



# 2010

## POPULATION & HOUSING CENSUS

### DISTRICT ANALYTICAL REPORT

---

## BOLGATANGA MUNICIPALITY



Canada 

MINISTRY OF FOREIGN AFFAIRS OF DENMARK  
**DANIDA** | INTERNATIONAL  
DEVELOPMENT COOPERATION

GHANA STATISTICAL SERVICE, OCTOBER, 2014

Copyright © 2014 Ghana Statistical Service

## **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 Bolgatanga Municipality 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 profile of the metropolis, 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 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 report for Bolgatanga Municipal 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: [www.statsghana.gov.gh](http://www.statsghana.gov.gh).

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**

# TABLE OF CONTENTS

<b>PREFACE AND ACKNOWLEDGEMENT .....</b>	<b>iii</b>
<b>LIST OF TABLES .....</b>	<b>vi</b>
<b>LIST OF FIGURES .....</b>	<b>vii</b>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>viii</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>ix</b>
<b>CHAPTER ONE: INTRODUCTION .....</b>	<b>1</b>
1.1 Background .....	1
1.2 Physical Features .....	3
1.3 Political Administration .....	3
1.4 Social and Cultural Structure .....	3
1.5 Economy.....	4
1.6 Census Methodology, Concepts and Definitions .....	4
1.7 Organization of the Report.....	14
<b>CHAPTER TWO: DEMOGRAPHIC CHARACTERISTICS.....</b>	<b>15</b>
2.1 Introduction .....	15
2.2 Population size and distribution .....	15
2.4 Fertility, Mortality and Migration .....	18
2.3 Mortality.....	20
<b>CHAPTER THREE: SOCIAL CHARACTERISTICS .....</b>	<b>24</b>
3.1 Introduction .....	24
3.2 Household Size, Household Composition and Headship.....	24
3.3 Marital Status .....	26
3.4 Nationality.....	31
3.5 Religious Affiliation.....	32
3.6 Literacy and Education.....	32
<b>CHAPTER FOUR: ECONOMIC CHARACTERISTICS .....</b>	<b>37</b>
4.1 Introduction .....	37
4.2 Economic Activity Status.....	37
4.3 Occupation .....	40
4.4 Industry.....	40
4.5 Employment Status .....	42
4.6 Employment Sector .....	42
<b>CHAPTER FIVE: INFORMATION COMMUNICATION TECHNOLOGY .....</b>	<b>43</b>
5.1 Introduction .....	43
5.2 Ownership of Mobile Phones .....	43
5.3 Use of internet .....	44
5.4 Household ownership of a desktop or laptop computer .....	44
5.5 Access to Fixed Telephone in the Household .....	44
<b>CHAPTER SIX: DISABILITY .....</b>	<b>45</b>
6.1 Introduction .....	45
6.2 Population with Disability.....	45
6.3 Types of Disability .....	45
6.4 Distribution of PWDs by Type of Locality of Residence .....	46

6.5	Disability and Activity Status .....	47
6.6	Disability, Education and Literacy .....	48
<b>CHAPTER SEVEN: AGRICULTURAL ACTIVITIES.....</b>		<b>50</b>
7.1	Introduction .....	50
7.2	Households in Agriculture .....	50
7.3	Types of Farming Activities.....	50
7.4	Types of livestock and other animals reared .....	51
<b>CHAPTER EIGHT: HOUSING CONDITION .....</b>		<b>53</b>
8.1	Introduction .....	53
8.2	Housing Stock .....	53
8.3	Type of dwelling, Holding and Tenancy Arrangement.....	54
8.4	Construction Materials .....	55
8.5	Room Occupancy .....	57
8.6	Access to Utilities and Household Facilities.....	58
8.7	Main Source of Water for Drinking and for other Domestic Use.....	61
8.8	Bathing and Toilet Facilities .....	63
8.9	Method of Solid Waste Disposal.....	65
<b>CHAPTER NINE: SUMMARY OF FINDINGS, CONCLUSIONS AND POLICY IMPLICATIONS.....</b>		<b>67</b>
9.1	Introduction .....	67
9.2	Summary of Findings .....	67
9.3	Conclusions .....	70
9.4	Policy implications.....	71
<b>REFERENCES.....</b>		<b>72</b>
<b>APPENDICES .....</b>		<b>73</b>
<b>LIST OF CONTRIBUTORS .....</b>		<b>75</b>

## LIST OF TABLES

Table 2.1: Population by age, sex and locality of residence .....	16
Table 2.2: Reported total fertility rate, general fertility rate and crude birth rate by district .....	19
Table 2.3: Children ever born and children surviving by age of woman and sex of child .....	20
Table 2.4: Total population, deaths in households and crude death rate by district .....	21
Table 2.5: Cause of death by district .....	21
Table 2.6: Birth place by duration of residence of migrants.....	23
Table 3.1: Household size by locality of residence .....	24
Table 3.2: Household population by composition and sex .....	25
Table 3.3: Household population by structure and sex.....	26
Table 3.4: Persons 12 years and older by sex, age-group and marital status.....	28
Table 3.5: Persons 12 years and older by sex, marital status and level of education .....	29
Table 3.6: Persons 12 years and older by sex, marital status and economic activity status ...	31
Table 3.7: Population by nationality and sex .....	32
Table 3.8: Population by religion and sex .....	32
Table 3.9: Population 11 years and older by sex, age and literacy status .....	34
Table 3.10: Population 3 years and older by level of education, school attendance and sex ...	36
Table 4.1: Population 15 years and older by activity status and sex .....	38
Table 4.2: Population 15 years and older by sex, age and activity status.....	39
Table 4.3: Employed population 15 years and older by occupation and sex.....	40
Table 4.4: Employed population 15 years and older by industry and sex .....	41
Table 4.5: Employed population 15 years and older by employment status and sex .....	42
Table 4.6: Employed population 15 years and older by employment sector and sex.....	42
Table 5.1: Population 12 years and older by mobile phone ownership, internet facility usage, and sex.....	43
Table 5.2: Households having desktop/laptop computers, fixed telephone lines and sex of head .....	44
Table 6.1: Population by type of locality, disability type and sex .....	46
Table 6.2: Persons 15 years and older with disability by economic activity status and sex .....	47
Table 6.3: Population 3 years and older by sex, disability type and level of education .....	49
Table 7.1: Households by agricultural activities and locality .....	50
Table 7.2: Distribution of livestock, other animals and keepers.....	51
Table 8.1: Stock of houses and households by type of locality .....	54
Table 8.2: Type of occupied dwelling unit by sex of household head and type of locality ...	54
Table 8.3: Ownership status of dwelling by sex of household head and type of locality.....	55
Table 8.4: Main construction material for outer wall of dwelling unit by type of locality ....	56
Table 8.5: Main construction materials for the floor of dwelling unit by type of locality .....	56
Table 8.6: Main construction material for roofing of dwelling unit by type of locality.....	57
Table 8.7: Household size and number of sleeping rooms occupied in dwelling unit .....	58
Table 8.8: Main source of lighting of dwelling unit by type of locality .....	59
Table 8.9: Main source of cooking fuel, and cooking space used by households .....	60
Table 8.10: Main source of water of dwelling unit for drinking and other .....	63
domestic purposes .....	63

Table 8.11: Type of toilet facility and bathing facility used by household by type of locality .....	65
Table 8.12: Method of solid and liquid waste disposal by type of locality .....	66
Table A1: Population by sex, number of households and houses in the 20 largest communities .....	73
Table A2: Population by age group in the 20 largest communities .....	74

## **LIST OF FIGURES**

Figure 1.1: Map of Bolgatanga Municipal.....	2
Figure 2.1: Population pyramid for Bolgatanga Municipal .....	17
Figure 2.2: Reported age specific death rates by sex.....	22
Figure 3.1: Marital Status of persons 12 years and older .....	27
Figure 3.2 Population 11 years and older by literacy status .....	33
Figure 7.1: Distribution of heads of agricultural household by age and locality.....	52
Figure 8.2: Main source of water for drinking in the Municipality .....	62

## **ACRONYMS AND ABBREVIATIONS**

AIDS:	Acquired Immune Deficiency Syndrome
CDR:	Crude Death Rate
CIDA:	Canadian International Development Agency
DANIDA:	Danish International Development Agency
ECOWAS:	Economic Community of West African States
EPA:	Expanded Programme of Immunisation
GSS:	Ghana Statistical Service
GDHS:	Ghana Demography Health Survey
HIV:	Human Immune Virus
ICT:	Information and Communication Technology
JHS:	Junior High School
JSS:	Junior Secondary School
NGOs:	Non-governmental Organisations
PHC:	Population and Housing Census
PWDs:	Persons with disabilities
SSS:	Senior Secondary School
STDs:	Sexually Transmitted Diseases
TBA:	Traditional Birth Attendant
TFR:	Total Fertility Rate
UN:	United Nations
UNDP:	United Nations Development Programme
WC:	Water Closet
WHO:	World Health Organization

# 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 Bolgatanga Municipality has a total population of 131,550 accounting for 12.6 percent of the population of the Upper East Region. The Municipality has a male population of 62,783 constitutes 47.7 percent and females are 68,767 or 52 percent of the total population. Although urbanization is fast catching up with the Bolgatanga Municipality, the rural population still account for half (50.2) of the population. The Municipality has a youthful population with 37.0 percent of the population below 15 years. The aged (60 years and older) constitute 7.4 percent of the population. The Municipality has a sex ratio of 91.3 implying there are more females than males.

## Fertility, mortality and migration

The Municipality has a total fertility rate of 3.0, which implies that on the average a female aged 15-49 years will give birth to three children by the end of her reproductive years, if she were to conform to current age-specific fertility rates. The crude birth rate (CBR) which is the number of birth per 1,000 population is 23.5, which is higher than the regional average of 22.7. With a crude death rate of 17.2 deaths per 1,000 population, male mortality is several times higher than female mortality for the population below five years. The Municipality has a high mortality rate for females than for males among the population below 35 years. The results show that 41.4 percent of household deaths in the Municipality is caused by accident/violence/ homicide/suicide whiles 58.6 percent are due to all other causes. Out of a total number of 26,932 migrants, 43.0 percent are born elsewhere in the region, while 57.0 percent are born in other regions of the country or outside Ghana. Most of the migrants in the Municipality are born in Ashanti and Northern regions. About a quarter (25.9) of the migrants who were born in the Central Region have lived in the Municipality for 20 years or more.

## Household size, composition and structure

With a household population of 129,696 the Bolgatanga Municipality has an average household size of five persons per households which is higher for rural areas (5.5) than urban areas (4.4). Majority of the household population consist of children (son/daughter) of household heads (42.3%), heads of households constitute 20.6 percent and spouses (10.1%). Grandchildren make up 7.6 percent of the household population. About one-fifth of the household population resides in a single parent (nuclear or extended) household. Majority (64.1%) of the household population in the Municipality live in extended family households.

## **Marital Status**

About two out of every five (43.6%) of the population 12 years and older in the Municipality have never been married while 45.3 percent are married. Less than two percent are either divorced or are separated. A higher proportion of females than males are separated, divorced or widowed. By age 25-29 years, almost twice as many females in that age group than their male counterparts are married. For all age groups the proportion of the female population 12 years and older who are divorced is higher than their male counterparts. Among the married, about half (51.0%) have never been to school while 28.7 percent have attained basic education. Among the married, 81.3 percent are employed and 15.6 percent are economically not active. On the other hand, majority of the never married are economically not active (60.5%). Among the sexes, the proportion of males who are married and employed is slightly higher than females (85.3 % and 77.8% respectively).

## **Nationality**

The proportion of Ghanaians by birth in the Municipality is 93.5 percent while those holding dual nationality is 2.7 percent. Other nationals in the district constitute 2.8 percent of the population.

## **Literacy and Education**

Nearly two-thirds (64.6%) of the population 11 years and older are literate while 35.4 percent are not literate in any language. The proportion of literate males (72.8%) is higher than females (57.4%). The proportion of males who can read and write in English and a Ghanaian language is 17.0 percent as compared with 10.6 percent of their female counterparts. Majority of the population 3 years and older currently attending school are at the primary level (47.0%) while 5.3 percent are in post secondary or tertiary level. More males than females are currently attending tertiary education.

## **Economic Activity Status**

More than 70 percent of the population 15 years and older are economically active, while those economically not active constitute a quarter (26%). Among the economically active population, 97.6 percent are employed and 2.4 percent are unemployed in the Municipality. Among the economically not active population 52.6 percent are students, 19.2 percent are performing household duties while 6.3 percent are disabled or too sick to work. More than half (55.6%) of the unemployed are first time job seekers while 44.4 percent have ever worked.

## **Occupation**

More than one-third (37.7%) of the employed persons are Skilled agricultural forestry and fishery workers while nearly one-fifth are craft and related trades workers. Service and sales workers constitute 18.5 percent of the employed population in the Municipality.

## **Employment Status**

More than half (58.1%) of the population 15 years and older are self-employed without employees, 3.1 percent self-employed with employees, and 15.5 percent are contributing family workers. Employees constitute 18.3 percent with two times more males than females. More females are self-employed without employees, contributing family workers, and domestic employees. The proportion of the population who are employed in the private informal sector is 83.4 percent, the public sector and the private formal employ 11.8 percent and 3.9 percent respectively. Males are more likely than females to be in these two sectors.

## **Information Communication Technology**

About a quarter (24.2%) of the population 12 years and older in the Municipality own a mobile phone with more males (49.7%) than females (38.7%). For the use of internet facilities, 15.5 percent of the population 12 years and older use internet facilities. More males than females use internet facilities. About one in every 10 of the households (9.4%) in the Municipality have a desktop or laptop computer, with more male headed households (10.7%) than female headed households (7.0%).

## **Type of Disability**

The Municipality has three out of every 100 persons living with one form of disability or the other. The types of disability in the district include sight, hearing, speech, physical, intellect, and emotion. Among those with disability, 28.9 percent have sight disability, followed by those with physical disability (23.2%), emotional (17.8%), and hearing (17.6%). The proportion of people with sight disability is high in urban areas (30.8%) than rural areas (27.7%). The proportion of males in the urban locality with physical disability is higher (23.4%) than that their female counterparts (17.4%). In the rural areas the proportion of females with physical disability is lower compared to their urban counterparts. More than half (54.6%) of persons with disability (PWD) are employed while 43.4 percent are economically not active. Females PWDs are more likely than their male counterparts to be economically not active. Educational level is generally low among the population with disability. More than half (55.1%) of PWDs have never attended school. Majority of persons with disabilities who have attended school have attained basic education (31.2%). Also, 10.2 percent of PWDs have attained SSS/SHS or higher education.

## **Households in Agriculture**

About 60 percent of households in the Municipality are engaged in agriculture. Majority (92.2%) of them are engaged in crop farming, while less than one percent (0.8%) of the households are engaged in tree planting. In the rural areas a higher proportion of households (89.3%) are engaged in agriculture as compared with 36.0 percent in the urban areas. While four out of every five households in the Municipality are into livestock rearing, 84.9 percent of the rural households compared to 70.2 percent of the urban households. Chicken (31.7%), goat (20.6%), guinea fowl (19.4%) accounts for 86.4 percent of the livestock reared in the Municipality.

## **Housing**

The stock of houses in the Bolgatanga Municipality is 14,523 with 53.3 percent of the houses located in rural areas. With an average of 1.8 households per house, there are on the average about nine persons per house.

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

More than half (53.8%) of all dwelling units in the Municipality are compound houses; 16.3 percent are huts/buildings on the same compound, 14.4 percent are separate houses and 5.6 percent are semi-detached houses. About two-thirds (65.8%) of the dwelling units in the Municipality are owned by members of the household; 22.3 percent are owned by private individuals; 5.1 percent are owned by a relative who is not a member of the household and 5.1 percent are owned by public or government.

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

The main construction material for outer walls of dwelling units in the Municipality is mud bricks/earth accounting for 61.8 percent with cement blocks/concrete constituting 36.4 percent of outer walls of dwelling units. Cement (78.9%) and mud/earth (17.6%) are the two main materials used in the construction of floors of dwelling units in the municipality. Metal sheets are the main roofing material (90.0%) for dwelling units in the district.

### ***Room occupancy***

One room constitutes the highest percentage (27.4%) of sleeping rooms occupied by households in housing units in the Municipality. Less than two 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 Municipality are electricity (53.5%), kerosene lamp (39.6%) and flashlight/torch (5.1%). The main source of fuel for cooking for most households in the Municipality are wood (33.2%) and charcoal (31.8%). Whereas majority of the urban households use charcoal (50.2%) most of their rural counterparts use wood (58.1%). The two main sources of water in the Municipality are borehole/pump/tube well (46.1%) and pipe-borne water in or outside the dwelling. About three out of every 100 households (3.3%) depend on public tap/standpipe.

Two-thirds of households (67.7%) in the Municipality have no toilet facility and therefore use the bush or fields. While 13.6 percent of the households depend on public toilet 12.5 percent have wc. About a quarter of households (25.2%) in the Municipality share separate bathrooms in the same house while 33 percent own bathrooms for their exclusive use.

### ***Waste disposal***

The most widely used method of solid waste disposal is by public dump in an open space accounting for 37.9 percent. About one in 12 households (8.2%) dump their solid waste indiscriminately. House to house waste collection accounts for 6.9 percent. For liquid waste disposal, throwing waste onto the street (64.7%) and onto the compound (10.9%) are the two most common methods used by households in the Municipality. About 12 percent of households use a sewage or drainage systems.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

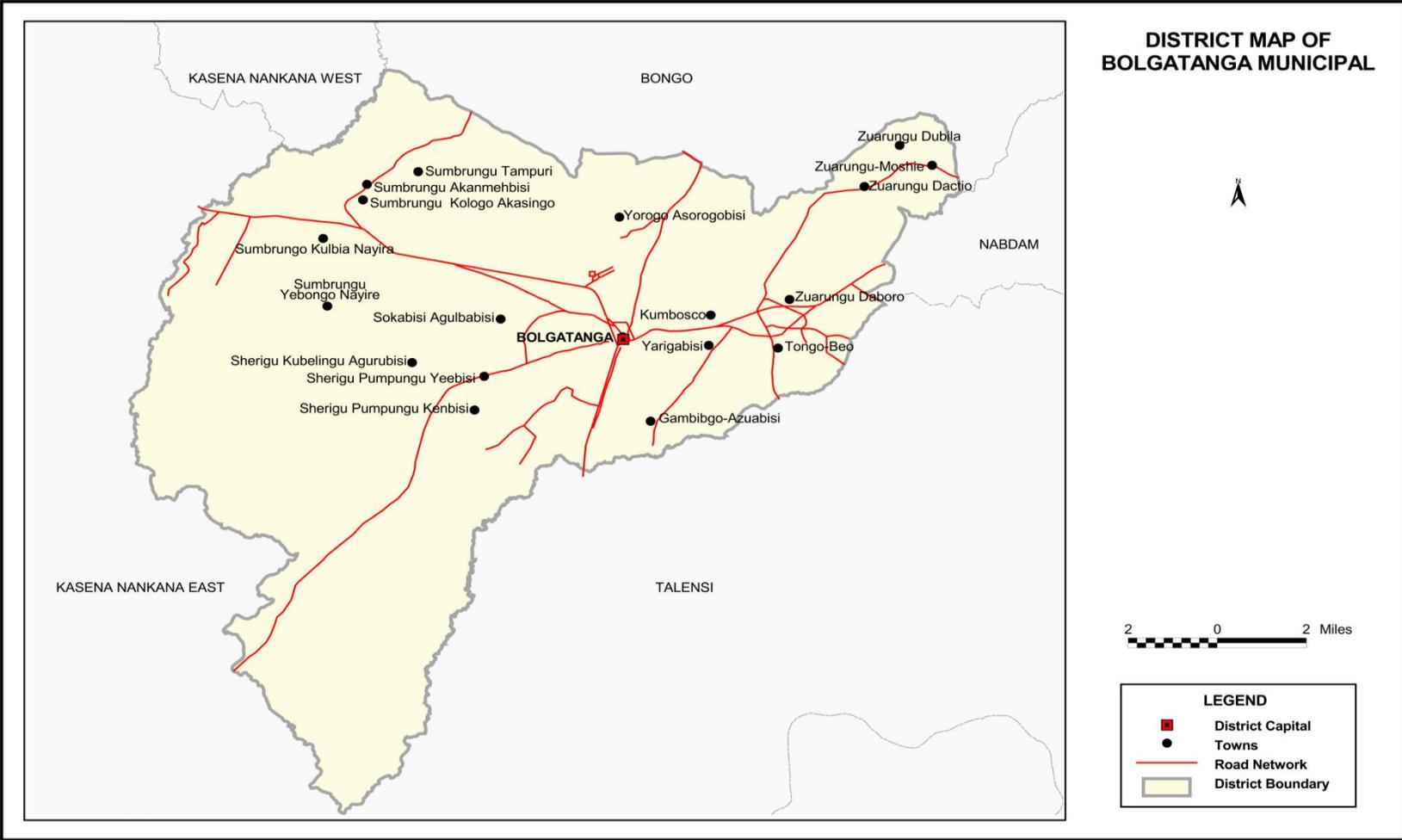
As far back as 1969, the Government of Ghana recognized that the “Population of Ghana is the nation’s greatest resource. It is both the instrument and objective of national development. The protection and enhancement of its welfare is the Government’s first responsibility” (GSS, 2013: page 1). Government also explicitly recognized the reciprocal relationship between population and development (i.e., population affects development even as development affects population. An understanding of the population, its characteristics and dynamics, is therefore crucial for realistic development planning.

The Government of Ghana has operated the decentralized system of development since 1988 with the District Assembly, as the planning authority. The District Assembly is expected to initiate and coordinate the processes of planning, programming, budgeting and implementation of district plans, programmes and projects. The district assemblies and the various organs are expected to carry out medium and long term planning including integration of population policies and issues, as they pertain to the needs of particular districts and communities.

The overall level of development and demographic structure of the country conceals differences between and within regions, districts, urban and rural localities. As such, there are bound to be differences in the population and development needs and priorities between and within regions, districts, urban and rural localities. This report covers the Bolgatanga Municipality. Its objective is to make available to the general public, analysis of data, and the results of the 2010 Population and Housing Census (PHC) for policy planning and implementation in the Municipality. Where feasible, comparisons between the 2000 PHC and 2010 PHC results are presented.

The Bolgatanga Municipality was established in 2004 by Legislative Instrument (LI) 1797 (2004). Located in the centre of the Upper East Region, approximately, between latitudes 10°30' and 10°50' North and longitudes 0°30' and 1°00' West, it is also the regional capital. Bolgatanga Municipality is bordered to the north by the Bongo District, south and east by the Talensi and Nabdam Districts, and to the west by the Kassena-Nankana Municipality. It covers a total land area of 729 square kilometers. It was the first of three municipalities to be established in the Upper East Region (the others are Bawku and Kasena-Nankana Municipalities), which together with ten other districts constitute the Upper East Region of Ghana. Figure 1.1 shows the map of the Bolgatanga Municipality.

**Figure1.1: Map of Bolgatanga Municipal**



Source: Ghana Statistical Service GIS

## **1.2 Physical Features**

### **1.2.1 Soil and Drainage**

The district's soil is "upland soil" mainly developed from granite rocks. It is shallow and low in soil fertility, weak with low organic matter content, and predominantly coarse textured. Erosion is a problem. Valley areas have soils ranging from sandy loams to salty clays. They have higher natural fertility but are more difficult to till and are prone to seasonal water logging and floods. Drainage is mainly by the White and Red Volta and Sissili Rivers and their tributaries which are also the main rivers (District Coordinating Unit Report, 2003).

The Municipality falls within the Birimian Tarkwaian and Voltaian rocks of Ghana; there is ample evidence of the presence of minerals particularly gold in the area. The landscape has gentle slopes with some isolated rock outcrops and uplands

### **1.2.2 Vegetation**

The natural vegetation is that of the savannah woodland, characterized by short scattered drought-resistant trees and grass that gets burnt by bushfire or scorched by the sun during the long dry season. Human interference with ecology is significant, resulting in near semi-arid conditions. The most common economic fruit trees are the shea, *dawadawa*, baobab and acacia.

### **1.2.3 Climate**

The climate is characterized by one rainy season from May/June to September/October. The mean annual rainfall during this period is between 800 mm and 1,100 mm. The rainfall is erratic spatially and in duration. There is a long spell of dry season from November to mid-February, characterized by cold, dry and dusty harmattan winds. Temperatures during this period can be as low as 14 degrees Celsius at night, but can go to more than 35 degrees Celsius during the day.

Humidity is, however, very low making the daytime high temperature a little uncomfortable. The Region is entirely within the "Meningitis Belt" of Africa. It is also within the onchocerciasis zone, but with the control of the disease, large areas of previously abandoned farmlands have been declared suitable for settlement and farming (UNDP Ghana, 2010),

## **1.3 Political Administration**

The Bolgatanga Municipality is divided into the following three (3) administrative zones: Bolgatanga, Zuarungu and Sumbrungu-Sherigu Zonal Councils with 37 unit committees. The Bolgatanga Municipality has one parliamentary constituency with 37 electoral areas. The total membership of the Assembly is 55 made up of 37 elected members, 16 appointed members, a Member of Parliament and the Municipal Chief Executive. There are only three female assembly members two of whom are elected and one government appointee.

## **1.4 Social and Cultural Structure**

Although majority (93.8%) of the inhabitants of the Municipality are from northern ethnic origins, the indigenous inhabitants of the area are the Grunis. Other settlers mainly in the Bolgatanga Township include the Akans, Ewes, Ga-Adanbge. Most of the ethnic groupings are organized around chiefs and leaders, while others come together as social groupings. The family is the basic social grouping among the people with the nuclear and the extended

family systems and the patrilineal system of customary inheritance. The traditional system of governance revolves around the Chief while the *Tindana* is the custodian of lands in the area.

The people have two festivals, the *Adakoya* festival celebrated by the people of Bolgatanga after the farming season and the *NabaYesika* festival celebrated annually by the people of Sherigu to outdoor their Chief. Agriculture is the main occupation of the people. The family and the traditional system of governance serve as the rallying point for community participation in developmental activities and social action.

#### **1.4.1 Religion**

Three main religious groupings found in the Municipality, are Christianity, Traditional religion and Islam.

### **1.5 Economy**

#### **1.5.1 Agriculture**

Agriculture, hunting and forestry are the main economic activities in the Municipality. About eighty percent of the economically active population engage in agriculture. The main products are millet, guinea-corn, maize, groundnut, beans, sorghum and dry the season tomatoes and onions. Livestock and poultry production are also important. Water-retaining structures (dams and dugouts) provide water for both domestic and agricultural purposes.

#### **1.5.2 Industry**

The activities that dominate this sub-sector are small-scale agro – processing of groundnuts, shea nuts, *dawadawa*, rice, sorghum, soya beans, maize and millet. Handicraft works like basket weaving, leather works and wood carving are also undertaken. The service sector activities include trading or commerce, transportation among others.

### **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 organisation, 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 organisations 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 pre-test 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/outdoor-sleepers, 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, Ksoa 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**

#### **Introduction**

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**

Understanding the population size, distribution, composition and processes driving the stability or change in the population of a particular country, region or district is fundamental for the development and implementation of programmes that address the needs of the local communities. Demographic analysis is a requisite for all aspects of the planning process.

One of the most important indicators in assessing the changes in population is its demographic characteristics. The changes in a country's population are mainly through fertility, mortality and migration levels, which to a large extent, are influenced by age-sex composition. Population size, distribution, age and sex structure is vital for development planning, programme implementation and evaluation. The age and sex composition is of great importance in analyzing the mortality, migration and fertility of the population. This chapter presents information on the distribution of the district's population by age and sex structure, its fertility, mortality and migration patterns.

#### **2.2 Population size and distribution**

Table 2.1 shows that the Bolgatanga Municipality has a total population of 131,550, accounting for 12.6 percent of the population of the Upper East Region (1,046,545). The Municipality has a male population of 62,783 constitutes 47.7 percent while females are 68,767 or 52 percent of the total population. Although urbanization is fast catching up with the Bolgatanga Municipality, the rural population still account for half (50.2) of the population. While the Municipality has 12.6 percent of the regional population, it accounts for three out of every 10 (29.8%) urban dwellers in Upper East. The urban dwellers are significantly higher than their rural counterparts for the population 20 to 49 years, which constitute the peak of the productive age. Similar patterns are observed among the male and female and urban and rural populations.

##### **Age and sex structure**

Understanding the age and sex structure of the population of the district is important for planning and equitable allocation of resources. The age and sex structure of the population of the district follow the region and the national pattern (Table 2.1). The age structure is that of a broad base and reduces gradually in the subsequent age groups and narrows in the older ages. While more males than females are observed in the age group 0-14 years, females outnumber males in the economically productive age group of 15-64 years as well as in the older ages.

**Table 2.1: Population by age, sex and locality of residence**

Age Group	Sex			Sex ratio	Type of locality	
	Both Sexes	Male	Female		Urban	Rural
All Ages	131,550	62,783	68,767	91.3	65,549	66,001
0 - 4	16,791	8,566	8,225	104.1	8,032	8,759
5-9	15,896	8,078	7,818	103.3	7,185	8,711
10-14	15,950	7,980	7,970	100.1	7,409	8,541
15 - 19	15,146	7,448	7,698	96.8	7,635	7,511
20 - 24	13,334	6,207	7,127	87.1	7,593	5,741
25 - 29	10,682	4,900	5,782	84.7	6,206	4,476
30 - 34	8,682	4,122	4,560	90.4	4,883	3,799
35 - 39	7,198	3,493	3,705	94.3	3,895	3,303
40 - 44	6,099	2,746	3,353	81.9	3,136	2,963
45 - 49	4,857	2,173	2,684	81.0	2,402	2,455
50 - 54	4,418	1,908	2,510	76.0	2,110	2,308
55 - 59	2,811	1,313	1,498	87.7	1,359	1,452
60 - 64	2,703	1,124	1,579	71.2	1,126	1,577
65 - 69	1,750	722	1,028	70.2	704	1,046
70 - 74	2,266	797	1,469	54.3	779	1,487
75 - 79	1,507	552	955	57.8	565	942
80 - 84	828	353	475	74.3	304	524
85+	632	301	331	91.0	226	406
All Ages	131,550	62,783	68,767	91.3	65,549	66,001
0-14	48,637	24,624	24,013	102.5	22,626	26,011
15-64	75,930	35,434	40,496	87.5	40,345	35,585
65+	6,983	2,725	4,258	64.0	2,578	4,405
<b>Age dependence ratio</b>	<b>73.25</b>	<b>77.18</b>	<b>69.81</b>		<b>62.47</b>	<b>85.47</b>

Source: Ghana Statistical Service, 2010 Population and Housing Census

### Age specific sex ratio

The age specific sex ratios reflect the age-sex distribution of the Municipality. Although the sex ratio of the Municipality is 91.3, implying that for every 100 females in the Municipality, there are a corresponding 91 males. As expected there are more males at birth yielding a ratio of 104 males to 100 females, the ratio decreases with advancing age till the male and female populations are almost at par by age 14 years. Averaging 85 males per 100 females, there are more females than males among the population aged 15 to 64. This could be attributed to male out migration or a higher female in migrants to the Municipality among others. Although the sex ratio indicates a dominance of females over the male population in the older ages, the lower ratios observed among those 70 to 79 years could be due to age misreporting.

### Dependency ratio

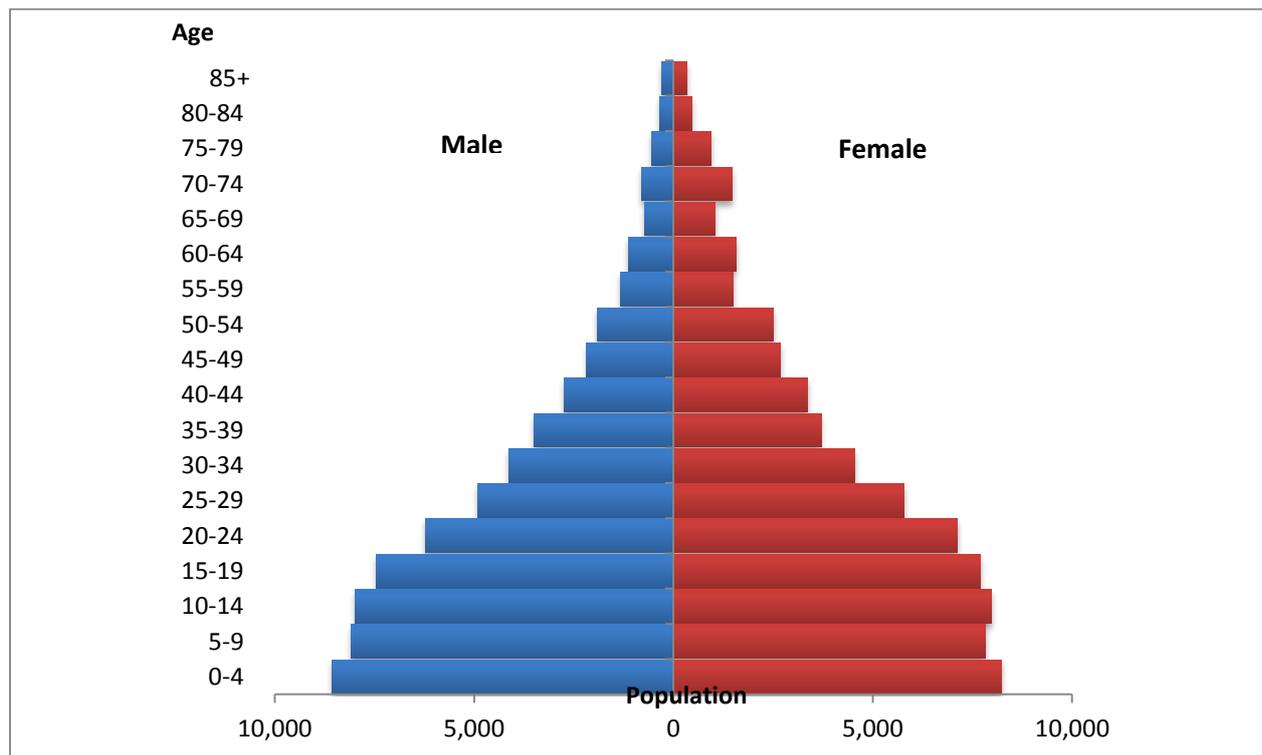
The age-dependency ratio is theoretically indicative of the economic burden of the potential working population – the smaller the ratio, the less the economic burden. The determination of the ratio is based on the assumption that all persons less than 15 years plus those 65 years and older do not work or cannot work and therefore depend on others. Additionally, it also assumes that all persons aged 15-64 years are working; this is not so in reality. The age dependency ratio is conventionally defined as the population aged less than 15 years plus those 65 years and older divided by the population in the 15-64 years age group multiplied by 100.

Table 2.1 reveals that the Bolgatanga Municipality has a total age-dependency ratio of 73.3 implying that every 100 persons in the working age group have 73 persons in the dependent ages to support. The rural residents bear a greater burden with a ratio of 85.5 compared to the burden on the urban (62.5) working age population. This means that whereas 10 persons in the working age population in the rural areas have between eight and nine dependents to support their urban counterparts have six to support.

### Population Pyramid

The population pyramid for the Bolgatanga Municipality has a typical broad-base and a relatively narrow apex. The broad-base of the pyramid indicates that the population of the Municipality has a built in potential for growth. The rough edges of the pyramid indicate variations in the age groups. The more pronounced chain saw-like edges of the females indicate a greater tendency for females to underestimate or shift their ages into other age groups resulting in age misreporting as indicated in the age sex structure. The pyramid shows an abrupt decline, more pronounced for females from age group 20-24 years. The tapering of the pyramid into a conical shape show the force of mortality as the population ages. The irregularities towards the top of the pyramid from age 65 years show the inequalities due to age miscalculations, age exaggerations, omissions, etc. A perfect pyramid should be the reflection of the age sex structure of the population.

**Figure 2.1: Population pyramid for Bolgatanga Municipal**



Source: Ghana Statistical Service, 2010 Population and Housing Census

The age and sex pyramid of the Bolgatanga Municipality depicts a broad base up to age 19, after which there is a sharp decline for males more than females. At age 15 and above, age reduction is sharper for males than for females indicating more females than males. Generally, the pyramid indicates that the majority of the population, about (60%), are within the age cohort of 0-24. Also for each higher age cohort the size reduces compared to the

lower age cohorts resulting in a conical shaped pyramid, a typical characteristic of developing countries population. This implies that, higher investments need to be made in schooling and child-care.

## **2.4 Fertility, Mortality and Migration**

Fertility, mortality and migration are important in influencing population dynamics and development. Fertility and mortality are used to determine the natural increase or decrease of the population. The 2010 PHC collected data on fertility which is the natural capability of producing off-springs. Mortality refers to all deaths that occurred in the household during the 12 months preceding the Census Night, while migration refers to the physical movement of persons across geographical boundaries for a given period. This is measured by combining data on the place of birth with place of enumeration and duration of stay at place of enumeration.

### **2.4.1 Fertility**

Fertility refers to the actual birth performance or childbearing among a population. Fertility is determined by a number of factors, including the physiological capacity of the woman to reproduce. These, in turn, are affected by a variety of social, cultural, health, economic and other environmental factors. Birth registration data constitute the most accurate source of data for the calculation of various fertility indices. Birth registration data, however, is neither complete, nor timely in the district in particular and the country as a whole. Discussed in this section include Crude Birth Rate (CBR), General Fertility Rate (GFR) and Total Fertility Rate (TFR). Table 2.2 shows reported total fertility rate, general fertility rate and crude birth rate by district, in the Upper East Region.

#### **Crude Birth Rate**

The crude birth rate (CBR) is the number of births per 1,000 population in a given year 'crude' because it relates to the entire population rather than the section of the population capable of giving birth). The crude birth rate for the Municipality is 23.5 births per 1,000 populations. This means that there are about 24 births for every 1,000 population in the Municipality per year. This is slightly higher than the regional average of 22.7.

#### **General Fertility Rate**

The general fertility rate is the number of births per 1,000 women aged 15-49 years in a given year. It differs from CBR in that the denominator relates to women in the reproductive age groups and not the total population. The General Fertility rate for the Municipality is 88.49, meaning that in the Municipality, about 88 children are born in a year to every 1,000 women in the age group 15-49. This rate is lower than the regional GFR of 97.5.

#### **Total Fertility Rate**

The total fertility rate (TFR) which is widely used is the average number of live births per 1,000 women in the childbearing age (15-49 years). In other words, it is the average number of children a woman would give birth to by the end of her reproductive years if current fertility rates prevailed (IUSSP, 1982). The TFR for the Municipality is 3.0 births per woman. It implies that on the average every woman in the reproductive age would have three children by the end of their reproductive years if current fertility rates prevailed. The municipality's TFR is lower than the regional average TFR of 3.4 births.

**Table 2.2: Reported total fertility rate, general fertility rate and crude birth rate by district**

District	Population	Number of women 15-49 years	Number of births in last 12 months	Total Fertility Rate	*General Fertility Rate	**Crude Birth 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
<b>Bolgatanga Municipal</b>	<b>131,550</b>	<b>34,909</b>	<b>3,089</b>	<b>3.0</b>	<b>88.5</b>	<b>23.5</b>
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

Source: Ghana Statistical Service, 2010 Population and Housing Census

Note: \* Number of live births per 1,000 women aged 15-49 years

\*\* Number of live births per 1,000 population

### Children ever born and children surviving

The 2010 PHC collected information on lifetime fertility of all women 12 years and older. In all, 116,172 children are recorded to have been born to 49,518 women 12 years and older in the Bolgatanga Municipal. Table 2.3 shows that the number of children ever born increases with increasing age of women and peaks among those aged 40-44. Children surviving include all children (male and female) born alive by female 12 years and older who are still alive. Less than one percent (0.59%) or six out of every 1,000 children ever born in the Municipality are born to teenage mothers aged 12-19 years. Also, on the average four out every five (93,221) children ever born to all females 12 years and older survive, with a slightly higher female survival rate than males.

**Table 2.3: Children ever born and children surviving by age of woman and sex of child**

Age	No of women	Children ever born			Children Surviving		
		Total	Male	Female	Total	Male	Female
Total	49,518	116,172	58,990	57,182	93,221	46,559	46,662
12-14	4,764	17	9	8	17	9	8
15-19	7,698	672	321	351	596	272	324
20-24	7,127	4,337	2,193	2,144	3,857	1,894	1,963
25-29	5,782	8,761	4,425	4,336	7,860	3,916	3,944
30-34	4,560	12,155	6,112	6,043	10,753	5,372	5,381
35-39	3,705	13,460	6,809	6,651	11,665	5,796	5,869
40-44	3,353	14,627	7,298	7,329	12,383	6,120	6,263
45-49	2,684	12,427	6,367	6,060	10,210	5,153	5,057
50-54	2,510	12,408	6,430	5,978	9,738	5,007	4,731
55-59	1,498	7,549	3,830	3,719	5,831	2,894	2,937
60-64	1,579	8,124	4,147	3,977	5,794	2,879	2,915
65-69	1,028	5,278	2,773	2,505	3,724	1,934	1,790
70-74	1,469	7,518	3,819	3,699	5,081	2,512	2,569
75+	1,761	8,839	4,457	4,382	5,712	2,801	2,911

Source: Ghana Statistical Service 2010 Population and Housing Census

## 2.3 Mortality

The quality of life in the Bolgatanga Municipality and the region as a whole rests ultimately on the basic conditions which influence health, morbidity and mortality in the population. These factors include the biological make-up of individuals, prevalence and severity of specific diseases, social, economic and environmental conditions as well as the availability, accessibility, affordability and utilization of health care facilities. Mortality levels, patterns, trends and differentials are very important indicators of the health status of the population. Information on mortality plays a vital role in development planning in general, and the planning, monitoring and evaluation of healthcare delivery systems in particular.

The number of children surviving out of the number ever born alive is a measure of the overall force of mortality. However, unlike information from death registration data, it cannot measure the age pattern of death, which is crucial for the study of age related morbidity and mortality. The survival rate is the percentage of all children ever born who are still alive at the time of the census irrespective of the current age of the child.

### Crude Death Rate

The Crude death rate (CDR) refers to the number of deaths per 1000 population in a given year. It is termed crude because although death occurs in the active population, the rate of occurrence is not uniform or evenly distributed among all the ages. From Table 2.4, a total of 2,269 deaths were recorded in the 12 months preceding the Census Night, yielding a crude death rate of about 17 deaths (17.2) in every 1,000 population. This shows that the mortality experience in the Municipality is high in the region (10.8 per 1,000 population).

**Table 2.4: Total population, deaths in households and crude death rate by district**

District	Total Population	Deaths in households	*Crude death rate
All Districts	1,046,545	11,339	10.8
Builsa North	56,477	478	8.5
Kasena Nankana West	70,667	566	8.0
Kasena Nankana East	109,944	1,217	11.1
<b>Bolgatanga Municipal</b>	<b>131,550</b>	<b>2,269</b>	<b>17.2</b>
Talensi	81,194	1,218	15.0
Bongo	84,545	1,093	12.9
Bawku West	94,034	838	8.9
Garu Tempene	130,003	1,287	9.9
Bawku Municipal	98,538	691	7.0
Builsa South	36,514	337	9.2
Nabdam	33,826	473	14.0
Binduri	61,576	510	8.3
Pusiga	57,677	362	6.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

### Household death

Table 2.5 presents the cause of death by district in the Upper East Region. Out of a total of 2,269 deaths recorded in the Bolgatanga Municipality, 41.4 percent are due to accident or violence or homicide or suicide while 58.6 percent are due to all other causes such as natural deaths. More than half (54.7%) of all accident or violence or homicide or suicide deaths in the region, occur in the Municipality. The municipality's percentage of deaths caused by either accident or violence or homicide or suicide is highest in the region, and probably the highest in the country.

**Table 2.5: Cause of death by district**

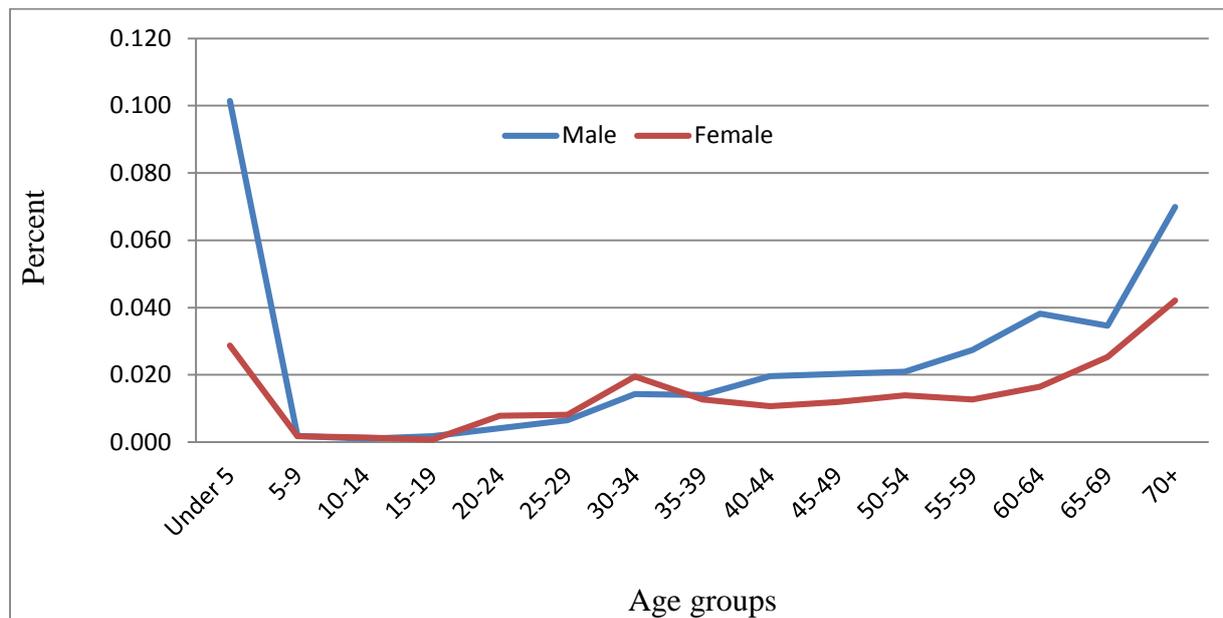
District	Total household deaths	Death due to			
		Accident /violence/ homicide/suicide		All other causes	
		Number	Percent	Number	Percent
All Districts	11,339	1,720	15.2	9,619	84.8
Builsa North	478	30	6.3	448	93.7
Kasena Nankana West	566	47	8.3	519	91.7
Kasena Nankana East	1,217	86	7.1	1,131	92.9
<b>Bolgatanga Municipal</b>	<b>2,269</b>	<b>940</b>	<b>41.4</b>	<b>1,329</b>	<b>58.6</b>
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 Tempene	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

Source: Ghana Statistical Service, 2010 Population and Housing Census

### Age specific death by sex

The age specific death rate (ASDR) is the number of deaths per year per 1,000 population of a given age group by sex. Mortality varies considerably by age and sex. Figure 2.2 shows the age specific death rates by sex in the Bolgatanga Municipality. The graph shows the expected “U” pattern with the lowest mortality rates occurring in the 10-19 year age group. Mortality is high in the first year of life, especially among males then falls sharply and reaches its minimum at age 10 to 19. Thereafter, it rises steadily with advancing age, however it is higher among the female population till the male mortality overtakes female mortality after age 39 and remains higher through to the older ages. The rise in mortality among the female population is slow between age 39 and 59 before it picks up momentum.

**Figure 2.2: Reported age specific death rates by sex**



Source: Ghana Statistical Service, 2010 Population and Housing Census

### 2.4.3 Migration

The census sought information on place of birth in relation to locality of enumeration. Birthplace and migratory pattern are, therefore, analysed by comparing locality of birth with locality of enumeration. Persons “born in the locality of enumeration” are assumed not to have had any migratory history. This may not necessarily be the case since some people who might have moved outside their locality of birth could have returned to that locality for the census or on visit or on retirement. Birthplace in relation to place of enumeration is, therefore, only a crude measure of migration.

The Bolgatanga Municipality, by virtue of its geographical position in the centre of the Upper East Region, and bordered by the remaining two Northern Regions and Bukina Faso, becomes a point of destination or the first stage for multi-stage migrants moving further South. Table 2.6 shows birth place of migrants in the district and how long they have lived in the district. Out of a total of 26,932 migrants in the Bolgatanga Municipal, 11,991 persons representing 43 percent were born elsewhere (in other localities) in the region, 53.6 percent are born in other regions of the country, and 3.4 percent (958) are born outside Ghana. About one out of every six (4,344) of the migrants in the municipality are born in the Ashanti

Region, 13.4 percent (3,744) are from the Northern Region, while 6.6 percent are born in the Greater Accra Region.

A total of 11,991 or slightly more than two out of every five migrants are intra-regional migrants or persons who were born in other parts of the region but currently reside in the Municipality. While 30.0 percent of these intra-regional migrants have been residing in the Municipality for 20 years or more, 39.6 percent have lived there for less than five years. Of particular interest are migrants from the other two northern regions (5483) who constitute 19.6 percent of the migrants of whom over a fifth (22.0%) have resided in the municipality for 20 years or longer.

**Table 2.6: Birth place by duration of residence of migrants**

Birthplace	Number	Duration of residence (%)				
		Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years
Total	26,932	16.6	25.2	13.9	17.0	23.8
Another locality in this region	11,991	15.1	24.5	13.2	17.1	30.0
Western	583	14.1	25.0	17.0	20.1	23.8
Central	397	18.6	31.2	12.3	11.8	25.9
Greater Accra	1,827	18.6	29.9	15.7	16.9	18.9
Volta	622	22.0	29.4	14.0	18.2	16.4
Eastern	630	17.1	29.2	19.2	18.1	16.3
Ashanti	4,344	21.1	27.5	14.5	18.8	18.1
Brong Ahafo	1,055	18.2	32.9	16.7	16.9	15.4
Northern	3,744	17.5	24.3	15.1	17.9	25.2
Upper East	-	-	-	-	-	-
Upper west	1,739	18.7	26.5	15.6	19.1	20.0
Outside Ghana	958	16.4	29.3	17.7	17.1	19.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

## CHAPTER THREE

### SOCIAL CHARACTERISTICS

#### 3.1 Introduction

Data on household size, composition and structure forms the basis of family relations and social cohesion. This chapter discusses the household composition, structure and size of the population in households on the municipality. The 2010 Population and Housing Census (2010 PHC) defines the household as a single or a group of persons who live together in the same house or compound, share housekeeping arrangements and are catered for as one unit. Members of a household are not necessarily related by blood, since non-relatives can be part of a household.

#### 3.2 Household Size, Household Composition and Headship

The composition of the Ghanaian household is a reflection of the social structure of the country. The household composition is therefore defined in terms of the relationship of the members of the household to the one person they accept and recognise as the head and who is responsible for the upkeep and management of the household members. Besides, the chapter covers marital characteristics, nationality religious affiliation, literacy and education.

##### 3.2.1 Household size

The household is the basic unit for demographic and economic analyses. Household size refers to the total number of persons in a household irrespective of age, sex, or relationship status. Table 3.1 presents the household size of the municipality by locality of residence. There are 26,706 households in the municipality of which about 55.4 percent (14,801) reside in urban areas with the rest in rural settlements. The municipality has an average household size of five persons with more persons in the rural households (5.5) areas than the urban households (4.4).

**Table 3.1: Household size by locality of residence**

Categories	Total country	Region	Municipality		
			Total	Urban	Rural
Total household population	24,076,327	1,034,704	129,696	64,398	65,298
Number of households	5,467,054	177,629	26,706	14,801	11,905
Average household size	4.4	5.8	4.9	4.4	5.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

##### 3.2.2 Household Composition

Household composition and structure in Ghana has a common feature in that the household heads are predominantly male. Table 3.2 shows the composition of the household population by sex of the household members. The data show that there are 129,696 persons living in households in the municipality. Household heads constitute 20.6 percent of this population, with more male household heads (28.1%) than female household heads (13.7%). Spouse constitutes 10.1 percent whereas biological children constitute 42.3 percent. There are more male children (47.6%) than female children (37.4%) in the households. Other relative (8.6%) and grandchildren (7.6%) also constitute a significant percentage of the household members

in the municipality with slightly more male than female grandchildren and more females than male relatives of the household head. The data also show that there are more daughter in-laws (3.3%) than son in-laws (0.2%) among households in the municipality. Adopted or foster children and step children living with households is not a widespread phenomenon in the municipality. The extended family system may also explain the low formal adoption rate.

**Table 3.2: Household population by composition and sex**

Household composition	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	129,696	100.0	61,892	100.0	67,804	100.0
Head	26,706	20.6	17,401	28.1	9,305	13.7
Spouse (wife/husband)	13,085	10.1	547	0.9	12,538	18.5
Child (son/daughter)	54,825	42.3	29,476	47.6	25,349	37.4
Parent/Parent in-law	2,886	2.2	268	0.4	2,618	3.9
Son/Daughter in-law	2,403	1.9	147	0.2	2,256	3.3
Grandchild	9,814	7.6	5,081	8.2	4,733	7
Brother/Sister	5,815	4.5	3,282	5.3	2,533	3.7
Step child	1,224	0.9	645	1	579	0.9
Adopted/Foster child	365	0.3	166	0.3	199	0.3
Other relative	11,181	8.6	4,228	6.8	6,953	10.3
Non-relative	1,392	1.1	651	1.1	741	1.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.2.3 Household Structure

Table 3.3 shows the household population by the household structure and the sex of its members. The two types of family ties that inform household formation are the nuclear and the extended family systems. The nuclear family consists of the father, mother and children (foster, adopted and biological). The structure of households in the municipality is dominated by the extended family system where nearly two-thirds (64.2%) of household members live in an extended family. The extended family comprising the head, spouse, children and heads relatives constitute the largest family system with one-third (33.8%) of the household population. The data reveals a rather alarming situation where more than one-third (38.1%) of the household population reside either in single parent extended (17.9%) or single parent nuclear household (10.2%). Slightly more than a third (35.9%) of the household population reside in nuclear families. This is an indication of the dominance of the extended family system arrangement in the district which reflects the communal system of the people of Bolgatanga Municipality.

Single person households is not a common phenomenon in the Bolgatanga Municipality and not many households are found with the head and spouse only. Nuclear households comprising head, spouse(s) and children only is 22.2 percent, which further indicates the importance the population of the municipality places on the extended family system. The fact that children, grandchildren and other relatives of the head constitute more than 60.0 percent of household members supports the view that the traditional external family household composition has not changed much. It also reflects the extent of fostering in the living arrangements of households. The above classification demonstrates the strength and extent of the extended family relations at the same time pointing at the emerging single parent household type in the municipality.

**Table 3.3: Household population by structure and sex**

Household Head	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	129,696	100.0	61,892	100.0	67,804	100.0
<b>Nuclear Households</b>						
Head only	3,099	2.4	1,974	3.2	1,125	1.7
Head and a spouse only	1,448	1.1	722	1.2	726	1.1
Nuclear (Head, spouse(s) and children)	28,734	22.2	14,770	23.9	13,964	20.6
Single parent Nuclear	13,258	10.2	5,594	9	7,664	11.3
<b>Extended Households</b>						
Extended (Head, spouse(s), children and Head's relatives)	43,802	33.8	21,251	34.3	22,551	33.3
Extended + non relatives	1,573	1.2	746	1.2	827	1.2
Head, spouse(s) and other composition	3,739	2.9	1,771	2.9	1,968	2.9
Single parent Extended	23,188	17.9	9,927	16	13,261	19.6
Single parent Extended + non relative	1,375	1.1	601	1	774	1.1
Head and other composition but no spouse	9,480	7.3	4,536	7.3	4,944	7.3

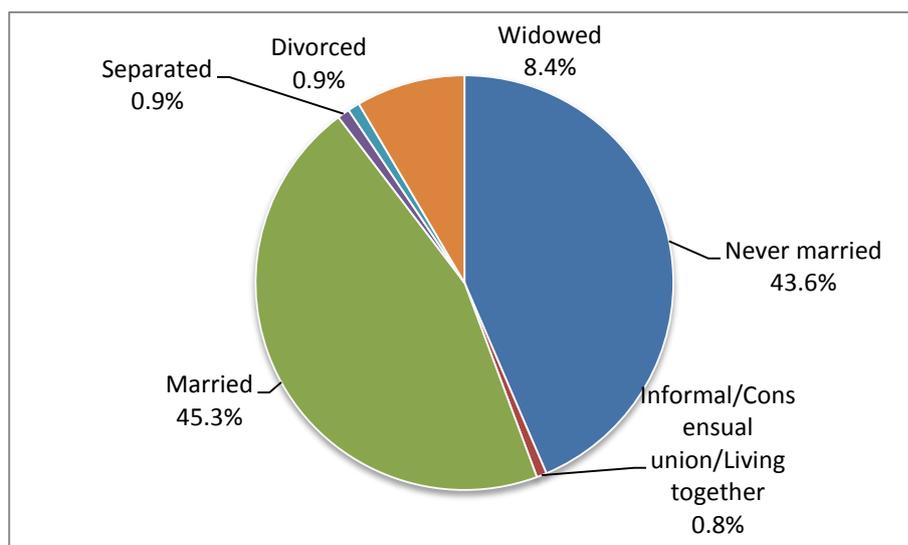
Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.3 Marital Status

Marriage may be defined as a social institution which establishes the legitimacy of children, (Gough, 1959). Marriage defined this way, thus, serves as a tool for procreation, mutual support and companionship. Marriage in Ghana includes both formal and informal unions. Formal unions are those sanctioned by law under the ordinance, by tradition/customary law, and by religion. Informal unions are cohabiting unions recognized in Ghana but not sanctioned by law, tradition or religion (Gaisie, 1976; Aryee, 1975). Marriage is a highly valued social institution in Ghana. It is one of the determinants of an individual's social status and also an indicator of social responsibility, trust and achievement.

Figure 3.1 and the data in Table 3.4 present the marital status by sex and age group of persons 12 years and older residing in the Bolgatanga Municipality. Figure 3.1 shows that in the municipality 43.6 percent of the population (aged 12 years or older) have never been married compared to 55.5 percent who have ever been married (married, widowed, divorced, and separated). Whiles about 45 percent of the population 12 years and older are currently married, about one percent each are either divorced or separated, whereas 8.4 percent are widowed. The data further reveals that the population in consensual union or living together as if married is not a phenomenon that is very common in the municipality, as only one out of every 125 (0.8%) persons 12 years or older are in this type of union.

**Figure 3.1: Marital Status of persons 12 years and older**



Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.3.1 Marital status by sex and age

The data in Table 3.4 show that the proportion of the population 12 years and older (43.6%) who have never been married is at its peak of 95.4 percent for age group 12-14 years. The proportion declines with increasing age to age group 20-24 years (70.2%) from which it decreases abruptly to 41.8 percent at age group 25-29 years and further declines to 19.6 percent at age group 30-34 years. From age group 35-39 years it remains below 10.0 percent for subsequent age groups to 3.5 percent at age 65 years and older.

Contrary to the pattern observed for the never married population, the percentages of the married increases with increasing age from 4.4 percent for the youngest age group 12-14 years to the peak of 60.4 percent at age group 35-39 years. After the peak, the trend reverses to decreasing percentages with 61.6 percent at age group 60-64 years and finally to 49.6 percent for those aged 65 years and older.

The trend for the never married males is similar to that of the never married females except that not only is the proportion of never married males (51.1%) much higher than that of females (37.1%) and that from age group 15-19 years, the proportion in each age group is substantially higher for males than for the corresponding age group for females and also the rate of decrease is faster for females than for males. For example, for the age group 20-24 years the proportion of never married males is 84.9 percent corresponding to 57.5 percent of females and at age group 25-29 years, the proportion of never married males reduces to 58.3 percent corresponding to 27.9 percent for females.

While the proportions of married males and females increase with increasing age, the proportion of married females at each age group is substantially higher than that for the corresponding age group for males, and at a higher tempo till age group 35-39 years where the females reach a peak (79.0%). The trend changes to higher male percentage married than females at each age group till 65 years and older but at a much slower tempo.

The proportion of widowed males in the municipality is 1.7 percent compared to 14.3 percent for females implying a ratio of 8 widowed females to one widowed male. The proportion of widowed males is 1.5 percent at age group 40-44 years compared to 19.2 percent for females

and 3.8 percent for males at age group 55-59 years compared to 40.8 percent for females, a ratio of 10.7 widowed females to one widowed male. This trend can be attributed to the polygamous nature of the region where a polygamous male still remains married when he has even lost one of his wives.

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

Sex/Age-group	Number	Total	Never married	Informal/ Consensual union/Living together	Married	Separated	Divorced	Widowed
<b>Both Sexes</b>								
Total	92,293	100.0	43.6	0.8	45.3	0.9	0.9	8.4
12-14	9,380	100.0	95.4	0.2	4.4	0.0	0.0	0.0
15 - 19	15,146	100.0	92.2	0.5	7.0	0.1	0.0	0.2
20 - 24	13,334	100.0	70.2	1.3	27.4	0.4	0.3	0.3
25 - 29	10,682	100.0	41.8	1.5	53.7	1.1	0.8	1.0
30 - 34	8,682	100.0	19.6	1.3	73.0	1.6	1.4	3.1
35 - 39	7,198	100.0	9.8	0.8	80.4	1.6	1.8	5.6
40 - 44	6,099	100.0	5.9	0.7	78.5	1.9	1.9	11.2
45 - 49	4,857	100.0	4.2	0.5	77.5	1.9	1.9	14.2
50 - 54	4,418	100.0	2.8	0.3	72.5	1.6	1.9	20.9
55 - 59	2,811	100.0	2.6	0.4	70.4	1.3	1.9	23.5
60 - 64	2,703	100.0	2.7	0.4	61.6	1.5	1.4	32.4
65+	6,983	100.0	3.5	0.3	49.4	1.1	1.3	44.4
<b>Male</b>								
Total	42,775	100.0	51.1	0.7	44.9	0.8	0.8	1.7
12-14	4,616	100.0	95.1	0.2	4.7	0.0	0.0	0.0
15 - 19	7,448	100.0	95.3	0.2	4.3	0.0	0.0	0.1
20 - 24	6,207	100.0	84.9	0.7	13.8	0.3	0.1	0.2
25 - 29	4,900	100.0	58.3	1.7	38.5	0.8	0.4	0.2
30 - 34	4,122	100.0	28.3	1.5	67.9	0.9	1.0	0.5
35 - 39	3,493	100.0	13.4	1.0	81.9	1.1	1.3	1.1
40 - 44	2,746	100.0	8.6	1.0	85.3	1.6	2.0	1.5
45 - 49	2,173	100.0	5.4	0.5	87.4	2.3	2.0	2.4
50 - 54	1,908	100.0	3.7	0.5	88.0	1.9	1.9	4.0
55 - 59	1,313	100.0	3.2	0.3	89.2	1.4	2.1	3.8
60 - 64	1,124	100.0	3.6	0.3	85.5	1.5	1.1	8.1
65+	2,725	100.0	4.0	0.3	80.7	1.7	1.3	11.9
<b>Female</b>								
Total	49,518	100.0	37.1	0.8	45.7	1.1	1.0	14.3
12-14	4,764	100.0	95.7	0.2	4.1	0.0	0.0	0.0
15 - 19	7,698	100.0	89.2	0.7	9.6	0.2	0.0	0.3
20 - 24	7,127	100.0	57.5	1.9	39.3	0.5	0.4	0.5
25 - 29	5,782	100.0	27.9	1.4	66.6	1.4	1.1	1.6
30 - 34	4,560	100.0	11.7	1.2	77.7	2.2	1.8	5.5
35 - 39	3,705	100.0	6.4	0.6	79.0	2.1	2.2	9.9
40 - 44	3,353	100.0	3.6	0.4	72.9	2.1	1.8	19.2
45 - 49	2,684	100.0	3.1	0.4	69.4	1.5	1.8	23.7
50 - 54	2,510	100.0	2.2	0.2	60.7	1.4	1.9	33.7
55 - 59	1,498	100.0	2.0	0.4	53.9	1.3	1.7	40.8
60 - 64	1,579	100.0	2.2	0.4	44.6	1.5	1.6	49.7
65+	4,258	100.0	3.1	0.3	29.4	0.8	1.3	65.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.3.2 Marital status and level of education

Table 3.5 reveals that the proportion of the never married decreases from basic education level with increasing educational level. While 11.0 percent of the never married population have no formal education, 59.1 percent have attained basic school education level, about one out of five (19.4%) have secondary school level education, 6.8 percent have post-secondary education, and 1.3 percent have tertiary education.

A higher percentage of never married males (11.6%) than females (10.4%) have no formal education while 44.8 percent of males and 37.0 percent of females have attained basic school education level. A slightly higher proportion of never married females (59.8%) than males (56.6%) attained basic education level. A much higher proportion of married females (57.0%) than married males (43.9%) have no formal education while a higher proportion of married males (30.7%) than married female (27.9%) have attained basic education level. Table 3.5 further reveals a much reduced proportion of married females (7.0%) than married males (10.1%) who have attained secondary school. The sex differentials became wider with a much higher proportion of married males (15.3%) than married females (9.0%) who have higher (beyond secondary level education).

Similar observations apply to the other marital statuses. In general while females in the municipality, irrespective of marital status tend to perform better than males up to basic education level, female face more fundamental challenges that prevent them from attaining educational level beyond basic school education than males. This implies a more problematic transition from basic to secondary school education and beyond for females than males. It requires policy actions to address such problems that make it more difficult for girls than boys to transition from basic education to secondary school education and beyond.

**Table 3.5: Persons 12 years and older by sex, marital status and level of education**

Sex/Marital status	Number	All levels	No Education	Basic <sup>1</sup>	Secondary <sup>2</sup>	Voc/ Tech/ Comm	Post middle/ secondary certificate/ diploma <sup>3</sup>	Tertiary <sup>4</sup>
<b>Both Sexes</b>								
Total	92,293	100.0	36.3	40.7	12.6	2.1	6.2	2.1
Never married	40,224	100.0	11.0	59.1	19.4	2.3	6.8	1.3
Informal/Consensual union/Living together	721	100.0	23.7	41.2	16.4	3.9	12.3	2.5
Married	41,836	100.0	51.0	28.7	8.4	2.1	6.5	3.3
Separated	874	100.0	52.9	31.6	5.4	4.0	4.3	1.8
Divorced	848	100.0	48.8	33.8	7.0	2.7	5.7	2.0
Widowed	7,790	100.0	85.3	11.1	1.0	0.5	1.7	0.4
<b>Male</b>								
Total	42,775	100.0	27.8	44.8	14.5	2.1	7.4	3.3
Never married	21,865	100.0	11.6	58.6	19.0	2.0	7.2	1.7
Informal/Consensual union/Living together	314	100.0	18.5	40.8	17.5	3.5	15.3	4.5
Married	19,186	100.0	43.9	30.7	10.1	2.2	8.0	5.1
Separated	351	100.0	49.9	33.0	8.3	3.1	3.4	2.3
Divorced	331	100.0	42.6	38.4	7.9	3.0	4.8	3.3
Widowed	728	100.0	78.7	15.7	1.9	0.8	1.9	1.0

**Table 3.5: Persons 12 years and older by sex, marital status and level of education (cont'd)**

Sex/Marital status	Number	All levels	No Education	Basic <sup>1</sup>	Secondary <sup>2</sup>	Voc/ Tech/ Comm	Post middle/ secondary certificate/ diploma <sup>3</sup>	Tertiary <sup>4</sup>
<b>Female</b>								
Total	49,518	100.0	43.5	37.0	10.9	2.1	5.2	1.2
Never married	18,359	100.0	10.4	59.8	19.8	2.8	6.4	0.9
Informal/Consensual union/Living together	407	100.0	27.8	41.5	15.5	4.2	10.1	1.0
Married	22,650	100.0	57.0	27.0	7.0	2.1	5.2	1.7
Separated	523	100.0	54.9	30.6	3.4	4.6	5.0	1.5
Divorced	517	100.0	52.8	30.9	6.4	2.5	6.2	1.2
Widowed	7,062	100.0	86.0	10.7	0.9	0.4	1.7	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

<sup>1</sup> Basic: Primary, Middle and JSS/JHS

<sup>2</sup> Secondary: SSS/SHS and Secondary

<sup>3</sup> Post Middle/ Sec. Cert./Diploma: Teacher training/ College of education, Agric, Nursing, University Diploma, HND, etc

<sup>4</sup> Tertiary: Bachelor's Degree and Post Graduate or higher

### 3.3.3 Marital status and economic activity status

Table 3.6 presents the marital status of the population 12 years and older by their economic activity. Status of economic activity significantly influences preference in marriage partner's selection. Evidence of ability to support a spouse financially or mere perception of ability to support a spouse financially, is an important determinant in the decision to get married.

Table 3.6 shows that more than one-third (35.5%) of the population 12 years and older are employed compared to 81.3 percent of their married counterparts and 65.3 percent of the widowed population. Contrarily, 60.5 percent of those who have never been married compared to the married (15.6%) are economically not active. Similar patterns are observed among the male and female populations. Among the never married category, more males (39.6%) than females (30.7%) are employed and of those married, more males than females are employed. Also, the proportion of females (18.3%) who are married and are economically not active is higher than their male counterparts (12.4%). Unemployment is highest among the population in informal or consensual union (6.8%) and is least among the widowed.

**Table 3.6: Persons 12 years and older by sex, marital status and economic activity status**

Sex/Marital Status	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both Sexes</b>								
Total	92,293	100.0	55,203	59.8	3,168	3.4	33,922	36.8
Never married	40,224	100.0	14,286	35.5	1,619	4.0	24,319	60.5
Informal/Consensual union/Living together	721	100.0	484	67.1	49	6.8	188	26.1
Married	41,836	100.0	33,994	81.3	1,328	3.2	6,514	15.6
Separated	874	100.0	690	78.9	30	3.4	154	17.6
Divorced	848	100.0	664	78.3	24	2.8	160	18.9
Widowed	7,790	100.0	5,085	65.3	118	1.5	2,587	33.2
<b>Male</b>								
Total	42,775	100.0	26,299	61.5	1,431	3.3	15,045	35.2
Never married	21,865	100.0	8,651	39.6	947	4.3	12,267	56.1
Informal/Consensual union/Living together	314	100.0	238	75.8	16	5.1	60	19.1
Married	19,186	100.0	16,374	85.3	436	2.3	2,376	12.4
Separated	351	100.0	287	81.8	11	3.1	53	15.1
Divorced	331	100.0	275	83.1	8	2.4	48	14.5
Widowed	728	100.0	474	65.1	13	1.8	241	33.1
<b>Female</b>								
Total	49,518	100.0	28,904	58.4	1,737	3.5	18,877	38.1
Never married	18,359	100.0	5,635	30.7	672	3.7	12,052	65.6
Informal/Consensual union/Living together	407	100.0	246	60.4	33	8.1	128	31.4
Married	22,650	100.0	17,620	77.8	892	3.9	4,138	18.3
Separated	523	100.0	403	77.1	19	3.6	101	19.3
Divorced	517	100.0	389	75.2	16	3.1	112	21.7
Widowed	7,062	100.0	4,611	65.3	105	1.5	2,346	33.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.4 Nationality

Ghanaian nationals are classified as Ghanaian by birth and by naturalization. The composition of the population of the municipality by nationality is summarized in Table 3.7. A greater proportion of the residents in the municipality (96.2%) are Ghanaians with 93.5 percent being Ghanaians by birth. The rest of the population is made up of persons from ECOWAS countries (1.9%), other African countries (0.5%) and non-Africans (0.4%). There are slightly more naturalized female Ghanaians (1.0%) and females with dual nationality (2.8%) than their male counterparts in the municipality.

**Table 3.7 Population by nationality and sex**

Nationality	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	131,550	100.0	62,783	100.0	68,767	100.0
Ghanaian by birth	123,027	93.5	58,584	93.3	64,443	93.7
Dual Nationality	3,593	2.7	1,691	2.7	1,902	2.8
Ghanaian by naturalisation	1,290	1	582	0.9	708	1
ECOWAS	2,461	1.9	1,348	2.1	1,113	1.6
Africa other than ECOWAS	688	0.5	333	0.5	355	0.5
Other	491	0.4	245	0.4	246	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.5 Religious Affiliation

Table 3.8 presents the religious affiliation of the population in the Bolgatanga Municipality. Christianity is the dominant religion with 57.6 percent following, followed by Traditionalist (22.3%) and Islam (17.1%). About three out of every 100 persons (2.7%) in the municipality have no religious affiliation. Within the Christian religion, the Catholics are in the majority (35.2%), followed by the Pentecostal or Charismatic (13.8%), then the Protestants (5.3%) and other Christians (3.3%). Table 3.8 further indicate that there are females (61.5%) Christians than male (53.4%) Christians. Males on the other hand dominate the Traditional religion and Islam.

**Table 3.8: Population by religion and sex**

Religion	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	131,550	100.0	62,783	100.0	68,767	100.0
No Religion	3,554	2.7	1,834	2.9	1,720	2.5
Catholic	46,295	35.2	20,569	32.8	25,726	37.4
Protestant (Anglican Lutheran etc.)	7,032	5.3	3,151	5	3,881	5.6
Pentecostal/Charismatic	18,138	13.8	7,879	12.5	10,259	14.9
Other Christians	4,347	3.3	1,901	3	2,446	3.6
Islam	22,488	17.1	11,300	18	11,188	16.3
Traditionalist	29,335	22.3	15,968	25.4	13,367	19.4
Other	361	0.3	181	0.3	180	0.3

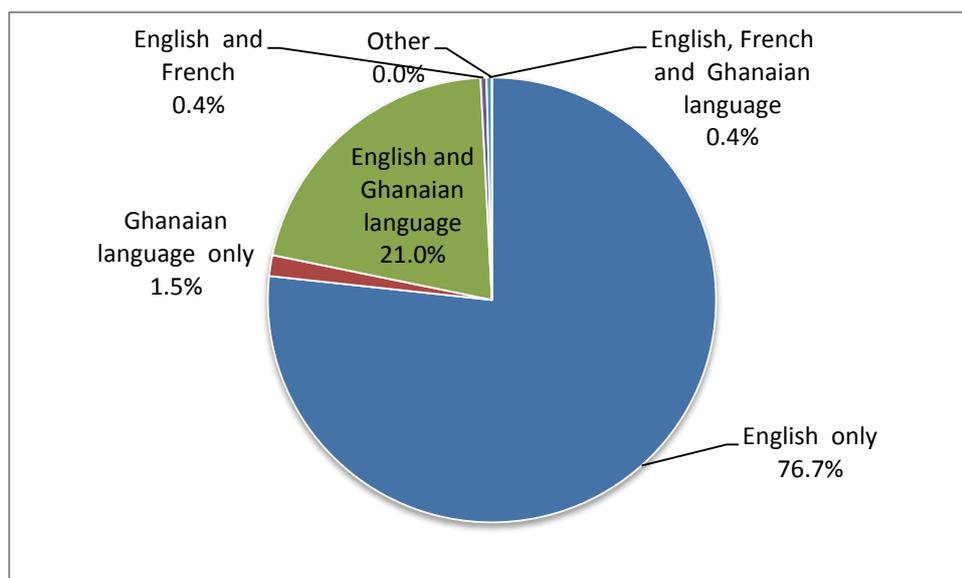
Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.6 Literacy and Education

#### 3.6.1 Literacy

Literacy is defined as the ability to read and write in any language and relates to those aged 11 years and older. Figure 3.2 and Table 3.9 present the literacy status of the population 11 years and older in the Bolgatanga Municipality. As indicated in Table 3.9, 64.6 percent of population aged 11 years and older are literate while 35.4 percent are not literate (illiterates). Figure 3.2 further shows that out of the total literate population, three-quarters (76.7%) are literate in English only, 21.0 percent literate in English and a Ghanaian language, while only 1.5 percent are literate in a Ghanaian language only. Being the regional capital and its closeness with Burkina Faso has not influence the population's literacy in French.

**Figure 3.2 Population 11 years and older by literacy status**



Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.9 indicates that about one person in three in the municipality (35.4%) is a non-literate. The level of non-literacy is higher among females (42.6%) than males (27.2%). Among the literates, 76.7 percent are literate in the English language only, 21.0 percent in English and a Ghanaian language and 1.5 percent are literate in a Ghanaian language only. Less than 1.0 percent are literates in French and other languages.

Overall, three-quarters of population in the municipality are literate in the English language only (76.7%). Literacy in English only is highest among age group 15-19 years (24.1%) but the proportion decreases with increasing age and reaches a proportion of 1.3 percent at age 65 years and older. Literacy in a Ghanaian language only is very low in the municipality (1.5%). Apart from age group 11-14 years (14.8%), the proportion literate in a Ghanaian language only increases with age from age group 15-19 years (17.3%) to 1.4 percent at age 65 years and older. Literacy in other languages is negligible, less than 1.0 percent. There are differentials between males and females in language literacy in the municipality.

Although literacy is higher among males (72.8%) than females (57.4%), the proportion literate at the younger age groups is higher for females at each age group 11-14 years to 25-29 years than for males but from age group 30-34 years to 65 years and older the proportion of males literate at each age group is higher than for females.

The implications are that literacy is higher among the younger generation of females below 30 years than their male counterparts. If this trend is sustained over time, female literacy in the municipality will not only catch up with that of males but will eventually be higher than that of males. The numbers for literacy in a Ghanaian language only are small, 482 males and 400 females.

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

	None (not literate)	Literate	English only	Ghanaian language only	English and Ghanaian language	English and French	English, French and Ghanaian language
<b>Both sexes</b>							
Total	<b>33,664</b>	<b>61,443</b>	<b>47,137</b>	<b>932</b>	<b>12,875</b>	<b>263</b>	<b>236</b>
11-14	622	11,572	9,981	138	1,388	40	25
15-19	1,335	13,811	11,372	161	2,169	62	47
20-24	2,386	10,948	8,366	147	2,352	46	37
25-29	2,975	7,707	5,569	121	1,962	25	30
30-34	3,495	5,187	3,630	113	1,414	19	11
35-39	3,493	3,705	2,609	71	986	22	17
40-44	3,597	2,502	1,732	55	671	25	19
45-49	2,959	1,898	1,280	44	549	9	16
50-54	2,781	1,637	1,012	37	557	8	23
55-59	1,799	1,012	601	21	382	2	6
60-64	2,063	640	380	11	243	3	3
65+	6,159	824	605	13	202	2	2
<b>Male</b>							
Total	<b>12,015</b>	<b>32,224</b>	<b>23,927</b>	<b>482</b>	<b>7,500</b>	<b>162</b>	<b>153</b>
11-14	319	5,761	4,914	78	733	24	12
15-19	653	6,795	5,567	83	1,095	30	20
20-24	863	5,344	3,986	73	1,237	25	23
25-29	978	3,922	2,700	66	1,116	16	24
30-34	1,155	2,967	1,981	62	902	13	9
35-39	1,266	2,227	1,506	33	658	18	12
40-44	1,277	1,469	989	25	423	17	15
45-49	1,045	1,128	726	24	362	7	9
50-54	916	992	580	16	368	8	20
55-59	631	682	393	9	275	1	4
60-64	693	431	229	6	191	2	3
65+	2,219	506	356	7	140	1	2
<b>Female</b>							
Total	<b>21,649</b>	<b>29,219</b>	<b>23,210</b>	<b>450</b>	<b>5,375</b>	<b>101</b>	<b>83</b>
11-14	303	5,811	5,067	60	655	16	13
15-19	682	7,016	5,805	78	1,074	32	27
20-24	1,523	5,604	4,380	74	1,115	21	14
25-29	1,997	3,785	2,869	55	846	9	6
30-34	2,340	2,220	1,649	51	512	6	2
35-39	2,227	1,478	1,103	38	328	4	5
40-44	2,320	1,033	743	30	248	8	4
45-49	1,914	770	554	20	187	2	7
50-54	1,865	645	432	21	189	-	3
55-59	1,168	330	208	12	107	1	2
60-64	1,370	209	151	5	52	1	-
65+	3,940	318	249	6	62	1	-

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.6.2 Education

The level of educational attainment is an important determinant of the quality of manpower. As such, the educational level of the people of the municipality, to some extent, reflects the level of social and economic development of the communities. It is also well known that education constitutes one of the most important factors influencing demographic behaviour and the level of fertility of a population.

Table 3.8 presents the level of education and school attendance of males and females three years and older in the municipality. The total population currently in school is 52,273 comprising 26,665 (51.0%) males and 25,608 (46.8%) females. The data further shows that the population 3 years and older who attended school in the past is 32,306 representing (53.4%) males and (46.6%) females in the municipality. Males exceed females for both population currently in school and those who attended school in the past. Among the population currently in school, nearly half (47.0%) are in primary school with slightly more males than females, about a one-fifth (19.4%) are in JHS and 9.5 percent are in SHS, while only four out of every 100 (4.1%) are in a tertiary institution. There are slightly more females than males in vocational or technical or commercial and post-secondary schools in the municipality. Generally, the number attending school considerably decreases with progression to higher educational levels.

The data further suggest that among the population who attended school in the past, three out of five (59.8%) only had basic education with more females (63.0%) than males (57.0%). While about the same proportion of males and females reported to have attained secondary or vocational or technical or post-secondary education, more males (14.1%) than females (8.5%) attained tertiary level.

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

Level of education	Currently attending						Attended in the past					
	Both sexes		Male		Female		Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	52,273	100.0	26,665	100.0	25,608	100.0	32,306	100.0	17,256	100.0	15,050	100.0
Nursery	5,124	9.8	2,557	9.6	2,567	10.0	-	-	-	-	-	-
Kindergarten	4,151	7.9	2,152	8.1	1,999	7.8	-	-	-	-	-	-
Primary	24,546	47.0	12,661	47.5	11,885	46.4	9,066	28.1	4,420	25.6	4,646	30.9
JSS/JHS	10,157	19.4	5,035	18.9	5,122	20.0	6,387	19.8	3,065	17.8	3,322	22.1
Middle	-	-	-	-	-	-	3,851	11.9	2,343	13.6	1,508	10.0
SSS/SHS	4,955	9.5	2,541	9.5	2,414	9.4	5,525	17.1	2,908	16.9	2,617	17.4
Secondary	-	-	-	-	-	-	1,118	3.5	763	4.4	355	2.4
Vocational/Technical/ Commercial	540	1.0	183	0.7	357	1.4	1,419	4.4	720	4.2	699	4.6
Post middle /secondary certificate	642	1.2	302	1.1	340	1.3	1,227	3.8	607	3.5	620	4.1
Tertiary	2,158	4.1	1,234	4.6	924	3.6	3,713	11.5	2,430	14.1	1,283	8.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

## **CHAPTER FOUR**

### **ECONOMIC CHARACTERISTICS**

#### **4.1 Introduction**

Governments all over the globe at certain stage of the development of their countries seek to know how many people are employed and unemployed. It should be noted that the more the working population, the better the prospects for wealth creation leading to improved living conditions and poverty reduction. The nature, type and size of the labour force are critical factors in the production of goods and services. The information on labour force is also used to formulate employment policies, to determine training needs and to calculate the expected working lives of the male and female populations and the rates of accession to, and retirement from economic activity. The focus of this chapter is on the type of economic activity, occupation, industry, employment status and employment sector. Although data was collected on the population five years and older, the analyses in this section is limited to the population 15 years and older.

#### **4.2 Economic Activity Status**

Table 4.1 presents information on the economic activity status of the population 15 years and older in the Bolgatanga Municipal. The figure shows that the proportion of the population that is economically active (74.0%) is nearly three times higher than proportion of the population not economically active (26.0%). Whiles 72.2 percent of the economically active population 15 years and older are employed, 2.4 percent are unemployed.

Table 4.1 further shows that among the unemployed population, 44.4 percent have ever worked but are currently seeking work, while 55.6 percent are seeking work for the first time. The proportion of females who worked before and are seeking work is 46.6 percent whilst those seeking work for the first time is 53.4. On the other hand, 41.9 percent of the male unemployed population had worked before but now seeking work whereas 58.1 percent are first time job seekers.

The data further reveal that those who are involved in full time education, that is, students (52.6%) constitute the majority of economically not active population. The proportion of the economically not active population who did home duties are 19.2 percent. However, the proportion of females who did home duties is higher than their male counterparts. This could be due to the social norm where females usually keep the home.

**Table 4.1: Population 15 years and older by activity status and sex**

Activity status	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	43,850	100.0	20,762	100.0	23,088	100.0
<b>Economically active</b>	32,434	74.0	15,646	75.4	16,788	72.7
<b>Employed</b>	31,666	97.6	15,286	97.7	16,380	97.6
<i>Worked</i>	30,891	97.6	14,886	97.4	16,005	97.7
<i>Did not work but had job to go back to</i>	625	2.0	320	2.1	305	1.9
<i>Did voluntary work without pay</i>	150	0.5	80.0	0.5	70.0	0.4
<b>Unemployed</b>	768	2.4	360	2.3	408	2.4
<i>Worked before, seeking work and available</i>	341	44.4	151	41.9	190	46.6
<i>Seeking work for the first time and available</i>	427	55.6	209	58.1	218	53.4
<b>Economically not active</b>	11,416	26.0	5,116	24.6	6,300	27.3
Did home duties (household chore)	2,193	19.2	588	11.5	1,605	25.5
Full time education	6,002	52.6	3,357	65.6	2,645	42.0
Pensioner/Retired	104	0.9	64	1.3	40.0	0.6
Disabled/Sick	720	6.3	350	6.8	370	5.9
Too old/young	2,005	17.6	570	11.1	1,435	22.8
Other	392	3.4	187	3.7	205	3.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 4.2 shows that the proportion employed increases with age from 8.1 percent at age 15-19 years to a peak of 14.4 percent for age group 25-29. Thereafter, the proportion of the employed reduces gradually with advancing age. The proportion for the employed male population increases with age from 8.9 percent at age group 15-19 years to a plateau at age groups 25-29 years to 30-34 years (14.0%), and decreases thereafter. Similar pattern is observed among the female population.

It is worth noting that 62.1 percent of the economically not active population are below 25 years, which translates into 69.0 percent of males and 57.0 percent of females. This corresponds closely with the percentage of the population economically not active in full time education (52.6%) comprising 65.6 percent of males and 42.0 percent of females. It can therefore be concluded that the skewness of the population economically not active towards the youngest age groups, 15-19 years and 20-24 years may be explained by the high proportion of the youth in full time education.

**Table 4.2: Population 15 years and older by sex, age and activity status**

Age group	All Status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both sexes</b>								
Total	82,913	100.0	53,570	100.0	3,159	100.0	26,184	100.0
15 - 19	15,146	18.3	4,313	8.1	329	10.4	10,504	40.1
20 - 24	13,334	16.1	6,507	12.1	1,064	33.7	5,763	22
25 - 29	10,682	12.9	7,696	14.4	796	25.2	2,190	8.4
30 - 34	8,682	10.5	7,377	13.8	367	11.6	938	3.6
35 - 39	7,198	8.7	6,361	11.9	213	6.7	624	2.4
40 - 44	6,099	7.4	5,466	10.2	108	3.4	525	2
45 - 49	4,857	5.9	4,297	8	85	2.7	475	1.8
50 - 54	4,418	5.3	3,822	7.1	48	1.5	548	2.1
55 - 59	2,811	3.4	2,310	4.3	42	1.3	459	1.8
60 - 64	2,703	3.3	1,815	3.4	73	2.3	815	3.1
65+	6,983	8.4	3,606	6.7	34	1.1	3,343	12.8
<b>Male</b>								
Total	38,159	100.0	25,461	100.0	1,426	100.0	11,272	100.0
15 - 19	7,448	19.5	2,274	8.9	139	9.7	5,035	44.7
20 - 24	6,207	16.3	3,028	11.9	442	31	2,737	24.3
25 - 29	4,900	12.8	3,571	14	386	27.1	943	8.4
30 - 34	4,122	10.8	3,574	14	173	12.1	375	3.3
35 - 39	3,493	9.2	3,168	12.4	96	6.7	229	2
40 - 44	2,746	7.2	2,514	9.9	57	4	175	1.6
45 - 49	2,173	5.7	1,984	7.8	42	2.9	147	1.3
50 - 54	1,908	5	1,750	6.9	21	1.5	137	1.2
55 - 59	1,313	3.4	1,167	4.6	20	1.4	126	1.1
60 - 64	1,124	2.9	810	3.2	32	2.2	282	2.5
65+	2,725	7.1	1,621	6.4	18	1.3	1,086	9.6
<b>Female</b>								
Total	44,754	100.0	28,109	100.0	1,733	100.0	14,912	100.0
15 - 19	7,698	17.2	2,039	7.3	190	11	5,469	36.7
20 - 24	7,127	15.9	3,479	12.4	622	35.9	3,026	20.3
25 - 29	5,782	12.9	4,125	14.7	410	23.7	1,247	8.4
30 - 34	4,560	10.2	3,803	13.5	194	11.2	563	3.8
35 - 39	3,705	8.3	3,193	11.4	117	6.8	395	2.6
40 - 44	3,353	7.5	2,952	10.5	51	2.9	350	2.3
45 - 49	2,684	6	2,313	8.2	43	2.5	328	2.2
50 - 54	2,510	5.6	2,072	7.4	27	1.6	411	2.8
55 - 59	1,498	3.3	1,143	4.1	22	1.3	333	2.2
60 - 64	1,579	3.5	1,005	3.6	41	2.4	533	3.6
65+	4,258	9.5	1,985	7.1	16	0.9	2,257	15.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 4.3 Occupation

Table 4.3 provides information on the employed population 15 years and older by occupation. The main occupation of the employed population is skilled agricultural, forestry and fishery workers (37.7%), followed by crafts and related workers (22.7%), service and sales workers (18.5%), professionals (6.9%) and elementary occupations (5.2%). Plant and machine operators and assemblers account for 2.9 percent, managers (2.3%), clerical support workers (2.0%) and technicians and associate professionals (1.9%). Whiles males dominate virtually all the occupations, there are twice more females (24.7%) than males (11.6%) among the service and sales workers. Females in the municipality also dominate in the craft and related trade workers.

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

Occupation	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	53,570	100.0	25,461	100.0	28,109	100.0
Managers	1,209	2.3	714	2.8	495	1.8
Professionals	3,700	6.9	2,201	8.6	1,499	5.3
Technicians and associate professionals	1,006	1.9	711	2.8	295	1.0
Clerical support workers	1,068	2.0	561	2.2	507	1.8
Service and sales workers	9,908	18.5	2,954	11.6	6,954	24.7
Skilled agricultural forestry and fishery workers	20,191	37.7	10,122	39.8	10,069	35.8
Craft and related trades workers	12,142	22.7	5,323	20.9	6,819	24.3
Plant and machine operators and assemblers	1,578	2.9	1,484	5.8	94	0.3
Elementary occupations	2,761	5.2	1,386	5.4	1,375	4.9
Other occupations	7	0.0	5	0.0	2	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 4.4 Industry

Industry is defined as the type of activity carried out by the enterprise where a person is working or the type of product produced or services rendered at the respondent's workplace. Information was collected only on the main product produced or service rendered in the establishment. Table 4.4 shows employed population 15 years and older by industry and sex. Agriculture, forestry and fishing, remains the largest industry, employing 37.8 percent of the economically active population aged 15 years and older in the municipality. The manufacturing (18.3%) and wholesale and retail; repair of motor vehicles and motorcycles (15.0%) are the other major sectors of employment in the district. These three together engage seven out of every 10 employed persons in the municipality. Whiles males dominate the agriculture industry, females dominate the manufacturing, wholesale and retail, as well as the accommodation and food services activities industries.

**Table 4.4: Employed population 15 years and older by industry and sex**

Industry	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	53,570	100.0	25,461	100.0	28,109	100.0
Agriculture forestry and fishing	20,249	37.8	10,182	40.0	10,067	35.8
Mining and quarrying	254	0.5	227	0.9	27	0.1
Manufacturing	9,824	18.3	3,115	12.2	6,709	23.9
Electricity gas steam and air conditioning supply	115	0.2	99	0.4	16	0.1
Water supply; sewerage waste management and remediation activities	201	0.4	157	0.6	44	0.2
Construction	1,779	3.3	1,691	6.6	88	0.3
Wholesale and retail; repair of motor vehicles and motorcycles	8,033	15.0	3,136	12.3	4,897	17.4
Transportation and storage	1,068	2.0	992	3.9	76	0.3
Accommodation and food service activities	2,283	4.3	310	1.2	1,973	7.0
Information and communication	197	0.4	150	0.6	47	0.2
Financial and insurance activities	326	0.6	220	0.9	106	0.4
Real estate activities	3	0.0	3	0.0	0	0.0
Professional scientific and technical activities	268	0.5	200	0.8	68	0.2
Administrative and support service activities	289	0.5	254	1.0	35	0.1
Public administration and defence; compulsory social security	1,885	3.5	1,317	5.2	568	2.0
Education	2,957	5.5	1,667	6.5	1,290	4.6
Human health and social work activities	1,221	2.3	575	2.3	646	2.3
Arts entertainment and recreation	215	0.4	192	0.8	23	0.1
Other service activities	2,062	3.8	811	3.2	1,251	4.5
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	332	0.6	156	0.6	176	0.6
Activities of extraterritorial organizations and bodies	9	0.0	7	0.0	2	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 4.5 Employment Status

The distribution of the workforce by employment status is often used as an indicator of progress in the modernization of employment and the economy. It also measures the relative capacity of the various sectors of the economy to create jobs. Table 4.5 shows employed population 15 years and older by employment status and sex. In the municipality as a whole, 58.1 percent of the employed population are self-employed without employees while an additional 3.1 percent of the self-employed have employees. Contributing family workers constitute 15.5 percent while employees make up only 18.3 percent. While females dominate the self-employed without employees (62.5) category there are more male self-employed who have other employees (3.6%).

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

Employment Status	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	53,570	100.0	25,461	100.0	28,109	100.0
Employee	9,819	18.3	6,300	24.7	3,519	12.5
Self-employed without employee(s)	31,105	58.1	13,526	53.1	17,579	62.5
Self-employed with employee(s)	1,676	3.1	929	3.6	747	2.7
Casual worker	883	1.6	614	2.4	269	1.0
Contributing family worker	8,296	15.5	3,258	12.8	5,038	17.9
Apprentice	1,560	2.9	740	2.9	820	2.9
Domestic employee (Househelp)	197	0.4	76	0.3	121	0.4
Other	34	0.1	18	0.1	16	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 4.6 Employment Sector

Table 4.6 shows the employed population 15 years and older by employment sector and sex. The data shows that 83.4 percent of the employed population work in the private informal sector whilst 11.8 percent are public sector workers. About 88 percent of the female employed population are in the private informal sector compared to 78 percent of the male population. Contrarily, the public sector employs more males (15.4%) than females (8.5%). More males are also employed in the private formal sector than females.

**Table 4.6: Employed population 15 years and older by employment sector and sex**

Employment Sector	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	53,570	100.0	25,461	100.0	28,109	100.0
Public (Government)	6,333	11.8	3,932	15.4	2,401	8.5
Private Formal	2,065	3.9	1,408	5.5	657	2.3
Private Informal	44,686	83.4	19,842	77.9	24,844	88.4
Semi-Public/Parastatal	61	0.1	36	0.1	25	0.1
NGOs (Local and International)	413	0.8	234	0.9	179	0.6
Other International Organisations	12	0.0	9	0.0	3	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER FIVE

## INFORMATION COMMUNICATION TECHNOLOGY

### 5.1 Introduction

Information Communication Technology (ICT) can be defined to include a group of electronic technologies and techniques used to manage information and knowledge. Due to its importance in recent development arena, the 2010 Population and Housing Census for the first time sought information on the ownership of mobile phones, usage of desk top or laptop computers and internet facilities by individuals and households. ICT is recognized as an important knowledge-based tool necessary for socioeconomic developments. The role of ICT in the economy of Ghana, has been widely recognized though it has not been fully experienced in all parts of the country. The recognition is reflected in the development of a national ICT infrastructure, institutional and regulatory framework for managing the sector, promoting the use of ICT in all sectors of the economy, implementing E-governance in all government institutions and the construction of a National Data Centre as well as regional and district information centers. This chapter presents data on the ownership of ICT facilities such as mobile phones, and desktop and or laptop computers, and use of internet by the population 12 years and older in the Bolgatanga Municipality.

### 5.2 Ownership of Mobile Phones

Table 5.1 presents information on the population 12 years and older and those amongst them who own mobile phones and those who use internet. The data reveals that two out of every five (43.8%) persons 12 years and older in the Bolgatanga Municipal own mobile phones compared to a regional average of one out of every four persons (24.2%). Whiles half (49.7%) of the male population 12 years and older own mobile phones, 38.7 percent of their female counterparts own mobile phones.

**Table 5.1: Population 12 years and older by mobile phone ownership, internet facility usage, and sex**

Region/District/Sex	Population 12 yrs+		Pop owning phone		Pop using internet	
	Number	Percent	Number	Percent	Number	Percent
Upper East Region	690,901	100.0	167,421	24.2	15,777	2.3
Bolgatanga Municipal	92,293	100.0	40,457	43.8	6,272	15.5
Male	42,775	100.0	21,277	49.7	4,071	19.1
Female	49,518	100.0	19,180	38.7	2,201	11.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 5.3 Use of internet

Table 5.1 shows that, of the population 12 years and older in the Bolgatanga Municipality, only 6,272 representing 15.5 percent use the internet, which is higher than the regional average of 2.3 percent. While one out of every five males aged 12 years and older use the internet, only one out of every 10 of their female counterparts use the internet in the municipality.

### 5.4 Household ownership of a desktop or laptop computer

Table 5.2 presents data on the households in the municipality that have a desktop or laptop computer and households that have fixed telephone lines. Less than 10 percent (9.4%) of the households in the municipality have a laptop or desktop computer. Slightly more male headed households (10.7%) compared to female headed households (7.0%) have a computer.

### 5.5 Access to Fixed Telephone in the Household

Table 5.2 presents data on the households in the municipality that have a desktop or laptop computer and households that have fixed telephone lines. Only three out of every 100 (2.9%) of the households in the municipality have a fixed telephone line. Slightly more male headed households (3.2%) compared to female headed households (2.5%) have a computer.

**Table 5.2: Households having desktop/laptop computers, fixed telephone lines and sex of head**

Sex	Number of households		Households having desktop/laptop computers		Households having fixed telephone lines	
	Number	Percent	Number	Percent	Number	Percent
Total	26,706	100.0	2,517	9.4	782	2.9
Male	17,401	100.0	1,869	10.7	549	3.2
Female	9,305	100.0	648	7.0	233	2.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER SIX

## DISABILITY

### 6.1 Introduction

Evidence the world over indicates that persons with disability are people who can contribute to development. However, prejudice in cultures in certain parts of the world has discriminated against people with disabilities. Over the past few decades there has been an international consensus on the recognition of the rights of persons with disabilities with emphasis on the promotion of their dignity, and inclusive development. Evidence is needed to make informed decisions on policies and programmes. Knowing the characteristics and understanding the numbers of people with disabilities and their circumstances can enhance policies that address barriers that prevent persons with disabilities (PWDs) from participating more effectively in national development. In the Local Governance System in Ghana, one of the assessment for any other district to pass the Functional Organisation Assessment Tools (FOAT) is to make provision for PWDs in the design and construction of physical projects like toilets, schools, markets, office buildings, among others. The 2010 PHC for the first time sought information disability. This chapter presents data on the prevalence of disability, and the social-demographic characteristics of people with disabilities in the Bolgatanga Municipal.

### 6.2 Population with Disability

PWDs have been defined as: Persons who are unable to or are restricted in the performance of certain specific life tasks/activities due to loss or malfunction of some part of the body as a result of impairment or malformation (GSS, 2010). Disability questions were asked of all household members.

Table 6.1 presents information on the people with disability and the type of disability by sex. The data show three out of every 100 (3.0%) of the population of the Bolgatanga Municipality have one form of disability or the other. While 3.0 percent of the male population have one form of disability or the other, 2.9 percent of their female counterparts have a disability. Table 6.1 further provide information on the type of disabilities. It must be noted however that due to the fact that some persons have multiple disabilities, the types of disability may necessarily not add up to the reported number of persons with disability.

### 6.3 Types of Disability

Table 6.1 shows the distribution of the various types of reported disabilities in the Municipality. Visual or sight disability is the most common disability type which affects almost three out of every 10 PWDs (28.9%). Also, nearly one in every four (23.2%) PWDs have a physical disability Emotional or behavioural disorders (17.8%) and hearing impairment ranks fourth by (17.6%), intellectual disability (13.0 %) ranks fifth followed closely by speech impairment (12.3%) and (15.2%) others.

**Table 6.1: Population by type of locality, disability type and sex**

Disability Type	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
<b>All localities</b>						
Total	131,550	100.0	62,783	100.0	68,767	100.0
Without disability	127,665	97	60,917	97	66,748	97.1
With disability	3,885	3.0	1,866	3.0	2,019	2.9
Sight	1,121	28.9	481	25.8	640	31.7
Hearing	684	17.6	297	15.9	387	19.2
Speech	476	12.3	259	13.9	217	10.7
Physical	900	23.2	448	24	452	22.4
Intellect	505	13.0	270	14.5	235	11.6
Emotion	690	17.8	330	17.7	360	17.8
Other	591	15.2	293	15.7	298	14.8
<b>Urban</b>						
Total	65,549	100.0	30,974	100.0	34,575	100.0
Without disability	64,110	97.8	30,286	97.8	33,824	97.8
With disability	1,439	2.2	688	2.2	751	2.2
Sight	443	30.8	180	26.2	263	35.0
Hearing	224	15.6	96	14.0	128	17.0
Speech	178	12.4	101	14.7	77	10.3
Physical	292	20.3	161	23.4	131	17.4
Intellect	211	14.7	109	15.8	102	13.6
Emotion	297	20.6	143	20.8	154	20.5
Other	139	9.7	68	9.9	71	9.5
<b>Rural</b>						
Total	66,001	100.0	31,809	100.0	34,192	100.0
Without disability	63,555	96.3	30,631	96.3	32,924	96.3
With disability	2,446	3.7	1,178	3.7	1,268	3.7
Sight	678	27.7	301	25.6	377	29.7
Hearing	460	18.8	201	17.1	259	20.4
Speech	298	12.2	158	13.4	140	11.0
Physical	608	24.9	287	24.4	321	25.3
Intellect	294	12.0	161	13.7	133	10.5
Emotion	393	16.1	187	15.9	206	16.2
Other	452	18.5	225	19.1	227	17.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 6.4 Distribution of PWDs by Type of Locality of Residence

From Table 6.1, it can be observed that two out of every 100 (2.2%) urban dwellers suffer one form of disability or the other compare to about four in every 100 (3.7%) rural dwellers. While sight disability remains the highest in the municipality, slightly more urban dwellers and females suffer from it than rural dwellers and males. In the urban localities, a higher percentage of males than females suffer from the following disabilities. Intellectual disability: males (15.8%) females (9.5%). The percentage of males (24.8%) and females (25.0%) is the same for the emotional disability. Majority of the physically challenged persons live in rural areas in the municipality.

## 6.5 Disability and Activity Status

Table 6.2 presents information on the economic activity status of persons with disability (PWDs), aged 15 years and older. More than half (54.6%) of all PWDs 15 years and older in the municipality are employed, 2.1 percent are unemployed while slightly more than forty percent (43.4%) are economically not active. Although, unemployment among persons with disability remains generally low, the rates of those with intellectual (3.8%), speech (1.2%) and emotional disability (2.6%) are among the highest for unemployed persons with disability. More than two out of every five PWDs who have physical (55.9%), intellectual (51.1%), sight (48.1%), and emotional (42.5%) disabilities are economically not active. There is not much variation among the sexes considering disability and economic activity status.

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

Disability type/Sex	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both Sexes</b>								
Total	82,913	100.0	53,570	64.6	3,159	3.8	26,184	31.6
No disability	79,816	100.0	51,880	65.0	3,095	3.9	24,841	31.1
With a disability	3,097	100.0	1,690	54.6	64	2.1	1,343	43.4
Sight	998	100.0	506	50.7	12	1.2	480	48.1
Hearing	560	100.0	314	56.1	13	2.3	233	41.6
Speech	311	100.0	175	56.3	10	3.2	126	40.5
Physical	805	100.0	345	42.9	10	1.2	450	55.9
Intellectual	370	100.0	167	45.1	14	3.8	189	51.1
Emotional	532	100.0	292	54.9	14	2.6	226	42.5
Other	364	100.0	216	59.3	12	3.3	136	37.4
<b>Male</b>								
Total	38,159	100.0	25,461	66.7	1,426	3.7	11,272	29.5
No disability	36,710	100.0	24,629	67.1	1,397	3.8	10,684	29.1
With a disability	1,449	100.0	832	57.4	29	2.0	588	40.6
Sight	425	100.0	242	56.9	3	0.7	180	42.4
Hearing	234	100.0	143	61.1	4	1.7	87	37.2
Speech	163	100.0	92	56.4	7	4.3	64	39.3
Physical	399	100.0	180	45.1	8	2.0	211	52.9
Intellectual	182	100.0	82	45.1	6	3.3	94	51.6
Emotional	243	100.0	125	51.4	7	2.9	111	45.7
Other	180	100.0	111	61.7	5	2.8	64	35.6

**Table 6.2: Persons 15 years and older with disability by economic activity status and sex (Cont'd)**

Disability type/Sex	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Female</b>								
Total	44,754	100.0	28,109	62.8	1,733	3.9	14,912	33.3
No disability	43,106	100.0	27,251	63.2	1,698	3.9	14,157	32.8
With a disability	1,648	100.0	858	52.1	35	2.1	755	45.8
Sight	573	100.0	264	46.1	9	1.6	300	52.4
Hearing	326	100.0	171	52.5	9	2.8	146	44.8
Speech	148	100.0	83	56.1	3	2.0	62	41.9
Physical	406	100.0	165	40.6	2	0.5	239	58.9
Intellectual	188	100.0	85	45.2	8	4.3	95	50.5
Emotional	289	100.0	167	57.8	7	2.4	115	39.8
Other	184	100.0	105	57.1	7	3.8	72	39.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 6.6 Disability, Education and Literacy

Table 6.3 presents the population 3 years and older by sex, their disability type and level of education attained in the Bolgatanga Municipal. Less than one-third (31.2%) of persons with disabilities in the municipality have attained basic level educations, 10.2 percent have attained secondary or higher education. More than half (55.1%) have never been to school. PWDs with sight (67.0%), physical (67.5%) and hearing (63.2%) disabilities have the highest proportions who have never been to school while the least is recorded among those with other forms of disability (36.4%). The data show that only one out of every 10 PWDs with any form of disability are able to attain secondary or higher education in the municipality. Evidence from Table 6.3 further suggest that only a few persons with disability are able to progress from basic school to secondary or higher levels. This is especially so among PWDs with intellectual (6.1%), hearing (6.5%) and physical (7.8%) disabilities. Females with any form of disability are more disadvantaged than their male counterparts regarding educational progression.

**Table 6.3: Population 3 years and older by sex, disability type and level of education**

Disability type/Sex	Total		Never		Pre-Prim		Basic		Sec/SHS and higher	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both Sexes</b>										
Total	121,187	100.0	36,608	30.2	9,275	7.7	54,007	44.6	21,297	17.6
No disability	117,430	100.0	34,539	29.4	9,143	7.8	52,834	45	20,914	17.8
With a disability	3,757	100.0	2,069	55.1	132	3.5	1,173	31.2	383	10.2
Sight	1,096	100.0	734	67	17	1.6	237	21.6	108	9.9
Hearing	672	100.0	425	63.2	17	2.5	186	27.7	44	6.5
Speech	453	100.0	237	52.3	24	5.3	145	32	47	10.4
Physical	887	100.0	599	67.5	9	1	210	23.7	69	7.8
Intellectual	491	100.0	263	53.6	17	3.5	181	36.9	30	6.1
Emotional	673	100.0	293	43.5	32	4.8	253	37.6	95	14.1
Other	541	100.0	197	36.4	47	8.7	245	45.3	52	9.6
<b>Male</b>										
Total	57,509	100.0	13,588	23.6	4,709	8.2	27,524	47.9	11,688	20.3
No disability	55,707	100.0	12,736	22.9	4,647	8.3	26,863	48.2	11,461	20.6
With a disability	1,802	100.0	852	47.3	62	3.4	661	36.7	227	12.6
Sight	469	100.0	281	59.9	8	1.7	123	26.2	57	12.2
Hearing	293	100.0	161	54.9	9	3.1	98	33.4	25	8.5
Speech	248	100.0	120	48.4	12	4.8	83	33.5	33	13.3
Physical	441	100.0	262	59.4	5	1.1	128	29	46	10.4
Intellectual	260	100.0	126	48.5	13	5	104	40	17	6.5
Emotional	322	100.0	117	36.3	11	3.4	141	43.8	53	16.5
Other	267	100.0	81	30.3	20	7.5	133	49.8	33	12.4
<b>Female</b>										
Total	63,678	100.0	23,020	36.2	4,566	7.2	26,483	41.6	9,609	15.1
No disability	61,723	100.0	21,803	35.3	4,496	7.3	25,971	42.1	9,453	15.3
With a disability	1,955	100.0	1,217	62.3	70	3.6	512	26.2	156	8
Sight	627	100.0	453	72.2	9	1.4	114	18.2	51	8.1
Hearing	379	100.0	264	69.7	8	2.1	88	23.2	19	5
Speech	205	100.0	117	57.1	12	5.9	62	30.2	14	6.8
Physical	446	100.0	337	75.6	4	0.9	82	18.4	23	5.2
Intellectual	231	100.0	137	59.3	4	1.7	77	33.3	13	5.6
Emotional	351	100.0	176	50.1	21	6	112	31.9	42	12
Other	274	100.0	116	42.3	27	9.9	112	40.9	19	6.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

## CHAPTER SEVEN

### AGRICULTURAL ACTIVITIES

#### 7.1 Introduction

Ghana's economy is generally regarded as agrarian, largely due to the sector's contribution to Gross Domestic Product (GDP), labour absorption and to foreign exchange earnings. The 2010 PHC for the first time collected data on agricultural activities; namely, crop farming, tree growing, livestock rearing and fish farming. The data collected consisted of types of crops cultivated and trees crops grown, farm size and type of cropping; livestock types and their numbers, and the numbers of keepers. This chapter presents information on households that are into agriculture, the type of farming activities they practice and the number of livestock reared.

#### 7.2 Households in Agriculture

A household is defined to be an agricultural household if; at least, one person in the household is engaged in any type of farming activity, namely crop farming, tree growing, livestock rearing and fish farming (GSS, 2012). Table 7.1 shows the number of household engaged in agriculture by locality. The data show that, agricultural households constitute 59.8 percent of households in the Municipality. This proportion is far below the regional proportion of 87.1 percent. The data show that out of 15,959 agricultural households in the municipality, 10,631 (89.3%) are in rural communities, compared to 36.0 percent urban households. This is an indication that agricultural activities are predominantly undertaken in the rural communities.

**Table 7.1: Households by agricultural activities and locality**

Agricultural Activity	Total		Urban		Rural	
	Number	Percent	Number	Percent	Number	Percent
Total Households	26,706	100.0	14,801	100.0	11,905	100.0
Households engaged in Agriculture	15,959	59.8	5,328	36.0	10,631	89.3
Crop Farming	14,718	92.2	4,423	83.0	10,295	96.8
Tree Planting	130	0.8	63	1.2	67	0.6
Livestock Rearing	12,764	80.0	3,741	70.2	9,023	84.9
Fish Farming	12	0.1	4	0.1	8	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 7.3 Types of Farming Activities

The households in agriculture in the municipality engage in four types of farming activities, namely crop farming, tree growing, livestock rearing and fish farming. Table 7.1 shows that more than 90.0 percent (92.2%) of households engaged in agricultural activities are involved in crop farming while 80.0 percent are also engaged in livestock rearing. A small proportion (0.8%) is engaged in tree growing and fish farming (0.1%).

The two traditional activities of crop farming and livestock rearing are prominent in both urban and rural communities. Fish farming, as distinct from fishing, is relatively new in the municipality and Upper East Region as a whole. The initial investment is relatively high. The

growing of trees in particular requires a considerable waiting time to harvest; this is not likely to draw much interest from the substantially subsistent farming communities (GSS, 2013).

## 7.4 Types of livestock and other animals reared

Livestock rearing is the second most important agricultural activity after crop farming in the municipality. Table 7.2 shows the types of livestock reared, their numbers and the average number of animals per keeper. Among the traditional livestock (sheep, goats, cattle and pig), the average number of animals are nine goats, nine cattle 10 sheep and 11 pigs. In the birds category, (chicken, turkey, guinea fowl, dove and duck), the average number per holder ranges from eight turkeys to 20 guinea fowls. The traditional local birds, chicken and guinea fowl, because of their availability in almost every household, do not yield significantly large average numbers. Fish farming is not a common activity in the municipality. Only five persons are engaged in fish farming. This category is made up of 0.2 percent engaged in modern fish farming, 0.2 percent in inland fishing.

**Table 7.2: Distribution of livestock, other animals and keepers**

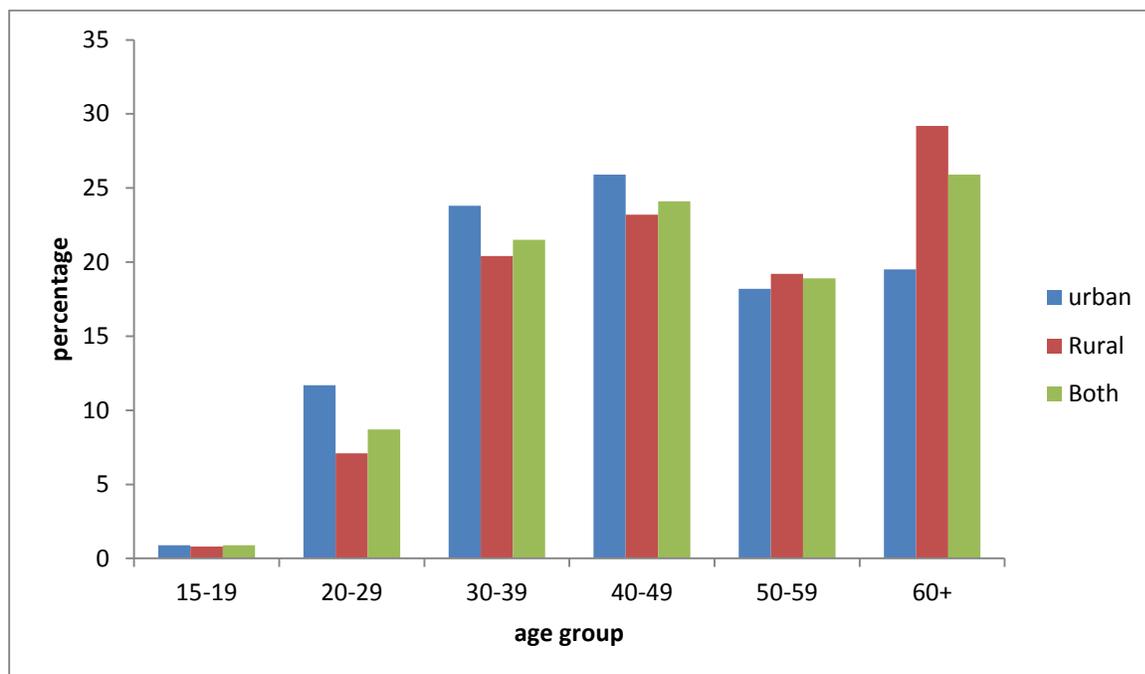
Livestock/ other animals	Number		Average Animal per Keeper	Percent	
	Animals	Keepers		Animals	Keepers
Total	405,400	32,560	13	100.0	100.0
Beehives	113	17	7	0.0	0.1
Cattle	27,517	2,989	9	6.8	9.2
Chicken	128,513	7,668	17	31.7	23.6
Dove	280	32	9	0.1	0.1
Duck	3682	285	13	0.9	0.9
Goat	83,656	9,627	9	20.6	29.6
Grass-cutter	2,572	46	56	0.6	0.1
Guinea fowl	78,487	4,008	20	19.4	12.3
Pig	14,500	1,370	11	3.6	4.2
Rabbit	621	60	10	0.2	0.2
Sheep	59,772	5,943	10	14.7	18.3
Silk worm	451	82	6	0.1	0.3
Snail	17	2	9	0.0	0.0
Turkey	488	60	8	0.1	0.2
Other (specify)	3,141	359	9	0.8	1.1
Fish farming	766	5	153	0.2	0.0
Inland fishing	644	7	92	0.2	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

### Distribution of agriculture households by age of household head

Figure 7.2 shows the distribution of agricultural households by age of household head and locality of residence. The proportion of households in agriculture increases with increasing age of the head of household, except for those aged 50-59. For household heads below 50 years, urban agriculture households exceed rural agricultural households. From age 50 however there are more rural households in agriculture than in the urban areas.

**Figure 7.1: Distribution of heads of agricultural household by age and locality**



Source: Ghana Statistical Service, 2010 Population and Housing Census

# **CHAPTER EIGHT**

## **HOUSING CONDITION**

### **8.1 Introduction**

It has long been established that man's most basic needs are food, clothing and shelter. Housing is both a social good, providing core security for households, neighbourhoods, societies and communities and an economic good, stimulating growth and development. A house or compound is defined as a structurally separate and independent place of abode. The essential features are separateness and independence. An enclosure may be considered as separate if it is surrounded by walls, fences, etc., so that a person or group of persons can isolate themselves from other persons in the community for the purpose of sleeping, preparing and taking their meals or protecting themselves from hazards of climate such as storms and the sun (GSS 2010)

The policy framework of the Government of Ghana, the Ghana Shared Growth and Development Agenda, emphasized the need for increased access of the population to safe, adequate and affordable housing and shelter (NDPC, 2010). Earlier frameworks also underscored the important role of housing in social development. In the Ghana Poverty Reduction Strategy (2003-2005) policy framework, for instance, housing interventions were prescribed implicitly within the context of social development objectives. The achievement of health objectives was linked, among others, to the provision of safe water supply and sewerage, improved housing, and well planned settlements (NDPC, 2002). The provision of periodic information on housing and housing conditions is therefore important both to assess what has been achieved and to plan ahead. The information from housing censuses also serves as a basis for planning housing and human settlement programmes and policies. It can also be used to determine the adequacy of housing stock and assessment of the need for additional housing. It may also provide information on living conditions of those residing in temporary or substandard housing at the national, regional and local levels.

Information on the stock of houses, type of dwelling, holding and tenancy arrangements, ownership of dwelling units, construction materials, room occupancy, access to utilities and household facilities, main sources of water, bathing and toilet facilities and method of waste disposal in the Bolgatanga Municipality are presented in this chapter.

### **8.2 Housing Stock**

The municipality population of 131,550 live in a total of 14,523 dwelling units which include any type of shelter used as living quarters, such as flats, apartments, enclosed compound, huts, kiosks, cargo containers, and tents. Table 8.1 indicates the stock of houses and households by type of locality. The data show that a total of 26,706 households in the municipality use 14,523 dwelling units, yielding 1.8 households per dwelling unit. With a household population of 129,696, the average population per house is nine (8.9) persons.

**Table 8.1 Stock of houses and households by type of locality**

Categories	Total				
	country	Region	District	Urban	Rural
Total population	24,658,823	1,046,545	131,550	65,549	66,001
Total household population	24,076,327	1,034,704	129,696	64,398	65,298
Number of houses	3,392,745	114,034	14,523	6,783	7,740
Number of households	5,467,054	177,629	26,706	14,801	11,905
Average households per house	1.6	1.6	1.8	2.2	1.5
Population per house*	7.1	9.1	8.9	9.5	8.4
Average household size	4.4	5.8	4.9	4.4	5.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

#### 8.3.1 Type of dwelling

Table 8.2 shows that majority of households in the Municipality live in permanent structures. Makeshift dwelling units such as tents, kiosks, containers, attachments to shops or offices, uncompleted buildings and others, together, constitute only 1.7 percent of dwelling units. The data also show that rooms in compound houses is the prevalent type of dwelling unit occupied by households 65.4 percent of households in the urban areas and 39.5 percent in the rural areas. Huts or buildings (same compound) constitute 28.0 percent of dwelling units in the rural areas while only 7.0 percent of such dwelling units are in the urban areas. There is not much difference between type of dwelling occupied by male headed household and that of female headed households.

**Table 8.2: Type of occupied dwelling unit by sex of household head and type of locality**

Type of dwelling	Total country	Region	District					
			Total		Male headed	Female headed	Urban	Rural
			Number	Percent				
Total	5,467,054	177,629	26,706	100.0	100.0	100.0	100.0	100.0
Separate house	1,471,391	29,787	3,840	14.4	15.2	12.9	11.8	17.6
Semi-detached house	391,548	6,836	1,496	5.6	5.7	5.5	6.6	4.4
Flat/Apartment	256,355	1,459	572	2.1	2.1	2.3	3.3	0.8
Compound house (rooms)	2,942,147	103,666	14,373	53.8	53.6	54.3	65.4	39.5
Huts/Buildings (same compound)	170,957	22,735	4,361	16.3	16.2	16.5	7.0	28.0
Huts/Buildings (different compound)	36,410	11,616	1,620	6.1	5.9	6.4	3.8	8.9
Tent	10,343	300	51	0.2	0.2	0.1	0.1	0.3
Improvised home (kiosk/container etc)	90,934	183	45	0.2	0.2	0.2	0.2	0.2
Living quarters attached to office/shop	20,499	348	53	0.2	0.2	0.2	0.3	0.1
Uncompleted building	66,624	554	256	1.0	0.8	1.3	1.4	0.4
Other	9,846	145	39	0.1	0.1	0.2	0.2	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.3.2 Holding and Tenancy Arrangement

Dwelling ownership status in the district is shown in Table 8.3 which indicates that almost two-thirds (65.8%) households resides in dwellings owned by a member of the household, while 22.3 percent is owned by other private individuals. The proportion of households living in a dwelling owned by a member of the household is higher in the rural areas (90.9%) than the urban centres

(45.5%); more households live in dwellings owned by private individuals in the urban areas (37.7%) than rural areas (3.3%).

One out of every 20 households (5.1%) in the municipality occupy government dwelling units with more male headed and urban households than female headed and rural households. Private employers provide accommodation to only about one out of 200 households (0.4%) in the municipality. Also, one out of every 20 households in the municipality resides in a dwelling unit belonging to a relative who is not a member of the household.

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

Ownership status	Total country	Region	District					
			Total		Male headed	Female headed	Urban	Rural
			Number	Percent				
Total	5,467,054	177,629	26,706	100.0	100.0	100.0	100.0	100.0
Owned by household member	2,883,236	154,016	17,562	65.8	66.7	64.1	45.5	90.9
Being purchased (e.g. mortgage)	45,630	721	270	1.0	0.8	1.4	1.7	0.2
Relative not a household member	851,630	6,035	1,353	5.1	4.6	5.9	6.7	3.0
Other private individual	1,439,021	12,181	5,966	22.3	21.6	23.8	37.7	3.3
Private employer	83,610	480	109	0.4	0.4	0.4	0.6	0.1
Other private agency	21,123	267	56	0.2	0.3	0.1	0.4	0.0
Public/Government ownership	118,804	3,686	1,375	5.1	5.6	4.3	7.4	2.4
Other	24,000	243	15	0.1	0.1	0.0	0.1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.4 Construction Materials

Construction materials often times referred to as building materials is any quantifiable solid substance which is used for house construction purposes. Many naturally occurring substances, such as clay, rocks, sand, and wood, even sticks and grasses, have been used to construct buildings. Aside the naturally occurring materials, many manufactured products are in use, some more and some less synthetic. The manufacturing of building materials is carried out by established industries in several countries; the use of these materials is characteristically identified into specific trade domain, such as masonry, carpentry, plumbing, and roofing work.

### 8.4.1 Material of Outer Walls

For construction of houses, mud brick or earth (61.8%) and cement blocks or concrete (36.4%) are the two main materials for the outer walls buildings in the municipality. Table 8.4 shows that the two materials account for 98.2 percent of materials used for the construction of out walls in the Municipality. In the urban areas cement blocks or concrete accounts for 55.6 percent in the construction of outer walls compared with 12.4 percent in the rural areas. On the other hand, mud brick or earth account for 85.3 percent of the construction material for outer walls in the rural areas but accounts for 42.9 percent in the urban areas.

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

Material for Outer wall	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Total	5,817,607	182,845	27,632	100.0	100.0	100.0
Mud brick/Earth	1,991,540	147,624	17,085	61.8	42.9	85.3
Wood	200,594	1,606	141	0.5	0.3	0.8
Metal sheet/Slate/Asbestos	43,708	855	89	0.3	0.4	0.2
Stone	11,330	372	39	0.1	0.1	0.1
Burnt bricks	38,237	233	32	0.1	0.2	0.1
Cement blocks/Concrete	3,342,462	29,321	10,048	36.4	55.6	12.4
Landcrete	104,270	1,890	116	0.4	0.2	0.7
Bamboo	8,206	54	20	0.1	0.1	0.1
Palm leaf/Thatch (grass)/Raffia	38,054	435	3	0.0	0.0	0.0
Other	39,206	455	59	0.2	0.2	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.4.2 Material for the Floor

Table 8.5 shows that in the municipality cement or concrete (78.9%) and earth or mud (17.6%) are the two main materials for the floor of occupied dwelling units. All the other materials, comprising stone, burnt brick, wood, vinyl tiles, ceramic/porcelain/granite/marble tiles, Terrazzo/Terrazzo tiles and other materials put together make up only 3.5 percent of materials used for the floor. The two main materials account for 96.5 percent of the floors in the Municipality. In the urban areas about 87.3 percent of households use cement or concrete as the main material for the floor of occupied dwellings and 9.4 percent in urban areas use mud or earth. In the rural areas on the other hand, 68.5 percent of households use cement or concrete and 27.9 percentage mud or earth as the main material for the floor of occupied dwelling units.

**Table 8.5: Main construction materials for the floor of dwelling unit by type of locality**

Materials for the floor	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Total	5,467,054	177,629	26,706	100.0	100.0	100.0
Earth/Mud	872,161	56,272	4,709	17.6	9.4	27.9
Cement/Concrete	4,255,611	116,911	21,075	78.9	87.3	68.5
Stone	32,817	1,623	198	0.7	0.3	1.3
Burnt brick	6,537	89	14	0.1	0.1	0.0
Wood	52,856	49	10	0.0	0.0	0.0
Vinyl tiles	57,032	196	98	0.4	0.5	0.2
Ceramic/Porcelain/Granite/Marble tiles	88,500	1,181	202	0.8	0.8	0.7
Terrazzo/Terrazzo tiles	85,973	401	284	1.1	1.6	0.4
Other	15,567	907	116	0.4	0.1	0.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.4.3 Material for Roofing

Table 8.6 shows that corrugated metal sheet is the main material (90.0%) used for the roof in the Municipality, while 4.4 percent of households use mud or mud bricks or earth. The architectural mud roofing phenomenon of flat mud roof houses is a continuation of the traditional practice prevalent in many parts of northern Ghana. The flat mud roofs serve as sleeping place for households when normal sleeping rooms become unbearably hot. The flat roofs are also used for drying perishable agricultural products such as maize beans and onions. Also about 3.0 percent of households use thatch or raffia for roofing. Other roofing materials such as wood, slate or asbestos, concrete, roofing tiles and bamboo constitute only 2.0 percent of roofing material in the Municipality.

**Table 8.6: Main construction material for roofing of dwelling unit by type of locality**

Main Roofing material	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Total	5,817,607	182,845	27,632	100.0	100.0	100.0
Mud/Mud bricks/Earth	80,644	22,227	1,212	4.4	0.9	8.7
Wood	45,547	3,085	231	0.8	0.5	1.3
Metal sheet	4,152,259	122,942	24,880	90.0	94.8	84.2
Slate/Asbestos	759,039	646	67	0.2	0.4	0.1
Cement/Concrete	141,072	879	234	0.8	1.2	0.4
Roofing tile	31,456	162	27	0.1	0.1	0.1
Bamboo	71,049	586	26	0.1	0.0	0.2
Thatch/Palm leaf or Raffia	500,606	30,722	820	3.0	1.7	4.5
Other	35,935	1,596	135	0.5	0.3	0.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.5 Room Occupancy

The total number of rooms occupied by the households includes living, dining and bed rooms. It excludes bathrooms, toilet and kitchen. Sleeping rooms are the number of rooms out of the total number of rooms that are used for sleeping. Information on the number of sleeping rooms occupied by the household vis-a-vis the number and age of household members provides an indication of the level of overcrowding and adequacy of dwelling stock available. It also reflects the socio economic status of the household. The data show that more than eight out of 10 (83.3%) of households in the municipality use between one to four rooms for sleeping. On average, one-room occupancy is prevalent in the Municipality. Almost 27.4 percent of households occupy one room. More than 18.0 percent (18.2%) of households with ten or more members occupy four rooms and only a small number (1.7%) of household size 10 or more occupied one room.

The number of rooms occupied by a household ranges from one to more than nine rooms. Generally, room occupancy is skewed towards one or two rooms. Table 8.6 shows that 69.7 percent of single person households in the Bolgatanga Municipality occupy one room, 16.4 percent occupy two rooms and 7.5 percent occupied three rooms. The four member households in the Municipality are 3,788. Out of this number 31.5 percent occupied two rooms, 25.3 percent occupy single rooms, and 23.3 percent occupy three rooms. Households of ten or more members in the Municipality are 1,866, of which 18.2 percent occupy four rooms, 16.9 percent use five

rooms for sleeping and 15.2 percent occupied ten rooms. Only 1.7 percent of ten member households occupy single room dwelling unit.

The proportion of households that occupy one sleeping room decreases with increasing household size. The data suggest that not many persons occupy few rooms that could be described as congestion. Less than 10 percent of nine or more member households in the district occupy one or two sleeping rooms.

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

Household size	Total		Number of sleeping rooms								
	Number	Percent	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Total	26,706	100.0	27.4	23.2	20	12.7	6.9	4.1	2.2	1.4	2.1
1	3,099	100.0	69.7	16.4	7.5	3.9	1.1	0.6	0.4	0.2	0.1
2	2,986	100.0	50.7	25.9	13.2	5.3	2.4	0.9	0.9	0.3	0.5
3	3,524	100.0	39.9	28.7	17.6	7.1	3.0	1.6	1.0	0.5	0.6
4	3,788	100.0	25.3	31.5	23.3	10.6	4.7	2.1	1.2	0.6	0.7
5	3,788	100.0	18.4	28.2	26.6	14.8	5.8	3.2	1.3	0.7	1.0
6	3,136	100.0	10.2	25.5	27	18.3	9.4	4.4	2.5	1.2	1.6
7	2,210	100.0	6.2	20.1	26.9	21.1	12.1	6.9	2.9	1.9	1.9
8	1,387	100.0	4.3	15.1	24.2	22.9	14.2	9.7	4.3	2.7	2.5
9	922	100.0	3.0	10.8	22.5	22.7	16.8	10.1	5.7	3.4	5.0
10+	1,866	100.0	1.7	4.8	11.8	18.2	16.9	14.6	8.6	8.1	15.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.6 Access to Utilities and Household Facilities

Information on household facilities and access to utilities give clear indication of how accessible certain basic facilities and necessities are to communities in the district.

### 8.6.1 Main Source of Lighting

Table 8.8 presents information on the source of lighting for households in the municipality. Slightly more than half of households (53.5%) are connected to the national grid and therefore electricity (mains) as their main source of lighting, while 39.6 percent depend on kerosene lamp. One out of every 20 households (5.1%) resort to the use of flashlight or torch for lighting. Although half of the households in the municipality use electricity, there are wide variations among urban and rural households. More than three-quarters (78.2%) for urban compared with 22.7 percent of their rural counterparts use electricity. Contrarily, about seventy percent (68.5%) of rural households depend on kerosene lamp.

Generally, the three main source of lighting in homes are electricity, kerosene lamp and flashlight/torch. All the other sources, including gas lamp, solar energy, and electricity from private generator, candle and others account for about 2.0 percent of as main sources of lighting for households.

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

Main source of light	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Total	5,467,054	177,629	26,706	100.0	100.0	100.0
Electricity (mains)	3,511,065	42,866	14,277	53.5	78.2	22.7
Electricity (private generator)	36,142	1,009	151	0.6	0.5	0.7
Kerosene lamp	971,807	80,752	10,576	39.6	16.4	68.5
Gas lamp	9,378	412	70	0.3	0.2	0.4
Solar energy	9,194	612	47	0.2	0.2	0.2
Candle	41,214	293	81	0.3	0.5	0.1
Flashlight/Torch	858,651	49,068	1,349	5.1	3.9	6.5
Firewood	13,241	1,191	82	0.3	0.1	0.6
Crop residue	4,623	830	32	0.1	0	0.2
Other	11,739	596	41	0.2	0.1	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.6.2 Main source of cooking fuel

Table 8.9 shows that firewood (33.2%) and charcoal (31.8%) are the most used cooking fuel in the Municipality accounting for 65.0 percent of all sources of fuel for cooking. Millet stock or corn stock (crop residue) is used by 15.0 percent of households and liquefied gas is also used by 15.0 percent of the households in the Municipality. The use of wood (33.2%) is lower than the regional proportion of 60.4 percent. Charcoal use in the municipality is twice the regional proportion of 15.2 percent. In the urban areas half (50.2%) of the households used charcoal as their source of cooking fuel in the rural areas. On the other hand, 58.1 percent of the rural households use firewood as their main source of cooking fuel. The use of firewood and charcoal has resulted in an increasing depletion of the vegetation cover in the municipality in particular, and the Region as a whole, with the associated negative impact on the environment.

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

Source of cooking fuel/ cooking space	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
<b>Main source of cooking fuel for household</b>						
Total	5,467,054	177,629	26,706	100.0	100.0	100.0
None no cooking	306,118	3,272	1,073	4.0	6.0	1.5
Wood	2,197,083	107,310	8,869	33.2	13.2	58.1
Gas	996,518	8,735	4,003	15	22.9	5.2
Electricity	29,794	383	55	0.2	0.2	0.3
Kerosene	29,868	402	78	0.3	0.4	0.1
Charcoal	1,844,290	27,021	8,498	31.8	50.2	8.9
Crop residue	45,292	29,725	4,008	15	6.9	25.1
Saw dust	8,000	93	20	0.1	0.1	0.0
Animal waste	2,332	124	11	0.0	0.0	0.1
Other	7,759	564	91	0.3	0.1	0.6
<b>Cooking space used by household</b>						
Total	5,467,054	177,629	26,706	100	100	100
No cooking space	386,883	6,822	1,364	5.1	7.1	2.6
Separate room for exclusive use of household	1,817,018	75,393	9,755	36.5	26.4	49.1
Separate room shared with other household(s)	410,765	4,664	455	1.7	1.6	1.8
Enclosure without roof	117,614	31,567	4,885	18.3	8.2	30.9
Structure with roof but without walls (Bedroom/Hall/Living room)	349,832	1,788	159	0.6	0.4	0.8
Veranda	74,525	572	124	0.5	0.7	0.2
Open space in compound	1,173,946	18,444	7,266	27.2	44.4	5.8
Other	1,115,464	38,038	2,652	9.9	11.1	8.5
Other	21,007	341	46	0.2	0.1	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

### Cooking Space

Almost all households in the Region (95.9%) have some cooking space within the confines of the dwelling unit (Table 8.9). Over a third (36.5%) of households have structures specifically set aside for exclusive use of the household for the purpose of cooking. A further 27.2 percent use the veranda in front of their living quarters and 9.9 percent use the open compound space while a small proportion of the households (0.5%) cook in their bedroom or living rooms. About 5.1 percent of households reported having no cooking space, most likely because they eat from other households or buy prepared food from food sellers.

Table 8.9 shows that in general the following, four categories of cooking space are dominant in the municipality: the separate room for exclusive use of household (36.5%), an open space in compound (9.9%); enclosures without roof (18.3%) and the veranda in front of the living quarters (27.2%). The use of shared cooking space is not very common in the Municipality (1.7%). There are variations between urban and rural communities in the proportions of households using the four main categories of cooking space. For instance, whereas about 44.4 percent of households in the urban areas use their verandas as cooking space the corresponding proportion is only 5.8 percent for rural households. Similarly the separate room for exclusive

use of household accounts for 49.1 in the rural areas, compared with 26.4 percent in the urban areas.

## **8.7 Main Source of Water for Drinking and for other Domestic Use**

Water is an important requirement in all spheres of human endeavour. It is a scientific fact that 70 percent of the human body consists of water. The 2003 World Environmental Day was commemorated under the theme “Water Vital Resource for Life” indicating that the importance of water is widely acknowledged. An adequate supply of easily accessible water for drinking and other domestic use is therefore a necessary condition for households to attain satisfactory levels of living.

### **8.7.1 Drinking Water**

Information was collected on the main source of drinking water for household members. According to the Ghana Medium Development Goal report (2012) an indicator referred to as ‘improved water sources’ measures the proportions of the population who use any of the following types of water supply for drinking: piped water, public tap, borehole or pump, protected well, protected spring or rain water. Improved water sources do not include vendor-provided water, bottled water, tanker trucks or unprotected wells and springs.

On the basis of this classification, at the municipality level, it can be observed from Table 8.9 that the proportion of households using various improved water sources is as follows: more than forty-six percent (46.1%) of the population in the Municipality use borehole/pump/tube well as their main source of drinking water. About 43.8 percent use pipe-borne water, 4.7 percent use protected well and 0.3 percent use protected spring, The proportion of households using unimproved water sources is as follows: 2.5 percent of the households in the Municipality use unprotected well, 1.5 percent use river/stream and 0.4 percent use dug out/pond/lake/dam/canal/others.

On the basis of the classification discussed earlier over four out of five households (94.9%) in the municipality have access to improved drinking water sources, which is higher than the regional proportion (88.2%). Access to improved drinking water sources is almost evenly spread between urban and rural communities. .

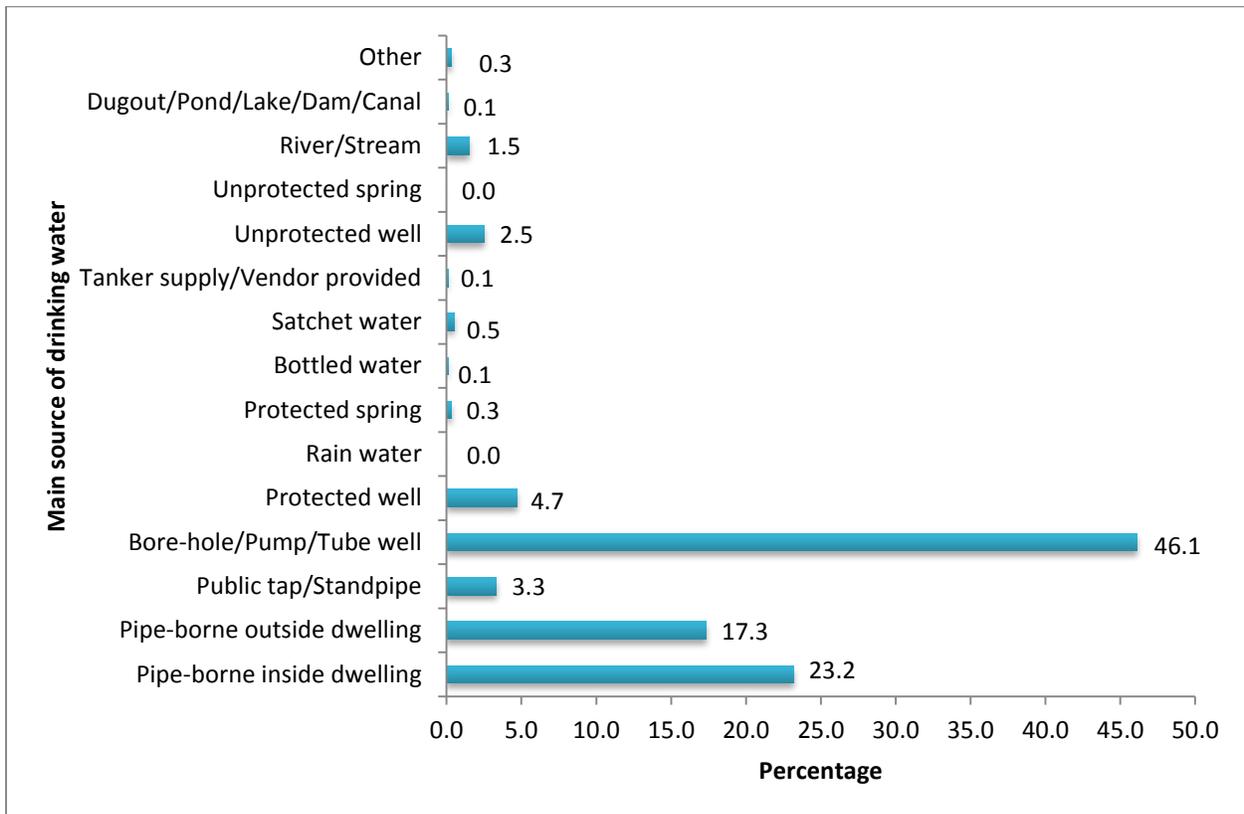
There are, however, some variations in the type of improved drinking water sources between urban and rural areas. In general, the use of pipe-borne water inside or outside dwelling units and public tap/stand pipe is higher among households in urban communities than in rural communities. The use of Bore-hole/Pump/Tube well and protected well is generally higher in the rural communities.

### **8.7.2 Water for other Domestic use**

In the municipality, the same sources of water used for drinking are also used for other domestic purposes except bottled water and sachet water. The proportions of households using the various sources of water for drinking are basically not different from the proportions using the sources for other domestic purposes. Table 8.10 shows that there are no significant shifts in the proportion that use the various sources of water for drinking and for other domestic uses. On the whole, 41.3 percent of households in the Municipality use pipe borne water for other domestic

purpose. More than forty-six percent (46.2%) use the borehole for other domestic uses and 6.1 percent use protected well for other domestic use. In the rural areas, 74.0 percent of households use the borehole for other domestic uses unlike in the urban areas where only 23.8 percent of the households use borehole water for other domestic purposes. In the urban areas, 67.2 percent of households use pipe-borne water compare to 9.2 percent of rural households in the Municipality, use pipe-borne water for other domestic use.

**Figure 8.2: Main source of water for drinking in the Municipality**



Source: Ghana Statistical Service, 2010 Population and Housing Census

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

Sources of water	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
<b>Main source of drinking water for household</b>						
Total	5,467,054	177,629	26,706	100.0	100.0	100.0
Pipe-borne inside dwelling	790,493	11,577	6,186	23.2	37.6	5.2
Pipe-borne outside dwelling	1,039,667	15,063	4,614	17.3	28.4	3.5
Public tap/Standpipe	712,375	5,179	892	3.3	5.4	0.8
Bore-hole/Pump/Tube well	1,267,688	101,817	12,322	46.1	22.4	75.7
Protected well	321,091	22,805	1,248	4.7	2.2	7.7
Rain water	39,438	223	5	0	0	0
Protected spring	19,345	683	69	0.3	0.2	0.3
Bottled water	20,261	82	20	0.1	0.1	0
Sachet water	490,283	694	125	0.5	0.8	0.1
Tanker supply/Vendor provided	58,400	267	24	0.1	0.1	0
Unprotected well	112,567	11,083	681	2.5	1.7	3.6
Unprotected spring	12,222	378	9	0	0.1	0
River/Stream	502,804	4,452	393	1.5	0.5	2.7
Dugout/Pond/Lake/Dam/Canal	76,448	3,175	34	0.1	0	0.3
Other	3,972	151	84	0.3	0.5	0.1
<b>Main source of water for other domestic use of household</b>						
Total	5,467,054	177,629	26,706	100	100	100
Pipe-borne inside dwelling	905,566	11,408	6,164	23.1	37.6	5.1
Pipe-borne outside dwelling	1,089,030	13,957	4,081	15.3	24.9	3.4
Public tap/Standpipe	704,293	4,541	779	2.9	4.7	0.7
Bore-hole/Pump/Tube well	1,280,465	98,487	12,332	46.2	23.8	74
Protected well	465,775	24,798	1,642	6.1	5	7.5
Rain water	39,916	330	26	0.1	0.1	0.1
Protected spring	18,854	672	61	0.2	0.2	0.3
Tanker supply/Vendor provided	100,048	301	29	0.1	0.2	0
Unprotected well	152,055	11,607	701	2.6	2.2	3.2
Unprotected spring	15,738	650	33	0.1	0.1	0.1
River/Stream	588,590	6,125	622	2.3	0.8	4.2
Dugout/Pond/Lake/Dam/Canal	96,422	4,518	126	0.5	0	1
Other	10,302	235	110	0.4	0.5	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.8 Bathing and Toilet Facilities

### 8.8.1 Bathing Facilities

Table 8.11 shows that while 89.7 percent of households in the Municipality use a space specifically provided for bathing within the dwelling unit while 6.7 percent use the open space around the house or compound. A little over three percent (3.1%) of households use the public bath house and a small proportion (0.3%) use bathrooms in other houses. When the bathing facility used by households is ranked, own bathroom for exclusive use of the household ranks first (33.0%) followed by a shared separate bathroom in the same house (25.2%), the shared open cubicle (17.2%) and the private open cubicle 14.3 percent of household' bathing facility.

However, there are variations between urban and rural communities in relation to type of bathroom used by households. In rural areas, own bathroom for exclusive use of the household ranks first with 46.7 percent, followed by the private open cubicle (19.1%), shared open cubicle (12.6%) and the shared separate bathroom in the same house (9.6%). Table 8.4 also shows that more than ten percent (10.7%) of the households in rural areas use the open space around their houses for bathing. In the urban areas on the other hand, the shared separate bathroom in the same house ranks first, (37.7%) followed by own bathroom for exclusive use by the household (22.1%). Shared open cubicle (20.8%) and the private open cubicle (10.4%) of the urban households. Also about five percent (5.1%) of urban households used the public bath.

### **8.8.2 Toilet Facilities**

Toilet facilities are classified into three categories in the Municipality with respect to their location and accessibility. These are built or constructed facilities in or around the house, facilities in another house and public facilities. All the three categories can be a flush toilet (WC), the KVIP, the pit latrine, or the bucket/pan latrines.

Public toilets are for communal or public use (paid or free use). No facility means that there is no built/constructed facility of any kind available for the use of the household and the household members use places other than designated areas, including the bush, field, rivers or stream. Some people even use “chamber pots” or other small receptacles (including plastic bags) and dispose of these in all sorts of places including open fields, stream and gutters

From the perspective of health hazards toilet facilities in the municipality are far from satisfactory. Table 8.11 shows that more than two thirds of all households (67.7%) have no toilet facility and use the bush or field. In the rural areas, almost ninety percent of households (89.2%) have no toilet facility. Even in the urban areas, the proportion of households with no toilet facility (50.4%) is high. Only about eighteen percent of households in the Municipality have a toilet facility of any kind provided in the house and 13.6 percent use public toilet (WC, KVIP Pit or Pan). The proportion of households using W.Cs is only 12.5 percent within the Municipality which is the highest in the region. The use of this facility is also largely urban based (19.0%) compared to (4.5%) for rural areas.

The availability and use of a public toilet of any type is more common in urban areas. For the Municipality as a whole, 13.6 percent use public toilets. However, the data indicate that 23.3 percent of households in the urban areas use public toilets of any type compared to 1.6 percent in the rural areas.

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

Toilet facility used by household	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
<b>Toilet facility used by household</b>						
Total	5,467,054	177,629	26,706	100.0	100.0	100.0
No facilities (bush/beach/field)	1,056,382	146,329	18,080	67.7	50.4	89.2
W.C.	839,611	6,050	3,349	12.5	19.0	4.5
Pit latrine	1,040,883	5,266	541	2.0	2.3	1.6
KVIP	572,824	6,196	726	2.7	3.4	1.9
Bucket/Pan	40,678	405	202	0.8	1.3	0.0
Public toilet (WC/KVIP/Pit Pan etc)	1,893,291	12,828	3,637	13.6	23.3	1.6
Other	23,385	555	171	0.6	0.3	1.1
<b>Bathing facility used by household</b>						
Total	5,467,054	177,629	26,706	100.0	100.0	100.0
Own bathroom for exclusive use	1,535,392	73,345	8,824	33.0	22.1	46.7
Shared separate bathroom in the same house	1,818,522	33,370	6,717	25.2	37.7	9.6
Private open cubicle	381,979	26,114	3,812	14.3	10.4	19.1
Shared open cubicle	1,000,257	21,111	4,590	17.2	20.8	12.6
Public bath house	140,501	2,391	827	3.1	5.1	0.7
Bathroom in another house	187,337	479	83	0.3	0.4	0.2
Open space around house	372,556	19,987	1,784	6.7	3.4	10.7
River/Pond/Lake/Dam	14,234	437	23	0.1	0.1	0.1
Other	16,276	395	46	0.2	0.1	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.9 Method of Solid Waste Disposal

Methods of waste disposal are divided into two major categories i.e. liquid waste and solid waste disposals. Waste disposal, especially solid waste, has remained a challenge to many localities in Ghana. MMDAs in the last decade have resorted to the use private waste management companies to manage solid waste in communities, especially urban communities.

### 8.9.1 Solid waste disposal

Table 8.12 presents methods of solid and liquid waste disposal by type of locality. More than three out of every five households in the municipality either dispose of their solid waste at an open public dump site (37.9%) or in a public refuse container (25.2%). Whiles 16.9 percent of the households burn their solid waste, 8.2 percent indiscriminately dump their generated solid waste. More than four percent (4.4%) of households bury their solid waste and about 6.9 percent of the households pay for their solid waste to be collected. More rural households than their urban counterparts burn or bury their solid waste. The use of open public dump sites is a more of a rural practice as slightly more than half of the rural households use this method. Probably due to the unavailability of refuse containers in the rural areas, only one in every 100 households has access to this facility.

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

Method of waste disposal	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
<b>Solid waste</b>						
Total	5,467,054	177,629	26,706	100.0	100.0	100.0
Collected	785,889	19,758	1,844	6.9	6.6	7.3
Burned by household	584,820	44,337	4,520	16.9	12.9	21.9
Public dump (container)	1,299,654	14,057	6,720	25.2	44.4	1.3
Public dump (open space)	2,061,403	55,459	10,110	37.9	26.6	51.9
Dumped indiscriminately	498,868	25,994	2,202	8.2	5.3	11.9
Buried by household	182,615	12,201	1,178	4.4	3.7	5.3
Other	53,805	5,823	132	0.5	0.5	0.5
<b>Liquid waste</b>						
Total	5,467,054	177,629	26,706	100	100	100
Through the sewerage system	183,169	4,062	818	3.1	3.6	2.4
Through drainage system into a gutter	594,404	7,676	2,182	8.2	13.1	2
Through drainage into a pit (soak away)	167,555	12,031	1,623	6.1	5.8	6.4
Thrown onto the street/outside	1,538,550	105,548	17,279	64.7	57	74.3
Thrown into gutter	1,020,096	6,029	1,819	6.8	11.1	1.5
Thrown onto compound	1,924,986	41,258	2,912	10.9	9.2	13.1
Other	38,294	1,025	73	0.3	0.2	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.9.2 Liquid waste disposal

Table 8.12 shows that the two major ways of liquid waste disposal in the Municipality, in both urban and rural areas, are to throw onto the street/outside and unto the compound. These two methods account for at least 74.0 percent of liquid waste disposal used in the municipality. In the rural areas about 74.3 percent of the households throw their liquid waste onto the street/outside, while 13.1 percent throw their liquid onto compound.

# **CHAPTER NINE**

## **SUMMARY OF FINDINGS, CONCLUSIONS AND POLICY IMPLICATIONS**

### **9.1 Introduction**

As far back as 1969, the Government of Ghana recognized that the “Population of Ghana are the nation’s greatest resource. It is both the instrument and objective of national development. The protection and enhancement of its welfare is the Government’s first responsibility” (Government of Ghana, 1969). Government also explicitly recognized the reciprocal relationship between population and development (i.e., population affects development even as development affects population. An understanding of the population, its characteristics and dynamics, is therefore crucial for realistic development planning.

The Government of Ghana has operated the decentralized system of development since 1988 with the District Assembly, as the planning authority. The District Assembly is expected to initiate and coordinate the processes of planning, programming, budgeting and implementation of district plans, programmes and projects. The District Assemblies and the various organs are expected to carry out medium and long term planning including integration of population policies and issues, as they pertain to the needs of particular districts and communities.

The overall level of development and demographic structure of the country conceals differences between and within regions, districts, urban and rural localities. As such, there are bound to be differences in the population and development needs and priorities between and within localities.

This report is the first for Bolgatanga Municipality and is produced with the aim of providing useful information for planners, academics and policy makers. The characteristics analyzed include the demographic profile, social and economic characteristics, and housing conditions, and this chapter provides the summary of the main findings, conclusion and make recommendations for action.

### **9.2 Summary of Findings**

#### **9.2.1 Demographic characteristics**

The Municipality has a total population of 131,550 which is made up of 47.7 percent male and 52.3 percent female. About 50.2 percent of the population of the Municipality is classified as rural and 49.8 percent urban. The municipality’s share of the regional population is 12.6 percent.

Children aged less than 5 years constitute 14.0 percent and those aged less than 15 years (0-14 years) are 42.7 percent. Thus, more than 50 percent of the Municipality’s population is under 20 years. This is an indication that the Municipality has a very youthful population. The Bolgatanga Municipality has a total dependency ratio of 73.3 implying that every 100 persons in the working age group have 73 persons in the dependent ages to support.

The TFR for the Municipality is 3.0 births per woman, implying that on the average every woman in the reproductive age would have three children by the end of their reproductive years if current fertility rates prevailed. The Municipality's TFR is lower than the regional average TFR of 3.4 births. Also, a total of 2,269 deaths were recorded in the 12 months preceding the Census Night, yielding a crude death rate of about 17 deaths in every 1,000 population. This shows that the mortality experience in the Municipality is highest in the region (10.8 per 1,000 population). The data reveal that 41.4 percent are due to accident or violence or homicide or suicide while 58.6 percent are due to all other causes such as natural deaths. More than half (54.7%) of all accident or violence or homicide or suicide deaths in the region, occur in the Municipality.

A total of 26,932 persons, representing 20.5 percent of the population of Bolgatanga Municipal are migrants. Forty-three percent were born in other localities of the region, 53.6 percent are born in other regions of the country, while 3.4 percent (958) are born outside Ghana. About one out of every six of the migrants in the Municipality are born in the Ashanti Region, 13.4 percent are from the Northern Region, while 6.6 percent are born in the Greater Accra Region.

### **9.2.2 Social characteristics**

There are 26,706 households in the municipality of which only about 55.4 percent (14,801) reside in urban areas with the rest in rural settlements. The municipality has an average household size of 4.9 persons with more persons in the rural households than the urban households. The structure of households in the municipality is dominated by the extended family system where nearly two-thirds (64.2%) of household members live in an extended family. The extended family comprising the head, spouse, children and heads relatives constitute the largest family system with one-third (33.8%) of the household population. The data reveals a rather alarming situation where more than one-third (38.1%) of the household population reside either in single parent extended (17.9%) or single parent nuclear household (10.2%). In the composition of the households, household heads constitute 20.6 percent of this population, with more male household heads (28.1%) than female household heads (13.7%). Spouse constitutes 10.1 percent whereas biological children constitute 42.3 percent. There are more male children (47.6%) than female children (37.4%) in the households.

About 43.6 percent of the municipality's population aged 12 years or older have never been married compared to 45.3 percent that indicated to have ever married. Less than two percent of the population 12 years and older are either divorced or separated and 8.4 percent are widowed. A slightly higher proportion of never married females (59.8%) than males (56.6%) attained basic education level. A much higher proportion of married females (57.0%) than married males (43.9%) have no formal education while a higher proportion of married males (30.7%) than married female (27.9%) have attained basic education level.

Ghanaians by birth constitute 93.5 percent of the Municipality's population. A little less than three percent (2.7%) are Ghanaians of dual citizenship (Ghanaian and other Nationality) and Ghanaians by naturalization constitute 1.0 percent. These three categories of Ghanaians constitute 97.2 percent of the population with other nationals making up only 2.8 percent.

There are three major religious groupings in the Municipality; Christians (57.4%) These are Traditionalists (22.3%), and Moslems (717.1%). Catholics constitute the largest single religious denomination in the Municipality.

### **9.2.3 Economic characteristics**

The economic activity status of the population 15 years and older reveals that the proportion of the economically active population (74.0%) is three times greater than the proportion of the population not economically active (26.0%). While 72.2 percent of the population 15 years and older are employed, 2.4 percent are unemployed.

The major occupations in the Municipality are agriculture including forestry and fishing works (37.7%). Craft and related trades constitute 22.7 percent while services and sales workers constitute 18.5 percent. Professionals make up 6.9 percent of the employed population.

There are three major industrial activities in the Municipality: agriculture, including forestry and fishing (37.8%), manufacturing (18.3%) and wholesale and retail; repair of motor vehicles and motorcycles (15.0%). The majority of the employed population are in the private informal sector. The public and private formal sectors together employ about one out of six persons.

### **9.2.4 Information Communication Technology**

The use of information communication technology tools in the Municipality is generally low, more especially computer ownership and internet facility usage. Of the population 12 years and older only 43.8 percent own mobile phones. While one out of every two (49.7%) of the male population 12 years and older own mobile phones, about two in every five (38.7%) of their female counterparts own mobile phones. The use of internet is low in the Municipality as only one out of six persons 12 years or older use the facility. Similarly, nearly one in every 10 households (9.4%) has a laptop or desktop computer.

### **9.2.5 Disability**

There are 4,063 persons with disability in the Municipality representing 3.0 percent of the population. The proportion of the Municipality's urban population who is disabled is 2.2 percent and that of the rural population is 3.7 percent. Sight disability accounts for about 28.9 percent of the various types of disabilities in the Municipality, followed by physical disability, 23.2 percent. Emotional disability in the Municipality is also high at 17.8 percent.

More than half (55.1%) of persons with disability in the Municipality have never attended school. The highest educational level attained by the majority PWDs in the Municipality (31.2%) is basic school. One in every 10 PWDs in Municipality have attained secondary or higher education. The proportion of PWDs in the Municipality who are employed is 54.6 percent, while 43.4 percent of them are economically not active.

### **9.2.6 Agricultural activities**

An agricultural household is one where at least one person in the household is engaged in farming. About 59.8 percent of the households in the Municipality are engaged in agricultural activities. The majority of the households in agriculture are engaged in crop farming and livestock rearing representing, 92.2 percent and 80.0 percent respectively. The total number of livestock in the Municipality is 405,400 and a total of 32,560 keepers with an average of 13 animals per keeper. Goats, chicken, sheep and guinea fowls are the most common livestock reared in the Municipality.

### **9.2.7 Housing condition**

The Municipality's population of 131,550, live in 14,523 dwelling units, with an average of nine persons per house. Compound houses are the most predominant dwelling units in the Municipality, constituting 53.8 percent of all dwelling units. Furthermore 65.8 percent of households live in dwelling units owned by a member of the household. In the urban areas, this proportion is 45.5 percent compared to 90.9 percent for rural settlements. The percentage that live in dwelling units owned by other private individual is 37.7 percent for urban households and under one percent (3.3%) in the rural areas.

The bulk of the material used for outer walls is mud bricks/earth (61.8 %) and cement blocks/concrete (36.4%). Conversely the proportion of households that use cement/concrete (78.9%) as main material for the floor is higher than mud/earth (17.6%). Cement/concrete floors are common in the urban areas than in rural areas.

Metal sheet, earth/mud, and thatch are the three dominant main materials used for roofing in the Municipality. These account for 97.4 percent of all material used for roofing. The data show that 83.3 percent of households in the Municipality use between one and four rooms for sleeping.

#### **Access to utilities**

More than half (53.3%) of households in the Municipality use electricity as their main source of lighting for households in the Municipality while two in every five (39.6%) depend on kerosene for their lighting. The proportion of households that rely on flashlight/torch is 5.1 percent. Wood and charcoal remain the main cooking fuel for households in the Municipality accounting for nearly two-thirds of all cooking fuels. One out of six households each use LPG and crop residue as main source of cooking fuel.

About 46 percent of households in the Municipality use borehole/pump/well as the main sources of drinking water. The combined proportion of household that use pipe-borne inside or outside their dwelling or public tap/standpipe is 89.9 percent. Similar patterns are observed for the main source of water for other domestic uses other than drinking. Sanitation is of great concern in the Municipality as two-thirds of households resort to open defecation. About one out of every seven 13.6 percent use public toilet (WC/KVIP/Pit latrine) and 2.0 percent use pit latrine.

Nearly two-thirds of households in the Municipality use public dump (open space or container) for the disposal of solid waste while 8.2 percent dispose of solid waste indiscriminately. More than half (57.0%) of urban households dispose liquid waste by throwing onto the street/outside compared with three-quarters (74.3%) of their rural counterparts.

### **9.3 Conclusions**

The Bolgatanga Municipality has a total population of 131,550 accounting for 12.6 percent of the population of the Upper East Region. More than 50 percent of the Municipality's population is under 20 years, an indication that the Municipality has a very youthful population. The youthfulness of the population should be harnessed by ensuring they are adequately trained for the future. An alarming revelation is the fact that 41.4 percent of household deaths in the Municipality is caused by accident/violence/ homicide/suicide while 58.6 percent are due to all other causes.

The extended family system arrangement though generally perceived to be fast eroding, is still very dominant in the Municipality. The data reveals an alarming proportion of single parent households in the Municipality. Since divorce widowhood are low among the population the plausible reason among others, is out migration. The Municipality as is the case with many districts in the region lags behind in infrastructure development especially the provision of sanitation facilities. Every effort should therefore be geared towards improving the lot of the population.

#### **9.4 Policy implications**

The overall level of development and demographic structure in the country conceals very marked differences between and within regions, districts, rural and urban areas. It is to effectively address the imbalance in development that the decentralization programme was initiated in 1984 with the District Assemblies established to “initiate and coordinate the processes of planning, programming, budgeting and implementation of district plans, programmes and projects” relevant to the needs of particular districts and communities.

All poverty indications show that northern Ghana (Upper East, Upper West and Northern) continues to be the poorest area in the country (Ghana Statistical Service, 2000). The characteristics of the districts (demographic, social, economic, housing conditions and Community facilities) in these three northern regions therefore need to be taken into account in deciding on the broad areas for policy strategies and interventions.

The Municipality has more females than males. One should, therefore expect more girls than boys in schools. Generally, in primary schools, there are as many girls as boys, a situation which often changes at the JSS level and beyond when the female dropout rate becomes high. First, the people should be educated on the need to send the girl-child to school and ensure she remains in school beyond the secondary level. Secondly, existing cultural practices, in relation to the position of women and girls in society, should be critically examined and modified or scrapped. There should be intensified education on the benefits of schooling to help stem girl-child dropout from schools, to provide incentives and attractive conditions to help retain girls in school. The school feeding program, the free text book and school uniforms and a host of other such programs to retain pupils in school are already in place and used to be improved and sustained.

The most pressing population and development problems requiring policy formulation and interventions are human reproduction/natural increase issues, young age structure and high dependency burden, high level of illiteracy, especially among the adult population, non-availability and/or poor access to social infrastructural facilities and services, including electricity and health related facilities at the household level., uneven distribution and poor quality educational infrastructure. The Municipality suffers from low levels of formal sector or non-farm employment. The municipality’s forest reserves are threatened with destruction through the use of wood for building and cooking fuel (fire wood and charcoal) and annual bush fires. All the above emphasize the importance of intensifying the process of extension of social infrastructural facilities within the Municipality instead of the current over concentration of services in only a few district capitals.

## REFERENCES

Ghana Statistical Service (GSS) (2013). *2010 Population and Housing Census: Regional Analytical Report: Upper East Region*. Accra: GSS.

Bolgatanga District (2003). District Planning Coordinating Unit Report (2003)

United Nations Development Programme (UNDP) Ghana (2010). *Bolgatanga Municipality Human Development Report 2010: Resource Endowment, Investment Opportunities and the Attainment of the MDGs*. Accra: UNDP

World Health Organization (2011). *World Report on Disability*

## APPENDICES

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

S/No	Community Name	Sex			House holds	Houses
		Total	Male	Female		
1	Bolgatanga	65,549	30,974	34,575	14,801	6,783
2	Zuarungu Daboro	3,801	1,833	1,968	716	432
3	Yarigabisi	2,965	1,425	1,540	608	358
4	Tongo-Beo	1,742	846	896	341	232
5	Gambibgo-Azuabisi	1,602	827	775	303	155
6	Zuarungu-Moshie	1,374	626	748	223	151
7	Zuarungu Dubila	1,054	519	535	194	122
8	Kumbosco	1,031	479	552	208	139
9	Sherigu Kubelingu Agurubisi	987	454	533	187	110
10	Sumbrungu Kulbia Nayira	970	479	491	147	110
11	Sumbrungu Yeobongo Nayine	938	453	485	182	126
12	Sumbrungu Akanmehbisi	931	441	490	160	107
13	Yorogo Asorogobisi	920	444	476	183	98
14	Sokabisi Agulbabisi	907	432	475	145	90
15	Sumbrungu Tampriri	898	415	483	156	95
16	Sumbrungu Kologo Akasingo	874	407	467	177	77
17	Kumbusco	873	396	477	162	142
18	Sherigu Pumpungu Yeebisi	833	441	392	115	69
19	Sherigu Pumpungu Kenbisi	832	393	439	129	75
20	Zuarungu Dactio	825	363	462	141	116

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

S/No	Community Name	Age Group																
		All 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	Bolgatanga	65,549	8,032	7,185	7,409	7,635	7,593	6,206	4,883	3,895	3,136	2,402	2,110	1,359	1,126	704	779	1,095
2	Zuarungu Daboro	3,801	443	400	391	403	424	346	262	208	160	159	134	78	86	63	97	147
3	Yarigabisi	2,965	375	330	355	349	286	222	204	176	132	117	139	61	69	35	55	60
4	Tongo-Beo	1,742	213	184	188	214	194	123	100	74	98	47	62	40	44	26	71	64
5	Gambibgo-Azuabisi	1,602	200	180	217	193	148	107	69	85	73	73	64	42	31	24	32	64
6	Zuarungu-Moshie	1,374	160	210	182	147	119	79	77	67	63	62	39	28	29	24	21	67
7	Zuarungu Dubila	1,054	161	174	135	107	61	66	66	38	42	35	39	22	23	20	32	33
8	Kumbosco	1,031	175	108	112	93	98	109	83	53	49	21	36	24	28	10	16	16
9	Sherigu Kubelingu Agurubisi	987	136	147	136	108	65	53	58	56	51	37	33	19	24	11	22	31
10	Sumbrungu Kulbia Nayira	970	134	140	127	100	96	51	52	46	44	32	28	29	21	10	23	37
11	Sumbrungu Yeobongo Nayine	938	131	160	114	108	65	39	61	42	47	46	26	21	22	16	22	18
12	Sumbrungu Akanmehbisi	931	102	124	148	107	73	46	64	58	50	45	23	26	19	17	12	17
13	Yorogo Asorogobisi	920	156	130	112	94	79	50	54	44	35	27	29	15	19	20	32	24
14	Sokabisi Agulbabisi Sumbrungu	907	105	104	107	105	99	77	52	50	41	31	28	20	32	11	19	26
15	Tampri	898	126	143	109	114	62	48	39	52	43	21	35	9	36	11	22	28
16	Sumbrungu Kologo Akasingo	874	120	118	127	143	63	29	46	38	53	40	32	12	15	17	14	7
17	Kumbusco	873	90	109	112	112	86	63	53	47	42	47	31	24	15	12	19	11
18	Sherigu Pumpungu Yeebisi	833	111	121	92	86	88	71	57	30	24	22	24	17	16	10	26	38
19	Sherigu Pumpungu Kenbisi	832	116	116	116	91	77	42	38	37	47	31	26	18	16	16	23	22
20	Zuarungu Dactio	825	95	137	96	96	56	69	49	29	27	33	39	18	26	13	27	15

Source: Ghana Statistical Service, 2010 Population and Housing Census

# LIST OF CONTRIBUTORS

## Project Secretariat

Dr. Philomena Nyarko, Government Statistician  
Mr. Baah Wadieh, Deputy Government Statistician  
Mr. David Yenukwa Kombat, Acting Census Coordinator  
Mr. Sylvester Gyamfi, DISDAP Project Coordinator  
Mrs. Abena A. Osei-Akoto, Data Processing  
Mr. Rochester Appiah Kubi Boateng, Data Processing  
Mrs. Jacqueline Anum, Data Processing  
Mrs. Samilia Mintah, Data Processing  
Mr. Yaw Misefa, Data Processing  
Mr. Ernest Enyan, Data Processing  
Mr. Festus Manu, Regional Statistician  
Ms. Hanna **Frempong Konadu**, Formatting/Typesetting  
Ms. Justina Yeboah, Formatting/Typesetting

## Writers

Mr. Samuel Brefo Darkwa  
Ms. Diana Asabia

## Consultant

Dr Frank K Teng Zeng  
Dr Sylvester Z Galaa  
Mr. Henry Nii Odai

## Editor/ Reviewers

Prof. Tom KB Kumekpor  
Mr. Omar Seidu  
Mr. Jeremiah Dery Sixtus  
Ms. Gloria Akoto Bamfo  
Mr. Francis Nyarkoh –Larbi