



# 2010

## POPULATION & HOUSING CENSUS

### DISTRICT ANALYTICAL REPORT

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### BINDURI DISTRICT



Canada

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

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## PREFACE AND ACKNOWLEDGEMENT

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

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

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

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

For ease of accessibility to the census data, the district report and other census reports produced by the GSS will be disseminated widely in both print and electronic formats. The report will also be posted on the GSS website: [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.



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## ACRONYMS AND ABBREVIATIONS

AIDS:	Acquired Immune Deficiency Syndrome
ASFR	Age Specific Fertility Rate
<sup>0</sup> C	Degree Celsius
CBR	Crude Birth Rate
CEB:	Children Ever Born
CEDAW:	Convention on Elimination of All forms of Discrimination
CHIPS:	Community Health Planning Services
CIDA:	Canadian International Development Agency
CS:	Children Surviving
CWIQ:	Core Welfare Indicator Questionnaire
DANIDA:	Danish International Development Agency
DCD	District Coordinating Director
DCE	District Chief Executive
DPO:	District Planning Officer
DFID:	Department for International Development
DP	Development Partner
EA:	Enumeration Area
ECOWAS:	Economic Community of West African States
EMIS:	Education Management Information System
<sup>0</sup> F	Degree Fahrenheit
EU:	European Union
fCUBE:	Free Compulsory Universal Basic Education
GDHS:	Ghana Demographic Health Survey
GDP:	Gross Domestic product
GES:	Ghana Education Service
GETFund:	Ghana Education Trust Fund
GFR	Gross Fertility Rate
GoG:	Government of Ghana
GPRTU:	Ghana Private Road Transport Union
GPS:	Global Positioning System
GSDP:	Ghana Statistics Development Plan
GSOP	Ghana Social Opportunities Project
GSS:	Ghana Statistical Service



HIV:	Human Immune Virus
ICT:	Information and Communication Technology
ICT4AD:	ICT for Accelerated Development
ICU:	International Communication Union
ISCO:	International Standard Classification of Occupation
ISIC:	International Standard Classification of Industry
ISSER:	Institute of Statistical Social and Economic Research
JHS:	Junior High School
JSS:	Junior Secondary School
Km	Kilometre
Km <sup>2</sup>	Kilometre square or square kilometer
KVIP	Kumasi Ventilated Improved Pit
L.I.	Legislative Instrument
LEAP:	Livelihood Empowerment Against Poverty
LESDEP:	Local Enterprise and Skills Development Programme
MDGs:	Millennium Development Goals
MER:	Migration Effectiveness Ratio
MICS:	Multiple Indicator Cluster Survey
MMDAs:	Metropolitan, Municipal and District Assemblies
MOE:	Ministry of Education
MOFA:	Ministry of Food and Agriculture
MOTI:	Ministry of Trade and Industry
NCA:	National Communication Authority
NCPEC:	The National Census Publicity and Evaluation Committee
NCTAC:	National Census Technical Advisory Committee
NDA:	Nabdam District Assembly
NDPC:	National Development Planning Commission
NGOs:	Non-Governmental Organisations
NHIS:	National Health Insurance Scheme
OIC:	Opportunities Industrialisation Centre
PAS:	Population Analysis Spreadsheet
PASEX:	Population Analysis System
PES:	Post Enumeration Survey
PHC:	Population and Housing Census
PM	Presiding Member

PNDC:	Provisional National Defense Council
PPP:	Public-Private Partnerships
PWDs:	Persons with disabilities
SADA:	Savanna Accelerated Development Authority
SAP:	Structural Adjustment Programme
SHS:	Senior High School
SMAM:	Singulate Mean Age at Marriage
SSS:	Senior Secondary School
TFR	Total Fertility Rate
UN:	United Nations
UNDP:	United Nations Development Programme
UNFPA:	United Nations Population Fund
UNICEF:	United Nations International Children's Education Fund
W.C:	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 population of Binduri District, according to the 2010 Population and Housing Census, is 61,576 representing 5.9 percent of the region's total population. Males constitute 48.1 percent and females represent 51.9 percent. The population is entirely rural. The district has a sex ratio of 92.6. The population of the district is youthful (0-14years) (43.9%) depicting a broad base population pyramid which tapers off with a small number of elderly persons (60 years and older) constituting 10.8 percent. The total age dependency ratio for the District is 108.8, the age dependency ratio for males is higher (122.9) than that of females (97.3).

## Fertility, mortality and migration

The Total Fertility Rate for the district is 3.6. The General Fertility Rate is 97.5 births per 1000 women aged 15-49 years which is the third highest for the region. The Crude Birth Rate (CBR) is 21.2 per 1000 population. The crude death rate for the district is 8.3 per 1000. Accident/violence/homicide/suicide accounted for 8.4 percent of all deaths while other causes constitute 91.6 percent of deaths in the district. The district has a migrant population of 3,155. Majority of migrants (83.1%) living in the district were born in another region while 14.8 percent were born elsewhere in Upper East Region. For migrants born in another region, those born in Ashanti Region constitute 48.5 percent followed by Brong Ahafo and Northern Region accounting for 7.0 percent each.

## Household Size, composition and structure

The district has a household population of 60,878 with a total number of 9,199 households. The average household size in the district is 6.6 persons per household. Children constitute the largest proportion of the household members accounting for 50.5 percent. Spouses form about 10.7 percent. Majority of households (54.4%) are composed of Extended (Head, spouse, children and Heads relatives) household structure. Nuclear households (head, spouse(s) and children) constitute 21.9 percent of the total number of households in the district.

## Marital status

About five in ten (51.4%) of the population aged 12 years and older are married, 38.1 percent have never married, 1.1 percent are in consensual unions, 7.6 percent are widowed, 1.1 percent are divorced and 0.7 percent are separated. By age 25-29 years, more than half of females (79.5%) are married compared to about 49.0 percent of males. At age 65 and above,

widowed females account for as high as 54.5 percent while widowed males account for only 6.5 percent. . Among the married, 81.3 percent have no education while about 23 percent of the never married have never been to school. More than three quarters of the married population (92.0%) are employed, 0.6 percent is unemployed and 7.4 percent are economically not active. A high proportion of those who have never married (42.8%) are economically not active with 0.7 percent unemployed.

### **Nationality**

The proportion of Ghanaians by birth in the district is 93.6 percent. Those who have naturalised constitute 1.1 percent and the non-Ghanaian population in the district is 2.8 percent.

### **Literacy and education**

Of the population 11 years and above, 42.2 percent are literate and 57.8 percent are non-literate. The proportion of literate males is higher (57.2 %) than that of females (42.8%). Three out of ten people (31.1%) indicated they could speak and write both English and Ghanaian languages. Of the population aged 3 years and above (22,730) in the district, 50.1 percent has never attended school, 39.8 percent are currently attending and 10.1 percent have attended in the past.

### **Economic Activity Status**

About 80.9 percent of the population aged 15 years and older are economically active while 19.1 per cent are economically not active. Of the economically active population, 99.1 percent are employed while 0.9 percent is unemployed. For those who are economically not active, a larger percentage of them are students (51.6%), 14.8% perform household duties and 6.1 percent are disabled or too sick to work. four out of ten unemployed are seeking work for the first time.

### **Occupation**

Of the employed population, about 84.3 percent are engaged as skilled agricultural, forestry and fishery workers, 5.9 percent in service and sales, 5.2 percent in craft and related trade, and 2.5 percent are engaged as managers, professionals, and technicians.

### **Employment status and sector**

Of the population 15 years and older 65.6 percent are self-employed without employees, 25.5 percent are contributing family workers, 0.7 percent are casual workers and 0.8 percent are domestic employees (house helps). Overall, men constitute the highest proportion in each employment category except the contributing family workers. The private informal sector is the largest employer in the district, employing 96.5 percent of the population followed by the public sector with 2.2 percent.

### **Information Communication Technology**

Of the population 12 years and above, 17.5 percent have mobile phones. Males who own mobile phones constitute 25.0 percent as compared to 10.7 percent of females. A little over one percent of the population 12 years and older uses internet facilities in the district. Only 1.4 percent of the total households in the district have desktop/laptop computers.

## **Disability**

About 2.8 percent of the district's total population has one form of disability or the other. The proportion of the male population with disability is slightly higher (2.9%) than females (2.7%). The types of disability in the district include sight, hearing, speech, physical, intellect, and emotion. Persons with sight disability recorded the highest of 41.9 percent followed by physical disability (26.3%). There are more females with sight and physical disability but more males with emotional disability in the district.

## **Agriculture**

As high as 93.9 percent of households in the district are engaged in agriculture. All agricultural households are rural households as the district is entirely rural. Most households in the district (99.3 %) are involved in crop farming. Poultry (chicken) is the dominant animal reared in the district.

## **Housing**

The housing stock of Binduri District is 6,391 representing 5.6 percent of the total number of houses in the Ashanti Region. The average number of persons per house is 9.2.

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

Over half (70.4%) of all dwelling units in the district are compound houses; 19.2 percent are separate houses and 2.0 percent are semi-detached houses. More than half (92.5%) of the dwelling units in the district are owned by members of the household; 2.6 percent are owned by private individuals; 3.2 percent are owned by a relative who is not a member of the household and only 0.6 percent are owned by public or government. Less than one percent (0.2%) of the dwelling units is owned through mortgage schemes.

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

The main construction material for outer walls of dwelling units in the district is mud/mud bricks or earth accounting for 88.1 percent with cement/concrete constituting 27.1 percent of outer walls of dwelling units in the district. Cement (72.2%) and mud/earth (23.3%) are the two main materials used in the construction of floors of dwelling units in the district. Metal sheets are the main roofing material (80.5 %) for dwelling units in the district.

### ***Room occupancy***

One room constitutes the highest percentage (85.2%) of sleeping rooms occupied by households in housing units in the district. About 0.6 percent of households with 10 or more members occupy single rooms.

### ***Utilities and household facilities***

The three main sources of lighting in dwelling units in the district are flashlight/torch (44.0%), kerosene lamp (41.0%) and electricity (13.0%). The main source of fuel for cooking for most households in the district is wood (62.8%). The four main sources of water in the district are borehole, protected well, unprotected well and pipe-borne water outside dwelling. About half of households (50.6%) drink water from boreholes.

The most common toilet facility used in the district is public toilet (WC, KVIP, Pit, Pan) representing 6.4 percent followed by pit latrine (5.3%). About 83.7 percent of the population in the district have no toilet facility. Close to a third of households (28.8%) in the district

have own bathrooms for exclusive use while 26.6 percent share separate bathrooms in the same house.

***Waste disposal***

The most widely used method of solid waste disposal is by public dump in the open space accounting for 31.5 percent. About one in ten households (15.8%) dump their solid waste indiscriminately. House to house waste collection accounts for 11.1 percent. For liquid waste disposal, throwing waste onto the street/outside (44.4%) and onto the compound (35.3%) are the two most common methods used by households in the district.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

The Binduri District is one of the three (3) new districts in the Upper East Region of Ghana created in 2012. It was carved out of the Bawku Municipality and established by Legislative Instrument (L.I. 2146) making it one of the 13 districts in the Upper East Region.

Binduri District is located approximately between latitudes  $11^{\circ} 11'$  and  $10^{\circ} 40'$  N and longitudes  $0^{\circ} 18'$  W and  $0^{\circ} 6'$  E in the north-eastern corner of the Upper East Region. It shares boundaries with Burkina Faso to the north, Garu-Tempane District to the south, Bawku Municipality to the east and Bawku West District to the west. The district covers a total land area of 391.91 square kilometres. With a total population of 61,576, the district has a population density of 157.1 persons per square kilometres.

### 1.2 Physical Features

#### Climatic Conditions

The climate of the district is characterised by two main seasons; dry and wet, which are influenced by the North-East Trade Winds and the South-West Monsoon Winds respectively. The dry season (late November to early March), is influenced by the cold, dry and dusty harmattan air mass from the Sahara Desert, and is characterised by little rainfall due to low relative humidity, which rarely exceeds 20 percent and low vapour pressure less than 10 mb. Day temperatures can reach as high as  $42^{\circ}$  Celsius (especially during February and March) while night temperatures can be as low as  $18^{\circ}$  Celsius. The period from May to October is the wet season. During this period, the entire district comes under the influence of the Tropical Maritime Air Mass. This air mass, together with rising convectional currents provides the district with rains. The average amount of rainfall recorded in the district is 800 mm per annum.

#### Relief and Drainage

The relief is generally low and undulating with heights of about 120 to 150 metres above sea level. However, a few parts of the district consist of series of plateaus with an average height of 400 metres. The district has its highest point located on the Zawse Hills peaking beyond 430 metres. This also marks the highest point in the Upper East Region.

The district is mainly drained by the White Volta River. A few streams, dams and dug-outs can also be found in low surface land areas. Most parts of the district are not well drained especially during the wet season. The district becomes inaccessible from the regional capital and other settlements almost on an annual basis due to flooding. The opening of the Bagri Dam in neighbouring Burkina Faso and the consequent overflow of the banks of the White Volta River and some of its tributaries aggravates the flooding situation in the district.

**Figure 1.1: Map of Binduri District**



Source: Ghana Statistical Service, GIS



## **Vegetation**

The vegetation of the district is mainly the Sahel Savannah type with scattered shrubs, short grasses and trees. Pockets of the savannah woodland vegetation can also be found in the district. The most common tree species include shea nut, dawadawa, baobab, mango and neem. The forested areas in the district can only be found along the White Volta River where the trees are protected.

## **Soils**

Soils in the district are generally of the Savannah Ochrosol type. Detailed soil classification by the Savanna Agricultural Research Institute (SARI), Manga reveals four different soil series. The Vairempare Series are mainly sandy loams associated with hornblende and granites. They are quite permeable with some good level of water retention and are suitable for the cultivation of cereals and legumes. This type of soil series is found in the eastern part of the district. The Tafali Series, which have similar characteristics as the Vairempare Series, are found around Binduri and its environs. The Gule and Brenyasi Series, located mostly in the valleys, are clay loams and suitable for the cultivation of rice, sorghum (naga red) and dry season vegetable cultivation (Onions and Tomatoes).

## **1.3 Political Administration**

The District Assembly is the highest administrative and legislative body in the district with a membership of seventeen (17) comprising twelve (12) elected members and five (5) appointed members. The Executive Committee has seven (7) members (i.e. a third of the District Assembly) chaired by the District Chief Executive. The Executive Committee has five (5) statutory sub-committees. The district has four (4) Area Councils.

## **1.4 Social and Cultural Structure**

### **1.4.1 Traditional Authority**

Traditional authority is vested in Divisional Chiefs: Binduri and Kaadi with sub-chiefs from other communities. All these chiefs are under the Bawku-Naba (President of the Bawku Traditional Council). The Council handles matters of traditional importance: chieftaincy, culture and tradition among others. The Traditional Council is represented in the District Assembly.

### **1.4.2 Ethnic Groupings**

The dominant ethnic group in the district is Kussasi. The main minority groups are Mamprusi, Bissa and Moshi. There are a few other minority ethnic groups in the district.

### **1.4.3 Marriage**

The traditional marriage entails the distinctive practice or payment of a bride price; the system where the family of the bridegroom pays some marriage expenses including the donation of two (2) to four (4) cows to the family of the bride. Many bridegrooms are not able to pay the dowry.

### **1.4.4 Inheritance**

The inheritance system practised in the district is patrilineal. Under this system, the eldest son inherits the property of his father in trust for the family. There is no form of ownership of family assets by daughters in the family.

### **1.4.5 Funerals**

Funerals are another major customary practice of the people. Funerals are mostly organized after the harvest (and especially during the long dry season). Funerals are performed to mark the end of the transition from earth to the spirit world.

### **1.4.6 Social Organization**

There are various religious groupings in the district. The major ones are Christianity (41.8%), Islam (35%) and various Traditional Religions (20%). There are other social groupings that are involved with economic activities. These are mostly into agro processing such as shea butter extraction, dawadawa processing, pito brewing and onion farming.

## **1.5 Economy**

There are three main active sectors of the district economy namely; agriculture, forestry and fishing; wholesale and retail, and manufacturing.

### **1.5.1 Agriculture**

Agriculture, forestry and fishing are the main-stay of the local economy accounting for about 83.9% of the economically active population. The major food crops grown are millet, sorghum, maize, rice, sweet potato, groundnuts, leafy vegetables, pepper, water melon and onion. Livestock such as cattle, sheep, goats, donkeys are also kept. Some food crops serve as cash crops and these include onions, tomatoes, and water melon. These are largely cultivated in the dry season.

### **1.5.2 Tourism and Hospitality Industry**

The tourism and hospitality industries are underdeveloped. The district does not abound in many tourism potentials. The few unharnessed tourism potentials however include the Yarigungu Crocodile Pond in Zawse, the Zawse Hills, the Old Slave Market Centre at Bindur and the Samapid Festival. There are however a few decent private guest houses in the district.

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

### **1.6.1 Introduction**

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

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

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

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

A large scale statistical operation, such as the 2010 Population and Housing Census required meticulous planning for its successful implementation. A working group of the Ghana

Statistical Service prepared the census project document with the assistance of two consultants. The document contains the rationale and objectives of the census, census organization, a work plan as well as a budget. The project document was launched in November 2008 as part of the Ghana Statistics Development Plan (GSDP) and reviewed in November 2009.

### **Census secretariat and committees**

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

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

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

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

### **Selection of Census topics**

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

fertility and mortality, educational and economic characteristics, issues relating to disability and housing conditions and amenities were included in the census.

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

### **Census mapping**

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

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

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

For effective data collection, there is the need to design appropriate documents to solicit the required information from respondents. GSS consulted widely with main data users in the process of the questionnaire development. Data users including MDAs, research institutions, civil society organizations and development partners were given the opportunity to indicate the type of questions they wanted to be included in the census questionnaire.

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

### **Pre-tests and trial census**

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

The census questionnaire was pre-tested twice in the course of its development. The first 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 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:

- i. 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.
- ii. Did not work, but had jobs to return to.
- iii. 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

The composition of the population of any nation greatly influences the policies and strategies that are formulated at the national level to better the lives of the people in a sustainable way. Knowing the population characteristics of the district is vital as it informs the kind of developmental goals, objectives, strategies, programmes and projects that are arrived at in order to bring about development to the district.

This chapter looks at some important population characteristics of the Binduri District. These characteristics are the size and distribution of the population, age and sex structure, age dependency ratios, migration, fertility, and mortality.

#### 2.2 Population Size and Distribution

Table 2.1 shows that the district has a total population of 61,576. More than half of the population (51.9%) are females with 48.1 percent being males. The age cohort with the highest proportion of the population is 5-9 with 16.0 percent of the population. The least populated age cohort is 5-9 with 0.1 percent of the population. It is also worth noting that the district has a youthful population constituting 43.9 percent of the entire population.

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

Age Group	Both Sexes	Sex		Sex ratio	Type of locality		
		Male	Female		Urban	Rural	Percent
All Ages	61,576	29,612	31,964	92.6	-	61,576	100.0
0 - 04	8,707	4,435	4,272	104	-	8,707	100.0
05 - 09	9,849	5,171	4,678	111	-	9,849	100.0
10 - 14	8,502	4,488	4,014	112	-	8,502	100.0
15 - 19	6,653	3,608	3,045	119	-	6,653	100.0
20 - 24	4,061	2,014	2,047	98.4	-	4,061	100.0
25 - 29	3,360	1,430	1,930	74.1	-	3,360	100.0
30 - 34	2,991	1,201	1,790	67.1	-	2,991	100.0
35 - 39	2,832	1,103	1,729	63.8	-	2,832	100.0
40 - 44	2,487	987	1,500	65.8	-	2,487	100.0
45 - 49	2,184	858	1,326	64.7	-	2,184	100.0
50 - 54	2,090	893	1,197	74.6	-	2,090	100.0
55 - 59	1,219	547	672	81.4	-	1,219	100.0
60 - 64	1,607	645	962	67	-	1,607	100.0
65 - 69	1,131	452	679	66.6	-	1,131	100.0
70 - 74	1,544	629	915	68.7	-	1,544	100.0
75 - 79	964	456	508	89.8	-	964	100.0
80 - 84	704	353	351	101	-	704	100.0
85 - 89	332	170	162	105	-	332	100.0
90 - 94	272	132	140	94.3	-	272	100.0
95 - 99	87	40	47	85.1	-	87	100.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

The sex ratio (number of males per the number of females) for all age groups is approximately 92.6. This means that for every 100 females there are approximately 93 corresponding males in the district. Table 2.2 shows that the male population in the district for age group 0-14 (14,094) is greater than the female population (12,964) for the same age category. However, the reverse is the case for age groups 15-64 and 65 years and above which have female populations of 16,198 and 2,802 respectively as compared to the male populations of 13,286 and 2,232 respectively. This explains why the sex ratio decreases from 108.7 for age group 0-14 to 82.0 for age group 15-64, and further drops to 79.7 for population 65 years and older.

From Table 2.2, the total dependency ratio is 108.8. This means that every 100 persons in the working age group (15-64) cater for approximately 109 persons. The total male dependency ratio is higher (122.9) than that of the female (97.3). This means that every 100 persons in the working age group, caters for approximately 123 males and 97 females. It is also worth noting that there are many more child dependants (91.8) than old age dependants (17.1). It is however interesting to note that male dependency for children (106.1) is more than that of female dependency (80.0) for children, whereas the opposite is the case for old age dependency. This implies that, there are more male than female children to be catered for, while there are more female than male old persons to be catered for.

**Table 2.2: Age dependency ratio by sex**

Age dependency ratio	Both Sexes	Male	Female	Sex Ratio
All Ages	61,576	29,612	31,964	92.6
0-14	27,058	14,094	12,964	108.7
15-64	29,484	13,286	16,198	82
65+	5,034	2,232	2,802	79.7
Total dependency ratio	108.8	122.9	97.3	
Child dependency ratio	91.8	106.1	80	
Aged dependency ratio	17.1	16.8	17.3	

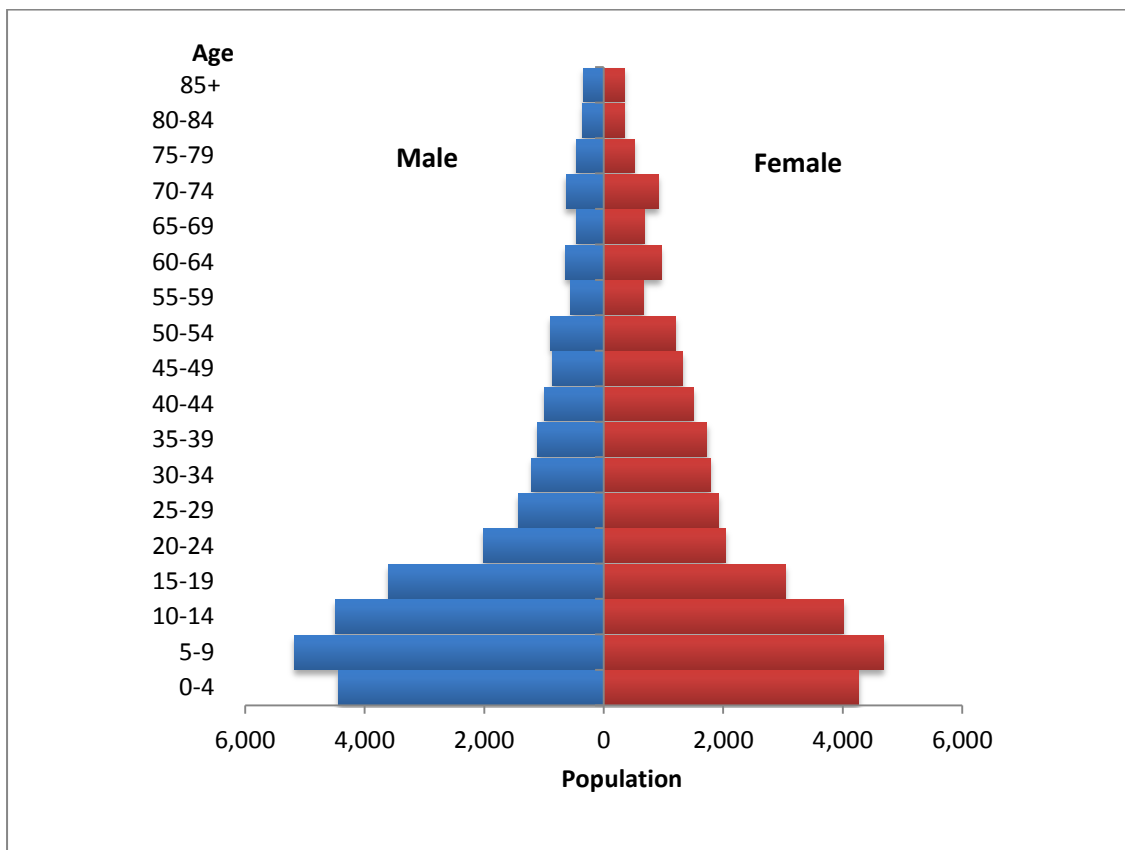
Source: Ghana Statistical Service, 2010 Population and Housing Census

### 2.3 Population Pyramid

A population pyramid presents in a form of a figure, the age and sex structure of the population. Figure 2.1, shows that the population pyramid of the district is conical in nature with a broad base (from 0-4 to 20-24) which smoothens out gently in a decreasing manner up to the middle age groups (from 25-29 to 50-54). It then roughens upwards for the next three age groups (from 60-64 to 70-74) and smoothens out almost evenly for the last three age groups (from 75-79 to 85+). From this observation, it is clear that the population of the district is generally youthful in nature with the large bars appearing for age groups of 0-4 to 60-64. It can also be observed that the longest bars in the youthful age cohorts appear in the 5-9 year group. This implies that most development strategies should be targeted at the younger population. There is however a deviation of the bars in age groups 60-64 and 70-74 which are longer than their preceding age group.

Generally, the sex distribution of the population is almost even throughout the pyramid with age groups 60-64 and 70-74 showing that females conspicuously outnumber males in those age groups.

**Figure 2.1: Population pyramid**



Source: Ghana Statistical Service, 2010 Population and Housing Census

## 2.4 Fertility, Mortality and Migration

### 2.4.1 Fertility

Fertility rate measures the number of live births of women. The fertility rate of any district is an important index for projecting the population of the district. Table 2.4 further shows that Binduri District has 13,367 women in the reproductive age group of 15-49 years. Out of this number, only 9.7 percent are reported to have given birth in the last twelve months. The total fertility rate (3.6) and the general fertility rate (105.1) are higher than the regional average of 3.4 and 97.5 respectively. The district has one of the highest fertility rates in the region. However, the crude birth rate of the district (21.2) is lower than the regional average of 22.7 indicating that there are more live births per every 1,000 women in the region than there are in the district.

**Table 2.4: 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
Bolgatanga Municipal	131,550	34,909	3,089	3.0	88.5	23.5
Talensi	81,194	17,431	1,820	3.6	104.4	22.4
Bongo	84,545	19,593	1,982	3.6	101.2	23.4
Bawku West	94,034	20,951	2,226	3.7	106.2	23.7
Garu Temppane	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
Nabdram	33,826	7,355	773	3.6	105.1	22.9
<b>Binduri</b>	<b>61,576</b>	<b>13,367</b>	<b>1,303</b>	<b>3.6</b>	<b>97.5</b>	<b>21.2</b>
Pusiga	57,677	13,159	1,377	3.7	104.6	23.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 2.5 shows the number of children ever born to females twelve years and older and the number of them that are surviving in the Binduri District. The total number of females twelve years and older is 21,279. The number of children ever born is 70,951. Out of the total number of children ever born, 60,289 are surviving with the number of male children surviving (30,395) higher than the number of female children surviving (29,894). Women 60 years and older (3,764) are more than women in each of the other age groups. This explains perhaps why there are many more number of children ever born as well as the number of them surviving by this age group. The age group with the least number of women (672) in the district is 55-59 years. Generally, the number of children ever born for both sexes increases sharply from the 12-14 year group (6) up to age group 35-39 years (8,267). Thereafter, it decreases marginally until age group 50-54 years (7,240) and drops more sharply to 4,111 at age group 55-59 years. It then increases sharply again to 22,447 at age group 60 years and older. A similar trend can be observed with children surviving for all the age groups beginning from the 12-14 year group.

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

Age	Number of Females	Children Ever Born			Children Surviving		
		Both Sexes	Male	Female	Both Sexes	Male	Female
All ages	21,279	70,951	36,025	34,926	60,289	30,395	29,894
12 - 14	2,279	6	3	3	4	3	1
15 - 19	3,045	236	119	117	219	111	108
20 - 24	2,047	1,820	970	850	1,662	871	791
25 - 29	1,930	4,341	2,217	2,124	4,061	2,055	2,006
30 - 34	1,790	6,647	3,391	3,256	6,107	3,084	3,023
35 - 39	1,729	8,267	4,147	4,120	7,444	3,736	3,708
40 - 44	1,500	8,153	4,170	3,983	7,199	3,666	3,533
45 - 49	1,326	7,681	3,856	3,825	6,701	3,340	3,361
50 - 54	1,197	7,242	3,697	3,545	6,110	3,061	3,049
55 - 59	672	4,111	2,071	2,040	3,391	1,718	1,673
60 +	3,764	22,447	11,384	11,063	17,391	8,750	8,641

Source: Ghana Statistical Service, 2010 Population and Housing Census



## 2.4.2 Mortality

Mortality is the total number of deaths in a geographical area in a particular period of time. This section looks at mortality in terms of total deaths in households and crude death rate, causes of death and age specific death rate. Table 2.6 shows the Total population, deaths in households and the crude death rate in the Upper East Region. Binduri District with a population of 61, 573, recorded a total of 510 household deaths with a Crude Death Rate of 8.3. The Crude Death Rate of the district is the lowest in the Region apart from that of Bawku Municipality (7.0) and Kasena Nankana West (8.0). The Crude Death Rate of the region is 10.8 percent.

Binduri District has one of the lowest number of household deaths (510) as well as a lower crude death rate of 8.3. This means that the mortality situation in the district is better considering the numbers of the other districts in the region.

**Table 2.6: Total population, deaths in households and crude death rate by districts**

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
Bolgatanga Municipal	131,550	2,269	17.2
Talensi	81,194	1,218	15.0
Bongo	84,545	1,093	12.9
Bawku West	94,034	838	8.9
Garu Tempane	130,003	1,287	9.9
Bawku Municipal	98,538	691	7.0
Builsa South	36,514	337	9.2
Nabdam	33,826	473	14.0
<b>Binduri</b>	<b>61,576</b>	<b>510</b>	<b>8.3</b>
Pusiga	57,677	362	6.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

## Causes of Death

Table 2.7 shows the number of deaths recorded in households as well as the causes of the deaths at three levels; national, regional and district. The causes of death are categorised into two namely: (1) deaths due to accident/violence/homicide/suicide and all other causes on one hand and (2) pregnancy-related death of females 15-54 years and not pregnancy-related death on the other hand. Of the total number of 510 deaths in the Binduri District, Accident/violence/ homicide /suicide accounted for 8.4 percent compared with 15.2 percent in the region while all other causes constitute 91.6 percent. Pregnancy related deaths in the district stands at only 1.0 percent compared with the regional proportion of 1.7 percent.

**Table 2.7: Death in Households**

District	Death due to											
	Total deaths		Accident/ violence/ homicide /suicide		All other causes		Total deaths		Pregnancy related death (female 15- 54 years)		Not pregnancy related	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Ghana	163,534	100.0	18,938	11.6	144,596	88.4	163,534	100.0	3,026	1.9	160,508	98.1
All Districts	11,339	100.0	1,720	15.2	9,619	84.8	11,339	100.0	193	1.7	11,146	98.3
Builsa North	478	100.0	30	6.3	448	93.7	478	100.0	4	0.8	474	99.2
Kasena Nankana West	566	100.0	47	8.3	519	91.7	566	100.0	4	0.7	562	99.3
Kasena Nankana East	1,217	100.0	86	7.1	1,131	92.9	1,217	100.0	11	0.9	1,206	99.1
Bolgatanga Municipal	2,269	100.0	940	41.4	1,329	58.6	2,269	100.0	89	3.9	2,180	96.1
Talensi	1,218	100.0	165	13.5	1,053	86.5	1,218	100.0	6	0.5	1,212	99.5
Bongo	1,093	100.0	61	5.6	1,032	94.4	1,093	100.0	16	1.5	1,077	98.5
Bawku West	838	100.0	43	5.1	795	94.9	838	100.0	15	1.8	823	98.2
Garu Tempene	1,287	100.0	97	7.5	1,190	92.5	1,287	100.0	19	1.5	1,268	98.5
Bawku Municipal	691	100.0	65	9.4	626	90.6	691	100.0	14	2.0	677	98.0
Builsa South	337	100.0	14	4.2	323	95.8	337	100.0	4	1.2	333	98.8
Nabdam	473	100.0	79	16.7	394	83.3	473	100.0	4	0.8	469	99.2
<b>Binduri</b>	<b>510</b>	<b>100.0</b>	<b>43</b>	<b>8.4</b>	<b>467</b>	<b>91.6</b>	<b>510</b>	<b>100.0</b>	<b>5</b>	<b>1.0</b>	<b>505</b>	<b>99.0</b>
Pusiga	362	100.0	50	13.8	312	86.2	362	100.0	2	0.6	360	99.4

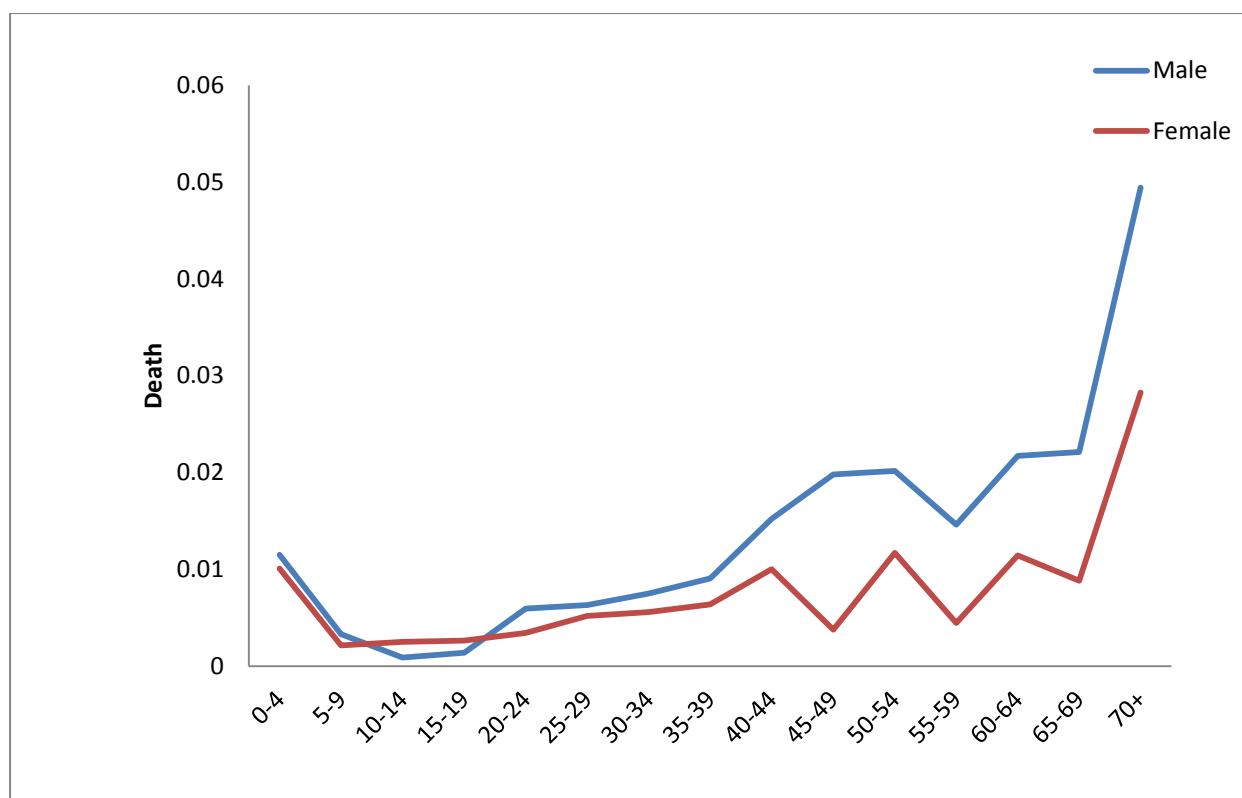
Source: Ghana Statistical Service, 2010 Population and Housing Census

### Age specific Death Rate

The figure shows age specific death rate (ASDR) of the people in the Bunduri district. From the figure the males' age group (0-4) has a higher death rate than their female counterpart, for both sexes death rate reduces up to age group (5-9). At age group (10-14) the male death rate reduces further than their female counterpart in the same age category until age group (15-19) where the male death rate begins to rise again. From age group (20-24), the death rate for both sexes rises but that of the males rises faster than that of the females. At age group (40-44) the female death rate declines and rises again from age group (45-49) till age group (50-54) and begins to fall again till age group (55-59). From this age group the death rate of the females' rises again till age group (60-64) and falls at age group (65-69) after which it rises and never falls because they have reached old age.

However, from age group (20-24), the male death rate rises till age group (50-54) and falls slightly till age group (55-59) and rises again until age group (60-64) where it stabilizes till age group (65-69) from which it rises and never falls due to old age. The only age group where both sexes mortality rate reduces is (0-4) and (55-59).

**Figure 2.2: Age specific death rates by sex**



Source: Ghana Statistical Service, 2010 Population and Housing Census

### 4.2.3 Migration

Table 2.3 shows the birthplace of resident migrants as well as their duration in the district. The total number of migrants in the district is 3,155. This represents only 5.1 percent of the total population of the district. Out of the total number of migrants in the district, as high as 31.3 percent of them have lived in the district for between one and four years, while the least percentage (14.1%) of migrants have lived in the district for at least twenty years.

Again, the number of migrants in the district who were born elsewhere in the Upper East Region is 467, representing 14.8 percent of the total number of migrants. Majority (2,621) of resident migrants were born elsewhere in another region. It is worth noting that out of the number of migrants born elsewhere in another region; most of them (1,531) were born in the Ashanti Region. Volta Region has the least number of migrants (55) in the district. Interestingly, the number of migrants in the district who were born in Brong Ahafo Region (222) is the same as those born in the Northern Region (222). A relatively low number (67) of the total number of migrants in the Binduri District were born outside Ghana. The migrants who have stayed in the district for 20 years and over are those born elsewhere in the region (27.0%) and those born outside Ghana constitute 25.4 percent.

**Table 2.3: Birthplace by duration of residence**

Birthplace	Number	Duration of residence (%)				
		Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years
Total	3,155	22.4	31.3	17.2	15.0	14.1
Born elsewhere in the region	467	19.7	16.1	19.5	17.8	27.0
Born elsewhere in another region: 2621						
Western	195	32.3	39.5	17.9	4.6	5.6
Central	62	11.3	51.6	9.7	8.1	19.4
Greater Accra	64	26.6	31.3	18.8	9.4	14.1
Volta	55	32.7	18.2	7.3	16.4	25.5
Eastern	79	15.2	45.6	16.5	7.6	15.2
Ashanti	1,531	24.4	32.5	17.0	14.4	11.7
Brong Ahafo	222	18.9	37.4	17.6	16.7	9.5
Northern	222	20.3	40.5	7.2	18.5	13.5
Upper East	-	-	-	-	-	-
Upper west	191	16.2	22.0	28.8	26.2	6.8
Outside Ghana	67	11.9	35.8	16.4	10.4	25.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

## CHAPTER THREE

### SOCIAL CHARACTERISTICS

#### 3.1 Introduction

This chapter focuses on analysis and interpretation of some social characteristics of the Binduri District. These social characteristics are household size, composition and headship, household structure, marital status, nationality, religious affiliation, and literacy and education.

#### 3.2 Household Size, Composition and Headship

##### 3.2.1 Household Size

Table 3.1 shows the household size by locality of residence. From the table, total household population in the district is 60,878 all of which are rural. The total number of households in the district is 9,199 with an average of 1.4 households per house. The district has an average household size of 6.6.

**Table 3.1 Household size by locality type**

Categories	Total country	Region	District	Urban	Rural
Total household population	24,076,327	1,034,704	60,878	-	60,878
Number of households	5,467,054	177,629	9,199	-	9,199
Average households per house	1.6	1.6	1.4	-	1.4
Average household size	4.5	5.9	6.6	-	6.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

##### 3.2.2 Household Composition

Table 3.2 shows household composition in the district. Out of a total household population of 60,878, there are 29,275 males and 31,603 females. More than half (50.5%) of the household population are children, while 15.1 percent and 10.7 percent are heads and spouses respectively. As low as 1.2 percent of the total household population constitutes step children while 0.3% is adopted/foster children.

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

Household composition	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	60,878	100.0	29,275	100.0	31,603	100.0
Head	9,199	15.1	7,390	25.2	1,809	5.7
Spouse (wife/husband)	6,500	10.7	143	0.5	6,357	20.1
Child (son/daughter)	30,724	50.5	16,753	57.2	13,971	44.2
Parent/Parent in-law	1,873	3.1	178	0.6	1,695	5.4
Son/Daughter in-law	670	1.1	36	0.1	634	2.0
Grandchild	3,736	6.1	1,951	6.7	1,785	5.6
Brother/Sister	2,135	3.5	1,233	4.2	902	2.9
Step child	752	1.2	403	1.4	349	1.1
Adopted/Foster child	190	0.3	93	0.3	97	0.3
Other relative	4,782	7.9	947	3.2	3,835	12.1
Non-relative	317	0.5	148	0.5	169	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

Of the 29,275 males that constitute a part of the total household population, 25.2 percent are household heads, 57.2 percent are children, 1.4 percent is step-children while 0.3 percent are adopted/foster children. Again, out of the 31,603 females that are a part of the household population, 5.7 percent are household heads, 44.2 percent are children while 1.1 percent and 0.3 percent are step-children and adopted/foster children.

There is more than double the percentage of female spouses as male spouses (20.1% and 0.5 %). respectively. This is probably the case because polygamy is practised in the district like many other districts in northern Ghana. The least populated category of household members in the district is non-relatives (0.5%).

The extended family system is practised in all Ghanaian communities and Binduri is not an exception. This is evident from Table 3.3 where 54.4 percent of the total household population constitutes extended families. This is above the percentage (21.9%) of household population that make up nuclear families in the district. The household structures with the least proportions (0.5) of persons are head and spouse only and single parent extended and non-relative families. The family structure with the highest proportions of males (53.9%) and females (54.8%) is the extended family system.

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

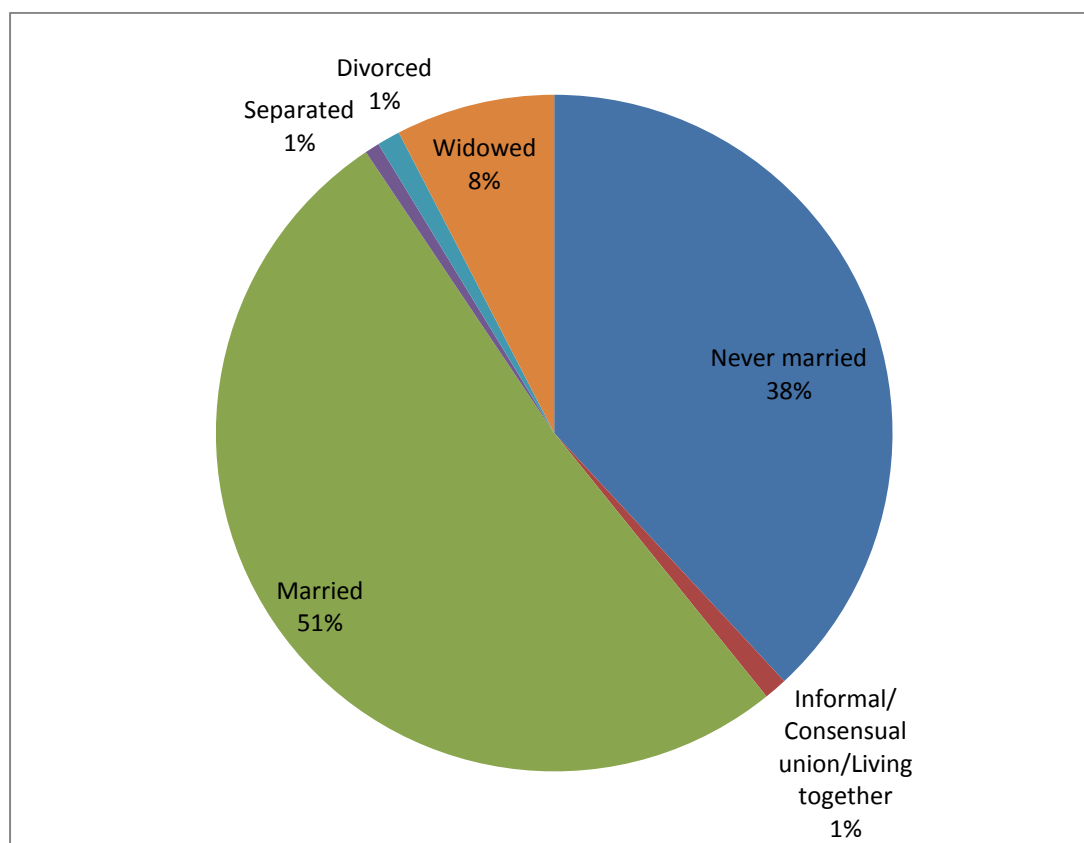
Household structure	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	60,878	100	29,275	100	31,603	100
Head only	351	0.6	231	0.8	120	0.4
Head and a spouse only	304	0.5	153	0.5	151	0.5
Nuclear (Head spouse(s) children)	13,361	21.9	6,951	23.7	6,410	20.3
Extended (Head spouse(s) children Head's relatives)	33,099	54.4	15,789	53.9	17,310	54.8
Extended + non relatives	885	1.5	447	1.5	438	1.4
Head spouse(s) and other composition	1,281	2.1	598	2	683	2.2
Single parent Nuclear	3,677	6	1,591	5.4	2,086	6.6
Single parent Extended	5,260	8.6	2,307	7.9	2,953	9.3
Single parent Extended + non relative	318	0.5	157	0.5	161	0.5
Head and other composition but no spouse	2,342	3.8	1,051	3.6	1,291	4.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.3 Marital Status

Figure 3.1 shows that out of the population aged 12 years and older in the district, 51.0 percent are married, 38.1 percent have never married, while the remaining 13.5 percent of the population is made up of those who are separated, divorced, widowed or are in informal/consensual union/living together.

**Figure 3.1: Persons 12 years and older by marital status**



Source: Ghana Statistical Service, 2010 Population and Housing Census

From Table 3.4, persons in the age groups 40-44 years have the highest percentage of married persons (87.1%) while age groups 35-39 and 45-49 have the majority of those who are divorced (2.2%). It is however interesting to note that there are more (2.7%) of persons 65 years and older who have never married compared to persons within the age groups 45-49 (2.2%) and for age group 60-64, it is 2.6%.

It is also clear from Table 3.4 that for persons 12 years and older, there are fewer males (47.0%) than females (55.0 %) who are married. There are also many more females who are widowed (12.9%) than males (1.3%). This can be explained partly due to the high practice of polygamy as a result of which many married women become widows with the death of just one husband. There is however an insignificant difference in the rates of divorce for both males (1.1%) and females (1.0%).

The age group for males with the highest proportion of those married is 55-59 (92.3%) while that of females is 35-39 (89.4%). Also, the age groups with the highest proportion of those divorced are 35-39 (3.4%) for males and 45-49 (2.2%) for females. It is also evident from table 3.3.1 that females 65 years and older constitute the highest proportion of the widowed (54.5%) than the other age groups for males the proportion is significantly lower (6.5 percent).

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

Sex/Age-group	Number	Total	Never married	Informal/ Consensual union/Living together	Married	Separated	Divorced	Widowed
<b>Both Sexes</b>								
Total	39,352	100.0	38.1	1.1	51.4	0.7	1.1	7.6
12 – 14	4,834	100.0	95.6	0.1	4.2	0.0	0.0	0.0
15 - 19	6,653	100.0	91.3	1.0	7.3	0.2	0.1	0.2
20 - 24	4,061	100.0	60.8	2.7	34.8	0.7	0.6	0.4
25 - 29	3,360	100.0	28.5	2.0	66.4	1.3	1.1	0.7
30 - 34	2,991	100.0	10.9	2.2	82.4	1.2	1.5	1.8
35 - 39	2,832	100.0	5.5	1.4	86.9	1.4	2.2	2.6
40 - 44	2,487	100.0	3.5	1.0	87.1	1.4	1.6	5.3
45 - 49	2,184	100.0	2.2	0.9	85.4	1.2	2.2	8.1
50 - 54	2,090	100.0	1.7	0.5	81.9	1.3	1.9	12.7
55 - 59	1,219	100.0	1.8	0.2	79.4	0.9	1.7	16.0
60 - 64	1,607	100.0	2.6	0.4	71.6	0.7	2.0	22.7
65+	5,034	100.0	2.7	0.3	61.9	0.4	1.4	33.2
<b>Male</b>								
Total	18,073	100.0	48.6	1.0	47.3	0.6	1.1	1.3
12 – 14	2,555	100.0	96.4	0.1	3.5	0.0	0.0	0.0
15 - 19	3,608	100.0	94.9	0.5	4.5	0.0	0.1	0.0
20 - 24	2,014	100.0	81.1	2.4	16.0	0.1	0.2	0.1
25 - 29	1,430	100.0	47.2	1.6	48.7	1.2	0.8	0.5
30 - 34	1,201	100.0	20.2	2.8	73.6	0.8	2.2	0.3
35 - 39	1,103	100.0	10.5	1.6	83.1	1.1	3.4	0.3
40 - 44	987	100.0	6.3	1.9	88.0	1.2	1.5	1.0
45 - 49	858	100.0	3.6	0.8	91.1	1.2	2.1	1.2
50 - 54	893	100.0	2.6	0.6	90.4	1.8	1.8	2.9
55 - 59	547	100.0	2.2	0.2	92.3	1.3	2.0	2.0
60 - 64	645	100.0	3.9	0.2	88.4	1.2	2.9	3.4
65+	2,232	100.0	3.6	0.4	87.1	0.5	2.0	6.5
<b>Female</b>								
Total	21,279	100.0	29.1	1.2	55.0	0.9	1.0	12.9
12 – 14	2,279	100.0	94.8	0.1	5.0	0.0	0.0	0.0
15 - 19	3,045	100.0	87.0	1.6	10.6	0.3	0.2	0.3
20 - 24	2,047	100.0	40.8	2.9	53.3	1.3	0.9	0.7
25 - 29	1,930	100.0	14.6	2.3	79.5	1.5	1.2	0.9
30 - 34	1,790	100.0	4.6	1.8	88.3	1.4	1.1	2.7
35 - 39	1,729	100.0	2.3	1.2	89.4	1.6	1.4	4.0
40 - 44	1,500	100.0	1.6	0.5	86.5	1.5	1.7	8.2
45 - 49	1,326	100.0	1.2	1.0	81.7	1.3	2.2	12.6
50 - 54	1,197	100.0	1.1	0.5	75.5	1.0	1.9	20.0
55 - 59	672	100.0	1.5	0.1	68.9	0.6	1.5	27.4
60 - 64	962	100.0	1.8	0.5	60.3	0.4	1.4	35.7
65+	2,802	100.0	2.1	0.3	41.9	0.2	1.0	54.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.5 shows that 59.3 percent of persons 12 years and older in the district have never had formal education; while 33.2 percent have attained basic education. Furthermore, 5.3 percent have attained secondary education and only 0.3 percent tertiary education. Widows have the highest population (93.8%) with no education, while those who have never married have the



least proportion (22.8%) of persons with no education. On the other hand, the divorced population has the highest proportion (0.5%) of those who have attained tertiary education.

Close to half (48.9%) of males have no formal education as compared to 68.1 percent of females. On the contrary, males have higher percentages (7.5%) than females (3.5%) in terms of attaining secondary education. This means that a lot of female students either do not qualify to enter the Senior High School or drop out in the Senior High School level. Table 3.5 also shows that males that are separated have the highest percentage (0.9%) of those who have attained tertiary education. In the case of females, the proportion of those who have never married and those who are married and have attained tertiary level of education add up to 0.2 percent.

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

Sex/Marital status	Number	All levels	No Education	Basic	Secondary	Voc/ Tech/ Comm	Post middle/ secondary certificate/ diploma	Tertiary
<b>Both Sexes</b>								
Total	39,352	100.0	59.3	33.2	5.3	0.5	1.4	0.3
Never married	14,974	100.0	22.8	64.7	10.1	0.6	1.5	0.3
Informal/Consensual union/Living together	434	100.0	34.8	53.2	9.0	0.5	2.3	0.2
Married	20,243	100.0	81.3	13.9	2.5	0.5	1.5	0.3
Separated	290	100.0	67.9	25.9	3.4	0.7	1.7	0.3
Divorced	426	100.0	67.1	23.5	4.7	1.6	2.6	0.5
Widowed	2,985	100.0	93.8	5.7	0.3	0.0	0.2	0.0
<b>Male</b>								
Total	18,073	100.0	48.9	40.2	7.5	0.7	2.2	0.5
Never married	8,786	100.0	22.5	63.7	10.9	0.6	1.8	0.4
Informal/Consensual union/Living together	185	100.0	29.7	56.8	10.8	0.0	2.2	0.5
Married	8,549	100.0	74.6	17.2	4.2	0.7	2.7	0.6
Separated	107	100.0	72.0	22.4	2.8	0.0	1.9	0.9
Divorced	205	100.0	68.8	21.0	4.9	0.5	3.9	1.0
Widowed	241	100.0	86.7	11.6	1.2	0.0	0.4	0.0
<b>Female</b>								
Total	21,279	100.0	68.1	27.3	3.5	0.4	0.7	0.1
Never married	6,188	100.0	23.3	66.1	8.9	0.6	1.1	0.1
Informal/Consensual union/Living together	249	100.0	38.6	50.6	7.6	0.8	2.4	0.0
Married	11,694	100.0	86.3	11.5	1.3	0.2	0.6	0.1
Separated	183	100.0	65.6	27.9	3.8	1.1	1.6	0.0
Divorced	221	100.0	65.6	25.8	4.5	2.7	1.4	0.0
Widowed	2,744	100.0	94.4	5.1	0.2	0.0	0.2	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.6 displays the information on persons 12 years and older by sex, marital status and economic activity status in the district. In all, 76.2 percent of persons 12 years and older are employed, 0.7 percent is unemployed, and 23.2 percent are economically not active. The percentage of married persons who are economically not active is 7.4 percent. The proportion of the never married who is economically not active is 42.8 percent while that of the divorced and widowed is 17.6 percent and 34.8 percent respectively.

**Table 3.6: Persons 12 years and older by Marital status, Sex and economic activity status**

Sex/Marital status	Total		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both Sexes</b>								
Total	39,352	100.0	29,980	76.2	256	0.7	9,116	23.2
Never married	14,974	100.0	8,451	56.4	109	0.7	6,414	42.8
Informal/Consensual union/Living together	434	100.0	373	85.9	4	0.9	57	13.1
Married	20,243	100.0	18,622	92.0	124	0.6	1,497	7.4
Separated	290	100.0	253	87.2	2	0.7	35	12.1
Divorced	426	100.0	348	81.7	3	0.7	75	17.6
Widowed	2,985	100.0	1,933	64.8	14	0.5	1,038	34.8
<b>Male</b>								
Total	18,073	100.0	13,609	75.3	118	0.7	4,346	24.0
Never married	8,786	100.0	5,148	58.6	62	0.7	3,576	40.7
Informal/Consensual union/Living together	185	100.0	170	91.9	0	0.0	15	8.1
Married	8,549	100.0	7,876	92.1	53	0.6	620	7.3
Separated	107	100.0	92	86.0	1	0.9	14	13.1
Divorced	205	100.0	172	83.9	2	1	31	15.1
Widowed	241	100.0	151	62.7	0	0	90	37.3
<b>Female</b>								
Total	21,279	100.0	16,371	76.9	138	0.6	4,770	22.4
Never married	6,188	100.0	3,303	53.4	47	0.8	2,838	45.9
Informal/Consensual union/Living together	249	100.0	203	81.5	4	1.6	42	16.9
Married	11,694	100.0	10,746	91.9	71	0.6	877	7.5
Separated	183	100.0	161	88.0	1	0.5	21	11.5
Divorced	221	100.0	176	79.6	1	0.5	44	19.9
Widowed	2,744	100.0	1,782	64.9	14	0.5	948	34.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.4 Nationality

Table 3.7 presents population by nationality and sex. The results show that 93.6 percent are Ghanaians by birth, 2.5 percent, Ghanaians by dual nationality and 1.9 percent of the Economic Community of West African States (ECOWAS) nationals.

Of the male population 93.7 percent are Ghanaians by birth, 2.4 percent are of dual nationality and 2.0 percent of ECOWAS nationals. Africans other than ECOWAS and other nationals constituted less than one percent for the male population

Again, of the female population of 31,964, Ghanaians by birth constituted 93.5 percent while population with dual nationality constituted 2.6 percent. Only 1.8 percent of the female population are ECOWAS nationals and less than one percent of Africans other than ECOWAS and other nationals.

**Table 3.7: Population by nationality and sex**

Nationality	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	61,576	100.0	29,612	100.0	31,964	100.0
Ghanaian by birth	57,634	93.6	27,751	93.7	29,883	93.5
Dual nationality (Ghanaian & Other)	1,560	2.5	722	2.4	838	2.6
Ghanaian by naturalization	655	1.1	295	1.0	360	1.1
ECOWAS	1,182	1.9	594	2.0	588	1.8
African other than ECOWAS	326	0.5	152	0.5	174	0.5
Other	219	0.4	98	0.3	121	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.5 Religious Affiliation

Table 3.8 shows that Christianity (Catholic, Protestants, Pentecostal/Charismatic, and Other Christian) is the dominant religion in the district with a total of 41.7 percent followers. Out of this, Catholics constitute 51.2 percent. Islam is the second dominant religion with a following of 35 percent. Traditional African religions have a following of 20.0 percent of the population. The number of those without religious affiliation is 2.1 percent, while the undefined (other) constitutes 0.2 percent.

It is also clear from Table 3.8 that 45.7 percent of Christians are males while 54.3 percent are females. Almost 50.0 percent (49.1%) of practitioners of Islam are males with 50.9 percent being females. The percentage of traditionalist who are males is 50.7 percent with 49.3 percent being females. Of those with no religion, 53.2 percent are males while 46.8 percent are females.

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

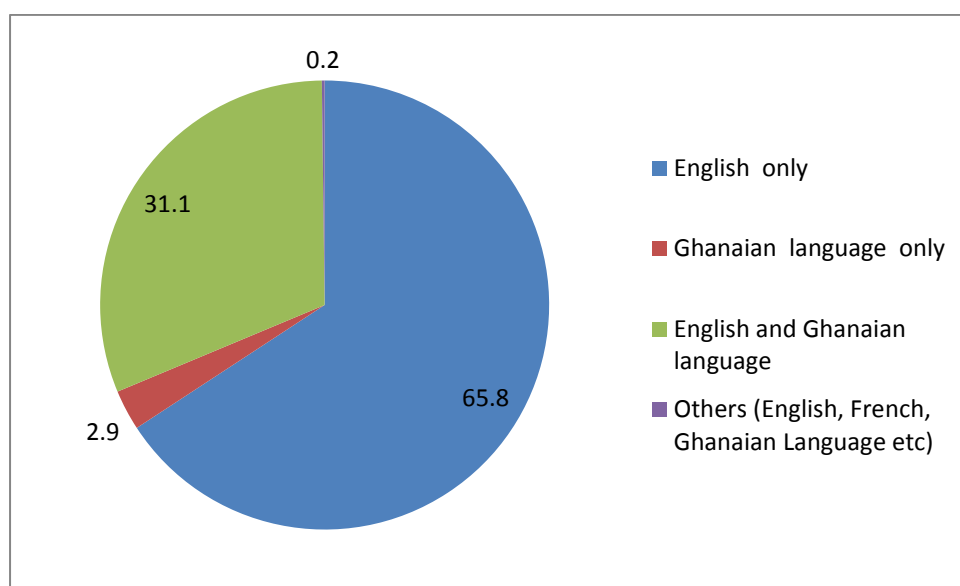
Religion	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	61,576	100.0	29,612	48.1	31,964	51.9
No religion	1,299	100.0	691	53.2	608	46.8
Catholic	13,149	100.0	6,199	47.1	6,950	52.9
Protestants (Anglican Lutheran etc.)	5,311	100.0	2,437	45.9	2,874	54.1
Pentecostal/Charismatic	4,658	100.0	1,998	42.9	2,660	57.1
Other Christian	2,579	100.0	1,118	43.4	1,461	56.6
Islam	22,092	100.0	10,841	49.1	11,251	50.9
Traditionalist	12,335	100.0	6,258	50.7	6,077	49.3
Other	153	100.0	70	45.8	83	54.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.6 Literacy and Education

Figure 3.2 shows that the majority of the people in the district are not able to read and write in any language. Of a literate population of 17,228 persons who are 11 years and older, 65.8 percent can read and write English language only, 31.1 percent are literate in English and Ghanaian language, while 2.9 percent are literate in Ghanaian language only. It is however clear from Figure 3.6 that only 0.2 percent of persons 11 years and older in the district can read and write in any other languages apart from English and Ghanaian language.

**Figure 3.2: Literacy by language of persons 11 years and older**



Source: Ghana Statistical Service, 2010 Population and Housing Census

From Table 3.9, the percentage of persons who can read and write only English is 74.9 for persons in the 11-14 age groups. Persons in the 40-44 age group have the less than 1 percent (0.7%) of those who can read and write both English and French. Again it is clear that out of the number of non-literate males, the percentage that can read and write English only is 65.6 while the percentage of those who can read and write English and French is 0.1. Similarly, as high as 66.1 percent of females read and write only English while only 0.6 percent read and write both English and French.

### 3.6.1 School Attendance

Information on school attendance provides an indication of formal schooling in society. In a society where few people have had formal education, there will be few people with requisite knowledge and skills needed for social and economic development.

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

Literacy status	None (not literate)	Literate	Total	English only	Ghanaian language only	English and Ghanaian language	English and French	English, French and Ghanaian language
<b>Both sexes</b>		-						
<b>Total</b>	23,591	17,228	100.0	65.8	2.9	31.1	0.1	0.1
11-14	1,049	5,252	100.0	74.9	1.9	23.1	0.0	0.0
15-19	1,436	5,217	100.0	72.0	1.8	26.1	0.0	0.0
20-24	1,718	2,343	100.0	62.3	2.5	35.0	0.0	0.1
25-29	2,137	1,223	100.0	54.6	3.9	41.2	0.2	0.1
30-34	2,188	803	100.0	51.7	3.9	44.1	0.1	0.2
35-39	2,274	558	100.0	47.0	6.3	46.1	0.4	0.4
40-44	2,051	436	100.0	47.7	9.9	41.3	0.7	0.5
45-49	1,828	356	100.0	45.5	7.9	46.6	0.0	0.0
50-54	1,767	323	100.0	41.5	7.4	50.5	0.3	0.3
55-59	1,007	212	100.0	35.4	6.1	58.5	0.0	0.0
60-64	1,428	179	100.0	45.3	5.6	49.2	0.0	0.0
65+	4,708	326	100.0	56.4	4.3	39.0	0.0	0.3

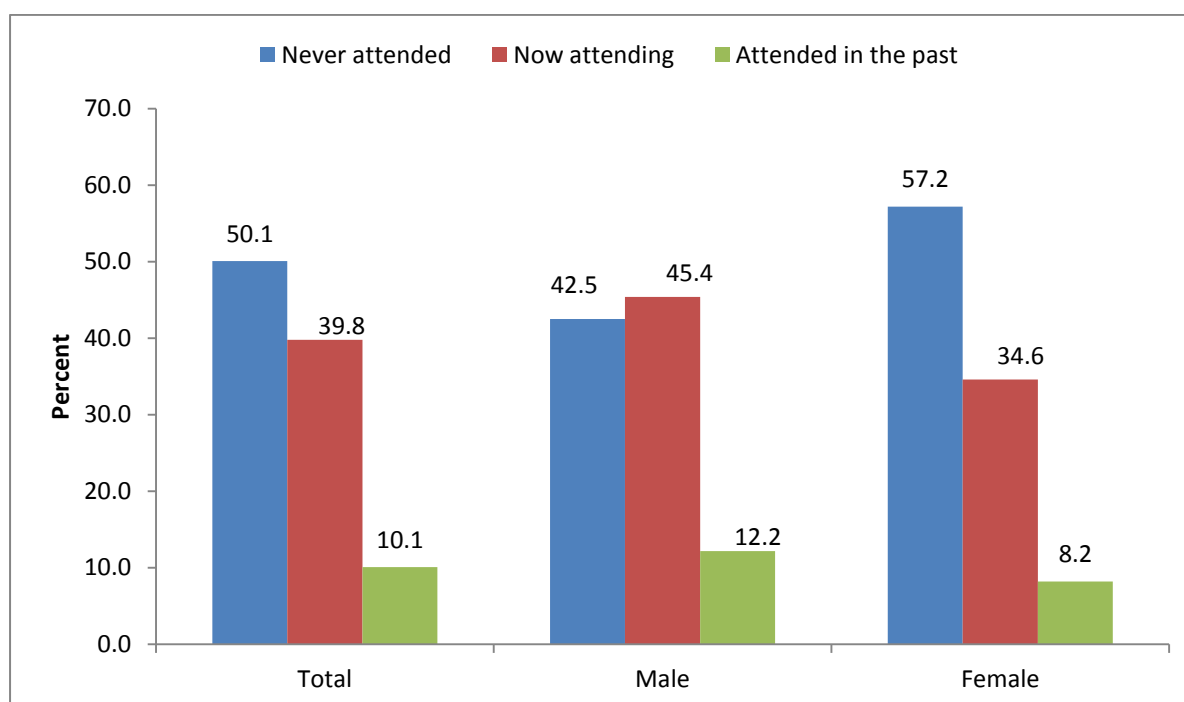
**Table 3.9: Population 11 years and older by sex, age and literacy status (cont'd)**

Literacy status	None (not literate)	Literate	Total	English only	Ghanaian language only	English and Ghanaian language	English and French	English, French and Ghanaian language
<b>Male</b>								
<b>Total</b>	8,982	9,855	100.0	65.6	2.4	31.9	0.1	0.1
11-14	543	2,776	100.0	75.3	1.4	23.3	0.0	0.0
15-19	643	2,965	100.0	72.0	2.0	26.0	0.1	0.0
20-24	584	1,430	100.0	63.1	2.1	34.6	0.1	0.1
25-29	731	699	100.0	55.8	2.7	41.2	0.3	0.0
30-34	707	494	100.0	50.2	2.4	47.0	0.2	0.2
35-39	763	340	100.0	50.3	3.5	45.3	0.6	0.3
40-44	711	276	100.0	51.4	6.2	42.0	0.0	0.4
45-49	661	197	100.0	43.7	6.6	49.7	0.0	0.0
50-54	681	212	100.0	44.3	6.1	48.6	0.5	0.5
55-59	407	140	100.0	35.7	2.1	62.1	0.0	0.0
60-64	523	122	100.0	42.6	6.6	50.8	0.0	0.0
65+	2,028	204	100.0	50.0	3.9	45.6	0.0	0.5
<b>Female</b>								
<b>Total</b>	14,609	7,373	100.0	66.1	3.7	30.1	0.0	0.1
11-14	506	2,476	100.0	74.6	2.5	22.9	0.0	0.0
15-19	793	2,252	100.0	71.9	1.7	26.4	0.0	0.0
20-24	1,134	913	100.0	60.9	3.2	35.7	0.0	0.2
25-29	1,406	524	100.0	53.1	5.5	41.2	0.0	0.2
30-34	1,481	309	100.0	54.0	6.1	39.5	0.0	0.3
35-39	1,511	218	100.0	41.7	10.6	47.2	0.0	0.5
40-44	1,340	160	100.0	41.3	16.3	40.0	1.9	0.6
45-49	1,167	159	100.0	47.8	9.4	42.8	0.0	0.0
50-54	1,086	111	100.0	36.0	9.9	54.1	0.0	0.0
55-59	600	72	100.0	34.7	13.9	51.4	0.0	0.0
60-64	905	57	100.0	50.9	3.5	45.6	0.0	0.0
65+	2,680	122	100.0	67.2	4.9	27.9	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 3.3 presents information on school attendance in the Binduri District. From the figure 50.1 percent of the population has never attended school. 39.8 percent are currently attending school while 10.1 percent have attended school in the past. There are more males currently in school, (45.4%) than (females 34.6%).

**Figure 3.3: School attendance**



Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.10 shows that 58.8 percent of persons 3 years and older in the district are currently attending primary school, 16.7 percent are in JSS/JHS, 5.6 percent are in SSS/SHS, while 0.5 percent are in tertiary institutions. This table also shows that there are 12,417 males and 10,313 females who are currently attending school. There are a relatively higher proportion of females (59.6%) in primary school compared to their male counterparts (58.1%). Almost the same proportion of males (16.9) and females (16.5) are in JSS/JHS while more males (6.4%) than females (4.7%) are in SSS/SHS. The proportion that is in the tertiary institutions is low for both males (0.6%) and females (0.3%).

There are 5,770 persons 3 years and older in the district who have attended school in the past. Out of this number, 38.6 percent have attended Primary School while 21.9 percent have attended JSS/JHS in the past. It is also clear that 15.4 percent have attended Middle School, and 2.1 percent have attended Vocational/Technical/Commercial School in the past. As high as 4.4 percent have attended tertiary institutions in the past compared to 0.5 percent of those who are currently attending tertiary institutions.

**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	22,730	100.0	12,417	100.0	10,313	100.0	5,770	100.0	3,323	100.0	2,447	100.0
Nursery	1,944	8.6	1,034	8.3	910	8.8	-	0.0	-	0.0	-	0.0
Kindergarten	2,059	9.1	1,076	8.7	983	9.5	-	0.0	-	0.0	-	0.0
Primary	13,354	58.8	7,209	58.1	6,145	59.6	2,228	38.6	1,181	35.5	1,047	42.8
JSS/JHS	3,800	16.7	2,098	16.9	1,702	16.5	1,266	21.9	612	18.4	654	26.7
Middle	-	0.00	-	0.0	-	0.0	886	15.4	560	16.9	326	13.3
SSS/SHS	1,279	5.6	795	6.4	484	4.7	650	11.3	437	13.2	213	8.7
Secondary	-	0	-	0.0	-	0.0	173	3.0	125	3.8	48	2.0
Vocational/Technical/ Commercial	74	0.30	49	0.4	25	0.2	120	2.1	70	2.1	50	2.0
Post middle/ secondary certificate	112	0.5	76	0.6	36	0.3	196	3.4	150	4.5	46	1.9
Tertiary	108	0.5	80	0.6	28	0.3	251	4.4	188	5.7	63	2.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

## CHAPTER FOUR

### ECONOMIC CHARACTERISTICS

#### 4.1 Introduction

This chapter deals with the characteristics of the economy of the Binduri District. The analysis and interpretations thereof focus on the following areas: type of activity, occupation, industry, employment status, and employment sector. The analysis and interpretation contained in this chapter relate to data on the population 15 years and older in the district.

#### 4.2 Economic Activity Status

Table 4.1 shows that there are 34,518 persons who are 15 years and older in the district. Out of the employed population, 98.5 percent worked during the reference period (the 7 days preceding the census night), 1.1 percent do not work but have a job to go back to while 0.4 percent do voluntary work without pay. The table further shows that 41.5 percent of the unemployed are seeking work for the first time. This could be attributed to the high number of graduates who have just completed school. This means that job creation and/or creating the environment for self-employment should be a priority for the district assembly. This is more so because with 51.6 percent of the economically not active currently in full time education, they would in the near future add up to the unemployed population upon completing school. The high percentage (58.5%) of the unemployed who have worked before, seeking work and available, is due to the seasonality of most economic activities especially farming.

**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>	34,518	<b>100.0</b>	15,518	<b>100.0</b>	19,000	<b>100.0</b>
<b>Economically active</b>	<b>27,936</b>	<b>80.9</b>	<b>12,463</b>	<b>80.3</b>	<b>15,473</b>	<b>81.4</b>
<b>Employed</b>	<b>27,683</b>	<b>99.1</b>	<b>12,347</b>	99.1	<b>15,336</b>	99.1
<i>Worked</i>	27,279	98.5	12,163	98.5	15,116	98.6
<i>Did not work but had job to go back to</i>	294	1.1	141	1.1	153	1.0
<i>Did voluntary work without pay</i>	110	0.4	43	0.3	67	0.4
<b>Unemployed</b>	253	<b>0.9</b>	116	<b>0.9</b>	137	<b>0.9</b>
<i>Worked before, seeking work and available</i>	148	58.5	60	51.7	88	64.2
<i>Seeking work for the first time and available</i>	105	41.5	56	48.3	49	35.8
<b>Economically not active</b>	6,582	<b>19.1</b>	3,055	<b>19.7</b>	3,527	<b>18.6</b>
Did home duties (household chore)	973	14.8	342	11.2	631	17.9
Full time education	3,394	51.6	1,985	65.0	1,409	39.9
Pensioner/Retired	72	1.1	51	1.7	21	0.6
Disabled/Sick	338	5.1	144	4.7	194	5.5
Too old/young	1,567	23.8	435	14.2	1,132	32.1
Other	238	3.6	98	3.2	140	4.0

Source: Ghana Statistical Service, 2010 Population and Housing Census



There is no much difference in economic activity status based on sex except that, among the economically not active population, the proportion of males who do home duties (household chores) is 11.2 percent, while that of females is 17.9 percent. This indicates that in the district females are still seen as housekeepers.

The age structure of a population is relevant to the development of every economy because differences in the age structure have varied implications for the employment situation in the economy. Table 4.2 indicates that 80.2 percent of the population 15 years and older are employed, 0.7 percent are unemployed, while 19.1 percent are economically not active. The age group 40-44 has the majority (96.4%) of its population employed, and at the same time has the least percent (3.2%) of its population being economically not active. Interestingly, Over two-thirds of the population (68.4%) 65 years and older are employed with less than one percent of them (0.1%) being unemployed. This is possibly because the main source of employment in the district is agriculture which doubles as the traditional source of lively of the people in the district. The 31.4 percent of persons 65 years and older who are economically not active are probably too old and physically incapacitated to continue with this traditional economic activity. There is thus the need for social intervention programmes to cater for these people.

Table 4.2 also shows that the female population (19,000) 15 years and older is greater than the male population (15,518). The female population that is employed is 80.7 percent compared to that of their male counterparts (79.6%). There is however no difference between males and females who are unemployed (0.7%). Even though there are more females than males, only 18.6 percent of them are economically not active as compared to 19.7 percent of males who are economically not active. This means that women are contributing more to the local economy than men in terms of numbers.

**Table 4.2: Economic activity status of population 15 years and older by age and sex**

Age group	All Status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both sexes</b>								
Total	34,518	100.0	27,683	80.2	253	0.7	6,582	19.1
15-19	6,653	100.0	3,795	57.0	31	0.5	2,827	42.5
20-24	4,061	100.0	2,934	72.2	66	1.6	1,061	26.1
25-29	3,360	100.0	2,999	89.3	48	1.4	313	9.3
30-34	2,991	100.0	2,816	94.1	23	0.8	152	5.1
35-39	2,832	100.0	2,693	95.1	17	0.6	122	4.3
40-44	2,487	100.0	2,397	96.4	10	0.4	80	3.2
45-49	2,184	100.0	2,098	96.1	12	0.5	74	3.4
50-54	2,090	100.0	1,982	94.8	5	0.2	103	4.9
55-59	1,219	100.0	1,136	93.2	4	0.3	79	6.5
60-64	1,607	100.0	1,391	86.6	24	1.5	192	11.9
65+	5,034	100.0	3,442	68.4	13	0.3	1,579	31.4

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

Age group	All Status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Male</b>								
Total	15,518	100.0	12,347	79.6	116	0.7	3,055	19.7
15-19	3,608	100.0	2,046	56.7	13	0.4	1,549	42.9
20-24	2,014	100.0	1,369	68.0	30	1.5	615	30.5
25-29	1,430	100.0	1,243	86.9	23	1.6	164	11.5
30-34	1,201	100.0	1,122	93.4	16	1.3	63	5.2
35-39	1,103	100.0	1,057	95.8	7	0.6	39	3.5
40-44	987	100.0	958	97.1	4	0.4	25	2.5
45-49	858	100.0	832	97.0	7	0.8	19	2.2
50-54	893	100.0	857	96.0	1	0.1	35	3.9
55-59	547	100.0	529	96.7	1	0.2	17	3.1
60-64	645	100.0	588	91.2	11	1.7	46	7.1
65+	2,232	100.0	1,746	78.2	3	0.1	483	21.6
<b>Female</b>								
Total	19,000	100.0	15,336	80.7	137	0.7	3,527	18.6
15-19	3,045	100.0	1,749	57.4	18	0.6	1,278	42
20-24	2,047	100.0	1,565	76.5	36	1.8	446	21.8
25-29	1,930	100.0	1,756	91.0	25	1.3	149	7.7
30-34	1,790	100.0	1,694	94.6	7	0.4	89	5
35-39	1,729	100.0	1,636	94.6	10	0.6	83	4.8
40-44	1,500	100.0	1,439	95.9	6	0.4	55	3.7
45-49	1,326	100.0	1,266	95.5	5	0.4	55	4.1
50-54	1,197	100.0	1,125	94.0	4	0.3	68	5.7
55-59	672	100.0	607	90.3	3	0.4	62	9.2
60-64	962	100.0	803	83.5	13	1.4	146	15.2
65+	2,802	100.0	1,696	60.5	10	0.4	1,096	39.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

This means that economic programmes and interventions must take into consideration the fact that more women than men would need more resources in terms of financial assistance as well as subsidies and inputs in the local economy.

### 4.3 Occupation

In the Binduri District, 84.3 percent of the employed are skilled agricultural, forestry and fishery workers while 5.9 percent are service and sales workers. Another 5.2 percent are craft and related trade workers while only 1.5 percent are professionals. This means that much attention must be given to the agricultural sector in the short to medium term while long term strategies should be proffered for the other promising occupations.

Gender analysis of occupational distribution in the district have a higher proportion of females (8.6%) as service and sales workers as compared to the proportion of males (2.5%) in that occupation.

**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	27,683	100.0	12,347	100.0	15,336	100.0
Managers	206	0.7	87	0.7	119	0.8
Professionals	414	1.5	273	2.2	141	0.9
Technicians and associate professionals	73	0.3	58	0.5	15	0.1
Clerical support workers	61	0.2	40	0.3	21	0.1
Service and sales workers	1,631	5.9	313	2.5	1,318	8.6
Skilled agricultural forestry and fishery workers	23,323	84.3	10,735	86.9	12,588	82.1
Craft and related trades workers	1,450	5.2	517	4.2	933	6.1
Plant and machine operators and assemblers	202	0.7	154	1.2	48	0.3
Elementary occupations	308	1.1	156	1.3	152	1.0
Other occupations	15	0.1	14	0.1	1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

The percentage of males who are skilled agricultural, forestry and fishery workers is 86.9 percent, while the proportion of female agricultural workers is 82.1 percent. However, there is greater female proportion (6.1%) in the craft and related trades workers as compared to the percentage of males (4.2%).

#### 4.4 Industry

Eighty four (83.9%) percent are in the Agriculture, forestry and fishing industry serves as the industry for most of the employed, 3.9 percent are into manufacturing, 0.1 percent are into financial and insurance activities industry with information and communication industry employing virtually none of the employed population. This shows the extent to which the economy is rural. Agriculture forestry and fishing industry employs the majority of both male and female populations (86.9% and 81.5% respectively). However, more females (6.6%) than males (3.1%) are in the wholesale and retail industry.

**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	27,683	100.0	12,347	100.0	15,336	100.0
Agriculture forestry and fishing	23,235	83.9	10,733	86.9	12,502	81.5
Mining and quarrying	40	0.1	6	0.0	34	0.2
Manufacturing	1,069	3.9	243	2.0	826	5.4
Electricity gas steam and air conditioning supply	5	0.0	5	0.0	-	0.0
Water supply; sewerage waste management and remediation activities	14	0.1	8	0.1	6	0.0
Construction	215	0.8	190	1.5	25	0.2
Wholesale and retail; repair of motor vehicles and motorcycles	1,391	5.0	379	3.1	1,012	6.6
Transportation and storage	124	0.4	120	1.0	4	0.0
Accommodation and food service activities	398	1.4	48	0.4	350	2.3
Information and communication	10	0.0	8	0.1	2	0.0
Financial and insurance activities	14	0.1	8	0.1	6	0.0
Real estate activities	-	0.0	-	0.0	-	0.0
Professional scientific and technical activities	73	0.3	27	0.2	46	0.3
Administrative and support service activities	56	0.2	47	0.4	9	0.1
Public administration and defence; compulsory social security	102	0.4	80	0.6	22	0.1
Education	380	1.4	250	2.0	130	0.8
Human health and social work activities	76	0.3	45	0.4	31	0.2
Arts entertainment and recreation	23	0.1	20	0.2	3	0.0
Other service activities	420	1.5	114	0.9	306	2.0
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	38	0.1	16	0.1	22	0.1
Activities of extraterritorial organizations and bodies	-	0.0	-	0.0	-	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 4.5 Employment Status

From table 4.5, out of the employed population 15 years and older, those who are self-employed without employees constitute 65.6 percent; those who are contributing family workers are 25.5 percent while those who are employees constitute 3.9 percent. Having a lot of self-employed without employees in the district means that the economy is not growing in terms of job creation. This could also mean that self-employment in the district does not require a huge start-up capital.

The table also shows that 66.5 percent of males are self-employed without employees as against 64.9 percent of females who are self-employed without employees. There are more male employees (6.0%) as compared to female employees (2.1%). Also, there are 27.6

percent of females who are contributing family workers compared with 22.9 percent of males.

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

Employment Sector	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	27,683	100.0	12,347	100.0	15,336	100.0
Employee	1,070	3.9	743	6.0	327	2.1
Self-employed without employee(s)	18,168	65.6	8,210	66.5	9,958	64.9
Self-employed with employee(s)	620	2.2	278	2.3	342	2.2
Casual worker	184	0.7	103	0.8	81	0.5
Contributing family worker	7,060	25.5	2,824	22.9	4,236	27.6
Apprentice	329	1.2	96	0.8	233	1.5
Domestic employee (Househelp)	224	0.8	84	0.7	140	0.9
Other	28	0.1	9	0.1	19	0.1

Source: Ghana Statistical Service, 2010 Population and Housing census

From Table 4.6, the public sector employment favours males as a relatively high percentage of them (3.5%) are employed in the public sector compared with the 1.1 percent of females. It is however worth noting that the NGOs and Other International Organisations operating in the district employ more females (0.4%) than males (0.3%).

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

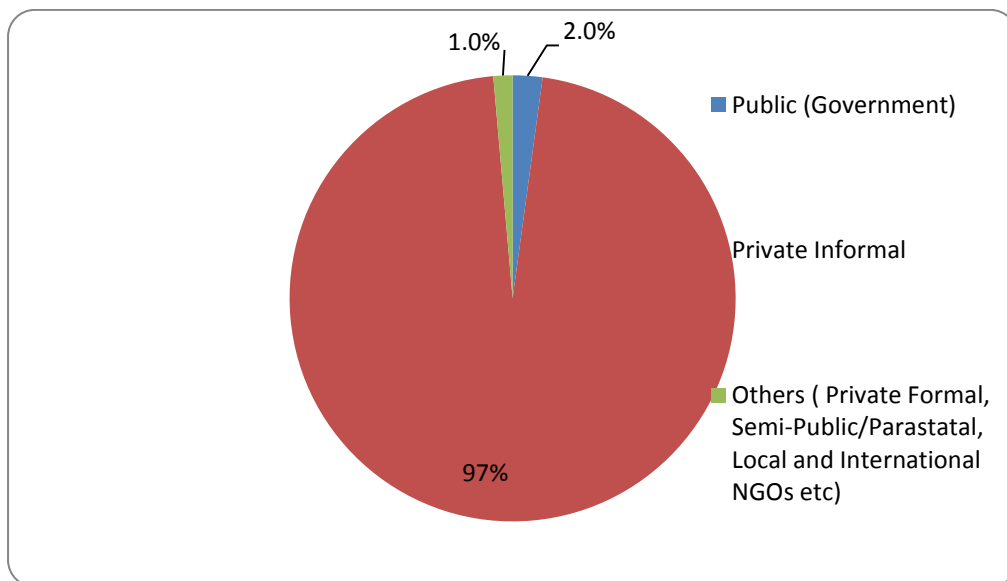
Employment Sector	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	27,892	100.0	12,433	100.0	15,459	100.0
Public (Government)	601	2.2	433	3.5	168	1.1
Private Formal	269	1.0	154	1.2	115	0.7
Private Informal	26,905	96.5	11,794	94.9	15,111	97.7
Semi-Public/Parastatal	14	0.1	9	0.1	5	0.0
NGOs (Local and International)	102	0.4	43	0.3	59	0.4
Other International Organisations	1	0.0	0	0.0	1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 4.6 Employment Sector

The distribution of employment sector in the Binduri District is skewed towards the private sector. Figure 4.3, shows that the private informal sector employs 97.0 percent of the employed population while the public/government sector employs 2.0 percent of the employed. Others (Private Formal, Semi/Parastatal, Local and International NGOs etc.) employ the remaining one percent.

**Figure 4.3: Employed population 15 years and older by employment sector**



Source: Ghana Statistical Service, 2010 Population and Housing Census

# **CHAPTER FIVE**

## **INFORMATION COMMUNICATION TECHNOLOGY**

### **5.1 Introduction**

There is widespread research interest in Information and Communication Technologies (ICTs) all over the world. ICTs are crucially important for sustainable development in developing countries. Thioune (2003) notes that for the past two decades most developed countries have witnessed significant changes that can be traced to ICTs. These multi-dimensional changes have been observed in almost all aspects of life: economics, education, communication, and travel. In a technology driven society, getting information quickly is important for both the sender and receiver. ICTs have made it possible to quickly find and distribute information. Thioune (2003) indicates that many initiatives have been taken at the international level to support Africa's efforts to develop a communication infrastructure and these efforts are designed to enable African countries, including Ghana, find faster ways to achieve durable and sustainable development.

Chapter five of this report discusses ICT usage in the Binduri District in relation to the ownership of mobile phones, desktop/laptop computers and the use of the internet.

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

Bittner (1989) defines mobile phone as a telephone system that can move or be moved easily and quickly from place to place. Mobile phones were once the tool of rich and busy executives who could afford. Mobile phones are now the ICT that is reshaping and revolutionizing communications globally. Its impact on the economic activities of nations, businesses, and small entrepreneurs is impressive.

According to the 2010 PHC, 6,797 persons representing 17.3 percent of persons 12 years and older in the Binduri District own mobile phones. This proportion is very low compared to the national average of 47.7 percent and still lower than the Upper East regional average of 24.2percent. Figure 1 further shows that the proportion of males (12 years and older) owning mobile phones is higher (25.0%) than the proportion of females (10.7%) in the district.

### **5.3 Use of Internet**

The Internet is a global collection of many types of computers and computer networks that are linked together. It is increasingly becoming the solution to many information problems, information exchange, and marketing (Adesanya, 2002). Where, (2000) states that 'with internet connectivity, one can do business all over the world without physical contact with the buyer or the need for a business intermediary'. The importance of ICTs in the development process was long recognized and access to ICTs was even made one of the targets of the Millennium Development Goal (MDG 8). This emphasises the benefits of new technologies, especially ICTs in the fight against poverty.

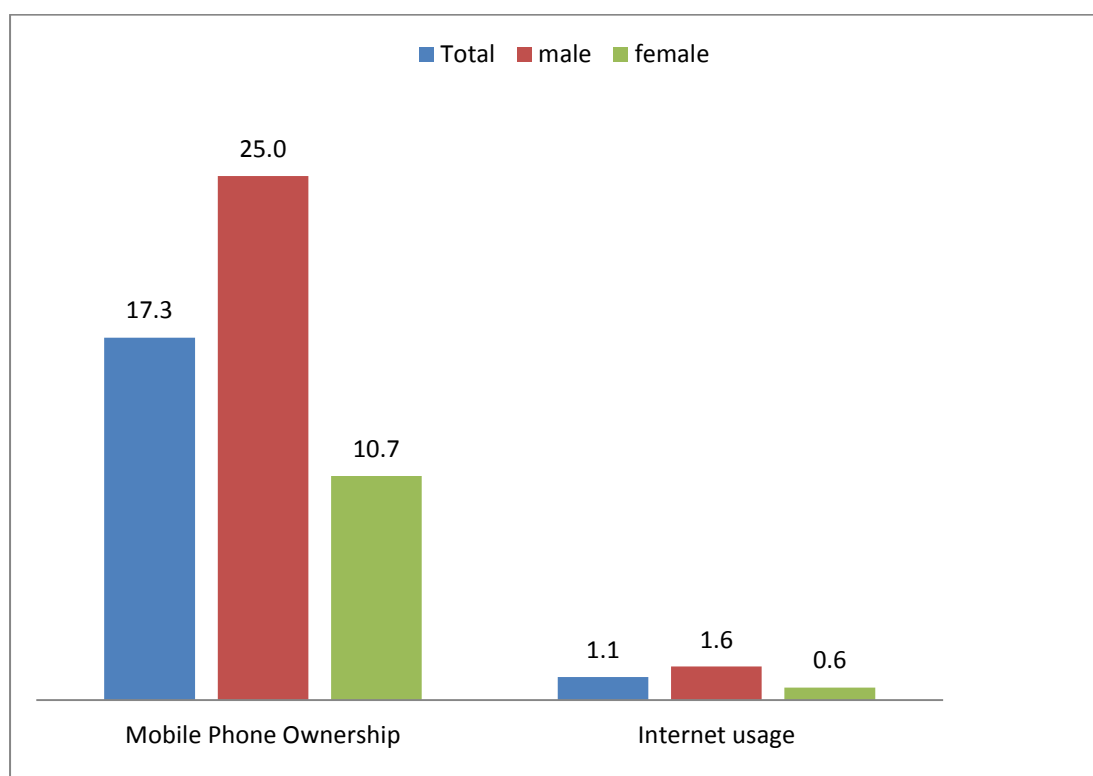
According to the International Communication Union (2012), the percentage of individuals using the Internet continues to grow worldwide and by the end of 2011, about 2.3 billion people were using the Internet. However, there is a wide gap in the access to internet between the developed and developing countries. By the end of 2011, 70.0 percent of households in

developed countries used the Internet compared to only 20.0 percent of households in developing countries, (GSS, 2010).

The 2010 Population and Housing Census as shown in Figure 1, recorded 435 users of internet facilities out of 39,352 population (12 years and older) in the Binduri District. This indicates that only 1.1 percent of persons 12 years and older has access to the internet which is almost equal to the regional average of 1.2 percent but way below the national average of 7.8 percent. In terms of sex, just as at the national and regional levels, usage of the Internet services among males is higher (1.6%) than their female counterpart (0.6%). Thus approximately, three males against one female use internet services in the District.

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

**Figure 5.1: Population 12 years and older by mobile phone ownership internet usage and sex**



Source: Ghana Statistical Service, 2010 Population and Housing Census

## 5.5 Household Ownership of Desktop or Laptop Computer

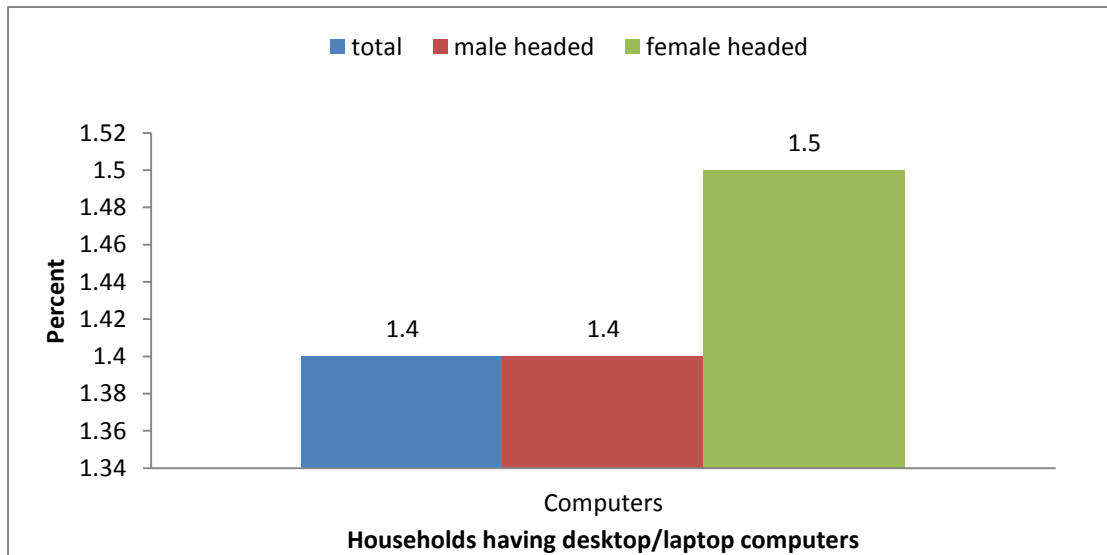
Computers (Desktop/laptop) are useful for accessing and processing information. Computers are now commonly used for writing letters and reports, printing books, newspapers, and magazines, drawing pictures and diagrams, doing statistics, mathematics and handling financial records, controlling traffic lights, flying aeroplanes, making and playing music and video, sending messages anywhere in the world and other services.

The 2010 PHC recorded 128 households (1.4%) of all households (9,199) in the Binduri District who own laptop or desktop computers. This figure is higher than the regional figure of 1.3 percent but lower than the national figures of 7.9 percent. Ownership of desktop/laptop computers is low because of the high cost or that people have access to them in their offices.



With respect to heads of household ownership of desktop or laptop computers by gender, female headed households recorded 1.5 percent of households with laptop/desktop computers while male headed households recorded 1.4 percent.

**Figure 5.2: Households having desktop/laptop computers and sex of head**



Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER SIX

## DISABILITY

### 6.1 Introduction

Disability as defined by the World Health Organisation is a "restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being". It describes a functional limitation or activity restriction caused by impairment. Disabilities are descriptions of disturbances in function at the level of the person. Examples of disabilities include difficulty in seeing, speaking or hearing, difficulty moving or climbing stairs; difficulty grasping, reaching height, bathing, eating and using toilet facilities.

Over the past few decades (since 1945) the United Nations through its General Assembly established the foundation for the promotion and protection of the rights of persons with disability, when it proclaimed the Universal Declaration of Human Rights. Article 25 of the Declaration states that "each person has the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control". There has been an international consent on the recognition of the rights of persons with disabilities which promote dignity, and inclusive development.

In planning evidence is needed to make informed decisions on policies and programmes. Understanding the numbers and knowing the characteristics of people with disabilities can help in addressing barriers and provide services that allow people with disabilities to participate more effectively in national development.

The 2010 PHC was the first census in Ghana to include questions on disabilities. This chapter therefore presents data on the population with disability, type of Disability, distribution of persons with disabilities (PWDs) by type of locality etc. in the Binduri District.

### 6.2 Population with Disability

As shown in Table 6.1, there are 1,732 persons with some form of disability in the Binduri District which constitutes 2.8 percent of the total population of the District. This proportion is both lower than the Upper East Regional proportion and the national proportion of (3.8%) and (3.0%) respectively. The proportion of persons with disability in the District is higher among males (2.9%) than females (2.7%) which is opposite for the national and regional average where females are dominating.

### 6.3 Type of Disability

The proportion of persons with disability by type of disability is shown in Table 6.1. The most common types of disability in the Binduri District are sight or visual impairment and physical disability follows by hearing. Visual impairment constitute 41.9 percent of persons followed by physical disability (26.3%) and hearing (21.2%) and the least (7.3%) being persons with other forms of disability. The distribution of the various types of disability in the District is also quite similar to the national and regional figures with sight and physical disability dominating. For instance, at the national level, sight and physical disability constitute 40.1 percent and 25.4 percent respectively, whereas at the regional level, sight and physical disability are 40.0 percent and 21.9 percent respectively. The district is predominantly rural hence disability by type of locality is not disaggregated.

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

Population by disability type	Both sexes		Male		Female	
	Number	percent	Number	percent	Number	percent
Total	61,576	100.0	29,612	100.0	31,964	100.0
No disability	59,844	97.2	28,742	97.1	31,102	97.3
With a disability	1,732	2.8	870	2.9	862	2.7
Sight	725	41.9	326	37.5	399	46.3
Hearing	367	21.2	181	20.8	186	21.6
Speech	224	12.9	124	14.3	100	11.6
Physical	456	26.3	228	26.2	228	26.5
Intellectual	232	13.4	122	14.0	110	12.8
Emotional	168	9.7	91	10.5	77	8.9
Other	126	7.3	80	9.2	46	5.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 6.4 Disability and Activity

Persons with disability 15 years and older and their activity status is shown in Table 6.2. From the Table, 61.4 percent of PWDs in the district are economically active whiles 38.6 percent are economically not active.

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

Both Sexes/ Disability type	All Status		Employed		Unemployed		Economically Not Active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both Sexes</b>								
Total	34,518	100.0	27,683	80.2	253	0.7	6,582	19.1
No disability	33,174	100.0	26,873	81.0	238	0.7	6,063	18.3
With a disability	1,344	100.0	810	60.3	15	1.1	519	38.6
Sight	600	100.0	331	55.2	6	1.0	263	43.8
Hearing	279	100.0	174	62.4	1	0.4	104	37.3
Speech	144	100.0	99	68.8	2	1.4	43	29.9
Physical	366	100.0	212	57.9	4	1.1	150	41.0
Intellectual	168	100.0	94	56.0	2	1.2	72	42.9
Emotional	117	100.0	77	65.8	2	1.7	38	32.5
Other	86	100.0	50	58.1	0	0.0	36	41.9
<b>Male</b>								
<b>Total</b>	15,518	100.0	12,347	79.6	116	0.7	3,055	19.7
No disability	14,867	100.0	11,917	80.2	111	0.7	2,839	19.1
With a disability	651	100.0	430	66.1	5	0.8	216	33.2
Sight	259	100.0	167	64.5	3	1.2	89	34.4
Hearing	133	100.0	88	66.2	0	0	45	33.8
Speech	78	100.0	55	70.5	1	1.3	22	28.2
Physical	180	100.0	114	63.3	1	0.6	65	36.1
Intellectual	84	100.0	46	54.8	0	0.0	38	45.2
Emotional	61	100.0	39	63.9	1	1.6	21	34.4
Other	52	100.0	29	55.8	0	0.0	23	44.2

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

Both Sexes/ Disability type	All Status		Employed		Unemployed		Economically Not Active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Female</b>								
<b>Total</b>	19,000	100.0	15,336	80.7	137	0.7	3,527	18.6
No disability	18,307	100.0	14,956	81.7	127	0.7	3,224	17.6
With a disability	693	100.0	380	54.8	10	1.4	303	43.7
Sight	341	100.0	164	48.1	3	0.9	174	51.0
Hearing	146	100.0	86	58.9	1	0.7	59	40.4
Speech	66	100.0	44	66.7	1	1.5	21	31.8
Physical	186	100.0	98	52.7	3	1.6	85	45.7
Intellectual	84	100.0	48	57.1	2	2.4	34	40.5
Emotional	56	100.0	38	67.9	1	1.8	17	30.4
Other	34	100.0	21	61.8	0	0.0	13	38.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

Out of the economically active PWDs, 60.3 percent are employed while 1.1 percent is unemployed.

Among the disability types with employment, persons with speech disability are mostly employed (68.8%) followed by emotional disability (65.8%) and the least is sight disability (55.2%). With respect to disability by gender and employment, 66.1 percent of males 15 years and older who are PWDs are employed as compared to 54.8 percent for females. There are more unemployed females (1.4%) than their male counterpart (0.8%).

## 6.5 Disability, Education and Literacy

Education generally enhances the employment opportunities of all persons in Ghana, including persons with disability. Government and other social welfare agencies have been implementing policies to improve access of persons with disability to education at all levels.

From Table 6.3, it shows that, out of 1,671 representing 2.9 percent of PWDs in the Binduri District 3 years and older of school going age, (66.1%) have never attended school and majority of those who have attended school, (24.7%) are in basic school while (6.2%) have attended SHS or Higher education. The data further indicates that more males (75.5%) than females (42.8%) have attained some level of education.

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

Sex/Disability type	Number					Percent				
	Total	Never	Pre-Prim	Basic	Sec/SHS & higher	Total	Never	Pre-Prim	Basic	Sec/SHS & higher
<b>Both Sexes</b>										
Total	56,888	28,515	3,993	21,420	2,960	100.0	50.1	7.0	37.7	5.2
No disability	55,217	27,411	3,942	21,007	2,857	100.0	49.6	7.1	38.0	5.2
With a disability	1,671	1,104	51	413	103	100.0	66.1	3.1	24.7	6.2
Sight	697	478	15	137	67	100.0	68.6	2.2	19.7	9.6
Hearing	358	244	13	94	7	100.0	68.2	3.6	26.3	2.0
Speech	212	135	11	57	9	100.0	63.7	5.2	26.9	4.2
Physical	442	312	11	104	15	100.0	70.6	2.5	23.5	3.4
Intellectual	223	159	4	52	8	100.0	71.3	1.8	23.3	3.6
Emotional	159	88	6	57	8	100.0	55.3	3.8	35.8	5.0
Other	115	71	6	33	5	100.0	61.7	5.2	28.7	4.3
<b>Male</b>										
Total	27,247	11,571	2,106	11,603	1,967	100.0	42.5	7.7	42.6	7.2
No disability	26,413	11,078	2,075	11,358	1,902	100.0	41.9	7.9	43.0	7.2
With a disability	834	493	31	245	65	100.0	59.1	3.7	29.4	7.8
Sight	308	192	6	71	39	100.0	62.3	1.9	23.1	12.7
Hearing	175	106	6	60	3	100.0	60.6	3.4	34.3	1.7
Speech	116	64	7	38	7	100.0	55.2	6.0	32.8	6.0
Physical	220	131	7	69	13	100.0	59.5	3.2	31.4	5.9
Intellectual	119	77	3	34	5	100.0	64.7	2.5	28.6	4.2
Emotional	85	39	4	37	5	100.0	45.9	4.7	43.5	5.9
Other	71	44	6	19	2	100.0	62.0	8.5	26.8	2.8
<b>Female</b>										
Total	29,641	16,944	1,887	9,817	993	100.0	57.2	6.4	33.1	3.4
No disability	28,804	16,333	1,867	9,649	955	100.0	56.7	6.5	33.5	3.3
With a disability	837	611	20	168	38	100.0	73.0	2.4	20.1	4.5
Sight	389	286	9	66	28	100.0	73.5	2.3	17.0	7.2
Hearing	183	138	7	34	4	100.0	75.4	3.8	18.6	2.2
Speech	96	71	4	19	2	100.0	74.0	4.2	19.8	2.1
Physical	222	181	4	35	2	100.0	81.5	1.8	15.8	0.9
Intellectual	104	82	1	18	3	100.0	78.8	1.0	17.3	2.9
Emotional	74	49	2	20	3	100.0	66.2	2.7	27.0	4.1
Other	44	27	0	14	3	100.0	61.4	0.0	31.8	6.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

## CHAPTER SEVEN

### AGRICULTURAL ACTIVITIES

#### 7.1 Introduction

An agricultural household according to the 2010 PHC is one that engages generally in agricultural activities or at least one of its members engages in agricultural production even if not earning from agricultural activity alone.

This chapter provides a description of household members and heads of households engaged in agricultural activities. These activities include crop farming, tree growing, livestock rearing and fish farming. Excluded from this discussion are those engaged in hunting and other, non- farm agricultural activities.

#### 7.2 Households in Agriculture

Table 7.1 shows the distribution of agricultural households in the Binduri District by type of locality. Since it is a rural district, all the households lived in rural localities. Out of 9,199 households enumerated, 8,641 are engaged in agricultural activities in the district representing 93.9 percent. This is higher than the regional and national averages of 83.7 percent and 45.8 percent respectively.

#### 7.3 Types of Farming Activities

From table 7.1 the main type of agricultural activities that many of the agriculture households in the district engage in are crop farming and livestock rearing. About 99.3 percent and 82.1 are into crop farming and livestock rearing respectively while only 0.4 percent is into tree planting. Approximately no household is into fish farming in the district.

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

Agricultural activity	Urban		Rural	
	Number	Percent	Number	Percent
Total Households	9,199	100.0	9,199	100.0
Households engages in Agriculture	8,641	93.9	8,641	93.9
Crop Farming	8,578	99.3	8,578	99.3
Tree Planting	37	0.4	37	0.4
Livestock Rearing	7,090	82.1	7,090	82.1
Fish Farming	3	0.0	3	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 7.2 shows that the total number of livestock reared in the district is 286,671. There are 19,946 keepers in the district with an average of 14 animals per keeper. The most common livestock raised in the district is chicken (90,797) with 4,267 keepers and an average of 21 birds per keeper followed by guinea fowl (74,039) with 3,261 keepers and an average of 23 animals per keeper. The livestock with the least number is snail (4) with 1 keeper and an average of 4 snails per keeper.

**Table 7.2: Distribution of livestock and keepers**

Distribution of livestock and animal reared	Number of Animals	Number of keepers	Average Animal per Keeper
Total	286,671	19,946	14
Beehives	650	41	16
Cattle	26,586	2,834	9
Chicken	90,797	4,267	21
Dove	1,141	19	60
Duck	900	91	10
Goat	49,063	4,985	10
Grass-cutter	619	33	19
Guinea fowl	74,039	3,261	23
Ostrich	650	40	16
Pig	4,309	494	9
Rabbit	512	45	11
Sheep	33,433	3,505	10
Silk worm	24	4	6
Snail	4	1	4
Turkey	81	10	8
Other	3,645	313	12
Fish farming	15	1	15
Inland fishing	203	2	102
Marine fishing	0	0	0

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER EIGHT

## HOUSING CONDITIONS

### 8.1 Introduction

Housing is an integral element of a district’s economy. Its backward and forward linkages with other parts of the economy closely bond people’s needs, demands and social processes with the supply of land, infrastructure, building materials, technology, labour, and housing finance. These linkages allow housing to act as an important engine for sustainable development and poverty reduction in both society and the economy. (UN-Habitat, 2010).

Housing data helps in understanding key aspects of housing and housing conditions. They assist policy makers and planners to make evidence based decisions on housing policies and interventions. This chapter provides an overview of housing and housing conditions in the Binduri District. Data presented include housing stock and types of houses, ownership, household room occupancy and housing conditions with particularly reference to the main source of water for drinking and for other domestic use, bathing and toilet facilities and methods of waste disposal.

### 8.2 Housing Stock

The distribution of housing stock and households by type of locality in the district is presented in Table 8.1. The table indicates that the total stock of houses in the district is 6,391 and situated in rural localities. The table further shows that there are 9,199 households in the district. The district average household per house is 1.4, which is lower than the regional average (1.6) and the national average (1.6). The average population per house and household size in the district are 9.6 and 6.6 respectively.

**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	61,576	-	61,576
Total household population	24,076,327	1,034,704	60,878	-	60,878
Number of houses	3,392,745	114,034	6,391	-	6,391
Number of households	5,467,054	177,629	9,199	-	9,199
Average households per house	1.6	1.6	1.4	-	1.4
Population per house	7.3	9.2	9.6	-	9.6
Average household size	4.5	5.9	6.6	-	6.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.3 Construction Materials

Table 8.2 shows the main construction materials used for outer walls of dwelling (occupied and vacant) in the district. The main materials for construction of outer walls in the district are mud brick/Earth (88.1%) and cement block/concrete (8.3%) with the other materials such as wood, metal sheet/slate/asbestos, landcrete, and bamboo etc. constituting 3.6 percent. The



building material hardly used for the construction of the outer walls of buildings in the district is bamboo.

**Table 8.2: Main construction material for outer wall of dwelling unit by type of locality**

Material for Outer wall	Total		District		Urban	Rural
	country	Region	Number	Percent		
Total	5,817,607	182,845	9,366	100.0	-	100.0
Mud brick/Earth	1,991,540	147,624	8,250	88.1	-	88.1
Wood	200,594	1,606	138	1.5	-	1.5
Metal sheet/Slate/Asbestos	43,708	855	42	0.4	-	0.4
Stone	11,330	372	14	0.1	-	0.1
Burnt bricks	38,237	233	7	0.1	-	0.1
Cement blocks/Concrete	3,342,462	29,321	778	8.3	-	8.3
Landcrete	104,270	1,890	113	1.2	-	1.2
Bamboo	8,206	54	2	0.0	-	0.0
Palm leaf/Thatch (grass)/Raffia	38,054	435	7	0.1	-	0.1
Other	39,206	455	15	0.2	-	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

Table 8.3 shows that the proportion of houses owned by members of household in the district is 92.5 percent, owned by a relative who is not a household member is 3.2 percent while the proportion of dwelling units owned by other private individuals is 2.6 percent. Public or government-owned housing forms only a small proportion of (0.6%) and the same figure is recorded for housing units owned by private employers. Only 0.2 percent of dwelling units are purchased probably through mortgage schemes. The ownership status of dwellings by sex indicates that 94.1 percent of houses owned by household members are male headed household as compared to 86.1 percent by their female counterpart.

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

Ownership	Total		District		Male headed	Female headed
	Country	Region	Number	Percent		
Total	5,467,054	177,629	9,199	100.0	100.0	100.0
Owned by household member	2,883,236	154,016	8,511	92.5	94.1	86.1
Being purchased (e.g. mortgage)	45,630	721	15	0.2	0.2	0.1
Relative not a household member	851,630	6,035	290	3.2	2.1	7.6
Other private individual	1,439,021	12,181	238	2.6	2.2	4.3
Private employer	83,610	480	52	0.6	0.6	0.5
Other private agency	21,123	267	8	0.1	0.1	0.1
Public/Government ownership	118,804	3,686	54	0.6	0.6	0.7
Other	24,000	243	31	0.3	0.3	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

As shown in Table 8.4, there are 9,199 occupied dwelling units in the district. Out of these, compound houses are the most common (70.4%) of dwelling units in the Binduri District. The proportion of dwelling units constituting separate or detached houses are 19.2 percent while Huts/buildings (same compound) constitute 6.4 percent of all dwelling units. The

remaining 4.1 percent of dwelling units include semi-detached house, flat/apartment, and huts/buildings (different compound).

**Table 8.4: Type of occupied dwelling unit by sex of household head and type of locality**

Type of dwelling	Total country	Region	District		Male headed	Female headed	Urban	Rural
			Number	Percent				
Binduri								
Total	5,467,054	177,629	9,199	100.0	100.0	100.0	-	100.0
Separate house	1,471,391	29,787	1,765	19.2	18.9	20.3	-	19.2
Semi-detached house	391,548	6,836	181	2.0	1.8	2.8	-	2.0
Flat/Apartment	256,355	1,459	47	0.5	0.5	0.6	-	0.5
Compound house (rooms)	2,942,147	103,666	6,476	70.4	70.2	71.1	-	70.4
Huts/Buildings (same compound)	170,957	22,735	586	6.4	7.0	3.9	-	6.4
Huts/Buildings (different compound)	36,410	11,616	64	0.7	0.7	0.7	-	0.7
Tent	10,343	300	6	0.1	0.1	0.0	-	0.1
Improvised home (kiosk/container etc.)	90,934	183	15	0.2	0.1	0.2	-	0.2
Living quarters attached to office/shop	20,499	348	16	0.2	0.2	0.0	-	0.2
Uncompleted building	66,624	554	39	0.4	0.4	0.3	-	0.4
Other	9,846	145	4	0.0	0.0	0.1	-	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

As shown in Table 8.5, the main materials for floors of dwellings (occupied dwellings) in the Binduri District are largely made of cement or concrete (72.2%). About one in five (23.3%) houses has floors made of earth or mud. The remaining 4.5 percent is made up of stone, burnt brick, wood, ceramics/porcelain/granite/marble tiles, terrazzo tiles and others. Material hardly used for the floors of the dwellings in the district is Vinyl tiles.

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

Materials for the floor	Total country	Region	District		Urban Percent	Rural Percent
			Number	Percent		
Total	5,467,054	177,629	9,199	100.0	-	100.0
Earth/Mud	872,161	56,272	2,143	23.3	-	23.3
Cement/Concrete	4,255,611	116,911	6,639	72.2	-	72.2
Stone	32,817	1,623	42	0.5	-	0.5
Burnt brick	6,537	89	5	0.1	-	0.1
Wood	52,856	49	6	0.1	-	0.1
Vinyl tiles	57,032	196	4	0.0	-	0.0
Ceramic/Porcelain/Granite/Marble tiles	88,500	1,181	63	0.7	-	0.7
Terrazzo/Terrazzo tiles	85,973	401	25	0.3	-	0.3
Other	15,567	907	272	3.0	-	3.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

Roofs of dwellings (Occupied and vacant) in Binduri District are mainly made of metal sheets (80.5%) as shown in Table 8.6. The next widely used material for roofing in the district is thatch/palm leaves or raffia (14.0%) while 2.4 percent of dwellings are roofed with mud/mud bricks/earth. The situation in the district conforms with the national and regional distributions where metal sheets constitute 67.2 percent at the regional level and 71.4 percent at the national level.

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

Main Roofing material	Total country	Region	District		Urban	Rural
			Number	Percent	Percent	Percent
Total	5,817,607	182,845	9,366	100.0	-	100.0
Mud/Mud bricks/Earth	80,644	22,227	222	2.4	-	2.4
Wood	45,547	3,085	86	0.9	-	0.9
Metal sheet	4,152,259	122,942	7,538	80.5	-	80.5
Slate/Asbestos	759,039	646	11	0.1	-	0.1
Cement/Concrete	141,072	879	53	0.6	-	0.6
Roofing tile	31,456	162	1	0.0	-	0.0
Bamboo	71,049	586	31	0.3	-	0.3
Thatch/Palm leaf or Raffia	500,606	30,722	1,312	14.0	-	14.0
Other	35,935	1,596	112	1.2	-	1.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.5 Room Occupancy

The number of rooms occupied by a household is one of the best indicators for assessing how crowded dwelling units in a locality are and the space available per person. There is health and consequent wellbeing implications or both for the household members. As shown in Table 8.7, 42.3 percent of households with four members occupy two rooms in the Binduri District. Also, 85.2 percent of one member households occupy one room.

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

Household size	Total	Number of sleeping rooms								
		One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Total	9,199	13.8	22.6	22.1	16.6	9.5	6.1	3.0	2.1	4.1
1	351	85.2	9.1	2.6	0.9	1.1	0.3	0.0	0.3	0.6
2	514	44.6	39.9	6.4	4.5	1.8	1.4	0.0	0.2	1.4
3	803	28.6	38.7	22.5	5.0	2.0	0.7	1.4	0.2	0.7
4	1,081	18.9	42.3	22.8	9.3	3.1	0.8	1.2	0.3	1.4
5	1,137	12.8	33.9	30.2	13.1	5.3	1.4	0.9	1.1	1.2
6	1,110	7.3	26.8	32.8	18.6	6.4	4.9	0.8	0.7	1.7
7	978	4.0	17.2	33.0	24.4	11.0	4.1	3.3	0.4	2.6
8	870	2.2	13.6	24.9	26.1	14.9	7.8	3.6	3.2	3.7
9	662	2.3	8.6	20.1	28.2	17.7	13.3	3.5	1.7	4.7
10+	1,693	0.6	2.8	11.0	20.7	19.5	16.1	8.9	7.3	13.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.6 Access to Utilities and Household Facilities

The nature of household utilities and facilities determine the level and quality of life. As society develops, the source of energy used for lighting and cooking as well as the quality of cooking space changes from the use of low quality to improved or modern facilities.

Table 8.8 indicates that, the main source of lighting for dwellings in the district is flashlight (44.0%) followed by kerosene lamp (41.0%) with only 13.0 percent of dwelling units using electricity. The remaining sources such as gas lamp, candle, firewood, crop residue, etc. constitute about 2.0 percent.

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

Main source of light	Total country	Region	District		Urban	Rural
			Number	Percent		
Total	5,467,054	177,629	9,199	100.0	-	100.0
Electricity (mains)	3,511,065	42,866	1,196	13.0	-	13.0
Electricity (private generator)	36,142	1,009	27	0.3	-	0.3
Kerosene lamp	971,807	80,752	3,772	41.0	-	41.0
Gas lamp	9,378	412	28	0.3	-	0.3
Solar energy	9,194	612	19	0.2	-	0.2
Candle	41,214	293	5	0.1	-	0.1
Flashlight/Torch	858,651	49,068	4,043	44.0	-	44.0
Firewood	13,241	1,191	62	0.7	-	0.7
Crop residue	4,623	830	41	0.4	-	0.4
Other	11,739	596	6	0.1	-	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

As shown in Table 8.9, the three main sources of energy used for cooking in households in the district are: wood (62.8%), crop residue (26.6%), and charcoal (5.4%). A part from these, 1.9 percent of households use gas while 1.5 percent use other fuel. Due to poverty and the availability of wood in rural areas, it is the main source of cooking fuel for most of the households.

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

Main source of cooking fuel, and cooking space used by households	Total country	Region	District	
			Number	Percent
<b>Cooking fuel</b>				
Total	5,467,054	177,629	9,199	100.0
None no cooking	306,118	3,272	122	1.3
Wood	2,197,083	107,310	5,776	62.8
Gas	996,518	8,735	176	1.9
Electricity	29,794	383	10	0.1
Kerosene	29,868	402	21	0.2
Charcoal	1,844,290	27,021	497	5.4
Crop residue	45,292	29,725	2,446	26.6
Saw dust	8,000	93	1	0.0
Animal waste	2,332	124	9	0.1
Other	7,759	564	141	1.5
<b>Cooking space used by household</b>				
Total	5,467,054	177,629	9,199	100.0
No cooking space	386,883	6,822	304	3.3
Separate room for exclusive use of household	1,817,018	75,393	3,751	40.8
Separate room shared with other household(s)	410,765	4,664	722	7.8
Enclosure without roof	117,614	31,567	1,891	20.6
Structure with roof but without walls	349,832	1,788	189	2.1
Bedroom/Hall/Living room)	74,525	572	10	0.1
Verandah	1,173,946	18,444	297	3.2
Open space in compound	1,115,464	38,038	1,991	21.6
Other	21,007	341	44	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

The distribution of cooking space used by households in the district is presented in Table 8.9. The most common type of cooking space for most households is separate room for exclusive use by households. About forty percent (40.8%) of the household use cooking spaces that are

separate for exclusive use of the households while 20.6 percent of households cook in enclosure without roof. Households who cook in open space in the compound constitute 21.6 percent while (7.8%) cook in separate rooms shared with other households.

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

The source of water supply particularly for drinking has tremendous effect on the burden of disease in a community. The main health benefit of clean water supply is a reduction in diarrhoeal disease, although the effects on other diseases are also substantial. Water is often classified as “improved” or “unimproved”. Sources considered as improved are household connection to public pipe borne water supply system, public standpipe, and bore-hole, protected (lined) dug well, protected spring, and rainwater collection. Unprotected wells and springs, vendors, and tanker-trucks are considered unimproved.

The main source of water for drinking and for other domestic purposes by households in occupied dwellings units in the district is shown in Table 8.10. From the Table, close to half of households (50.6%) in the district have the bore-hole/pump/tube well as their main source of drinking water followed by protected well (22.2%) and unprotected well 12.1 percent. The remaining 15.1 percent use other sources such as bottled water, unprotected spring, rain water etc. About 85.1 percent of households in the district patronise improved sources of drinking water while the remaining 14.9 percent patronise unimproved sources.

**Table 8.10: Main source of drinking water for household**

Sources of water	Total		District		Urban	Rural
	country	Region	Number	Percent	Percent	Percent
<b>Main source of drinking water for household</b>						
Total	5,467,054	177,629	9,199	100.0	-	100.0
Pipe-borne inside dwelling	790,493	11,577	181	2.0	-	2.0
Pipe-borne outside dwelling	1,039,667	15,063	447	4.9	-	4.9
Public tap/Standpipe	712,375	5,179	425	4.6	-	4.6
Bore-hole/Pump/Tube well	1,267,688	101,817	4,655	50.6	-	50.6
Protected well	321,091	22,805	2,043	22.2	-	22.2
Rain water	39,438	223	2	0.0	-	0.0
Protected spring	19,345	683	59	0.6	-	0.6
Bottled water	20,261	82	4	0.0	-	0.0
Sachet water	490,283	694	16	0.2	-	0.2
Tanker supply/Vendor provided	58,400	267	1	0.0	-	0.0
Unprotected well	112,567	11,083	1,115	12.1	-	12.1
Unprotected spring	12,222	378	31	0.3	-	0.3
River/Stream	502,804	4,452	123	1.3	-	1.3
Dugout/Pond/Lake/Dam/Canal	76,448	3,175	97	1.1	-	1.1
Other	3,972	151	0	0.0	-	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

The main source of water used by households in occupied dwelling units for other domestic purposes in the district is bore-hole/pump/tube well (49.3%), follow by protected well (22.4%) and unprotected well (12.0%) and use pipe-borne outside dwelling (4.6). Households who use public tap/standpipe forms (4.5%) while river/stream constitutes 2.5 percent.

**Table 8.11: Main source of water for other domestic use of household**

Sources of water	Total country	Region	District		Urban	Rural
			Number	Percent	Percent	Percent
<b>Main source of water for other domestic use of household</b>						
Total	5,467,054	177,629	9,199	100.0	-	100.0
Pipe-borne inside dwelling	905,566	11,408	178	1.9	-	1.9
Pipe-borne outside dwelling	1,089,030	13,957	426	4.6	-	4.6
Public tap/Standpipe	704,293	4,541	416	4.5	-	4.5
Bore-hole/Pump/Tube well	1,280,465	98,487	4,532	49.3	-	49.3
Protected well	465,775	24,798	2,065	22.4	-	22.4
Rain water	39,916	330	5	0.1	-	0.1
Protected spring	18,854	672	46	0.5	-	0.5
Tanker supply/Vendor provided	100,048	301	2	0.0	-	0.0
Unprotected well	152,055	11,607	1,103	12.0	-	12.0
Unprotected spring	15,738	650	51	0.6	-	0.6
River/Stream	588,590	6,125	232	2.5	-	2.5
Dugout/Pond/Lake/Dam/Canal	96,422	4,518	142	1.5	-	1.5
Other	10,302	235	1	0.0	-	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.8 Bathing and Toilet Facilities

Table 8.12 presents bathing and toilet facilities available in occupied dwelling units in the district. Bathing facilities used in the district are primarily of four main types: those owned for exclusive use constitute 28.8%, shared separate bathroom in the same house (26.6%), and shared open cubicle (15.5%) and private open cubicle (17.9%). The proportion of households that use open space around the house is 9.8 percent. Households who use public bath house is 0.8 percent as against 0.5 percent who uses bath rooms in another house.

**Table 8.12: Bathing facility and toilet facilities used by household**

Bathing facility and toilet facilities used by household	Total country	Region	District		Rural
			Number	Percent	
<b>Toilet facility used by household</b>					
Total	5,467,054	177,629	9,199	100.0	9,199
No facilities (bush/beach/field)	1,056,382	146,329	7,699	83.7	7,699
W.C.	839,611	6,050	142	1.5	142
Pit latrine	1,040,883	5,266	490	5.3	490
KVIP	572,824	6,196	244	2.7	244
Bucket/Pan	40,678	405	17	0.2	17
Public toilet (W.C./KVIP/Pit/Pan etc.)	1,893,291	12,828	587	6.4	587
Other	23,385	555	20	0.2	20
<b>Bathing facility used by household</b>					
Total	5,467,054	177,629	9,199	100.0	9,199
Own bathroom for exclusive use	1,535,392	73,345	2,645	28.8	2,645
Shared separate bathroom in the same house	1,818,522	33,370	2,449	26.6	2,449
Private open cubicle	381,979	26,114	1,648	17.9	1,648
Shared open cubicle	1,000,257	21,111	1,428	15.5	1,428
Public bath house	140,501	2,391	73	0.8	73
Bathroom in another house	187,337	479	42	0.5	42
Open space around house	372,556	19,987	901	9.8	901
River/Pond/Lake/Dam	14,234	437	5	0.1	5
Other	16,276	395	8	0.1	8

Table 8.12 also shows the distribution of type of toilet facilities used by households in dwelling units in the district. From the table, over eighty percent (83.7%) have no facility

hence resort to bush, fields or beaches as place of convenience. Households using public toilet constitute (6.4%) while 5.3 percent use pit latrine. The remaining (4.6%) of households use WC, KVIP, Bucket/Pan and Other.

## 8.9 Methods of waste disposal

A major challenge of districts in Ghana is efficient solid (refuse) and liquid waste disposal. As shown in Table 8.13 there are varied forms of disposing solid waste (refuse) in the district. Public dump (open space) accounts for 31.5 percent of refuse disposal in the district followed by burning by the household (27.3%). The proportion of households who dump solid wastes indiscriminately is 15.8 percent while the proportion of households whose solid wastes is collected is 11.1 percent. Other proportions of solid waste disposal include public dump (container) (2.6%), buried by household (9.0%) and other (2.6 %).

The majority of households in the district as shown in Table 8.12 dispose of liquid waste by either throwing onto the street/outside (44.4%) or throwing onto compound (35.3%). Approximately 12 percent of households dispose of their liquid waste through drainage system into a pit (soak away).

**Table 8.13: Method of rubbish and liquid waste disposal by households**

Method of disposal of solid and liquid waste by household	Total country	Region	District		
			Number	Percent	Rural
<b>Method of rubbish disposal by household</b>					
Total	5,467,054	177,629	9,199	100.0	9,199
Collected	785,889	19,758	1,025	11.1	1,025
Burned by household	584,820	44,337	2,515	27.3	2,515
Public dump (container)	1,299,654	14,057	242	2.6	242
Public dump (open space)	2,061,403	55,459	2,900	31.5	2,900
Dumped indiscriminately	498,868	25,994	1,457	15.8	1,457
Buried by household	182,615	12,201	824	9.0	824
Other	53,805	5,823	236	2.6	236
<b>Methods of liquid waste disposal by household</b>					
Total	5,467,054	177,629	9,199	100.0	9,199
Through the sewerage system	183,169	4,062	65	0.7	65
Through drainage system into a gutter	594,404	7,676	388	4.2	388
Through drainage into a pit (soak away)	167,555	12,031	1,080	11.7	1,080
Thrown onto the street/outside	1,538,550	105,548	4,085	44.4	4,085
Thrown into gutter	1,020,096	6,029	300	3.3	300
Thrown onto compound	1,924,986	41,258	3,247	35.3	3,247
Other	38,294	1,025	34	0.4	34

Source: Ghana Statistical Service, 2010 Population and Housing Census

## **CHAPTER NINE**

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

#### **9.1 Introduction**

The Binduri District is one of the thirteen (13) districts in the Upper East Region of Ghana. The district has a total population of 61,576. Females constitute 51.8 percent of the total population while males constitute 48.1 percent. The district has a total land area of 391.91 square kilometres. The Binduri District Assembly is the highest political authority in the district with the District Chief Executive leading the secretariat in implementing the decisions of the Assembly. The district has one constituency and four Area Councils.

#### **9.2 Summary of findings**

##### **Demographic Characteristics**

The total population of the district is 61,576. More than half of the population (51.9%) are females with 48.1 percent being males. The sex ratio for all age groups is 93. This means that for every 100 females there are 93 males in the district. The district has a population density of 157.1 persons per square kilometres.

The dependency ratio of the district is 108.8. This means that every 100 persons in the working age group (15-64) cater for approximately 109 persons. Male dependency ratio is higher (122.9) than female dependency ratio (97.3). There are 13,367 women in the reproductive age group of 15-49 years in the district. This number represents 21.7 percent of the total population in the district.

The district has a total fertility rate of 3.6 percent which is higher than the regional fertility rate of 3.4 percent. It has a lower crude birth rate of 21.2 percent compared to the regional crude birth rate of 22.7 percent. This means that even though the district registers more births than the region as a whole, the region registers more live births than there are in the district. Binduri District has one of the lowest numbers of household deaths (510) as compared to the other districts in the region. The district also has one of the lowest crude death rates of 8.3 in the region.

Only 5.1 percent of the total population of the Binduri District are migrants. The majority (31.3%) of migrants in the district have lived for between one and four years. The majority (1,531) of the migrant population in the district are from the Ashanti Region.

##### **Social Characteristics**

The total population of households is 60,878. Children constitute 50.5 percent of this population, while 15.1 percent are household heads. The proportion of those who are married is 10.7 percent. The proportion of male household heads is 25.2 percent. This is higher than the proportion of female household heads (5.7%). Like most Ghanaian communities, extended family structure (54.4%) is dominant in Binduri District, with nuclear families constituting 21.9 percent.



There are more married persons (51.0%) in the district than there are of those who have never married (38.1%) of the total number of persons 12 years and older. The remaining 13.5 percent are made up of those who are separated, divorced, widowed or are in informal/consensual union/living together. Persons in the age groups 40-44 years have the highest percentage of married persons (87.1%) in the district.

Out of a total population of 61,576, 93.6 percent are Ghanaians by birth, 2.5% are Ghanaians with dual nationality while the remaining 3.9 percent are made up of Ghanaians by naturalisation, those of ECOWAS, non ECOWAS and other nationalities.

Christianity (Catholic, Protestants, Pentecostal/Charismatic, and Other Christian) is the dominant religion (41.7%). Islam is the second dominant religion with a proportion of 35 percent of the total population of the district. Traditional religion has a proportion of 20.0 percent, while those without religious affiliation are 2.1 percent.

The non-literate population (23,591) is greater than the literate population (17,228). Of the literate population, 65.8 percent can read and write English language only, 31.1 percent can read and write English and Ghanaian language, while 2.9 percent can read and write Ghanaian language only.

School enrolment is highest at the primary level (58.8%) and lowest at the Vocational/Technical/Commercial level for those currently attending school. Of those who attended school in the past, 38.6 percent reached primary level, making it the highest level of education for majority of those who attended school in the past.

### **Economic Characteristics**

The Binduri District has a high proportion (80.9%) of its population 15 years and older being economically active with only 19.1 percent being economically not active. The employment situation in the district is very good with as high as 99.1 percent being employed with less than one percent (0.9%) being unemployed.

Agriculture is the mainstay of the economy employing as high as 84.3 percent of the employed population. The agriculture, forestry and fishing industry has the majority of the employed (83.9%) population 15 years and older. Majority of the employed population in the district are self-employed, with those who have no employees constituting 65.6 percent.

The private informal sector employs 97.0 percent of the employed population making it the major sector of employment. The Public (Government) sector employs only 2.0 percent.

### **Information Communication Technology**

A total population of 6,797 representing (17.3%) own mobile phone in the district. More males (25.0%) own mobile phones as compared to 10.7 percent of their female counterparts. Only 1.1 percent of the population in the district uses the internet facility. The usage of the facility among males is higher (1.6%) as compared to 0.6 percent by their female counterpart.

A total of (1.4%) of all households own Laptop/ Desktop computers. Female headed household has (1.5%) as compared to 1.4 percent male of laptop/desktop ownership in the district.

## **Disability**

There are 1,732 persons with disability representing (2.8%) of the population in the district. Disability by gender indicates that there are more males (2.9%) than female (2.7%) in the district. The most predominant type of disability in the district is sight (41.9%) follow by physical disability (26.3%), hearing (21.2%) and the least is other forms of disability 7.3 percent. Activity status of PWDs shows that 61.4% are economically active and 38.6 percent are economically not active. Out of these (60.3%) are employed while 1.1 percent are unemployed. Over sixty six percent have never attended any form of education.

## **Housing Conditions**

The main materials for construction of outer walls in the district are Mud brick/Earth (88.1%) and cement block/concrete (8.3%). Main materials used for the floors of dwellings (occupied dwellings) in the district are largely made of cement or concrete (72.2%). About one in five (23.3%) houses has floors made of earth or mud. Main material used for the roof of buildings in the district is metal sheets (80.5%) followed by Thatch/Palm leaves or Raffia. The least material used for roofing is roofing tiles which accounts for less than one percent.

Over forty percent of household size of four occupies two rooms while 85.2 percent of one member households in the district occupy one room. Flashlight is the main source of lighting for dwellings in the district (44.0%) follow by kerosene lamp (41.0%) with 13.0 percent of them using electricity.

The three main sources of energy used for cooking by the households are: wood (62.8%), crop residue (26.9%), and Charcoal (5.4%) Besides these (1.9%) of the households use gas while (1.5%) uses other fuel.

Majority of households in the district (50.6%) drink borehole/tube well /pump follow by protected well (22.2%) and unprotected well 12.1 percent. Borehole (49.3%) is the main source of water for other domestic use follow by protected well (22.4%) and unprotected well 12.0 percent. Majority of households in the district (83.7%) have no toilet facilities. The proportion using the public toilet is 6.4% while 5.3 percent use pit latrine.

There are many forms of waste disposal methods in the district with public dump (open space) accounting for (31.5%) follow by burned by the household (27.3%) while dump indiscriminately and collected constitute 15.8 and 11.1 percent respectively.

## **9.3 Conclusion**

With a total population of 61,576 and a population density of 157 km<sup>2</sup>, the district is sparsely populated. The female population is greater constituting 51.9 percent of the entire district population. This explains the high sex ratio of 93. The district also has a high dependency ratio of 109 with male dependency (109) being higher than female dependency (97.3%). The district also has a high fertility rate of 3.6 percent and a low crude death rate of 8.3 in the region. Migrants in the district are very few making up only 5.1 percent of the total population.

The district has a youthful population with children constituting 50.5 percent of the entire population. Male headed households (25.2%) are more than female headed households (5.7%). The three major religious groups in the district are Christianity (41.7%), Islam (35%) and Traditional Religion (20.0%). The non-literate population is higher 57.8 percent than the literate population 42.2 percent. School attendance is highest at the primary level (58.8%).

A very high proportion of the population are economically active (80.3%), with less than one percent of the employable population being unemployed. Agriculture employs a majority of 84.3 percent of the economically active population. The private informal sector employs most workers (97.0%) with majority of them being self-employed without employees.

The (1.1%) usage of internet facility as recorded in the district is very low even though is close to the regional average of 1.2 percent. Household ownership of laptop/desktop computers which stands at (1.4%) though higher than the regional average of (1.3%) falls below the national average of 7.8 percent.

Persons with disability in the district constitute 2.8 percent of the population which is lower than the regional and the national average of 3.8 and 3.0 percent. The most common types of disability in the district are sight, physical and hearing the average number of persons with disability in the district is lower than that of the regional average. About 88.1 percent of the outer walls of houses in the district are made of Mud/Mud bricks /Earth. The main source of lighting in the district is Flash light (44.0%), Kerosene lamp (41.0%) and electricity 13.0 percent. The main source of fuel for cooking is wood (62.8%).

#### **9.4 Policy Implications**

Given the high fertility rate of 3.6 in the district, a regional fertility rate of 3.4, the 1969 National Population Policy objective of reducing population growth to 1.7% by 2000, is far from being achieved. This therefore means that policy interventions in the areas of family planning and girl child education should be vigorously pursued. This would reduce the number of unplanned pregnancies as well as early births and keep girls in school longer than has been the case.

Another policy objective of the National Population Policy is to ensure free and compulsory universal basic education and encourage girls' retention in schools. With primary enrolment in the district reaching 58.8 percent, the School Feeding Programme, Capitation, as well as Free School Uniforms and Textbooks programmes should be expanded and sustained. There should also be special incentives and scholarships to promote girl child education. Policies already formulated for the agricultural sector which are yielding positive results need to be sustained and intensified especially in the rural districts. The programmes on subsidising agricultural inputs should particularly be sustained to support the largely agrarian economy. Policy programmes should also be formulated to provide financial assistance to persons in agriculture.

The use of ICT for interaction, communication and business has become critical in this knowledge age. Given the importance of mobile phones in community and health development through mobile-health (m-health), government should encourage and motivate private phone companies to expand access to mobile phones particularly in rural communities. There should be a conscious effort to promote ICT, based on the information available from the census data

The inclusion of disability in the 2010 PHC has provided opportunity to assess the social, demographic and economic characteristics of PWDs. The results should inform the development of strategies which will respond to the effective implementation of the Disability Act in the district. The large proportion of PWDs in the district brings to bare the need for district authorities to establish special schools and centres e.g. schools for the deaf and blind which will offer them opportunities to enhance their livelihoods in these rural settings.

The use of wood and charcoal as the main sources of fuel has for a bearing on the rapid deforestation in the district. The intermittent shortages of gas and relatively high cost of the product should be addressed to encourage more households to shift to the use of gas to help save the environment.

The non-availability of toilet facilities in the district should be of prior concern to the authorities, NGOs and development partners to avoid the spread of any epidemics in cases of flooding. the health implications associated with this will have serious consequences on people in the district. It therefore needs collaboration from all stakeholders to deal with the problem.

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## APPENDICES

**Table A1: Household Composition by type of locality**

Household Composition	Total		Urban		Rural	
	Number	Percent	Number	Percent	Number	Percent
Total	60,878	100.0	0	0.0	60,878	100.0
Head only	351	0.6	0	0.0	351	0.6
Household with head and a spouse only	304	0.5	0	0.0	304	0.5
Household with head and biological/adopted children only	3,677	6.0	0	0.0	3,677	6.0
Household with head spouse(s) and biological/adopted children only	13,361	21.9	0	0.0	13,361	21.9
Household with head spouse(s) biological/adopted children and relatives of the head only	33,099	54.4	0	0.0	33,099	54.4
Household with head spouse(s) biological/adopted children relatives and nonrelatives of the head	885	1.5	0	0.0	885	1.5
Household with head spouse(s) and other composition	1,281	2.1	0	0.0	1,281	2.1
Household with head biological/adopted children and relatives of the head only	5,260	8.6	0	0.0	5,260	8.6
Household with head biological/adopted children relatives and nonrelatives of the head	318	0.5	0	0.0	318	0.5
Household with head and other composition but no spouse	2,342	3.8	0	0.0	2,342	3.8

**Table A2: Population 3 years and older by sex, disability type and level of education**

Sex/Disability type	Total	Educational level attained									
		Never attended	Nursery	Kinder garten	Primary	Middle/ JSS/ JHS	Sec./ SSS/ SHS	Voc./ Tech./ Comm.	Post sec	Bachelor degree	Post graduate (Cert. Diploma Masters PHD etc.)
<b>Total</b>	56,888	28,515	1,938	2,055	15,492	5,928	2,100	194	558	97	11
No disability	55,217	27,411	1,920	2,022	15,241	5,766	2,043	182	529	92	11
With a disability	1,671	1,104	18	33	251	162	57	12	29	5	0
Sight	697	478	6	9	72	65	35	7	21	4	0
Hearing	358	244	6	7	66	28	4	1	2	0	0
Speech	212	135	4	7	39	18	5	0	3	1	0
Physical	442	312	4	7	60	44	5	4	5	1	0
Intellectual	223	159	2	2	36	16	6	0	2	0	0
Emotional	159	88	1	5	30	27	6	0	2	0	0
Other	115	71	2	4	24	9	5	0	0	0	0
<b>Male</b>											
<b>Total</b>	27,247	11,571	1,033	1,073	8,349	3,254	1,355	119	405	77	11
No disability	26,413	11,078	1,023	1,052	8,200	3,158	1,319	112	385	75	11
With a disability	834	493	10	21	149	96	36	7	20	2	0
Sight	308	192	2	4	41	30	21	4	13	1	0
Hearing	175	106	3	3	42	18	1	0	2	0	0
Speech	116	64	2	5	27	11	4	0	2	1	0
Physical	220	131	3	4	36	33	4	3	5	1	0
Intellectual	119	77	2	1	21	13	3	0	2	0	0
Emotional	85	39	0	4	19	18	3	0	2	0	0
Other	71	44	2	4	12	7	2	0	0	0	0
<b>Female</b>											
<b>Total</b>	29,641	16,944	905	982	7,143	2,674	745	75	153	20	0
No disability	28,804	16,333	897	970	7,041	2,608	724	70	144	17	0
With a disability	837	611	8	12	102	66	21	5	9	3	0
Sight	389	286	4	5	31	35	14	3	8	3	0
Hearing	183	138	3	4	24	10	3	1	0	0	0
Speech	96	71	2	2	12	7	1	0	1	0	0
Physical	222	181	1	3	24	11	1	1	0	0	0
Intellectual	104	82	0	1	15	3	3	0	0	0	0
Emotional	74	49	1	1	11	9	3	0	0	0	0
Other	44	27	0	0	12	2	3	0	0	0	0

Source: Ghana Statistical Service, 2010 Population and Housing Census

**Table A3: Distribution of households engaged in tree growing or crop farming by type of crop and population engaged**

Households/ Type of crop	Households	Population in occupied units			Population engaged in agricultural activities		
		Total	Male	Female	Total	Male	Female
Total households in occupied units	9,199	60,878	29,275	31,603	25,986	12,305	13,681
Households engaged in agricultural activities	8,641	58,523	28,209	30,314	25,986	12,305	13,681
Households engaged in crop farming or tree growing	8,578	58,127	28,019	30,108	25,816	12,219	13,597
Households engaged in crop farming	8,578	58,127	28,019	30,108	25,816	12,219	13,597
Households engaged in tree growing	37	271	142	129	136	75	61
Agro forestry (tree planting)	37	271	142	129	136	75	61
Alligator pepper	20	165	71	94	58	30	28
Apples	13	135	66	69	40	25	15
Asian vegetables (e.g. tinda, cauliflower)	17	167	82	85	58	29	29
Avocado	15	176	87	89	51	23	28
Banana	77	473	241	232	180	88	92
Beans	3,171	23,111	11,152	11,959	10,526	4,954	5,572
Black pepper	5	19	9	10	12	7	5
Black berries	14	138	74	64	52	25	27
Cabbage	4	30	17	13	21	13	8
Carrot	14	90	43	47	27	19	8
Cashew	9	62	35	27	26	14	12
Cassava	342	1,932	874	1,058	582	245	337
Citronella	1	6	4	2	2	1	1
Citrus	17	114	55	59	36	19	17
Cloves	1	6	4	2	1	0	1
Cocoa	278	1,574	774	800	534	266	268
Cocoyam	77	435	193	242	149	55	94
Cocoyam / Taro (koko)	24	160	81	79	51	28	23
Coffee	6	53	26	27	13	7	6
Cola	10	92	47	45	27	10	17
Cotton	2	15	9	6	4	2	2
Cucumber	44	354	170	184	158	77	81
Egg plant	1	5	3	2	5	3	2
Garden eggs	66	494	250	244	227	114	113
Ginger	12	70	29	41	25	10	15
Groundnut	1,265	10,023	4,877	5,146	4,404	2,073	2,331
Guava	19	148	59	89	64	30	34
Kenaf	29	230	101	129	82	37	45
Lemon grass	8	44	26	18	21	12	9
Lettuce	10	70	37	33	39	23	16
Maize	6,087	43,330	20,922	22,408	19,423	9,288	10,135
Mango	49	336	161	175	173	90	83
Melon (agusi)	22	144	78	66	65	32	33
Millet	6,334	44,960	21,802	23,158	20,497	9,793	10,704
Mushroom	18	97	48	49	45	20	25
Nut meg	17	93	49	44	43	23	20



**Table A3: Distribution of households engaged in tree growing or crop farming by type of crop and population engaged (cont'd)**

Households/ Type of crop	House-holds	Population in occupied units			Population engaged in agricultural activities		
		Total	Male	Female	Total	Male	Female
Oil palm	102	645	331	314	214	108	106
Okro	455	3,291	1,635	1,656	1,608	750	858
Onion	821	6,721	3,276	3,445	2,977	1,432	1,545
Pawpaw	5	39	18	21	14	9	5
Peas	24	175	80	95	92	42	50
Pepper	224	1,560	770	790	639	293	346
Pineapple	3	7	4	3	4	2	2
Plantain	409	2,348	1,064	1,284	703	290	413
Potatoes	47	425	206	219	230	106	124
Rice	3,859	28,016	13,395	14,621	13,038	6,006	7,032
Rubber	14	81	38	43	55	27	28
Shallot	3	18	10	8	13	7	6
Shea tree	9	53	28	25	33	17	16
Sorghum	342	2,693	1,283	1,410	1,492	729	763
Soya beans	3,028	22,129	10,644	11,485	10,326	4,800	5,526
Spinach	5	26	11	15	8	5	3
Sugarcane	1	9	4	5	3	1	2
Sun flower	26	200	95	105	93	42	51
Sweet pepper	5	43	20	23	21	9	12
Sweet potatoes	89	735	359	376	379	185	194
Tiger nut	8	47	17	30	16	8	8
Tobacco	126	1,029	507	522	476	228	248
Tomatoes	221	1,762	874	888	764	371	393
Water melon	171	1,490	735	755	677	310	367
Yam	61	400	191	209	111	50	61
Other (specify)	226	1,604	765	839	817	379	438

Source: Ghana Statistical Service, 2010 Population and Housing Census

**Table A4: Population by sex, number of household and houses in the 20 largest communities**

S/No.	Community Name	Total	Sex		House holds	Houses
			Male	Female		
1	Narango	3,179	1,534	1,645	536	373
2	Zorsi	3,022	1,457	1,565	466	343
3	Bazua	2,527	1,253	1,274	337	260
4	Boko	2,359	1,113	1,246	314	203
5	Binduri	2,110	995	1,115	287	212
6	Atuba	1,740	861	879	262	189
7	Aporunzua	1,441	671	770	241	194
8	Bauk Sapelliga	1,313	642	671	167	131
9	Nayoko No. 2	1,224	564	660	167	116
10	Azum Sapelliga	1,147	540	607	139	99
11	Tambugu Natinga	1,110	543	567	149	99
12	Manga	1,091	535	556	159	102
13	Kpalugu Bundure	1,058	490	568	147	92
14	Yagore	873	413	460	114	70
15	Yapala	873	435	438	123	100
16	Tandienabug	856	383	473	111	77
17	Ninsako	799	406	393	106	68
18	Kukparigu-Temgpelug	760	345	415	200	83
19	Tempelim Zulugo	760	370	390	100	59
20	Kukparigu	748	335	413	146	77

Source: Ghana Statistical Service, 2010 Population and Housing Census

**Table A5: Population by age group in the 20 largest communities**

S/No.	Community Name	All	Age group															
		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	Narango	3,179	399	488	450	297	255	157	142	169	134	112	141	83	76	54	84	138
2	Zorsi	3,022	414	453	416	360	223	173	144	146	129	108	80	63	71	68	62	112
3	Bazua	2,527	344	394	341	280	190	129	153	115	110	80	88	49	71	30	54	99
4	Boko	2,359	347	364	322	282	168	154	111	118	96	69	55	42	58	36	61	76
5	Binduri	2,110	327	338	288	213	146	107	121	91	75	58	63	38	58	26	73	88
6	Atuba	1,740	310	298	225	157	98	94	81	81	82	71	63	30	46	31	38	35
7	Aporunzua	1,441	171	225	201	167	123	101	66	81	64	51	58	26	35	15	19	38
8	Bauk Sapelliga	1,313	187	216	176	152	90	81	64	60	50	47	27	33	34	21	31	44
9	Nayoko No. 2	1,224	205	178	161	140	107	58	50	49	49	42	33	22	29	30	43	28
10	Azum Sapelliga	1,147	181	201	136	131	66	59	50	55	39	35	40	25	30	20	21	58
11	Tambugu Natinga	1,110	164	197	150	97	59	79	56	50	32	48	58	19	31	20	23	27
12	Manga	1,091	164	182	146	131	83	62	47	45	41	36	29	22	24	18	19	42
13	Kpalugu Bundure	1,058	158	174	145	116	77	61	45	48	40	42	27	12	21	13	24	55
14	Yagore	873	124	126	119	85	58	60	47	50	43	34	27	13	22	16	26	23
15	Yapala	873	140	143	116	116	54	30	21	40	42	21	45	14	32	6	25	28
16	Tandienabug	856	110	176	134	99	25	28	33	48	30	33	26	17	32	12	17	36
17	Ninsako	799	124	127	117	100	44	30	33	28	33	23	28	23	20	14	20	35
18	Kukparigu- Temgpelug	760	90	86	84	95	79	56	51	37	38	37	27	24	12	11	17	16
19	Tempelim Zulugo	760	102	125	90	94	54	50	30	40	40	32	26	17	16	18	16	10
20	Kukparigu	748	92	98	101	92	73	56	45	34	32	28	31	14	11	12	9	20

Source: Ghana Statistical Service, 2010 Population and Housing Census

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