



# 2010

## POPULATION & HOUSING CENSUS

### DISTRICT ANALYTICAL REPORT

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## DORMAA EAST DISTRICT



Canada 

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

GHANA STATISTICAL SERVICE, OCTOBER, 2014

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## PREFACE AND ACKNOWLEDGEMENT

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

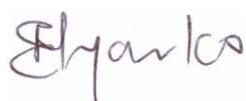
A population census is the most important source of data on the size, composition, growth and distribution of a country's population at the national and sub-national levels. Data from the 2010 Population and Housing Census (PHC) will serve as reference for equitable distribution of national resources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

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

The District Analytical Report for the Dormaa East 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.



**Dr. Philomena Nyarko**  
**Government Statistician**

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## **ACRONYMS AND ABBREVIATIONS**

AIDS:	Acquire Immune Deficiency Syndrome
ASFR:	Age Specific Fertility Rate
CBR:	Crude Birth Rate
CDR:	Crude Death Rate
CEB:	Children Ever Born
CERSGIS:	Centre for Remote Sensing and Geographic Information Services
CIDA:	Canadian International Development Agency
CS:	Children Surviving
DANIDA	Danish International Development Agency
DFID:	Department for International Development
DPs:	Development Partners
ECOWAS:	Economic Community of West African States
EA:	Enumeration Area
EU:	European Union
FCUBE:	Free Compulsory Universal Basic Education
GFR:	General Fertility Rate
GNAG:	Ghana National Association of Garages
GSS:	Ghana Statistical Service
HIV:	Human Immune Virus
ICT:	Information Communication Technology
JHS:	Junior High School
JSS:	Junior Secondary School
Km <sup>2</sup> :	Kilometers Square
KVIP:	Kumasi Ventilated Improved Pit
L.I:	Legislative Instrument
MCE:	Municipal Chief Executive
MDAs	Ministries, Departments and Agencies
MDGs:	Millennium Development Goals

MPCU:	Municipal Planning and Coordinating Unit
NCA:	National Communications Authority
NCPEC:	National Census Publicity and Education Committee
NCSC:	National Census Steering Committee
NCTAC:	National Census Technical Advisory Committee
NDPC:	National Development Planning Commission
NER:	Net Enrolment Ratio
NGO:	Non-Governmental Organization
NGOs:	Non-governmental Organizations
OPD:	Out Patient Department.
PES:	Post Enumeration Survey
PHC	Population and Housing Census
PPP:	Public Private Partnership
PWDs	Persons with disabilities
SIT:	Social Inclusion Transfer
SHS:	Senior High School
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 Emergency Fund
WC:	Water Closet
WHO:	World Health Organization

# EXECUTIVE SUMMARY

## Introduction

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

## Population size, structure and composition

The population of 50,871, according to the 2010 Population and Housing Census, is 2,310,983 representing seven percent (2.2%) of the region's total population. Males constitute 47.1 percent and females represent 52.9 percent of the total population of the district. More than half (63.8%) of the population in the Dormaa East district live in urban areas. The sex ratio of the district is 89.1, which implies that there are 89 males per 100 females. The district has a youthful population with 20,432 (34.6 %) of the population below 15 years. This depicts a broad base population pyramid which tapers off with a small proportion of elderly persons (2.2%) aged 60 years and older. The total age dependency ratio for the district is 85.2.

## Fertility, mortality and migration

The Total Fertility Rate (TFR) for the district is 3.7 which is higher than the regional rate of 3.58. The General Fertility Rate (GFR) is 115.0 births per 1000 women aged 15-49 years. The Crude Birth Rate (CBR) is 27.7 per 1000 population. The crude death rate is 7.8 per 1000. Majority of migrants 1420 (12.5%) living in the district were born elsewhere in the Upper East region while 6,892 (60.7%) percent were born elsewhere in another region.

## Household size, composition and structure

The district has a household population of 50871 with a total number of 11,722 households. The average household size in the district is 4.3 persons. Children constitute the largest proportion of the household members accounting for 40.5 percent. Spouses form about 9.4 percent. Nuclear households (head, spouse(s) and children) constitute 23.8 percent of the household population in the district.

## Marital status

About forty-five percent (41.5%) of the population aged 12 years and older are married, 37.1 percent have never married while 5.4 percent are widowed. Nine out of every ten persons (96.8%) aged between 12-14 years have 'never married', 2.6 percent of the same age group are 'married' and less than one percent (0.6 %) are in 'informal/consensual union/living together'.

## Nationality

Majority of the population in the district are Ghanaians (97.9%) while 2.1 percent are non-Ghanaians (i.e. nationals of ECOWAS, Africa other than ECOWAS and Other).

## **Literacy and Education**

Out of the 27,713 persons 11 years and older in the district, 54.5 percent are literate and 14.8 percent are not-literate. The proportion of literate males (49.3 %) is lower than that of literate females (50.7%). Out of a total of 19,488 persons aged 3 years and older in the district 38.8 percent are currently in school, an equal proportion has attended school in the past and 22.4 percent have never attended school.

## **Economic Activity Status**

About 76 percent (75.6%) of the population aged 15 years and older is economically active while 24.4 percent is economically not active. Of the economically active population, 96.2 percent are employed whilst 3.8 percent are unemployed. Females (25.0%) are more likely to be economically not active than males (23.6%). For those who are economically not active, a large percentage is students (53.7%), 19.8 % perform household duties and 6.2 percent are disabled or too sick to work. Seventy three percent (73.3%) of the unemployed population are seeking work for the first time.

## **Occupation**

Of the employed population, about 67.2 percent are engaged as skilled agricultural, forestry and fishery workers, 12.8 percent in service and sales, 8.3 percent in craft and related trade, and 1.2 percent are engaged as managers.

## **Employment status and sector**

Of the population 15 years and older 68.7 percent are 'self-employed without employees', 13.6 percent are 'contributing family workers', 1.5 percent are 'casual workers and 0.7 percent are domestic employees (house helps). The private informal sector is the largest employer in the district, employing 92.9 percent of the population followed by the public sector with 4.5 percent.

## **Information Communication Technology**

Of the population 12 years and above, 43.1 percent have mobile phones. Men who own mobile phones constitute 47.3 percent as compared to 39.6 percent of females. Only 1.7 percent of the population 12 years and older uses internet facilities in the district. A small proportion of households (3.3%) in the district have desktop/laptop computers.

## **Disability**

About seven percent (2.6 %) of the population in the district are persons with disability. Persons with sight disability recorded the highest of 35.3 percent followed by physical disability (30.2 %). The proportion of the female population with disability is higher (2.7 %) than males (2.5%).

## **Agriculture**

Households in agriculture account for 80.2 percent of the total households in the district. In the rural localities, 92.0 percent households are agricultural households while in the urban localities, 73.5 percent of households are into agriculture. Most households (97.9 %) in the district are engaged in crop farming. Poultry (chicken) is the dominant 68.9 percent livestock reared in the district.

## **Housing**

The housing stock of the district is 8,064. The average number of households per house is 1.6 and average household size is 4.4.

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

The common types of dwelling units occupied by households in the district are compound houses (47.3%), followed by separate houses (38.0%). Five in every ten (53.0 %) of the dwelling units in the district are owned by members of the household; 24.9 percent is owned by a relative who is not a household member.

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

The main construction material for outer walls of dwelling units in the district is cement/concrete accounting for 43.0 percent with 'palm leaf/thatch (grass)/raffia constituting less than one percent (0.3%). Cement/concrete (73.4%) and mud/earth (23.7%) are the two main materials used in the construction of floors of dwelling units in the district. Metal sheets (87.4%) are the main roofing material for dwelling units in the district followed by Thatch/palm leaf or raffia ( 8.9 %) and other not specified materials ( 1%).

### ***Room occupancy***

One room constitute the highest proportion 2,092 (17.8%) of sleeping rooms occupied by households in dwelling units in the district. About 5 percent (4.7%) of households with 10 or more members occupy three rooms.

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

The two main sources of lighting in dwelling units in the district is electricity (main) (58.6%), flashlight (30.1%) while solar energy, firewood and crop residual are nonexistence source of lighting in the district. The main sources of fuel for cooking for most households in the district are wood (78.6%), charcoal (9.0%) and none no cooking (7.4 %). The main sources of water in the district are borehole/pump/tube well (39.3%), pip-bone outside dwelling (21.6%), public tap/stand pipe (13.7%) and tanker supply/ vendor provided nonexistence in the district. The most common toilet facility used in the district is pit latrine (43.8%) percent followed by public toilet (WC, KVIP, pit pan) (39.4%). About five percent (4.8%) of the population in the district has no toilet facility.

### ***Waste disposal***

The most widely use method of solid waste disposal is by public dump in the open space accounting for (50.9%). About seven percent (6.6%) of households dump their solid waste indiscriminately. House to house waste collection accounts for 1.0 percent. For liquid waste disposal, throwing waste onto the street/ outside (45.8%) and onto the compound (45.4%) are the two most common methods used by households in the district.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background**

The Dormaa East District is one of the 27 administrative centres in the Brong Ahafo Region. It was carved from the Dormaa Municipality by a Legislative Instrument (LI 1851) of 2007. This measure was to deepen efforts to eradicate the economic, social, cultural and political factors that contribute to poverty in the district, within the framework of sustainable rural development. The district was inaugurated on 29<sup>TH</sup> February 2008 with its administrative capital Wamfie.

The Dormaa East District lies between latitude 7° 08′ North and 7° 25′ North and longitude 2°.35′ West and 2°.48′ west. The District has a total land area of 456 square kilometers. This represents about 1.18 percent of the total land mass of the Brong Ahafo. It shares common boundaries with Dormaa Municipal to the West, Berekum to the North, Sunyani to the East, and South by Asunafo North Municipal and Asutifi District. The capital of the district is Wamfie.

### **1.2 Physical Characteristics**

The physical or natural environment, to a large extent, influences the socio-economic conditions of the people in the district. The major aspects of the physical features examined include, area, climate and vegetation.

#### **1.2.1 Climate**

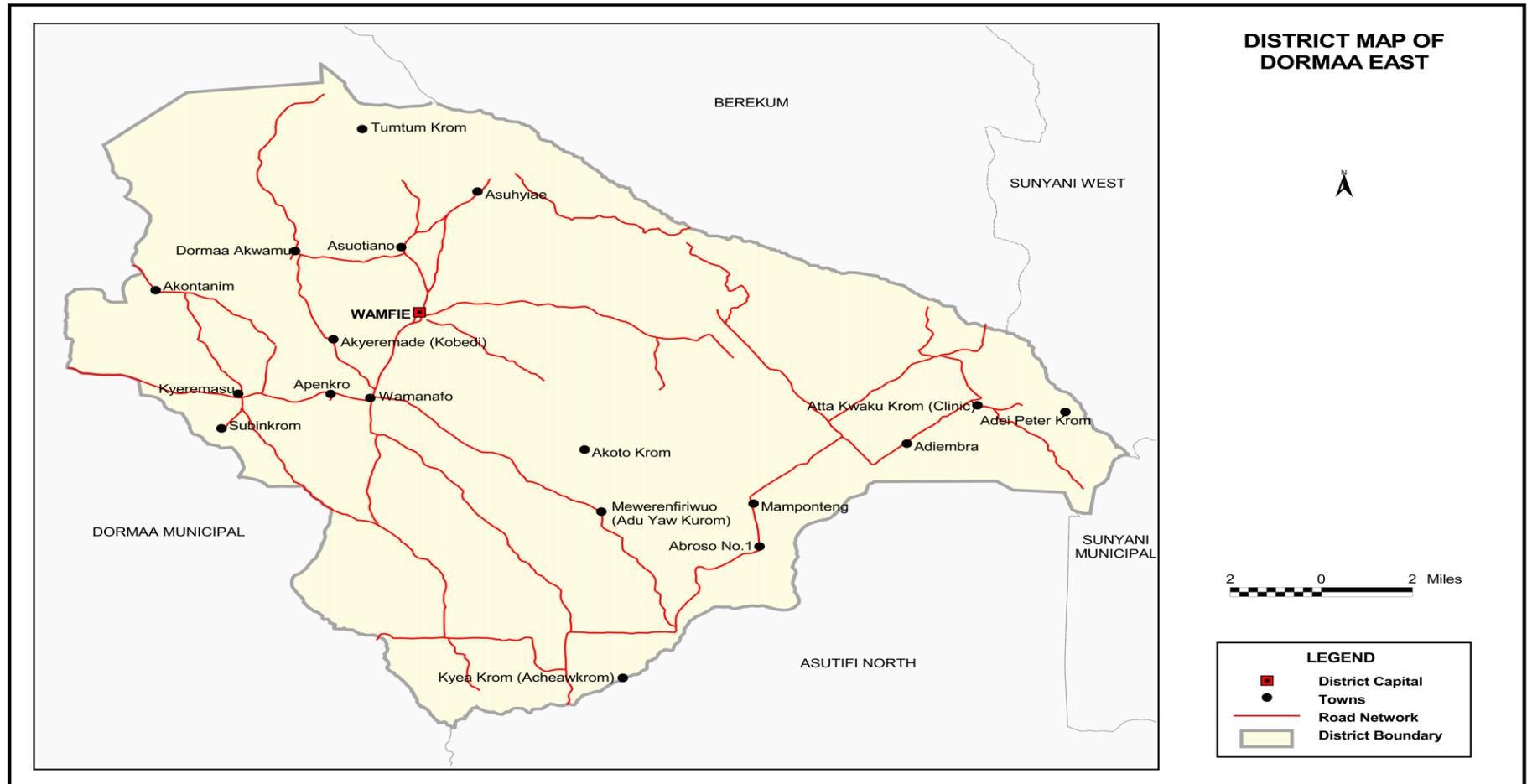
The district is located within the east semi-equatorial climate region with a double maximal rainfall regime. The mean annual rainfall is between 124cm and 175cm. The first rainy season is from March to June and the second is from September to October. Such rainfall regime enables the cultivation of crops such as maize, cassava and plantain twice within the year.

The dry season is quite pronounced, beginning around the latter part of November and ending in February. This is often accompanied by relative humidity of between (75- 80) percent and (70- 72) percent during the rest of the year.

#### **1.2.2 Vegetation**

The major types of flora found in the forest ranges from shrubs and climbers to giants' silk cotton trees. Timber species like Wawa, Odum, Sapele and Mahogany also abound in the district. The forest has been extensively cultivated leading to an invasion of grassland vegetation. The extensively cultivable forest occupies the North, Central, Western and Southern parts of the district. The vegetation is dominated by elephant grass and a few short trees scattered all over the district.

**Figure 1.1: Dormaa East district map**



Source: Ghana Statistical Service, GIS

### **1.3 Political Administration**

The political and administrative head of the district is the District Chief Executive and the District Co-coordinating Director are responsible for the day to day administration of the district. Other heads of departments include those in charge of education, health, works, finance, physical planning, agriculture, community and social welfare, central administration, and disaster prevention. These assist the coordinating director to effectively run the district.

The district has one constituency with one Member of Parliament. There is a Town Council at Wamfie and four (4) Area Councils at Dormaa Akwamu, Asuotiano, Waimanaho and Kyeremasu. There are 19 electoral areas within the district and 29 assembly members.

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

Traditionally, Dormaa East District has one paramountcy that performs ceremonial functions and supervises the activities of the divisional and sub chiefs in the district.

The district is predominantly inhabited by the Bono. However, there are other minor tribes like the Ahyis from La Cote d'voire, Ashanti, Dagomba, Frafra, Ewe, Ga-Adangbe and Sefwi.

The people in the district celebrate Kwafie festival every four years. During the festival period, all chiefs in the area pay homage to the paramount chief and social, political and economic issues are discussed for the next four years.

In terms of religious affiliation, Christians form the majority, followed by Moslems and Traditionalists. Despite the religious differences, there is peaceful co-existence and religious tolerance among the people in the district.

#### **1.4.1 Education**

The District has 71 basic schools across the district and two Senior High Schools at Wamfie and Wamanafo. There is also one college of education at Dormaa Akwamu. Most of the educational facilities are owned and managed by the government. In terms of location, the primary schools are the most widely distributed educational facilities in the District.

#### **1.4.2 Health Facilities**

The Dormaa East District has no district hospital; however, there are two public health centres at Wamfie and Dormaa Akwamu and a Mission Health Centre at Kyeremasu which attend to the medical needs to people in the district. Complicated health cases are referred to the Berekum Municipal Hospital and Dormaa Presbyterian Hospital. Apart from these, there are clinics at Akontanin, Kyeremasu, Waimanalo and Wamfie. In addition, there are Community-based Health Planning Services (CHPS) compounds at Kofibourkrom, one private maternity home and community clinic both at Wamanafo and thirty health outreach points that are fairly distributed throughout the district.

#### **1.4.3 Roads**

Roads are expected to link the rural centers to the urban centers and facilitate productivity in agriculture and agro-industry. The district is agrarian with most of the food crops produced in rural settlements. The condition of the main trunk road leading to the district from the regional capital (Sunyani) is good and has business and industrial development potential.

However, some roads linking the rural communities to the district capital are not motorable during most part of the year.

#### **1.4.4 Energy**

The largest six towns in the district have been connected to the national electricity grid. This is a potential for investment and large-scale industrialization. However, most of the rural communities which constitute the chunk of the population in the district have not been connected to the national grid.

### **1.5 Economy**

Dormaa East is richly endowed with human and natural resources, particularly mineral deposits, forest and timber species, rich soil, poultry production and good climatic conditions.

#### **1.5.1 Banking and Non-Banking Institutions**

The only banking institution in the District is the Wamfie Rural Bank .The bank has its head office at Wamfie, the district capital and branches at Dormaa Ahenkro, Techiman and Sunyani. There are other cooperative financial institutions in the district: Brong Ahafo Catholic Co-operative Society for Development (BACCSOD), Peak Financial Consult both at Wamfie and Chance Brothers Co-operative Society at Wamanafu which provide credit and financial services to people. These Financial Institutions have the prospective of mobilising domestic saving and boosting businesses and investment.

#### **1.5.2 Industrial Sector**

The District has a number of recognized Small and Medium scale Enterprises (SMEs) such as car repairs, wood works, metal works, handicraft works and palm oil extraction. These SMEs are currently not located in an industrial zone because of unavailability of electricity.

#### **1.5.3 Poultry Production**

The poultry industry employs a high proportion of the active labour force and is a major source of revenue for the district. The industry is operating in three categories: large, medium and small scale.

#### **1.5.4 Crop and Livestock Production**

The district contributes immensely to the production of livestock, cash crops and food crops in Ghana. Notably among the cash crops are cocoa and oil palm. Food crops such as maize, plantain and cassava are either consumed locally or exported to urban centres. Livestock such as goats, sheep, cattle and pigs are also reared on large scale 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 organisation, a work plan as well as a budget. The project document was launched in November 2008 as part of the Ghana Statistics Development Plan (GSDP) and reviewed in November 2009.

### **Census secretariat and committees**

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

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

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

The Regional and District Census Implementation Committees were inter-sectoral in their composition. Members of the Committees were mainly from decentralized departments with the Regional and District Coordinating Directors chairing the Regional Census Implementation Committee and District Census Implementation Committee, respectively. The Committees contributed to the planning of district, community and locality level activities in areas of publicity and field operations. They supported the Regional and District

Census Officers in the recruitment and training of field personnel (enumerators and supervisors), as well as mobilizing logistical support for the census.

### **Selection of Census topics**

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

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

### **Census mapping**

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

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

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

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

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

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

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

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

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

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

### **1.6.3 Census Enumeration**

#### **Method of enumeration and field work**

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

houses and households identified in their respective enumeration areas, was adopted for the 2010 PHC.

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

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

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

Enumeration resumed in all districts when the questionnaire shortage was resolved and by 17<sup>th</sup> October, 2010, enumeration was completed in most districts. Enumerators who had finished their work were mobilized to assist in the enumeration of localities that were yet to be enumerated in some regional capitals and other fast growing areas. Flooded areas and other inaccessible localities were also enumerated after the end of the official enumeration period. Because some enumeration areas in fast growing cities and towns, such as, Accra Metropolitan Area, Kumasi, Kasafo 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:

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

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

### **Occupation**

This referred to the type of work the person was engaged in at the establishment where he/she worked. This was asked only of persons 5 years and older who worked 7 days before the

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

### **Industry**

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

### **Employment Status**

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

### **Employment Sector**

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

### **Disability**

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

### **Information Communication Technology (ICT)**

ICT questions were asked for both individuals and households. Persons having mobile phones refer to respondents 12 years and older who owned mobile phones (irrespective of the number of mobile phones owned by each person). Persons using internet facility refers to those who had access to internet facility at home, internet cafe, on mobile phone or other mobile device. Internet access is assumed to be not only via computer, but also by mobile phones, PDA, game machine and digital television.

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

## **Fertility**

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

## **Mortality**

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

## **Agriculture**

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

## **Housing Conditions and Facilities**

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

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

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

## **1.7 Organization of the Report**

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

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

Information Communication Technology (ICT) is discussed in chapter five. It analyses mobile phone ownership, internet use and ownership of desktop/laptop computers while

chapter six is devoted to Persons living with disabilities (PWDs) and their socio-demographic characteristics. Chapter seven concentrates on the agricultural activities of the households, describing the types of farming activities, livestock rearing and numbers of livestock reared.

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

## **CHAPTER TWO**

### **DEMOGRAPHIC CHARACTERISTICS**

#### **2.1 Introduction**

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

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

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

Table 2.1 shows that the Doramaa East District has a total population of 50,871. The District has a male population of 23,970 constituting 47.2 percent while females are 26,901 or 52.8 percent of the total population. Though it is one of the deprived districts in the region, urbanization is fast catching up with the district with 63.8 percent of the population residing in urban settlements. The district has a sex ratio of 89 males to every 100 females, implying it is predominantly female. This trend is observed in all age groups except those in the 5-14 age group.

##### **Age dependency ratio**

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

Table 2.1 reveals that the Dormaa East has a total age-dependency ratio of 85.2 implying that every 100 persons in the working age group have 85 persons in the dependent ages to support. The rural residents bear a greater burden with a ratio of 87 compared to the burden on the urban (84) working age population.

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

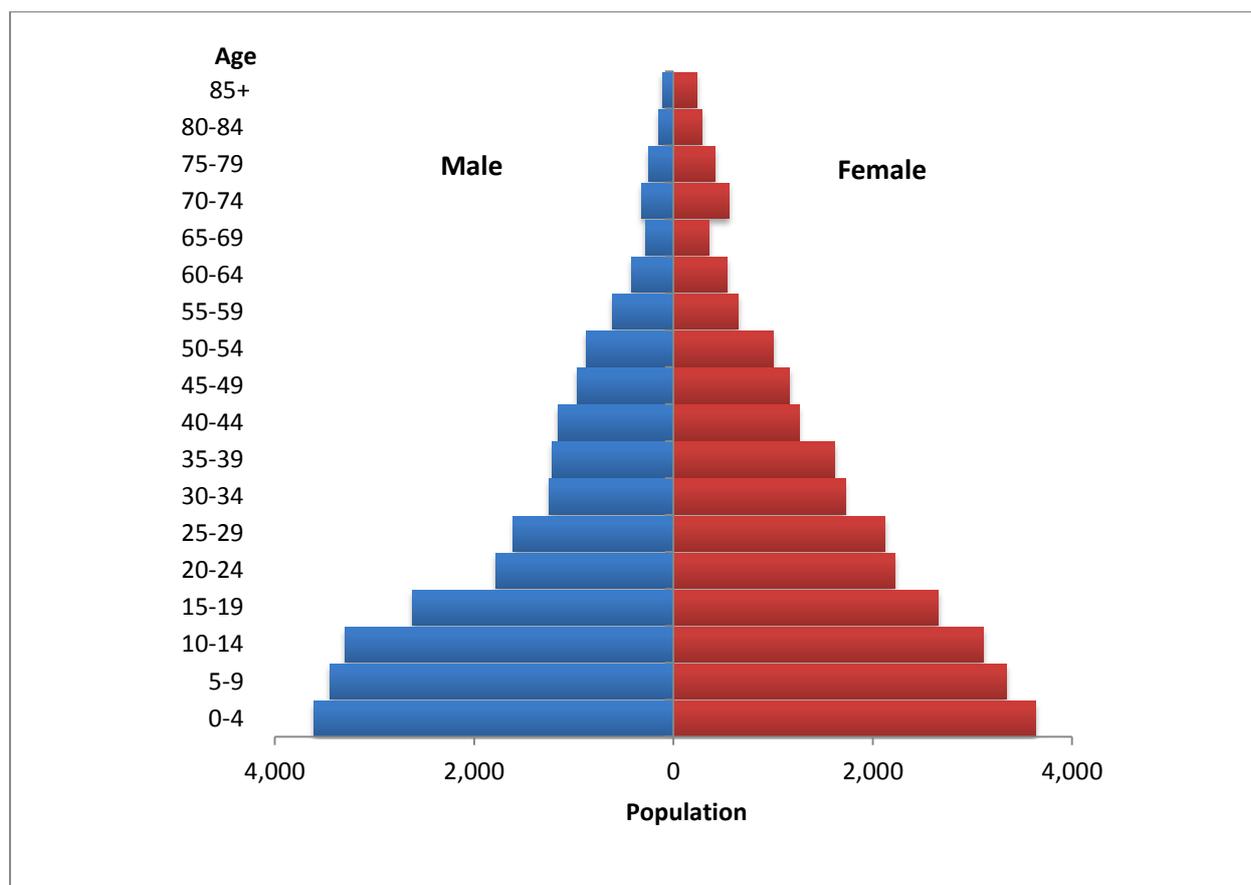
Age Group	Both			Sex ratio	Urban	Rural
	Sexes	Male	Female			
All Ages	50,871	23,970	26,901	89.1	32,462	18,409
0 - 4	7,246	3,610	3,636	99.3	4,300	2,946
5 - 9	6,786	3,443	3,343	103	4,266	2,520
10 - 14	6,400	3,293	3,107	106	4,382	2,018
15 - 19	5,275	2,621	2,654	98.8	3,802	1,473
20 - 24	4,011	1,785	2,226	80.2	2,721	1,290
25 - 29	3,730	1,606	2,124	75.6	2,343	1,387
30 - 34	2,969	1,245	1,724	72.2	1,805	1,164
35 - 39	2,832	1,213	1,619	74.9	1,686	1,146
40 - 44	2,420	1,160	1,260	92.1	1,460	960
45 - 49	2,135	969	1,166	83.1	1,280	855
50 - 54	1,877	876	1,001	87.5	1,156	721
55 - 59	1,265	613	652	94	798	467
60 - 64	960	422	538	78.4	580	380
65 - 69	634	279	355	78.6	374	260
70 - 74	879	322	557	57.8	520	359
75 - 79	671	252	419	60.1	454	217
80 - 84	437	149	288	51.7	305	132
85 - 89	181	66	115	57.4	121	60
90 - 94	125	35	90	38.9	85	40
95 - 99	38	11	27	40.7	24	14
All Ages	50,871	23,970	26,901	89.1	32,462	18,409
0-14	20,432	10,346	10,086	102.6	12,948	7,484
15-64	27,474	12,510	14,964	83.6	17,631	9,843
65+	2,965	1,114	1,851	60.2	1,883	1,082
<b>Age-dependency ratio</b>	<b>85.16</b>	<b>91.61</b>	<b>79.77</b>		<b>84.12</b>	<b>87.03</b>

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 2.3 Age–sex structure

The population pyramid for the Bolgatanga Municipality has a typical broad-base and a relatively narrow apex. The broad-base of the pyramid indicates that the population of the Municipality has a built in potential for growth. The rough edges of the pyramid indicate variations in the age groups. The pyramid shows an abrupt decline, more pronounced for males from age group 20-24 years. Male out migration from age 20 could be accounting for this trend. The tapering of the pyramid into a conical shape show the force of mortality as the population ages.

**Figure 2.1: Population pyramid**



Source: Ghana Statistical Service, 2010 Population and Housing Census

## 2.4 Fertility, Mortality and Migration

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

### 2.4.1 Fertility

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

## Crude Birth Rate

The crude birth rate (CBR) is the number of births per 1,000 population in a given year 'crude' because it relates to the entire population rather than the section of the population capable of giving birth). The crude birth rate for the district is 28.0births per 1,000 populations. This means that are 24 births for every 1,000 population in the district per year. This is slightly higher than the regional average of 26.3.

## General Fertility Rate

The general fertility rate is the number of births per 1,000 women aged 15-49 years in a given year. It differs from CBR in that the denominator relates to women in the reproductive age groups and not the total population. The General Fertility rate for the district is 111.5, meaning that in the district, about 112 children are born in a year to every 1,000 women in the age group 15-49. This rate is lower than the regional GFR of 105.9.

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

District	Population	Number of women 15-49 years	Number of births in last 12 months	Total Fertility Rate	*General Fertility Rate	**Crude Birth Rate
All Districts	2,310,983	572,813	60,685	3.6	105.9	26.3
Asunafo South	95,580	22,115	2,706	4.0	122.4	28.3
Asunafo North Municipal	124,685	30,007	3,452	3.9	115.0	27.7
Asutifi North	52,259	12,681	1,606	4.3	126.6	30.7
Dormaa Municipal	112,111	29,337	2,816	3.3	96.0	25.1
<b>Dormaa East</b>	<b>50,871</b>	<b>12,773</b>	<b>1,424</b>	<b>3.7</b>	<b>111.5</b>	<b>28.0</b>
Tano South	78,129	18,766	2,257	4.0	120.3	28.9
Tano North	79,973	19,493	2,063	3.6	105.8	25.8
Sunyani Municipal	123,224	36,146	2,644	2.6	73.1	21.5
Sunyani West	85,272	22,452	2,150	3.2	95.8	25.2
Berekum Municipal	129,628	36,119	3,001	2.8	83.1	23.2
Jaman South	92,649	23,759	2,314	3.3	97.4	25.0
Jaman North	83,059	20,640	1,747	3.0	84.6	21.0
Tain	88,104	20,692	2,139	3.5	103.4	24.3
Wenchi Municipal	89,739	22,028	2,188	3.4	99.3	24.4
Techiman Municipal	147,788	39,718	4,079	3.5	102.7	27.6
Nkoranza South	100,929	24,772	3,000	4.0	121.1	29.7
Nkoranza North	65,895	14,779	1,915	4.4	129.6	29.1
Atebubu Amantin	105,938	24,760	2,940	4.0	118.7	27.8
Sene West	57,734	13,378	1,446	3.7	108.1	25.0
Pru	129,248	30,261	2,981	3.4	98.5	23.1
Kintampo South	81,000	17,893	2,367	4.5	132.3	29.2
Kintampo North Municipal	95,480	23,040	2,652	3.9	115.1	27.8
Asutifi South	53,584	12,657	1,360	3.6	107.5	25.4
Dormaa West	47,678	11,282	1,487	4.5	131.8	31.2
Techiman North	59,068	15,421	1,619	3.5	105.0	27.4
Banda	20,282	4,402	474	3.7	107.7	23.4
Sene East	61,076	13,442	1,858	4.6	138.2	30.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

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

## Total Fertility Rate

The total fertility rate (TFR) which is widely used is the average number of live births per 1,000 women in the childbearing age (15–49 years). In other words, it is the average number of children a woman would give birth to by the end of her reproductive years if current fertility rates prevailed (IUSSP, 1982). The TFR for the Municipality is 3.7 births per woman. It implies that on the average every woman in the reproductive age would have between three and four children by the end of their reproductive years if current fertility rates prevailed.

## 2.3 Mortality

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

**Table 2.3: Total population, deaths in households and crude death rate by district**

District	Total Population	Deaths in households	*Crude death rate
All Districts	2,310,983	14,189	6.1
Asunafo South	95,580	472	4.9
Asunafo North Municipal	124,685	626	5.0
Asutifi North	52,259	458	8.8
Dormaa Municipal	112,111	782	7.0
<b>Dormaa East</b>	<b>50,871</b>	<b>399</b>	<b>7.8</b>
Tano South	78,129	542	6.9
Tano North	79,973	475	5.9
Sunyani Municipal	123,224	455	3.7
Sunyani West	85,272	462	5.4
Berekum Municipal	129,628	858	6.6
Jaman South	92,649	514	5.5
Jaman North	83,059	627	7.5
Tain	88,104	566	6.4
Wenchi Municipal	89,739	704	7.8
Techiman Municipal	147,788	854	5.8
Nkoranza South	100,929	703	7.0
Nkoranza North	65,895	637	9.7
Atebubu Amantin	105,938	625	5.9
Sene West	57,734	344	6.0
Pru	129,248	351	2.7
Kintampo South	81,000	671	8.3
Kintampo North Municipal	95,480	673	7.0
Asutifi South	53,584	227	4.2
Dormaa West	47,678	275	5.8
Techiman North	59,068	427	7.2
Banda	20,282	191	9.4
Sene East	61,076	271	4.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

Note: \* Number of deaths per 1,000population

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

### Crude Death Rate

The Crude death rate (CDR) refers to the number of deaths per 1000 population in a given year. It is termed crude because although death occurs in the active population, the rate of occurrence is not uniform or evenly distributed among all the ages. . From Table 2.4, a total of 399 deaths were recorded in the 12 months preceding the Census Night, yielding a crude death rate of about eight deaths (7.8) in every 1,000 population. This shows that the mortality experience in the district is relatively higher than the average of the region.

### Household death

Table 2.4 presents the cause of death by district in the Brong Ahafo Region. Out of a total of 399 deaths recorded in the Dormaa East, 8.8 percent are due to accident or violence or homicide or suicide whiles 91.2 percent are due to all other causes such as natural deaths.

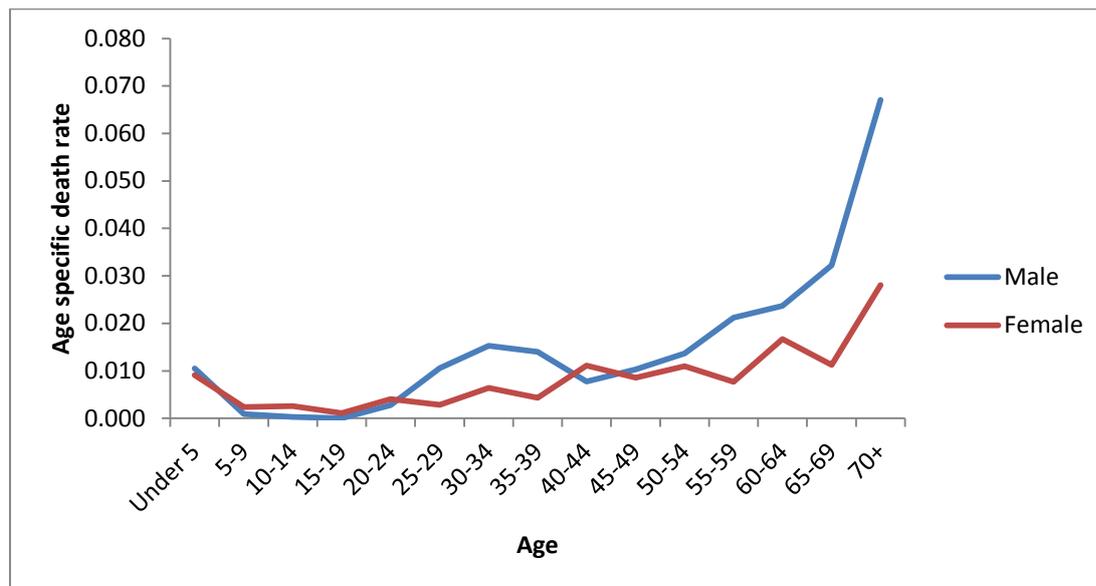
**Table 2.4: Cause of death by district**

District	Total household deaths	Death due to			
		Accident /violence / homicide/suicide		All other causes	
		Number	Percent	Number	Percent
Total	14,189	1,235	8.7	12,954	91.3
Asunafo South	472	39	8.3	433	91.7
Asunafo North Municipal	626	65	10.4	561	89.6
Asutifi North	460	31	6.7	429	93.3
Dormaa Municipal	782	71	9.1	711	90.9
<b>Dormaa East</b>	<b>399</b>	<b>35</b>	<b>8.8</b>	<b>364</b>	<b>91.2</b>
Tano South	542	47	8.7	495	91.3
Tano North	475	33	6.9	442	93.1
Sunyani Municipal	455	36	7.9	419	92.1
Sunyani West	462	70	15.2	392	84.8
Berekum Municipal	858	79	9.2	779	90.8
Jaman South	514	55	10.7	459	89.3
Jaman North	627	39	6.2	588	93.8
Tain	566	31	5.5	535	94.5
Wenchi Municipal	704	52	7.4	652	92.6
Techiman Municipal	854	103	12.1	751	87.9
Nkoranza South	703	81	11.5	622	88.5
Nkoranza North	637	30	4.7	607	95.3
Atebubu Amantin	625	62	9.9	563	90.1
Sene West	344	34	9.9	310	90.1
Pru	351	22	6.3	329	93.7
Kintampo South	671	50	7.5	621	92.5
Kintampo North Municipal	673	55	8.2	618	91.8
Asutifi South	225	21	9.3	204	90.7
Dormaa West	275	26	9.5	249	90.5
Techiman North	427	35	8.2	392	91.8
Banda	191	11	5.8	180	94.2
Sene East	271	22	8.1	249	91.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

The age specific death rate (ASDR) is the number of deaths per year per 1,000 population of a given age group by sex. Mortality varies considerably by age and sex. Figure 2.2 shows the age specific death rates by sex in the Dormaa East District. The graph shows the expected “U” pattern with the lowest mortality rates occurring in the 10-19 year age group. Mortality is high in the first year of life, especially among males then falls sharply and reaches its minimum at age 10 to 19. Thereafter, it rises steadily with advancing age, however it is higher among the male population. The rise in mortality among the female population is slow.

**Figure 2.2: Age specific death rates**



Source: Ghana Statistical Service, 2010 Population and Housing Census

### 2.4.1 Migration

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

Table 2.5 shows birth place of migrants in the district and how long they have lived in the district. Out of a total of 11,361 migrants in the Dormaa East District, 6,892 persons representing 60.7 percent were born elsewhere (in other localities) in the region, 36 percent are born in other regions of the country, and 3.3 percent (373) are born outside Ghana. About one out of every eight (1,420) of the migrants in the district are born in the Upper East Region, six percent (680) are from the Upper West Region, while 5.4 percent are born in the Ashanti Region.

**Table 2.5: Birth place by duration of residence of migrants**

Birthplace	Number	Duration of residence (%)				
		Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years
Total	11,361	12.2	32.3	18.2	17.1	17.0
Born elsewhere in the region	6,892	12.6	34.0	19.2	16.7	17.5
Born elsewhere in another region:						
Western	313	15.7	46.3	14.4	16.3	7.3
Central	115	9.6	42.6	10.4	11.3	26.1
Greater Accra	130	11.5	33.1	19.2	9.2	26.9
Volta	92	13.0	30.4	23.9	18.5	14.1
Eastern	267	15.0	31.1	11.2	12.4	30.3
Ashanti	617	13.0	33.2	15.9	14.3	23.7
BrongAhafo	-	-	-	-	-	-
Northern	462	12.1	26.2	18.6	19.5	23.6
Upper East	1,420	11.1	29.9	17.8	26.6	14.6
Upper west	680	14.7	32.5	24.7	16.3	11.8
Outside Ghana	373	11.0	44.5	17.7	11.3	15.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

## CHAPTER THREE

### SOCIAL CHARACTERISTICS

#### 3.1 Introduction

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

#### 3.2 Household Size, Composition and Headship

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

##### 3.2.1 Household size

The household is the basic unit for demographic and economic analyses. Household size refers to the total number of persons in a household irrespective of age, sex, or relationship status. Table 3.1 presents the household size of the district by locality of residence. There are 11,722 households in the district of which about 63.5 percent (7,446) reside in urban areas with the rest in rural settlements. The district has an average household size of four persons with same persons in the rural households (4.2) areas than the urban households (4.3).

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

Categories	Region	District	Urban		Rural	
			Number	Percent	Number	Percent
Total household population	2,265,458	50,137	31,972	63.8	18,165	36.2
Number of households	490,515	11,722	7,446	63.5	4,276	36.5
Average household size	4.6	4.3	4.3		4.2	

Source: Ghana Statistical Service, 2010 population and housing census

##### 3.2.2 Household Composition

Household composition and structure in Ghana has a common feature in that the household heads are predominantly male. Table 3.2 shows the composition of the household population by sex of the household members. The data show that there are 50,137 persons living in households in the district. Household heads constitute 23.4 percent of this population, with more male household heads (29.4%) than female household heads (18.0%). Spouse constitutes 9.4 percent whereas biological children constitute 40.5 percent. There are more male children (42.7%) than female children (38.4%) in the households. Grandchildren (13.0%) and other relatives (5.7%) also constitute a significant percentage of the household

members in the district with slightly more male than female grandchildren and more females than male relatives of the household head. Adopted or foster children and step children living with households is not a widespread phenomenon in the district. The extended family system may also explain the low formal adoption rate.

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

Household composition	District		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	50,137	100.0	23,596	100.0	26,541	100.0
Head	11,722	23.4	6,944	29.4	4,778	18.0
Spouse (wife/husband)	4,737	9.4	196	0.8	4,541	17.1
Child (son/daughter)	20,284	40.5	10,080	42.7	10,204	38.4
Parent/Parent in-law	465	0.9	42	0.2	423	1.6
Son/Daughter in-law	290	0.6	100	0.4	190	0.7
Grandchild	6,519	13.0	3,193	13.5	3,326	12.5
Brother/Sister	1,700	3.4	890	3.8	810	3.1
Step child	350	0.7	185	0.8	165	0.6
Adopted/Foster child	191	0.4	96	0.4	95	0.4
Other relative	2,880	5.7	1,316	5.6	1,564	5.9
Non-relative	999	2.0	554	2.3	445	1.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.2.1 Household structure

Table 3.3 shows the household population by the household structure and the sex of its members. The two types of family ties that inform household formation are the nuclear and the extended family systems. The nuclear family consists of the father, mother and children (foster, adopted and biological). The structure of households in the district is dominated by the extended family system where nearly two-thirds (58.4%) of household members live in an extended family. The extended family comprising the head, spouse, children and heads' relatives account for about one-fifth (19.0%) of the household population.

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

Household structure	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	50,137	100.0	23,596	100.0	26,541	100.0
<b>Nuclear Family</b>						
Head only	2,092	4.2	1,477	6.3	615	2.3
Head and a spouse only	932	1.9	467	2.0	465	1.8
Nuclear (Head, spouse(s) and children)	11,939	23.8	6,192	26.2	5,747	21.7
Single parent Nuclear	5,911	11.8	2,444	10.4	3,467	13.1
<b>Extended Family</b>						
Extended (Head, spouse(s), children and Head's relatives)	9,529	19.0	4,624	19.6	4,905	18.5
Extended + non relatives	1,009	2.0	513	2.2	496	1.9
Head, spouse(s) and other composition	1,935	3.9	971	4.1	964	3.6
Single parent Extended	11,228	22.4	4,360	18.5	6,868	25.9
Single parent Extended + non relative	1,081	2.2	438	1.9	643	2.4
Head and other composition but no spouse	4,481	8.9	2,110	8.9	2,371	8.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

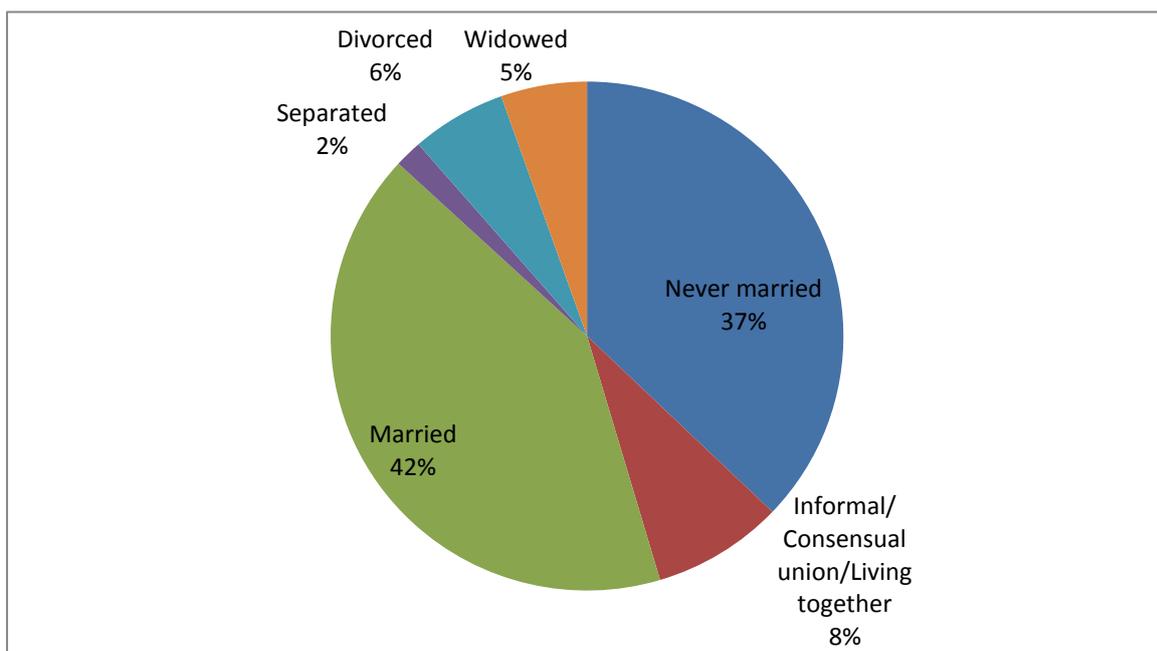
The data reveals a rather alarming situation where more than one-third (34.2%) of the household population reside either in single parent extended (22.4%) or single parent nuclear household (11.8%). Slightly less than a quarter (23.8%) of the household population reside in nuclear families. This is an indication of the dominance of the extended family system arrangement in the district which reflects the communal system of the people. It also reflects the extent of fostering in the living arrangements of households. The above classification demonstrates the strength and extent of the extended family relations at the same time pointing at the emerging single parent household type in the municipality.

### 3.3 Marital status

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

Figure 3.1 and the data in Table 3.4 present the marital status by sex and age group of persons 12 years and older residing in the Dormaa East District. Figure 3.1 shows that in the district as a whole, 43.6 percent of the population (aged 12 years or older) have never been married compared to 55 percent who have ever been married (married, widowed, divorced, and separated). Whiles about 42 percent of the population 12 years and older are currently married, about six percent are either divorced or separated. The data further reveals that the population in consensual union or living together as if married is not a phenomenon that is very common in the district, as one out of every 13 persons (8%) 12 years or older are in this type of union.

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



Source: Ghana Statistical Service, 2010 Population And Housing Census

## Marital status by sex and age

The data in Table 3.4 show that the proportion of the population 12 years and older who have never been married is at its peak of 96.8 percent for age group 12-14 years. The proportion declines with increasing age. A small proportion of the population remains unmarried after 45 years in the district.

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

Sex/Age-group	Total		Never married	Informal/ Consensual union/Living together	Married	Separated	Divorced	Widowed
	Number	Percent						
<b>Both Sexes</b>								
Total	34,023	100.0	37.1	8.3	41.5	1.7	6.0	5.4
12 - 14	3,584	100.0	96.8	0.6	2.6	0.0	0.0	0.0
15 - 19	5,275	100.0	90	4.7	4.5	0.3	0.2	0.2
20 - 24	4,011	100.0	59.7	16.3	21.0	1.4	1.4	0.1
25 - 29	3,730	100.0	31.3	18.4	45.2	2.1	2.3	0.7
30 - 34	2,969	100.0	13.2	13.7	64.3	2.5	5.5	0.8
35 - 39	2,832	100.0	7.3	11.5	69.4	2.7	7.3	1.7
40 - 44	2,420	100.0	3.6	7.3	72.6	2.6	10.3	3.7
45 - 49	2,135	100.0	2.2	5.2	74.3	2.8	10.6	5.0
50 - 54	1,877	100.0	1.6	3.9	71.0	2.3	14.4	6.8
55 - 59	1,265	100.0	1.3	2.9	67.4	3.4	15.0	9.9
60 - 64	960	100.0	0.7	3.3	61.6	1.9	15.9	16.6
65+	2,965	100.0	2.2	1.3	42.0	2.2	14.2	38.0
<b>Male</b>								
Total	15,506	100.0	46.5	7.1	40.6	1.1	3.6	1.1
12 - 14	1,882	100.0	97.4	0.3	2.3	0.0	0.0	0.0
15 - 19	2,621	100.0	96.3	1.0	2.6	0.0	0.1	0.0
20 - 24	1,785	100.0	81.8	9.1	8.0	0.4	0.6	0.0
25 - 29	1,606	100.0	48.7	17.6	30.7	1.1	1.5	0.4
30 - 34	1,245	100.0	23.5	16.0	56.2	1.2	3.1	0.1
35 - 39	1,213	100.0	11.4	13.2	68.2	1.6	5.2	0.5
40 - 44	1,160	100.0	5.6	8.4	76.1	2.6	6.1	1.1
45 - 49	969	100.0	3.4	5.3	81.3	2.1	6.7	1.2
50 - 54	876	100.0	2.9	5.3	79.3	1.7	9.5	1.4
55 - 59	613	100.0	2.3	4.2	81.7	3.1	7.3	1.3
60 - 64	422	100.0	1.4	5.2	77.3	1.7	10.7	3.8
65+	1,114	100.0	3.3	1.6	74.9	2.3	9.6	8.3
<b>Female</b>								
Total	18,517	100.0	29.3	9.3	42.1	2.2	8.0	9.1
12 - 14	1,702	100.0	96.2	0.9	2.8	0.0	0.0	0.0
15 - 19	2,654	100.0	83.9	8.4	6.4	0.6	0.3	0.3
20 - 24	2,226	100.0	42	22.0	31.5	2.2	2.1	0.3
25 - 29	2,124	100.0	18.1	19.0	56.2	2.8	2.9	1.0
30 - 34	1,724	100.0	5.7	12.1	70.1	3.4	7.3	1.3
35 - 39	1,619	100.0	4.3	10.3	70.4	3.5	8.9	2.7
40 - 44	1,260	100.0	1.7	6.2	69.4	2.5	14.2	6.0
45 - 49	1,166	100.0	1.1	5.1	68.4	3.3	13.8	8.1
50 - 54	1,001	100.0	0.5	2.7	63.6	2.8	18.8	11.6
55 - 59	652	100.0	0.5	1.7	54.0	3.7	22.2	17.9
60 - 64	538	100.0	0.2	1.9	49.3	2.0	20.1	26.6
65+	1,851	100.0	1.6	1.1	22.3	2.2	17.0	55.9

Contrary to the pattern observed for the never married population, the percentages of the married increases with increasing age from 2.6 percent for the youngest age group 12-14 years to the peak of 74.3 percent at age group 45-49 years. After the peak, the trend reverses to decreasing percentages.

The trend for the never married males is similar to that of the never married females except that not only is the proportion of never married males (46.5%) much higher than that of females (29.3%) and that from age group 15-19 years, the proportion in each age group is substantially higher for males than for the corresponding age group for females and also the rate of decrease is faster for females than for males.

While the proportions of married males and females increase with increasing age, the proportion of married females at each age group is substantially higher than that for the corresponding age group for males, and at a higher tempo till age group 35-39 years where the females reach a peak (70.4%). The trend changes to higher male percentage married than females at each age group till 65 years and older but at a much slower tempo.

### **3.3.2 Marital status and level of education.**

Table 3.5 reveals that the proportion of the never married decreases from basic education level with increasing educational level. While 5.8 percent of the never married population have no formal education, 71.4percent have attained basic school education level, about one out of five (19.1%) have secondary school level education, 2.1 percent have post-secondary education, and one out of every 200 persons have tertiary education.

A higher percentage of never married males (6.5%) than females (4.9%) have no formal education while 70.0 percent of males and 73.2 percent of females have attained basic school education level. A slightly higher proportion of never married males (19.3%) than females (18.9%) attained secondary education level. A much higher proportion of married females (32.8%) than married males (24.4%) have no formal education while about the same proportion of married males and married female have attained basic education level. Table 3.5 further reveals a much reduced proportion of married females (4.3%) than married males (7.3%) who have attained secondary school. The sex differentials became wider with a much higher proportion of married males than married females who have higher (beyond secondary level education).

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

Sex/Marital status	Number	All levels	No Education	Basic <sup>1</sup>	Secondary <sup>2</sup>	Vocational/ Technical/ Commercial	Post middle/ secondary certificate/ diploma <sup>3</sup>	Tertiary <sup>4</sup>
<b>Both Sexes</b>								
Total	34,023	100	22.0	63.2	10.8	1.1	2.4	0.5
Never married	12,635	100	5.8	71.4	19.1	1.0	2.1	0.6
Informal/Consensual union/Living together	2,811	100	13.6	70.9	11.9	1.4	2.1	0.1
Married	14,103	100	29.1	60.3	5.7	1.2	3.1	0.7
Separated	590	100	31.0	60.0	4.6	1.0	2.7	0.7
Divorced	2,036	100	37.7	55.9	3.8	0.9	1.5	0.2
Widowed	1,848	100	70.8	27.1	0.9	0.3	0.9	0.1
<b>Male</b>								
Total	15,506	100	15.7	65.3	13.3	1.2	3.7	0.9
Never married	7,209	100	6.5	70.0	19.3	1.1	2.3	0.8
Informal/Consensual union/Living together	1,097	100	11.2	68.6	14.3	1.5	4.1	0.3
Married	6,303	100	24.4	60.4	7.3	1.3	5.3	1.2
Separated	176	100	33.5	55.1	5.1	1.1	3.4	1.7
Divorced	554	100	28.2	62.5	6.1	1.1	1.8	0.4
Widowed	167	100	48.5	44.9	1.8	0.0	3.6	1.2
<b>Female</b>								
Total	18,517	100	27.3	61.4	8.7	1.0	1.4	0.2
Never married	5,426	100	4.9	73.2	18.9	0.9	1.9	0.3
Informal/Consensual union/Living together	1,714	100	15.1	72.4	10.3	1.3	0.9	0.0
Married	7,800	100	32.8	60.1	4.3	1.1	1.3	0.3
Separated	414	100	30.0	62.1	4.3	1.0	2.4	0.2
Divorced	1,482	100	41.2	53.4	2.9	0.9	1.3	0.2
Widowed	1,681	100	73.1	25.3	0.8	0.3	0.6	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.3.3 Marital Status and Economic Activity Status

Table 3.6 presents the marital status of the population 12 years and older by their economic activity. More than one-third (34.4%) of the population 12 years and older who have never been married are employed compared to 90.6 percent of their married counterparts and 60.5 percent of the widowed population. Contrarily, 62.0 percent of those who have never been married compared to the married (8.0%) are economically not active. Similar patterns are observed among the male and female populations. Among the never married category, more males than females are employed and of those married, more males than females are employed. Also, the proportion of females (9.0%) who are married and are economically not active is higher than their male counterparts (6.7%). Unemployment is highest among the population in informal or consensual union (6.8%) and is least among the widowed.

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

Sex/Marital status	Total		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both Sexes</b>								
Total	34,023	100.0	22,708	66.7	865	2.5	10,450	30.7
Never married	12,635	100.0	4,343	34.4	457	3.6	7,835	62
Informal/Consensual union/Living together	2,811	100.0	2,280	81.1	139	4.9	392	13.9
Married	14,103	100.0	12,774	90.6	206	1.5	1,123	8.0
Separated	590	100.0	489	82.9	20	3.4	81	13.7
Divorced	2,036	100.0	1,686	82.8	28	1.4	322	15.8
Widowed	1,848	100.0	1,136	61.5	15	0.8	697	37.7
<b>Male</b>								
Total	15,506	100.0	10,331	66.6	385	2.5	4,790	30.9
Never married	7,209	100.0	2,773	38.5	285	4.0	4,151	57.6
Informal/Consensual union/Living together	1,097	100.0	1,004	91.5	27	2.5	66	6.0
Married	6,303	100.0	5,810	92.2	69	1.1	424	6.7
Separated	176	100.0	160	90.9	1	0.6	15	8.5
Divorced	554	100.0	471	85.0	1	0.2	82	14.8
Widowed	167	100.0	113	67.7	2	1.2	52	31.1
<b>Female</b>								
Total	18,517	100.0	12,377	66.8	480	2.6	5,660	30.6
Never married	5,426	100.0	1,570	28.9	172	3.2	3,684	67.9
Informal/Consensual union/Living together	1,714	100.0	1,276	74.4	112	6.5	326	19
Married	7,800	100.0	6,964	89.3	137	1.8	699	9.0
Separated	414	100.0	329	79.5	19	4.6	66	15.9
Divorced	1,482	100.0	1,215	82	27	1.8	240	16.2
Widowed	1,681	100	1,023	60.9	13	0.8	645	38.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.4 Nationality

Table 3.4 summarizes the composition of population by nationality. About 98 percent of the population in the district is Ghanaians as against approximately two (2) percent non-Ghanaians. (ECOWAS, Africa other than ECOWAS and those classified as other). There are slightly more male ECOWAS nationals than females in the district.

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

Nationality	Both sexes		Male		Female	
	Number		Number	Percent	Number	Percent
Total	50,871		23,970	100.0	26,901	100.0
Ghanaian by birth	48,623		22,865	95.4	25,758	95.8
Dual Nationality	868		403	1.7	465	1.7
Ghanaian by naturalization	310		146	0.6	164	0.6
ECOWAS	576		322	1.3	254	0.9
Africa other than ECOWAS	258		115	0.5	143	0.5
Other	236		119	0.5	117	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.5 Religious Affiliation

Table 3.8 presents the religious affiliation of the population in the Dormaa East District. Christianity is the dominant religion with 85.4 percent following, followed by Islam (7.1%). About seven out of every 100 persons (6.6%) in the district have no religious affiliation. Within the Christian religion, the Pentecostal or Charismatic are in the majority (32.7%), followed by then the Protestants (22.3%) and Catholics (18.8%). Table 3.8 further indicate that there are females (88.9%) Christians than male (81.5%) Christians. Males on the other hand dominate the Traditional religion and Islam.

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

Religion	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	50,871	100.0	23,970	100.0	26,901	100.0
No Religion	3,359	6.6	2,257	9.4	1,102	4.1
Catholic	9,569	18.8	4,395	18.3	5,174	19.2
Protestant (Anglican Lutheran etc.)	11,367	22.3	5,085	21.2	6,282	23.4
Pentecostal/Charismatic	16,611	32.7	7,349	30.7	9,262	34.4
Other Christians	5,907	11.6	2,718	11.3	3,189	11.9
Islam	3,627	7.1	1,945	8.1	1,682	6.3
Traditionalist	243	0.5	140	0.6	103	0.4
Other (Specify)	188	0.4	81	0.3	107	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.6 Literacy and Education

Literacy is defined as the ability to read and write in any language and relates to those aged 11 years and older. Table 3.9 present the literacy status of the population 11 years and older in the Dormaa East District. Persons who are literate in English and Ghanaian language constitutes the highest proportion of 67.9 percent while those that are literate in English only is 16.8 percent which is closely followed by Ghanaian language only 14.5 percent. Persons who are literate in English and French and also English, French and Ghanaian language accounts for percentages that are less than one percent (0.2% and 0.6%) respectively.

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

Age group literacy status	Population 11 years and older by sex, age and literacy status								
	None (not literate)	Literate	Total	English only	Ghanaian language only	English and Ghanaian language	English and French	English, French and Ghanaian language	Other
<b>Both sexes</b>									
<b>Total</b>	7,507	27,713	100.0	16.8	14.5	67.9	0.2	0.6	0.0
11-14	119	4,662	100.0	28.0	10.9	60.0	0.1	1.0	0.0
15-19	256	5,019	100.0	18.3	7.2	73.5	0.1	0.9	0.0
20-24	380	3,631	100.0	15.4	9.4	74.6	0.1	0.4	0.0
25-29	585	3,145	100.0	15.7	16.3	67.1	0.3	0.6	0.0
30-34	601	2,368	100.0	14.6	20.1	64.7	0.2	0.4	0.0
35-39	672	2,160	100.0	14.2	23.7	61.5	0.2	0.4	0.0
40-44	681	1,739	100.0	11.7	20.7	66.9	0.2	0.5	0.0
45-49	641	1,494	100.0	12.4	21.3	66.0	0.1	0.3	0.0
50-54	593	1,284	100.0	10.2	17.4	72.0	0.2	0.2	0.0
55-59	363	902	100.0	8.9	16.2	73.6	0.2	1.1	0.0
60-64	468	492	100.0	10.6	19.3	69.1	0.2	0.8	0.0
65+	2,148	817	100.0	9.5	19.7	69.6	0.2	0.9	0.0
<b>Male</b>									
<b>Total</b>	2,446	13,659	100.0	15.2	11.4	72.3	0.2	0.8	0.0
11-14	66	2,415	100.0	27.2	9.8	61.4	0.1	1.4	0.0
15-19	114	2,507	100.0	17.5	6.3	75.1	0.1	1.0	0.0
20-24	126	1,659	100.0	12.5	5.8	81.0	0.2	0.5	0.0
25-29	196	1,410	100.0	13.0	12.2	73.3	0.4	1.0	0.0
30-34	205	1,040	100.0	12.7	16.3	70.3	0.1	0.6	0.0
35-39	234	979	100.0	12.0	20.0	67.1	0.4	0.5	0.0
40-44	250	910	100.0	9.9	17.4	72.0	0.2	0.5	0.0
45-49	235	734	100.0	11.7	15.0	72.8	0.1	0.4	0.0
50-54	199	677	100.0	7.4	13.0	79.0	0.3	0.3	0.0
55-59	124	489	100.0	7.8	9.0	81.4	0.4	1.4	0.0
60-64	113	309	100.0	10.0	13.9	74.4	0.3	1.3	0.0
65+	584	530	100.0	8.1	16.0	74.7	0.4	0.8	0.0
<b>Female</b>									
<b>Total</b>	5,061	14,054	100.0	18.4	17.5	63.6	0.1	0.4	0.0
11-14	53	2,247	100.0	28.8	12.1	58.4	0.1	0.5	0.0
15-19	142	2,512	100.0	19.1	8.1	71.9	0.1	0.8	0.0
20-24	254	1,972	100.0	17.9	12.5	69.3	0.0	0.4	0.0
25-29	389	1,735	100.0	17.9	19.7	62.0	0.1	0.3	0.0
30-34	396	1,328	100.0	16.1	23.1	60.2	0.3	0.2	0.0
35-39	438	1,181	100.0	16.1	26.7	56.9	0.1	0.3	0.0
40-44	431	829	100.0	13.6	24.4	61.4	0.1	0.5	0.0
45-49	406	760	100.0	13.0	27.4	59.5	0.0	0.1	0.0
50-54	394	607	100.0	13.3	22.4	64.3	0.0	0.0	0.0
55-59	239	413	100.0	10.2	24.7	64.4	0.0	0.7	0.0
60-64	355	183	100.0	11.5	28.4	60.1	0.0	0.0	0.0
65+	1,564	287	100.0	12.2	26.5	60.3	0.0	1.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

As indicated in Table 3.10, female population who are literate accounts for high 50.7 percent, while male literate is 49.3 percent. From the table it has been shown that female non-literate represents a high 67.4 percent and male non-literate 32.6 percent.

**Table 3.10: Population 11 years and older by sex, age and literacy status**

Age group	Total	Literate		Total	Non-literate	
		Male	Female		Male	Female
Total	27,713	49.3	50.7	7,507	32.6	67.4
11-14	4,662	51.8	48.2	119	55.5	44.5
15-19	5,019	50.0	50.0	256	44.5	55.5
20-24	3,631	45.7	54.3	380	33.2	66.8
25-29	3,145	44.8	55.2	585	33.5	66.5
30-34	2,368	43.9	56.1	601	34.1	65.9
35-39	2,160	45.3	54.7	672	34.8	65.2
40-44	1,739	52.3	47.7	681	36.7	63.3
45-49	1,494	49.1	50.9	641	36.7	63.3
50-54	1,284	52.7	47.3	593	33.6	66.4
55-59	902	54.2	45.8	363	34.2	65.8
60-64	492	62.8	37.2	468	24.1	75.9
65+	817	64.9	35.1	2,148	27.2	72.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.6.1 Population 3 years and older by level of education, school attendance and sex

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

Table 3.11 presents the level of education and school attendance of males and females three years and older in the municipality. The total population currently in school is 19,488 comprising 10,142 (52.0%) males and 9,346 (48.0%) females. Males exceed females for both population currently in school and those who attended school in the past. Among the population currently in school, nearly half (48.8%) are in primary school with slightly more females (49.2%) than males (48.5%). About a one-fifth (19.4%) are in JHS and 9.5 percent are in SHS, with only four out of every 100 (4.1%) in a tertiary institutions. There are slightly more females than males in vocational or technical or commercial and post-secondary schools in the municipality. Generally, the number attending school considerably decreases with progression to higher educational levels.

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

**Table 3.11: 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	19,488	100.0	10,142	100.0	9,346	100.0	18,454	100.0	8,696	100.0	9,758	100.0
Nursery	1,981	10.2	1,025	10.1	956	10.2	-	-	-	-	-	-
Kindergarten	2,650	13.6	1,337	13.2	1,313	14.0	-	-	-	-	-	-
Primary	9,518	48.8	4,918	48.5	4,600	49.2	3,589	19.4	1,368	15.7	2,221	22.8
JSS/JHS	3,381	17.3	1,755	17.3	1,626	17.4	6,096	33.0	2,486	28.6	3,610	37.0
Middle	-	-	-	-	-	-	5,681	30.8	2,996	34.5	2,685	27.5
SSS/SHS	1,632	8.4	884	8.7	748	8.0	1,603	8.7	860	9.9	743	7.6
Secondary	-	-	-	-	-	-	433	2.3	312	3.6	121	1.2
Vocational/Technical/ Commercial	68	0.3	43	0.4	25	0.3	298	1.6	143	1.6	155	1.6
Post middle/secondary certificate	61	0.3	35	0.3	26	0.3	354	1.9	231	2.7	123	1.3
Tertiary	197	1.0	145	1.4	52	0.6	400	2.2	300	3.4	100	1.0

Source: Ghana Statistical Service, 2010 population and housing census

## CHAPTER FOUR

### ECONOMIC CHARACTERISTICS

#### 4.1 Introduction

Governments all over the globe at certain stage of the development of their countries seek to know how many people are employed and unemployed. The nature, type and size of the labour force are critical factors in the production of goods and services. The information on labour force is also used to formulate employment policies, to determine training needs and to calculate the expected working lives of the male and female populations and the rates of accession to, and retirement from economic activity. This chapter discusses the type of economic activity, occupation, industry, employment status and employment sector of the population 15 years and older.

#### 4.2 Economic Activity Status

Table 4.1 presents information on the economic activity status of the population 15 years and older in the Dormaa East District. The proportion of the population that is economically active (75.6%) is three times higher than proportion of the population economically not active (24.4%). Whiles 96.2 percent of the economically active population 15 years and older are employed, 3.8 percent are unemployed.

Table 4.1 further shows that among the unemployed population, 26.7 percent have ever worked but are currently seeking work, while 73.3 percent are seeking work for the first time. The proportion of females who worked before and are seeking work is 29.4 percent whilst those seeking work for the first time is 70.6.

**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>	30,439	<b>100.0</b>	13,624	<b>100.0</b>	16,815	<b>100.0</b>
<b>Economically active</b>	<b>23,020</b>	<b>75.6</b>	<b>10,409</b>	<b>76.4</b>	<b>12,611</b>	<b>75.0</b>
<b>Employed</b>	<b>22,156</b>	96.2	<b>10,024</b>	96.3	<b>12,132</b>	96.2
<i>Worked</i>	21,693	97.9	9,896	98.7	11,797	97.2
<i>Did not work but had job to go back to</i>	379	1.7	95	0.9	284	2.3
<i>Did voluntary work without pay</i>	84	0.4	33	0.3	51	0.4
<b>Unemployed</b>	<b>864</b>	<b>3.8</b>	<b>385</b>	<b>3.7</b>	<b>479</b>	<b>3.8</b>
<i>Worked before, seeking work and available</i>	231	26.7	90	23.4	141	29.4
<i>Seeking work for the first time and available</i>	633	73.3	295	76.6	338	70.6
<b>Economically not active</b>	<b>7,419</b>	<b>24.4</b>	<b>3,215</b>	<b>23.6</b>	<b>4,204</b>	<b>25.0</b>
Did home duties (household chore)	1,470	19.8	354	11.0	1,116	26.5
Full time education	3,982	53.7	2,167	67.4	1,815	43.2
Pensioner/Retired	104	1.4	82	2.6	22	0.5
Disabled/Sick	460	6.2	208	6.5	252	6.0
Too old/young	964	13	228	7.1	736	17.5
Other	439	5.9	176	5.5	263	6.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

On the other hand, 23.4 percent of the male unemployed population had worked before but now seeking work whereas 76.6 percent are first time job seekers.

The data further reveal that those who are involved in full time education, that is, students (53.7%) constitute the majority of economically not active population. The proportion of the economically not active population who did home duties are 19.8 percent. However, the proportion of females who did home duties is higher than their male counterparts. This could be due to the social norm where females usually keep the home.

Table 4.2 shows the activity status of the employed population 15 years and older by age and sex. As can be seen from Table 4.2, the age group 25-29 recorded the highest number of the employed for both males (13.6) and females (14.3). The number of employed persons increases with age between ages 24-65 for both sexes. Age group 20-24 years recorded the highest percentage of the unemployed for both males (37.4%) and females (34.4%). Majority of the unemployed are between ages 15-35 for both males (87.8%) and females (85.8%). The majority of the economically not active population (68.2%) is also in age bracket 15-24 years. Indeed, half is in age 15-19, and more than three quarters of males and more than three fifths of females are within age 15 and 24 years. This is because many who are in full time education are in the youthful ages and are not working.

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

Age group	All Status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both sexes</b>								
Total	30,439	100.0	22,156	100.0	864	100.0	7,419	100.0
15 - 19	5,275	17.3	1,415	6.4	159	18.4	3,701	49.9
20 - 24	4,011	13.2	2,343	10.6	309	35.8	1,359	18.3
25 - 29	3,730	12.3	3,099	14	195	22.6	436	5.9
30 - 34	2,969	9.8	2,704	12.2	86	10	179	2.4
35 - 39	2,832	9.3	2,620	11.8	47	5.4	165	2.2
40 - 44	2,420	8	2,307	10.4	20	2.3	93	1.3
45 - 49	2,135	7	2,043	9.2	17	2	75	1
50 - 54	1,877	6.2	1,784	8.1	8	0.9	85	1.1
55 - 59	1,265	4.2	1,176	5.3	7	0.8	82	1.1
60 - 64	960	3.2	832	3.8	11	1.3	117	1.6
65+	2,965	9.7	1,833	8.3	5	0.6	1,127	15.2
<b>Male</b>								
Total	13,624	100.0	10,024	100.0	385	100.0	3,215	100.0
15 - 19	2,621	19.2	725	7.2	68	17.7	1,828	56.9
20 - 24	1,785	13.1	980	9.8	144	37.4	661	20.6
25 - 29	1,606	11.8	1,359	13.6	92	23.9	155	4.8
30 - 34	1,245	9.1	1,156	11.5	34	8.8	55	1.7
35 - 39	1,213	8.9	1,137	11.3	19	4.9	57	1.8
40 - 44	1,160	8.5	1,121	11.2	8	2.1	31	1
45 - 49	969	7.1	944	9.4	4	1	21	0.7
50 - 54	876	6.4	840	8.4	5	1.3	31	1
55 - 59	613	4.5	583	5.8	6	1.6	24	0.7
60 - 64	422	3.1	376	3.8	3	0.8	43	1.3
65+	1,114	8.2	803	8	2	0.5	309	9.6

**Table 4.2: Population 15 years and older by sex, age and activity status (cont'd)**

Age group	All Status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Female</b>								
Total	16,815	100.0	12,132	100.0	479	100.0	4,204	100.0
15 - 19	2,654	15.8	690	5.7	91	19.0	1,873	44.6
20 - 24	2,226	13.2	1,363	11.2	165	34.4	698	16.6
25 - 29	2,124	12.6	1,740	14.3	103	21.5	281	6.7
30 - 34	1,724	10.3	1,548	12.8	52	10.9	124	2.9
35 - 39	1,619	9.6	1,483	12.2	28	5.8	108	2.6
40 - 44	1,260	7.5	1,186	9.8	12	2.5	62	1.5
45 - 49	1,166	6.9	1,099	9.1	13	2.7	54	1.3
50 - 54	1,001	6.0	944	7.8	3	0.6	54	1.3
55 - 59	652	3.9	593	4.9	1	0.2	58	1.4
60 - 64	538	3.2	456	3.8	8	1.7	74	1.8
65+	1,851	11	1,030	8.5	3	0.6	818	19.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 4.3 Occupation

Table 4.3 presents the population 15 years and older by occupation and sex. The employed population in the district is 22,156 of which more females (12,132) are employed than males (10,024). Skilled agriculture, forestry and fishery (67.2%) constitute the major occupation, followed by service and sales (12.8%). There are more females in service and sales (19.4%) than males (4.7%). Service and sales is the second most dominant occupation for females while craft and related trades (10.0%) is second highest among the males.

**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	22,156	100.0	10,024	100.0	12,132	100.0
Managers	265	1.2	123	1.2	142	1.2
Professionals	884	4.0	563	5.6	321	2.6
Technicians and associate professionals	167	0.8	113	1.1	54	0.4
Clerical support workers	109	0.5	70	0.7	39	0.3
Service and sales workers	2,833	12.8	476	4.7	2,357	19.4
Skilled agricultural forestry and fishery workers	14,882	67.2	6,905	68.9	7,977	65.8
Craft and related trades workers	1,846	8.3	1,002	10.0	844	7.0
Plant and machine operators and assemblers	552	2.5	543	5.4	9	0.1
Elementary occupations	616	2.8	228	2.3	388	3.2
Other occupations	2	0.0	1	0.0	1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 4.4 Industry

Industry is defined as the type of activity carried out by the enterprise where a person is working or the type of product produced or services rendered at the respondent's workplace. Information was collected only on the main product produced or service rendered in the establishment. Table 4.4 presents distribution of the district's workforce by their industry of employment and by sex. Almost 7 out of every 10 (67.6%) persons that are employed are engaged in agriculture and the remaining are engaged in other sectors. Service industries such as wholesale, accommodation and food services and education are female dominated as against the more physical intensive industries such as construction; mining and quarrying that are male dominated.

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

Industry	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	22,156	100.0	10,024	100.0	12,132	100.0
Agriculture forestry and fishing	14,975	67.6	7,030	70.1	7,945	65.5
Mining and quarrying	7	0.0		0.1	1	0.0
Manufacturing	1,159	5.2	462	4.6	697	5.7
Electricity gas steam and air conditioning supply	4	0.0	3	0.0	1	0.0
Water supply; sewerage waste management and remediation activities	44	0.2	19	0.2	25	0.2
Construction	426	1.9	423	4.2	3	0.0
Wholesale and retail; repair of motor vehicles and motorcycles	1,947	8.8	472	4.7	1,475	12.2
Transportation and storage	439	2.0	436	4.3	3	0.0
Accommodation and food service activities	767	3.5	72	0.7	695	5.7
Information and communication	22	0.1	13	0.1	9	0.1
Financial and insurance activities	37	0.2	27	0.3	10	0.1
Real estate activities	0	0.0	0	0.0	0	0.0
Professional scientific and technical activities	147	0.7	48	0.5	99	0.8
Administrative and support service activities	56	0.3	43	0.4	13	0.1
Public administration and defence; compulsory social security	154	0.7	112	1.1	42	0.3
Education	811	3.7	498	5.0	313	2.6
Human health and social work activities	126	0.6	51	0.5	75	0.6
Arts entertainment and recreation	50	0.2	46	0.5	4	0.0
Other service activities	939	4.2	244	2.4	695	5.7
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	46	0.2	19	0.2	27	0.2
Activities of extraterritorial organizations and bodies	0	0.0	0	0.0	0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 4.5 Employment status

The distribution of the workforce by employment status is often used as an indicator of progress towards modernization of the economy and to measure the relative capacity of the various sectors. Table 4.5 shows the distribution of the workforce by employment status and sex. Many employed persons in the district are self-employed without employees (68.7%), followed by contributing family workers (13.6%). Employees constitute approximately 10 percent of the work force with nearly three times more males.

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

Employment Status	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	22,156	100.0	10,024	100.0	12,132	100.0
Employee	2,106	9.5	1,412	14.1	694	5.7
Self-employed without employee(s)	15,232	68.7	6,832	68.2	8,400	69.2
Self-employed with employee(s)	615	2.8	308	3.1	307	2.5
Casual worker	334	1.5	245	2.4	89	0.7
Contributing family worker	3,016	13.6	944	9.4	2,072	17.1
Apprentice	666	3.0	194	1.9	472	3.9
Domestic employee (House help)	161	0.7	82	0.8	79	0.7
Other	26	0.1	7	0.1	19	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 4.6 Employment Sector

Table 4.6 shows the employed population 15 years and older by employment sector and sex. The data shows that about 93 percent of the employed populations work in the private informal sector whilst 4.5 percent are public sector workers. About 95 percent of the female employed population are in the private informal sector compared to 90 percent of the male population. Contrarily, the public sector employs more males (6.2%) than females (3.1%). More males are also employed in the private formal sector than females.

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

Employment Sector	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	22,156	100.0	10,024	100.0	12,132	100.0
Public (Government)	997	4.5	618	6.2	379	3.1
Private Formal	500	2.3	342	3.4	158	1.3
Private Informal	20,588	92.9	9,033	90.1	11,555	95.2
Semi-Public/Parastatal	28	0.1	12	0.1	16	0.1
NGOs (Local and International)	41	0.2	18	0.2	23	0.2
Other International Organisations	2	0.0	1	0.0	1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER FIVE

## INFORMATION COMMUNICATION TECHNOLOGY

### 5.1 Introduction

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

### 5.2 Ownership of mobile phone

Table 5.1 presents information on the population 12 years and older and those amongst them who own mobile phones and those who use internet. The data reveals that two out of every five (43.1%) persons 12 years and older in Dormaa East own mobile phones compared to a regional average of 40.2 percent. Whiles 47.3 percent of the male population 12 years and older own mobile phones, 39.6 percent of their female counterparts own mobile phones.

### 5.3 Use of internet

Table 5.1 shows that, of the population 12 years and older in the Dormaa East District, only 583 representing 1.7 percent use the internet, which is lower than the regional average of 3.4 percent. Whiles 2.7 percent of the males aged 12 years and older use the internet, only less than one percent of their female counterparts use the internet in the district.

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

Region/District/Sex	Population 12 years+		Population owning phone		Population using internet	
	Number	Percent	Number	Percent	Number	Percent
Region	1,547,336	100.0	622,715	40.2	52,923	3.4
All Districts	34,023	100.0	14,671	43.1	583	1.7
Male	15,506	100.0	7,340	47.3	420	2.7
Female	18,517	100.0	7,331	39.6	163	0.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 5.4 Household ownership of desktop/laptop computer

Table 5.2 presents data on the households in the district that have a desktop or laptop computer. Less than five percent (3.3%) of the households in the district have a laptop or desktop computer. Slightly more male headed households (3.7%) compared to female headed households (2.8%) have a computer.

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

Region/District/Sex	Number of households		Households having desktop/laptop computers	
	Number	Percent	Number	Percent
Brong Ahafo Region	490,519	100.0	22,618	4.6
Dormaa East	11,722	100.0	387	3.3
Male	6,944	100.0	255	3.7
Female	4,778	100.0	132	2.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER SIX

## DISABILITY

### 6.1 Introduction

Persons with disability (PWD) have been defined as those who are unable to or are 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 (Ghana Statistical Service, 2012). Evidence the world over indicates that persons with disability are people who can contribute to development. However, prejudice in cultures in certain parts of the world has discriminated against people with disabilities. Over the past few decades there has been an international consensus on the recognition of the rights of persons with disabilities with emphasis on the promotion of their dignity, and inclusive development. Evidence is needed to make informed decisions on policies and programmes. Knowing the characteristics and understanding the numbers of people with disabilities and their circumstances can enhance policies that address barriers that prevent persons with disabilities (PWDs) from participating more effectively in national development. In the Local Governance System in Ghana, one of the assessment for any other district to pass the Functional Organisation Assessment Tools (FOAT) is to make provision for PWDs in the design and construction of physical projects like toilets, schools, markets, office buildings, among others. The 2010 PHC for the first time sought information disability. This chapter presents data on the prevalence of disability, and the social-demographic characteristics of people with disabilities in the Dormaa East District

### 6.2 Population with disability

Table 6.1 presents information on the people with disability and the type of disability by sex. The data show about three out of every 100 (2.6%) of the population of the Dormaa East District have one form of disability or the other. While 2.5 percent of the male population have one form of disability or the other, 2.7 percent of their female counterparts have a disability. Table 6.1 further provide information on the type of disabilities. It must be noted however that due to the fact that some persons have multiple disabilities, the types of disability may necessarily not add up to the reported number of persons with disability.

### 6.3 Type of disability

The types of disabilities reported at the census include sight, hearing, speech, physical, intellectual and emotional. Disability cases can be multiple, that is, one person can have more than one type of disability. Table 6.1 and Figure 6.1 present the type of disability in the district by sex. The commonest type of disability in the district is sight impairment (26.5%). Thus more than one quarter of PWDs in the district have sight related problems. This is closely followed by physical (22.7%) and hearing (13.9%) disabilities. Among the six major disabilities, while females suffer more than males in three (sight, hearing and physical) whereas males suffer mostly from speech, intellectual and emotional disabilities.

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

Disability Type	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
<b>All Localities</b>						
Total	50,871	100.0	23,970	100.0	26,901	100.0
No disability	49,539	97.4	23,366	97.5	26,173	97.3
With a disability	1,332	2.6	604	2.5	728	2.7
Sight	470	35.3	201	33.3	269	37
Hearing	247	18.5	93	15.4	154	21.2
Speech	200	15	105	17.4	95	13
Physical	402	30.2	168	27.8	234	32.1
Intellectual	154	11.6	90	0.4	64	0.2
Emotional	153	11.5	86	14.2	67	9.2
Other	146	11.0	72	11.9	74	10.2
<b>Urban</b>						
Total	32,462	100.0	14,724	100.0	17,738	100.0
No disability	31,530	97.1	14,319	97.2	17,211	97
With a disability	932	2.9	405	2.8	527	3.0
Sight	346	37.1	137	33.8	209	39.7
Hearing	171	18.3	55	13.6	116	22.0
Speech	135	14.5	71	17.5	64	12.1
Physical	272	29.2	110	27.2	162	30.7
Intellectual	114	12.2	70	0.5	44	0.2
Emotional	110	11.8	63	15.6	47	8.9
Other	104	11.2	47	11.6	57	10.8
<b>Rural</b>						
Total	18,409	100.0	9,246	100.0	9,163	100.0
No disability	18,009	97.8	9,047	97.8	8,962	97.8
With a disability	400	2.2	199	2.2	201	2.2
Sight	124	31.0	64	32.2	60	29.9
Hearing	76	19.0	38	19.1	38	18.9
Speech	65	16.3	34	17.1	31	15.4
Physical	130	32.5	58	29.1	72	35.8
Intellectual	40	10.0	20	0.2	20	0.2
Emotional	43	10.8	23	11.6	20	10.0
Other	42	10.5	25	12.6	17	8.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 6.4 Distribution by type of Locality

PWDs in urban areas are more than twice the number in rural area. Of the 1,332 PWDs in the district, 932 are in urban areas. Common disabilities in both urban and rural areas are sight, physical and hearing. Sight disability in urban areas is higher (39.7%) of all disabilities in the district. It is the commonest disability in urban areas, followed by hearing and speech in that order. In the rural areas, the commonest disability is physical (35.8%), followed by sight and hearing.

## 6.5 Disability and Activity

Table 6.2 shows the distribution of PWDs 15 years and older by economic activity status and sex. More than half (52.8%) of all PWDs 15 years and older in the district are employed, 1.5 percent are unemployed while slightly more than forty percent (45.7%) are economically not active. Although, unemployment among persons with disability remains generally low, the rates of those with emotional (3.3%), speech (2.8%) and intellectual disability (2.4%) are among the highest for unemployed persons with disability.

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

Sex/Disability type	All Status		Employed		Unemployed		Economically Not Active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both sexes</b>	30,439	100.0	22,156	72.8	864	2.8	7,419	24.4
Without disability	29,295	100.0	21,552	73.6	847	2.9	6,896	23.5
With disability	1,144	100.0	604	52.8	17	1.5	523	45.7
Sight	425	100.0	252	59.3	3	0.7	170	40.0
Hearing	212	100.0	119	56.1	1	0.5	92	43.4
Speech	145	100.0	73	50.3	4	2.8	68	46.9
Physical	357	100.0	115	32.2	7	2.0	235	65.8
Intellect	127	100.0	44	34.6	3	2.4	80	63.0
Emotion	122	100.0	54	44.3	4	3.3	64	52.5
Other	130	100.0	72	55.4	1	0.8	57	43.8
<b>Male</b>								
<b>Total</b>	13,624	100.0	10,024	73.6	385	2.8	3,215	23.6
Without disability	13,111	100.0	9,726	74.2	380	2.9	3,005	22.9
With disability	513	100.0	298	58.1	5	1.0	210	40.9
Sight	187	100.0	119	63.6	1	0.5	67	35.8
Hearing	71	100.0	40	56.3	1	1.4	30	42.3
Speech	75	100.0	38	50.7	3	4.0	34	45.3
Physical	150	100.0	54	36.0	1	0.7	95	63.3
Intellect	76	100.0	27	35.5	2	2.6	47	61.8
Emotion	68	100.0	29	42.6	2	2.9	37	54.4
Other	64	100.0	43	67.2	1	1.6	20	31.3
<b>Female</b>								
<b>Total</b>	16,815	100.0	12,132	72.1	479	2.8	4,204	25.0
Without disability	16,184	100.0	11,826	73.1	467	2.9	3,891	24.0
With disability	631	100.0	306	48.5	12	1.9	313	49.6
Sight	238	100.0	133	55.9	2	0.8	103	43.3
Hearing	141	100.0	79	56.0	0	0.0	62	44
Speech	70	100.0	35	50.0	1	1.4	34	48.6
Physical	207	100.0	61	29.5	6	2.9	140	67.6
Intellect	51	100.0	17	33.3	1	2.0	33	64.7
Emotion	54	100.0	25	46.3	2	3.7	27	50.0
Other	66	100.0	29	43.9	0	0.0	37	56.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

More than two out of every five PWDs who have physical (65.8%), intellectual (63.0%), emotional (48.1%), and speech (42.5%) disabilities are economically not active. There is not much variation among the sexes considering disability and economic activity status.

## **6.6 Disability and Education**

Table 6.3 presents the population 3 years and older by sex, their disability type and level of education attained in the Dormaa East District. More than forty percent (44.7%) of persons with disabilities in the district have attained basic education, 6.9 percent have attained secondary or higher education. More than forty percent (45.4%) have never been to school. PWDs with hearing (55.9%), physical (53.7%) and intellectual (63.2%) disabilities have the highest proportions who have never been to school while the least is recorded among those with emotional disability (40.5%). Evidence from Table 6.3 further suggest that only a few persons with disability are able to progress from basic school to secondary or higher levels. This is especially so among PWDs with hearing (4.7%), intellectual (4.8%) and sight (7.8%) disabilities. Females with any form of disability are more disadvantaged than their male counterparts regarding educational progression.

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

Disability type/sex	Total		Never attended		Pre-School		Basic		Sec/SHS and Higher	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both Sexes</b>										
Total	46,558	100.0	8616	18.5	4,631	9.9	28,265	60.7	5,046	10.8
No disability	45,263	100.0	8028	17.7	4,592	10.1	27,686	61.2	4,957	11.0
With a disability	1,295	100.0	588	45.4	39	3.0	579	44.7	89	6.9
Sight	464	100.0	211	45.5	11	2.4	215	46.3	27	5.8
Hearing	236	100.0	132	55.9	6	2.5	87	36.9	11	4.7
Speech	194	100.0	89	45.9	15	7.7	75	38.7	15	7.7
Physical	391	100.0	210	53.7	7	1.8	148	37.9	26	6.6
Intellectual	146	100.0	70	47.9	3	2.1	66	45.2	7	4.8
Emotional	148	100.0	60	40.5	4	2.7	75	50.7	9	6.1
Other	143	100.0	62	43.4	3	2.1	62	43.4	16	11.2
<b>Male</b>										
Total	21,833	100.0	2995	13.7	2,362	10.8	13,523	61.9	2,953	13.5
No disability	21,249	100.0	2805	13.2	2,348	11.0	13,200	62.1	2,896	13.6
With a disability	584	100.0	190	32.5	14	2.4	323	55.3	57	9.8
Sight	200	100.0	67	33.5	1	0.5	113	56.5	19	9.5
Hearing	87	100.0	41	47.1	2	2.3	39	44.8	5	5.7
Speech	103	100.0	44	42.7	7	6.8	45	43.7	7	6.8
Physical	165	100.0	60	36.4	3	1.8	85	51.5	17	10.3
Intellectual	85	100.0	32	37.6	2	2.4	44	51.8	7	8.2
Emotional	81	100.0	27	33.3	2	2.5	47	58.0	5	6.2
Other	70	100.0	25	35.7	1	1.4	33	47.1	11	15.7
<b>Female</b>										
Total	24,725	100.0	5621	22.7	2,269	9.2	14,742	59.6	2,093	8.5
No disability	24,014	100.0	5223	21.7	2,244	9.3	14,486	60.3	2,061	8.6
With a disability	711	100.0	398	56.0	25	3.5	256	36.0	32	4.5
Sight	264	100.0	144	54.5	10	3.8	102	38.6	8	3.0
Hearing	149	100.0	91	61.1	4	2.7	48	32.2	6	4.0
Speech	91	100.0	45	49.5	8	8.8	30	33.0	8	8.8
Physical	226	100.0	150	66.4	4	1.8	63	27.9	9	4.0
Intellectual	61	100.0	38	62.3	1	1.6	22	36.1		0.0
Emotional	67	100.0	33	49.3	2	3.0	28	41.8	4	6.0
Other	73	100.0	37	50.7	2	2.7	29	39.7	5	6.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER SEVEN

## AGRICULTURAL ACTIVITIES

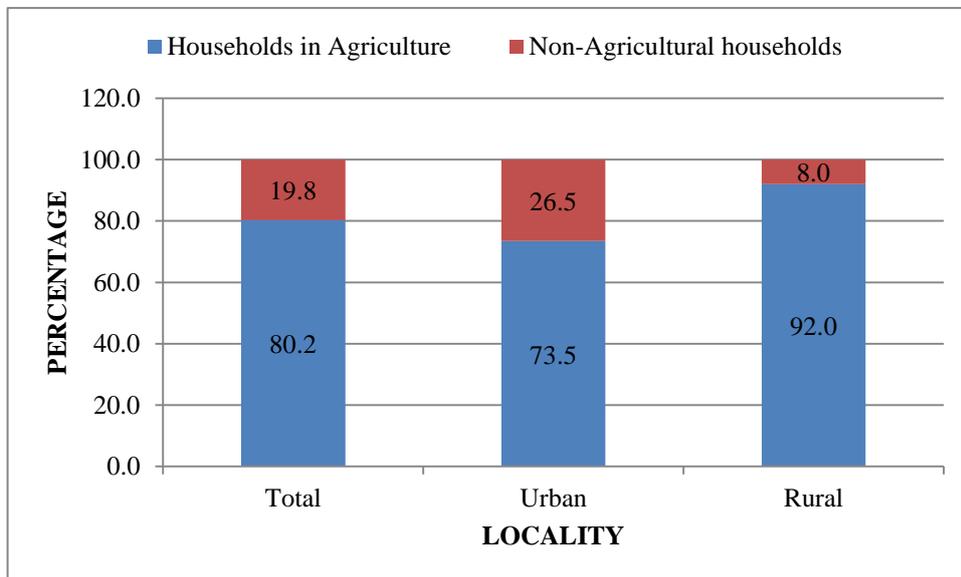
### 7.1 Introduction

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

### 7.2 Households in Agriculture

A household is defined to be an agricultural household if; at least, one person in the household is engaged in any type of farming activity, namely crop farming, tree growing, livestock rearing and fish farming (GSS, 2012). Figure 7.1 shows households in agricultural activities and those not in agricultural activities by type of locality. A greater proportion of households in the district are engaged in agricultural activity as compared to households not engaged in agricultural activities. Also, there are more agricultural households in the rural areas than in urban areas.

**Figure 7.1: Households in agriculture by locality**



Source: Ghana Statistical Service, 2010 Population and Housing Census

### 7.3 Types of Farming Activities

Table 7.1 shows the type of agricultural activities engaged in by households and locality in the district. Out of the 9,404 agricultural households in the district, 98 percent are into crop farming whiles 30.1 percent are into livestock rearing. More rural than urban households in the district are rearing animals.

**Table 7.1: Households in agricultural activities by locality type**

Total Households	Total		Urban		Rural	
	Number	Percent	Number	Percent	Number	Percent
	11,722	100.0	7,446	100.0	4,276	100.0
Households engaged in Agriculture	9,404	80.2	5,471	73.5	3,933	92.0
Crop Farming	9,207	97.9	5,317	97.2	3,890	98.9
Tree Planting	437	4.6	299	5.5	138	3.5
Livestock Rearing	2,835	30.1	1,274	23.3	1,561	39.7
Fish Farming	9	0.1	6	0.1	3	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 7.4 Types of Livestock numbers and keepers

Livestock rearing is the second most important agricultural activity after crop farming in the district. Table 7.2 shows the types of livestock reared, their numbers and the average number of animals per keeper. Nearly 70 percent (68.9%) of all animals reared are chicken, followed by goats (14.2%). While 46 percent of the animal keepers have chickens with an average of 30 birds per keeper; about 30 percent are keeping goats with an average of 10 goats. Fish farming is not a common activity in the district.

**Table 7.2: Distribution of animal reared and keepers**

Livestock and keeper	Animals		Keepers		Average Animal per Keeper
	Number	Percent	Number	Percent	
Total	85,944	100.0	4,295	100.0	20.0
Beehives	636	0.7	5	0.1	127.2
Cattle	624	0.7	34	0.8	18.4
Chicken	59,237	68.9	1,984	46.2	29.9
Dove	51	0.1	6	0.1	8.5
Duck	1,861	2.2	135	3.1	13.8
Goat	12,191	14.2	1,286	29.9	9.5
Grass-cutter	42	0.0	11	0.3	3.8
Guinea fowl	1,676	2.0	52	1.2	32.2
Ostrich	43	0.1	3	0.1	14.3
Pig	1,365	1.6	167	3.9	8.2
Rabbit	357	0.4	37	0.9	9.6
Sheep	5,996	7.0	521	12.1	11.5
Silk worm	31	0.0	2	0.0	15.5
Snail	200	0.2	1	0.0	200.0
Turkey	82	0.1	18	0.4	4.6
Other	124	0.1	24	0.6	5.2
Fish farming	1,428	1.7	9	0.2	158.7
Inland fishing	0	0.0	0	0.0	0.0
Marine fishing	0	0.0	0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER EIGHT

## HOUSING CONDITIONS

### 8.1 Introduction

The attainment of health objectives is linked among other, to the provision of improved housing, safe water supply and sewerage, and well planned settlements.

The provision of periodic information on housing and housing conditions is therefore important in accessing the state of housing issue in the country.

The census solicited information on housing stock, room occupancy, construction materials and other domestic amenities. This chapter presents information on types of housing and housing facilities in the Dorma East in the Brong Ahafo Region. The chapter presents the analysis on housing and housing conditions from the 2010 Population and Housing Census.

### 8.2 Housing Stock

Table 8.1 presents the stock of houses and households by type of locality. The total number of houses in the Dormaa East District is 8,064, of which 56 percent(4,504) is located in urban and 44 percent(3,560) in rural areas. The district has a total household population 50,137, with 6.2 persons per house, and an average household size of 4.3 in the district. However, the average household size for the urban (4.3) is slightly higher than that of the rural (4.2).

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

Categories	Total				
	country	Region	District	Urban	Rural
Total population	24,658,823	2,310,983	50,871	32,462	18,409
Total household population	24,076,327	2,265,458	50,137	31,972	18,165
Number of houses	3,392,745	331,967	8,064	4,504	3,560
Number of households	5,467,054	490,515	11,722	7,446	4,276
Average households per house	1.6	1.5	1.5	1.7	1.2
Population per house*	7.1	6.8	6.2	7.1	5.1
Average household size	4.4	4.6	4.3	4.3	4.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.3 Dwelling, holding and tenancy arrangement

Table 8.2 presents the ownership status of dwelling by sex of household head and type of locality. The total number of dwelling units in the district stands at 11,722. This figure covers 5,467,054 (0.2%) and 490,515 (2.4%) of the total number of dwellings in the country and region respectively. The number of dwelling units owned by the category labelled as other private individuals (2,299) is far more than public or government dwellings (72) in the district. Again, Table 8.2 shows that greater proportion of the dwelling units are owned by members of households (53.0%). Relatives who are not members of households (24.9%) are the second largest owners of the dwelling units. This pattern is observable with respect to type of household head ownership of dwellings by sex with males accounting for high percent of (52.7%) while females (53.6%). Ownership of dwelling by household members by

locality indicates a higher percent for rural localities (63.4%) while urban (47.1%). Ownership status which accounts for less than one percent in the District includes private employer, other private agency, public/Government and other not specified ownership and this is the same for ownership by sex and locality.

**Table 8.2: Ownership status of dwelling by sex of household head and type of locality**

Ownership status	Total country	Region	District		Male headed	Female headed	Urban	Rural
			Number	Percent				
Total	5,467,054	490,515	11,722	100.0	100.0	100.0	100.0	100.0
Owned by household member	2,883,236	260,608	6,218	53.0	52.7	53.6	47.1	63.4
Being purchased (e.g. mortgage)	45,630	3,448	78	0.7	0.6	0.8	0.4	1.1
Relative not a household member	851,630	90,176	2,920	24.9	22.4	28.5	28.9	18.0
Other private individual	1,439,021	116,402	2,299	19.6	22.0	16.2	22.1	15.3
Private employer	83,610	9,509	77	0.7	1.0	0.1	0.4	1.1
Other private agency	21,123	1,390	27	0.2	0.3	0.1	0.3	0.1
Public/Government ownership	118,804	7,138	72	0.6	0.8	0.4	0.6	0.7
Other	24,000	1,844	31	0.3	0.2	0.3	0.3	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.3.2 Type of occupied dwelling

Table 8.3 shows the distribution of the type of occupied dwelling units. Compound houses accounts for (47.3%) and separate houses (38.0%) the account for high percentages of the occupied dwelling of the total stock of occupied dwellings. Two other types of occupied dwellings which are of significance in the district are semi-detached houses (7.8%) and huts/buildings in same compound (4.3%).

**Table 8.3: 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				
Total	5,467,054	490,515	11,722	100.0	100.0	100.0	100.0	100.0
Separate house	1,471,391	162,809	4,450	38.0	39.8	35.2	31.8	48.7
Semi-detached house	391,548	27,079	911	7.8	6.3	9.9	9.8	4.2
Flat/Apartment	256,355	11,331	147	1.3	1.4	1.1	1.6	0.7
Compound house (rooms)	2,942,147	256,130	5,539	47.3	44.8	50.8	54.1	35.3
Huts/Buildings (same compound)	170,957	20,955	505	4.3	5.8	2.1	1.2	9.8
Huts/Buildings (different compound)	36,410	3,245	19	0.2	0.2	0.1	0.1	0.3
Tent	10,343	871	20	0.2	0.2	0.1	0.1	0.2
Improvised home (kiosk/container etc.)	90,934	2,393	55	0.5	0.7	0.2	0.5	0.4
Living quarters attached to office/shop	20,499	1,102	12	0.1	0.1	0.0	0.1	0.0
Uncompleted building	66,624	3,850	56	0.5	0.5	0.5	0.6	0.3
Other	9,846	750	8	0.1	0.1	0.0	0.0	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

Though the percentages of compound house occupancy is more than separate house for both male and female headed households, the proportion of separate houses occupied by male headed households (39.8%) is higher than that of female headed households (35.2%), while the reverse is the case for compound houses (44.8% for male headed compared to 50.8% in the female headed).

Among urban households, compound houses (54.1%) are more common than separate houses (31.8%), while the reverse is the case among rural households (separate houses, 48.7% as against compound houses, 35.3%).

## 8.4 Construction Materials

### 8.4.1: Main construction material for outer wall of dwelling units by type of locality

Construction materials used for the outer walls of dwelling units include mud/brick/earth, wood, burnt bricks, cement blocks/concrete, landcrete, among others as shown in Table 8.4. The commonest construction materials used for the outer walls of dwelling in the district is mud bricks/earth (43.3%). This is followed by cement blocks/concrete (43.0%). Bamboo materials (0.0%) are however non-existent on the scale of the district's construction materials. In terms of rural-urban distribution, mud/brick/earth are dominant in the rural areas (68.5%) compared to the urban dwellings (28.1%). On the other hand, cement blocks/concrete materials are profound in the urban dwellings (57.2%) compared to that of the rural dwellings (19.6%). This wide margin in the rural-urban usage of construction materials could be as a result of the higher rate of poverty in rural areas compared to urban areas.

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

Material for Outer wall	Total country	Region	District		Urban	Rural
			Number	Percent		
Total	5,817,607	519,342	12,092	100.0	100.0	100.0
Mud brick/Earth	1,991,540	239,284	5,241	43.3	28.1	68.5
Wood	200,594	7,932	137	1.1	1.1	1.2
Metal sheet/Slate/Asbestos	43,708	2,447	40	0.3	0.3	0.4
Stone	11,330	814	12	0.1	0.1	0.2
Burnt bricks	38,237	5,062	685	5.7	6.9	3.6
Cement blocks/Concrete	3,342,462	241,282	5,197	43.0	57.2	19.6
Landcrete	104,270	18,808	596	4.9	5.8	3.5
Bamboo	8,206	523	4	0.0	0.0	0.0
Palm leaf/Thatch (grass)/Raffia	38,054	1,694	34	0.3	0.2	0.4
Other	39,206	1,496	146	1.2	0.3	2.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.4.2 Materials for the floor of dwelling

Construction materials for the floor of dwelling units are important factors as far as the housing industry is concerned. The health, comfort and safety of inhabitants are influenced by these factors. Table 8.5 presents main construction materials for the floor of dwelling units by total country, region and district. The commonest construction material used by households for the floor of dwelling units in the district is cement/concrete (73.4%), followed by earth/mud (23.7%) with burnt bricks being the least.. Cement/concrete is the commonest material used by households at all levels- national, regional (Brong Ahafo) as well as the rural-urban localities of the Dorma East District. While there is a vast margin between the use of cement/concrete (87.1%) and earth/mud (9.1) for the floor by urban households, there is

slight margin between cement/concrete usage (49.5%) and earth/mud usage (48.7%) by the rural households. Other building materials for the floor of dwellings in the district include stones, burnt brick, wood, vinyl tiles, ceramic tiles, terrazzo tiles, among others.

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

Materials for the floor	Total		District		Urban	Rural
	country	Region	Number	Percent		
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
Earth/Mud	872,161	113,228	2,782	23.7	9.4	48.7
Cement/Concrete	4,255,611	363,827	8,602	73.4	87.1	49.5
Stone	32,817	3,325	135	1.2	1.3	0.9
Burnt brick	6,537	322	16	0.1	0.1	0.1
Wood	52,856	1,114	31	0.3	0.3	0.2
Vinyl tiles	57,032	1,889	32	0.3	0.4	0.0
Ceramic/Porcelain/Granite/Marble tiles	88,500	3,784	81	0.7	0.9	0.3
Terrazzo/Terrazzo tiles	85,973	1,972	22	0.2	0.3	0.0
Other	15,567	1,054	21	0.2	0.2	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.4.3 Material for roofing

Table 8.6 shows the main construction materials used by households for roofing of dwelling units in the district by locality of residence. Roofing of dwelling units in the district are dominated by metal sheet (87.4%) and thatch/palm leaf/raffia (8.9%). Other roofing materials include cement/concrete, bamboo, and slate/asbestos. Roofing tiles is not used as roofing material in the district. The district materials for roofing form 2.3% of the region and 0.2% of the country's roofing materials for dwelling units. Metal sheet also make up the dominant roofing materials used by both rural and urban households in the district. It is used by 96.9 percent urban households compared to 71.9 percent rural households.

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

Main Roofing material	Total		District		Urban	Rural
	country	Region	Number	Percent		
<b>Total</b>	5,817,607	519,342	12,092	100.0	100.0	100.0
Mud/Mud bricks/Earth	80,644	4,394	91	0.8	0.1	1.8
Wood	45,547	3,588	86	0.7	0.6	0.9
Metal sheet	4,152,259	423,255	10,569	87.4	96.9	71.9
Slate/Asbestos	759,039	1,686	17	0.1	0.1	0.2
Cement/Concrete	141,072	3,161	57	0.5	0.5	0.4
Roofing tile	31,456	704	1	0.0	0.0	0.0
Bamboo	71,049	4,679	68	0.6	0.2	1.2
Thatch/Palm leaf or Raffia	500,606	74,583	1,080	8.9	1.3	21.5
Other	35,935	3,292	123	1.0	0.3	2.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.5 Room Occupancy

The relationship between the number of rooms and number of persons per room gives the space available for a person. Overcrowded rooms pose health risks such as the spread of infectious diseases like measles and tuberculosis (TB) and respiratory tract infections (RTIs).

Table 8.7 provides information on household size and the number of sleeping rooms occupied by households in the district. The Table indicates that out of a total of 11,722 households in the district, households using a single sleeping room are more than half (54.8%), with those using two rooms constituting approximately a quarter (24.5%). There could be overcrowding in most dwelling units in the district considering the fact that 9 in every 10 households sleep in not more than 3 rooms. Of 1,624 households in the district having household size of four persons, 57.8 percent live in single rooms, and more than 4 in every 5 households (85.4%) sleep in not more than 2 rooms.

Table 8.7 further shows that one third (33.4%) of households with six persons sleep in single room, and for those with seven persons, one quarter (25.6%) sleep in single room.

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

Household size	Total		Number of sleeping rooms								
	Number	Percent	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Total	11,722	100.0	54.8	24.5	11.4	4.8	2.0	1.2	0.5	0.3	0.4
1	2,092	100.0	92.9	4.5	1.1	0.5	0.1	0.3	0.1	0.1	0.3
2	1,481	100.0	72.1	22.4	3.4	0.8	0.3	0.4	0.2	0.1	0.3
3	1,637	100.0	64.6	24.5	8.4	1.0	0.6	0.4	0.4	0.0	0.1
4	1,624	100.0	57.8	27.6	9.3	3.1	0.9	0.7	0.3	0.2	0.1
5	1,537	100.0	45.2	32.0	14.1	5.8	1.3	1.0	0.6	0.0	0.1
6	1,091	100.0	33.4	36.1	17.8	7.1	3.1	1.5	0.3	0.2	0.6
7	833	100.0	25.6	35.4	21.4	10.6	4.1	1.9	0.4	0.5	0.2
8	505	100.0	13.7	36.2	26.9	11.5	5.5	3.2	1.4	1.0	0.6
9	366	100.0	11.5	31.1	27.6	13.9	7.7	3.6	1.9	1.6	1.1
10+	556	100.0	6.5	22.1	26.8	19.2	11.2	6.7	2.9	2.0	2.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.6.1 Main sources of Lighting

This section discusses household access to lighting, cooking fuel and cooking space in the district. Table 8.8 presents the main source of lighting of dwelling units by type of locality. Electricity (mains) represent 58.6% is the leading source of lighting, followed by flashlights (30.1%), and kerosene lamp (9.1%). Other sources of lighting which includes electricity (private generator), candles, gas lamp and firewood accounts less than one percent. Solar energy, firewood and crop residue are nonexistence sources of lighting. In terms of rural-urban distribution, electricity (mains) (73.8%) is the major source of lighting for urban households whereas flashlight/torch (50.6%) is the most common source of lighting for the rural households.

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

Main source of light	Total		District		Urban	Rural
	country	Region	Number	Percent		
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
Electricity (mains)	3,511,065	263,890	6,873	58.6	73.8	32.2
Electricity (private generator)	36,142	2,372	38	0.3	0.4	0.2
Kerosene lamp	971,807	58,403	1,071	9.1	5.9	14.8
Gas lamp	9,378	793	25	0.2	0.1	0.4
Solar energy	9,194	693	3	0.0	0.0	0.0
Candle	41,214	1,662	31	0.3	0.3	0.2
Flashlight/Torch	858,651	159,901	3,533	30.1	18.4	50.6
Firewood	13,241	997	11	0.0	0.0	0.2
Crop residue	4,623	272	1	0.0	0.0	0.0
Other	11,739	1,532	136	1.2	1.1	1.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.7 Main source of cooking fuel, and cooking space used by households

Table 8.9 is on the main source of cooking fuel and cooking space for households. The main source of cooking fuel for households is wood (78.6%) while charcoal (9.0%) and gas (3.9%). Other sources which includes areas lightly more than one percent when put together). As much as 7.4 percent of households in the district do not cook. The percentages that do not cook or depend on charcoal and gas are higher in urban than rural households, while the percentage using wood is higher in rural households than urban. As much as 9 in every 10 rural households use wood as against 7 in every 10 urban households. The percentage that is not cooking is more than twice in urban households (9.2%) than rural households (4.4%).

### 8.7.1 Cooking space

Table 8.9 shows that nearly 2 in every 5 (39.8%) households have separate room used exclusively for cooking. This is common for both rural and urban households. The next most commonly used cooking space is open space in compound which nearly one in every 5 households in both urban and rural communities uses.

Other two cooking spaces used by more than 10 percent of all households in the district are separate rooms shared with other households (13.4%) and structure with roof without walls (10.4%). While higher proportions of urban (15.7%) than rural (9.4%) households use the former, the reverse is the case for the latter cooking space, structure with roof without walls (13.0% of rural and 8.5% of urban households).

Also noteworthy are households that do not have cooking space for the district it represent 9.1 percent while urban locality 10.3 percent and rural 7 percent and urban households that cook on verandas (8.5%).

**Table 8.9: Main source of cooking fuel and cooking space for households in the district**

Source of cooking fuel/ cooking space	Total country	Region	District		Urban	Rural
			Number	Percent		
<b>Main source of cooking fuel for household</b>						
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
None no cooking	306,118	32,285	871	7.4	9.2	4.4
Wood	2,197,083	294,170	9,213	78.6	71.1	91.7
Gas	996,518	36,641	453	3.9	5.5	1.1
Electricity	29,794	1,073	13	0.1	0.1	0.1
Kerosene	29,868	929	13	0.1	0.1	0.1
Charcoal	1,844,290	122,190	1,056	9.0	13.0	2.1
Crop residue	45,292	1,788	57	0.5	0.5	0.5
Saw dust	8,000	1,023	11	0.1	0.1	0.0
Animal waste	2,332	87	0	0.0	0.0	0.0
Other	7,759	329	35	0.3	0.5	0.0
<b>Cooking space used by household</b>						
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
No cooking space	386,883	39,078	1,071	9.1	10.3	7.0
Separate room for exclusive use of household	1,817,018	136,004	4,660	39.8	36.9	44.6
Separate room shared with other household(s)	410,765	47,827	1,569	13.4	15.7	9.4
Enclosure without roof	117,614	7,195	189	1.6	1.1	2.4
Structure with roof but without walls (Bedroom/Hall/Living room)	349,832	41,889	1,220	10.4	8.5	13.7
Verandah	74,525	1,575	29	0.2	0.3	0.1
Open space in compound	1,173,946	84,605	741	6.3	8.5	2.0
Other	1,115,464	130,728	2,180	18.6	18.0	19.7
Other	21,007	1,614	63	0.5	0.6	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

### 8.7.1 Main source of water for drinking

Table 8.10 shows the main source of water for drinking and for other domestic use. Out of the total households (11,722) in the district, 39.3% use bore-hole/pump/tube well as source of water for drinking. Pipe-borne outside dwelling (21.6%) and public tap/standpipe (13.7%) are the second and third main sources. Twice as many urban households as rural households use public tap/standpipe. River/stream (18.8%) is the second main source of water used for drinking by rural households.

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

The highest percentages of the households use bore-hole/pump/tube well as source of water for other domestic use in both rural (30.6%) and urban (29.4%) households in the district. However, more than twice as many urban (19.6%) as rural (9.1%) households use public tap/standpipe for other domestic chores. River/stream is second to bore-hole/pump/tube well for domestic use by rural households.

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

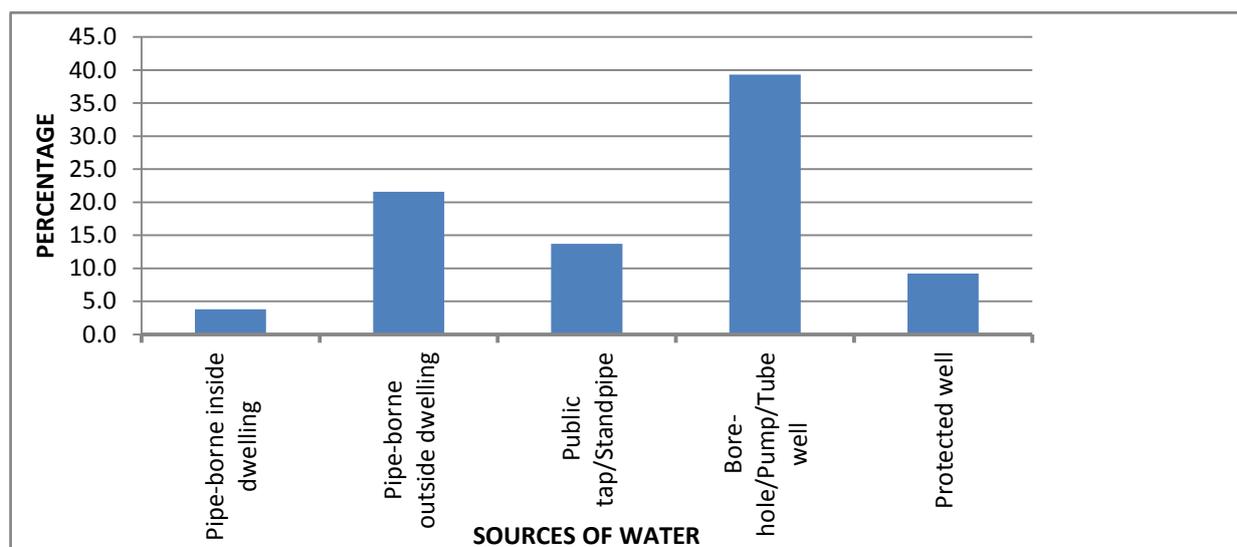
Sources of water	Total country	Region	District		Urban	Rural
			Number	Percent		
<b>Main source of drinking water for household</b>						
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
Pipe-borne inside dwelling	790,493	29,804	441	3.8	4.9	1.7
Pipe-borne outside dwelling	1,039,667	68,152	2,528	21.6	23.7	17.8
Public tap/Standpipe	712,375	83,741	1,605	13.7	16.7	8.4
Bore-hole/Pump/Tube well	1,267,688	163,629	4,606	39.3	39.4	39.2
Protected well	321,091	45,990	1,080	9.2	10.7	6.6
Rain water	39,438	1,044	16	0.1	0.1	0.2
Protected spring	19,345	1,498	41	0.3	0.3	0.5
Bottled water	20,261	777	13	0.1	0.1	0.1
Satchet water	490,283	13,356	168	1.4	2.1	0.2
Tanker supply/Vendor provided	58,400	288	2	0.0	0.0	0.0
Unprotected well	112,567	9,372	300	2.6	1.1	5.0
Unprotected spring	12,222	1,360	29	0.2	0.1	0.4
River/Stream	502,804	64,993	830	7.1	0.4	18.8
Dugout/Pond/Lake/Dam/Canal	76,448	6,268	61	0.5	0.3	1.0
Other	3,972	243	2	0.0	0.0	0.0
<b>Main source of water for other domestic use of household</b>						
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
Pipe-borne inside dwelling	905,566	32,149	480	4.1	5.4	1.8
Pipe-borne outside dwelling	1,089,030	67,219	3,059	26.1	29.6	20.0
Public tap/Standpipe	704,293	83,208	1,846	15.7	19.6	9.1
Bore-hole/Pump/Tube well	1,280,465	156,073	3,495	29.8	29.4	30.6
Protected well	465,775	57,094	1,101	9.4	11.3	6.2
Rain water	39,916	965	8	0.1	0.1	0.0
Protected spring	18,854	1,626	77	0.7	0.8	0.4
Tanker supply/Vendor provided	100,048	651	3	0.0	0.0	0.0
Unprotected well	152,055	10,956	317	2.7	1.4	4.9
Unprotected spring	15,738	1,567	33	0.3	0.1	0.5
River/Stream	588,590	70,604	1,198	10.2	1.8	25.0
Dugout/Pond/Lake/Dam/Canal	96,422	7,421	93	0.8	0.5	1.4
Other	10,302	982	12	0.1	0.1	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

One quarter of rural households use river/stream for domestic activities. Protected wells are used mostly by urban households compared to unprotected wells by rural households.

Figure 8.2 shows the main source of water for drinking and for other domestic use. The proportion of households using bore-hole/pump/tube well as source of water is higher followed by pipe borne outside dwelling. Public tap/standpipe, protected well and pipe-borne inside dwelling comes next to the two most commonly used in that order.

**Figure 8.1: Five main sources of water**



Source: Ghana Statistical Service, 2010 Population and Housing Census

### **8.8.1 Bathing and Toilet Facilities**

A critical indicator of the sanitation condition of a dwelling unit is an efficient and hygienic method of waste disposal available which in a way is a measurement criterion of the socio-economic status of a household. Table 8.11 shows the type of toilet and bathing facility used by households by locality.

The most common toilet facility used by households in the district is pit latrine (43.8%). This is followed by public toilet (39.4%). Eight and nine in every ten rural and urban households respectively use these two toilet facilities.

Another facility of significance is the KVIP (8.3%).and the percentage using WC (3.2%) is small. These two facilities are more prevalent in urban than rural households. Nearly 5 percent of the households in the district do not have toilet facilities.

### **8.8.2 Bathing Facilities**

#### **Shares separate bathroom in the same house**

Two most common bathing facilities used by households are shared separate bathroom in same house and own bathroom for exclusive use. Nearly two thirds of households in the district use these two facilities. Whiles the former is more common in urban than rural households, the reverse is the case for the latter. Other facilities of significance are shared open cubicle (12.0%), private open cubicle (9.5%), open space around house (8.1%) and bathroom in another house (5.3%).

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

Toilet facility/Bathing facility	Total country	District				
		Region	Number	Percent	Urban	Rural
<b>Toilet facility used by household</b>						
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
No facilities (bush/beach/field)	1,056,382	87,122	567	4.8	5.5	3.7
W.C.	839,611	32,800	378	3.2	4.3	1.3
Pit latrine	1,040,883	112,552	5,132	43.8	41.0	48.6
KVIP	572,824	39,544	976	8.3	10.7	4.2
Bucket/Pan	40,678	903	24	0.2	0.2	0.2
Public toilet (WC KVIP Pit Pan etc.)	1,893,291	216,053	4,613	39.4	37.9	41.9
Other	23,385	1,541	32	0.3	0.3	0.2
<b>Bathing facility used by household</b>						
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
Own bathroom for exclusive use	1,535,392	119,022	3,158	26.9	21.7	36.1
Shared separate bathroom in the same house	1,818,522	170,946	4,399	37.5	44.3	25.7
Private open cubicle	381,979	40,486	1,109	9.5	7.7	12.5
Shared open cubicle	1,000,257	79,955	1,405	12.0	13.9	8.6
Public bath house	140,501	3,354	17	0.1	0.1	0.3
Bathroom in another house	187,337	25,442	623	5.3	5.6	4.9
Open space around house	372,556	49,179	945	8.1	6.1	11.5
River/Pond/Lake/Dam	14,234	1,027	10	0.1	0.1	0.1
Other	16,276	1,104	56	0.5	0.6	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.9 Method of Waste Disposal

Table 8.12 shows distribution of methods of solid and liquid waste disposal by the type of locality. Good sanitation conditions are paramount to the well-being of every society. The methods of disposing waste in such environments are therefore crucial to the socio-economic development of every society. As can be seen from the table, 8.9 solid waste is mostly disposed at public dump (open space) representing 50.9%, followed by public dump (container) used by 8.5%. Almost seven percent (6.6%) of the households dump waste indiscriminately. Other methods of solid waste disposal by households include collection, burning and burying.

In urban households, public dump (open space) and public dump (container) representing 42.5% and 42.3% are the dominant methods of disposing solid waste whereas rural households mostly use public dump (open space), that is by 65.6%.

In terms of liquid waste disposal, most households throw it onto the street/outside (45.8%), followed by disposal onto compound (45.4%). Throwing liquid waste onto the street/outside is the method used by the highest percentage (49.3%) in urban areas while throwing onto the compound (53.9%) is the most method of liquid disposal used by rural households

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

Method of waste disposal	Total country	Region	District		Urban	Rural
			Number	Percent		
<b>Solid waste</b>						
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
Collected	785,889	14,058	114	1.0	1.1	0.7
Burned by household	584,820	21,408	847	7.2	6.7	8.1
Public dump (container)	1,299,654	117,369	3,335	28.5	42.3	4.3
Public dump (open space)	2,061,403	261,390	5,972	50.9	42.5	65.6
Dumped indiscriminately	498,868	58,399	773	6.6	4.9	9.5
Buried by household	182,615	15,015	612	5.2	1.9	11.0
Other	53,805	2,876	69	0.6	0.5	0.7
<b>Liquid waste</b>						
Total	5,467,054	490,515	11,722	100.0	100.0	100.0
Through the sewerage system	183,169	5,851	53	0.5	0.6	0.2
Through drainage system into a gutter	594,404	12,558	150	1.3	1.6	0.8
Through drainage into a pit (soak away)	167,555	7,581	499	4.3	5.2	2.7
Thrown onto the street/outside	1,538,550	200,536	5,363	45.8	49.3	39.5
Thrown into gutter	1,020,096	31,703	327	2.8	2.7	2.9
Thrown onto compound	1,924,986	231,047	5,317	45.4	40.5	53.9
Other	38,294	1,239	13	0.1	0.2	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

# **CHAPTER NINE**

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

### **9.1 Summary of Findings**

The 2010 Population and Housing Census conducted by Ghana Statistical Service has provided relevant data needed to sensitize policy makers, planners and local government authorities to make informed decisions, aimed at the growth of the economy. This chapter highlights findings from the main report that would be used to plan for the socio-economic development of the Dormaa East District of the Brong Ahafo Region. Recommendations are also made for possible policy interventions.

#### **Population Size**

Dormaa East has a population of 50,871 with 52.8% females as against 47.2% males. It has 63.8 percentage residing in urban areas as against 36.2 percent in rural areas. The age structure of the district's population is basically shaped by the effects of high fertility and decreasing mortality rate. The population 0-24 years constitutes the highest proportion (58%). This is followed by the adult 25-64 years population (36.2%) and aged 65 years and above (5.8%). This shows that the district has a youthful population.

#### **Fertility**

Out of a female population of 26,901 in the Dormaa East District, 12,773 (30.4%) is between the aged 15-49 years with Total Fertility Rate (TFR) of 3.71. This means that on the average a female aged 15-49 years could give birth to about 4 children throughout her reproductive years. This is higher than both the regional average TFR of 3.58 and the national TFR of 3.28.

#### **Mortality**

Out of 11,722 households in the district, the number of households that recorded death is 399. Males experienced a higher death rate than females in almost all the age groups except 15-19 year where the mortality rate for females is higher than males. This could be attributed to the child bearing related deaths that may be responsible for higher death rate among the teenagers.

#### **Marital Status**

The married or ever married constitute nearly 80 percent of the population age 12 years and older. Exactly half of the population (the married and those in informal/consensual union) are in a marital union. The separated, divorced and the widowed together constitute 13.1 percent of the population.

#### **Literate**

The proportion of the population that is literate is 64.7 percent; Out of the literate population, 56.3 percent are literate in English and Ghanaian language. Between the sexes, the percentage that is non literate among females far exceeds that of the males.

## **Education**

About three quarters of the population aged 3 years and older have either attended school in the past or are currently attending school. Primary level (48.8%) education has the highest current school attendance.

Male's attendance exceeds females' in the past. On the other hand, among those who are currently attending school, female attendance rate is higher at the basic level but lower at the higher levels, from SSS/SHS to the tertiary.

## **Economically Active/Economically Not Active**

Economically active and economically not active population of persons 15 years and older are 23,020 and 7,419 respectively. Among the economically active, 22,156 are employed while 864 are unemployed. Thus, 9 out of every 10 economic active persons are employed in the district. A higher percentage of males (98.6%) than females (97.2%) within their respective economically active population are employed.

The highest proportion of those not economically active is in full time education for both males and females.

## **Disability**

Persons with Disability (PWDs) constitute 3.5 percent of the entire population, with sight impairment being the most reported in the district. The percentages of PWD among male and female populations are 2.5 and 2.7, respectively. Employed females with disability (306) are more than employed males with disability (298).

## **Information Communication Technology**

Less than 2 percent of the population 12 years and older in the district are using internet facility. A far higher proportion of the males (72.0%) are using the internet than their female counterparts (28.0%).

## **Farming**

A very large percentage (80.2%) of the households in the district are engaged in the agricultural activities such as crop farming, tree planting, livestock rearing and fish farming. Disparities, however, exist between the rural and urban agricultural household population; 73.5 percent of urban households are engaged in agriculture, as against 92 percent of rural households.

## **Housing conditions**

The most common construction material used for the outer walls of the dwelling units in the district is the mud brick/earth (43.3%). This is followed by cement/concrete (43.0%). The use of mud brick/earth is used by a larger percentage of rural households (68.5%) compared to urban households (28.1%). The material used for the floor of most dwelling units is made of cement/concrete (73.4%), followed by mud/earth (23.7%). Other building materials for floor of dwelling units in the district include stone, mud brick and wood, vinyl tiles, ceramic tiles, terrazzo tiles, among others. Out of 11,722 households in the district, households using a single sleeping room are more than half (54.8%), with those using two rooms constituting approximately a quarter (24.5%). There could be overcrowding in most dwelling units in the district considering the fact that 9 in every 10 households sleep in not more than 3 rooms.

The main source of lighting of dwelling units by type of locality. Electricity (mains) represent 58.6% is the leading source of lighting, followed by flashlights (30.1%), and kerosene lamp (9.1%). Other sources of lighting which includes electricity (private generator), candles, gas lamp and firewood accounts less than one percent. Solar energy, firewood and crop residue are nonexistence sources of lighting.

The main source of cooking fuel for households is wood (78.6%) while charcoal (9.0%) and gas (3.9%). Other sources which includes are slightly more than one percent when put together. As much as 7.4 percent of households in the district do not cook. The percentages that do not cook or depend on charcoal and gas are higher in urban than rural households, while the percentage using wood is higher in rural households than urban. Nearly 2 in every 5 (39.8%) households have separate room used exclusively for cooking. This is common for both rural and urban households. The next most commonly used cooking space is open space in compound which nearly one in every 5 households in both urban and rural communities uses.

Other two cooking spaces used by more than 10 percent of all households in the district are separate rooms shared with other households (13.4%) and structure with roof without walls (10.4%).

About 44 percent of the households use Pit Latrine, while 39.4 percent use Public Toilet (WC, KVIP, Pit, and Pan). WC and KVIP are used by only 3.2 percent and 8.3 percent of households in the districts, respectively.

More than one third of the households (37.5%) in the district share separate bathroom in the same house while less than one percent of the households use public bath house in the district.

## **9.2 Conclusion**

Dormaa East District has a predominantly youthful population. A large proportion is within age 0-24 years. This affects the level of dependency. The Total fertility Rate (TFR) of the district is higher than both the regional and national figures.

Majority of the households are engaged in agriculture. The introduction of improved agricultural methods therefore can contribute substantially to raising the standard of living of especially rural households most of whom are engaged in agricultural activities

The highest proportion of those not economically active is in full time education for both males and females. Males who are in school are higher than that of females especially from the middle to tertiary levels for those who attended school in the past whilst the reverse is the case at the lower levels for primary and JSS/JHS. Females that are non-literates also far exceed that of males. There are disparities in level of educational attainment between males and females. Efforts should therefore be made by stakeholders to promote educational attainment beyond the basic school level (Primary and JSS/JHS) to provide the needed human resources necessary for the rapid development of the district.

The most common construction material used for dwelling units in the district is the mud brick/Earth which is dominant among rural households compared to urban households. The use of pit latrines is also prevalent in the district. The dwellings in the district are built with poor construction materials, indicating the level of poverty of the population. The uses of poor materials have associated health risks for the people.

### **9.3 Policy Implications and Recommendations**

It is known that a lower fertility rate enhances the availability of economic and social benefits to families and the community as a whole, and ensures better maternal and child health, as a result of proper spacing of births. Attempt should be made therefore to reduce the high fertility rates of the district through deliberate policy interventions especially in terms of advocacy.

The government and the private sector should set up a fund to support and cater for the vulnerable, including the widowed and aged.

Efforts should be made to curb illiteracy at all levels in the district. Non-formal education programmes should be invigorated and made more attractive to the never been to school to facilitate their economic activities.

The gap between the males and females in terms of employment should be bridged with policy interventions. Policy interventions like scholarships should be adopted to address challenges in the educational system.

Although employed persons are higher in the district than the unemployed, the government should put strategies and interventions in place in terms of skills acquisition for the youth. Course work or syllabus of educational institutions should be structured to include skills that would enable them acquire relevant skills demanded in the job market.

The percentage of persons with disability employed should be increased so that more persons with disability will be employed in the job market. Policies should also be amended to enable PWDs to access free education in selected academic institutions.

All the organizations and institutions should be made aware of the benefits of ICT and assisted in formulating an ICT Policy document that can impact the development of the district and country at large. Training of the youth in the use desktop/laptop computers should be re-enforced to enable the youth to be effective and efficient at school and the workplace. Some specific institutions in Ghana responsible for development of scientific and technological capabilities need to be strengthened and focused on demand-driven initiatives in order to provide products and services to meet local needs.

There should be efforts by the government to mechanize crop farming and agriculture in the district. Policy interventions geared towards afforestation should be considered in the district. Government and authorities should ensure that protected areas are preserved.

Private estate owners with the support of the government should be encouraged to invest in building houses at affordable prices in rural localities. Rural households should be sensitized and encouraged to put up cheap and durable structures to protect them against natural disaster like heavy rains and flooding. Private estate owners and landlords also should be encouraged to at least have a WC or KVIP in the houses built, so that households would easily have access to the facilities to reduce the risk of contracting infectious diseases. The government and authorities involved in ensuring the safety of our environment should enforce the by-laws governing the inclusion of safer and hygienic ways of solid and liquid waste disposal in the district.

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## APPENDICES

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

Household Composition	Total		Urban		Rural	
	Total	Percent	Urban	Percent	Rural	Percent
Total	50,137	100.0	31,972	100.0	18,165	100.0
Head only	2,092	4.2	1,301	4.1	791	4.4
Household with head and a spouse only	932	1.9	398	1.2	534	2.9
Household with head and biological/adopted children only	5,911	11.8	4,422	13.8	1,489	8.2
Household with head spouse(s) and biological/adopted children only	11,939	23.8	6,570	20.5	5,369	29.6
Household with head spouse(s) biological/adopted children and relatives of the head only	9,529	19.0	5,150	16.1	4,379	24.1
Household with head spouse(s) biological/adopted children relatives and nonrelatives of the head	1,009	2.0	647	2.0	362	2.0
Household with head spouse(s) and other composition	1,935	3.9	1,115	3.5	820	4.5
Household with head biological/adopted children and relatives of the head only	11,228	22.4	8,290	25.9	2,938	16.2
Household with head biological/adopted children relatives and nonrelatives of the head	1,081	2.2	900	2.8	181	1.0
Household with head and other composition but no spouse	4,481	8.9	3,179	9.9	1,302	7.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

**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>	46,558	8,616	1,981	2,650	13,107	15,158	3,668	366	829	160	23
No disability	45,263	8,028	1,966	2,626	12,881	14,805	3,613	356	807	158	23
With a disability	1,295	588	15	24	226	353	55	10	22	2	0
Sight	464	211	4	7	76	139	17	0	10	0	0
Hearing	236	132	5	1	36	51	9	0	2	0	0
Speech	194	89	6	9	45	30	13	0	1	1	0
Physical	391	210	2	5	61	87	11	6	8	1	0
Intellectual	146	70	1	2	36	30	7	0	0	0	0
Emotional	148	60	1	3	42	33	5	2	2	0	0
Other	143	62	1	2	24	38	7	5	3	1	0
<b>Male</b>											
<b>Total</b>	21,833	2,995	1,025	1,337	6,286	7,237	2,056	186	568	122	21
No disability	21,249	2,805	1,019	1,329	6,171	7,029	2,022	181	551	121	21
With a disability	584	190	6	8	115	208	34	5	17	1	0
Sight	200	67	0	1	37	76	12	0	7	0	0
Hearing	87	41	2	0	15	24	3	0	2	0	0
Speech	103	44	3	4	28	17	6	0	1	0	0
Physical	165	60	1	2	28	57	6	4	7	0	0
Intellectual	85	32	0	2	26	18	7	0	0	0	0
Emotional	81	27	0	2	26	21	3	0	2	0	0
Other	70	25	0	1	10	23	5	3	2	1	0
<b>Female</b>											
<b>Total</b>	24,725	5,621	956	1,313	6,821	7,921	1,612	180	261	38	2
No disability	24,014	5,223	947	1,297	6,710	7,776	1,591	175	256	37	2
With a disability	711	398	9	16	111	145	21	5	5	1	0
Sight	264	144	4	6	39	63	5	0	3	0	0
Hearing	149	91	3	1	21	27	6	0	0	0	0
Speech	91	45	3	5	17	13	7	0	0	1	0
Physical	226	150	1	3	33	30	5	2	1	1	0
Intellectual	61	38	1	0	10	12	0	0	0	0	0
Emotional	67	33	1	1	16	12	2	2	0	0	0
Other	73	37	1	1	14	15	2	2	1	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**

Activity/ Type of crop	Households	Population in occupied units			Population engaged in agricultural activities		
		Total	Male	Female	Total	Male	Female
Total households in occupied units	11,722	50,137	23,596	26,541	16,632	7,890	8,742
Households engaged in agricultural activities	9,404	43,673	20,614	23,059	16,632	7,890	8,742
Households engaged in crop farming or tree growing	9,240	42,998	20,310	22,688	16,319	7,737	8,582
Households engaged in crop farming	9,207	42,889	20,255	22,634	16,270	7,706	8,564
Households engaged in tree growing	437	2,115	1,062	1,053	877	468	409
Agro forestry (tree planting)	437	2,115	1,062	1,053	877	468	409
Alligator pepper	3	18	8	10	5	3	2
Apples	10	45	26	19	18	12	6
Asian vegetables (e.g. tinda, cauliflower)	4	31	18	13	31	18	13
Avocado	6	25	13	12	10	5	5
Banana	8	40	17	23	15	8	7
Beans	70	422	210	212	147	81	66
Black pepper	1	2	2	0	2	2	0
Cabbage	5	19	7	12	11	4	7
Carrot	42	198	88	110	74	32	42
Cashew	136	670	339	331	282	151	131
Cassava	4,443	22,357	10,254	12,103	8,145	3,512	4,633
Citronella	5	26	16	10	15	9	6
Citrus	65	374	174	200	154	79	75
Cloves	2	10	5	5	4	2	2
Cocoa	3,862	18,163	9,001	9,162	7,212	3,813	3,399
Coconut	51	213	102	111	79	39	40
Cocoyam	2,226	11,204	5,180	6,024	4,225	1,809	2,416
Cocoyam / Taro (kooko)	111	504	205	299	186	75	111
Coffee	2	12	6	6	4	2	2
Cola	10	31	18	13	14	8	6
Cucumber	16	99	52	47	34	16	18
Egg plant	2	12	2	10	4	1	3
Gallic	1	3	1	2	1	0	1
Garden eggs	106	569	268	301	211	91	120
Ginger	3	14	6	8	5	2	3
Groundnut	7	60	31	29	26	12	14
Guava	5	26	14	12	10	5	5
Kenaf	3	8	3	5	8	3	5
Lettuce	2	10	4	6	6	3	3
Maize	3,620	17,856	8,728	9,128	6,878	3,536	3,342
Mango	6	42	21	21	13	6	7
Millet	9	43	26	17	17	10	7
Nut meg	1	2	1	1	2	1	1

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

**of crop and population engaged (Cont'd)**

Activity/ Type of crop	Households	Population in occupied units			Population engaged in agricultural activities		
		Total	Male	Female	Total	Male	Female
Oil palm	582	2,962	1,451	1,511	1,220	624	596
Okro	181	981	441	540	367	145	222
Onion	12	64	30	34	28	15	13
Pawpaw	6	21	9	12	9	4	5
Peas	3	17	8	9	6	2	4
Pepper	794	4,004	1,828	2,176	1,600	681	919
Pineapple	24	119	51	68	62	30	32
Plantain	5,070	24,791	11,524	13,267	9,313	4,126	5,187
Potatoes	2	8	2	6	3	0	3
Rice	29	165	90	75	54	34	20
Shea tree	1	13	7	6	4	1	3
Soya beans	4	29	12	17	15	7	8
Sugarcane	5	44	20	24	15	6	9
Sun flower	1	6	5	1	2	1	1
Sweet potatoes	1	6	4	2	3	1	2
Tobacco	5	31	13	18	12	6	6
Tomatoes	186	1,018	500	518	377	165	212
Water melon	4	21	11	10	7	3	4
Yam	408	2,192	1,022	1,170	868	381	487
Other	221	1,042	516	526	410	223	187

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	Sex			House holds	Houses
		Male	Female	Total		
1	Wamfie	5,736	6,923	12,659	3,121	1,614
2	Wamanafo	3,395	4,231	7,626	1,641	1,156
3	Kyeremasu	2,807	3,372	6,179	1,297	824
4	Asuotiano	2,599	2,984	5,583	1,265	854
5	Dormaa Akwamu	2,216	2,519	4,735	1,055	609
6	Akontanim	869	973	1,842	402	302
7	Apenkro	358	400	758	177	140
8	Asuhyiae	362	338	700	158	132
9	Mewerenfiriwuo (Adu Yaw Kurom)	375	306	681	186	161
10	Kwame Ningo Shed	355	318	673	108	94
11	Tumtum Krom	279	344	623	142	131
12	Atta Kwaku Krom (Clinic)	279	251	530	138	101
13	Mamponteng	271	232	503	101	120
14	Adei Peter Krom	266	212	478	109	86
15	Akoto Krom	261	217	478	92	83
16	Subinkrom	208	251	459	107	81
17	Akyeremade (Kobedi)	190	264	454	91	79
18	Abroso No. 1	241	202	443	101	98
19	Adiembra	235	206	441	118	138
20	Kyea Krom (Acheawkrom)	244	193	437	116	161

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

S/No.	Community Name	AGE GROUP																
		All ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1	Wamfie	12,659	1,665	1,637	1,693	1,488	1,071	909	703	657	559	520	452	301	217	160	218	409
2	Wamanafo	7,626	995	1,021	986	914	684	562	424	340	344	315	287	197	152	80	125	200
3	Kyeremasu	6,179	868	827	829	659	503	457	356	315	271	228	232	149	103	59	106	217
4	Asuotiano	5,583	716	726	821	695	427	392	309	353	260	202	176	138	94	68	65	141
5	Dormaa Akwamu	4,735	646	651	579	450	363	347	268	227	215	206	182	136	110	75	113	167
6	Akontanim	1,842	239	251	212	165	135	120	101	105	92	96	71	59	43	35	50	68
7	Apenkro	758	110	88	91	84	62	54	44	41	38	43	28	15	10	8	16	26
8	Asuhyiae	700	105	90	107	68	52	47	47	47	32	25	21	16	12	10	5	16
9	Mewerenfiriwuo (Adu Yaw Kurom)	681	132	94	62	43	32	52	50	52	41	30	27	16	20	8	13	9
10	Kwame Ningo Shed	673	126	110	80	54	44	50	43	43	34	26	20	6	9	6	7	15
11	Tumtum Krom Atta Kwaku Krom	623	104	81	97	79	51	42	30	25	27	21	16	17	8	7	7	11
12	(Clinic)	530	86	70	51	29	34	45	38	49	36	26	16	17	9	9	10	5
13	Mamponteng	503	91	63	50	37	29	48	39	40	26	23	19	6	12	4	4	12
14	Adei Peter Krom	478	77	63	44	26	35	40	29	32	29	20	27	14	13	5	15	9
15	Akoto Krom	478	102	79	42	50	28	36	30	38	22	15	6	5	6	6	8	5
16	Subinkrom	459	72	50	48	38	53	34	19	19	17	22	21	9	10	10	14	23
17	Akyeremade (Kobedi)	454	74	48	54	43	34	33	23	18	28	14	20	12	10	7	16	20
18	Abroso No. 1	443	73	62	62	26	27	28	34	30	28	18	15	15	11	4	3	7
19	Adiembra Kyea Krom	441	56	58	45	24	20	39	32	35	36	29	22	16	12	3	5	9
20	(Acheawkrom)	437	79	52	31	31	28	30	31	24	30	30	33	9	10	8	7	4

Source: Ghana Statistical Service, 2010 Population and Housing Census

# **LIST CONTRIBUTORS**

## **Project Secretariat**

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

## **Writers**

Sarfo Ernest Kyere  
Sakyimah Boahen Stephen

## **Consultant**

Dr. Majorine Danso-Manu

## **Editor/ Reviewers**

Dr. Delali Badasu  
Mr. Vitus Bobruonu  
Mr. Omar Seidu