

# DISTRICT ANALYTICAL REPORT SAGNARIGU DISTRICT









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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 Sagnarigu 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.

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

Syanlo

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#### ACRONYMS AND ABBREVIATIONS

CBR Crude Birth Rate

CHIPS Community Health Planning Service

CIDA Canadian International Development Agency

DANIDA Danish International Development Agency

DCE District Chief Executive

DCD District Co-coordinating Director

GFR General Fertility Rate

GSS Ghana Statistical Service

ICT Information and Communication Technology

JHS Junior High School

JSS Junior Secondary School

LEAP Livelihood Empowerment against Poverty Programme

NHIS National Health Insurance Scheme

SHS Senior High School

PHC Population and Housing Census

PPP Public Private Partnership

PWD People with Disabilities

TFR Total Fertility Rate

UNDP United Nations Development Programme

#### **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 Sagnarigu District, according to the 2010 Population and Housing Census, is 148,099 representing 6 percent of the region's total population. Males constitute 50.6 percent and females represent 49.4 percent. The district has an urban population of 93,550, representing 63.2 percent. The district has a sex ratio of 102.3. The population of the district is youthful (0-14 years) representing 37.5 percent and depicting a broad base population pyramid which tapers off with a small number of elderly persons (60+ years) (5.9%). The total age dependency ratio for the District is 71.2, the age dependency ratio for males is higher (71.9) than that of females (70.5).

#### Fertility, mortality and migration

The District has a Total Fertility Rate of 3.3 which is slightly higher than the Regional average of 3.5. The General Fertility Rate is 92.8 births per 1000 women aged 15-49 years and a Crude Birth Rate (CBR) of 24.2 per 1000 population. The crude death rate for the district is 5.7 per 1000. The death rate for males is highest for ages 70+ years representing 47.1 deaths per 1000 population while for the females, the highest death rate of 28.4 deaths per 1000 population is for age 70+ years. Also, 7.2 percent of deaths in the District are due to accident/violence/homicide/suicide, while the rest are due to other causes. Majority of migrants (58.7%) living in the district were born elsewhere in the Northern region, while those born in another region constitute 39.4 percent. For migrants born in another region, those born in Upper East constitute 30.7 percent followed by Ashanti with 14.2 percent and Upper West, 13.3 percent.

#### Household Size, composition and structure

The district has a household population of 146,291 with a total number of 23,447 households. The average household size in the district is 6.3 persons per household. Children constitute the largest proportion of the household composition accounting for 43.3 percent. Spouses form about 9.9 percent. Extended (Heads, spouse(s), children and Head's relatives) households constitute 50.5 percent of the total number of households in the district.

#### **Marital status**

About half (48.5%) of the population aged 12 years and older are married, 45.3 percent have never married, 0.6 percent are in consensual unions, 3.8 percent are widowed, 1.1 percent are divorced and 0.7 percent are separated. By age 25-29 years, about two-third of the females

(70.1%) are married compared 30.7 percent of their male counterparts. At age 65 and above, widowed females account for as high as 55.3 percent while widowed males account for only 5.8 percent. Among the married, 59.3 percent have no education while about 16.1 percent of the never married have never been to school. About 7 in 10 of the married population (73.8%) are employed, 4 percent are unemployed and 22.3 percent are economically not active. A greater proportion of those who have never married (50.1%) are employed with 4.2 percent unemployed.

#### **Nationality**

The proportion of Ghanaians by birth in the district is 95.4 percent. Those who have naturalised constitute 0.7 percent and the non-Ghanaian population in the district is 2.0 percent.

#### Literacy and education

Of the population 11 years and above, 60.0 percent are literate and 40.0 percent are non-literate. The proportion of literate males is higher (68.3 %) than that of females (52.0%). About 59.1 percent indicated they could speak and write both English and Ghanaian languages. Of the population aged 3 years and above (135,846) in the district, 33.7 percent has never attended school, 44.7 percent are currently attending and 21.5 percent have attended in the past.

#### **Economic Activity Status**

About 59.0 percent of the population aged 15 years and older are economically active while 41.0 per cent are economically not active. Of the economically active population, 92.1 percent are employed while 7.9 percent are unemployed. For those who are economically not active, a larger percentage of them are students (58.2%), 22.3 percent perform household duties and 2.1 percent are disabled or too sick to work. Five out of ten (54.6%) unemployed are seeking work for the first time.

#### Occupation

Of the employed population, about 27.0 percent are engaged as service and sale workers, 22.0 percent craft and related trade, 21.5 percent engaged as skilled agricultural forestry and fishery workers and 16.0 percent are engaged as managers, professionals, and technicians.

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

Of the population 15 years and older 57.2 percent are self-employed without employees, 25.6 percent are employees and 6.0 percent contributing family workers. The private informal sector is the largest employer in the district, employing 77.5 percent of the population followed by the public sector with 15.9 percent.

#### **Information Communication Technology**

Of the population 12 years and above, 48.4 percent have mobile phones. Among the men, those who own mobile phones constitute 54.9 percent as compared to 41.9 percent of females. Less than 10 percent (9.0%) of the population 12 years and older use internet facilities in the district. Only 13.4 percent of the total households in the district have desktop/laptop computers.

#### **Disability**

About 1.5 percent of the district's total population has one form of disability or the other. The proportion of the male population with disability is slightly higher (1.5%) than females (1.4%). The types of disability in the district include sight, hearing, speech, physical, intellect, and emotion. Persons with sight disability recorded the highest of 30.3 percent followed by physical disability (28.5%). There are more females with sight and physical disabilities than males in both the urban and rural localities. Of the population disabled, 52.7 percent have never been to school.

#### Agriculture

Only 3 out of ten (36.5%) of households in the district are engage in agriculture. In the rural localities, 47.9 percent of the households are agricultural households while in the urban localities, 29.9 percent of households are into agriculture. Most agricultural households in the district (84.2%) are involved in crop farming. Chicken is the dominant animal reared in the district.

#### **Housing**

The housing stock of Sagnarigu District is 16,307 representing 6.3 percent of the total number of houses in the Northern Region. The average number of persons per house is 9.1.

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

About 69 percent of all dwelling units in the district are compound houses; 13.0 percent are separate houses and 5.0 percent are semi-detached houses. About six out of ten (61.7%) dwelling units in the district are owned by members of the household; 25.2 percent are owned by private individuals; 5.2 percent are owned by a relative who is not a member of the household and only 5.8 percent are owned by public or government. Less than one percent (0.6%) of the dwelling units is owned through mortgage schemes.

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

The main construction material for outer walls of dwelling units in the district is cement/concrete accounting for 62.7 percent with mud brick/earth constituting 2.7 percent of outer walls of dwelling units in the district. Cement (84.8%) and mud/earth (10.7%) are the two main materials used in the construction of floors of dwelling units in the district. Metal sheets (80.5%) and Thatch/Palm leaf or raffia (13.2%) are the two main roofing materials for dwelling units in the district.

#### Room occupancy

Single room constitutes the highest percentage (28.7%) of sleeping rooms occupied by households in housing units in the district. About 14 percent of households with 10 or more members occupy three rooms.

#### Utilities and household facilities

The three main sources of lighting in dwelling units in the district are kerosene lamp (20.3%), electricity (73.7%) and flashlight/torch (4.1%). The four main sources of water in the district are pipe-borne inside dwelling, out-side dwelling and public stand-pipe. Pipe borne water together contribute 90.7 percent of drinking water of households. A greater proportion of households do not have toilet facilities representing 46.2 percent, followed by households using Public toilet (WC/KVIP/Pit pan etc.) (27.6%). A third of households (35.6%) in the

district share separate bathrooms in the same house and another 28.1 percent own bathrooms for exclusive use by household members.

#### Waste disposal

The most widely method of solid waste disposal is by public dump in the open space accounting for 29.3 percent. About 21.4 percent of households dump their solid waste indiscriminately. House to house waste collection accounts for 9.7 percent. For liquid waste disposal, throwing waste onto the street/outside (53.1%) and onto the compound (21.1%) are the two most common methods used by households in the district.

# CHAPTER ONE INTRODUCTION

#### 1.1 Introduction

The Sagnarigu District with its capital at Sagnarigu is one of the six (6) newly created districts in the Northern Region in the first half of 2012. It was carved out of the Tamale Metropolis by Legislative Instrument (LI) 2066. The district was inaugurated on 24<sup>th</sup> June, 2012. One of the reasons for the creation of the district was to redirect developmental projects to the communities north and west of the Metropolis (now Sagnarigu) which were relatively less developed as compared to the urban areas in the Tamale Metropolis.

The Sagnarigu District has 79 communities, comprising of 20 urban, 6 peri-urban, and 53 rural areas.

#### 1.2 Physical Features

#### 1.2.1 Area

The district covers a total land size of 200.4km² and shares boundaries with the Savelugu - Nanton Municipality to the north, Tamale Metropolis to the south and east, Tolon District to the west and Kumbungu District to the north-west. Geographically, the district lies between latitudes 9°16' and 9° 34' North and longitudes 0° 36' and 0° 57' West. Figure 1.1 is a map of the Sagnarigu District.

#### 1.2.2 Climate

The Sagnarigu District, like many others in the Northern Region, has a single rainy season, usually stretching from May to October, and this period naturally coincides with the farming activities in the district. Annual rainfall average ranges from 600mm to 1100mm, the peak being usually between July and August.

Daily temperatures vary from season to season. During the rainy season, there is high humidity with relatively less sunshine and heavy thunderstorms. The mean day temperatures range from 28°C (December - mid-April) to about 38°C (April - June) while the mean night temperatures range from 18°C (December) to 25°C (February, March).

The dry season (November – March) is characterized by the dry Harmattan winds; the Harmattan season presents two extreme weather conditions, the extreme dry cold temperature of the early dawns and mornings and the very warm afternoons.

#### 1.2.3 Drainage and vegetation

The district is poorly endowed with water bodies; this is attributed to the high underground water table. The only natural water bodies are a few seasonal streams which have water during the rainy season and dry up in the dry season. In addition, there are a few dams and dug-outs such as the Kpene and Kanvilli-Kpawumo. These alternative sources of water provide water for animals as well as for domestic use.

The district lies within the Savannah Woodland Region characterized by tree savannah vegetation of varying sizes and density. The major types of tree in the district are dawadawa, nim, acacia, mahogany, and baobab among others.

Figure 1.1: Map of Sagnarigu district

## **DISTRICT MAP OF SAGNERIGU** Yilonayil KUMBUMGU SAVELUGU NANTON ● Gbolo LEGEND SANNERIGU District Capital TOLON Towns Road Network Shishegu District Boundary TAMALE SUB METRO

Source: Ghana Statistical Service, GIS

#### **1.2.4** Soils

The main soil types in the district are sandstone, gravel, mudstone and shale that have weathered into different soil grades. Due to seasonal erosion, soil types emanating from this phenomenon are sand, clay and laterite ochrosols. The availability of these soil types has contributed to rapid real estate development in the area where estate developers have resorted to the use of local building materials such as 'sea sand', gravel and clay.

#### 1.3 Political and Administrative Structure

The District Chief Executive is the political head of the district. The district is divided into three (3) area councils; namely Choggu-Sagnarigu, Kalpohini and Kanvilli. It is further sub divided into twenty three (23) electoral areas. There are thirty-one (31) district assembly members, comprising twenty-two (22) elected and nine (9) government appointees. The district has two constituencies: the Sagnarigu Constituency and the Tamale North Constituency with each represented by one (1) elected Member of Parliament in the Parliament of Ghana in Accra (Sagnarigu District Profile, 2013).

#### 1.4 Cultural and Social Structure

#### 1.4.1 Traditional setup

The chieftaincy institution as well as the traditional set up in the district is well revered and structured. The Sagnari-Naa, who is usually installed by the Yaa Naa, is the chief with the highest authority in the district. There are twelve (12) other sub-chiefs under the Sagnari-Naa to whom these sub-chiefs owe allegiance.

#### 1.4.2 Ethnicity

The Sagnarigu District is ethnically diverse. The Dagomba, however, is the main ethnic group in the district. Other ethnic groups are Gonja, Mamprusi, Akan, Dagaaba from the Northern Region and other parts of Ghana. In addition, there are other ethnic groups from countries in the West African Region such as Burkina Faso, Niger and Mali among others.

#### 1.4.3 Religious composition

The major religions in the district are Islam (which is the dominant religion), Christianity and Traditional religions. The Dagomba (the dominant ethnic group in the district) are predominantly Muslims while the rest of the ethnic groups who come from other regions of the country but reside in the district are largely Christians.

#### 1.4.4 Festivals

Festivals are very important events in the calendar of the Sagnarigu District. Like many other districts in the Northern Region, Sagnarigu District boasts of a variety of festivals. The most prominent ones are the Damba (which locally means Fire) and the two (2) Eid festivals celebrated by the Muslim majority in the district.

#### 1.5 Economic Feature

#### 1.5.1 Agriculture

Agriculture is the main economic activity of majority of the citizens of the district, largely engaged in both crop and animal farming. The main crops cultivated by farmers in the district are yam, millet, maize, cassava, groundnuts, cowpea, and soya beans among others. Livestock farming is also an important agricultural activity in the district and animals such as

goats, sheep and cattle are some of the main animals reared in the district. The service and manufacturing sectors also employ some proportion of the population of the district.

#### 1.5.2 Hospitality industry

There is an increase in the presence of hospitality industries in parts of the district. More hotels, guest houses and restaurants are springing up. Some of the most prominent hotels and restaurants in the district are the Mariam Hotel, Gariba Lodge, Modern City Hotel and Discovery Hotel among others.

#### 1.5.3 Transportation

The Tamale Airport, which is now the gateway to Northern Ghana is located approximately 14 kilometres from downtown Tamale and located within the boundaries of the Sagnarigu District. The airport is mainly used for national and currently regional scheduled flights between Tamale, Accra and other cities in Ghana as well as the capital cities of some West African countries.

Public transportation by taxi is one of the most convenient means of getting around the district. However, the most popular means of transportation for the local people is the motorbike. Transportation out of the district to the adjourning towns and districts is, however, largely facilitated by the private mini-bus system (trotro) and the Metro Mass Transport System.

#### 1.5.4 Road network

A few of the roads in the district are fairly good. However, many rural roads are in a deplorable state and in need of resurfacing and reconstruction. Most of the farming and periurban communities are linked to the market centres by feeder roads. In the urban and Tamale-North parts of the district, however, the roads have either asphalt or bitumen surfacing.

#### 1.5.5 Utility services

The district is endowed with basic utility services. Electricity, water, roads, markets and communication services are mainly available in the urban areas in the district. However, these facilities are either non-existent or inadequate in the rural areas.

#### 1.5.6 Financial Institutions

The district has two major financial institutions which are both privately owned (Ecobank and Barclays bank). These two (2) banks are all located in Gumani, along the Bolgatanga road.

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

A trial census which is a dress rehearsal of all the activities and procedures that are planned for the main census was carried out in October/November 2009. These included recruitment and training, distribution of census materials, administration of the questionnaire and other census forms, enumeration of the various categories of the population (household, institutional and floating population), and data processing. The trial census was held in six selected districts across the country namely; Saboba (Northern Region), Chereponi (Northern Region), Sene (Brong Ahafo Region), Bia (Western Region), Awutu Senya (Central Region), and Osu Klottey Sub-Metro (Greater Accra Region). A number of factors were considered in selecting the trial census districts. These included: administrative boundary issues, ecological zone, and accessibility, enumeration of floating population/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 21<sup>st</sup> September 2010 with the identification of EA boundaries, listing of structures, enumeration of institutional population and floating population.

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

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

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

#### 1.6.4 Post enumeration survey

In line with United Nations recommendations, GSS conducted a Post Enumeration Survey (PES) in April, 2011 to check content and coverage error. The PES was also to serve as an important tool in providing feedback regarding operational matters such as concepts and procedures in order to help improve future census operations. The PES field work was carried out for 21 days in April 2011 and was closely monitored and supervised to ensure quality output. The main findings of the PES were that:

- 97.0 percent of all household residents who were in the country on Census Night (26<sup>th</sup> September, 2010) were enumerated.
- 1.3 percent of the population was erroneously included in the census.

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

#### 1.6.5 Release and dissemination of results

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

#### 1.6.6 Concepts and definitions

#### 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 26<sup>th</sup> 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 is organised into nine chapters. Chapter One presents the background information of the district which includes physical features, political administration, social and cultural structure, economy, outline of the report and concepts and definition. In Chapter Two, the demographic characteristics of the district are discussed. Chapter Three examines the social characteristics of the population while Chapter Four looks at the economic characteristics. Chapter Five focuses on communication and technology and Chapter Six is on disability. Chapter Seven and Eight respectively describes the agricultural activities and housing conditions in the district and in Chapter Nine, summary of findings, conclusions and policy implications are presented.

# CHAPTER TWO DEMOGRAPHIC CHARACTERISTICS

#### 2.1 Introduction

This chapter describes the demographic characteristics of the Sagnarigu District as captured in the 2010 Population and Housing Census. The main focus of this chapter includes population size and distribution, the age-sex structure, fertility, dependency ratios, place of residence (rural-urban), mortality, birthplace and migration.

#### 2.2 Population Size and Distribution

Table 2.1, shows the population distribution of the Sagnarigu District as recorded in the 2010 PHC. The total population of the District is 148,099 with males constituting 50.6 percent (74,886) and females 49.4 percent (73,213). Again, the table shows a very young population where 48.8 percent of the population falls between ages 0-19 years. The aged (65+), constitute only 4.1 percent of the total population in the municipality. The age group 0-4 has the highest proportion of 14.1 percent with those 95+ recording the lowest proportion of 0.1 percent.

The sex ratio, which represents the number of males to a 100 females for the district is 102.3. It can be seen from Table 2.1 that the male population in the District is greater than that of the female population from 0-24 years and from age 25 years and above females outnumber males. This shows that at birth, there are more males than females and as the population grows older, there are more females than males.

Table 2.1 further looks at the distribution of the population by locality of residence. From the table, about six in ten people (63.2%) live in urban areas in the District. The District has an age dependency ratio of 71.3, which means there are more people in the working age group than there are in the dependent population. This is good since the welfare of dependences can be well taken care of. The age dependency ratio varies only slightly between the males (71.9) and females (70.5), but it is much higher in the rural (75.2) than urban (69.0%) areas in the District.

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

	Sex				Type of locality			
				Sex				
Age Group	<b>Both Sexes</b>	Male	Female	ratio	Urban	Rural		
All Ages	148,099	74,886	73,213	102.3	93,550	54,549		
0 - 4	20,940	10,673	10,267	104.0	12,834	8,106		
5 - 9	18,444	9,478	8,966	105.7	11,329	7,115		
10-14	16,151	8,284	7,867	105.3	10,269	5,882		
15 - 19	16,733	8,788	7,945	110.6	10,886	5,847		
20 - 24	15,525	7,717	7,808	98.8	9,902	5,623		
25 - 29	14,062	6,655	7,407	89.8	8,971	5,091		
30 - 34	10,903	5,357	5,546	96.6	6,988	3,915		
35 - 39	8,180	4,039	4,141	97.5	5,263	2,917		
40 - 44	6,750	3,364	3,386	99.4	4,239	2,511		
45 - 49	4,932	2,617	2,315	113.0	3,151	1,781		
50 - 54	4,294	2,264	2,030	111.5	2,694	1,600		
55 - 59	2,403	1,358	1,045	130.0	1,573	830		
60 - 64	2,712	1,398	1,314	106.4	1,692	1,020		
65 - 69	1,491	769	722	106.5	938	553		
70 - 74	1,921	877	1,044	84.0	1,186	735		
75 - 79	967	489	478	102.3	622	345		
80 - 84	895	404	491	82.3	532	363		
85 - 89	446	209	237	88.2	272	174		
90 - 94	250	101	149	67.8	143	107		
95+	100	45	55	81.8	66	34		
All Ages	148,099	74,886	73,213	102.3	93,550	54,549		
0-14	55,535	28,435	27,100	104.9	34,432	21,103		
15-64	86,494	43,557	42,937	101.4	55,359	31,135		
65+	6,070	2,894	3,176	91.1	3,759	2,311		
Age-	•	•	,		•	,		
dependency								
ratio	71.2	71.9	70.5		69	<b>75.2</b>		

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.3 Age-Sex Structure (Population Pyramid)

The age structure of the district bears similarity with the regional and national pattern, where the youthful structure of the population is quite visible as is depicted in Figure 2.1.

Figure 2.1 shows that the district's population structure is broad with more youthful persons at the base and generally narrows as age increases. The number of people in the age groups then gradually decreases as age increases except for the age groups 15-19 and 60-64 years which register higher numbers than that recorded in the age immediately before them. A similar increase is also recorded in the age group 70-74 years. The district's population is therefore more youthful in nature and has the potential to increase the productive work force with time.

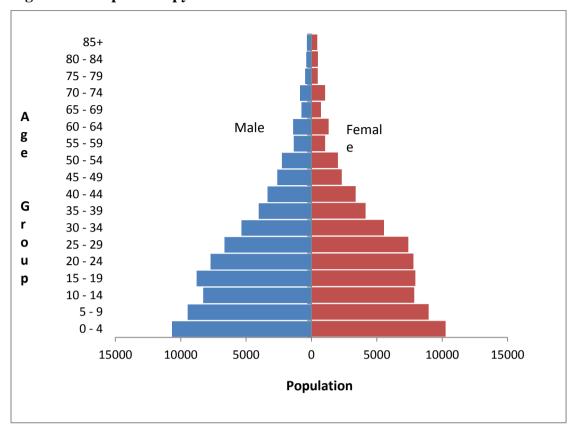


Figure 2.1: Population pyramid

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.4 Migration, Fertility, and Mortality

Records on fertility, mortality and migration are indispensable as far as socio-economic planning and policy formulations are concerned. Moreover, in a developing country such as Ghana, where data on these indicators are not readily available, census data become very important in providing data on fertility, mortality and migration.

#### 2.4.1 Fertility

Fertility is dependent on a number of factors including social, cultural, economic, health, and other environmental conditions. The actual reproductive performance of a couple or a population is referred to as Total Fertility Rate. TFR is, however, different from General Fertility Rate which is the number of live births per 1,000 women of age 15-49 years in a given year.

Table 2.2 shows the Total Fertility Rate, General Fertility Rate and Crude Death Rate by district in the Northern Region. Of the 2,479,461 people living in the region, 582,897 are women within ages 15-49 years. The region recorded a Total Fertility Rate (TFR) of 3.5, General Fertility Rate (GFR) of 101.9 and a Crude Birth Rate (CBR) of 24.0.

Out of the total number of 582,897 women recorded within the 15-49 age group in the Northern Region, 38,548 are in the Sagnarigu District and the number of live births in the last 12 months preceding the census is 3,579.

The TFR is the average number of children that would be born to a woman by the time she ended childbearing if she were to pass through all her childbearing years conforming to the age-specific fertility rates of a given year. Table 2.2 indicates that the district recorded a TFR of 3.3 which is two children lower than the highest recorded TFR of 5.3 in the region for North Gonja.

Table 2.2 further indicates that the district's GFR of 92.8 is far higher than the 65.2 recorded for Zabzugu District as the least in the Northern Region. This is, however, lower than the regional average of 102. This implies that there were about 93 births per 1,000 women 15-49 years in the district in 2010.

Birth rate is the number of live births per 1,000 people in a given year. CBR is, however, calculated for the whole population. The Sagnarigu District has a CBR of 24.2 which is about the same as the regional average of 24 as shown in Table 2.2.

Table 2.2: Total fertility rate, general fertility rate and crude birth rate by district

		Number of	Number of births	Total	*General	**Crude
		women 15-	in last 12	Fertility	Fertility	Birth
District	Population	49 years	months	Rate	Rate	Rate
All Districts	2,479,461	582,897	59,391	3.54	101.9	24
Bole	61,593	14,471	1,663	3.8	114.9	27
Sawla-Tuna-Kalba	99,863	22,207	2,230	3.6	100.4	22.3
West Gonja	41,180	9,806	924	3.3	94.2	22.4
Gonja Central	87,877	20,555	2,086	3.6	101.5	23.7
East Gonja	135,450	31,216	3,071	3.6	98.4	22.7
Kpandai	108,816	24,066	2,959	4.3	123	27.2
Nanumba South	93,464	21,210	2,542	4.2	119.8	27.2
Nanumba North	141,584	32,246	3,143	3.4	97.5	22.2
Zabzugu	63,815	15,591	1,016	2.4	65.2	15.9
Yendi Municipal	117,780	27,686	2,355	3	85.1	20
Tamale Metropolis	223,252	59,341	4,743	2.8	79.9	21.2
Tolon	72,990	17,028	1,585	3.2	93.1	21.7
SaveluguNanton	139,283	33,942	4,300	4.3	126.7	30.9
Karaga	77,706	18,666	1,621	2.9	86.8	20.9
Gushiegu	111,259	26,349	2,868	3.7	108.8	25.8
Saboba	65,706	14,519	1,871	4.2	128.9	28.5
Chereponi	53,394	11,652	1,495	4.3	128.3	28
BunkpuruguYonyo	122,591	26,725	2,893	3.8	108.3	23.6
Mamprusi East	121,009	27,145	2,785	3.6	102.6	23
Mamprusi West	121,117	27,528	3,080	3.8	111.9	25.4
North Gonja	43,547	9,935	1,349	5.3	135.8	31
Kumbumgu	39,341	8,851	920	3.6	103.9	23.4
Sagnerigu	148,099	38,548	3,579	3.3	92.8	24.2
Mion	81,812	18,812	1,935	3.4	102.9	23.7
Tatale	60,039	14,108	1,307	3.5	92.6	21.8
Mamprugu Moagduri	46,894	10,694	1,071	3.4	100.1	22.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### Children ever born, children surviving and sex

Table 2.3 shows the female population 12 years and older by age, children ever born and children surviving. The total number of females in this category is 50,568 with 115,931 children ever born, recording a survival rate of 84.0 percent.

Children ever born is highest for the age group 30-34 (14,615), followed by the age groups 40-44 and 35-39 (15,497 and 15,417 respectively). On the contrary, the number of children ever born is lowest for the age group 12-14 (22). Table 2.3 further shows that there are more male children ever born (59,983) than female children (55,948).

Relative to children surviving, Table 2.3 indicates that the survival rate for male children ever born is 83.2 percent compared to 84.9 percent for their female counterparts. The survival rate for male and female in the age category 30-34 is 87.1 percent and 90.7 percent respectively. This is in contrast with the survival rate of 76.9 percent and 77.8 percent respectively for the males and females within the age group 12-14 years.

Table 2.3 further shows that the survival rate of children in the district increases by age of mother steadily from the age group 12-14 (77.3%) and peaks at age group 30-34 (88.8%) and thereafter decreases to reach 75.6% at the age group 60+.

Table 2.3: Female population 12 years and older by age, children ever born, children surviving and sex

	Number	Children Ever Born		Chil	dren Surv	viving	S	urvival R	Rate	
Age	of	Both			Both			Both		
Group	Females	sexes	Male	Female	sexes	Male	Female	sexes	Male	Female
All ages	50,568	115,931	59,983	55,948	97,396	49,887	47,509	84.0	83.2	84.9
12 - 14	4,455	22	13	9	17	10	7	77.3	76.9	77.8
15 - 19	7,945	472	238	234	390	195	195	82.6	81.9	83.3
20 - 24	7,808	4,071	2,052	2,019	3,564	1,762	1,802	87.5	85.9	89.3
25 - 29	7,407	10,540	5,425	5,115	9,291	4,670	4,621	88.1	86.1	90.3
30 - 34	5,546	14,638	7,615	7,023	13,003	6,635	6,368	88.8	87.1	90.7
35 - 39	4,141	15,417	8,003	7,414	13,619	7,041	6,578	88.3	88.0	88.7
40 - 44	3,386	15,497	7,883	7,614	13,464	6,782	6,682	86.9	86.0	87.8
45 - 49	2,315	12,021	6,191	5,830	10,205	5,251	4,954	84.9	84.8	85.0
50 - 54	2,030	11,130	5,828	5,302	9,223	4,790	4,433	82.9	82.2	83.6
55 - 59	1,045	6,013	3,078	2,935	4,886	2,491	2,395	81.3	80.9	81.6
60 +	4,490	26,110	13,657	12,453	19,734	10,260	9,474	75.6	75.1	76.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.4.2 Mortality

Mortality plays an important role in determining the rate of population growth especially by age, sex, occupation and social class. Mortality by extension could also be a reflection of the socio-economic status of a people as well as their healthcare delivery system.

Death rate (also called the crude death rate) is defined as the number of deaths per 1,000 people in a given year. Table 2.4 indicates that Sagnarigu District has a total population of 148,009 and out of it 847 deaths were recorded in the households during the 2010 Population and Housing Census, giving the crude death rate of the district as 5.7. The CDR for the district is lower than the average for the region which is 5.9.

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

	Total	Deaths in	*Crude death
District	Population	households	rate
All Districts	2,479,461	14,715	5.9
Bole	61,593	450	7.3
Sawla-Tuna-Kalba	99,863	722	7.2
West Gonja	41,180	197	4.8
Gonja Central	87,877	334	3.8
East Gonja	135,450	761	5.6
Kpandai	108,816	554	5.1
Nanumba South	93,464	542	5.8
Nanumba North	141,584	653	4.6
Zabzugu	63,815	196	3.1
Yendi Municipal	117,780	737	6.3
Tamale Metropolis	223,252	1,257	5.6
Tolon	72,990	502	6.9
SaveluguNanton	139,283	1,413	10.1
Karaga	77,706	501	6.4
Gushiegu	111,259	744	6.7
Saboba	65,706	235	3.6
Chereponi	53,394	288	5.4
BunkpuruguYonyo	122,591	575	4.7
Mamprusi East	121,009	619	5.1
Mamprusi West	121,117	955	7.9
North Gonja	43,547	247	5.7
Kumbumgu	39,341	343	8.7
Sagnerigu	148,099	847	5.7
Mion	81,812	556	6.8
Tatale	60,039	210	3.5
MampruguMoagduri	46,894	277	5.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### **Age-Specific Death Rate**

Death rates are usually calculated for specific age groups in order to compare mortality rates of different ages. This could also be calculated to evaluate differences in death rates of the same age over time. The age-specific death rate is computed as a ratio of the number of deaths of people in a specific age group. For example, deaths among the age group 10-14 years to the population in that age group multiplied by 1,000.

The age-specific death rate of the district is presented in Figure 2.2. The data presented in the figure show that death rates among females are relatively lower than males for the infant age group of 0-4, but between the age group 10-14 and 40-44, female death rates are higher compared to males. The figure also shows that age-specific death rates are lower in age group 5-9 years compared to age group 0-4 years

for either males or females. Age-specific death rates for both males and females steadily increase from age group 20-24 until age group 40-44. However, beyond the age group 40-44 years, the variation between the males and females is very visible with the males showing much higher age-specific death rates than females in these older ages.

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Figure 2.2: Reported age-specific death rate by sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### Causes of deaths in households

Table 2.5 indicates that total number of reported deaths in the district is 847 and, of this figure, 7.3 percent (representing 62 deaths) are attributed to accident/violence/homicide/suicide and the remaining 92.7 percent attributed to 'all other causes'. In comparison, the proportion of deaths resulting from accidents in the Sagnarigu District is relatively lower than that recorded for the whole of the Northern Region (9.7%) and Ghana (11.6%).

Table 2.5: Cause of death by district

		Death due to						
			Accident/violence/ homicide/suicide All other of		r causes			
District	Total deaths	Number	Percent	Number	Percent			
All Districts	14,715	1,434	9.7	13,281	90.3			
Bole	450	29	6.4	421	93.6			
Sawla-Tuna-Kalba	722	65	9.0	657	91.0			
West Gonja	197	21	10.7	176	89.3			
Gonja Central	334	44	13.2	290	86.8			
East Gonja	761	77	10.1	684	89.9			
Kpandai	554	124	22.4	430	77.6			
Nanumba South	542	49	9.0	493	91.0			
Nanumba North	653	62	9.5	591	90.5			
Zabzugu	196	25	12.8	171	87.2			
Yendi Municipal	738	97	13.1	641	86.9			
Tamale Metropolis	1,257	119	9.5	1,138	90.5			
Tamale South	384	31	8.1	353	91.9			
Tamale Central	873	88	10.1	785	89.9			
Tolon	503	33	6.6	470	93.4			
Savelugu Nanton	1,413	139	9.8	1,274	90.2			
Karaga	501	67	13.4	434	86.6			
Gushiegu	744	31	4.2	713	95.8			
Saboba	235	23	9.8	212	90.2			
Chereponi	288	25	8.7	263	91.3			
Bunkpurugu Yonyo	575	62	10.8	513	89.2			
Mamprusi East	619	59	9.5	560	90.5			
Mamprusi West	955	74	7.7	881	92.3			
North Gonja	247	36	14.6	211	85.4			
Kumbumgu	342	14	4.1	328	95.9			
Sagnerigu	847	62	7.3	785	92.7			
Mion	555	52	9.4	503	90.6			
Tatale	210	28	13.3	182	86.7			
Mamprugu Moagduri	277	17	6.1	260	93.9			

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.4.3 Migration

Migration is the movement of people from one place to another as a result of one or a combination of factors including political, economic, religious, environmental, civil conflicts, marriage and education. Table 2.6 shows that the total population of migrants in the district is 35,663. Of this number, people born elsewhere in the region is 20,926. Those born in other regions outside the Northern Region are largely from the Upper East Region while the Western Region has the least number. The table further shows that migrants resident in Sagnarigu District who are born outside the country numbered 692 and represented almost 11 percent of the total population enumerated in the district. Table 2.6 also has information on the duration of residence of migrants in the district which suggests that migrants who have

stayed for 1-4 years in the district represent 31.1 percent while 18.5 percent of them have lived in the district for 10-19 years. At the same time, 11.9 percent of the migrants have been resident in the district for less than one year prior to the 2010 PHC. Duration of residence in the district among the migrants varies across the regions of origin. It, however, appears that migrants from the Central Region recorded the highest proportion to have lived in the district the longest period of 20 or more years (24.7%) compared to their counterparts from the other regions.

**Table 2.6: Birthplace by duration of residence of migrants** 

	Duration of residence (%)							
Birthplace	Number	Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years		
Total	35,663	11.9	31.1	20.2	18.5	18.3		
Born elsewhere in the region	20,926	10.8	31.0	20.6	18.9	18.7		
Born elsewhere in another region:								
Western	432	14.4	24.5	19.4	19.4	22.2		
Central	470	14	25.1	16.2	20.0	24.7		
Greater Accra	1,666	15.4	32.8	21.7	14.8	15.4		
Volta	1,248	11.7	28.5	22.9	18.3	18.5		
Eastern	710	11.5	30.0	18.7	20.0	19.7		
Ashanti	1,994	14.8	31.3	18.0	17.7	18.2		
BrongAhafo	1,346	16	32.2	19.0	18.7	14.0		
Northern	-							
Upper East	4,314	12.6	30.5	19.7	18.1	19.1		
Upper west	1,865	12.4	34.0	20.0	18.o	15.7		
Outside Ghana	692	10.7	36.0	18.5	18.1	16.8		

Source: Ghana Statistical Service, 2010 Population and Housing Census

# CHAPTER THREE SOCIAL CHARACTERISTICS

#### 3.1 Introduction

This chapter provides an overview of the social characteristics in both rural and urban areas in the Sagnarigu District. It examines the social characteristics of the household and its composition, the relationship between household size, composition and headship. Social development issues including marital status, nationality, religious affiliation, educational status, fertility and mortality are all important considerations of planning and development.

In Ghana, there have been many social interventions primarily aimed at the rural communities and urban poor. Notable among these interventions are the Livelihood Empowerment against Poverty (LEAP) Programme and the National Health Insurance Scheme (NHIS) where household data provide inputs for determining premiums and targeting those who should be exempted from payment. Households are also central to the study of income, maintenance, economic dependency, savings, fertility, migration and social welfare (Tacoli, 2012). Knowledge of household structure, composition, and headship provides important statistical tools for social and economic planning. A study of households also provides the basis for a meaningful projection of the future population size as well as housing needs.

#### 3.2 Size, Household Composition and Headship

Household composition refers to the patterns of relationships between the head of household and other members of the household. This includes relationships such as being a spouse (wife/husband), child (son/daughter), grandchild, parent/parent-in-law, brother/sister, other relative and non-relative. The size, composition, and structure of households are influenced by socio-economic and demographic factors such as age at first marriage and birth, length of time spent in school, cultural practices, occupation, material or financial abilities, capabilities of parents and couples as well as fertility, mortality and migration rates.

#### 3.2.1 Household Size

Table 3.1 provides information on household size by locality in the Sagnarigu District. The District has a household population of 146,291 with a total number of 23,447 households. The average household size from the 2010 PHC data in the District is 6.3 persons per household. The average household per house is 1.4 with urban dwellers having a higher proportion of households per house than rural dwellers. However, average household size for both rural areas and urban areas is the same (6.3).

Table 3.1: Household size by locality

	Total		District				
Categories	country	Region	Total	Urban	Rural		
Total household population	24,076,327	2,445,061	146,291	63.2	36.8		
Number of households	5,467,054	318,119	23,447	63.0	37.0		
Average households per house	1.6	1.2	1.4	1.6	1.2		
Population per house	7.3	9.6	9.1	10.1	7.8		
Average household size	4.5	7.8	6.3	6.3	6.3		

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 3.1.2 Household Composition and Headship

Table 3.2 shows household composition and headship in the Sagnarigu District. It shows that sons and daughters constitute a chunk (43.3%) of the household population in the district. Almost half (47.5%) of the male population is classified as sons compared to 39 percent of the females who are daughters to the head of household. In terms of numbers, there are more sons than daughters enumerated in the district. Altogether, household heads represented 16 percent of the entire household membership in the district. As expected, a higher proportion of the male population (25.1%) is recorded as heads of household compared to 6.7 percent of the female population.

Almost one in 10 persons in the households is a spouse to the head of household: 19.3 percent of the female population compared to less than one percent of the male population. This means that there are more female spouses than male spouses based on their relationship with their respective heads of household. It is also to be noted that other relatives, grandchildren and brothers/sisters represent substantial proportions of the household membership. Almost 13 percent of household members are reported as other relatives, with grandchildren and brothers/sisters constituting 6.8 percent and 5.6 percent respectively. There are some visible variations in the size of these categories among the males and female populations. This is especially the case with regard to other relatives which represent 16.3 percent of the female population compared to 9.2 percent of the males.

Table 3.2: Household population by composition and sex

	То	tal	Ma	ale	Fen	nale
Household composition	Number	Percent	Number	Percent	Number	Percent
Total	146,291	100.0	73,878	100.0	72,413	100.0
Head	23,447	16.0	18,562	25.1	4,885	6.7
Spouse (wife/husband)	14,499	9.9	490	0.7	14,009	19.3
Child (son/daughter)	63,363	43.3	35,101	47.5	28,262	39.0
Parent/Parent in-law	1,539	1.1	124	0.2	1,415	2.0
Son/Daughter in-law	1,799	1.2	114	0.2	1,685	2.3
Grandchild	9,936	6.8	5,111	6.9	4,825	6.7
Brother/Sister	8,258	5.6	5,053	6.8	3,205	4.4
Step child	2,068	1.4	1,125	1.5	943	1.3
Adopted/Foster child	1,257	0.9	543	0.7	714	1.0
Other relative	18,626	12.7	6,830	9.2	11,796	16.3
Non-relative	1,499	1.0	825	1.1	674	0.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 3.1.3 Household population structure and sex

Household structure is discussed with respect to the classification of the household based on affiliations within household members regarding whether the household is nuclear, extended or different combinations of the two. In other words, it refers to the type of relationship (whether related or unrelated) among household members present on census night.

Table 3.3 classifies the household population by structure and sex. The information in the table shows that the extended household structure (made up of the head, spouse(s), children and head's relatives) is by far the most dominant in the district and represents 50.5 percent of all the households. In terms of sex, a slightly higher proportion (50.9%) of the female population belonged to the extended households than their male counterparts (50.1%). The nuclear household structure which is composed of head, spouse(s) and children is less common compared to the extended and represents 20.2 percent of the households enumerated

in the district. The district also has single-parent nuclear and single-parent extended households and these respectively form 4.6 percent and 10.1 percent of the households. The data in Table 3.3 also reveal slight variations in the proportions of the population belonging to the different household structures by sex.

Table 3.3: Household population by structure and sex

	То	tal	Ma	ale	Fen	nale
Household structure	Number	Percent	Number	Percent	Number	Percent
Total	146,291	100.0	73,878	100.0	72,413	100.0
Head only	2,847	1.9	2,032	2.8	815	1.1
Head and a spouse only	1,482	1.0	746	1.0	736	1.0
Nuclear (Head spouse(s) children)	29,554	20.2	15,490	21.0	14,064	19.4
Extended (Head spouse(s) children Head's relatives)	73,910	50.5	37,031	50.1	36,879	50.9
Extended + non relatives	4,245	2.9	2,169	2.9	2,076	2.9
Head spouse(s) and other composition	3,261	2.2	1,655	2.2	1,606	2.2
Single parent Nuclear	6,687	4.6	2,973	4.0	3,714	5.1
Single parent Extended	14,770	10.1	6,593	8.9	8,177	11.3
Single parent Extended + non relative	1,281	0.9	606	0.8	675	0.9
Head and other composition but no spouse	8,254	5.6	4,583	6.2	3,671	5.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 3.3 Marital Status

In Ghana, marriage is recognized by the society as a union between a man and a woman for the purpose of procreation, mutual and emotional support and companionship. There are norms governing marriage in human society, including a socially and legally acceptable minimum age for marriage which may vary across different societies. In Ghana, 18 years is by law the minimum age at which marriage can take place. Nonetheless, there are cases where girls younger than 18 years have been given out into marriage. In order to understand marriage patterns in Ghana, the 2010 PHC collected information on persons 12 years and above by marital status.

The marital status of people 12 years and older in the Sagnarigu District is illustrated in Figure 3.1. It shows that almost half (48.5%) of the persons in this age category are married with about 46 percent of them never married. The widowed, divorced and separated, however, are in the minority and represent 3.8 percent, 1.1 percent and 0.7 percent respectively of persons 12 years and older in the district. The figure further shows that less than one percent of them are in informal/consensual unions or living together.

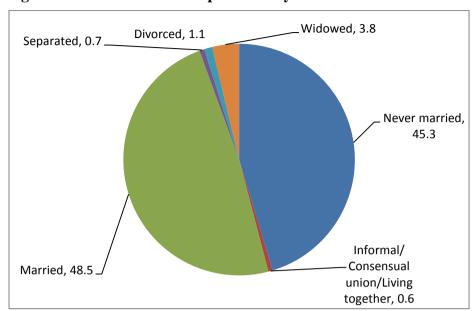


Figure 3.1: Marital status of persons 12 years and older

#### 3.3.1 Marital Status, Age and Sex

The marital status of persons 12 years and older presented in Table 3.4 shows that the 40-44 age group records the highest proportion (88.2%) of persons who are married while as expected, the lowest proportion of 6.0 percent is reported in age 12-14 years. It is also shown that the proportion of persons married increases from among the younger ages until age 40-44 years after which it decreases largely due to deaths, separation or divorce. Also, 6.0 percent and 6.9 percent of persons 12-14 and 15-19 years respectively are reported to be married.

Table 3.4 also has information on the sex differentials by marital status. The table shows quite clearly that the proportion of persons who are married is higher among the females than the males. For example, 53.1 percent of the males compared to 37.5 percent of the females are never married in contrast to 52.8 percent of the females and 44.3 percent of the males who are married. At the same time, a higher proportion (6.7%) of the female population 12 years and older is widowed compared to their male counterparts (0.8%). Quite clearly, this may be the result of re-marriages that are quite commonly undertaken by males compared to females. The pattern of marital status by age and sex is not different from what has been described above.

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

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				Informal/				
G . /A			NT.	Consensual				
Sex/Age-	Manada an	T-4-1	Never	union/Living	Mamiad	C	D:	W: 4 4
group	Number	Total	married	together	Married	Separated	Divorced	Widowed
Both Sexes	101.770	100.0	45.0	0.6	40.5	0.7		2.0
Total	101,779	100.0	45.3	0.6	48.5	0.7	1.1	3.8
12- 14	9,215	100.0	93.9	0.1	6.0	0.0	0.0	0.0
15 - 19	16,733	100.0	92.6	0.3	6.9	0.1	0.0	0.1
20 - 24	15,525	100.0	72.8	0.9	25.4	0.3	0.3	0.3
25 - 29	14,062	100.0	45.8	1.2	51.5	0.6	0.6	0.3
30 - 34	10,903	100.0	21.7	0.7	74.6	0.9	1.3	0.8
35 - 39	8,180	100.0	9.2	0.7	85.8	1.2	1.7	1.4
40 - 44	6,750	100.0	4.7	0.6	88.2	1.3	2.4	2.9
45 - 49	4,932	100.0	3.5	0.6	87.8	1.6	2.2	4.4
50 - 54	4,294	100.0	2.4	0.4	83.5	1.40	3.40	9.00
55 - 59	2,403	100.0	2.1	0.5	81.7	1.00	3.30	11.30
60 - 64	2,712	100.0	3.2	0.1	73.2	1.6	3.1	18.7
65+	6,070	100.0	6.4	0.2	58.2	1.1	2.5	31.7
Male								
Total	51,211	100.0	53.1	0.5	44.3	0.5	0.8	0.8
12- 14	4,760	100.0	94.3	0.1	5.5	0.0	0.0	0.0
15 - 19	8,788	100.0	94.9	0.1	4.8	0.1	0.0	0.1
20 - 24	7,717	100.0	87.7	0.5	11.3	0.1	0.2	0.2
25 - 29	6,655	100.0	67.3	1.1	30.7	0.3	0.4	0.2
30 - 34	5,357	100.0	33.7	0.9	63.5	0.7	0.9	0.3
35 - 39	4,039	100.0	13.8	0.7	82.8	0.9	1.4	0.4
40 - 44	3,364	100.0	6.7	0.6	88.8	1.2	1.8	0.9
45 - 49	2,617	100.0	4.7	0.7	90.9	1.1	1.5	1.1
50 - 54	2,264	100.0	2.8	0.4	91.6	1.1	2.3	1.7
55 - 59	1,358	100.0	2	0.5	93.2	0.4	1.8	2.1
60 - 64	1,398	100.0	3.8	0.2	88.2	1.6	2.6	3.6
65+	2,894	100.0	8.1	0.2	82.4	1.1	2.2	5.8
Female	_,~,							
Total	50,568	100.0	37.5	0.7	52.8	0.9	1.4	6.7
12 - 14	4,455	100.0	93.5	0.1	6.4	0.0	0.0	0.0
15 - 19	7,945	100.0	90.1	0.4	9.2	0.1	0.1	0.2
20 - 24	7,808	100.0	58.1	1.3	39.3	0.5	0.4	0.4
25 - 29	7,407	100.0	26.5	1.3	70.1	0.9	0.8	0.4
30 - 34	5,546	100.0	10.1	0.5	85.3	1.0	1.7	1.3
35 - 39	4,141	100.0	4.8	0.7	88.8	1.5	1.7	2.3
40 - 44	3,386	100.0	2.7	0.7	87.7	1.3	2.9	4.9
40 - 44 45 - 49	2,315	100.0	2.7	0.5	84.3	2.1	3.0	8.1
			1.9	0.3	74.5	1.7	4.6	
50 - 54 55 - 50	2,030	100.0						17.0
55 - 59	1,045	100.0	2.3	0.6	66.7	1.9	5.3	23.3
60 - 64	1,314	100.0	2.5	0.1	57.2	1.7	3.7	34.9
65+	3,176	100.0	4.8	0.1	36.0	1.0	2.8	55.3

#### 3.3.2 Marital Status and level of education

Table 3.5 indicates that there are 101,779 people aged 12 years and older in the Sagnarigu District out of which 40.6 percent have no education, and 31.5 percent have basic education which happens to be the most commonly attained level of education among the population.

Just about 4.0 percent of the population has attained a tertiary level of education in the district in comparison with 8.6 percent of them that have post-middle/secondary/diploma certificates.

The pattern of marital status by education suggests that the never married persons are more educated than others who are either married or ever married. Among the never married, 16.1 percent have no education compared to close to 60 percent or higher among the married, separated, divorced or widowed. This may be due to the fact that the never married are relatively younger and more likely to have gone to school compared to their ever married counterparts who may be much older. By sex, the pattern shown in Table 3.5 is not different except that within each marital status, males are more likely to have relatively higher education compared to females.

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

							Post middle/	
						Vocational/	secondary	
		All	No		Secon	Technical/	certificate/	
Sex/Marital status	Number	levels	Education	Basic <sup>1</sup>	dary <sup>2</sup>	Commercial	diploma <sup>3</sup>	Tertiary <sup>4</sup>
<b>Both Sexes</b>								
Total	101,779	100.0	40.6	31.5	13.7	1.8	8.6	3.8
Never married	46,129	100.0	16.1	48.8	21.6	1.8	9.2	2.5
Informal/Consensual union/Living together	610	100.0	34.9	23.8	15.7	3.8	14.9	6.9
Married	49,380	100.0	59.3	17.8	7.6	1.9	8.3	5.1
Separated	693	100.0	58.4	16.0	7.8	2.3	10.4	5.1
Divorced	1,148	100.0	60.5	18.4	8.2	3.0	7.6	2.4
Widowed	3,819	100.0	85.8	8.6	1.6	0.5	2.6	0.8
Male								
Total	51,211	100.0	32.3	34.2	16.1	1.9	9.9	5.6
Never married	27,168	100.0	15.3	47.6	22.4	1.7	9.9	3.1
Informal/Consensual union/Living together	277	100.0	24.5	26.0	17.7	3.6	17.3	10.8
Married	22,667	100.0	51.3	19.1	8.9	2.2	10.0	8.5
Separated	259	100.0	52.9	15.8	11.6	2.7	11.6	5.4
Divorced	425	100.0	60.0	16.9	9.4	3.3	7.1	3.3
Widowed	415	100.0	73.7	13.5	5.1	1.4	3.4	2.9
Female								
Total	50,568	100.0	48.9	28.9	11.4	1.7	7.2	1.9
Never married	18,961	100.0	17.3	50.5	20.4	1.9	8.3	1.6
Informal/Consensual union/Living together	333	100.0	43.5	21.9	14.1	3.9	12.9	3.6
Married	26,713	100.0	66.0	16.7	6.4	1.7	6.9	2.2
Separated	434	100.0	61.8	16.1	5.5	2.1	9.7	4.8
Divorced	723	100.0	60.7	19.2	7.5	2.8	7.9	1.9
Widowed	3,404	100.0	87.3	8.0	1.2	0.4	2.5	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 3.3.3 Marital status and economic activity status

The activity status of persons in the population could help understand the categories into which people are placed in the district when discussing marital status. In some cultures and religions, ability to support a spouse financially is a key determinant of whether one could marry or not.

Table 3.6 shows that 50.1 percent of the population 12 years and older in the Sagnarigu District are employed. The unemployed constitute 4.2 percent and 45.7 percent of them are economically not active. This means that almost half of the persons 12 years and older in the district are either unemployed or not active.

In terms of marital status, the never married report the lowest proportion employed (24.8%) and is followed by the widowed (37.4%). On the other hand, the highest proportion that is employed is among the married. In contrast, the married persons have the least proportion (22.3%) that is not economically active compared to 70.6 percent and 55.9 percent respectively among the never married and the widowed. The low employment rates and high economic inactivity levels could be accounted for by the fact that many of the never married may be young and in school and, therefore, may not be in any employment, thereby making them economically not active.

On the other hand, among the widowed, a majority of them are women and much older and as a result making them largely economically not active. A similar pattern is shown for either males or females. In both cases, males are more likely than females to be employed, but less likely to be economically not active compared to their female counterparts.

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

	То	tal	Empl	oved	Unemp	oloved	Economi act	
Sex/Marital status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	101,779	100.0	50,955	50.1	4,308	4.2	46,516	45.7
Never married	46,129	100.0	11,448	24.8	2,126	4.6	32,555	70.6
Informal/Consensual union/Living together	610	100.0	375	61.5	40	6.6	195	32.0
Married	49,380	100.0	36,422	73.8	1,964	4.0	10,994	22.3
Separated	693	100.0	472	68.1	29	4.2	192	27.7
Divorced	1,148	100.0	808	70.4	49	4.3	291	25.3
Widowed	3,819	100.0	1,430	37.4	100	2.6	2,289	59.9
Male								
Total	51,211	100.0	26,960	52.6	2,019	3.9	22,232	43.4
Never married	27,168	100.0	7,626	28.1	1,301	4.8	18,241	67.1
Informal/Consensual union/Living together	277	100.0	188	67.9	23	8.3	66	23.8
Married	22,667	100.0	18,437	81.3	653	2.9	3,577	15.8
Separated	259	100.0	183	70.7	11	4.2	65	25.1
Divorced	425	100.0	329	77.4	16	3.8	80	18.8
Widowed	415	100.0	197	47.5	15	3.6	203	48.9
Female								
Total	50,568	100.0	23,995	47.5	2,289	4.5	24,284	48.0
Never married	18,961	100.0	3,822	20.2	825	4.4	14,314	75.5
Informal/Consensual union/Living together	333	100.0	187	56.2	17	5.1	129	38.7
Married	26,713	100.0	17,985	67.3	1,311	4.9	7,417	27.8
Separated	434	100.0	289	66.6	18	4.1	127	29.3
Divorced	723	100.0	479	66.3	33	4.6	211	29.2
Widowed	3,404	100.0	1,233	36.2	85	2.5	2,086	61.3

#### 3.4 Nationality

Nationality is the legal relationship between a person and a state. Ghanaian nationals are classified as Ghanaians by birth and by naturalization. Other nationals are grouped into ECOWAS nationals, Africans other than ECOWAS nationals, and non-Africans.

From Table 3.7, Ghanaians by birth represent 95.4 percent of the total population in the district. There is virtually no difference by sex with 95 percent of either the males or females being Ghanaians by birth. The same situation is true for the other nationality categories for males and females. For example, 1.9 percent each of males and females have dual nationality and about one percent of either males or females are ECOWAS nationals. Again, 0.7 percent of either males or females are Ghanaians by naturalization in the district. The district, therefore, is largely populated by Ghanaians by birth.

Table 3.7: Population by nationality and sex

	Both	sexes	Ma	ale	Fen	nale
Nationality	Number	Percent	Number	Percent	Number	Percent
Total	148,099	100.0	74,886	100.0	73,213	100.0
Ghanaian by birth	141,245	95.4	71,401	95.3	69,844	95.4
Dual nationality (Ghanaian & Other)	2,792	1.9	1,404	1.9	1,388	1.9
Ghanaian by naturalization	989	0.7	494	0.7	495	0.7
ECOWAS	1,587	1.1	846	1.1	741	1.0
African other than ECOWAS	825	0.6	404	0.5	421	0.6
Other	661	0.4	337	0.5	324	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 3.5 Religious Affiliation

Table 3.8 shows the religious affiliation of the population in the Sagnarigu District. It is clear that the most dominant religion in the district is Islam with 83.5 percent of the population being Muslims, followed by Christians who represent 15.6 percent. Catholics are the most dominant Christians and form 7.2 percent of the population with Pentecostal/Charismatic, and Protestant (Anglican, Lutheran) adherents accounting for 3.5 percent and 3.1 percent respectively. Almost two percent of the population belongs to other Christian religions and only 0.4 percent of them are worshippers of Traditional Religion.

Table 3.8: Population by religion and sex

	Both	sexes	Ma	ıle	Fem	ale
Religion	Number	Percent	Number	Percent	Number	Percent
Total	148,099	100.0	74,886	100.0	73,213	100.0
No religion	263	0.2	138	0.2	125	0.2
Catholic	10,685	7.2	5,088	6.8	5,597	7.6
Protestants (Angelican Lutheran etc.)	4,647	3.1	2,288	3.1	2,359	3.2
Pentecostal/Charismatic	5,248	3.5	2,532	3.4	2,716	3.7
Other Christian	2,644	1.8	1,294	1.7	1,350	1.8
Islam	123,613	83.5	62,999	84.1	60,614	82.8
Traditionalist	602	0.4	338	0.5	264	0.4
Other	397	0.3	209	0.3	188	0.3

In terms of comparison by sex, there is not much variation between the males and females except that a relatively higher proportion of the males (84.1%) than the females (82.8%) reported to be Muslims while among those professing to be Christians, the proportion is slightly higher for females than males across each of the Christian denominations.

#### 3.6 Literacy and Education

#### 3.6.1 Literacy Status

Table 3.9 shows that the total literate population of the district is 62,856 and the non-literate stands at 41,498. This implies that about 40 percent of the population in the district is not literate in any language. Of the number that are literate (representing 60 percent of the population), 38.6 percent is literate in English only, 1.4 percent in Ghanaian Language only and more than half of them (59.1%) are literate in English and Ghanaian language.

A similar pattern is shown by age where literacy in both English and Ghanaian language is the highest within each age group for either males or females, followed by literacy in English language only. The only exception is in the 11-14 year group where the proportion that is literate in English language only is the highest followed by English and Ghana language. It is also observed from Table 3.9 that at all ages, literacy in French is almost absent with less than one percent recorded as being literate in English and French at the same time.

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

						English		English,
	None				Ghanaian	and	English	French and
	(not			English	language	Ghanaian	and	Ghanaian
Age group	literate)	Literate	Total	only	only	language	French	language
<b>Both Sexes</b>								_
Total	41,498	62,856	100.0	38.6	1.4	59.1	0.3	0.6
10-14	931	10,859	100.0	53.6	1.4	44.5	0.2	0.3
15-19	2,449	14,284	100.0	41.5	1.3	56.6	0.2	0.4
20-24	4,283	11,242	100.0	33.6	1.3	64.4	0.2	0.5
25-29	5,302	8,760	100.0	31.6	1.3	65.9	0.4	0.7
30-34	5,171	5,732	100.0	31.8	1.2	66.3	0.2	0.5
35-39	4,507	3,673	100.0	32.3	1.6	65.0	0.2	0.8
40-44	4,192	2,558	100.0	35.6	2.3	60.9	0.2	0.9
45-49	3,140	1,792	100.0	36.0	1.8	60.2	0.5	1.5
50-54	2,826	1,468	100.0	35.9	1.2	60.9	0.5	1.4
55-59	1,537	866	100.0	34.8	1.8	62.6	0.2	0.6
60-64	2,109	603	100.0	38.5	2.8	56.7	0.7	1.3
65+	5,051	1,019	100.0	35.3	1.8	61.4	0.4	1.1
Male		-						
Total	16,638	35,892	100.0	36.3	1.4	61.5	0.3	0.6
10-14	395	5,684	100.0	54.0	1.4	44.2	0.1	0.3
15-19	1,033	7,755	100.0	40.1	1.4	58	0.2	0.3
20-24	1,494	6,223	100.0	31.4	1.3	66.8	0.2	0.4
25-29	1,672	4,983	100.0	29.3	1.3	68.3	0.5	0.6
30-34	1,846	3,511	100.0	28.2	1.1	69.9	0.3	0.5
35-39	1,755	2,284	100.0	27.8	1.0	69.8	0.2	1.2
40-44	1,743	1,621	100.0	32.0	1.9	64.4	0.2	1.4
45-49	1,469	1,148	100.0	34.6	1.7	60.9	0.6	2.3
50-54	1,310	954	100.0	33.6	1.3	62.6	0.6	1.9
55-59	713	645	100.0	33.8	1.4	64.0	0.2	0.6
60-64	956	442	100.0	36.7	2.0	59.0	0.5	1.8
65+	2,252	642	100.0	29.9	1.6	66.4	0.5	1.7

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

						English		English,
	None				Ghanaian	and	English	French and
Age	(not			English	language	Ghanaian	and	Ghanaian
group	literate)	Literate	Total	only	only	language	French	language
Female		-						
Total	24,860	26,964	100.0	41.8	1.5	56	0.2	0.5
10-14	536	5,175	100.0	53.3	1.4	44.7	0.2	0.3
15-19	1,416	6,529	100.0	43.1	1.2	54.8	0.2	0.5
20-24	2,789	5,019	100.0	36.3	1.3	61.5	0.2	0.7
25-29	3,630	3,777	100.0	34.8	1.4	62.8	0.3	0.7
30-34	3,325	2,221	100.0	37.5	1.2	60.6	0.2	0.5
35-39	2,752	1,389	100.0	39.7	2.7	57.1	0.2	0.3
40-44	2,449	937	100.0	41.8	2.9	55.0	0.2	0.1
45-49	1,671	644	100.0	38.5	2.0	59.0	0.3	0.2
50-54	1,516	514	100.0	40.1	1.2	57.8	0.4	0.6
55-59	824	221	100.0	37.6	3.2	58.4	0.5	0.5
60-64	1,153	161	100.0	43.5	5.0	50.3	1.2	0.0
65+	2,799	377	100.0	44.6	2.1	53.1	0.3	0.0

#### 3.6.2 Level of Education and School Attendance

Table 3.10 shows the population 3 years and older by level of education, school attendance and sex. It shows that for both sexes, the population currently attending primary school is the highest (40.8%). Also, 18.9 percent are currently attending junior high schools while 11.9 percent and 6.4 percent are in senior high and tertiary institutions respectively. In terms of sex differential, a relatively higher proportion of females (42.4%) than males (39.4%) are reported to be currently attending primary school in the district. However, at higher levels of schooling, the proportion of males currently in school is higher compared to females. For example, 19.4 percent and 7.4 percent of the males reported to be currently attending junior high and tertiary schools respectively compared to 18.3 percent and 5.2 percent respectively of their female counterparts.

School attendance in the past also shows some variation by sex. What is quite visible from Table 3.10, however, is that a much higher proportion of the population attending school in the past did so at the tertiary level compared to current school attendance. For example, school attendance at the tertiary level in the past constitute 20.7 percent (24.5 percent for the males compared to 15.4 percent among the females), suggesting a relatively lower school attendance in the past at the tertiary level among the females relative to the males. In contrast, however, a relatively higher proportion of the females attended primary, junior and senior high school in the past compared to their male counterparts. On the other hand, with reference to middle and secondary school education, a higher proportion of the males compared to the females attended in the past. It appears that between the past and the present, the gap in educational attendance between the males and females is closing.

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

			Currently	attending					Attended	in the past		
	Both	sexes	Ma	ale	Fen	nale	Both	sexes	Ma	ale	Fen	nale
Level of education	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	60,782	100.0	32,959	100.0	27,823	100.0	29,240	100.0	16,933	100.0	12,307	100.0
Nursery	8,433	13.9	4,333	13.1	4,100	14.7	-	0.0	-	0.0	-	0.0
Kindergarten	3,581	5.9	1,875	5.7	1,706	6.1	-	0.0	-	0.0	-	0.0
Primary	24,778	40.8	12,983	39.4	11,795	42.4	5,414	18.5	2,695	15.9	2,719	22.1
JSS/JHS	11,491	18.9	6,396	19.4	5,095	18.3	5,125	17.5	2,750	16.2	2,375	19.3
Middle	-	-	-	-	-	0.0	2,822	9.7	1,695	10.0	1,127	9.2
SSS/SHS	7,244	11.9	4,257	12.9	2,987	10.7	5,388	18.4	3,041	18.0	2,347	19.1
Secondary	-	-	-	-	-	0.0	1,347	4.6	935	5.5	412	3.3
Vocational/Technical/Commercial	555	0.9	275	0.8	280	1.0	1,311	4.5	723	4.3	588	4.8
Post middle/secondary certificate	814	1.3	402	1.2	412	1.5	1,791	6.1	946	5.6	845	6.9
Tertiary	3,886	6.4	2,438	7.4	1,448	5.2	6,042	20.7	4,148	24.5	1,894	15.4

# CHAPTER FOUR ECONOMIC CHARACTERISTICS

#### 4.1 Introduction

The 2010 Population and Housing Census collected data on the economic characteristics of the population in the Sagnarigu District. These data provide information on the economic activity status of the population enumerated in the district by sector. The data are useful for the computation of economic indicators and the determination of the level of development in the district.

This chapter analyses the economic activities of persons classified as economically active and economically not active by their employment status by age, sex, locality of residence (urban or rural area), marital status, level of education, and sector of employment.

#### 4.2 Economic Activity Status

Economic activity status describes the activity of the respondents during the seven (7) days prior to the census night. Information on economic activity was collected for persons 15 years and older.

Table 4.1 illustrates the activity status of population 15 years and older by sex. Out of the 92,564 people 15 years and older 59.0 percent are economically active while 41.0 percent are economically not active. Out of the economically active population 92.1 percent are employed and 7.9 percent are unemployed. Among those who are unemployed, majority (54.6%) of them are first time job seekers. Of the economically not active population, 58.2 percent are in full time education, while 22.3 percent did home duties. It shows that 61.7 percent of the males are economically active population, while the females represent 56.4 percent. Also, more males (93.0%) than females (91.2%) are employed and more females (8.8%) than males (7.0%) are unemployed. While more males in the economically not active are in full time education than females, (71.7% and 46.3% respectively), more females than males did home duties (32.6% and 10.6% respectively).

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

	Tot	al	Ma	ıle	Fem	iale
Activity status	Number	Percent	Number	Percent	Number	Percent
Total	92,564	100.0	46,451	100.0	46,113	100.0
Economically active	54,636	59.0	28,648	61.7	25,988	56.4
Employed	50,341	92.1	26,637	93.0	23,704	91.2
Worked	47,800	95.0	25,328	95.1	22,472	94.8
Did not work but had job to go						
back to	2,187	4.3	1,146	4.3	1,041	4.4
Did voluntary work without pay	354	0.7	163	0.6	191	0.8
Unemployed	4,295	7.9	2,011	7.0	2,284	8.8
Worked before, seeking work and available	1,950	45.4	813	40.4	1,137	49.8
Seeking work for the first time and available	2,345	54.6	1,198	59.6	1,147	50.2
Economically not active	37,928	41.0	17,803	38.3	20,125	43.6
Did home duties (household chore)	8,450	22.3	1,885	10.6	6,565	32.6
Full time education	22,089	58.2	12,767	71.7	9,322	46.3
Pensioner/Retired	696	1.8	520	2.9	176	0.9
Disabled/Sick	807	2.1	397	2.2	410	2.0
Too old/young	3,715	9.8	1,173	6.6	2,542	12.6
Other	2,171	5.7	1,061	6.0	1,110	5.5

#### 4.2.1 Economic Activity Status and Age

Table 4.2 presents population 15 years and older by sex, age and activity status. Overall, the table indicates that 54.4 percent of the population 15 years and older in the district are employed, 4.6 percent is unemployed and 41.0 percent are economically not active. The pattern by age shows that the proportion that is employed is lowest at 15-19 yeaes and represent 14.8 percent and steadily increases to peak at 84.2 percent within the age group 45-49 years and then gradually reduces to reach 39.8 percent at age 65 years and older. Conversely, the proportion of the economically not active population is highest at age 15-19 years, reduces as age increases to a low of 13.1 percent at age 45-49 years before rising to 59.3 percent at age 65 years and older. By sex, a higher proportion of the males (57.3%) than females (51.4%) are reported to be employed in the district. There is virtually no difference in the pattern of economic activity status by age and sex in the general population described above. We find, however, that at all ages, a higher proportion of males than females are employed while the reverse is the case with respect to the economically not active population in the district.

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

	All S	tatus	Empl	oved	Unem	oloved	Economi act	•
Age group	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both sexes	Transcr	T CICCIII	TVGIIIOCI	1 crecin	Trainiou	T CICCIII	Transcr	T CTCCIII
Total	92,564	100.0	50,341	54.4	4,295	4.6	37,928	41.0
15-19	16,733	100.0	2,484	14.8	381	2.3	13,868	82.9
20-24	15,525	100.0	5,721	36.9	1,061	6.8	8,743	56.3
25-29	14,062	100.0	8,339	59.3	1,153	8.2	4,570	32.5
30-34	10,903	100.0	8,074	74.1	687	6.3	2,142	19.6
35-39	8,180	100.0	6,666	81.5	326	4.0	1,188	14.5
40-44	6,750	100.0	5,587	82.8	206	3.1	957	14.2
45-49	4,932	100.0	4,152	84.2	136	2.8	644	13.1
50-54	4,294	100.0	3,412	79.5	101	2.4	781	18.2
55-59	2,403	100.0	1,866	77.7	61	2.5	476	19.8
60-64	2,712	100.0	1,626	60.0	125	4.6	961	35.4
65+	6,070	100.0	2,414	39.8	58	1.0	3,598	59.3
Male	,		•				•	
Total	46,451	100.0	26,637	57.3	2,011	4.3	17,803	38.3
15-19	8,788	100.0	1,283	14.6	160	1.8	7,345	83.6
20-24	7,717	100.0	2,655	34.4	476	6.2	4,586	59.4
25-29	6,655	100.0	3,970	59.7	532	8.0	2,153	32.4
30-34	5,357	100.0	4,154	77.5	336	6.3	867	16.2
35-39	4,039	100.0	3,541	87.7	155	3.8	343	8.5
40-44	3,364	100.0	2,988	88.8	110	3.3	266	7.9
45-49	2,617	100.0	2,379	90.9	71	2.7	167	6.4
50-54	2,264	100.0	1,979	87.4	52	2.3	233	10.3
55-59	1,358	100.0	1,176	86.6	35	2.6	147	10.8
60-64	1,398	100.0	998	71.4	58	4.1	342	24.5
65+	2,894	100.0	1,514	52.3	26	0.9	1,354	46.8
Female								
Total	46,113	100.0	23,704	51.4	2,284	5.0	20,125	43.6
15-19	7,945	100.0	1,201	15.1	221	2.8	6,523	82.1
20-24	7,808	100.0	3,066	39.3	585	7.5	4,157	53.2
25-29	7,407	100.0	4,369	59.0	621	8.4	2,417	32.6
30-34	5,546	100.0	3,920	70.7	351	6.3	1,275	23.0
35-39	4,141	100.0	3,125	75.5	171	4.1	845	20.4
40-44	3,386	100.0	2,599	76.8	96	2.8	691	20.4
45-49	2,315	100.0	1,773	76.6	65	2.8	477	20.6
50-54	2,030	100.0	1,433	70.6	49	2.4	548	27.0
55-59	1,045	100.0	690	66.0	26	2.5	329	31.5
60-64	1,314	100.0	628	47.8	67	5.1	619	47.1
65+	3,176	100.0	900	28.3	32	1.0	2,244	70.7

# 4.3 Occupation

Table 4.3 shows the employed population 15 years and older by occupation and sex. It indicates that four main occupational groups in the district and these together provide jobs for up to about 82 percent of all employed persons 15 years and older in the district. These are service and sales workers (27.0%), craft and related trades workers (22.0%), skilled agricultural forestry and fishery workers (21.5%) and professionals (11.1%). Apart from these, there are other minor occupational groups such as plant and machine operators and assemblers and, elementary occupations which respectively engage 6.1 percent and 4.4

percent of employed persons in the district. Each of the remaining types of occupation provides jobs for less than three percent of the employed persons. There are also some significant variations between the males and females as to the type of occupation they are engaged in. These are particularly visible in the following occupational groups: service and sales (12.4% males and 43.3% females); skilled agricultural, forestry and fishery workers (31.2% males and 10.7% females) and plant and machine operators and assemblers (7.9% for males and 0.4% for females). This means that some of the occupations are selective of males while others are mainly for females.

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

Occupation	Both	sexes	Ma	le	Fem	Female		
Occupation	Number	Percent	Number	Percent	Number	Percent		
Total	50,341	100.0	26,637	100.0	23,704	100.0		
Managers	1,395	2.8	865	3.2	530	2.2		
Professionals	5,594	11.1	3,577	13.4	2,017	8.5		
Technicians and associate professionals	1,049	2.1	761	2.9	288	1.2		
Clerical support workers	915	1.8	451	1.7	464	2.0		
Service and sales workers	13,583	27.0	3,311	12.4	10,272	43.3		
Skilled agricultural forestry and fishery workers	10,846	21.5	8,315	31.2	2,531	10.7		
Craft and related trades workers	11,055	22.0	5,514	20.7	5,541	23.4		
Plant and machine operators and assemblers	2,203	4.4	2,104	7.9	99	0.4		
Elementary occupations	3,081	6.1	1,194	4.5	1,887	8.0		
Other occupations	620	1.2	545	2.0	75	0.3		

Source: Ghana Statistical Service, 2010 Population and Housing Census

# 4.4 Industry

The industry of employment in the district is presented in Table 4.4 by sex. From the table, the employed persons are distributed across several types of industry of employment. However, just about five of them are the most popular in the district by virtue of the size of the population they engage. Wholesale and retail; repair of motor vehicles and motorcycles engages one in four employed persons in the district, followed by agriculture forestry and fishing which provides livelihood for about 22 percent of all employed persons in the district.

Also, manufacturing, education, accommodation and food service activities engages 14.1 percent, 9.5 percent and 6.1 percent respectively of employed persons in the district. Each of the remaining industrial avenues provides jobs for less than five percent of the employed persons.

The distribution is, however, not uniform by sex. Among the males, 15.1 percent of the employed persons are into wholesale and retail; repair of motor vehicles and motorcycles compared to 37.1 percent of their female counterparts. At the same time, 31.7 percent of males and 11.0 percent of females are into agriculture forestry and fishing activities. Furthermore, only about one percent of the males are engaged in accommodation and food service activities compared to 11.7 percent of the females. Similar variations are observed by sex with regard to manufacturing and education.

Table 4.4: Employed population 15 years and older by Industry and sex

	Both s	sexes	Ma	ale	Fen	nale
Industry	Number	Percent	Number	Percent	Number	Percent
Total	50,341	100.0	26,637	100.0	23,704	100.0
Agriculture forestry and fishing	11,031	21.9	8,431	31.7	2,600	11.0
Mining and quarrying	35	0.1	24	0.1	11	0.0
Manufacturing	7,089	14.1	2,403	9.0	4,686	19.8
Electricity gas stream and air conditioning supply	151	0.3	127	0.5	24	0.1
Water supply; sewerage waste management and remediation						
activities	103	0.2	90	0.3	13	0.1
Construction	1,974	3.9	1,893	7.1	81	0.3
Wholesale and retail; repair of motor vehicles and motorcycles	12,819	25.5	4,032	15.1	8,787	37.1
Transportation and storage	1,752	3.5	1,658	6.2	94	0.4
Accommodation and food service						
activities	3,084	6.1	301	1.1	2,783	11.7
Information and communication	227	0.5	180	0.7	47	0.2
Financial and insurance activities	413	0.8	300	1.1	113	0.5
Real estate activities	7	0.0	6	0.0	1	0.0
Professional scientific and technical activities	915	1.8	407	1.5	508	2.1
Administrative and support service activities	545	1.1	445	1.7	100	0.4
Public administration and defence;						
compulsory social security	1,647	3.3	1,296	4.9	351	1.5
Education	4,803	9.5	3,046	11.4	1,757	7.4
Human health and social work activities	1,156	2.3	599	2.2	557	2.3
Arts entertainment and recreation	202	0.4	171	0.6	337	0.1
		3.8		3.8		3.8
Other service activities	1,917	3.8	1,013	3.8	904	3.8
Activities of households as employers; undifferentiated goods - and services - producing activities						
of households for own use	421	0.8	177	0.7	244	1.0
Activities of extraterritorial organizations and bodies	50	0.1	38	0.1	12	0.1

# 4.5 Employment Status

Table 4.5 illustrates the distribution of employed population 15 years and older by employment status and sex. On the whole, the self-employed without employee(s) stands out as the highest proportion and engages 57.2 percent of the people and is made up of 49.2 percent of the males and 66.3 percent among the females. It is followed by the employee category with 25.6 percent with 33.4 percent males and 16.8 percent females. Again, employed persons who are self-employed with employees constitute 5.6 percent of the employed persons while others classified as contributing family workers represent 6.0 percent. It is also to be noted that while the proportion of males working as self-employed

with employees are higher than the females, the reverse is the case with regard to contributing family workers.

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

	Both sexes		Ma	le	Female	
Employment Status	Number	Percent	Number	Percent	Number	Percent
Total	50,341	100.0	26,637	100.0	23,704	100.0
Employee	12,868	25.6	8,892	33.4	3,976	16.8
Self-employed without						
employee(s)	28,814	57.2	13,098	49.2	15,716	66.3
Self-employed with						
employee(s)	2,800	5.6	1,640	6.2	1,160	4.9
Casual worker	447	0.9	299	1.1	148	0.6
Contributing family worker	3,019	6.0	1,363	5.1	1,656	7.0
Apprentice	1,965	3.9	1,142	4.3	823	3.5
Domestic employee (House						
help)	319	0.6	133	0.5	186	0.8
Other	109	0.2	70	0.3	39	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 4.6 Employment Sector

Table 4.6 depicts the employment sector of the employed persons by sex. By far, the private informal sector is the dominant provider of work for the population and consist of 77.5 percent of all employed persons in the district which is made up of 71.0 percent of males and 84.9 percent of females.

The big variation between males and females in the private informal sector may be attributed to the fact that most of the jobs in this sector involve trading which women tend to do better than men. It is also observed that the public (government) sector employs 15.9 percent of all employed persons in the district and it is skewed in favour of males (20.1%) compared to females (11.2%). The private formal sector also engages only 5.3 percent which is made up of relatively higher proportion of males (7.1%) than females (3.1%) The NGOs, semi-public/parastatal and international organisations do not constitute major sources of employment in the district and together engage 1.3 percent of the employed persons.

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

	Both sexes		M	ale	Fen	Female	
Employment Sector	Number	Percent	Number	Percent	Number	Percent	
Total	50,341	100.0	26,637	100.0	23,704	100.0	
Public (Government)	8,003	15.9	5,347	20.1	2,656	11.2	
Private Formal	2,645	5.3	1,902	7.1	743	3.1	
Private Informal	39,012	77.5	18,899	71.0	20,113	84.9	
Semi-Public/Parastatal	60	0.1	46	0.2	14	0.1	
NGOs (Local and International)	549	1.1	391	1.5	158	0.7	
Other International							
Organisations	72	0.1	52	0.2	20	0.1	

#### **CHAPTER FIVE**

#### INFORMATION COMMUNICATION TECHNOLOGY

#### 5.1 Introduction

Information Communication Technology (ICT) in the 21<sup>st</sup> century has a direct contribution towards the success of an individual, organization or a country as a whole. The recognition of the relevance of ICT is reflected in actions such as 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 Innovation Centres and district ICT centres across the country (GSS, 2010).

This chapter focuses on the analysis of the usage of ICT in the district. It discusses the ownership and usage of mobile phones and internet facility by sex. The chapter also discusses household ownership and usage of desktop/laptop computers, household possession of fixed telephone lines by sex of the household head.

#### 5.2 Ownership of Mobile Phones

Table 5.1 shows that there are 101,779 persons aged 12 years and older in the Sagnarigu District. Out of this, about half (48.4%) own mobile phones. A higher proportion of males (54.9%) than females (41.9%), however, own mobile phones in the district.

#### 5.3 Use of Internet

Table 5.1 further has information on the use of the internet. It shows that the use of internet in the district is quite low with a little less than one in 10 (9.0%) persons 12 years and older using the internet facility. A higher proportion of the males (12.0%) than the females (5.9%) use the internet, a situation which could be due to differences in education between the males and females not only in the district but Ghana as a whole.

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

	Population 12 years and older		Population mobile	_	Population using internet facility		
Male	Number	Percent	Number	Percent	Number	Percent	
Total	101,779	100.0	49,328	48.4	9,204	9.0	
Male	51,211	100.0	28,134	54.9	6,178	12.0	
Female	50,568	100.0	21,194	41.9	3,026	5.9	

# 5.4 Household Ownership of Desktop or Laptop Computer

Table 5.2 further shows the proportion of the household in the Sagnarigu District by ownership of desktop or laptop computers.

From table, household ownership of desktop or laptop computers constitute only 13.4 percent of households. A slightly higher proportion of female-headed (14.9%) households own desktop/laptop computers compared to the male-headed households (13.0%).

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

	Number of ho	ouseholds	Household desktop/	_
Sex of head	Number	Percent	Number	Percent
Total	23,447	100.0	3,136	13.4
Male	18,562	100.0	2,410	13.0
Female	4,885	100.0	726	14.9

# CHAPTER SIX DISABILITY

#### 6.1 Introduction

Persons With disability (PWDs) can be described as those persons 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 (GSS, 2012).

Data on PWDs were collected during the 2010 Population and Housing Census to help understand the disability situation in the country in terms of the types of disability to guide policy making in this regard.

# 6.2 Population with Disability

Table 6.1 indicates that, out of the total population of 148,099 enumerated in the district, there are 2,166 PWDs representing 1.5 percent of the total district population. Based on comparison by sex, the proportion of males with disabilities (1.5%) is not too different compared to the females (1.4%).

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

	Both sexes		Ma	ale	Female	
Disability Type	Number	percent	Number	percent	Number	percent
All Localities						
Total	148,099	100.0	74,886	100.0	73,213	100.0
No disability	145,933	98.5	73,767	98.5	72,166	98.6
With a disability	2,166	1.5	1,119	1.5	1,047	1.4
Sight	657	30.3	310	27.7	347	33.1
Hearing	367	16.9	177	15.8	190	18.1
Speech	309	14.3	187	16.7	122	11.7
Physical	617	28.5	319	28.5	298	28.5
Intellectual	307	14.2	157	0.2	150	0.2
Emotional	270	12.5	124	11.1	146	13.9
Other	298	13.8	160	14.3	138	13.2
Urban						
Total	93,550	100.0	47,120	100.0	46,430	100.0
No disability	92,214	98.6	46,426	98.5	45,788	98.6
With a disability	1,336	1.4	694	1.5	642	1.4
Sight	425	31.8	209	30.1	216	33.6
Hearing	237	17.7	112	16.1	125	19.5
Speech	212	15.9	128	18.4	84	13.1
Physical	341	25.5	173	24.9	168	26.2
Intellectual	176	13.2	89	0.2	87	0.2
Emotional	163	12.2	71	10.2	92	14.3
Other	206	15.4	109	15.7	97	15.1

Table 6.1: Population by type of locality, disability type and sex (cont'd)

	Both sexes		Ma	ale	Fem	Female	
Disability Type	Number	percent	Number	percent	Number	percent	
Rural							
Total	54,549	100.0	27,766	100.0	26,783	100.0	
No disability	53,719	98.5	27,341	98.5	26,378	98.5	
With a disability	830	1.5	425	1.5	405	1.5	
Sight	232	28.0	101	23.8	131	32.3	
Hearing	130	15.7	65	15.3	65	16.0	
Speech	97	11.7	59	13.9	38	9.4	
Physical	276	33.3	146	34.4	130	32.1	
Intellectual	131	15.8	68	0.2	63	0.2	
Emotional	107	12.9	53	12.5	54	13.3	
Other	92	11.1	51	12.0	41	10.1	

# **6.3** Type of Disability

Table 6.1 further provides data on the types of disability by sex. The table reveals that sight disability is the most common in the district and represents 30.3 percent of all types of disability identified in the 2010 PHC. It is followed in terms of magnitude by physical (28.5%), hearing (16.9%), speech (14.3%), intellectual (14.2%) and emotional (12.5%) disabilities. Other disabilities not identified by name also form 13.8 percent. By sex, it is to be noted that the proportion of females that reported some form of disability were higher than or the same as the males for each type of disability except in the case of speech and other disabilities for which the reverse is true.

# **6.4** Distribution by Type of Locality

In terms of type of locality, Table 6.1 also shows that there is virtually no difference between the urban and rural areas based on the proportion of PWDs considering that 1.4 percent and 1.5 percent of the urban and rural populations are recorded as having some form of disability. There are, however, some important variations that need to be highlighted. For example, in the urban areas, the proportion with sight disability (31.8%) is the highest while emotional disability records the lowest proportion (12.2%) of all reported cases of disability. In contrast, the highest and lowest proportions of PWDs are respectively those with physical (33.3%) and speech (11.7%) disabilities in the rural areas.

The pattern of type of disability by sex is also not different from that shown in the general population. With the exception of speech, emotional and other disabilities in the urban areas and also physical, speech and other disabilities in the rural areas, the proportion of PWDs among the females is the same or relatively higher than among the males in the Sagnarigu District.

# 6.5 Disability and Activity

This section discusses disability by economic activity status of persons 15 years and older in the district.

Data from Table 6.2 show that less than half (45.8%) of the population 15 years and older with some disabilities are economically active, of which 41.8 percent are employed and 4.0 percent unemployed, while more than half (54.2%) of them are economically not active. In

all cases of disability, 45 percent or less of PWDs are employed compared to 54.6 percent among persons with no disability. Overall, persons with intellectual and physical disabilities have the lowest proportion employed (29.3% and 30.0% respectively) while their counterparts with emotional disability have the highest proportion of their members employed (45.4%).

Comparing them by sex also reveals that in all cases of disability type, the proportion employed is higher among the males than the females. This means that employers are more inclined to employ males who have some disabilities than females with similar conditions which may imply some form of gender discrimination against the females with disabilities.

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

	A 11 G		Б. 1	Employed		Unemployed		cally Not
Sex/Disability	All S						Act	
type	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes		4000	-0-11					
Total	92,564	100.0	50,341	54.4	4,295	4.6	37,928	41.0
No disability	90,775	100.0	49,594	54.6	4,223	4.7	36,958	40.7
With a disability	1,789	100.0	747	41.8	72	4.0	970	54.2
Sight	587	100.0	256	43.6	27	4.6	304	51.8
Hearing	301	100.0	131	43.5	15	5.0	155	51.5
Speech	216	100.0	90	41.7	12	5.6	114	52.8
Physical	546	100.0	164	30.0	16	2.9	366	67.0
Intellectual	246	100.0	72	29.3	14	5.7	160	65.0
Emotional	218	100.0	99	45.4	13	6.0	106	48.6
Other	232	100.0	94	40.5	9	3.9	129	55.6
Male								
Total	46,451	100.0	26,637	57.3	2,011	4.3	17,803	38.3
No disability	45,526	100.0	26,199	57.5	1,979	4.3	17,348	38.1
With a disability	925	100.0	438	47.4	32	3.5	455	49.2
Sight	279	100.0	147	52.7	13	4.7	119	42.7
Hearing	144	100.0	75	52.1	6	4.2	63	43.8
Speech	128	100.0	58	45.3	10	7.8	60	46.9
Physical	278	100.0	93	33.5	8	2.9	177	63.7
Intellectual	127	100.0	41	32.3	6	4.7	80	63.0
Emotional	105	100.0	58	55.2	3	2.9	44	41.9
Other	120	100.0	48	40.0	5	4.2	67	55.8
Female								
Total	46,113	100.0	23,704	51.4	2,284	5.0	20,125	43.6
No disability	45,249	100.0	23,395	51.7	2,244	5.0	19,610	43.3
With a disability	864	100.0	309	35.8	40	4.6	515	59.6
Sight	308	100.0	109	35.4	14	4.5	185	60.1
Hearing	157	100.0	56	35.7	9	5.7	92	58.6
Speech	88	100.0	32	36.4	2	2.3	54	61.4
Physical	268	100.0	71	26.5	8	3.0	189	70.5
Intellectual	119	100.0	31	26.1	8	6.7	80	67.2
Emotional	113	100.0	41	36.3	10	8.8	62	54.9
Other	112	100.0	46	41.1	4	3.6	62	55.4

#### 6.6 Disability, Education and Literacy

Literacy and education are fundamental indicators for a country's human capital development. The collection of data on these indicators in a census is, therefore, significant for any country.

Table 6.3 presents the distribution of the population three years and older by level of education and disability type. The table indicates that more than half (52.7%) of persons with various forms of disability in the district have never attended school compared with one in three in the total population as well as among persons with no disability.

As usual, the gap between males and females is quite visible within the general population and by each type of disability. Among persons with disability, the proportion with no education is as high as 48.2 percent and 54.4 percent respectively among the males and females in the district. It is also observed that persons with speech disability recorded the lowest proportion (39.3%) with no education in contrast with their counterparts with physical disability who recorded the highest proportion (61.6%) with no education. By sex, however, persons with sight disability have the highest proportion with no education among the males, but among the females, it is among persons with physical disability.

Just like in the general population, however, the lowest proportion with no education is recorded among persons with speech disability. At the same time, females with disability have the highest proportion with no education among each disability type compared to the males. The table further shows variations in school attendance by disability status and type as well as by sex. At all levels of educational attainment, the females are disadvantaged irrespective of whether or not they have some form of disabilities.

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

			Number					Percen	it	
					Sec/SHS					Sec/SHS
Sex/Disability			Pre-		and			Pre-		and
type	Total	Never	Prim	Basic	higher	Total	Never	Prim	Basic	higher
Both sexes										
Total	135,846	45,824	12,014	49,630	28,378	100.0	33.7	8.8	36.5	20.9
No disability	133,742	44,716	11,932	49,103	27,991	100.0	33.4	8.9	36.7	20.9
With a disability	2,104	1,108	82	527	387	100.0	52.7	3.9	25.0	18.4
Sight	645	364	17	130	134	100.0	56.4	2.6	20.2	20.8
Hearing	354	209	13	79	53	100.0	59.0	3.7	22.3	15.0
Speech	295	116	17	97	65	100.0	39.3	5.8	32.9	22.0
Physical	602	371	11	138	82	100.0	61.6	1.8	22.9	13.6
Intellectual	301	178	13	78	32	100.0	59.1	4.3	25.9	10.6
Emotional	261	128	13	67	53	100.0	49.0	5.0	25.7	20.3
Other	288	136	18	72	62	100.0	47.2	6.3	25.0	21.5
Male										
Total	68,609	18,717	6,208	26,519	17,165	100.0	27.3	9.0	38.7	25.0
No disability	67,522	18,193	6,170	26,224	16,935	100.0	26.9	9.1	38.8	25.1
With a disability	1,087	524	38	295	230	100.0	48.2	3.5	27.1	21.2
Sight	305	179	5	55	66	100.0	58.7	1.6	18.0	21.6
Hearing	173	88	5	53	27	100.0	50.9	2.9	30.6	15.6
Speech	181	59	13	63	46	100.0	32.6	7.2	34.8	25.4
Physical	309	169	6	78	56	100.0	54.7	1.9	25.2	18.1
Intellectual	155	86	6	44	19	100.0	55.5	3.9	28.4	12.3
Emotional	121	57	6	29	29	100.0	47.1	5.0	24.0	24.0
Other	154	65	11	44	34	100.0	42.2	7.1	28.6	22.1
Female										
Total	67,237	27,107	5,806	23,111	11,213	100.0	40.3	8.6	34.4	16.7
No disability	66,220	26,523	5,762	22,879	11,056	100.0	40.1	8.7	34.5	16.7
With a disability	1,017	584	44	232	157	100.0	57.4	4.3	22.8	15.4
Sight	340	185	12	75	68	100.0	54.4	3.5	22.1	20.0
Hearing	181	121	8	26	26	100.0	66.9	4.4	14.4	14.4
Speech	114	57	4	34	19	100.0	50.0	3.5	29.8	16.7
Physical	293	202	5	60	26	100.0	68.9	1.7	20.5	8.9
Intellectual	146	92	7	34	13	100.0	63.0	4.8	23.3	8.9
Emotional	140	71	7	38	24	100.0	50.7	5.0	27.1	17.1
Other	134	71	7	28	28	100.0	53.0	5.2	20.9	20.9

# CHAPTER SEVEN AGRICULTURAL ACTIVITIES

#### 7.1 Introduction

Agriculture, as earlier discussed in chapter one is the largest economic activity in the district. It also serves as the major source of employment for majority of the inhabitants of the district.

This chapter discusses the characteristics of agricultural households. An agricultural household refers to a situation where 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). Data collected by the 2010 PHC on agriculture are household-based.

# 7.2 Households in Agriculture

Table 7.1 shows that about 4 out of 10 (36.5%) of the household are engaged in agriculture. More households in the rural areas (47.9%) are engaged in agriculture than in the urban areas (29.9%).

Table 7.1: Households by agricultural activities and locality

	Total		Url	oan	Ru	Rural	
Categories	Number	Percent	Number	Percent	Number	Percent	
<b>Total Households</b>	23,447	100.0	14,769	100.0	8,678	100.0	
Households not engaged in Agriculture	14,878	63.5	10,357	70.1	4,521	52.1	
Households engage in Agriculture	8,569	36.5	4,412	29.9	4,157	47.9	
Crop Farming	7,219	84.2	3,563	80.8	3,656	87.9	
Tree Planting	24	0.3	8	0.2	16	0.4	
Livestock Rearing	3,977	46.4	1,900	43.1	2,077	50.0	
Fish Farming	5	0.1	5	0.1	0	0.0	

Source: Ghana Statistical Service, 2010 Population and Housing Census

# 7.3 Types of Farming Activities

Among the agricultural households, majority (84.2%) are engaged in crop farming, while 46.4 percent are into livestock rearing. Only 0.3 percent of households in the district are engaged in tree planting and 0.1 percent into fish farming. More households in the rural areas are engaged in both Crop farming and livestock rearing than it is in urban areas. No household in the rural areas is into fish farming. (Refer to Figure 7.1)



Figure 7.1: Agricultural households by type of farming

# 7.4 Type of livestock and other Animals Reared

A total of 141,054 livestock are recorded to be reared by 7,611 people in the Sagnarigu District. (Table 7.2). This translates into an average of 19 animals per keeper. From the information presented in Table 7.2, chicken (52,233), followed by sheep (27,085) are the most commonly reared livestock in the district. Goat rearing is also quite popular and recorded 24,943 animals during the 2010 PHC. Guinea fowl and cattle are next in line with 15,934 and 14,413 birds and animals recorded to be reared in the district. Each of the remaining livestock as shown in Table 7.2 has less than 1,000 of its kind reported to be reared in the district. Interestingly, only one person was engaged in fishing in the district. Fishing is followed by beehives with 53 per head, dove keeping (47 per head), grass cutter rearing (33 per head), cattle rearing (28 per head) and guinea fowl keeping (27 per head). This means that for most of the livestock particularly chicken, there are many people involved to the extent that the average number of animals or birds kept per person is quite small. It is thus clear that most of these livestock are not reared on a large scale.

Table 7.2: Distribution of livestock, other animals and keepers

Livestock	Number of Animals	Number of keepers	Average Animal per Keeper
All livestock	141,054	7,611	19
Beehives	267	5	53
Cattle	14,413	517	28
Chicken	52,233	2,115	25
Dove	1,890	40	47
Duck	984	77	13
Goat	24,943	2,121	12
Grass-cutter	294	9	33
Guinea fowl	15,934	582	27
Ostrich	325	20	16
Pig	1,059	56	19
Rabbit	405	29	14
Sheep	27,085	1,971	14
Silk worm	202	15	13
Snail	0	0	0
Turkey	416	30	14
Other	280	17	16
Fish farming	314	7	44

# CHAPTER EIGHT HOUSING CONDITIONS

#### 8.1 Introduction

The 2010 Population and Housing Census asked questions on housing and housing conditions. This chapter, therefore, examines data on the type of dwelling units, occupancy status, methods of waste disposal, main materials used in the construction of dwelling units, access to utilities and household facilities. This analysis is important to bring out the quality of life at the household level with regard to housing conditions.

## 8.2 Housing Stock

Table 8.1 indicates that the total stock of houses in the district is 16,307. The proportion of houses in urban areas (63.2%) is higher than total number of houses in the rural areas (36.8%). The data further shows that the average number of households per house in the district is 1.4, with slightly more households per house in urban (1.6) than in the rural areas (1.2).

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

	Total		I	District					
Categories	country	Region	Total	Urban	Rural				
Total population	24,658,823	2,479,461	148,099	63.2	36.8				
Total household population	24,076,327	2,445,061	146,291	63.2	36.8				
Number of houses	3,392,745	257,311	16,307	57.1	42.9				
Number of households	5,467,054	318,119	23,447	63	37				
Average households per house	1.6	1.2	1.4	1.6	1.2				
Population per house	7.3	9.6	9.1	10.1	7.8				
Average household size	4.5	7.8	6.3	6.3	6.3				

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

#### 8.3.1 Ownership status of dwelling by sex of household head and type of locality

Table 8.2 presents information on ownership status of dwelling units by sex of household heads and type of locality. The Table shows that 61.7 percent of dwelling units are owned by a household member, while 25.5 percent are owned by other private individuals. Relative who is not a household member (5.2%) and Public/Government (5.8%) also own a significant number of dwelling units. The table further shows that there are significantly more maleheaded dwelling units (65.6%) owned by a member of the households compared to femaleheaded households (46.8%) in the district. In contrast, however, the proportion of households headed by females (37.2%) that are owned by other private individuals is higher compared to that headed by males (22.0%). These two are the main types of ownership of dwelling units in the district. The situation in the urban and rural areas is similar in terms of ownership of dwelling units of households. It is, however, important to note that the proportion of dwelling units owned by public/government in the rural areas is by far higher compared to the urban areas (11.6% and 2.5% respectively).

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

					Distri	ct		
	Total		То	tal	Male	Female		_
Type of dwellings	Country	Region	Number	Percent	headed	headed	Urban	Rural
Total	5,467,054	318,119	23,447	100.0	100.0	100.0	100.0	100.0
Owned by household member	2,883,236	267,538	14,457	61.7	65.6	46.8	59.7	65.0
Being purchased (e.g. mortgage)	45,630	1,352	133	0.6	0.5	0.8	0.6	0.4
Relative not a household member	851,630	16,460	1,210	5.2	5.2	4.9	5.7	4.2
Other private individual	1,439,021	24,310	5,903	25.2	22.0	37.2	29.6	17.7
Private employer	83,610	1,248	173	0.7	0.7	1.0	0.8	0.7
Other private agency	21,123	431	54	0.2	0.2	0.3	0.2	0.2
Public/Government ownership	118,804	5,863	1,370	5.8	5.2	8.2	2.5	11.6
Other	24,000	917	147	0.6	0.6	0.8	0.9	0.1

#### 8.3.2 Type of occupied dwelling unit by sex of household head and type of locality

Table 8.3 shows that compound houses are the main type of dwelling units in the Sagnarigu District. Almost 70 percent of the dwelling units in the districts are compound houses. There is little variation between male- and female-headed households: 68.8 percent and 71.5 percent respectively of male- and female-headed households are in compound houses. On the other hand, the proportion of households in compound houses is higher in urban areas (72.5%) compared to rural areas (64.0%). Separate houses are also common in the district and represent 13 percent of the dwelling units with virtually no difference between male- and female-headed households, but slightly higher in the urban (13.8%) than rural (11.7%) areas. Huts/buildings (same compound) are also quite common in the rural areas where such dwelling units make up 11.1 percent of all dwelling units compared to only 2.8 percent in the urban localities. On the other hand, flat apartments and semi-detached houses are less common and form five percent or less of the dwelling units irrespective of household headship or type of locality.

Table 8.3: Type of occupied dwelling unit by sex of household head and type of locality

			District						
	Total		То	tal	Male	Female			
Type of dwelling	country	Region	Number	Percent	headed	headed	Urban	Rural	
Total	5,467,054	318,119	23,447	100.0	100.0	100.0	100.0	100.0	
Separate house	1,471,391	51,622	3,054	13.0	13.1	12.9	13.8	11.7	
Semi-detached house	391,548	12,761	1,162	5.0	4.6	6.3	4.7	5.4	
Flat/Apartment	256,355	3,360	867	3.7	3.5	4.4	3.9	3.3	
Compound house (rooms)	2,942,147	208,934	16,260	69.3	68.8	71.5	72.5	64.0	
Huts/Buildings (same									
compound)	170,957	34,405	1,374	5.9	6.9	2.0	2.8	11.1	
Huts/Buildings (different									
compound)	36,410	3,374	193	0.8	0.9	0.5	0.5	1.4	
Tent	10,343	818	57	0.2	0.2	0.4	0.3	0.2	
Improvised home (kiosk/container etc)	90,934	404	34	0.1	0.2	0.1	0.1	0.2	
Living quarters attached to office/shop	20,499	619	111	0.5	0.5	0.5	0.1	1.0	
Uncompleted building	66,624	1,428	299	1.3	1.3	1.2	1.2	1.4	
Other	9,846	394	36	0.2	0.1	0.2	0.2	0.1	

#### **8.4** Construction Materials

Three separate types of construction materials were looked at during the 2010 Population and Housing Census. These are the main construction materials for outer walls, floor and roofing of the dwelling units of households.

#### **8.4.1** Construction materials for outer walls

Table 8.4 indicates that the main construction materials used by the households for the outer walls of dwelling units is cement block/concrete (62.7%), followed by mud brick/earth (30.3%). As expected, the proportion of households using mud brick/earth is higher in the rural areas (40.2%) than in the urban areas (24.2%). In contrast, however, the proportion of households using cement blocks/concrete to construct the outer wall of their dwelling units is higher in the urban areas (69.8%) compared to the rural areas (51.0%).

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

			Dist	District			
	Total		To	tal			
Material for Outer wall	country	Region	Number	Percent	Urban	Rural	
Total	5,817,607	339,874	25,327	100.0	100.0	100.0	
Mud brick/Earth	1,991,540	247,754	7,669	30.3	24.2	40.2	
Wood	200,594	5,389	142	0.6	0.6	0.5	
Metal sheet/Slate/Asbestos	43,708	1,984	199	0.8	0.8	0.7	
Stone	11,330	1,077	91	0.4	0.3	0.5	
Burnt bricks	38,237	647	86	0.3	0.5	0.1	
Cement blocks/Concrete	3,342,462	64,863	15,877	62.7	69.8	51.0	
Landcrete	104,270	10,609	1,135	4.5	3.3	6.4	
Bamboo	8,206	285	25	0.1	0.1	0.1	
Palm leaf/Thatch (grass)/Raffia	38,054	5,894	18	0.1	0.1	0.1	
Other	39,206	1,372	85	0.3	0.4	0.2	

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.4.2 Construction materials for the floor of dwelling units

From Table 8.5, majority of the households (84.8%) adopt cement/concrete as the main material for the floor of their dwelling units, followed by earth/mud (10.7%). The least used material for the floor of household dwellings in the district is wood, which is used in only eight dwellings in the district. With regard to type of locality, Table 8.5 depicts that a higher proportion of urban dwellers use cement/concrete (86.5%) than their rural counterparts (81.9%). In contrast, the usage of Earth/Mud as floor material of dwelling units is higher in the rural (8.8%) than urban (13.9%) areas. Burnt bricks and wood are rarely used for the floor of household dwelling units in the district.

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

				Distric	et	
	Total		Tot	al		
Materials for the floor	country	Region	Number	Percent	Urban	Rural
Total	5,467,054	318,119	23,447	100.0	100.0	100.0
Earth/Mud	872,161	97,678	2,508	10.7	8.8	13.9
Cement/Concrete	4,255,611	214,535	19,888	84.8	86.5	81.9
Stone	32,817	1,358	118	0.5	0.5	0.6
Burnt brick	6,537	277	37	0.2	0.2	0.1
Wood	52,856	195	8	0.0	0.0	0.1
Vinyl tiles	57,032	510	260	1.1	1.2	0.9
Ceramic/Porcelain/Granite/Marble tiles	88,500	2,091	357	1.5	1.5	1.5
Terrazzo/Terrazzo tiles	85,973	365	187	0.8	0.8	0.8
Other	15,567	1,110	84	0.4	0.4	0.3

#### 8.4.3 Construction Materials for roofing of dwelling units and type of locality

In Table 8.6, information on the type of material used for the roofing of dwelling units in the Sagnarigu District is presented. From the table, two roofing materials stand out. These are metal sheet used by four in five of dwelling units (80.5%) and thatch/palm leaf or raffia which is used by 13.2 percent of the dwellings. The use of these two roofing materials also varies between the urban and rural localities with the former using more of metal sheet (88.1%) than the latter (68.2%). In contrast, a higher proportion of rural localities (26.1%) use thatch/palm leaf or raffia for roofing their dwellings than urban areas (5.3%).

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

				Distri	ct	
	Total		Tot	tal		
Main Roofing material	country	Region	Number	Percent	Urban	Rural
Total	5,817,607	339,874	25,327	100.0	100.0	100.0
Mud/Mud bricks/Earth	80,644	16,434	174	0.7	0.8	0.5
Wood	45,547	3,740	259	1.0	1.3	0.5
Metal sheet	4,152,259	192,412	20,392	80.5	88.1	68.2
Slate/Asbestos	759,039	2,091	507	2.0	1.7	2.6
Cement/Concrete	141,072	1,429	276	1.1	1.2	0.8
Roofing tile	31,456	761	28	0.1	0.1	0.1
Bamboo	71,049	1,137	50	0.2	0.2	0.1
Thatch/Palm leaf or Raffia	500,606	118,517	3,335	13.2	5.3	26.1
Other	35,935	3,353	306	1.2	1.3	1.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

# 8.5 Room Occupancy

Information on number of sleeping rooms available to a household is useful in determining whether or not the space available to households could lead to overcrowding. Obviously, room occupancy levels have some impacts on individual health risk exposure particularly to communicable diseases in the event of an outbreak.

As shown in Table 8.7, 28.7 percent of the households in the district have only one sleeping room, 23.2 percent have two rooms while 17.9 percent and 10.8 percent have three and four rooms respectively. Households that have access to five or more rooms represent 19.3 percent

in the district. In terms of the number of sleeping rooms available by household size, we find that 81.8 percent of one-member households occupy one room while the remaining 19.2 percent have access to two or more rooms. For two-member households, 61.6 percent have one room, 27.5 percent have two rooms and the remaining 10.9 percent have three rooms or more. The distribution of rooms by household size further suggests that at each level of household size between one and four, a higher proportion up to 80 percent or more have access to rooms ranging from one to four rooms. This may imply that although there may be some overcrowding, it may not be too acute in the district

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

						Number	of sleepin	ng rooms			
House-	Total hou	seholds	i								Nine rooms
hold			One	Two	Three	Four	Five	Six	Seven	Eight	or
size	Number	Percent	room	rooms	rooms	rooms	rooms	rooms	rooms	rooms	more
Total	23,447	100.0	28.7	23.2	17.9	10.8	6.4	4.2	2.9	1.9	3.9
1	2,847	100.0	81.8	11.7	2.9	1.0	0.5	0.3	0.3	0.2	1.4
2	2,162	100.0	61.6	27.5	5.5	1.7	0.6	0.4	0.5	0.4	1.8
3	2,339	100.0	46.2	33.3	12.1	3.1	1.5	0.7	0.6	0.7	1.7
4	2,527	100.0	32.3	38.6	17.6	6.5	1.8	0.9	0.7	0.2	1.5
5	2,496	100.0	19.8	38.2	25.0	9.8	3.7	1.5	0.4	0.6	0.9
6	2,258	100.0	13.6	33.0	29.1	13.6	5.6	1.9	1.6	0.3	1.3
7	1,698	100.0	7.9	25.8	32.4	18.1	8.5	3.1	2.1	0.5	1.6
8	1,454	100.0	4.9	16.9	33.5	22.6	10.7	5.1	2.3	1.7	2.4
9	1,068	100.0	4.5	10.7	28.7	24.3	15.3	7.8	4.2	1.8	2.7
10+	4,598	100.0	2.4	5.8	14.1	17.2	15.5	14.0	10.2	7.2	13.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### **8.6** Access to Utilities and Household Facilities

Access to utilities and amenities, such as water and sanitation, and fuel is not only an important measure of the social and economic well-being of households, fundamental to the health of households. This section discusses sources of lighting, fuel used for cooking, lighting as well as water and sanitation facilities.

Table 8.8 shows the main source of lighting for dwelling units in the district. It indicates that two main sources of lighting are particularly important in the district. These are electricity (mains) which is used by 73.7 percent of households in the district, and kerosene lamps used by 20.3 percent of the households. In the urban areas, electricity use is as high as 79.4 percent compared to 63.9 percent in the rural localities Kerosene lamps use as a source of lighting varies between 15.5 percent in urban and 28.6 percent in rural areas. Flashlight/torch is also used by 4.1 percent of households (3.4% in urban and 5.3% in rural localities). The other sources of lighting are not significant in the district.

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

				Dist	rict	
	Total		To	tal		
Main source of light	country	Region	Number	Percent	Urban	Rural
Total	5,467,054	318,119	23,447	100.0	100.0	100.0
Electricity (mains)	3,511,065	114,889	17,269	73.7	79.4	63.9
Electricity (private generator)	36,142	2,219	218	0.9	0.8	1.2
Kerosene lamp	971,807	134,656	4,771	20.3	15.5	28.6
Gas lamp	9,378	860	25	0.1	0.1	0.1
Solar energy	9,194	1,048	31	0.1	0.1	0.2
Candle	41,214	488	72	0.3	0.3	0.3
Flashlight/Torch	858,651	60,518	964	4.1	3.4	5.3
Firewood	13,241	2,257	54	0.2	0.2	0.3
Crop residue	4,623	759	20	0.1	0.1	0.1
Other	11,739	425	23	0.1	0.1	0.1

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

Table 8.9 examines the percentage distribution of households by source of water for drinking and for other uses. The use of pipe borne water (both inside dwellings and outside dwellings) is the main source of water for drinking for 77.6 percent of all households in the district. This is higher in the urban (87.2%) than in the rural (61.3%) areas. Public stand pipe is also fairly used in the district, with 13.1 percent of households (8.0% in the urban and 21.9% in the rural areas).

It appears, therefore, that in terms of drinking water, the Sagnarigu District is better off since all the other sources of drinking water shown in the table (many of which are unprotected) are used by less than 10 percent of households in the district although it is much higher in the rural (16.8%) than the urban (4.9%) areas.

A similar picture is shown in Table 8.9 about sources of domestic water usage in the district. The three main sources of water, namely; pipe borne water inside and outside the dwelling and stand pipe together are used by about 90 percent of the households for domestic purposes: 94.8 percent and 81.2 percent respectively in the urban and rural localities.

Table 8.9: Main source of water of dwelling unit for drinking and other domestic purposes

				Distr	ict	
	Total		Tot	tal		
Sources of water	country	Region	Number	Percent	Urban	Rural
Main source of drinking water						
Total	5,467,054	318,119	23,447	100.0	100.0	100.0
Pipe-borne inside dwelling	790,493	27,811	9,404	40.1	44.7	32.4
Pipe-borne outside dwelling	1,039,667	38,852	8,783	37.5	42.5	28.9
Public tap/Standpipe	712,375	21,798	3,082	13.1	8.0	21.9
Bore-hole/Pump/Tube well	1,267,688	111,650	178	0.8	0.7	0.9
Protected well	321,091	17,933	382	1.6	1.5	1.8
Rain water	39,438	2,066	119	0.5	0.1	1.2
Protected spring	19,345	1,008	88	0.4	0.5	0.2
Bottled water	20,261	233	24	0.1	0.1	0.2
Sachet water	490,283	1,187	46	0.2	0.2	0.1
Tanker supply/Vendor provided	58,400	942	149	0.6	0.8	0.3
Unprotected well	112,567	13,517	57	0.2	0.2	0.4
Unprotected spring	12,222	1,109	9	0	0	0.1
River/Stream	502,804	55,470	234	1	0.1	2.5
Dugout/Pond/Lake/Dam/Canal	76,448	24,308	809	3.5	0.4	8.7
Other	3,972	235	83	0.4	0.3	0.4
Main source of water for other do	mestic use					
Total	5,467,054	318,119	23,447	100.0	100.0	100.0
Pipe-borne inside dwelling	905,566	27,698	9,332	39.8	44.3	32.1
Pipe-borne outside dwelling	1,089,030	37,432	8,691	37.1	42.5	27.8
Public tap/Standpipe	704,293	19,390	3,026	12.9	8.0	21.3
Bore-hole/Pump/Tube well	1,280,465	101,815	220	0.9	0.8	1.1
Protected well	465,775	19,715	422	1.8	1.7	2.0
Rain water	39,916	2,182	62	0.3	0.1	0.5
Protected spring	18,854	927	99	0.4	0.5	0.3
Tanker supply/Vendor provided	100,048	1,214	141	0.6	0.8	0.3
Unprotected well	152,055	13,349	55	0.2	0.3	0.2
Unprotected spring	15,738	1,002	12	0.1	0.0	0.1
River/Stream	588,590	63,445	264	1.1	0.2	2.7
Dugout/Pond/Lake/Dam/Canal	96,422	29,210	1,035	4.4	0.5	11
Other	10,302	740	88	0.4	0.3	0.5

# **8.8** Bathing and Toilet Facilities

Table 8.10 illustrates the point that overall 46.2 percent of households do not have toilet facilities. According to locality, 37.8 percent of households in the urban areas and 60.5 percent in rural areas have no toilet facilities and, therefore, either use the bush or field. Interestingly, water closet (W.C) usage is higher in rural areas (17.4%) compared to the urban localities (15.1%). It is also evident from Table 8.10 that the use of public toilets is more common in urban areas (34.4%) than rural areas (16.1%).

Household bathing facilities as depicted in the table indicate that 'shared separate bathroom in the same house' is the most common type of facility in the district (35.6%), with 38.4 percent for urban areas and 30.7 percent in rural localities. 'Own bathroom for exclusive use' is also widely used in rural areas (32.4%) than urban areas (25.6%). However, the quality and size may not be the same between the urban and rural areas. Also important are shared

open cubicles used by 22.5 percent and 20.2 percent of urban and rural households respectively. A relatively smaller proportion of households (less than 10%) also use private open cubicles, public bath houses and open space around the house.

Table 8.10: Bathing facility and toilet facilities used by household

				District	
	Total	To	tal	_	_
Categories	country	Number	Percent	Urban	Rural
Toilet facility used by household					
Total	5,467,054	23,447	100.0	100.0	100.0
No facilities (bush/beach/field)	1,056,382	10,829	46.2	37.8	60.5
W.C.	839,611	3,747	16.0	15.1	17.4
Pit latrine	1,040,883	369	1.6	2.1	0.7
KVIP	572,824	1,619	6.9	8.4	4.4
Bucket/Pan	40,678	85	0.4	0.3	0.5
Public toilet (WC KVIP Pit Pan etc)	1,893,291	6,467	27.6	34.4	16.1
Other	23,385	331	1.4	1.9	0.5
Bathing facility used by household			0.0		
Total	5,467,054	23,447	100.0	100.0	100.0
Own bathroom for exclusive use	1,535,392	6,592	28.1	25.6	32.4
Shared separate bathroom in the same					
house	1,818,522	8,339	35.6	38.4	30.7
Private open cubicle	381,979	1,178	5.0	4.1	6.6
Shared open cubicle	1,000,257	5,072	21.6	22.5	20.2
Public bath house	140,501	1,182	5.0	5.3	4.6
Bathroom in another house	187,337	90	0.4	0.4	0.3
Open space around house	372,556	934	4.0	3.4	4.9
River/Pond/Lake/Dam	14,234	20	0.1	0.1	0.1
Other	16,276	40	0.2	0.2	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.9 Method of Waste Disposal

The main methods of waste disposal as indicated in Table 8.11 is public dump (open space) constituting 29.3 percent, for the urban areas, public dump in open spaces (30.6%), burnt by household (22.5%) and public dump in a container (22.4%). For the rural areas, the three main methods are public dump in open spaces (27.0%), indiscriminate dumping (24.9%) and burnt by household (19.5%). Some of these practices are not healthy and have implications for public health particularly the dumping of refuse in open spaces and indiscriminate dumping anywhere. It is also interesting to note that the proportion of household waste that is collected is lower in the urban areas (9.3%) compared to the rural localities (10.2%). Again, in the urban localities, indiscriminate disposal of waste is 8.3 percent. The proportion of household buried waste is also small at 5.9 percent in the urban and 3.9 percent in the rural areas.

Table 8.11 also shows that there is limited use for modern methods of liquid waste disposal in the district in either the urban or rural areas although it is relatively better in the urban areas. These modern methods of liquid waste disposal including the use of the sewerage system, drainage system into a pit/soak away or gutter together are used by 20.4 percent of urban households and 17.2 percent of rural households. In the Sagnarigu District, therefore, the main methods of liquid waste disposal is by throwing onto the street 53.1 percent (50.5% for urban and 57.5% for rural) and throwing onto the compound (21.5% for urban and 20.3% for rural). These practices could have serious implications for the public health of the population.

Table 8.11: Method of rubbish and liquid waste disposal by households

			Distri	ict	
	Total	То	tal		
Waste disposal method	country	Number	Percent	Urban	Rural
Method of rubbish disposal					
Total	5,467,054	23,447	100.0	100.0	100.0
Collected	785,889	2,263	9.7	9.3	10.2
Burned by household	584,820	5,021	21.4	22.5	19.5
Public dump (container)	1,299,654	4,511	19.2	22.4	13.8
Public dump (open space)	2,061,403	6,866	29.3	30.6	27.0
Dumped indiscriminately	498,868	3,388	14.4	8.3	24.9
Buried by household	182,615	1,207	5.1	5.9	3.9
Other	53,805	191	0.8	0.9	0.6
Method of liquid waste disposal					
Total	5,467,054	23,447	100.0	100.0	100.0
Through the sewerage system	183,169	1,362	5.8	6.3	5.0
Through drainage system into a gutter	594,404	1,631	7.0	6.4	7.9
Through drainage into a pit (soak away)	167,555	1,514	6.5	7.7	4.3
Thrown onto the street/outside	1,538,550	12,453	53.1	50.5	57.6
Thrown into gutter	1,020,096	1,414	6.0	7.0	4.3
Thrown onto compound	1,924,986	4,941	21.1	21.5	20.3
Other	38,294	132	0.6	0.6	0.5

# CHAPTER NINE SUMMARY OF FINDINGS, CONCLUSIONS AND POLICY IMPLICATIONS

#### 9.1 Introduction

Population census is the primary source of data on the population and characteristics of a country, region or a district. The 2010 Population and Housing Census collected data on indicators such as demographic, social and economic characteristics as well as the housing conditions of the entire population of Ghana. Geographically, the census covered, district, and sub-district levels such as localities, villages, settlements and residential areas which were classified into enumeration areas.

The general objective of the census was to provide information to guide policy-making for the development of the population and the nation as a whole. This chapter accordingly provides a summary of relevant results of the analyses of the district data and their corresponding policy implications.

#### 9.2 Summary of Findings and Conclusions

#### **Demographic characteristics**

The total population of the district is 148,099 and out of this, 49.4 percent are females and 50.6 percent are males. The dependency ratio is higher in urban areas (63.2%) compared to the rural areas (36.8%). Analysis of the demographic characteristics of the district suggests a relatively higher male population at age 0-4 years through to 20-24 years, beyond which the female population is more than their male counterparts.

The age structure of the district bears similarity with the regional and national pattern, where a youthful structure characteristic of many developing countries is depicted. The age-sex structure is broad based, consisting of large population at youthful age groups which reduces as age increases. The population of the Sagnarigu District is, therefore, largely youthful with many challenges for development.

The Sagnarigu District records a total fertility rate (TFR) of 3.3 which is relatively lower than the regional average of 3.54. The district's GFR is also recorded at 92.8 which is lower than the regional average of 101.9. On the other hand, the district has a crude birth rate (CBR) of 24.2 which is slightly higher than the regional average of 24.0 per 1,000 population.

#### **Social characteristics**

The data on social characteristics relative to household composition in the district show that a high proportion of 43.3 percent of household members are classified as 'children (son/daughter) while 12.7 percent of them are made up of other relatives of the heads of household The household structure also has about half of them as extended families with the nuclear family taking 20.2 percent.

In relation to marital status, almost half (48.5%) of persons 12 years and older in the Sagnarigu District are married. On the other hand, close to half (45.3%) within the marriage age bracket are never married. The analysis also shows that majority of persons 12 years and

older who have never married are also economically not active perhaps due to the fact that most of them are young and in school. The females are more disadvantaged than males with regard to literacy.

The data on literacy indicate that about 40 percent of the population in the district cannot read or write in any language. Among the literate population, 38.6 percent are literate in English only, 1.4 percent in Ghanaian Language only and almost 60 percent of them are literate in English and Ghanaian language. In each of the age groups, literacy in both English and Ghanaian language is the highest except in the 11-14 year group where literacy in English language only is the highest, followed by English and Ghana language.

#### **Economic activity status**

About 59 percent of the population 15 years and older are economically active, while 41 percent are economically not active. Also, of the economically active population, 92.1 percent are employed and 7.9 percent are unemployed. The private informal sector employs the highest number of the employed population in the district (77.5%). A higher proportion of the females (84.9%) than males (71.0%) are employed in this sector. This may be attributed to the fact that most of the jobs under this sector involve trading which women tend to do better than men. The Public (Government) Sector, however, provides jobs for a smaller number of employed persons in the district (20.1% of the males and 11.2% of the females). There appears to be relatively higher unemployment among the youthful ages from 20 to 34 years which require some attention.

Wholesale and retail, repair of motor vehicles and motorcycles is the leading industry of employment for people in the district and is home to 25.5 percent of all employed persons. The second largest industry of employment in the district is the agriculture, forestry and fishing (21.9%). About a third of the males (31.7%) are engaged in the agriculture, forestry and fishing sector compared to 11.0 percent of their female counterparts.

#### **Information Communication Technology**

Access to internet facility in the Sagnarigu District is quite low. The analysis shows that only nine percent of persons 12 years and older in the district use the internet. In contrast, mobile phone usage is fairly common with about half (48.4%) of the population 12 years and older using mobile phones. Access to both internet facility and mobile phones is higher in males than females in the district.

With respect to ownership of fixed telephone lines, the data indicate that only 2.3 percent of all households in the district own one. Ownership of desktop/laptop computers at the household level is also low at 13.4 percent.

#### **Disability**

The proportion of people with disability (PWDs) is 1.5 percent of the district's population. Sight (30.0%) and physical (28.5%) disabilities are the most common in the district. Persons with disability are the ones most likely to be unemployed and also less likely to attend school compared to others with no disability. Just like in the general population, females with disability are more disadvantaged compared to their male counterparts in terms of access to education.

#### **Agricultural activities**

Overall about 37.0 percent of all households in the Sagnarigu District are engaged in agricultural activities, a higher proportion of which is in the rural (47.9%) than the urban (29.9%) areas. Majority of agricultural households in the district also practise crop farming (84.2%), followed by livestock rearing (46.4%).

The total number of livestock reared in the Sagnarigu District is recorded at 141,054 and is made up of a wide variety of animals. Chicken is by far the most reared livestock in the district with a total of 52,233 birds being kept, followed by sheep (27,085), guinea fowl (15,934) and cattle (14,413). Inland fishing and snail farming are, however, not very common in the district.

#### **Housing conditions**

Data on housing conditions in the Sagnarigu District indicate that the average number of people per house in the district is 9.1 with an average household size of 6.3. Compound houses (with rooms) are also the most common in both urban (72.5%) and rural (64.0%) localities.

Whereas concrete/cement is the most used material for the construction of the floor of dwelling units in both urban areas (86.5%) and rural areas (81.9%), metal sheets are widely used as construction materials for their roofing (88.1% in the urban and 68.2% in the rural areas). Cement blocks/concrete is also common in both urban (69.8%) and rural (51.0%) areas for the construction of outer walls of dwelling units in the district.

Majority of households in the district (73.7%) have access to electricity as their main source of lighting which is higher in the urban (79.4%) compared to the rural areas (63.9%).

The use of pipe borne water for drinking and domestic purposes is also very high in the district. Pipe borne water (both inside and outside dwellings) is the main source of water for drinking for 77.6 percent of households in the district while public stand pipe is used by 13.1 percent of the households. As expected, the use of pipe borne water (within and outside dwellings) is higher in the urban areas (87.2%) than the rural localities (61.3%).

Access to bathing and toilet facilities or lack of it is an important indicator of the health and sanitation status of a household. In the Sagnarigu District, significant numbers of households in the district (46.2%), urban areas (37.8%) and rural areas (60.5%) have no access to toilet facility. The improved toilet facilities such as water closet (WC) are less used but comparatively used more in rural areas (17.4%) than in the urban areas (15.1%).

Waste disposal is another problem confronting the district with the data showing that rubbish disposal in the district is largely done through public dump (open space) by about 30 percent urban and 27 percent rural households. At the same time, a significant amount of rubbish is dumped indiscriminately by 8.3 percent and 24.9 percent of urban and rural households respectively with implications for public health in the district.

With regard to liquid waste disposal, most of the households throw it onto the street/outside (50.5% urban and 57.6% rural) and also onto the compound (21.5% in urban areas and 20.3% rural areas). The use of the sewage system which is the best is, however, not common in the district (6.3% for urban areas and 5.0% for rural areas).

#### 9.3 Policy Implications

The characteristics of the population and housing conditions in the Sagnarigu District as observed by the results of the analysis of the 2010 Population and Housing Census data have implications for the general wellbeing of the people in the district. These characteristics, therefore, call for relevant policies to manage the population to ensure that its human resource potentials can be fully realized for the economic progress of the district and the entire nation. The goals of any such policies must, however, be within the general human development agenda of Ghana.

To realise the wellbeing of the people, the objectives of the revised 1994 Population Policy of Ghana must be considered. The general objective of the policy is to ensure that rapid population growth does not constrain economic progress of the nation. The human resource potential of the district can only be realized with increased education and skill training, but the analysis has shown that the educational and other socio-economic characteristics that are indicators of human resource quality are generally low. Investment in education and other basic needs, including housing, social amenities and facilities for the benefit of the population should be considered as priority to achieve socio-economic progress in the district.

The pursuit of goals such as generation of employment for the youth are appropriate in meeting the needs of the youth in the district among whom there is high unemployment. To this end, the Ghana Youth Employment and Entrepreneurial Development Agency (GYEEDA) should be strengthened to adequately equip participants who excel during their training to be able to provide jobs for others through entrepreneurship training. With a higher proportion of the population of the district being in the urban areas, there should be increased attention to income-generation activities for the urban youth without neglecting their rural counterparts.

The different population sub-groups of the district present some characteristics that require careful policy measures to meet their peculiar needs. These policies should be gender-sensitive considering the differences that the data have demonstrated between the males and females in the district particularly in terms of education, employment, disability and access to ICT. Furthermore, investment in the education of young people must be emphasized as a key policy with a long-term plan that ensures their gainful employment as well. This would in the long term contribute in reducing the proportion of child marriages in the district.

There is a generally low level of education among PWDs which calls for urgent policy attention. The Sagnarigu District Assembly should consider providing educational scholarships to sponsor some PWDs each year to pursue education beyond the senior high school level.

It is also recommended that the District Assembly should consider enacting by-laws that enjoin every landlord/landlady to provide toilet facilities in their homes if there is none or rigidly enforce existing ones if they exist. In a related development, the district must provide enough solid and liquid waste disposal bins to the communities at vantage points that can be easily accessible to all in order to forestall possible public health hazards through the indiscriminate disposal of waste as the report has revealed.

# **REFERENCES**

- Ghana Statistical Service (2013a), 2010 Population and Housing Census National Analytical Report.
- Ghana Statistical Service (2013b), 2010 Population and Housing Census Northern Regional Report.
- Sagnarigu News (a publication by the Assembly of development projects and programmes) 2013.

# **APPENDICES**

Table A1: Population 11 years and older with disability by age-sex and literacy status

Disability		Never		Kinder-						Voc/ Tech/	Post middle /sec	Post sec	Bachelor	Post graduate (Cert. Diploma Masters PHD
type/Sex	Total	attended	Nursery	garten	Primary	JSS/JHS	Middle	SSS/SHS	Secondary	Comm.	cert	diploma	degree	etc)
<b>Both Sexes</b>														
Total	100.0	33.7	6.2	2.6	22.2	12.2	2.1	9.3	1.0	1.4	1.9	4.5	2.2	0.6
No disability	100.0	33.4	6.3	2.7	22.4	12.3	2.0	9.3	1.0	1.4	1.9	4.5	2.2	0.6
With a disability	100.0	52.7	2.8	1.1	13.7	6.9	4.5	6.2	2.0	1.9	2.4	3.7	1.6	0.7
Sight	100.0	56.4	2.0	0.6	9.6	4.3	6.2	5.7	2.5	2.8	3.4	4.3	1.2	0.8
Hearing	100.0	59.0	2.5	1.1	13.6	5.9	2.8	5.4	0.6	2.5	1.4	4.0	1.1	0.0
Speech	100.0	39.3	3.7	2.0	21.7	8.1	3.1	7.5	2.4	2.7	2.4	4.1	1.7	1.4
Physical	100.0	61.6	1.3	0.5	11.0	7.5	4.5	4.0	1.7	1.0	1.2	4.2	1.3	0.3
Intellectual	100.0	59.1	2.7	1.7	15.0	9.3	1.7	3.3	1.0	1.3	1.3	3.0	0.7	0.0
Emotional	100.0	49.0	3.8	1.1	16.1	6.9	2.7	5.7	2.3	1.9	2.7	4.2	3.4	0.0
Other	100.0	47.2	4.5	1.7	13.5	8.3	3.1	10.1	2.1	0.3	3.1	3.1	1.7	1.0
Male														
Total	100.0	27.3	6.3	2.7	22.9	13.3	2.5	10.6	1.4	1.5	2.0	5.4	3.2	1.0
No disability	100.0	26.9	6.4	2.8	23.0	13.4	2.4	10.7	1.3	1.4	2.0	5.5	3.2	1.0
With a disability	100.0	48.2	2.4	1.1	13.8	8.2	5.2	6.8	2.6	2.2	2.1	4.4	1.9	1.1
Sight	100.0	58.7	1.0	0.7	7.9	3.9	6.2	6.6	2.6	3.0	2.3	4.6	1.6	1.0
Hearing	100.0	50.9	1.7	1.2	17.9	8.1	4.6	4.0	0.6	4.0	2.3	2.9	1.7	0.0
Speech	100.0	32.6	5.5	1.7	22.7	9.4	2.8	8.8	2.8	3.3	2.8	3.9	1.7	2.2
Physical	100.0	54.7	1.3	0.6	11.0	9.1	5.2	4.9	3.2	1.3	1.3	5.5	1.3	0.6
Intellectual	100.0	55.5	2.6	1.3	14.8	12.3	1.3	3.9	1.3	2.6	1.9	1.9	0.6	0.0
Emotional	100.0	47.1	3.3	1.7	16.5	5.8	1.7	6.6	4.1	1.7	3.3	3.3	5.0	0.0
Other	100.0	42.2	5.2	1.9	15.6	9.1	3.9	9.7	1.9	0.6	3.2	3.9	0.6	1.9

Table A1: Population 11 years and older with disability by age-sex and literacy status (cont'd)

											Post			Post graduate
										Voc/	middle			(Cert. Diploma
Disability		Never		Kinder-						Tech/	/sec	Post sec	Bachelor	Masters PHD
type/Sex	Total	attended	Nursery	garten	Primary	JSS/JHS	Middle	SSS/SHS	Secondary	Comm.	cert	diploma	degree	etc)
Female														<u> </u>
Total	100.0	40.3	6.1	2.5	21.6	11.1	1.7	7.9	0.6	1.3	1.9	3.5	1.2	0.2
No disability	100.0	40.1	6.1	2.6	21.7	11.2	1.6	8.0	0.6	1.3	1.9	3.5	1.3	0.2
With a disability	100.0	57.4	3.1	1.2	13.6	5.5	3.7	5.5	1.5	1.5	2.7	2.9	1.2	0.2
Sight	100.0	54.4	2.9	0.6	11.2	4.7	6.2	5.0	2.4	2.6	4.4	4.1	0.9	0.6
Hearing	100.0	66.9	3.3	1.1	9.4	3.9	1.1	6.6	0.6	1.1	0.6	5.0	0.6	0.0
Speech	100.0	50.0	0.9	2.6	20.2	6.1	3.5	5.3	1.8	1.8	1.8	4.4	1.8	0.0
Physical	100.0	68.9	1.4	0.3	10.9	5.8	3.8	3.1	0.0	0.7	1.0	2.7	1.4	0.0
Intellectual	100.0	63.0	2.7	2.1	15.1	6.2	2.1	2.7	0.7	0.0	0.7	4.1	0.7	0.0
Emotional	100.0	50.7	4.3	0.7	15.7	7.9	3.6	5.0	0.7	2.1	2.1	5.0	2.1	0.0
Other	100.0	53.0	3.7	1.5	11.2	7.5	2.2	10.4	2.2	0.0	3.0	2.2	3.0	0.0

Table A2: Population by sex, number households and number of houses in the 20 largest communities

			Sex			
S/No.	Community Name	Both Sexes	Male	Female	Households	Houses
1	Choggu Manayili	17,809	9,015	8,794	2,675	1,679
2	Kalpohini	15,738	7,957	7,781	2,595	1,523
3	Gumani	12,506	6,210	6,296	2,147	981
4	Jisonayili	9,359	4,585	4,774	1,472	1,022
5	Sanerigu	8,328	4,239	4,089	1,243	878
6	Sakasaka	7,847	3,893	3,954	1,125	635
7	Kukuo	5,581	2,739	2,842	953	674
8	Shishegu	5,565	2,868	2,697	890	642
9	Kanvilli	5,506	2,874	2,632	739	584
10	Gurugu	5,498	2,813	2,685	989	751
11	Nyohini	4,894	2,480	2,414	596	342
12	Gumbihini	3,908	1,938	1,970	889	516
13	Zagyuli	3,296	1,661	1,635	501	465
14	Education Ridge	2,871	1,404	1,467	443	310
15	Vitting	2,234	1,133	1,101	394	273
16	Maleshegu	2,163	1,119	1,044	331	328
17	Tunayili	2,103	1,022	1,081	372	224
18	Kpalsi	2,079	1,068	1,011	361	328
19	Gbolo	1,876	979	897	332	324
20	Yilonayili	1,721	903	818	174	173

Table A3: Population by age group in the 20 largest communities

		All	Age group															
S/N	Community Name	ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1	Choggu Manayili	17,809	2,379	2,128	1,897	2,029	1,976	1,891	1,363	931	741	594	515	312	342	176	238	297
2	Kalpohini	15,738	2,258	1,939	1,626	1,789	1,575	1,412	1,122	925	741	609	467	295	314	180	196	290
3	Gumani	12,506	1,550	1,326	1,371	1,468	1,458	1,283	976	757	573	390	372	207	237	146	153	239
4	Jisonayili	9,359	1,132	1,070	1,104	1,188	940	878	718	576	457	368	307	163	138	75	112	133
5	Sanerigu	8,328	1,234	1,055	895	967	875	824	546	412	377	295	253	148	148	82	77	140
6	Sakasaka	7,847	1,132	961	844	900	836	696	584	443	341	242	230	127	133	82	135	161
7	Kukuo	5,581	785	717	612	594	582	497	422	320	267	184	171	90	94	51	79	116
8	Shishegu	5,565	797	718	722	662	590	504	379	270	259	147	120	113	99	42	63	80
9	Kanvilli	5,506	731	697	635	722	565	465	406	314	256	168	128	70	110	60	75	104
10	Gurugu	5,498	835	731	605	602	514	520	478	317	241	176	147	71	86	45	56	74
11	Nyohini	4,894	683	590	547	554	540	468	359	254	209	144	120	86	83	73	73	111
12	Gumbihini	3,908	490	473	381	393	529	460	326	237	166	87	100	51	72	33	45	65
13	Zagyuli	3,296	398	406	441	347	345	297	269	163	143	91	103	74	65	40	41	73
14	Education Ridge	2,871	363	314	297	374	443	284	185	137	116	87	111	44	39	19	32	26
15	Vitting	2,234	270	244	253	266	264	232	165	125	105	71	75	36	43	19	27	39
16	Maleshegu	2,163	367	267	239	230	203	193	146	122	85	63	66	41	55	19	29	38
17	Tunayili	2,103	328	286	226	231	198	170	134	146	106	60	66	22	32	28	45	25
18	Kpalsi	2,079	264	260	238	246	209	211	163	115	111	82	50	25	36	14	24	31
19	Gbolo	1,876	278	270	238	173	167	180	154	114	94	57	54	20	27	7	21	22
20	Yilonayili	1,721	293	248	162	168	130	164	100	91	76	83	45	30	25	24	26	56

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