



2010

POPULATION & HOUSING CENSUS

DISTRICT ANALYTICAL REPORT

MAMPRUGU MOAGDURI DISTRICT



Canada 

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DEVELOPMENT COOPERATION

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PREFACE AND ACKNOWLEDGEMENT

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

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

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

The District Analytical Report for the Mamprugu Moagduri 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.



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ACRONYMS AND ABBREVIATIONS

AGI:	Association of Ghanaian Industries
AIDS:	Acquired Immune Deficiency Syndrome
CEB:	Children Ever Born
CIDA:	Canadian International Development Agency
CS:	Children Surviving
KVIP:	Kumasi Ventilated Improved Pits
CHIPS:	Community Health Planning Services
DANIDA:	Danish International Development Agency
DFID:	Department for International Development
ECOWAS:	Economic Community of West African States
EU:	European Union
FCUBE:	Free Compulsory Universal Basic Education
GET Fund:	Ghana Education Trust Fund
GDP:	Gross Domestic product
GSS:	Ghana Statistical Service
GPS:	Global Positioning System
GES:	Ghana Education Service
GHS:	Ghana Health Service
HIV:	Human Immune Virus
ICT:	Information Communication Technology
JSS:	Junior Secondary School
JHS:	Junior High School
SSS:	Senior Secondary School
SHS:	Senior High School
LEAP:	Livelihood Empowerment against Poverty Programme
MMDAs	Metropolitan, Municipal and District Assemblies
MDGs	Millennium Development Goals

MOE	Ministry of Education
MOFA	Ministry of Food and Agriculture
MOTI	Ministry of Trade and Industry
NHIS	National Health Insurance Scheme
NDPC	National Development Planning Commission
NGOs	Non-governmental Organisations
PHC	Population and Housing Census
PPP	Public-Private Partnerships
PNDC	Provisional National Defence Council
PASEX	Population Analysis System
SADA	Savannah Accelerated Development Authority
SAP	Structural Adjustment Programme
UNICEF	United Nations International Children's Education Fund
UN	United Nations
WHO	World Health Organization
WC	Water Closet
MVP	Millennium Village Promise
CWSA	Community Water and Sanitation Agency
CBR	Crude Birth Rate
GFR	General Fertility Rate
TFR	Total Fertility Rate
CDR	Crude Death Rate

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 Mamprugu Moagduri District, according to the 2010 Population and Housing Census, is 46,894 representing 1.9 percent of the region's total population. Males constitute nearly 50 percent and females represent just a little above 50 percent. . In terms of rural-urban distribution, the district has all of its inhabitants living in rural localities. This implies that the district is completely a rural one.

The district has a sex ratio of 99.9. The population of the district is youthful depicting a broad base population pyramid which tapers off with a small number of elderly persons (4.4 %). The total age dependency ratio for the District is 101.4, the age dependency ratio for males is higher (109.7) than that of females (93.6).

Fertility, mortality and migration

The Total Fertility Rate for the district 3.4. The General Fertility Rate is 100.1 births per 1000 women aged 15-49 years. The Crude Birth Rate (CBR) is 22.8 per 1000 population. The crude death rate for the district is 7.7 per 1000. The death rate for males is highest for age 70 and above representing 47 deaths per 1000 population while for the females, the highest death rate of 29 deaths per 1000 population is for age 70 years and older.. Accident/violence/homicide /suicide accounted for 6.1 percent of all deaths while other causes constitute 93.9 percent of deaths in the district. Majority of migrants (65.6 percent) living in the district were born in another region while 34.4 percent were born elsewhere in the Northern Region. For migrants born in another region, more than half (57.7%) were born outside Ghana, while 13.1 percent and 11 percent were born in Ashanti and Upper East regions respectively.

Household size, composition and structure

The district has a household population of 45,160 with a total number of 5,214 households. The average household size in the district is 9.0 persons per household. Children constitute the largest proportion of the household members accounting for 53.9 percent. Spouses form about 10.4 percent. Extended households (head, spouse(s), children, and head's relative) constitute 67.9 percent of the total number of households in the district.

Marital status

About six in ten (59.9%) of the population aged 12 years and older are married, 34.3 percent have never married, 0.4 percent are in consensual unions, 4.1 percent are widowed, 0.7 percent are divorced and 0.6 percent are separated.. . Among the married, 90.1 percent have

no education while about 56.1 percent of the unmarried have never been to school. Over 80 percent of the married population (82.5%) are employed, 0.7 percent are unemployed and 16.8 percent are economically not active. About 41.9 percent of those who have never married) are economically not active with 0.7 percent unemployed.

Nationality

The proportion of Ghanaians by birth in the district is 94.0 percent. Those who have naturalized constitute 0.9 percent and the non-Ghanaian population in the district is 2.8 percent.

Literacy and education

Of the population 11 years and above, 77.9 percent are not literate and 22.1 percent are literate. Illiteracy is higher among the females (53.1%) than the males (46.9%). Seven out of ten people (64.6%) indicated they could speak and write both English and Ghanaian languages.

Economic activity status

About 76.0 percent of the populations aged 15 years and older are economically active while 24.0 percent are economically not active. Of the economically active population, 99.0 percent are employed while 1.0 percent are unemployed. For those who are economically not active, a larger percentage of them (perform household duties (40.3) and, 32.0 percent are in full time education. 20.2 percent are too old or young to work. Four out of ten unemployed are seeking work for the first time.

Occupation

Of the employed population, about 94.0 percent are engaged as skilled agricultural, forestry and fishery workers, 2.8 percent in craft and related trade, and 1.7 percent are engaged in services and sales.

Employment status and sector

Of the population 15 years and older 50.2 percent are self-employed without employees, 45.1 percent are contributing family workers. Apprentice, domestic employees and casual workers together form less than one percent of the employed population 15 years and older in the district. The private informal sector is the largest employer in the district, employing 98.1 percent of the population followed by the public sector with 0.7 percent.

Information Communication Technology

Of the population 12 years and above, 7.8 percent have mobile phones. Men who own mobile phones constitute 11.6 percent as compared to 4.3 percent of females. Under one percent of the population 12 years and older use internet facilities in the district. Only 4 households representing 0.1 percent of the total households in the district have desktop/laptop computers.

Disability

About 1.4 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 (1.2%). The types of disability in the district include sight, hearing, speech, physical, intellect, and emotion. Persons with sight disability recorded the highest of 51.2 percent followed by hearing disability (20.2%). Of the population disabled, 83.1 percent have never been to school.

Agriculture

As high as 97.2 percent of households in the district are engaged in agriculture. Most households in the district (98.6%) are involved in crop farming. Poultry (chicken) is the dominant animal reared in the district

Housing

The housing stock of Mamprugu Moagduri District is 3,085 representing 1.2 percent of the total number of houses in the Northern Region. The average number of persons per house is 15.2.

Type, tenancy arrangement and ownership of dwelling units

Over half (71.5%) of all dwelling units in the district are compound houses, followed by huts/buildings (same compound) which form 13.54 percent, 8.4 percent are separate houses and 2.7 percent are semi-detached houses. More ninety percent (96.4%) of the dwelling units in the district are owned by members of the household; 2.6 percent are owned by a relative who is not a member of the household and only 0.4 percent are owned by public or government.

Material for construction of outer wall, floor and roof

The main construction material for outer walls of dwelling units in the district is mud/mud bricks or earth accounting for 90.4 percent with palm leaf/thatch constituting 3.0 percent of outer walls of dwelling units in the district. Cement (78.8) and mud/earth (19.9%) are the two main materials used in the construction of floors of dwelling units in the district. Thatch/palm leaf or raffia are the main roofing material (49.9%) for dwelling units in the district.

Room occupancy

One room constitutes the highest percentage (62.9%) of sleeping rooms occupied by households in housing units in the district. About 0.2 percent of households with 10 or more members occupy single rooms.

Utilities and household facilities

The three main sources of lighting in dwelling units in the district are flashlight/torch (67.2%), kerosene lamp (29.7%) and firewood (0.7%). The main source of fuel for cooking for most households in the district is wood (97.1%). The four main sources of water in the district are borehole, river stream, public tap and pipe borne water. About half of households (46.0 %) drink water from boreholes.

Out of the total number of households in the district, about 87 percent use bush or open field for toilet. About 7.4 percent of households in the district use KVIP. About four in ten of households (42.4%) in the district share separate bathrooms in the same house while 21.1 percent own bathrooms for their exclusive use.

Waste disposal

The most widely method of solid waste disposal is by public dump in the open space accounting for 43.0 percent. About four in ten households (37.8%) dump their solid waste indiscriminately. House to house waste collection accounts for 7.0 percent. For liquid waste disposal, throwing waste onto the compound (67.83%) and onto the street (20.5 %) are the two most common methods used by households in the district.

CHAPTER ONE

INTRODUCTION

1.1 Background

The Mamprugu Moagduri District was carved from West Mamprusi District. Its capital is Yagaba. It was established by LI 2063 of 2012 and forms part of the districts and municipalities created in the year 2012. The district was inaugurated on 28th June, 2012.

1.2 Physical Features

1.2.1 Location

The District is located within longitudes 0°35'W and 1°45'W and Latitude 9°55'N and 10°35'N. It shares boundaries with North Gonja District to the West, Kunbungu District to the south, Sisala East in the Upper West Region, Builsa South in the Upper East Region and West Mamprusi District in the Northern Region. Figure 1.1 is a map of the Mamprusi Moagduri District Assembly.

1.2.2 Climate

The district lies within the savannah climatic belt with single maxima rainfall regime. Average annual rainfall is between 1000mm and 1400mm. The rains occur between May and October. July to September is normally the peak period. Floods occur during the peak period after which there is a prolonged dry season from November to April. Temperatures are generally high all year round with the hottest month being March. Average monthly temperature is between 25.50°C and 35°C. In the rainy season, there is high humidity and sunshine with heavy thunder storms. The dry season is characterized by dry harmattan winds from November to February and high sunshine from March to May.

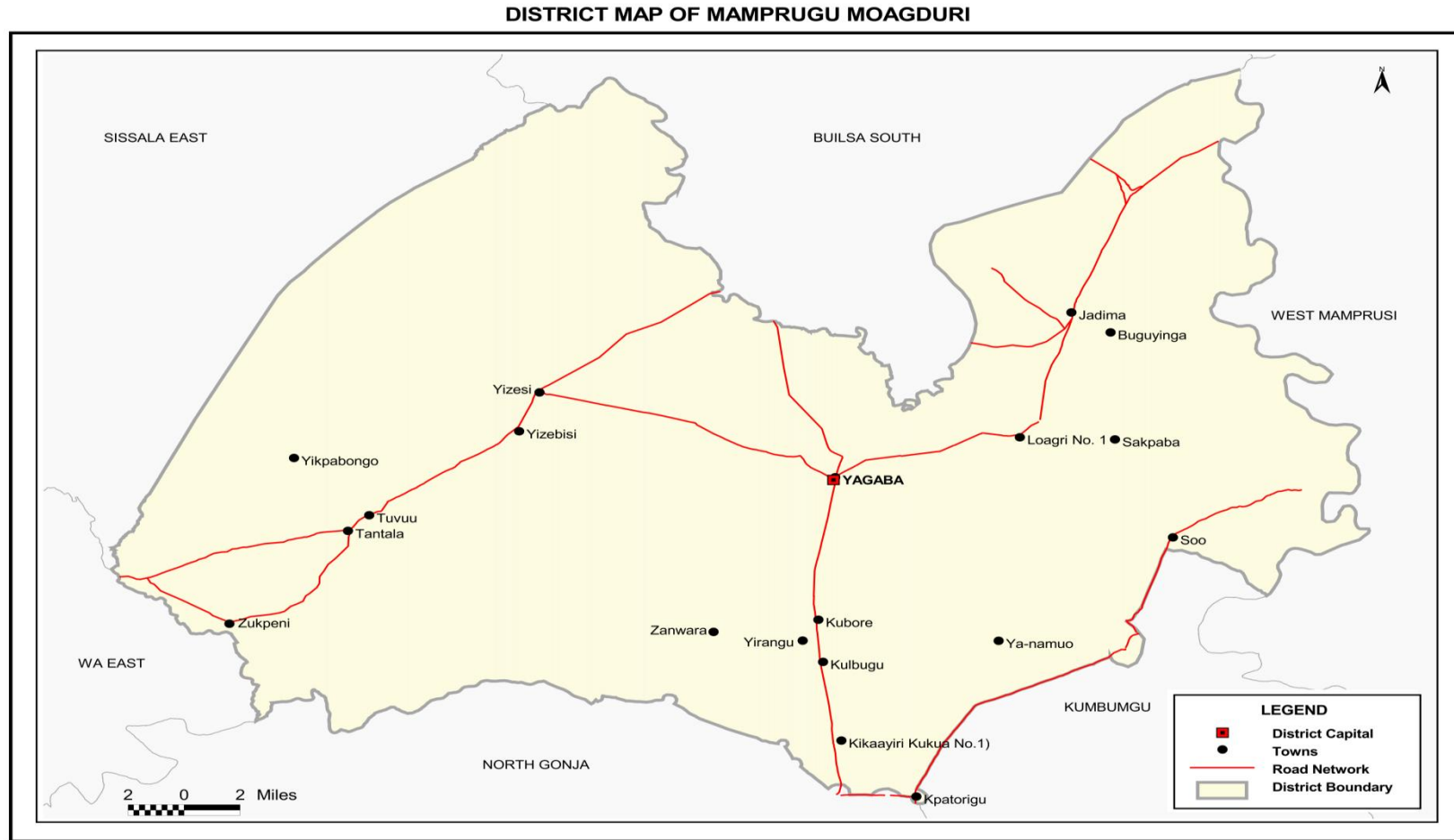
1.2.3 Relief and drainage

The district geology is made up of Middle Voltaic rocks normally suitable for rural water supply. It is largely covered by a flat and undulating terrain. The most significant river in the district is the White Volta and its tributaries include Sissili and the Kulpawn rivers. Along the valleys of these rivers are large arable lands, good for the cultivation of rice and other cereals.

1.2.3 Soil and vegetation

Soils in the district are developed under the Savannah vegetation. The soils are quite rich in nutrients especially along the valleys. Alluvial soils are quite extensive around the valleys which are also suitable for rice production. There is considerable soil erosion in the district due to bad farming practices and rampant burning of the bush. The natural vegetation is classified as Guinea Savannah Woodland, composed of short trees of varying sizes and density, growing over a dispersed cover of perennial grasses and shrubs.

Figure 1.1: Map of Mamprugu Moagduri District



Source: Ghana Statistical Service, (GIS)

1.2.5 Settlement

The settlement pattern in the district is generally dispersed but with a few nucleated and linear patterns in the relatively bigger towns. Housing in the district is largely traditional huts built in the form of compound houses with a good number roofed with thatch. The district capital and other few communities have buildings built with cement and roofed with aluminum sheets.

1.3 Political Administration

The political administration of the district is based on the local government Act 1993, Act 462 which establishes district and sub-district structures for the administration of district Assemblies. The district has been sub-divided into 4 Area Councils and 85 unit committee members. The District Chief Executive is the political head of the district.

1.4 Social Structure

1.4.1 Ethnicity and traditional political arrangement

The Mamprusi, Kantonsi, Komma and the Builsa are the major ethnic groups in the district. There are also Fulanis in the district who are working as herdsmen for the indigenous people. The typical political traditional arrangement includes the following: the Chief, the Wudana who is the linguist in the village and leader of the elders; the Kpandana (the elders of the Community and advisors to the chief), the Tindana (in charge of the gods in the Community/ Fetish priest), the Kanbonnaba (the Chief Warrior), the Nachinaa (the Youth Leader), the Mangazia (the Women's Leader), the Fongu Kpamma (the Sectional Heads).

There are three main traditional areas in the district. These are the Wungu Traditional Area, Soo Traditional Area and Wulugu Traditional Area. It is worth noting that some communities in the West Mamprusi District shares paramouncies with these traditional areas. All these traditional areas are answerable to the king of Mamprugu, the Nayiri.

Islam is the predominant religion in the district. The major festivals in the district are the Fire Festival and the Damba Festival. The celebration of the Damba and Fire festivals follows the Islamic calendar and it depends on which month the moon appears. The main aim for the Damba Festival is to remember the birth and naming ceremony of the Holy Prophet Mohammed. It is, therefore, a twin festival namely, "Somo Damba" which is celebrated to commemorate the birth of the Prophet and "Naa-Damba" is held to mark his naming ceremony. The appearance of the Damba month, "goori" marks the beginning of the festival. It is important to note that the festival is a time of unity amongst all the chieftaincy gates of Mamprugu. The Fire Festival (Bugum) on the other hand, is observed by the people to mark the landing of Prophet Noah's Ark after the flood. In recent times, the celebration of these festivals serve as a platform where local interests are publicized as the local elites have increasingly used them as political forums to project local interest while government representatives in their speeches at the festival durbars seek to bring government policy closer to the people.

1.5 Economy

The agricultural sector plays a major role in the district economy. The contribution of the service industry to the economy is, however, negligible. The district is also yet to be connected to the national grid. Infrastructure for communication in the district is limited to a few towns in the district.

1.5.1 Agriculture

Agriculture is the mainstay of the district as majority of the people are engaged in agricultural activities. Along the river valleys are large stretches of arable land, good for cultivation of rice and cereals on a commercial scale. This also presents opportunities to undertake dry season farming. Crops such as millet, beans, maize, rice and groundnuts are cultivated throughout the district. Sheanut is harvested from the shea tree which grows wildly in the district for shea butter processing. Animal rearing is lucrative as ample land is available for livestock farming. Cattle, sheep, goats and pigs are kept for domestic and commercial purposes.

1.5.2 Industry

The 2010 PHC puts the total employed population 15 years and older in the district at 19,069, representing 40.7 percent of the total population of the district. Majority of the employed population are in the agriculture, forestry and fishing industry (93.5%). The manufacturing industry which is the second largest industry in the district employs only 2.4 percent of employed persons similar to wholesale and retail (2.3%). Water supply, sewerage waste management, and remediation activities as well as the arts entertainment and creative industry are the least employer of people in the district. In terms of agricultural processing, sheanut, groundnut and dawadawa processing are the main activities in the district. The processing is mostly undertaken by women groups.

1.6 Census Methodology, Concepts and Definitions

1.6.1 Introduction

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

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

1.6.2 Pre-enumeration activities

Development of census project document and work plans

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

Census secretariat and committees

A well-structured management and supervisory framework that outlines the responsibilities of the various stakeholders is essential for the effective implementation of a population and

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

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

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

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

Selection of census topics

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

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

Census mapping

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

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

Development of questionnaire and manuals

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

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

Pre-tests and trial census

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

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

A trial census which is a dress rehearsal of all the activities and procedures that are planned for the main census was carried out in October/November 2009. These included recruitment and training, distribution of census materials, administration of the questionnaire and other census forms, enumeration of the various categories of the population (household,

institutional and floating population), and data processing. The trial census was held in six selected districts across the country namely; Saboba (Northern Region), Chereponi (Northern Region), Sene (Brong Ahafo Region), Bia (Western Region), Awutu Senya (Central Region), and Osu Klottey Sub-Metro (Greater Accra Region). A number of factors were considered in selecting the trial census districts. These included: administrative boundary issues, ecological zone, and accessibility, enumeration of floating population/outdoor-sleepers, fast growing areas, institutional population, and enumeration areas with scattered settlements.

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

1.6.3 Census enumeration

Method of enumeration and field work

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

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

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

Enumeration of the household population started on Monday, 27th 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 17th 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, Kasa 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 (26th September, 2010) were enumerated.
- 1.3 percent of the population was erroneously included in the census.
- Regional differentials are observed. Upper East region recorded the highest coverage rate of 98.2 percent while the Volta region had the lowest coverage rate of 95.7 percent.
- Males (3.3%) were more likely than females (2.8%) to be omitted in the census. The coverage rate for males was 96.7 percent and the coverage rate for females was 97.2 percent. Also, the coverage rates (94.1%) for those within the 20-29 and 30-39 age groups are relatively lower compared to the coverage rates of the other age groups.
- There was a high rate of agreement between the 2010 PHC data and the PES data for sex (98.8%), marital status (94.6%), relationship to head of household (90.5%) and age (83.0%).

1.6.5 Release and dissemination of results

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

1.6.6 Concepts and definitions

Introduction

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

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

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

Region

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

District

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

Locality

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

Population

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

Household

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

Head of household

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

Household and non-household population

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

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

Age

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

Nationality

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

Ethnicity

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

Birthplace

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

Duration of residence

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

Religion

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

Marital Status

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

Literacy

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

Education

School Attendance

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

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

Level of Education

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

Activity status

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

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

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

Occupation

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

Industry

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

Employment status

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

Employment sector

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

Disability

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

Information Communication Technology (ICT)

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

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

Fertility

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

Mortality

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

Agriculture

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

Housing conditions and facilities

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

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

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

1.7 Organization of the Report

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

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

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

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

CHAPTER TWO

DEMOGRAPHIC CHARACTERISTICS

2.1 Introduction

This chapter provides information on the age and sex of household members, the population size of the district as well as the dependency ratios. The chapter also captures population distribution by rural and urban residence in the district. Issues of migration, fertility and mortality are also discussed in this chapter.

2.2 Population Size and Distribution

Table 2.1 shows that the total population of the district is 46,894, representing 1.9 percent of the region's total population comprising 23,439 males (50.0 %) and 23,455 females (50.0%). In terms of rural-urban distribution, the district has all of its inhabitants living in rural localities. This implies that the district is completely a rural one.

2.2.1 Sex ratio, age dependency, age-sex structure

Table 2.1 shows the age structure, sex composition, and age dependency ratio of the district. The age structure and the sex composition of the district population follow the national and the regional patterns which are broad at the base and gradually decrease at older ages. The sex ratio is the ratio of males to 100 females. Table 2.1 depicts sex ratios among various age groups in the district. For all ages, the sex ratio of the district stands at 99.9. This means that there are slightly more females than males in the district. This varies somewhat from the national and the regional patterns where the sex ratio for all ages stands at 95.2 and 98.4 respectively.

The table indicates that sex ratio is above 100 at ages 0-19 years. This is an indication that there are more males than females among these ages. A similar pattern can be observed for all the other age groups except between 20 and 44 years and also 60-64 and 70-74 years where the number of females far exceeds their male counterparts. The low sex ratios between age 20 and 44 years may be due to the out-migration which may be selective of males of these ages in the district.

2.2.2 Dependency ratio

This is the ratio of persons in the "dependent" ages (population under 15 years and 65 years and older) to those in the "economically productive" ages of 15-64 years. Table 2.1 shows that the dependency ratio for the district is 101.4. This ratio reveals that there are about 101 persons in the dependent ages for every 100 persons in the working age population. The dependency ratio for the district is higher than both the national and regional averages which stand at 75.6 and 96.8 respectively. These figures suggest a large proportion of children and the elderly population in the district. Dependency among the male population is relatively higher (109.7) than among the female population (93.6). This follows the national and the regional trends where dependency ratios for males are higher than those of females.

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

Age group	Sex						Sex ratio
	Both Sexes		Male		Female		
	Number	Percent	Number	Percent	Number	Percent	
All Ages	46,894	100.0	23,439	49.98	23,455	50.02	99.9
0 – 4	7,913	16.9	4,011	8.55	3,902	8.32	102.8
5 – 9	8,088	17.3	4,227	9.01	3,861	8.23	109.5
10 – 14	5,554	11.8	2,974	6.34	2,580	5.50	115.3
15 – 19	4,720	10.1	2,470	5.27	2,250	4.80	109.8
20 – 24	3,661	7.8	1,702	3.63	1,959	4.18	86.9
25 – 29	3,533	7.5	1,497	3.19	2,036	4.34	73.5
30 – 34	2,862	6.1	1,307	2.79	1,555	3.32	84.1
35 – 39	2,116	4.5	1,004	2.14	1,112	2.37	90.3
40 – 44	1,863	4.0	870	1.86	993	2.12	87.6
45 – 49	1,597	3.4	808	1.72	789	1.68	102.4
50 – 54	1,341	2.9	689	1.47	652	1.39	105.7
55 – 59	647	1.4	359	0.77	288	0.61	124.7
60 – 64	949	2.0	469	1.00	480	1.02	97.7
65 – 69	539	1.2	289	0.62	250	0.53	115.6
70 – 74	624	1.3	311	0.66	313	0.67	99.4
75 – 79	286	0.6	144	0.31	142	0.30	101.4
80 – 84	295		148	0.32	147	0.31	100.7
85 – 89	163	0.4	82	0.17	81	0.17	101.2
90 – 94	102	0.2	58	0.12	44	0.09	131.8
95 – 99	41	0.1	20	0.04	21	0.04	95.2
All Ages	46,894	100.0	23,439	49.98	23,455	50.02	99.9
0-14	21,555	46.0	11,212	23.91	10,343	22.06	108.4
15-64	23,289	49.7	11,175	23.83	12,114	25.83	92.2
65+	2,050	4.4	1,052	2.24	998	2.13	105.4
Age-dependency ratio	101.4		109.7		93.6		

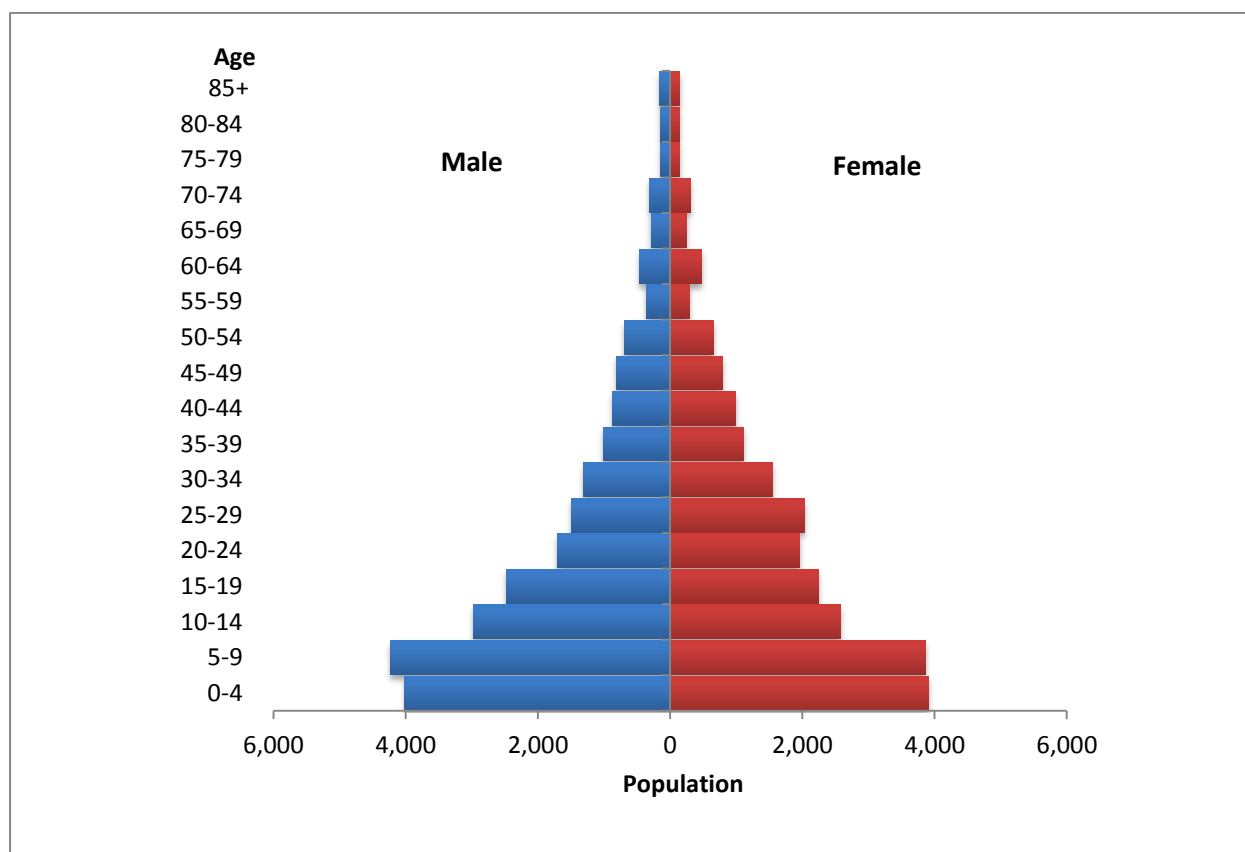
Source: Ghana Statistical Service, 2010 Population and Housing Census

2.2.3 Age-sex structure

Figure 2.1 represents the age structure of the district's population. The age structure for the district shows a relatively large proportion of the district population within the 0-19 age groups, representing 56.0 percent of the total population of the district. In contrast, 4.4 percent of the population is made up of persons 65 years and older. The age group 5-9 years has the highest proportion (17.3%) of the population while persons of age 95-99 years represent the least proportion of about one percent.

The age structure reflects the national pattern where males are more than females at the base while the reverse is the case higher up on the population pyramid of the district.

Figure 2.1: Population pyramid



Source: Ghana Statistical Service, 2010 Population and Housing Census

2.3 Migration, Fertility and Mortality

Fertility, mortality and migration are principal determinants of population growth at a particular point in time. The composition of the population is important for development planning and policy formulation at all levels (national, regional, district and locality) of governance.

2.3.1 Fertility

Table 2.3 provides information on the total fertility rate (TFR) for women aged 15-49 years. The TFR is defined as the average number of children that would be born to a woman by the time she completes childbearing if she were to experience the prevailing pattern of age-specific fertility rate. The table also shows other fertility measures such as general fertility rate (GFR) and crude birth rate (CBR). The GFR indicates births relative to the number of women in the reproductive age (15-49). The CBR, on the other hand, is the simplest and most frequently used measure of fertility. It is crude and always expressed per 1000 population and includes all ages and both sexes in the denominator.

The total population of women in the district for ages 15-49 years is 10,694. This represents 22.8 percent of the total population of the district (46,894). The number of births in the district in the last 12 months prior to the census is 1,071, representing 2.28 percent of the district's population. The table further shows that the TFR, GFR and CBR of the district stand at 3.4, 100.1, and 22.8 respectively.

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

District	Population	Number of women 15-49 years	Number of births in last 12 months	Total Fertility Rate	*General Fertility Rate	**Crude Birth Rate
All Districts	2,479,461	582,897	59,391	3.54	101.9	24.0
Bole	61,593	14,471	1,663	3.80	114.9	27.0
Sawla-Tuna-Kalba	99,863	22,207	2,230	3.60	100.4	22.3
West Gonja	41,180	9,806	924	3.30	94.2	22.4
Gonja Central	87,877	20,555	2,086	3.60	101.5	23.7
East Gonja	135,450	31,216	3,071	3.60	98.4	22.7
Kpandai	108,816	24,066	2,959	4.30	123.0	27.2
Nanumba South	93,464	21,210	2,542	4.20	119.8	27.2
Nanumba North	141,584	32,246	3,143	3.40	97.5	22.2
Zabzugu	63,815	15,591	1,016	2.40	65.2	15.9
Yendi Municipal	117,780	27,686	2,355	3.00	85.1	20.0
Tamale Metropolis	223,252	59,341	4,743	2.80	79.9	21.2
Tolon	72,990	17,028	1,585	3.20	93.1	21.7
Savelugu Nanton	139,283	33,942	4,300	4.30	126.7	30.9
Karaga	77,706	18,666	1,621	2.90	86.8	20.9
Gushiegu	111,259	26,349	2,868	3.70	108.8	25.8
Saboba	65,706	14,519	1,871	4.20	128.9	28.5
Chereponi	53,394	11,652	1,495	4.30	128.3	28.0
Bunkpurugu Yonyo	122,591	26,725	2,893	3.80	108.3	23.6
Mamprusi East	121,009	27,145	2,785	3.60	102.6	23.0
Mamprusi West	121,117	27,528	3,080	3.80	111.9	25.4
North Gonja	43,547	9,935	1,349	5.30	135.8	31.0
Kumbungu	39,341	8,851	920	3.60	103.9	23.4
Sagnerigu Municipal	148,099	38,548	3,579	3.30	92.8	24.2
Mion	81,812	18,812	1,935	3.40	102.9	23.7
Tatale	60,039	14,108	1,307	3.50	92.6	21.8
Mamprugu Moagduri	46,894	10,694	1,071	3.40	100.1	22.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.3.3 Fertility and Child Survival

Table 2.4 shows the number of children ever born by females 12 years and older and the number of children surviving in the district. The distribution of children surviving as proportion of children ever born in the district by age suggests a relatively higher survival rates among the females compared to the males.

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

Age	Number of Females	Children Ever Born			Children Surviving		
		Both sexes	Male	Female	Both sexes	Male	Female
All ages	14,533	39,391	20,434	18,957	33,415	17,142	16,273
12 - 14	1,421	4	3	1	3	2	1
15 - 19	2,250	401	196	205	371	175	196
20 - 24	1,959	2,080	1,071	1,009	1,901	952	949
25 - 29	2,036	4,547	2,378	2,169	4,126	2,118	2,008
30 - 34	1,555	5,654	2,939	2,715	5,072	2,625	2,447
35 - 39	1,112	5,130	2,631	2,499	4,491	2,304	2,187
40 - 44	993	5,276	2,748	2,528	4,520	2,350	2,170
45 - 49	789	4,399	2,240	2,159	3,656	1,867	1,789
50 - 54	652	3,564	1,838	1,726	2,906	1,484	1,422
55 - 59	288	1,633	865	768	1,355	688	667
60 +	1,478	6,703	3,525	3,178	5,014	2,577	2,437

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.3.4 Mortality

Table 2.5 presents information on the total population, total household deaths and crude death rates for Districts in the Northern region. The household deaths in the District are 277 and it represents 0.8 percent of the total household population (70,574). The crude death rate is 7.7 per 1,000 populations.

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

District	Total Population	Deaths in households	*Crude death 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
Savelugu Nanton	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
Bunkpurugu Yonyo	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
Kumbungu	39,341	343	8.7
Sagnerigu Municipal	148,099	847	5.7
Mion	81,812	556	6.8
Tatale	60,039	210	3.5
Mamprugu Moagduri	46,894	277	5.9

2.3.5 Causes of deaths

Table 2.6 shows the various causes of deaths in the district. Accidents, violence, homicide or suicide accounts for 6.1 percent of all deaths in the district. This compares with 9.7 percent and 11.6 percent respectively in the Northern Region and Ghana. However, pregnancy accounts for 3.2 percent of all deaths which is higher than the average for the Northern Region (2.2%) and Ghana (1.9%). This could be attributed to the inadequate number of health professionals and infrastructure in the district. Other causes of death in the district account for about 93.9 percent of total number of deaths recorded in the district.

Table 2.5: Causes of death in households

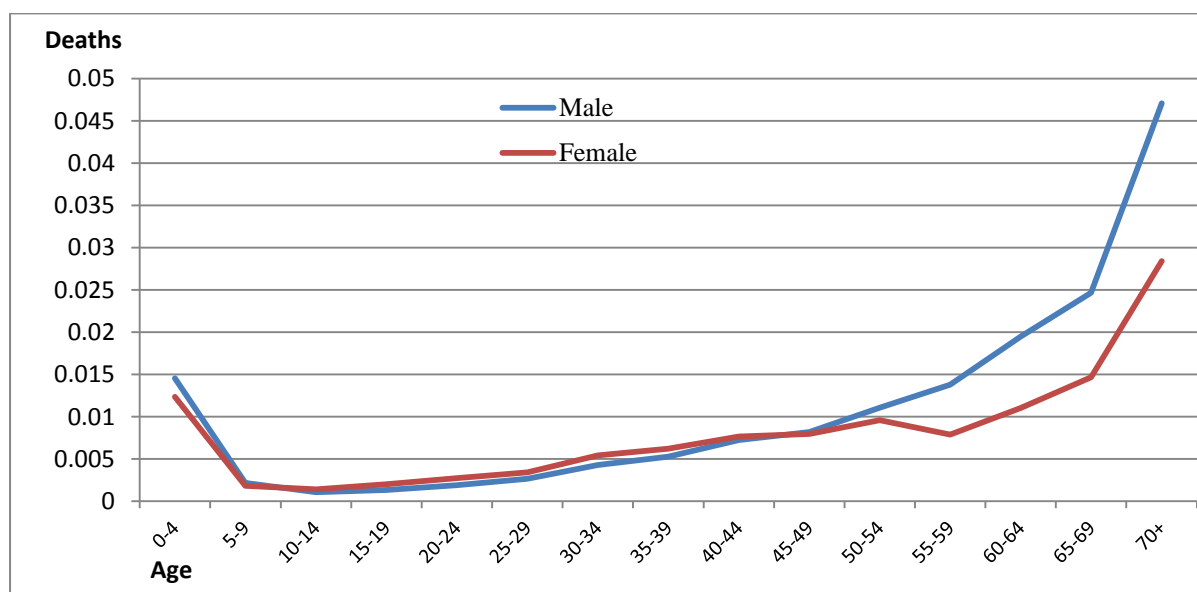
Country/ Region/ District	Total deaths		Death due to				Pregnancy related death (female 15-54 years)		Not pregnancy related	
			Accident/ violence/ homicide /suicide		All other causes					
	No.	%	No.	%	No.	%	No.	%	No.	%
Ghana	163,534	100.0	18,938	11.6	144,596	88.4	3,026	1.9	160,508	98.1
Northern	14,715	100.0	1,434	9.7	13,281	90.3	322	2.2	14,393	97.8
Mamprugu Moagduri	277	100.0	17	6.1	260	93.9	9	3.2	268	96.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.3.6 Age-Specific death rate

Figure 2.2 shows the age-specific death rates in the district. It shows a variation of deaths by age and sex where the death rates are higher among males at ages less than 10 years and more than 50 years. In contrast, within ages 10-49 years, death rates are higher among females than males which could be largely due to the impact of maternal mortality that affects females during their reproductive ages.

Figure 2.2: Age specific death rate



Source: Ghana Statistical Service, 2010 Population and Housing Census

2.3.3 Migration

Table 2.2 shows the total migrant population, percentage distribution of the population by birth place and duration of residence. The total migrant population of the district stands at 2,322. Out of this, 799 are born elsewhere in the region, representing 34.4 percent. On the other hand, 1,523 of them (65.6%) are born elsewhere in another region in Ghana. The table further shows that among migrants born elsewhere in another region, more than half (57.7%) were born outside Ghana while 13.1 percent and 11 percent were born in Ashanti and Upper East regions respectively. More than half of migrants recorded in the district have stayed less than five years in the district (26.8% for less than one year and 28.6% for 1-4 years). This varies by region of origin of the migrants.

Table 2.6: Birthplace by duration of residence of migrants

Birthplace	Total		Duration of residence (%)				
	Number	Percent	Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years
Total	2,322	100.0	26.8	28.6	14.9	15.1	14.6
Born elsewhere in the region	799	34.4	33.9	20.5	12.3	12.9	20.4
Born elsewhere in another region	1,523	65.6					
Western	7	0.5	85.7	0.0	0.0	14.3	0.0
Central	3	0.2	66.7	0.0	0.0	0.0	33.3
Greater Accra	21	1.4	57.1	9.5	9.5	14.3	9.5
Volta	45	3.0	37.8	11.1	0.0	20.0	31.1
Eastern	64	4.2	46.9	37.5	4.7	0.0	10.9
Ashanti	199	13.1	51.3	18.1	9.5	9.0	12.1
Brong Ahafo	93	6.1	36.6	15.1	15.1	17.2	16.1
Northern	-						
Upper East	168	11.0	37.5	14.3	16.1	14.9	17.3
Upper west	44	2.9	31.8	47.7	0.0	4.5	15.9
Outside Ghana	879	57.7	8.1	42.5	20.9	19.8	8.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER THREE

SOCIAL CHARACTERISTICS

3.1 Introduction

This chapter presents information related to the social characteristics of the population of the district which include the household structure, marriage pattern, ethnicity, nationality, religious affiliation, educational attainment and literacy level.

3.2 Household Size, Composition and Headship

3.2.1 Household size

Table 3.1 shows that the District has a total household population of 45,160 with zero population for urban and 45,160 in rural areas. According to the 2010 Population and Housing Census, there are 5,214 households which are all located in the rural areas. The mean number of households per house is 1.7 for the District. The average household size in the District is 9.0 persons.

Table 3.1: Household size by locality

Categories	Total country	Region	District		
			Total	Urban	Rural
Total household population	24,076,327	2,445,061	45,160	-	45,160
Number of households	5,467,054	318,119	5,214	-	5,214
Average households per house	1.6	1.2	1.7	-	1.7
Average household size	4.5	7.8	9.0	-	9.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.2 Household composition and headship

Table 3.2 shows the household population composition by sex in the district. It shows a total household population of 45,160 with 5,214 heads out of which 4,969 (95.3%) are males and 245 (4.7%) are females. This implies that male household heads far out-number their female counterparts in the district. This is similar to the national as well as the regional figures. Children are the most dominant among the household population in the district. As shown in Table 3.2, 53.9 percent of the household population is made up of children, which is higher among the males (60.0%) than among the females (47.8%). Non-relatives represent the least proportion (0.1%) of the household population in the district. Spouses form about 10.4 percent.

Table 3.2: Household population by composition and sex

Household composition	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	45,160	100.0	22,540	100.0	22,620	100.0
Head	5,214	11.5	4,969	22.0	245	1.1
Spouse (wife/husband)	4,686	10.4	95	0.4	4,591	20.3
Child (son/daughter)	24,325	53.9	13,519	60.0	10,806	47.8
Parent/parent in-law	911	2.0	138	0.6	773	3.4
Son/daughter in-law	541	1.2	19	0.1	522	2.3
Grandchild	2,139	4.7	1,099	4.9	1,040	4.6
Brother/Sister	2,109	4.7	1,399	6.2	710	3.1
Step child	561	1.2	309	1.4	252	1.1
Adopted/foster child	218	0.5	118	0.5	100	0.4
Other relative	4,389	9.7	836	3.7	3,553	15.7
Non-relative	67	0.1	39	0.2	28	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.3 Household population by structure and sex

This section presents information on household population living in a nuclear or extended family household. Table 3.3 indicates that a higher proportion of the household population live in extended family (head, spouses, children and head's relative) household (69.6%) than nuclear family (head, spouse(s) and children) household (20.9%). The females (71.3%) are more likely to live in extended family households than males (67.9%). Households comprising the head and a spouse only (0.3%) are the least proportion of the household population in the District.

Table 3.3: Household population by structure and sex

Household structure	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	45,160	100.0	22,540	100.0	22,620	100.0
Head only	35	0.1	25	0.1	10	0.0
Head and a spouse only	148	0.3	75	0.3	73	0.3
Nuclear (head spouse(s) children)	9,445	20.9	4,970	22.0	4,475	19.8
Extended (head spouse(s) children head's relatives)	31,446	69.6	15,311	67.9	16,135	71.3
Extended + non relatives	388	0.9	188	0.8	200	0.9
Head spouse(s) and other composition	506	1.1	250	1.1	256	1.1
Single parent nuclear	854	1.9	454	2.0	400	1.8
Single parent extended	1,621	3.6	867	3.8	754	3.3
Single parent extended + non relative	178	0.4	87	0.4	91	0.4
Head and other composition but no spouse	539	1.2	313	1.4	226	1.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3 Marital Status

Marital status is classified into married, never married, informal/consensual union or living together, separated, divorced or widowed. Persons who are 12 years or older were interviewed on marital status in the district. Table 3.4 presents the total population 12 years and older in the district as 28,329. Out of this number, 34.3 percent are never married, 59.9 percent are married and 4.1 percent widowed, 0.7 percent divorced, 0.6 percent separated and 0.4 percent are in consensual relationships. A higher proportion of the males (41.5%) than females (27.3%) are never married. Among males or females, the younger persons (less than

20 years) are less likely to be married compared to their counterparts who are older. This is because at age 12-19 years, most of them may be in school or would see themselves as too young for marriage.

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

Sex/age-group	Number	Total	Never married	Informal/Consensual union/Living together	Married	Separated	Divorced	Widowed
Both Sexes								
Total	28,329	100.0	34.3	0.4	59.9	0.6	0.7	4.1
12 - 14	2,990	100.0	89.9	0.2	9.8	0.0	0.0	0.0
15 - 19	4,720	100.0	79.8	0.1	19.9	0.1	0.1	0.1
20 - 24	3,661	100.0	48.3	0.7	50.2	0.2	0.3	0.3
25 - 29	3,533	100.0	22.8	0.7	74.5	0.8	0.6	0.6
30 - 34	2,862	100.0	11.0	0.7	85.3	1.3	1.3	0.6
35 - 39	2,116	100.0	4.5	0.5	91.9	1.1	0.8	1.3
40 - 44	1,863	100.0	3.2	0.3	90.9	1.1	1.2	3.3
45 - 49	1,597	100.0	1.8	0.3	89.5	1.1	1.6	5.8
50 - 54	1,341	100.0	1.8	0.0	85.1	0.6	1.7	10.8
55 - 59	647	100.0	2.3	0.5	84.1	1.2	1.1	10.8
60 - 64	949	100.0	2.2	0.1	77.2	1.1	0.9	18.4
65+	2,050	100.0	5.7	0.2	65.0	1.0	1.5	26.6
Male								
Total	13,796	100.0	41.5	0.4	55.5	0.8	0.8	1.0
12 - 14	1,569	100.0	89.7	0.2	10.1	0.0	0.0	0.0
15 - 19	2,470	100.0	87.0	0.1	12.6	0.1	0.1	0.0
20 - 24	1,702	100.0	68.6	0.6	30.2	0.2	0.2	0.2
25 - 29	1,497	100.0	37.4	1.1	59.6	0.8	0.8	0.3
30 - 34	1,307	100.0	18.0	0.8	78.3	1.6	1.1	0.2
35 - 39	1,004	100.0	7.1	0.6	89.7	1.6	0.8	0.2
40 - 44	870	100.0	4.5	0.1	90.8	1.7	1.8	1.0
45 - 49	808	100.0	2.2	0.5	93.1	1.5	1.4	1.4
50 - 54	689	100.0	1.5	0.0	94.8	0.7	1.6	1.5
55 - 59	359	100.0	1.9	0.6	92.5	1.1	1.1	2.8
60 - 64	469	100.0	1.5	0.2	93.0	0.6	0.4	4.3
65+	1,052	100.0	5.5	0.4	84.7	1.3	1.9	6.2
Female								
Total	14,533	100.0	27.3	0.3	64.0	0.5	0.7	7.1
12 - 14	1,421	100.0	90.1	0.3	9.6	0.0	0.0	0.0
15 - 19	2,250	100.0	71.8	0.0	27.9	0.0	0.0	0.2
20 - 24	1,959	100.0	30.8	0.8	67.5	0.2	0.3	0.5
25 - 29	2,036	100.0	12.0	0.4	85.4	0.8	0.5	0.8
30 - 34	1,555	100.0	5.1	0.6	91.1	1.0	1.4	0.9
35 - 39	1,112	100.0	2.2	0.4	93.8	0.6	0.7	2.3
40 - 44	993	100.0	2.0	0.4	91.0	0.6	0.7	5.2
45 - 49	789	100.0	1.4	0.1	85.8	0.6	1.8	10.3
50 - 54	652	100.0	2.1	0.0	74.8	0.5	1.8	20.7
55 - 59	288	100.0	2.8	0.3	73.6	1.4	1.0	20.8
60 - 64	480	100.0	2.9	0.0	61.9	1.5	1.5	32.3
65+	998	100.0	5.8	0.0	44.2	0.7	1.1	48.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3.2 Population by marital status and level of education

From Table 3.5, about 56.1 percent of the never married population have no formal education while 36.0 percent have basic education. The proportion of those who have never attended school is high among the married (90.1%). On the other hand, about 8.0 percent of the married have attained basic level of education while less than 1 percent have tertiary education (0.1%).

About 9 in 10 of the never married female population have no education, with those having basic level education recording 7.2 percent, 0.8 percent have secondary education.

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

Sex/marital status	Number	All levels	No Education	Basic ¹	Secondary ²	Voc./ Tech./ Comm	Post middle/ secondary certificate/ diploma ³	Tertiary ⁴
Both Sexes								
Total	28,329	100.0	78.6	17.5	3.2	0.1	0.5	0.1
Never married	9,703	100.0	56.1	36.0	7.0	0.2	0.6	0.1
Informal/consensual union/living together	109	100.0	78.0	11.0	11.0	0.0	0.0	0.0
Married	16,956	100.0	90.1	8.0	1.2	0.1	0.5	0.0
Separated	183	100.0	88.5	10.4	1.1	0.0	0.0	0.0
Divorced	205	100.0	91.2	7.8	1.0	0.0	0.0	0.0
Widowed	1,173	100.0	95.4	4.1	0.5	0.0	0.0	0.0
Male								
Total	13,796	100.0	75.6	19.2	4.3	0.1	0.7	0.1
Never married	5,730	100.0	57.7	33.6	7.7	0.2	0.7	0.1
Informal/consensual union/living together	61	100.0	70.5	14.8	14.8	0.0	0.0	0.0
Married	7,653	100.0	88.3	9.0	1.7	0.1	0.7	0.1
Separated	109	100.0	88.1	10.1	1.8	0.0	0.0	0.0
Divorced	105	100.0	88.6	10.5	1.0	0.0	0.0	0.0
Widowed	138	100.0	97.1	2.2	0.7	0.0	0.0	0.0
Female								
Total	14,533	100.0	81.5	15.8	2.2	0.1	0.3	0.0
Never married	3,973	100.0	53.8	39.4	6.0	0.3	0.5	0.0
Informal/consensual union/living together	48	100.0	87.5	6.3	6.3	0.0	0.0	0.0
Married	9,303	100.0	91.6	7.2	0.8	0.1	0.2	0.0
Separated	74	100.0	89.2	10.8	0.0	0.0	0.0	0.0
Divorced	100	100.0	94.0	5.0	1.0	0.0	0.0	0.0
Widowed	1,035	100.0	95.2	4.3	0.5	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3.3 Marital status of persons 12 years and older and economic activity

Table 3.6 shows persons 12 years and older by their sex, marital status and economic activity status. Among the never married population, 57.4 percent are employed, 0.7 percent unemployed and 41.9 percent are economically not active. Also, among the population who are in informal or consensual unions, 73.9 percent are employed, 4.1 percent unemployed and 22 percent are economically not active.

Among the married population majority are employed (82.5%) while only 0.7 percent are unemployed. Also, about 16.8 percent of the married are economically not active.

Table 3.6: Marital status of persons 12 years and older by sex and economic activity

Sex/Marital Status	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	28,329	100.0	20,472	72.3	200	0.7	7,657	27.0
Never married	9,703	100.0	5,565	57.4	71	0.7	4,067	41.9
Informal/consensual union/living together	109	100.0	76	69.7	3	2.8	30	27.5
Married	16,956	100.0	13,992	82.5	117	0.7	2,847	16.8
Separated	183	100.0	155	84.7	2	1.1	26	14.2
Divorced	205	100.0	166	81.0	0	0.0	39	19.0
Widowed	1,173	100.0	518	44.2	7	0.6	648	55.2
Male								
Total	13,796	100.0	10,600	76.8	79	0.6	3,117	22.6
Never married	5,730	100.0	3,506	61.2	36	0.6	2,188	38.2
Informal/consensual union/living together	61	100.0	41	67.2	0	0.0	20	32.8
Married	7,653	100.0	6,795	88.8	41	0.5	817	10.7
Separated	109	100.0	90	82.6	2	1.8	17	15.6
Divorced	105	100.0	89	84.8	0	0.0	16	15.2
Widowed	138	100.0	79	57.2	0	0.0	59	42.8
Female								
Total	14,533	100.0	9,872	67.9	121	0.8	4,540	31.2
Never married	3,973	100.0	2,059	51.8	35	0.9	1,879	47.3
Informal/consensual union/living together	48	100.0	35	72.9	3	6.3	10	20.8
Married	9,303	100.0	7,197	77.4	76	0.8	2,030	21.8
Separated	74	100.0	65	87.8	0	0.0	9	12.2
Divorced	100	100.0	77	77.0	0	0.0	23	23.0
Widowed	1,035	100.0	439	42.4	7	0.7	589	56.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.4 Nationality

Table 3.4 provides information on the nationality of the population resident in the district. It shows that majority of the residents (94.0%) in the district are Ghanaians by birth. The same is the case among either the males or females in the district. The population with dual nationality is represented by 1.9 percent and 0.9 percent by naturalization while persons from ECOWAS states and Africa other than ECOWAS states represent 2.3 percent and 0.5 percent respectively. The distribution by nationality in the district does not vary much by sex.

Table 3.7: Population by nationality and sex

Nationality	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	46,894	100.0	23,439	100.0	23,455	100.0
Ghanaian by birth	44,070	94.0	21,998	93.9	22,072	94.1
Dual nationality (Ghanaian & other)	902	1.9	452	1.9	450	1.9
Ghanaian by naturalization	418	0.9	202	0.9	216	0.9
ECOWAS	1,067	2.3	565	2.4	502	2.1
African other than ECOWAS	237	0.5	124	0.5	113	0.5
Other	200	0.4	98	0.4	102	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.5 Religious Affiliation

Table 3.7 shows the distribution of the population in the district by religious affiliation. Moslems are the most dominant and represent 80 percent of the population, followed by Christians (9.5%) while adherents of Traditional Religion form 9.4 percent. The Christian Religion is further classified into Catholic (2.3%), Protestants (2.6%), Pentecostal (2.7%) and other Christians (1.9%). People belonging to other faiths are in a minority and represent 0.1 percent of the population with others professing no religion forming 1.3 percent.

Table 3.8: Population by religion and sex

Religion	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	46,894	100.0	23,439	100.0	23,455	100.0
No religion	590	1.3	305	1.3	285	1.2
Catholic	1,092	2.3	542	2.3	550	2.3
Protestants (Anglican Lutheran etc.)	1,213	2.6	605	2.6	608	2.6
Pentecostal/Charismatic	1,267	2.7	654	2.8	613	2.6
Other Christian	881	1.9	444	1.9	437	1.9
Islam	37,497	80.0	18,635	79.5	18,862	80.4
Traditionalist	4,309	9.2	2,234	9.5	2,075	8.8
Other	45	0.1	20	0.1	25	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6 Literacy and Education

3.6.1 Literacy

Literacy is measured by the ability to read and write a simple statement in any language with understanding. Table 3.8 indicates that as high as 77.9% of the population 11 years and older in the district are not literate. This means that only 22.1 percent of the population is literate in the district. Illiteracy is higher among the females (53.1%) than the males (46.9%). Literacy in English and French among either males or females by age is generally less than one percent in the district. In contrast, among all literate persons in the district, literacy in English and Ghanaian language is 64.6 percent is also higher in all the groups. The pattern by age group varies slightly between the males and females. It is also to be noted that 29.1 percent of the literate population 11 years and older is literate in English language only in the district. This varies between 26.3 percent among the males and 32.5 percent among the females.

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

Age/sex	None (not literate)	Literate	Total	English only	Ghanaian language only	English and Ghanaian language	English and French
Both sexes			-				
Total	22,711	6,455	100.0	29.1	6.2	64.6	0.1
10-14	1,923	1,904	100.0	33.7	5.3	60.8	0.2
15-19	2,704	2,016	100.0	30.0	5.3	64.7	0.0
20-24	2,755	906	100.0	23.7	7.8	68.2	0.2
25-29	2,965	568	100.0	27.1	8.1	64.8	0.0
30-34	2,540	322	100.0	25.8	5.9	68.3	0.0
35-39	1,943	173	100.0	20.2	9.2	70.5	0.0
40-44	1,732	131	100.0	23.7	6.9	69.5	0.0
45-49	1,477	120	100.0	34.2	9.2	56.7	0.0
50-54	1,274	67	100.0	22.4	9.0	68.7	0.0
55-59	606	41	100.0	19.5	2.4	78.0	0.0
60-64	900	49	100.0	18.4	8.2	73.5	0.0
65+	1,892	158	100.0	24.7	7.6	67.7	0.0
Male							
Total	10,655	3,595	100.0	26.3	6.7	66.8	0.1
10-14	1,012	1,011	100.0	31.2	5.0	63.6	0.2
15-19	1,378	1,092	100.0	27.8	5.1	66.9	0.1
20-24	1,173	529	100.0	21.6	9.5	68.6	0.4
25-29	1,161	336	100.0	25.9	7.4	66.7	0.0
30-34	1,108	199	100.0	15.1	7.5	77.4	0.0
35-39	912	92	100.0	20.7	13.0	66.3	0.0
40-44	801	69	100.0	18.8	13.0	68.1	0.0
45-49	734	74	100.0	29.7	9.5	60.8	0.0
50-54	644	45	100.0	20.0	13.3	66.7	0.0
55-59	328	31	100.0	16.1	3.2	80.6	0.0
60-64	438	31	100.0	29.0	6.5	64.5	0.0
65+	966	86	100.0	22.1	8.1	69.8	0.0
Female							
Total	12,056	2,860	100.0	32.5	5.7	61.8	0.0
10-14	911	893	100.0	36.6	5.6	57.7	0.1
15-19	1,326	924	100.0	32.5	5.5	62.0	0.0
20-24	1,582	377	100.0	26.8	5.6	67.6	0.0
25-29	1,804	232	100.0	28.9	9.1	62.1	0.0
30-34	1,432	123	100.0	43.1	3.3	53.7	0.0
35-39	1,031	81	100.0	19.8	4.9	75.3	0.0
40-44	931	62	100.0	29.0	0.0	71.0	0.0
45-49	743	46	100.0	41.3	8.7	50.0	0.0
50-54	630	22	100.0	27.3	0.0	72.7	0.0
55-59	278	10	100.0	30.0	0.0	70.0	0.0
60-64	462	18	100.0	0.0	11.1	88.9	0.0
65+	926	72	100.0	27.8	6.9	65.3	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6.2 Educational attainment

Educational attainment in the district is presented with reference to population three years and older. Table 3.7 shows school attendance in the district which includes current and past attendance. The table shows that 12,069 persons (85.8%) are currently attending school in the district. This compares with 2000 (14.2%) who attended school in the past at all levels in the district. Current primary school attendance is the highest in the district and shows not much difference between the males (52.7%) and females (52.4%). This is similar to those who attended primary school in the past which is, however, higher among males (66.0%) compared to their female counterparts (59.7%). It also shows that 14.9 percent and 5.5 percent respectively are currently attending JSS/JHS and SSS/SHS education which compares with 11.5 percent and 9.8 percent that attended in the past. In either case (current or in the past), a higher proportion of males than females are recorded to attend school. Vocational school attendance is the least in the district and forms one percent or less either currently or in the past.

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

Level of education	Currently attending						Attended in the past					
	Both sexes		Male		Female		Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	12,069	100.0	6,404	100	5,665	100	2,000	100	1,094	100	906	100.0
Nursery	1,904	15.8	920	14.4	984	17.4	-	0	-	-	-	-
Kindergarten	1,279	10.6	630	9.8	649	11.5	-	0	-	-	-	-
Primary	6,341	52.5	3,373	52.7	2,968	52.4	1,319	66	653	59.7	666	73.5
JSS/JHS	1,802	14.9	1,010	15.8	792	14	230	11.5	117	10.7	113	12.5
Middle	-	0.0	-	0	-	-	89	4.5	76	6.9	13	1.4
SSS/SHS	661	5.5	418	6.5	243	4.3	196	9.8	132	12.1	64	7.1
Secondary	-	0.0	-	0	-	0	56	2.8	39	3.6	17	1.9
Vocational/Technical/ Commercial	23	0.2	9	0.1	14	0.2	17	0.9	11	1	6	0.7
Post middle/secondary certificate	26	0.2	18	0.3	8	0.1	55	2.8	34	3.1	21	2.3
Tertiary	33	0.3	26	0.4	7	0.1	38	1.9	32	2.9	6	0.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FOUR

ECONOMIC CHARACTERISTICS

4.1 Economic Activity Status

The enumerated persons fall into two major groups: the economically active and the non-economically active, as presented in Table 4.1. The economically active population consists of those who worked or had a job but did not work or were unemployed on census night 2010. All other categories are classified as “not economically active”. The table shows that 76 percent of the district population 15 years and older are economically active while 24.0 per cent are economically not active. Of the economically active population, 99.0 percent are employed while 1.0 percent are unemployed. This varies by 81.1 percent among the males and 71.3 percent among the females. This indicates that a higher proportion of the males than females are economically active in the district. Among those who are economically not active, 40.3 percent do home duties and 32.0 percent are engaged in full time education. As expected, the proportion of the economically not active female population (49.7%) engaged in home duties is higher than among the males (25.0%) while on the other hand the economically non-active males (48.5%) are higher in proportion compared to the females (21.8%). Also, 20.2 percent, 3.8 percent and 1.0 percent of the non-economically active population in the district are respectively too old, disabled or sick and pensioners on retirement from active service.

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

Activity status	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	25,339	100.0	12,227	100.0	13,112	100.0
Economically active	19,269	76.0	9,914	81.1	9,355	71.3
<i>Employed</i>	<i>19,069</i>	<i>99.0</i>	<i>9,835</i>	<i>99.2</i>	<i>9,234</i>	<i>98.7</i>
<i>Worked</i>	<i>18,796</i>	<i>98.6</i>	<i>9,698</i>	<i>98.6</i>	<i>9,098</i>	<i>98.5</i>
<i>Did not work but had job to go back to</i>	<i>241</i>	<i>1.3</i>	<i>129</i>	<i>1.3</i>	<i>112</i>	<i>1.2</i>
<i>Did voluntary work without pay</i>	<i>32</i>	<i>0.2</i>	<i>8</i>	<i>0.1</i>	<i>24</i>	<i>0.3</i>
<i>Unemployed</i>	<i>200</i>	<i>1.0</i>	<i>79</i>	<i>0.8</i>	<i>121</i>	<i>1.3</i>
<i>Worked before, seeking work and available</i>	<i>118</i>	<i>59.0</i>	<i>44</i>	<i>55.7</i>	<i>74</i>	<i>61.2</i>
<i>Seeking work for the first time and available</i>	<i>82</i>	<i>41.0</i>	<i>35</i>	<i>44.3</i>	<i>47</i>	<i>38.8</i>
Economically not active	6,070	24.0	2,313	18.9	3,757	28.7
Did home duties (household chore)	2,445	40.3	578	25.0	1,867	49.7
Full time education	1,940	32.0	1,121	48.5	819	21.8
Pensioner/retired	38	0.6	23	1.0	15	0.4
Disabled/sick	187	3.1	88	3.8	99	2.6
Too old/young	1,224	20.2	392	16.9	832	22.1
Other	236	3.9	111	4.8	125	3.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.2 Age and Activity Status

Table 4.2 shows the economic status of the district population 15 years and older for males and females. Out of a total population of 25,339, 75.3 percent is employed, less than one percent is unemployed and 24.0 percent is economically not active. There is some variation by sex where among the males, 80.4 percent is employed, 0.6 percent is unemployed and 18.9

percent is economically not active. This compares with 70.4 percent, 0.9 percent and 28.7 percent respectively among the females. This suggests that there is a higher probability of the males being employed compared to the females in the district. The employed population increases in proportion from younger ages to age 45-49 years and thereafter declines. A similar pattern is shown by sex although the decline appears to occur earlier among the females than among the males. Persons 65 years and older are also more likely to be economically not active compared to persons who are much younger. Economic inactivity among the older population 65 years and above is further shown to be higher among females (64.8%) than males (33.3%).

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

Age group	All Status		Total	Employed		Unemployed		Economically not active	
	Number	Percent		Number	Percent	Number	Percent	Number	Percent
Both sexes									
Total	25,339	100.0	100.0	19,069	75.3	200	0.8	6,070	24.0
15-19	4,720	18.6	100.0	2,732	57.9	33	0.7	1,955	41.4
20-24	3,661	14.4	100.0	2,661	72.7	42	1.1	958	26.2
25-29	3,533	13.9	100.0	2,794	79.1	48	1.4	691	19.6
30-34	2,862	11.3	100.0	2,450	85.6	12	0.4	400	14.0
35-39	2,116	8.4	100.0	1,923	90.9	8	0.4	185	8.7
40-44	1,863	7.4	100.0	1,682	90.3	7	0.4	174	9.3
45-49	1,597	6.3	100.0	1,452	90.9	5	0.3	140	8.8
50-54	1,341	5.3	100.0	1,129	84.2	2	0.1	210	15.7
55-59	647	2.6	100.0	542	83.8	1	0.2	104	16.1
60-64	949	3.7	100.0	661	69.7	32	3.4	256	27.0
65+	2,050	8.1	100.0	1,043	50.9	10	0.5	997	48.6
Male									
Total	12,227	100.0	100.0	9,835	80.4	79	0.6	2,313	18.9
15-19	2,470	20.2	100.0	1,467	59.4	17	0.7	986	39.9
20-24	1,702	13.9	100.0	1,275	74.9	15	0.9	412	24.2
25-29	1,497	12.2	100.0	1,242	83.0	17	1.1	238	15.9
30-34	1,307	10.7	100.0	1,189	91.0	5	0.4	113	8.6
35-39	1,004	8.2	100.0	974	97.0	3	0.3	27	2.7
40-44	870	7.1	100.0	841	96.7	2	0.2	27	3.1
45-49	808	6.6	100.0	777	96.2	2	0.2	29	3.6
50-54	689	5.6	100.0	649	94.2	0	0.0	40	5.8
55-59	359	2.9	100.0	333	92.8	0	0.0	26	7.2
60-64	469	3.8	100.0	388	82.7	16	3.4	65	13.9
65+	1,052	8.6	100.0	700	66.5	2	0.2	350	33.3
Female									
Total	13,112	100.0	100.0	9,234	70.4	121	0.9	3,757	28.7
15-19	2,250	17.2	100.0	1,265	56.2	16	0.7	969	43.1
20-24	1,959	14.9	100.0	1,386	70.8	27	1.4	546	27.9
25-29	2,036	15.5	100.0	1,552	76.2	31	1.5	453	22.2
30-34	1,555	11.9	100.0	1,261	81.1	7	0.5	287	18.5
35-39	1,112	8.5	100.0	949	85.3	5	0.4	158	14.2
40-44	993	7.6	100.0	841	84.7	5	0.5	147	14.8
45-49	789	6.0	100.0	675	85.6	3	0.4	111	14.1
50-54	652	5.0	100.0	480	73.6	2	0.3	170	26.1
55-59	288	2.2	100.0	209	72.6	1	0.3	78	27.1
60-64	480	3.7	100.0	273	56.9	16	3.3	191	39.8
65+	998	7.6	100.0	343	34.4	8	0.8	647	64.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.3 Occupation

Table 4.3 shows the distribution of the economically active population 15 years and older by occupation and sex in the district. It shows that by far, skilled agricultural forestry and fishery is the major (94%) occupation for most people in the district. A higher proportion of males (97.0%) than females (90.9%) are employed as skilled agricultural forestry and fishery workers. Craft and related trades occupation, which is the second largest employer of the economically active population in the district employs only 2.8 percent of this population. This occupation, however, employs a higher proportion of the females (5.0%) compared to the males (0.8%). Skilled professional and related workers are virtually absent in the district with less than one percent of the employed population working as managers, professionals and technical and associate professionals in the district either among the males or females. However, more females (5.0%) are into craft and related trades than males (0.8%).

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

Occupation	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	19,069	100.0	9,835	100.0	9,234	100.0
Managers	44	0.2	13	0.1	31	0.3
Professionals	103	0.5	64	0.7	39	0.4
Technicians and associate professionals	6	0.0	4	0.0	2	0.0
Clerical support workers	9	0.0	7	0.1	2	0.0
Service and sales workers	321	1.7	55	0.6	266	2.9
Skilled agricultural forestry and fishery workers	17,931	94.0	9,541	97.0	8,390	90.9
Craft and related trades workers	536	2.8	78	0.8	458	5.0
Plant and machine operators and assemblers	20	0.1	18	0.2	2	0.0
Elementary occupations	99	0.5	55	0.6	44	0.5
Other occupations	0	0.0	0	0.0	0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.4 Industry

With respect to industry of employment, agriculture forestry and fishing is the leading sector of employment in the district. From Table 4.4, this sector employs as high as 93.5 percent of the employed population 15 years and older, broken down into 96.3 percent males and 90.5 percent females. Manufacturing is represented by 2.4 percent of employed persons in the district with a breakdown as 0.8 percent males and 4.0 percent among the females. Wholesale and retail represents only 2.3 percent of the employed populations in the district.

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

Industry	Sex					
	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	19,069	100.0	9,835	100.0	9,234	100.0
Agriculture forestry and fishing	17,826	93.5	9,468	96.3	8,358	90.5
Mining and quarrying	1	0.0	1	0.0	0	0.0
Manufacturing	451	2.4	81	0.8	370	4.0
Electricity gas steam and air conditioning supply	0	0.0	0	0.0	0	0.0
Water supply; sewerage waste management and remediation activities	1	0.0	1	0.0	0	0.0
Construction	17	0.1	17	0.2	0	0.0
Wholesale and retail; repair of motor vehicles and motorcycles	437	2.3	136	1.4	301	3.3
Transportation and storage	14	0.1	12	0.1	2	0.0
Accommodation and food service activities	121	0.6	6	0.1	115	1.2
Information and communication	11	0.1	6	0.1	5	0.1
Financial and insurance activities	3	0.0	0	0.0	3	0.0
Real estate activities	0	0.0	0	0.0	0	0.0
Professional scientific and technical activities	4	0.0	1	0.0	3	0.0
Administrative and support service activities	6	0.0	3	0.0	3	0.0
Public administration and defence; compulsory social security	9	0.0	9	0.1	0	0.0
Education	87	0.5	64	0.7	23	0.2
Human health and social work activities	20	0.1	5	0.1	15	0.2
Arts entertainment and recreation	1	0.0	1	0.0	0	0.0
Other service activities	37	0.2	20	0.2	17	0.2
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	23	0.1	4	0.0	19	0.2
Activities of extraterritorial organizations and bodies	0	0.0	0	0.0	0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.5 Employment Status

Table 4.5 shows that out of a total employed population 15 years and older, 50.2 percent is self-employed without employee(s) and 45.1 percent are represented by contributing family workers. A higher proportion of the males (63.7%) are self-employed without employee(s) than their female counterparts (35.8%). In contrast, however, the proportion of females (3.0%) who are self-employed with employee(s) is relatively higher than males (1.4%) in the district. Apprentice, domestic employees and casual workers together form less than one percent of the employed population 15 years and older in the district. This is largely accounted for by the rural character of the district.

Table 4.5: Employed population 15 years and older by industry and sex

Employment sector	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	19,069	100.0	9,835	100.0	9,234	100.0
Employee	231	1.2	156	1.6	75	0.8
Self-employed without employee(s)	9,564	50.2	6,260	63.7	3,304	35.8
Self-employed with employee(s)	409	2.1	133	1.4	276	3.0
Casual worker	53	0.3	27	0.3	26	0.3
Contributing family worker	8,602	45.1	3,148	32.0	5,454	59.1
Apprentice	41	0.2	18	0.2	23	0.2
Domestic employee (house help)	102	0.5	58	0.6	44	0.5
Other	67	0.4	35	0.4	32	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.6 Employment Sector

This refers to the sector of employment in which the respondents were working at the time of the census or where they were employed as of the census night. Table 4.5 indicates that the private informal sector provides employment for 98.1 percent and followed by the public sector with 0.7 percent of the district's population 15 years and older. The table also shows that there is virtually no difference between the males (98.0%) and females (98.2%) that are employed in this sector. The other sectors, private formal, semi-public/parastatal, and NGOs (Local and International) together account for the remaining two percent of the employed population 15 years and older in the district.

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

Employment sector	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	19,069	100.0	9,835	100.0	9,234	100.0
Public (Government)	124	0.7	77	0.8	47	0.5
Private/formal	160	0.8	81	0.8	79	0.9
Private/informal	18,704	98.1	9,635	98.0	9,069	98.2
Semi-Public/Parastatal	0	0.0	0	0.0	0	0.0
NGOs (local and international)	81	0.4	42	0.4	39	0.4
Other International Organisations	0	0.0	0	0.0	0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FIVE

INFORMATION COMMUNICATION TECHNOLOGY

5.1 Introduction

Information Communication Technology (ICT) plays an important role in the economy of every nation and is widely recognized as a key instrument for the socio-economic and political transformation of developing nations.

Information and communication technology can help developing countries tackle a wide range of health, social and economic problems. By improving access to information and by enabling communication, ICT can play a role in attaining the Millennium Development Goals such as the elimination of extreme poverty, combating serious diseases, and achieving universal primary education and gender equality. Yet, the benefits of ICT are not fully realized in many countries as ICT is often out of reach of the poor and those in rural areas.

ICT is any technology that enables communication and the electronic capture, processing, and transmission of information. In recent years, ‘new’ ICT technologies, such as mobile phones and the internet (and associated applications such as ‘VOIP’, transmitting telephone calls over the internet) have become available to growing numbers worldwide. The area of ICT that has seen the most rapid growth is in the area of mobile phone usage.

This chapter focuses on the of information communication technology in the Mamprugu Moagduri District. Data are analysed for mobile phone usage, use of internet, usage of desktop/laptop and ownership of fixed telephone lines at the household level.

5.2 Ownership of Mobile Phones

Mobile phones have become one of the major communication tools for disseminating information and transacting business in the district and the region as a whole. Table 5.1 presents the population 12 years and older that own mobile phones and use internet facility in the district. There are 2,218 persons aged 12 years and older that own mobile phones and they represent 7.8 percent of the population in Mamprugu Moagduri District. This figure is lower compared with that of the regional figure of 22.3 percent. The district also has a higher proportion of males owning mobile phones (11.6%) compared with 4.3 percent of mobile phones ownership by females.

5.3 Use of Internet

The last decade has witnessed an unprecedented diffusion of network technologies into developing countries. The technological discourse attending and encouraging the adoption of the new media, particularly the internet, has centered on their potential to accelerate national development efforts, bring about favorable socio-cultural changes, and open up public spheres for free and democratic discourse. As part of the contemporary globalization phenomenon, internet has become a vital communication facility for people, businesses and organizations and the district is not an exception. Like the mobile phone, the level of usage of the internet is very low in the district. Out of a total of 28,329 persons 12 years and older who were interviewed, only 105, representing 0.4 percent have access to the internet (Table 5.1). While a slightly higher proportion of internet users in the district is made up of females

(51.3%) than males (48.7%), the proportion of males (0.5%) using the internet is a little higher than their female counterparts (0.3%).

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

Sex	Population 12 years and older		Population having mobile phone		Population using internet facility	
	Number	Percent	Number	Percent	Number	Percent
Total	28,329	100.0	2,218	7.8	105	0.4
Male	13,796	48.7	1,596	11.6	66	0.5
Female	14,533	51.3	622	4.3	39	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.4 Household Ownership of Desktop or Laptop computer

Usage of desktop/laptop is almost absent in the district. From Table 5.2, only four households in the district reported ownership of desktop or laptop computer. Interestingly, all four households were headed by males. Poverty, illiteracy and lack of electricity could account for this situation.

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

Sex	Number of households		Households having desktop/laptop computers	
	Number	Percent	Number	Percent
Total	5,214	100	4	0.1
Male	4,969	95.3	4	1.6
Female	245	4.7	0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SIX

DISABILITY

6.1 Introduction

Persons with disability, according to the Compendium of Statistical Standards, Variables and Concepts for Official Statistics in Ghana, is defined as those who are unable to or are restricted in the performance of specific tasks/activities due to loss of function of some part of the body as a result of impairment or malformation. The scope of protection for people with disabilities in employment focuses on the effect of a disability on the person in relation to the working environment, and not on the diagnosis or the impairment. People are considered as Persons with Disabilities (PWDs) when they meet all the criteria in the definition:

- i. Having a physical or mental impairment;
- ii. Which is long term or recurring; and
- iii. Which substantially limits their prospects of entry into and advancement in employment (Persons with Disability Act, 2006 Act 715).

This chapter analyses the population with disability, type of disability and distribution of disability by type of locality and level of education in Mamprugu Moagduri District.

6.2 Population with Disability

The total population of Mamprugu Moagduri District is 46,894 and 1.4 percent are persons with disability (PWDs). Since the district is entirely rural in character, no comparison is made by type of locality i.e., urban and rural. From Table 6.1, a slightly higher proportion of the males (1.5%) than the females (1.2%) suffer from some form of disability in the district.

6.3 Type of Disability

Table 6.1 shows the types of disability in the district by sex. The commonest types of disability in the district are sight, hearing, speech, physical, intellect and emotion. It is possible that some of the persons with disabilities could suffer from more than one type of disability. Table 6.1 shows that Sight is by far the commonest type of disability (51.2%) in the district, followed by hearing (20.2%), physical (17.2%), and speech (12.1%). Emotional disability has the lowest proportion of 6.8 percent in the district. With respect to the male and female disability population, sight is the most prevalent with 48.3 percent and 54.8 respectively and the lowest being emotional disability which represented 6.8 percent of all persons with disability in the district.

Table 6.1 further shows that the proportion of males with speech (14.4%) and physical (18.6%) disability is higher than their male counterparts. In contrast, however, a higher proportion of the females suffer from sight (54.6%) and hearing (21.4%) disabilities compared to the males (48.3% and 19.2% respectively).

Table 6.1: Population by disability type and sex

Disability type	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	46,894	100.0	23,439	100.0	23,455	100.0
No disability	46,259	98.6	23,085	98.5	23,174	98.8
With a disability	635	1.4	354	1.5	281	1.2
Sight	325	51.2	171	48.3	154	54.8
Hearing	128	20.2	68	19.2	60	21.4
Speech	77	12.1	51	14.4	26	9.3
Physical	109	17.2	66	18.6	43	15.3
Intellectual	56	8.8	29	0.1	27	0.1
Emotional	43	6.8	22	6.2	21	7.5
Other	60	9.4	38	10.7	22	7.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.4 Disability and Economic Activity

Table 6.2 shows the distribution of the population 15 years and older by sex, disability type and economic activity status in the district. The table shows that, of the 482 persons 15 years and older who have some form of disability, 52.9 percent are employed, 0.8 percent are unemployed and 46.3 percent are economically not active. Persons with sight disability suffer more from economic inactivity compared to others with other disabilities. This is because a little more than half of persons with sight disability (50.6%) are reported to be economically not active compared to less than half of those with other disabilities. The females with sight disabilities report a much higher proportion of economical inactivity (60.6%) compared to their male counterparts (39.6%). Approximately 49 percent of persons with sight disability are employed compared to about 76 percent and 62.1 percent among persons suffering from speech and intellectual disabilities respectively. The proportion of persons with emotional disability who are employed is also quite high (76.9%).

Table 6.2 further indicates that the proportion of male PWDs who are employed (64.7%) are far higher than that among females (38.0%). For each of the disabilities, females are more likely to be economically inactive compared to the males. Unemployment is also relatively higher among females with some disabilities compared to their male counterparts.

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

Both sexes/disability type	All Status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	25,339	100.0	19,069	75.3	200	0.8	6,070	24.0
No disability	24,857	100.0	18,814	75.7	196	0.8	5,847	23.5
With a disability	482	100.0	255	52.9	4	0.8	223	46.3
Sight	267	100.0	132	49.4	0	0.0	135	50.6
Hearing	91	100.0	53	58.2	1	1.1	37	40.7
Speech	42	100.0	32	76.2	0	0.0	10	23.8
Physical	83	100.0	45	54.2	3	3.6	35	42.2
Intellectual	29	100.0	18	62.1	1	3.4	10	34.5
Emotional	26	100.0	20	76.9	1	3.8	5	19.2
Other	47	100.0	30	63.8	0	0.0	17	36.2
Male								
Total	12,227	100.0	9,835	80.4	79	0.6	2,313	18.9
No disability	11,958	100.0	9,661	80.8	78	0.7	2,219	18.6
With a disability	269	100.0	174	64.7	1	0.4	94	34.9
Sight	139	100.0	84	60.4	0	0.0	55	39.6
Hearing	48	100.0	34	70.8	0	0.0	14	29.2
Speech	30	100.0	27	90.0	0	0.0	3	10.0
Physical	54	100.0	33	61.1	0	0.0	21	38.9
Intellectual	18	100.0	12	66.7	1	5.6	5	27.8
Emotional	16	100.0	12	75.0	1	6.3	3	18.8
Other	30	100.0	20	66.7	0	0.0	10	33.3
Female								
Total	13,112	100.0	9,234	70.4	121	0.9	3,757	28.7
No disability	12,899	100.0	9,153	71.0	118	0.9	3,628	28.1
With a disability	213	100.0	81	38.0	3	1.4	129	60.6
Sight	128	100.0	48	37.5	0	0.0	80	62.5
Hearing	43	100.0	19	44.2	1	2.3	23	53.5
Speech	12	100.0	5	41.7	0	0.0	7	58.3
Physical	29	100.0	12	41.4	3	10.3	14	48.3
Intellectual	11	100.0	6	54.5	0	0.0	5	45.5
Emotional	10	100.0	8	80.0	0	0.0	2	20.0
Other	17	100.0	10	58.8	0	0.0	7	41.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.5 Disability, Education and Literacy

According to United Nation's Convention on the Rights of Persons with Disabilities, persons with disabilities should be guaranteed the right to inclusive education at all levels, regardless of age, without discrimination and on the basis of equal opportunity.

In Ghana, Article 17 of the Disability Act 2006 (Act 712) states that the Minister of Education shall by Legislative Instrument designate schools or institutions in each region which shall provide the necessary facilities and equipment that will enable persons with disability to fully benefit from the school or institution and Article 18 of the Act states the Government shall

- i. provide free education for a person with disability and
- ii. establish special schools for persons with disability who by reason of their disability cannot be enrolled in formal schools.

Table 6.3 presents data on population 3 years and older by sex, disability type and level of education in the district. According to Table 6.3, there are 603 persons who are three years and older with disability in the district. A total of 83.1 percent of persons with disability have never attended school, 4.1 percent attended pre-school, 9.6 percent has basic school, one percent has secondary school and 1.3 holds post-secondary school education. No PWD in the district has attended a vocational/technical/commercial school or tertiary level education. It is clear that PWDs have lower education compared to their counterparts with no disabilities. For example, 83.1 percent of PWDs have no education compared to 66.9 percent among others with no disabilities. Among PWDs, those with sight and hearing disabilities have the highest proportion never attended school (87.9% and 87.2% respectively) compared to their counterparts with speech disability with the lowest proportion of 72.1 percent never attended school. Basic school appears to be the highest level of education acquired among those who have attended school in the district and this again varies by disability status where 23.1 percent of persons with no disability had basic school education compared to just about 10 percent of others with disabilities.

6.5.1 Persons with disability and educational attainment by sex

Table 6.3 further shows that females with any form of disability have relatively lower education compared to their male counterparts. For example, while 81.7 percent of the males have never attended any school, 84.9 percent of the females have not done so. Furthermore, 10.4 percent of males with disabilities have basic school education, 3.3 percent have attended secondary school while 1.2 percent have gone up to post-secondary. This compares with 8.7 percent and 1.5 percent of the females with basic and secondary level education respectively with none of them going beyond secondary school. It is also to be noted that females are more disadvantaged relative to males among each group of persons with some disability.

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

Both sexes	Total	Percent	Never attended	Pre-School	Basic School	Secondary Sch.	Voc./ Tech/ Comm	Post Secondary Sch	Tertiary
Both Sexes									
Total	42,751	100.0	67.1	7.4	22.9	2.1	0.1	0.2	0.0
No disability	42,148	100.0	66.9	7.5	23.1	2.1	0.1	0.2	0.0
With a disability	603	100.0	83.1	4.1	9.6	2.5	0.0	0.7	0.0
Sight	313	100.0	87.9	3.3	7.0	1.0	0.0	1.3	0.0
Hearing	125	100.0	87.2	0.9	11.2	0.8	0.0	0.0	0.0
Speech	68	100.0	72.1	10.2	17.6	1.5	0.0	1.5	0.0
Physical	105	100.0	75.2	5.1	11.4	8.6	0.0	1.0	0.0
Intellectual	48	100.0	77.1	10.8	14.6	0.0	0.0	0.0	0.0
Emotional	41	100.0	78.0	15.6	9.8	0.0	0.0	0.0	0.0
Other	58	100.0	84.5	6.1	6.9	3.4	0.0	0.0	0.0
Male									
Total	21,306	100.0	64.8	7.3	24.5	2.8	0.1	0.2	0.1
No disability	20,968	100.0	64.5	7.3	24.8	2.8	0.1	0.2	0.1
With a disability	338	100.0	81.7	3.6	10.4	3.3	0.0	1.2	0.0
Sight	165	100.0	87.3	1.8	6.7	1.8	0.0	2.4	0.0
Hearing	67	100.0	83.6	0.0	14.9	1.5	0.0	0.0	0.0
Speech	46	100.0	71.7	4.3	19.6	2.2	0.0	2.2	0.0
Physical	65	100.0	75.4	4.6	10.8	7.7	0.0	1.5	0.0
Intellectual	25	100.0	76.0	8.0	16.0	0.0	0.0	0.0	0.0
Emotional	22	100.0	81.8	4.5	13.6	0.0	0.0	0.0	0.0
Other	38	100.0	81.6	5.3	7.9	5.3	0.0	0.0	0.0
Female									
Total	21,445	100.0	69.4	7.6	21.2	1.5	0.1	0.1	0.0
No disability	21,180	100.0	69.2	7.6	21.4	1.5	0.1	0.1	0.0
With a disability	265	100.0	84.9	4.9	8.7	1.5	0.0	0.0	0.0
Sight	148	100.0	88.5	4.1	7.4	0.0	0.0	0.0	0.0
Hearing	58	100.0	91.4	1.7	6.9	0.0	0.0	0.0	0.0
Speech	22	100.0	72.7	13.6	13.6	0.0	0.0	0.0	0.0
Physical	40	100.0	75.0	2.5	12.5	10.0	0.0	0.0	0.0
Intellectual	23	100.0	78.3	8.7	13.0	0.0	0.0	0.0	0.0
Emotional	19	100.0	73.7	21.1	5.3	0.0	0.0	0.0	0.0
Other	20	100.0	90.0	5.0	5.0	0.0	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SEVEN

AGRICULTURE ACTIVITIES

7.1 Introduction

Agriculture plays a critical role in reducing poverty and promoting growth in the Ghanaian economy. Ghana, therefore, needs an agricultural revolution that is productivity and growth driven to increase income levels. This requires the partnership between civil society organizations, the private sector and the government to initiate policies that will promote the sector. This chapter analyses the agricultural activities in the Mamprugu Moagduri District, with the main focus on households in agriculture and types of farming activities.

7.2 Households in Agriculture

Households in agriculture refer to households with at least one member engaged in one agricultural activity or another. Table 7.1 presents information on the total number of households engaged in agricultural activity. These include crop farming, tree planting, livestock rearing and fish farming. The table indicates that 97.2 percent of the households in the district are engaged in agriculture.

7.3 Type of Farming Activities

Table 7.1 again presents information on types of farming activities in the district. Farming activities considered during the data collection are crop farming, tree planting, livestock rearing and fish farming. The information shows that 98.6 percent of the households engaged in agriculture are involved in crop farming while 75.1 percent is into livestock rearing and 1.8 percent and 1.1 percent respectively engaged in tree planting and fish farming. The Table has no information by locality because the entire district is rural with no urban composition.

Table 7.1: Households by agricultural activities

	Total	
	Number	Percent
Livestock rearing		
Total households	5,214	100.0
Households engages in agriculture	5,066	97.2
Crop farming	4,994	98.6
Tree planting	90	1.8
Livestock rearing	3,805	75.1
Fish farming	54	1.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

7.3.1 Livestock and keepers

Table 7.2 shows the distribution of livestock and keepers in the district. The table shows a total of 153,297 livestock in the district of which chicken record the highest number (26.3%) and is followed by cattle (22.8%). There are also more goats (18.1%) compared with guinea

fowl (17.1%). The proportion of turkey, snail, rabbit and fish farming together are, however, less than one percent of the total livestock population in the district. The table further shows that there are 9,316 livestock keepers in the district. Of this number, one in four (25.9%) keeps goats while about 20 percent of them keeps cattle and about 11 percent takes care of guinea fowls. Overall, an individual keeps an average of 16 animals in the district. Among those who keep guinea fowls, each keeper keeps an average of 26 guinea fowls. Similarly, on average, 21 rabbits are taken care of by one keeper in the district.

Table 7.2: Distribution of livestock and keepers

Livestock/Keepers	Animals		keepers		Average Animal per Keeper
	Number	Percent	Number	Percent	
All livestock	153,297	100	9,316	100	16
Beehives	170	0.1	16	0.2	11
Cattle	34,962	22.8	1,897	20.4	18
Chicken	40,317	26.3	2,106	22.6	19
Dove	895	0.6	32	0.3	28
Duck	689	0.4	49	0.5	14
Goat	27,726	18.1	2,417	25.9	11
Grass-cutter	2,218	1.4	104	1.1	21
Guinea fowl	26,186	17.1	995	10.7	26
Ostrich	392	0.3	22	0.2	18
Pig	895	0.6	49	0.5	18
Rabbit	168	0.1	8	0.1	21
Sheep	17,212	11.2	1,526	16.4	11
Silk worm	127	0.1	17	0.2	7
Snail	17	0	2	0	9
Turkey	10	0	1	0	10
Other	152	0.1	20	0.2	8
Fish farming	183	0.1	5	0.1	37
Inland fishing	710	0.5	42	0.5	17
Marine fishing	268	0.2	8	0.1	34

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER EIGHT

HOUSING CONDITIONS

8.1 Introduction

Poverty studies by the Government of Ghana and the World Bank (Ghana Statistical Services, 1995, 1996) have shown that about 60 percent of Ghanaians do not have access to electricity for lighting, 40 percent live in mud brick or plastered houses, and nearly all are without indoor sewerage plumbing. This chapter, therefore, provides information on housing characteristics such as housing stock, type of dwelling, housing condition, holding and tenancy arrangement, sources of drinking water and accessibility. Information is also given on source of power, bathing and toilet facilities as well as method of waste disposal.

8.2 Housing Stock

The housing stock of Mamprugu Moagduri District is 3,085 representing 1.2 percent of the total number of houses in the Northern Region. The district has a total population of 46,894, representing an average of 15.2 persons per house (Table 8.1). There are 45,160 households with an average household size of 9.0, which is higher than the regional (7.8) and national (4.5) averages. The average number of households per house is also recorded at 1.7, which is higher than the regional (1.2) and national (1.6) figures.

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

Categories	Total		District		
	Country	Region	Total	Urban	Rural
Total population	24,658,823	2,479,461	46,894	-	46,894
Total household population	24,076,327	2,445,061	45,160	-	45,160
Number of houses	3,392,745	257,311	3,085	-	3,085
Number of households	5,467,054	318,119	5,214	-	5,214
Average households per house	1.6	1.2	1.7	-	1.7
Population per house	7.3	9.6	15.2	-	15.2
Average household size	4.5	7.8	9	-	9

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3 Type of Dwelling, Holding and Tenancy Arrangement

8.3.1 Type of dwelling units

Table 8.2 presents the various types of dwelling units in the district. It shows that rooms in compound houses are the commonest type of dwelling units occupied by households in the district. These account for 71.5 percent of dwelling units, followed by huts/buildings (same compound) which form 13.5 percent of the dwelling units in the district. Separate houses account for 8.4 percent and 2.7 percent are semi-detached houses. Except for the separate type of dwelling houses which have a relatively higher proportion of females as heads (14.7%), the proportion of male heads is higher than female heads in all other dwelling types in the district.

Table 8.2: Type of occupied dwelling unit by sex of household head

Type of dwelling	Total		District			
	Country	Region	Total		Male headed	Female headed
			Number	Percent		
Total	5,467,054	318,119	5,214	100.0	100.0	100.0
Separate house	1,471,391	51,622	438	8.4	8.1	14.7
Semi-detached house	391,548	12,761	143	2.7	2.7	4.1
Flat/apartment	256,355	3,360	12	0.2	0.2	0.0
Compound house (rooms)	2,942,147	208,934	3,727	71.5	71.6	68.2
Huts/buildings (same compound)	170,957	34,405	703	13.5	13.6	11.0
Huts/buildings (different compound)	36,410	3,374	147	2.8	2.9	1.2
Tent	10,343	818	22	0.4	0.4	0.0
Improvised home (kiosk/container etc)	90,934	404	12	0.2	0.2	0.0
Living quarters attached to office/shop	20,499	619	5	0.1	0.1	0.8
Uncompleted building	66,624	1,428	4	0.1	0.1	0.0
Other	9,846	394	1	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3.2 Ownership of Occupied Dwelling Units

Table 8.3 shows the distribution of type of ownership of occupied dwelling units in the district. Ownership of living units is largely by household member (96.4%). This is followed by others such as relatives who are not household members (2.6%) and public/government ownership (0.4%). Other types of ownership of dwelling units in the district include ownership by private individual (0.5%), other private agency (0.1%) and others (0.1%). There is, however, no dwelling unit that is owned by private employers in the district perhaps due to the rural character of the district. Household headship by sex in the district, on the other hand, shows that there are more male headed households (95%) than female headed households (5%). All dwelling units in the district are in rural localities as the district is entirely rural.

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

Dwelling units	Total		District					
			Total		Male headed		Female headed	
	Country	Region	Number	Percent	Number	Percent	Number	Percent
Total	5,467,054	318,119	5,214	100.0	4,969	95.0	245	5.0
Owned by household member	2,883,236	267,538	5,025	96.4	4,793	95.0	232	5.0
Being purchased (e.g. mortgage)	45,630	1,352	3	0.1	3	100.0	0	0.0
Relative not a household member	851,630	16,460	136	2.6	136	100.0	0	0.0
Other private individual	1,439,021	24,310	24	0.5	15	63.0	9	38.0
Private employer	83,610	1,248	0	0.0	0	0.0	0	0.0
Other private agency	21,123	431	4	0.1	2	50.0	2	50.0
Public/Government ownership	118,804	5,863	19	0.4	17	89.0	2	11.0
Other	24,000	917	3	0.1	3	100.0	0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4 Construction Materials

The 2010 census collected data on the different types of materials used in the construction of buildings. The significance of this is to analyze data for policy decisions. One key implication that can be drawn from analyzing data on housing conditions is the richness of materials used in the construction of houses. For instance, houses built with mud bricks and roofed with thatch with no water and sanitary facilities have enormous health implications for the occupants of these dwelling units. This section, therefore, looks at the main materials used for the construction of dwelling units and the facilities available.

8.4.1 Main materials for outer walls

Table 8.4 has information on the type of materials used for the construction of outer walls of dwelling units in the district. Overall, 90.4 percent of all dwelling units in the district are constructed with mud brick/earth. Other materials used are palm leaf/thatch (3.0%), wood (2.4%), cement blocks/concrete (2.0%) and metal sheet (1.0%). The usage of stone (0.2%), landcrete (0.3%), bamboo (0.1%) and other materials (0.5%) for the construction of outer walls in the district is, however, not common. This is expected considering that the district is entirely rural.

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

Material for outer wall	Total		District	
	Country	Region	Number	Percent
Total	5,817,607	339,874	5,289	100.0
Mud brick/earth	1,991,540	247,754	4,780	90.4
Wood	200,594	5,389	128	2.4
Metal sheet/slate/asbestos	43,708	1,984	53	1.0
Stone	11,330	1,077	10	0.2
Burnt bricks	38,237	647	6	0.1
Cement blocks/concrete	3,342,462	64,863	108	2.0
Landcrete	104,270	10,609	17	0.3
Bamboo	8,206	285	6	0.1
Palm leaf/thatch (grass)/raffia	38,054	5,894	157	3.0
Other	39,206	1,372	24	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.2 Main materials for the floor

Table 8.5 shows the various materials used for the floor of dwelling units in the district. Overall, cement or concrete is the main material (78.8%) used for floors of dwelling units in the district. This is followed by earth or mud (19.9%). The usage of other materials such as ceramic/porcelain/ granite or marble tiles (0.6%), wood (0.1%), stone (0.2%) and other materials (0.4%) are relatively insignificant and together form less than two percent of the materials used for the floors of dwelling units in the country.

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

Materials for the floor	Total		District	
	Country	Region	Number	Percent
Total	5,467,054	318,119	5,214	100.0
Earth/mud	872,161	97,678	1,037	19.9
Cement/concrete	4,255,611	214,535	4,107	78.8
Stone	32,817	1,358	11	0.2
Burnt brick	6,537	277	2	0.0
Wood	52,856	195	5	0.1
Vinyl tiles	57,032	510	0	0.0
Ceramic/porcelain/granite/marble tiles	88,500	2,091	29	0.6
Terrazzo/terrazzo tiles	85,973	365	1	0.0
Other	15,567	1,110	22	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.3 Main materials for roofing

Table 8.6 shows the distribution of the main materials used for roofing dwelling units in the district. The main material used for roofing in the district is thatch/palm leaf or raffia (49.9%). This is followed by metal sheet (41.3%) and mud/mud bricks or earth (6.5%). Other materials used include bamboo (0.3%), roofing tiles (0.3%), wood (0.8%), concrete (0.1%), and slate (0.1%) which together form less than two percent of all materials used.

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

Main roofing material	Total		District	
	Country	Region	Number	Percent
Total	5,817,607	339,874	5,289	100.0
Mud/mud bricks/earth	80,644	16,434	344	6.5
Wood	45,547	3,740	43	0.8
Metal sheet	4,152,259	192,412	2,186	41.3
Slate/asbestos	759,039	2,091	5	0.1
Cement/concrete	141,072	1,429	5	0.1
Roofing tile	31,456	761	16	0.3
Bamboo	71,049	1,137	18	0.3
Thatch/palm leaf or raffia	500,606	118,517	2,639	49.9
Other	35,935	3,353	33	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.5 Room Occupancy

Sleeping rooms' occupancy can be an indication of the extent of overcrowding. Table 8.7 presents the distribution of household size and number of sleeping rooms for occupied dwelling unit in the District. Table 8.7 shows that generally, the number of people who occupy sleeping rooms declined as the number of rooms increased. About 0.2 percent of households with 10 or more members occupy single rooms.

The proportion of households with only one sleeping room was highest (62.9%) compared with 1.0 percent of household sizes seven, eight and nine for one sleeping room. The proportion of

household size three, using two sleeping rooms is more than half (51.0%) compared with less than one percent (0.7%) for household size three sleeping in eight rooms

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

Household size	Number of sleeping rooms										Nine rooms or more
	Total	Percent	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	
1	35	100.0	62.9	17.1	14.3	2.9	0.0	0.0	2.9	0.0	0.0
2	128	100.0	26.6	53.1	10.2	0.0	1.6	2.3	2.3	0.0	3.9
3	298	100.0	13.4	51.0	24.2	2.3	2.0	2.7	2.0	0.7	1.7
4	349	100.0	6.0	48.4	26.6	8.9	4.0	0.0	2.3	0.3	3.4
5	484	100.0	3.5	29.5	40.1	15.5	4.5	1.4	0.4	1.0	3.9
6	493	100.0	1.6	21.5	34.3	26.4	7.3	2.2	1.2	1.4	4.1
7	512	100.0	1.0	14.6	31.1	28.9	10.4	6.4	2.1	1.6	3.9
8	530	100.0	0.2	8.1	20.9	27.0	21.9	9.1	5.1	2.5	5.3
9	472	100.0	0.4	7.6	16.3	24.8	18.2	14.4	9.5	3.6	5.1
10+	1,913	100.0	0.2	2.7	8.1	15.9	17.6	17.3	11.8	8.0	18.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6 Access to Utilities and Household facilities

8.6.1 Source of lighting

Information on lighting as part of housing facility was collected in the 2010 Population and Housing Census. Table 8.7 presents the responses gathered from households about their main source of lighting in the house. Overall, the use of flashlight or torch constitutes the main source of lighting in the district (67.2%). This is followed by kerosene lamp (29.7%) and firewood (0.7%). The use of all other sources of lighting in the district especially electricity from the national grid (1.0) is relatively insignificant. There is, therefore, the need to work towards getting communities connected to the national grid as no single community is connected yet.

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

Main source of light	Total		District	
	Country	Region	Number	Percent
Total	5,467,054	318,119	5,214	100.0
Electricity (mains)	3,511,065	114,889	53	1.0
Electricity (private generator)	36,142	2,219	22	0.4
Kerosene lamp	971,807	134,656	1,547	29.7
Gas lamp	9,378	860	10	0.2
Solar energy	9,194	1,048	29	0.6
Candle	41,214	488	1	0.0
Flashlight/torch	858,651	60,518	3,506	67.2
Firewood	13,241	2,257	35	0.7
Crop residue	4,623	759	10	0.2
Other	11,739	425	1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6.2 Main source of cooking fuel

Table 8.8 presents the type of fuel used for cooking in the district. Overall, wood is the main fuel used in the district, accounting for 97.1 percent of fuel used. This is followed by charcoal (1.3%). This has far reaching implications for the forest and the environment. Households that do not cook at home in the district are few (0.4%). The table further indicates the percent distribution of cooking space in occupied dwellings. Overall, two in five households (41.0%) use open space in compound as their cooking space. This is followed by separate room for exclusive use of household (31.9%) and enclosure without roof (17.6%). The usage of other alternative spaces for cooking is not that common in the district as presented in the table. Households without cooking space in the district account for 1.3 percent.

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

Main source of cooking fuel for household	Total		District					
	Country	Region	Total	Percent	Urban		Rural	
					Number	Percent	Number	Percent
Cooking Fuel								
Total	5,467,054	318,119	5,214	100.0	0.0	0.0	5,214	100.0
None no cooking	306,118	6,713	22	0.4	0.0	0.0	22	100.0
Wood	2,197,083	243,314	5,063	97.1	0.0	0.0	5,063	100.0
Gas	996,518	10,584	17	0.3	0.0	0.0	17	100.0
Electricity	29,794	1,396	6	0.1	0.0	0.0	6	100.0
Kerosene	29,868	1,116	7	0.1	0.0	0.0	7	100.0
Charcoal	1,844,290	52,124	67	1.3	0.0	0.0	67	100.0
Crop residue	45,292	1,804	32	0.6	0.0	0.0	32	100.0
Saw dust	8,000	515	0	0.0	0.0	0.0	0	0.0
Animal waste	2,332	84	0	0.0	0.0	0.0	0	0.0
Other	7,759	469	0	0.0	0.0	0.0	0	0.0
Cooking space used by household								
Total	5,467,054	318,119	5,214	100.0	0.0	0.0	5,214	100.0
No cooking space	386,883	10,910	69	1.3	0.0	0.0	69	100.0
Separate room for exclusive use of household	1,817,018	82,024	1,665	31.9	0.0	0.0	1,665	100.0
Separate room shared with other household(s)	410,765	10,877	259	5.0	0.0	0.0	259	100.0
Enclosure without roof	117,614	11,245	898	17.2	0.0	0.0	898	100.0
Structure with roof but without walls	349,832	11,055	42	0.8	0.0	0.0	42	100.0
Bedroom/hall/living room)	74,525	1,403	28	0.5	0.0	0.0	28	100.0
Verandah	1,173,946	34,131	114	2.2	0.0	0.0	114	100.0
Open space in compound	1,115,464	155,651	2,136	41.0	0.0	0.0	2,136	100.0
Other	21,007	823	3	0.1	0.0	0.0	3	100.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

8.7.1 Main source of water of dwelling units

Table 8.9 indicates that bore-hole/pump/tube well is the main source of water for households in the district. About 46 percent of households depend on this source of water for drinking. This is followed by unprotected wells (25.9%). The other significant sources include protected well (9.4%), pipe-borne outside dwelling (9.5%), dug out/pond/lake/dam or canal (3.2%), and protected well (9.4%). The main source of water for other domestic use include bore-hole/pump/tube well (42.8%), unprotected well (25.5%), river or stream (4.8%), protected well (10.3%) and pipe borne outside dwelling (9.7%).

8.7.2 Main source of water for other domestic use

Further analysis of the data in Table 8.10 indicates that, 44.6 percent of the households use bore-hole/tube well, unprotected well (31.0%), and protected well (10.3%) for other domestic purposes.

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

Sources of water	Total Country	Region	District	
			Number	Percent
Main source of drinking water				
Total	5,467,054	318,119	5,214	100.0
Pipe-borne inside dwelling	790,493	27,811	13	0.2
Pipe-borne outside dwelling	1,039,667	38,852	495	9.5
Public tap/standpipe	712,375	21,798	116	2.2
Bore-hole/pump/tube well	1,267,688	111,650	2,386	45.8
Protected well	321,091	17,933	492	9.4
Rain water	39,438	2,066	3	0.1
Protected spring	19,345	1,008	11	0.2
Bottled water	20,261	233	4	0.1
Sachet water	490,283	1,187	4	0.1
Tanker supply/vendor provided	58,400	942	1	0.0
Unprotected well	112,567	13,517	1,350	25.9
Unprotected spring	12,222	1,109	16	0.3
River/stream	502,804	55,470	154	3.0
Dugout/pond/lake/dam/canal	76,448	24,308	167	3.2
Other	3,972	235	2	0.0

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

Sources of water	Total Country	Region	District	
			Number	Percent
Main source of water for other domestic use				
Total	5,467,054	318,119	5,214	100
Pipe-borne inside dwelling	905,566	27,698	16	0.3
Pipe-borne outside dwelling	1,089,030	37,432	506	9.7
Public tap/Standpipe	704,293	19,390	107	2.1
Bore-hole/pump/tube well	1,280,465	101,815	2,229	42.8
Protected well	465,775	19,715	536	10.3
Rain water	39,916	2,182	41	0.8
Protected spring	18,854	927	13	0.2
Tanker supply/vendor provided	100,048	1,214	5	0.1
Unprotected well	152,055	13,349	1,327	25.5
Unprotected spring	15,738	1,002	20	0.4
River/stream	588,590	63,445	248	4.8
Dugout/pond/lake/dam/canal	96,422	29,210	166	3.2
Other	10,302	740	0	0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.8 Bathing and Toilet Facilities

8.8.1 Bathing and toilet facilities used by household

Table 8.10 shows toilet and bathing facilities used by households in the district. Out of the total number of households in the district, about 87 percent use bush or open field for toilet. This is by far higher than the national average of 19.3 percent and the regional of 72.6 that use the bush or open field as place of convenience. Households that use KVIP and Pit latrine represent 7.4 percent and 3.4 percent respectively. The other toilet facilities used in the district, including bucket/pan (0.1%), WC (0.2%), public toilet (0.2%) and others (2.1%) are not widely patronized.

In terms of bathing facilities in the district, about 42.4 percent of all the households share separate bathroom in the same house. On the other hand, households that own bathrooms for their exclusive use represent 21.1 percent. About 7 and 17 percent of households respectively use private open cubicle and shared cubicles for bathing. About 10 percent of the households use open space around the house for bathing. Interestingly, some of the households (0.7%) rely on river/lake or dam for bathing in the district.

Table 8.11: Bathing facility and toilet facilities used by household

Toilet facility used by household	Total		Region		District	
	Country	Percent	Number	Percent	Number	Percent
Total	5,467,054	100.0	318,119	100.0	5,214	100.0
No facilities (bush/beach/field)	1,056,382	19.3	230,852	72.6	4,519	86.7
W.C.	839,611	15.4	7,736	2.4	9	0.2
Pit latrine	1,040,883	19.0	9,218	2.9	175	3.4
KVIP	572,824	10.5	14,587	4.6	387	7.4
Bucket/Pan	40,678	0.7	1,248	0.4	4	0.1
Public toilet (WC, KVIP, Pit, Pan, etc.)	1,893,291	34.6	52,704	16.6	13	0.2
Other	23,385	0.4	1,774	0.6	107	2.1
Bathing facility used by household						
Total	5,467,054	100.0	318,119	100.0	5,214	100.0
Own bathroom for exclusive use	1,535,392	28.1	108,283	34.0	1,101	21.1
Shared separate bathroom in the same house	1,818,522	33.3	95,261	29.9	2,210	42.4
Private open cubicle	381,979	7.0	22,044	6.9	352	6.8
Shared open cubicle	1,000,257	18.3	48,531	15.3	905	17.4
Public bath house	140,501	2.6	12,409	3.9	85	1.6
Bathroom in another house	187,337	3.4	2,646	0.8	3	0.1
Open space around house	372,556	6.8	27,210	8.6	518	9.9
River/Pond/Lake/Dam	14,234	0.3	1,001	0.3	38	0.7
Other	16,276	0.3	734	0.2	2	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.9 Method of Waste Disposal

8.9.1 Solid waste disposal

Table 8.11 shows that only 7.0 percent of the total numbers of households that have their waste (rubbish) collected. The main disposal method for rubbish in the district is public dump (open space). About 43 percent of the households use this dumping method. This is followed by indiscriminate dumping (37.8%). Other less used methods for waste disposal in the district include burning (9.4%) and burying by household (1.2%).

8.9.2 Liquid waste disposal

Table 8.11 also shows liquid waste disposal methods used by households in the district. The information indicates two main methods used for disposing of liquid waste. These are disposal onto the street or outside (67.8%) and thrown onto the compound (20.5%). Other less patronized methods of liquid disposal in the district is liquid waste thrown onto gutter (5.4%). The waste disposal situation in the district raises serious environmental concerns. The current practice may suggest the non-availability of waste collection bins and containers in the district. There is, therefore, an urgent need for the adoption of waste collection methods in disposing of waste in the district. The situation further calls for environmental education geared towards changing people's attitude from indiscriminate disposal of waste in the district.

Table 8.12: Method of solid and liquid waste disposal by households

Method of waste disposal by household	Total country		District			
	Country	Region	Total	Percent	Urban	Rural
Method of rubbish disposal by household						
Total	5,467,054	318,119	5,214	100.0	0	5,214
Collected	785,889	19,674	366	7.0	0	366
Burned by household	584,820	34,594	489	9.4	0	489
Public dump (container)	1,299,654	47,222	42	0.8	0	42
Public dump (open space)	2,061,403	123,188	2,258	43.3	0	2,258
Dumped indiscriminately	498,868	83,889	1,969	37.8	0	1,969
Buried by household	182,615	7,140	61	1.2	0	61
Other	53,805	2,412	29	0.6	0	29
Method of liquid waste disposal by household						
Total	5,467,054	318,119	5,214	100.0	0	5,214
Through the sewerage system	183,169	6,636	56	1.1	0	56
Through drainage system into a gutter	594,404	13,949	89	1.7	0	89
Through drainage into a pit (soak away)	167,555	16,152	158	3.0	0	158
Thrown onto the street/outside	1,538,550	178,671	3,535	67.8	0	3,535
Thrown into gutter	1,020,096	19,931	279	5.4	0	279
Thrown onto compound	1,924,986	81,195	1,071	20.5	0	1,071
Other	38,294	1,585	26	0.5	0	26

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER NINE

SUMMARY OF FINDINGS, CONCLUSION AND POLICY IMPLICATIONS

9.1 Introduction

As with previous censuses, the 2010 PHC collected data on basic demographic and socio-economic characteristics such as age, sex, relationship to head of household, marital status, ethnicity, religion, literacy, education, economic characteristics and housing. However, unlike previous censuses, the census of 2010 collected data on information and communications technologies (ICT), disability, emigration, maternal mortality and agriculture. Although censuses are organized every ten years, the results form the basis of a wide range of planning, policy-making and research activities. This chapter, therefore, summarizes the findings on the demographic, social and economic characteristics of the district and their policy implications and interventions for the district. It highlights key indicators that are of relevance for policy decisions in the district.

9.2 Demographic Indicators

One key demographic indicator worthy of note is the dependency ratio of the district which stands at 101.4. This means that there are about 101 persons in the dependent ages for every 100 persons in the working ages. This is higher than both the national and the regional ratios of 75.6 and 96.8 respectively.

9.3 Social Indicators

Data analysis of key social indicators in the district reveals a number of issues that are not only worthy of note but also are of importance for making policy decisions. One key social issue that emerged from the data analysis is the issue of high rate of illiteracy in the district. About 78 percent of the population in the district 11 years and older are not literate. This calls for strategies to be mapped out to improve upon the situation. Another issue that is worthy of note is the issue of low ICT usage in the district. Data analyzed indicate that about five percent of the district's population 12 years and older own mobile phones and use the internet. This is far lower than the regional figure which is 23.3 percent.

Indicators under housing are not also encouraging especially with water and sanitation. Disposal methods for both solid or rubbish and liquid waste in the district call for urgent attention to ensure cleaner and safer environment in the district. The main disposal method for rubbish in the district is public dump in open spaces. For liquid waste, the common practice is by throwing onto the street or outside. About 87 percent of households in the district use the bush or open field for toilet. Also, about 26 percent of households depend on unprotected wells as their source of drinking water. Another key concern under housing has to do with the usage of wood as fuel for cooking. Wood accounts for 97.1 percent of fuel used in the district. This has direct impact on the environment as fuel wood is drawn directly from the forest stock.

Pregnancy-related mortality (3.2%) in the district is relatively high as compared to the national and the regional figures of 1.9 percent and 2.2 percent respectively. This could be attributed to the inadequate number of health professionals and infrastructure in the district. Also, it is important to pay attention to under-five mortality in the district as it is quite high relative to mortality among all other age groups in the district.

9.4 Economic Indicators

The analysis has shown that 40.7 percent of the total population 15 years and older in the district are employed. A majority of the employed population is engaged in the agriculture and fishing industry (93.5%). It is also shown that the private informal sector provides employment for about 98 percent of the population 15 years and older in the district. Among the employed population in the district, the proportion of males (80.4%) is higher than females (70.4%). The most economically active age group in the district is, however, recorded within the age group of 25-29 years.

9.5 Conclusion

The report has highlighted the inadequacies in facilities such as information communication technology, education, housing and the amenities available to the households and the social and economic characteristics of the people in the district. From the data analyzed, six key issues emerged as essential for policy decisions in the district. These issues include high illiteracy rate, high pregnancy-related deaths, low ICT usage, poor water and sanitation conditions as well as over reliance on wood for fuel. The 2010 Census has therefore provided the opportunity for an in-depth analysis of the socio-demographic and economic situation in the district. The wealth of information provided by the 2010 Census would facilitate district level planning. The Assembly would, therefore, be better placed to plan, using reliable data, to achieve its development objectives.

9.6 Policy Implications

There is the need to improve the existing sources of water supply in the district. A more realistic measure will be through the construction of deep wells and boreholes. The District Assembly is urged to collaborate with Community Water and Sanitation Agency through the CIDA-funded Project and Sustainable Rural Water Project to improve upon the situation.

Another issue that is worthy of note is the disposal method for both solid and liquid waste in the district. The situation leaves much to be desired. There is the need for the provision of sanitation infrastructure such as containers and litter bins and enforcement of environmental bye laws of the Assembly. The Assembly could utilize its existing partnership with Zoom Lion Ghana to improve upon the situation.

The high use of wood for cooking also calls for appropriate policy decisions to save the environment as the district is gradually losing its forest resources. There is, therefore, the need to encourage community tree planting in the district. The Assembly can also collaborate with the Environmental Protection Agency in Northern Region to promote environmental conservation through tree planting and related activities. The monitoring activities of the existing district and

community environmental committees should be intensified to ensure that existing environmental bye laws are fully implemented and adhered to.

As regards the low usage of ICT in the district, the Assembly could work with the Ministry of Communications through the one laptop for a student project to improve upon the situation. The Assembly could also collaborate with other development partners to promote access to ICT in the district.

The literacy situation in the district requires the Assembly to put greater percentage of its investment in education. Strategies must, therefore, be mapped out in the district's 2014-2017 Medium Term Development Plan to bring down the high illiteracy rate which stand at 87 percent.

The high pregnancy-related deaths and the high mortality among children under five, call for effective policy measures to be put in place by the District Assembly to tackle the problem. The presence of SADA-MVP project in the district, however, provides some measure of relief in addressing the problem. The project has constructed a number of health centres and attracted a few health professionals through special schemes to the district. Such initiatives should be sustained and improved upon through effective collaboration between the district, Ghana Health Service, health-related NGOs in the Northern Region and beyond, and the SADA-MVP Project Management Team.

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APPENDICES

Table A1: Household composition by type of locality

Composition	Total		District
	Country	Region	Total
Total	5,467,136	5,214	5,214
Household with head and a spouse only	208,340	74	74
Household with head and multiple spouse only	0	0	0
Household with head spouse(s) and biological/adopted children only	1,337,416	1,526	1,526
Household with head spouse(s) biological/adopted children and relatives of the head only	762,847	2,965	2,965
Household with head spouse(s) biological/adopted children relatives and nonrelatives of the head	47,570	30	30
Household with head spouse(s) and other composition	165,052	91	91
Head only	960,700	35	35
Household with head and biological/adopted children only	707,214	179	179
Household with head biological/adopted children and relatives of the head only	603,295	206	206
Household with head biological/adopted children relatives and nonrelatives of the head	41,189	9	9
Household with head and other composition but no spouse	633,513	99	99

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

S/No.	Community Name	Total	Male	Female	House holds	Houses
1	Yizesi	4,376	2,249	2,127	435	235
2	Loagri No. 1	3,812	1,818	1,994	447	213
3	Kubore	3,358	1,562	1,796	323	199
4	Yagaba	2,836	1,337	1,499	303	164
5	Tantala	2,151	1,076	1,075	264	184
6	Zanwara	1,692	821	871	184	72
7	Kpatorigu	1,639	847	792	167	119
8	Jadima	1,605	824	781	182	126
9	Yikpabongo	1,285	651	634	149	101
10	Kulbugu	1,249	620	629	116	80
11	Yirangu	1,128	607	521	88	67
12	Soo	1,085	515	570	129	106
13	Zukpeni	1,073	537	536	13	8
14	Kikaayiri (Kukua No. 1)	1,048	522	526	120	73
15	Yizebisi	1,024	551	473	101	82
16	Tuvuu	962	493	469	146	59
17	Nanguri	881	479	402	87	41
18	Sakpaba	837	383	454	93	49
19	Buguyinga	829	400	429	100	87
20	Ya-Namuo	803	382	421	73	55

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

S/No	Community Name	All ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1	Yizesi	4,376	597	779	595	543	379	314	243	197	190	120	122	59	77	34	60	67
2	Loagri No. 1	3,812	657	644	406	365	286	310	259	183	160	141	109	40	93	30	56	73
3	Kubore	3,358	632	532	384	352	279	262	202	151	119	132	83	35	52	29	46	68
4	Yagaba	2,836	445	402	344	342	238	274	190	128	106	95	74	42	36	36	32	52
5	Tantala	2,151	331	414	234	232	179	169	161	89	70	58	55	28	38	28	36	29
6	Zanwara	1,692	308	304	190	163	135	129	100	78	58	42	42	27	42	29	23	22
7	Kpatorigu	1,639	388	251	154	112	79	128	104	74	67	53	59	32	42	24	39	33
8	Jadima	1,605	311	270	167	132	125	111	94	78	69	54	44	13	47	20	33	37
9	Yikpabongo	1,285	240	259	151	134	85	72	74	61	65	25	35	12	30	14	14	14
10	Kulbugu	1,249	264	219	141	129	91	83	65	58	53	41	30	15	10	18	10	22
11	Yirangu	1,128	198	212	173	89	90	60	75	46	47	37	34	18	10	7	6	26
12	Soo	1,085	191	199	122	99	94	77	64	45	41	38	30	15	30	10	12	18
13	Zukpeni	1,073	146	158	117	131	111	104	53	34	37	47	20	19	28	17	24	27
14	Kikaayiri (Kukua No. 1)	1,048	203	174	131	115	111	74	49	29	36	29	33	14	14	6	10	20
15	Yizebisi	1,024	166	172	120	109	90	54	76	38	41	37	32	11	17	14	22	25
16	Tuvuu	962	176	181	111	90	86	96	60	35	23	31	34	2	15	7	5	10
17	Nanguri	881	154	162	102	107	78	63	46	53	40	14	24	7	13	6	9	3
18	Sakpaba	837	191	182	74	75	67	67	52	33	24	8	23	6	10	4	9	12
19	Buguyinga	829	165	167	72	60	74	61	30	37	32	28	20	27	21	12	5	18
20	Ya-Namuo	803	145	136	79	93	64	58	43	35	34	30	23	10	20	7	12	14

Source: Ghana Statistical Service, 2010 Population and Housing Census

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