



2010

POPULATION & HOUSING CENSUS

DISTRICT ANALYTICAL REPORT

BIRIM NORTH DISTRICT



Canada 

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

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

The GSS wishes to express its profound gratitude to the Government of Ghana for providing the required resources for the conduct of the 2010 PHC. While appreciating the contribution of our Development Partners (DPs) towards the successful implementation of the Census, we wish to specifically acknowledge the Department for Foreign Affairs, Trade and Development (DFATD) formerly the Canadian International Development Agency (CIDA) and the Danish International Development Agency (DANIDA) for providing resources for the preparation of all the 216 district reports. Our gratitude also goes to the Metropolitan, Municipal and District Assemblies, the Ministry of Local Government, Consultant Guides, Consultant Editors, Project Steering Committee members and their respective institutions for their invaluable support during the report writing exercise. Finally, we wish to thank all the report writers, including the GSS staff who contributed to the preparation of the reports, for their dedication and diligence in ensuring the timely and successful completion of the district census reports.

Dr. Philomena Nyarko
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ACRONYMS

CERSGIS	Centre for Remote Sensing and Geographic Information Systems
CBR	Crude Birth Rate
CDR	Crude Death Rate
ECOWAS	Economic Commission of West African States
GSS	Ghana Statistical Service
GFR	General Fertility Rate
ICT	Information Communication Technology
JHS	Junior High School
JSS	Junior Secondary School
KVIP	Kumasi Ventilated Improved Pit
MDAs	Ministries, Departments and Agencies
MDGs	Millennium Development Goals
NCTAC	National Census Technical Advisory Committee
NCSC	National Census Steering Committee
PES	Post Enumeration Survey
PHC	Population and Housing Census
PWDs	Persons with Disability
TFR	Total Fertility Rate
UN	United Nations
UNFPA	United Nation Population Fund
SHS	Senior High School
SSS	Senior Secondary School
WC	Water Closet

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 Birim North District, according to the 2010 Population and Housing Census, is 78,907 representing 3.0 percent of the region's total population. Males constitute 50.2 percent and females represent 49.8 percent. Ninety percent of the population is rural. The district has a sex ratio of 100.6. The population of the district is youthful (51.5%) depicting a broad base population pyramid which tapers off with a small number of elderly persons (6.5%). The total age dependency ratio for the District is 81.7, the age dependency ratio for males is higher (83.2) than that of females (80.3).

Fertility, mortality and migration

The Total Fertility Rate for the district 3.9. The General Fertility Rate is 116.1 births per 1000 women aged 15-49 years which is among the highest for the region. The Crude Birth Rate (CBR) is 27.4 per 1000 population. The crude death rate for the district is 7.5 per 1000. The death rate for males is highest for age 70 and above representing 62 deaths per 1000 population while for the females, the highest death rate of 54 deaths per 1000 population is for ages 65-69. Accident/violence/homicide/suicide accounted for 3.7 percent of all deaths while other causes constitute 2.6 percent of deaths in the district.

Majority of migrants (57.4 percent) living in the district were born elsewhere in the region. For migrants born in another region, they constitute 40.2 percent.

Household Size, composition and structure

The district has a household population of 77,572 with a total number of 18,511 households. The average household size in the district is 4.2 persons per household. Children constitute the largest proportion of the household structure accounting for 42.5 percent. Spouses form about 11.2 percent. Nuclear households (head, spouse(s) and children) constitute 39.0 percent of the total number of households in the district.

Marital status

About four in ten (42.2%) of the population aged 12 years and older are married, 37.0 percent have never married, 8.4 percent are in consensual unions, 5.1 percent are widowed, 4.9 percent are divorced and 2.4 percent are separated. By age 25-29 years, more than half of females (56.9%) are married compared to a little above one-third of males (35.4%). At age 65 and above, widowed females account for as high as 54.9 percent while widowed males

account for only 13.1 percent. . Among the married, 75.9 percent have no education while about 8.4 percent of the unmarried have never been to school. About nine out of ten (86.3%) of the married population are employed, 2.4 percent are unemployed and 11.4 percent are economically not active. A greater proportion of those who have never married (62.9%) are economically not active with 3.3 percent unemployed.

Nationality

The proportion of Ghanaians by birth in the district is 96.0 percent. Those who have naturalised constitute 0.5 percent and the non-Ghanaian population in the district is 1.8 percent.

Literacy and education

Of the population 11 years and above, 83.8 percent are literate and 16.2 percent are non-literate. The proportion of literate males is higher (52.1 %) than that of females (47.9%). Seven out of ten people (75.0%) indicated they could read and write both English and Ghanaian languages. Of the population aged 3 years and above in the district, 14.8 percent has never attended school, 40.3 percent are currently attending and 44.9 percent have attended in the past.

Economic Activity Status

About 75.5 percent of the population aged 15 years and older are economically active while 24.5 per cent are economically not active. Of the economically active population, 96.3 percent are employed while 3.7 percent are unemployed. For those who are economically not active, nearly forty percent of them are students (39.5%), 31.1% perform household duties and 7.4 percent are disabled or too sick to work. Six out of ten (61.2%) unemployed are seeking work for the first time.

Occupation

Of the employed population, about 52.0 percent are engaged as skilled agricultural, forestry and fishery workers, 14.1 percent in service and sales, 12.8 percent in craft and related trade, and 6.9 percent are engaged as managers, professionals, and technicians.

Employment status and sector

Of the population 15 years and older 64.7 percent are self-employed without employees, 14.5 percent are employees, 1.4 percent are casual workers and 0.5 percent are domestic employees (house helps). Overall, females constitute the highest proportion in each employment category except employees. The private informal sector is the largest employer in the district, employing 90.4 percent of the population followed by the public sector with 5.2 percent.

Information and Communication Technology

Of the population 12 years and above, 42.3 percent have mobile phones. Males who own mobile phones constitute 49.1 percent as compared to 35.6 percent of females. Slightly less than three percent (2.9%) of the population 12 years and older use internet facilities in the district. Only 703 households representing 3.8 percent of the total households in the district have desktop/laptop computers.

Disability

About 3.9 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 lower (4.0%) than females (3.8%). The types of disability in the district include sight, hearing, speech, physical, intellect, and emotion. Persons with sight disability recorded the highest of 39.6 percent followed by physical disability (23.0%). About 4.5 percent of the population with disability are in the urban localities. There are more females with sight disability than males, while with physical disability males dominate. Of the population disabled, 30.1 percent have never been to school.

Agriculture

About 74.4 percent of households in the district are engaged in agriculture. In the rural localities, nine out of ten households (80.3%) are agricultural households while in the urban localities, 59.4 percent of households are into agriculture. Most households in the district (97.8%) are involved in crop farming. Poultry (chicken) is the dominant animal reared in the district.

Housing

The housing stock of Birim North District is 15,462 representing 3.5 percent of the total number of houses in the Eastern Region. The average number of persons per house is 5.0.

Type, tenancy arrangement and ownership of dwelling units

Over half (50.7%) of all dwelling units in the district are compound houses; 32.6 percent are separate houses and 11.1 percent are semi-detached houses. More than half (57.7%) of the dwelling units in the district are owned by members of the household; 22.2 percent are owned by private individuals; 15.7 percent are owned by a relative who is not a member of the household and only 1.1 percent are owned by public or government. Less than one percent (0.8%) of the dwelling units is owned through mortgage schemes.

Material for construction of outer wall, floor and roof

The main construction material for outer walls of dwelling units in the district is mud bricks/earth accounting for 44.7 percent followed with cement blocks or concrete constituting 44.3 percent of outer walls of dwelling units in the district. Cement (77.9%) and mud/earth (20.0%) are the two main materials used in the construction of floors of dwelling units in the district. Metal sheets are the main roofing material (92.3%) for dwelling units in the district.

Room occupancy

One room constitutes the highest percentage (59.7%) of sleeping rooms occupied by households in housing units in the district. About 6.8 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 electricity (62.0%), kerosene lamp (19.2%). The main source of fuel for cooking for most households in the district is wood (61.4%). The proportion for rural (71.1%) is higher than that of urban (36.8%). The four main sources of water in the district are borehole, public tap and pipe borne water. About half of households (41.4%) drink water from boreholes.

The most important toilet facility used in the district is pit latrine representing 40.2%, public toilets 21.8% and KVIP representing 18.2 percent. About 16.0 percent of the population in the district has no toilet facility. About 34.8 percent of households in the district share separate bathrooms in the same house while 24.0 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 57.8 percent. About (12.3%) households dump their refuse in containers. House to house waste collection accounts for 1.8 percent. For liquid waste disposal, throwing waste onto the compound (60.3%) and onto the street (25.3%) are the two most common methods used by households in the district.

CHAPTER ONE

INTRODUCTION

1.1 Background

The Birim North District was carved out of the former Birim District Council in 1987 as part of the government's decentralization programme to promote effective decentralized governance and speed up the development of the area. It is bordered to the north by Kwahu West Municipal, to the west by Asante Akyem South and Adansi South Districts all in the Ashanti Region, to the south by Akyemansa District, a newly created District carved out of the present Birim North District and to the east by Atiwa and Kwaebibirem Districts. The District has a total land area of 566.48 square kilometers.

1.2 Physical features

1.2.1 Relief and Drainage

The landscape of the District is mostly undulating and mountainous in nature. The hilly areas are basically made up of lava flows and schist which in some cases rise to over 61 meters above sea level. These areas have high rainfall of about 170mm per annum. The low areas of the District are made up of phyllite and greywacke. These areas have relatively low rainfall compared to the hilly areas. The district has two main rivers - the Pra and the Birim Rivers. The latter is a tributary of the Pra River. The Pra River serves as the boundary between the District and two other Districts in Ashanti region, whilst the Birim River serves as the southern boundary of the District.

1.2.2 Climatic conditions

The District lies within the semi-equatorial climatic zone that experiences substantial amounts of precipitation. It experiences a double maxima rainfall pattern. The first rainfall season starts from late March to early July and the second season is from mid- August to late October. The amount of rainfall received in the district is between 150cm and 200cm reaching its maximum during the two peak periods of May-June and September-October annually. Temperatures range between an average minimum of 25.1 degree Celsius and a maximum of 27.9 degree Celsius. The District has a relative humidity of about 55-59 percent during the entire year. This high amount of rainfall and moderate temperatures has the potential of improving and sustaining agricultural activities in the district. This climatic condition supports the cultivation of cash crops such as oil palm and cocoa.

1.2.3 Vegetation

The district lies within the Semi- deciduous forest belt of Ghana comprising tall trees with evergreen undergrowth. The forest contains large species of economic trees. The district is home to nine forest reserves. The rapid expansion of cocoa and oil palm cultivation in the district coupled with the activities of the illegal chain saw operators and illegal small-scale mining are destroying the vegetation.

1.3 Political Administration

The Birim North District Assembly is the highest Administrative and Political authority in the District with the mandate to initiate and coordinate all development efforts aimed at sustainable development at the local level. The District is currently made up of four (4) Area Councils. There is one (1) Member of Parliament (MP) who is an Ex- Officio member of the District Assembly. The Executive committee of the Assembly is chaired by the District Chief Executive (DCE) who is the government representative. The administration is headed by the District Coordinating Director (DCD), who is responsible for the day-to-day operation of the Assembly.

1.4 Cultural and Social Structure

The Birim North District is heterogeneous in terms of ethnicity. The Akans who are mostly Akyems constitute about 75 percent of the entire population in the district. Other tribes such as the Ewes, Gas, Krobos and Guans and people of Northern Ghana origin constitute the remaining 25 percent of the population.

With regards to religious beliefs, there are three main religions practiced by the people in the district. Christianity is the most dominant religion constituting 92.7 percent, Islam and traditional religion commands 4.3 percent and 3 percent respectively.

On migration, data collected indicate that about 2 percent of the District population normally leave the District every year whilst those who come in constitute about four percent. This is high as a result of the boom in illegal gold mining activities in the District. The migrants are mainly energetic young men between the ages of 21-48 years and dominated by Males (76%).

1.4.1 Traditional Authority

There are three traditional areas in the district. These are Akyem Kotoku, Akyem Abuakwa and Akyem Bosome. The predominant among them is the Kotoku Traditional Authority, which constitutes over 85 percent of the people. It has its traditional headquarters at Akim Oda. The Abuakwa towns are Chia, Adubiase and Odumase whilst Ofoase, Brenase and Anyinase constitute the Bosome towns in the district.

Figure 1.1 Map of Birim North District



Source: Ghana Statistical, 2010 Population and Housing Census

1.5 Economy and Living Conditions

1.5.1 Agriculture

Agriculture is the mainstay of the economy of Birim North District. About 73.5 percent of the workforce in the district is engaged in one form of agriculture enterprise or the other. The major crops cultivated in the District include cocoa, oil palm, citrus, rice, maize, plantain, cassava, cocoyam and vegetables. The District has a number of small-scale industries which are sparsely located in the District. They can be categorized broadly as, service industries and agro-processing industries. The District has economically large deposit of gold which is currently being exploited by companies such as Newmont among others. Illegal miners popularly known as “galamsey” are also doted all over the District.

1.5.2 Tourism

The Birim North District is endowed with parks, wildlife sanctuary, picturesque water bodies, historic sites and antiquities. It has ten well managed forest reserves that are resourceful in flora and fauna, which are basic to the development of attractive Wild Life sanctuaries or parks. Near Otwereso is a site of the confluence of the Birim and Pra Rivers. At Oda Akrofonso, near Afosu are Ashanti antique War Bells and grove that marks the spot where the great Ashanti King, Osei Tutu was killed. It also has reputable hotels like the Beige Village.

1.5.3 Transport and communication

The total length of the District’s roads is 395.6 kilometers. This is made up of 101km trunk roads, 206km feeder roads and 88.6 km earth surfaces. There is a post office at new Abirem and twenty- one postal agencies spread across the district, although most of these are not functioning at the moment.

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, Ksoa and Techiman were not properly demarcated and some were characterized by large EAs, some enumerators were unable to complete their assigned tasks within the stipulated time.

1.6.4 Post Enumeration Survey

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

- 97.0 percent of all household residents who were in the country on Census Night (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 and Communication Technology (ICT), Fertility, Mortality, Agricultural Activity and Housing Conditions.

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

Region

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

District

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

Locality

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

Population

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

Household

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

Head of Household

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

Household and Non-household population

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

- (a) Educational Institutions
- (b) Children's and Old People's Homes
- (c) Hospitals and Healing Centres
- (d) Hotels
- (e) Prisons
- (f) Service Barracks
- (g) Soldiers on field exercise

(h) Floating Population: The following are examples of persons in this category:

- i. All persons who slept in lorry parks, markets, in front of stores and offices, public bathrooms, petrol filling stations, railway stations, verandas, pavements, and all such places which are not houses or compounds.
- ii. Hunting and fishing camps.
- iii. Beggars and vagrants (mentally sick or otherwise).

Age

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

Nationality

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

Ethnicity

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

Birthplace

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

Duration of Residence

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

Religion

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

Marital Status

Marital status refers to the respondent's marital status as at Census Night. The question on marital status was asked only of persons 12 years and older. The selection of the age limit of

12 years was based on the average age at menarche and also on the practice in some parts of the country where girls as young as 12 years old could be given in marriage.

Literacy

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

Education

School Attendance

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

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

Level of Education

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

Activity Status

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

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

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

Occupation

This referred to the type of work the person was engaged in at the establishment where he/she worked. This was asked only of persons 5 years and older who worked 7 days before the census night, and those who did not work but had a job to return to as well as those unemployed who had worked before. All persons who worked during the 7 days before the census night were classified by the kind of work they were engaged in. The emphasis was on the work the person did during the reference period and not what he/she was trained to do. For those who did not work but had a job to return to, their occupation was the job they

would go back to after the period of absence. Also, for persons who had worked before and were seeking for work and available for work, their occupation was on the last work they did before becoming unemployed. If a person was engaged in more than one occupation, only the main one was considered.

Industry

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

Employment Status

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

Employment Sector

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

Disability

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

Information and 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

Population size, composition and age-sex structure are important characteristics that have many social and economic implications. Population size and composition influence the District's potential human resource requirement and provision of social services such as schools, hospitals/clinics and housing. This chapter presents information on population size and distribution, age-sex structure, migration, fertility and mortality in the district.

2.2 Population Size and Distribution

2.2.1 Introduction

Table 2.1 presents data on the demographic characteristic of the population with regards to age, sex and locality of residence. These characteristics are examined in the sub-sections that follow.

2.2.2 Population Size and distribution (urban/rural)

The distribution of the population by sex and locality of residence are shown in Table 2.1. The data shows that the total population of the District is 78,907 representing 3 percent of the regional population. The male population is 39,572 and that of females is 39,335, an indication that there are slightly more males (50.2%) than females (49.8%) in the District. The Table further shows that District is essentially a rural district with majority of its people living in rural areas (70.6%) compared to urban areas (29.4%).

2.2.3 Age specific sex ratios

The Birim North District is one of the Districts in the region dominated by male population, with 101 males to 100 females. The age specific sex ratio ranges from about 61 males for every 100 females in the older ages of 85 years and older to 116 males for every 100 females in the age group 60-64 years. There are slightly more males than females for the population below 19 years and between 40 and 64 years except for age 50-54 years.

2.3.2 Dependency ratio

The age-dependency ratio is a theoretical concept which does not apply strictly in real population and differs from economic dependency ratio. For example although ages 15-64 are not "dependent" a large proportion of youth 15-19 are "dependent" in practice, that is being at school or not supporting anyone. Similarly, not all persons aged 65 years and over are dependent. The age-dependency ratio is often used as an indicator of the economic burden that the productive portion of a population must bear. Countries with very high birth rates coupled with low death rates usually have the highest age-dependency ratios because of the large proportion of children in the population.

Table 2.1 indicates that there are variations in the dependency ratio for males and females and locality of residence. The total dependency ratio for the District is 81.7 which mean that for every 100 people in the working age population, there are about 81 people in the dependent population to support.

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

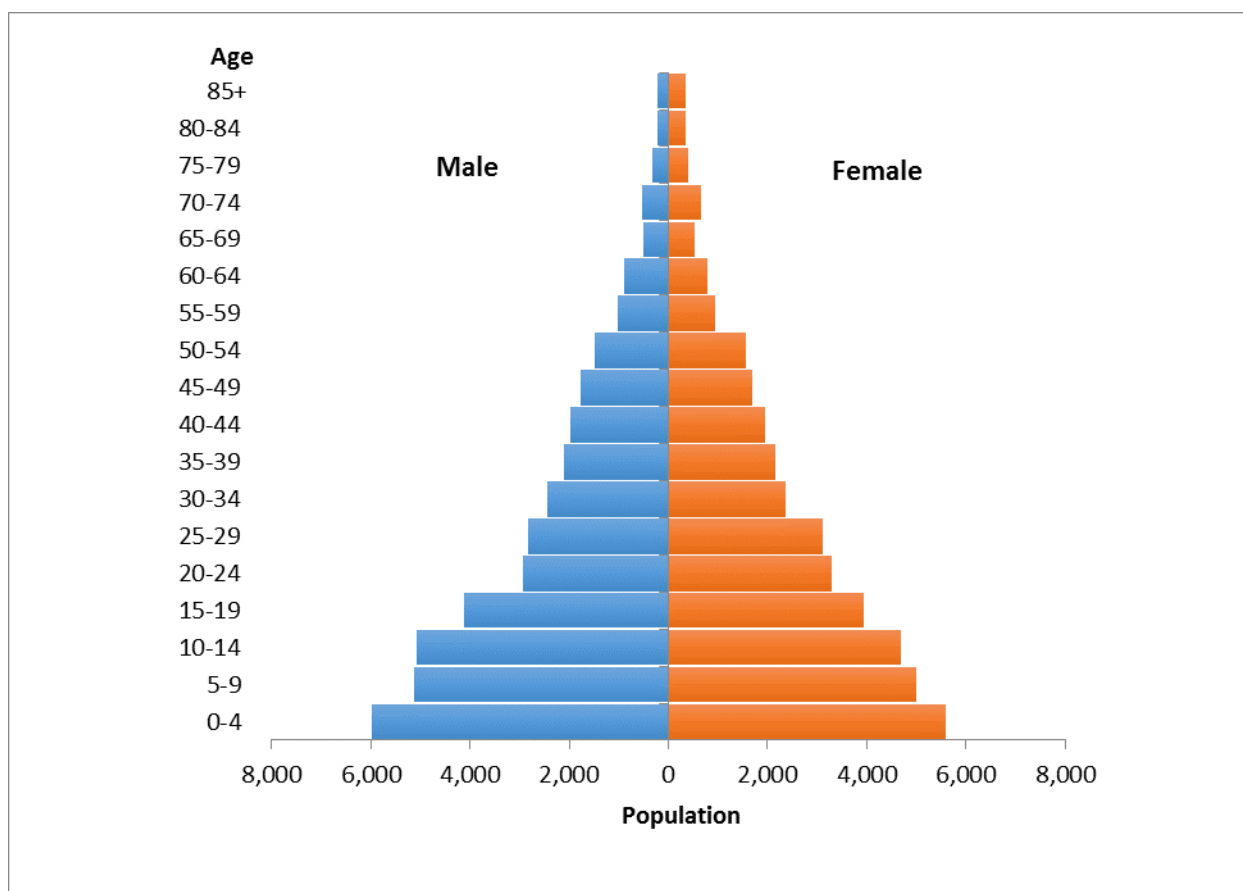
Age Group	Sex						Type of locality			
	Both Sexes	Male		Female		Sex ratio	Urban		Rural	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
All Ages	78,907	39,572	50.2	39,335	49.8	100.6	21,166	26.8	57,741	73.2
0 - 4	11,560	5,974	51.7	5,586	48.3	106.9	2,718	23.5	8,842	76.5
5-9	10,119	5,134	50.7	4,985	49.3	103.0	2,503	24.7	7,616	75.3
10-14	9,772	5,084	52.0	4,688	48.0	108.4	2,661	27.2	7,111	72.8
15 - 19	8,073	4,129	51.1	3,944	48.9	104.7	2,411	29.9	5,662	70.1
20 - 24	6,233	2,933	47.1	3,300	52.9	88.9	1,943	31.2	4,290	68.8
25 - 29	5,943	2,830	47.6	3,113	52.4	90.9	1,713	28.8	4,230	71.2
30 - 34	4,817	2,443	50.7	2,374	49.3	102.9	1,395	29.0	3,422	71.0
35 - 39	4,270	2,109	49.4	2,161	50.6	97.6	1,195	28.0	3,075	72.0
40 - 44	3,926	1,966	50.1	1,960	49.9	100.3	1,059	27.0	2,867	73.0
45 - 49	3,460	1,779	51.4	1,681	48.6	105.8	945	27.3	2,515	72.7
50 - 54	3,045	1,487	48.8	1,558	51.2	95.4	788	25.9	2,257	74.1
55 - 59	1,973	1,027	52.1	946	47.9	108.6	475	24.1	1,498	75.9
60 - 64	1,676	901	53.8	775	46.2	116.3	408	24.3	1,268	75.7
65 - 69	1,023	495	48.4	528	51.6	93.8	248	24.2	775	75.8
70 - 74	1,187	525	44.2	662	55.8	79.3	273	23.0	914	77.0
75 - 79	700	312	44.6	388	55.4	80.4	173	24.7	527	75.3
80 - 84	573	233	40.7	340	59.3	68.5	135	23.6	438	76.4
85+	557	211	37.9	346	62.1	61.0	123	22.1	434	77.9
All Ages	78,907	39,572	50.2	39,335	49.8	100.6	21,166	26.8	57,741	73.2
0-14	31,451	16,192	51.5	15,259	48.5	106.1	7,882	25.1	23,569	74.9
15-64	43,416	21,604	49.8	21,812	50.2	99.0	12,332	28.4	31,084	71.6
65+	4,040	1,776	44.0	2,264	56.0	78.4	952	23.6	3,088	76.4
Age- dependency ratio	81.7	83.2		80.3			71.6		85.8	

Source: Ghana Statistical, 2010 Population and Housing Census

2.3.3 Population Pyramid

The age and sex structure of the District is shown in the population pyramid (Figure 2.1). The pyramid has a relatively large base, reduces gradually in the subsequent age groups until the population becomes relatively small in the older ages. The Figure provides insightful lessons regarding current and future fertility and migration patterns to enhance policy formulation and infrastructure planning. The pyramid generally shows the expected pattern of declines in the length of the bars for each group with advancing age.

Figure 2.1: Population Pyramid



Source: Ghana Statistical, 2010 Population and Housing Census

2.3 Fertility, Mortality and Migration

Fertility, mortality and migration are important in influencing population dynamics and development. Fertility and mortality are used to determine the natural increase or decrease of the population.

The 2010 Population and Housing Census collected data on fertility which is the natural capability of producing off-springs. Mortality refers to all deaths that occurred in the household during the 12 months preceding the Census Night, while migration refers to the physical movement of persons across geographical boundaries for a given period. This is measured by combining data on the place of birth with place of enumeration and duration of stay at place of enumeration.

2.4.1 Fertility

Fertility refers to the actual birth performance or childbearing among a population. The general fertility rate (GFR) is the number of births in a given year divided by the mid-year population of women in the age group 15-49 years. The total fertility rate (TFR) which is widely used is the average number of live births per 1,000 women in the childbearing age (15-49 years). In other words, it is the average number of children a woman would give birth to by the end of her reproductive years if current fertility rates prevailed (IUSSP, 1982). The

crude birth rate indicates the number of life births occurring during a year, per 1000 population.

Table 2.2 shows that the crude birth rate (CBR) is 27.4 per 1,000 for the Birim North District which means that 27 births occur for every 1,000 population in the District per year compared to about 26 in the region. The general fertility rate which is more refined than the CBR also shows that fertility is 116 births per 1,000 women aged 15-49 years is recorded annually compared to an average of 104 in the region. The more refined of the three indicators and the widely used, total fertility rate (TFR), is 3.9 compared to 3.5 for the region. It implies that on the average every woman in the reproductive age has between three and four children in the District compared to the same proportion per woman in the region generally.

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

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	2,633,154	788,455	67,900	3.5	103.9	25.8
Birim South	119,767	35,212	3,259	3.9	114.3	27.2
Birim Municipal	144,869	45,720	3,411	3.1	90.1	23.5
West Akim Municipal	195,349	58,024	5,434	3.9	113.8	27.8
Suhum-Kraboia Coaltar	167,551	48,762	4,317	3.6	108	25.8
Akwapem South Municipal	123,501	38,447	3,091	3.3	95.5	25.0
Akwapem North	136,483	41,211	3,549	3.6	103.4	26.0
New Juaben Municipal	183,727	62,150	3,612	2.4	68.0	19.7
Yilo Krobo	87,847	27,007	2,030	2.9	90.1	23.1
Lower Manya	89,246	29,546	2,190	3.0	87.4	24.5
Asuogyaman	98,046	30,675	2,254	3.1	89.5	23.0
Upper Manya	72,092	20,332	1,859	3.7	111.5	25.8
Fanteakwa	108,614	31,368	2,769	3.7	107.2	25.5
East Akim Municipal	167,896	51,132	3,807	3.1	89.9	22.7
Kwaebibirem	192,562	58,556	5,407	3.9	111.4	28.1
Akyem Mansa	97,374	27,417	2,735	4.3	122.3	28.1
Birim North	78,907	22,778	2,163	3.9	116.1	27.4
Atiwa	110,622	31,359	3,207	4.2	125.9	29.0
Kwahu West Municipal	93,584	29,311	2,295	3.3	95.0	24.5
Kwahu South	69,757	20,311	1,872	3.8	114	26.8
Kwahu East	77,125	21,132	2,067	4.2	120.7	26.8
Kwahu North	218,235	58,005	6,572	4.4	132.3	30.1

Source: Ghana Statistical, 2010 Population and Housing Census

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

** Number of live births per 1,000 population

2.4.2 Children ever born and children surviving

The number of children ever born per woman measures the lifetime or cumulative fertility performance of females aged 12 years and older. Table 2.3 shows that the District recorded a total of 77,850 children ever born, comprising 38,997 males and 38,853 females. This translates to an average completed family size of 2.9 children for women aged 12 years and older. As expected the number of children ever born generally increases with age.

Table 2.3 also indicates that the number of children surviving is 67,785 comprising 33,666 males and 34,119 females. The mean children surviving is about three. The highest mean children surviving is among the age group 50 years and older.

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

Age	Number of Females	Children Ever Born				Children Surviving			
		Both Sexes	Average CEB	Male	Female	Both Sexes	Average CS	Male	Female
All Ages	26,763	77,850	2.9	38,997	38,853	67,785	2.5	33,666	34,119
12-14	2,687	8	0	6	2	6	0.0	4	2
15-19	3,944	696	0.2	398	298	627	0.2	352	275
20-24	3,300	3,045	0.9	1,530	1,515	2,790	0.8	1,353	1,437
25-29	3,113	6,111	2	3,125	2,986	5,721	1.8	2,904	2,817
30-34	2,374	7,487	3.2	3,739	3,748	6,944	2.9	3,443	3,501
35-39	2,161	8,731	4	4,497	4,234	8,069	3.7	4,156	3,913
40-44	1,960	9,401	4.8	4,726	4,675	8,573	4.4	4,276	4,297
45-49	1,681	8,748	5.2	4,305	4,443	7,867	4.7	3,820	4,047
50-54	1,558	8,853	5.7	4,435	4,418	7,830	5.0	3,885	3,945
55-59	946	5,529	5.8	2,750	2,779	4,733	5.0	2,368	2,365
60+	3,039	19,241	6.3	9,486	9,755	14,625	4.8	7,105	7,520

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.4.3 Mortality

Mortality, as one of the three components of population change, plays an important role in determining the growth of a population. Mortality is the occurrence of death in a population. The level and pattern of mortality is a reflection of the health status of a population. From Table 2.4, a total of 595 deaths were recorded in the 12 months preceding the Census Night, yielding a crude death rate of about eight deaths (7.5) in every 1,000 population. This shows that the mortality experience in the District is relatively lower than the average of the region (8.2).

Table 2.4: Deaths in the households and crude death rate by district

District	Total Population	Deaths in households	*Crude death rate
All Districts	2,633,154	21,519	8.2
Birim South	119,767	1,351	11.3
Birim Municipal	144,869	966	6.7
West Akim Municipal	108,298	866	8.0
Suhum Municipal	90,358	632	7.0
Nsawam Adoagyiri Municipal	86,000	448	5.2
Akwapem North	136,483	1,317	9.6
New Juaben Municipal	183,727	1,085	5.9
Yilo Krobo	87,847	1,198	13.6
Lower Manya	89,246	940	10.5
Asuogyaman	98,046	853	8.7
Upper Manya	72,092	607	8.4
Fanteakwa	108,614	911	8.4
East Akim Municipal	167,896	1,427	8.5
Kwaebibirem	113,721	726	6.4
Akyem Mansa	97,374	805	8.3
Birim North	78,907	595	7.5
Atiwa	110,622	1,064	9.6
Kwahu West Municipal	93,584	659	7.0
Kwahu South	69,757	879	12.6
Kwahu East	77,125	992	12.9
Kwahu Afram Plains North	102,423	455	4.4
Upper West Akyem	87,051	662	7.6
Akwapim South	37,501	357	9.5
Ayensuano	77,193	741	9.6
Denkyembuor	78,841	444	5.6
Kwahu Afram Plains South	115,812	539	4.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

Note: * Number of deaths per 1,000 population

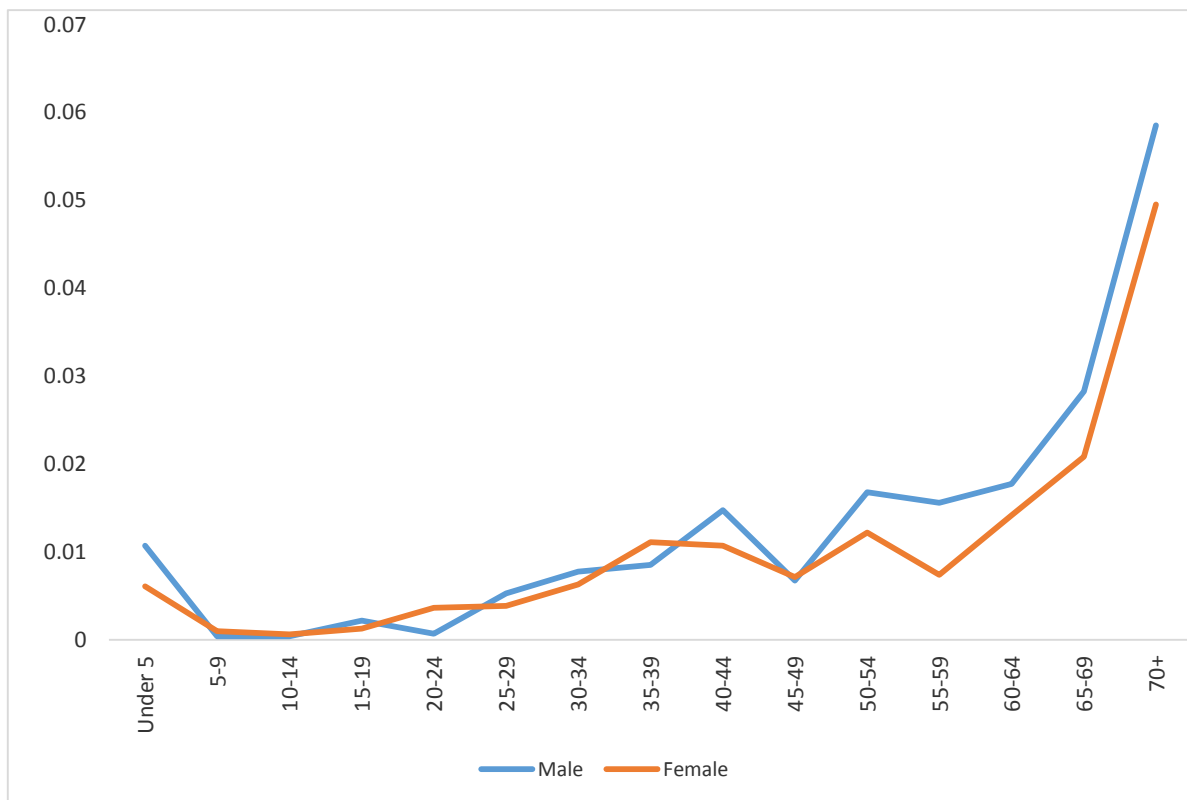
2.2.3 Age specific death rate

The age specific death rate (ASDR) is the number of deaths per year per 1,000 population of a given age group by sex. It forms a good basis for making comparisons about mortality levels. ASDR statistics help local health professionals and government to target specific age groups to engage policy actions to influencing mortality levels. Mortality varies considerably by age and sex. Figure 2.2 shows the age specific death rates by sex in the Birim North District. The graph shows the expected “U” pattern with the lowest mortality rates occurring in the 15-24 year age groups. Mortality is high in the first year of life, then falls sharply and reaches its minimum in that age group. The Figure also shows higher male mortality rates for the population below age 10.

Mortality among both sexes rises steadily from age 20 with that of the female population remaining slightly higher. Male mortality picks momentum from age group 45-49 years and beyond at a faster rate than female mortality and remains higher.

Death rates are higher among males (13 deaths per 1,000) and females (11 deaths per 1,000) at age 0-4 years. This declines to one male death per thousand and two female deaths per 1,000 in ages 5-9. After this age, death rates fluctuate between the male and female until from age 50 when male mortality rises higher than female mortality. The main reason that may explain the higher death rates among females than males in the reproductive ages (15-49 years) is high maternal mortality among females in their reproductive ages. In the older ages male mortality is higher than that of the females as life expectancy rate at older ages is higher for females than males. Males perform riskier economic activities than females during their youthful ages and become weaker in old age. Consequently, they have higher mortality rate than females in their old age.

Figure 2.2: Age-specific deaths rates



Source: Ghana Statistical Service, 2010 Population and Housing Census

2.2.4 Causes of death

Table 2.5 presents the cause of death by district in the Eastern Region. Out of a total of 595 deaths recorded in the District, 14 percent (83) are due to accident or violence or homicide or suicide while 86 percent (512) are due to all other causes such as natural deaths. The District's percentage of deaths caused by either accident or violence or homicide or suicide is 3.7 percent below the regional average of 10.4 percent.

Table 2.5: Causes of death by district

Region/District	Death due to				
	Accident/ violence/ homicide/ suicide	All other causes	Total deaths	Pregnancy related death (female 15-54 years)	Not pregnancy related
EASTERN	2,240	19,279	21,519	365	21,154
Birim South	153	1,198	1,351	27	1,324
Birim Municipal	118	848	966	14	952
West Akim Municipal	99	767	866	6	860
Suhum Municipal	35	605	640	13	627
Nsawam Adoagyiri Municipal	46	402	448	9	439
Akwapem North	106	1,211	1,317	17	1,300
New Juaben Municipal	121	964	1,085	22	1,063
Yilo Krobo	108	1,090	1,198	17	1,181
Lower Manya	63	877	940	21	919
Asuogyaman	85	768	853	3	850
Upper Manya	32	575	607	7	600
Fanteakwa	73	838	911	13	898
East Akim Municipal	235	1,192	1,427	41	1,386
Kwaebibirem	78	649	727	15	712
Akyem Mansa	53	752	805	8	797
Birim North	83	512	595	11	584
Atiwa	94	970	1,064	22	1,042
Kwahu West Municipal	58	601	659	12	647
Kwahu South	85	794	879	12	867
Kwahu East	138	854	992	19	973
Kwahu Afram Plains North	92	363	455	16	439
Upper West Akyem	62	600	662	11	651
Akwapim South	61	296	357	7	350
Ayensuano	49	684	733	10	723
Denkyembuor	53	390	443	8	435
Kwahu Afram Plains South	60	479	539	4	535

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.3.2 Migration

Migration refers to change in usual place of residence. A migrant is therefore defined as a person whose usual place of residence is different from his/her place of birth or previous residence. The importance of measuring migration lies in its impact on the population size, structure and distribution in the District. The selectivity of the migration process in terms of age, sex, education and other socio-demographic characteristics can have significant impact on the overall social and economic development of the District.

The 2010 PHC collected data on birthplace and place of enumeration by duration of residence which are used to assess migratory movements in the District. As shown in Table 2.6, there are 29,238 migrants in the District out of which 16,810 persons were born elsewhere in Eastern Region, 11,759 persons were born elsewhere in another region and the remaining 669 born outside Ghana.

For migrants born elsewhere in another region the largest number moved to the District from the Ashanti Region (2,846), followed by Central Region (1,970), Volta Region (1,823), and

Greater Accra Region (1,482). The least number of migrants moved from Upper West Region (359).

With regards to the duration of stay, about 12 percent of migrants had lived in the District for less than one year, 30.1 percent had lived in the District between one to 4 years, 17.3 percent between 5 to 9 years and together, 40 percent for over ten years.

Table 2.6: Birthplace by duration of residence of migrants

Birthplace	Migrants		Duration of residence (Percent)				
	Total	Percent	Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years
Total	29,238	100.0	12.5	30.1	17.3	17.6	22.4
Different locality in this region	16,810	100.0	12.0	27.9	16.3	18.7	25.1
Western	985	100.0	12.8	42.5	22.9	14.1	7.6
Central	1,970	100.0	12.9	29.6	16.9	17.8	22.8
Greater Accra	1,482	100.0	14.5	36.3	19.8	12.9	16.5
Volta	1,823	100.0	10.1	27.4	18.3	19.1	25.1
Eastern	0	0.0	0.0	0.0	0.0	0.0	0.0
Ashanti	2,846	100.0	13.9	31.6	18.7	16.2	19.6
Brong Ahafo	735	100.0	14.4	37.0	19.0	18.0	11.6
Northern	866	100.0	11.7	28.6	19.3	19.3	21.1
Upper East	693	100.0	13.3	38.0	18.3	16.9	13.6
Upper West	359	100.0	15.6	49.9	15.6	8.1	10.9
Outside Ghana	669	100.0	19.0	32.6	16.1	11.4	20.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER THREE

SOCIAL CHARACTERISTICS

3.1 Introduction

The social characteristics of the population in the District is critical for planning social services such as education, housing, health care, and social welfare. The objective of this chapter is to provide analysis of the social characteristics of the population which includes the household size, composition and headship, marital status, nationality, religious affiliation, literacy and education.

3.2 Household Size, Composition, and Structure

A household is defined as “a person or a group of persons, who live together in the same house or compound, share the same house-keeping arrangements and recognize one person as the head of household”. A household may include a man, his wife, children, other relatives, and non-relatives living with them. Visitors who spent the census night with the household were also enumerated (GSS, 2012).

3.2.1 Household Size

The household is the basic unit for demographic and economic analyses. Household size refers to the total number of persons in a household irrespective of age, sex, or relationship status. Table 3.1 presents the household size of the District by locality of residence. There are 18,511 households in the District of which 71.8 percent (13,291) reside in rural areas with the rest in urban settlements. The average household size for the District is almost the same as that of the region. While the average household size is slightly higher in rural areas, the number of household per house is lower in rural areas compared to urban areas.

Table 3.1: Household size by locality of residence

Categories	Region	District	Urban	Rural
Total household population	2,574,549	77,572	20,684	56,888
Number of households	632,045	18,511	5,220	13,291
Average households per house	1.5	1.2	1.4	1.1
Average household size	4.1	4.2	4.0	4.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.2 Household Composition

A household may be composed of one or more of the following: head, spouse, child or children, parents/parents in law, step child, other relatives or non- relatives. Table 3.2 shows household population by composition and sex. In total, there are 77,572 persons living in households in the District comprising 38,863 males and 38,709 females. The Table identifies four major types of household composition in the District, namely household heads (23.9%), spouses (11.2%), children (42.5%) and grandchildren (10.2%).

The proportions of parent/parent-in-law, step children, son/daughter-in-law and adopted/foster children are substantially low (0.7%, 0.7%, 0.7%, 0.3% respectively).

For the sexes, a higher percentage of males than females are household heads (31.7% and 16.3% respectively) and there are more females than males who are spouses in the household (20.4% and 2.0% respectively). The proportions of parent/parent-in-law and son/daughter-in-law are also higher in female-headed households (1.2% and 1.0% respectively) than male headed households (0.3% and 0.5% respectively).

Table 3.2: Household composition by sex

Household composition	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	77,572	100.0	38,863	100.0	38,709	100.0
Head	18,511	23.9	12,316	31.7	6,195	16.0
Spouse (wife/husband)	8,665	11.2	756	2.0	7,909	20.4
Child (son/daughter)	32,988	42.5	17,057	43.9	15,931	41.2
Parent/Parent in-law	574	0.7	98	0.3	476	1.2
Son/Daughter in-law	554	0.7	176	0.5	378	1.0
Grandchild	7,896	10.2	4,016	10.3	3,880	10.0
Brother/Sister	2,563	3.3	1,473	3.8	1,090	2.8
Step child	513	0.7	249	0.6	264	0.7
Adopted/Foster child	214	0.3	90	0.2	124	0.3
Other relative	3,662	4.7	1,757	4.5	1,905	4.9
Non-relative	1,432	1.9	875	2.3	557	1.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.3 Household Structure

Household structure presented in this section is defined as the classification of persons in the households and the type of relationship among household members who were present on census night. This social classification determines whether one falls in a nuclear or extended family. Table 3.2 shows that the extended family system is revered and widely practiced in the District with 61 percent of all household members constituting different compositions of this system, while 31 percent constitutes nuclear families.

More than twice as many males (6.7%) single member households are found in the District than females (2.7%) single person households. The data further reveals that one-quarter (32.3%) of the household population live in nuclear families of father, mother and children, while one in ten (10.0%) are in single parent nuclear families (parent and children only). A small proportion of couples live without any children in their household (1.9%) among the nuclear families.

The table further shows that a greater proportion of the extended family households are single parents residing with other relatives (15.5%), with more females (17.7%) in this family structure than males (13.2%).

Table 3.3: Household population by structure and sex

Household structure	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	77,572	100.0	38,863	100.0	38,709	100.0
Nuclear Family	30,088	39.0	16,302	42.0	13,786	36.0
Head only	3,617	4.7	2,588	6.7	1,029	2.7
Head and a spouse only	1,452	1.9	721	1.9	731	1.9
Nuclear (Head spouse(s) children)	25,019	32.3	12,993	33.4	12,026	31.1
Extended Family	47,484	61.0	22,561	58.0	24,923	64.0
Extended (Head spouse(s) children Head's relatives)	15,456	19.9	7,708	19.8	7,748	20.0
Extended + non relatives	1,703	2.2	907	2.3	796	2.1
Head spouse(s) and other composition	3,498	4.5	1,866	4.8	1,632	4.2
Single parent Nuclear	7,775	10.0	3,359	8.6	4,416	11.4
Single parent Extended	11,990	15.5	5,127	13.2	6,863	17.7
Single parent Extended + non relative	1,196	1.5	538	1.4	658	1.7
Head and other composition but no spouse	5,866	7.6	3,056	7.9	2,810	7.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3 Marital Status

Marriage may be defined as a social institution which establishes the legitimacy of children, (Gough, 1959). Marriage defined this way, thus, serves as a tool for procreation, mutual support and companionship. Marriage in Ghana includes both formal and informal unions. Formal unions are those sanctioned by law under the ordinance, by tradition/customary law, and by religion. Informal unions are cohabiting unions recognized in Ghana but not sanctioned by law, tradition or religion (Gaisie, 1976; Aryee, 1975).

3.3.2 Marital Status by age and sex

The distribution of marital status by age and sex is presented in Table 3.4. It is observed that similar proportion of males and females reported as being married (42.1% and 42.3% respectively). However, more females than males are widowed (8.6% and 1.6% respectively), divorced (6.2% and 3.6% respectively) and separated (3.0% and 1.8% respectively).

The data on marital status among the age groups reveals that the age group 12-14 years has the highest percentage of the population never married (95.0%), followed by the age group 15-19 years (89.1%). The age group 50-55 and 60 years and older both recorded the least proportion of the never married (2.4%). Generally, the proportion of the married increases with age up to age 30-39 years and begins to decline at the older ages. On the other hand, the proportions of the divorced and widowed are substantially higher at the older ages (55 years and older) and more common among females than males. For example, about 55 percent of females aged 65 years and older are widowed compared to 13.1 percent of their male counterparts.

Table 3.4: Marital status of population 12 years and older by sex and age

Sex/Age-group	Number	Total	Never married	Informal/ Consensual union/Living together	Married	Separated	Divorced	Widowed
Both Sexes								
Total	53,106	100.0	37.0	8.4	42.2	2.4	4.9	5.1
12-14	5,650	100.0	95.0	0.9	4.1	0.0	0.0	0.0
15 - 19	8,073	100.0	89.1	4.4	5.8	0.5	0.2	0.1
20 - 24	6,233	100.0	58.5	15.6	22.9	1.7	1.0	0.2
25 - 29	5,943	100.0	31.1	16.7	46.6	2.5	2.6	0.5
30 - 34	4,817	100.0	14.5	13.6	62.6	3.1	5.1	1.1
35 - 39	4,270	100.0	7.2	10.8	69.8	4.3	6.0	1.8
40 - 44	3,926	100.0	4.2	8.2	71.8	3.6	9.2	3.1
45 - 49	3,460	100.0	3.8	7.9	71.2	3.5	8.7	4.8
50 - 54	3,045	100.0	2.4	4.8	71.0	3.4	9.2	9.1
55 - 59	1,973	100.0	2.6	3.5	66.4	3.4	12.3	11.7
60 - 64	1,676	100.0	2.7	2.9	61.5	4.1	12.2	16.6
65+	4,040	100.0	2.4	2.3	43.3	3.4	12.1	36.5
Male								
Total	26,343	100.0	43.5	7.4	42.1	1.8	3.6	1.6
12-14	2,963	100.0	95.7	0.8	3.5	0.0	0.0	0.0
15 - 19	4,129	100.0	95.2	1.4	3.2	0.1	0.0	0.0
20 - 24	2,933	100.0	77.5	9.8	11.6	0.8	0.4	0.0
25 - 29	2,830	100.0	46.3	15.8	35.4	1.1	1.3	0.2
30 - 34	2,443	100.0	20.2	14.6	59.3	2.0	3.4	0.5
35 - 39	2,109	100.0	11.4	10.6	69.7	3.4	4.4	0.4
40 - 44	1,966	100.0	6.0	8.9	73.8	3.4	7.2	0.8
45 - 49	1,779	100.0	5.6	8.4	74.0	3.4	7.0	1.5
50 - 54	1,487	100.0	3.8	6.2	78.2	2.6	6.9	2.3
55 - 59	1,027	100.0	3.3	4.5	76.7	3.7	8.1	3.7
60 - 64	901	100.0	4.2	3.7	75.1	3.1	9.3	4.6
65+	1,776	100.0	2.6	3.2	67.7	3.4	10.0	13.1
Female								
Total	26,763	100.0	30.5	9.3	42.3	3.0	6.2	8.6
12-14	2,687	100.0	94.3	1.1	4.7	0.0	0.0	0.0
15 - 19	3,944	100.0	82.7	7.4	8.4	0.9	0.3	0.2
20 - 24	3,300	100.0	41.7	20.8	32.9	2.6	1.6	0.4
25 - 29	3,113	100.0	17.3	17.6	56.9	3.8	3.8	0.7
30 - 34	2,374	100.0	8.6	12.6	65.9	4.3	6.8	1.8
35 - 39	2,161	100.0	3.1	11.1	70.0	5.1	7.6	3.1
40 - 44	1,960	100.0	2.3	7.5	69.7	3.8	11.2	5.4
45 - 49	1,681	100.0	1.8	7.4	68.2	3.6	10.5	8.4
50 - 54	1,558	100.0	1.2	3.5	64.2	4.2	11.4	15.6
55 - 59	946	100.0	1.9	2.4	55.3	3.2	16.9	20.3
60 - 64	775	100.0	1.0	1.9	45.7	5.3	15.5	30.6
65+	2,264	100.0	2.3	1.6	24.2	3.4	13.6	54.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3.3 Marital Status and Education

Table 3.5 presents the marital status of the population 12 years and older in relation to their educational level. The data shows that 75.9 percent of persons who have never been married have basic education and 14.8 percent have secondary education while only 5.4 percent have no education. On the other hand, 15.7 percent and 19.8 percent of those in informal union and

those who are married respectively have never had any education. Furthermore, while 72.2 percent and 63.9 percent of the separated and divorced respectively have basic education, 59 percent of the widowed have no education. The proportion who are never married and have at least secondary education (17.8%) is higher compared to the married with at least secondary education (11.3%).

Among the persons in all the marital status categories, between 52.4 percent and 74.3 percent of males as against 35 percent to 78.2 percent of females have attained basic education. Similarly, between 5.7 percent and 40.9 percent of males compared to five percent to 62.3 percent of females have no education.

Table 3.5: Marital status of Population 12 years and older by sex and level of education

Sex/Marital status	Number	All levels	No Education	Basic ¹	Secondary ²	Vocational/ Technical/ commercial	Post middle/ secondary certificate/ diploma ³
Both Sexes							
Total	53,106	100.0	16.6	69.6	8.9	1.3	2.8
Never married	19,623	100.0	5.4	75.9	14.8	0.8	2.2
Informal/Consensual union/Living together	4,441	100.0	15.7	72.3	8.1	1.2	1.9
Married	22,430	100.0	19.8	67.9	5.9	1.8	3.6
Separated	1,274	100.0	18.9	72.2	3.7	2.0	3.0
Divorced	2,609	100.0	29.6	63.9	2.6	1.8	2.0
Widowed	2,729	100.0	59.0	37.7	1.2	0.7	1.3
Male							
Total	26,343	100.0	10.7	71.2	11.2	1.6	4.0
Never married	11,472	100.0	5.7	74.3	15.5	0.9	2.6
Informal/Consensual union/Living together	1,947	100.0	10.9	71.0	11.8	1.6	3.1
Married	11,099	100.0	13.9	68.7	8.0	2.2	5.5
Separated	471	100.0	11.9	75.4	4.9	2.8	4.7
Divorced	938	100.0	20.8	69.1	3.4	2.7	3.9
Widowed	416	100.0	40.9	52.4	1.7	1.0	4.1
Female							
Total	26,763	100.0	22.4	68.0	6.6	1.1	1.6
Never married	8,151	100.0	5.0	78.2	13.8	0.7	1.7
Informal/Consensual union/Living together	2,494	100.0	19.4	73.2	5.3	0.8	1.0
Married	11,331	100.0	25.6	67.1	3.8	1.4	1.8
Separated	803	100.0	23.0	70.4	3.0	1.6	2.0
Divorced	1,671	100.0	34.5	61.0	2.1	1.4	1.0
Widowed	2,313	100.0	62.3	35.0	1.2	0.7	0.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

¹ Basic: Primary, Middle and JSS/JHS

² Secondary: SSS/SHS and Secondary

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

⁴ Tertiary: Bachelors Degree and Post Graduate or higher

3.3.4 Marital Status and Economic Activity

Table 3.6 presents the marital status of the population 12 years and older by their economic activity status. The data shows that out of the total population 12 years and older, 69.1 percent are economically active while 30.9 percent are economically not active. While 58.9 percent of those who are never married and 36.8 percent of the widowed are economically not active, only 11.2 percent of their married counterparts are economically not active. The divorced and widowed populations are less likely to be unemployed compared with those in the other marital status categories. While more than 80 percent or more of the married, separated, divorced and persons in consensual union are employed, 62.1 percent of the widowed and 38.1 percent of the never married are employed. A similar trend is observed among the male and female populations.

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

Sex/Marital status	Total		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	53,106	100.0	35,373	66.6	1,327	2.5	16,406	30.9
Never married	19,623	100.0	7,473	38.1	589	3.0	11,561	58.9
Informal/Consensual union/Living together	4,441	100.0	3,578	80.6	190	4.3	673	15.2
Married	22,430	100.0	19,478	86.8	440	2.0	2,512	11.2
Separated	1,274	100.0	1,028	80.7	31	2.4	215	16.9
Divorced	2,609	100.0	2,122	81.3	47	1.8	440	16.9
Widowed	2,729	100.0	1,694	62.1	30	1.1	1,005	36.8
Male								
Total	26,343	100.0	18,242	69.2	541	2.1	7,560	28.7
Never married	11,472	100.0	4,887	42.6	352	3.1	6,233	54.3
Informal/Consensual union/Living together	1,947	100.0	1,788	91.8	38	2.0	121	6.2
Married	11,099	100.0	10,127	91.2	137	1.2	835	7.5
Separated	471	100.0	395	83.9	6	1.3	70	14.9
Divorced	938	100.0	793	84.5	8	0.9	137	14.6
Widowed	416	100.0	252	60.6	0	0.0	164	39.4
Female								
Total	26,763	100.0	17,131	64.0	786	2.9	8,846	33.1
Never married	8,151	100.0	2,586	31.7	237	2.9	5,328	65.4
Informal/Consensual union/Living together	2,494	100.0	1,790	71.8	152	6.1	552	22.1
Married	11,331	100.0	9,351	82.5	303	2.7	1,677	14.8
Separated	803	100.0	633	78.8	25	3.1	145	18.1
Divorced	1,671	100.0	1,329	79.5	39	2.3	303	18.1
Widowed	2,313	100.0	1,442	62.3	30	1.3	841	36.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

The data further shows that the highest number of unemployed are in consensual union; 4.3 percent of the male population and 6.1 percent of their female counterparts. A similar pattern is observed among those who reported to be separated.

3.4 Nationality

Table 3.7 shows the distribution of the population by nationality and sex. The data shows that 96 percent of the population in the District are Ghanaian by birth, and another 1.7 percent have dual nationality. About one percent are from ECOWAS countries. Persons from other African countries and other countries constitute less than one percent of the population (0.7%). A similar pattern is observed for the sexes.

Table 3.7: Population by nationality and sex

Nationality	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	78,907	100.0	39,572	100.0	39,335	100.0
Ghanaian by birth	75,760	96.0	37,955	95.9	37,805	96.1
Dual Nationality	1,317	1.7	625	1.6	692	1.8
Ghanaian by naturalization	431	0.5	220	0.6	211	0.5
ECOWAS	903	1.1	508	1.3	395	1.0
Africa other than ECOWAS	298	0.4	153	0.4	145	0.4
Other	198	0.3	111	0.3	87	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.5 Religion

The distribution of the population by religious affiliation and sex as presented in Table 3.8 shows that the majority (83.1%) are Christians, about seven percent are of the Islamic faith, and less than one percent are of traditional religion (0.6%). For both males and females, a higher proportion of Christians are members of the Pentecostal/charismatic churches (31.6% and 35.6% respectively) followed by Protestant churches (23.7% and 25.8%). However, there are more males than females who have no religious affiliation (11.2% and 5.3% respectively).

Table 3.8: Religious affiliation by sex

Religion	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	78,907	100.0	39,572	100.0	39,335	100.0
No Religion	6,504	8.2	4,432	11.2	2,072	5.3
Catholic	8,257	10.5	4,153	10.5	4,104	10.4
Protestant (Anglican, Lutheran etc.)	19,524	24.7	9,370	23.7	10,154	25.8
Pentecostal/Charismatic	26,516	33.6	12,498	31.6	14,018	35.6
Other Christians	11,307	14.3	5,463	13.8	5,844	14.9
Islam	5,414	6.9	2,909	7.4	2,505	6.4
Traditionalist	511	0.6	328	0.8	183	0.5
Other (Specify)	874	1.1	419	1.1	455	1.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6 Literacy and Education

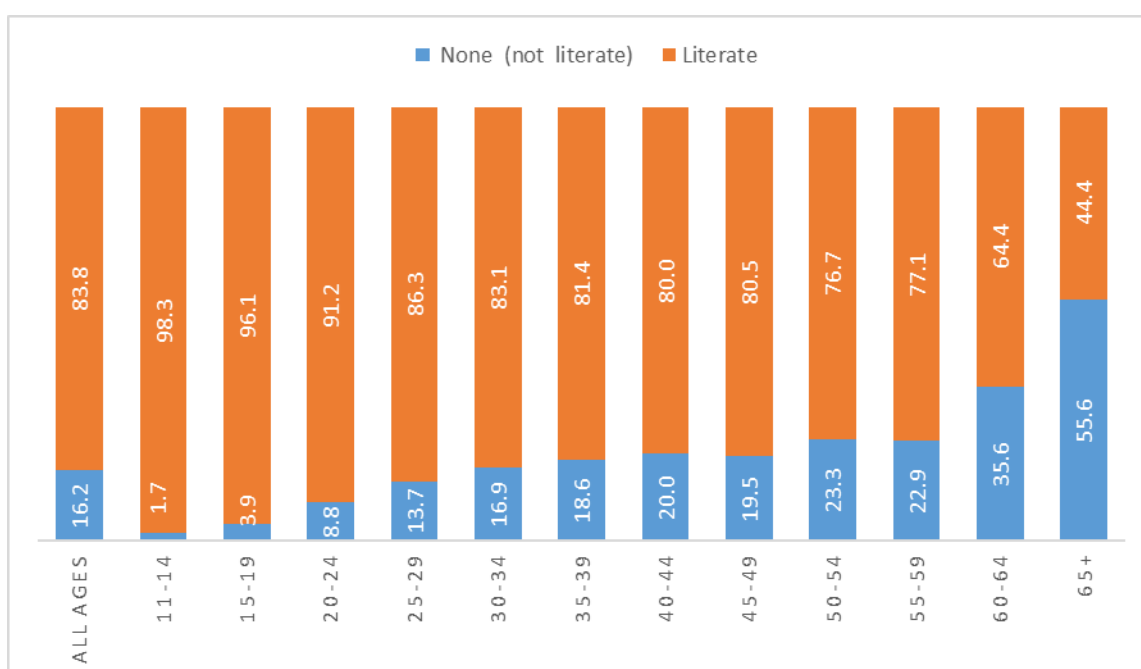
Literacy and education levels of a population are two inseparable components that influence the social outlook of the people in terms of their appreciation and understanding of issues affecting them to a large extent. Literacy is defined as the ability to read and write with understanding. Education and literacy bring enlightenment and transformation and in

summary result in human resource development. This section is on the levels of literacy and education in the district.

3.6.1 Literacy

The 2010 PHC collected information from persons age 11 years and older on literacy in three languages namely Ghanaian languages, English and French. Figure 3.2 shows the distribution of the population 11 years and older by literacy status in the district. Out of a total of 54,852 persons aged 11 years and older in the district, 45,963 or 83.8 percent are literate. This is against a regional average of 81 percent and a national average of 74.1 percent. Literacy is nearly universal among the youth population of the District. The population in the age group 11-24 years have a literacy rate of between 91.2 and 98.3 percent. Except in the older ages of 60 years and beyond, the District have a high literate population where about 75 percent of the population 11 years and older can read and write in one language or the other.

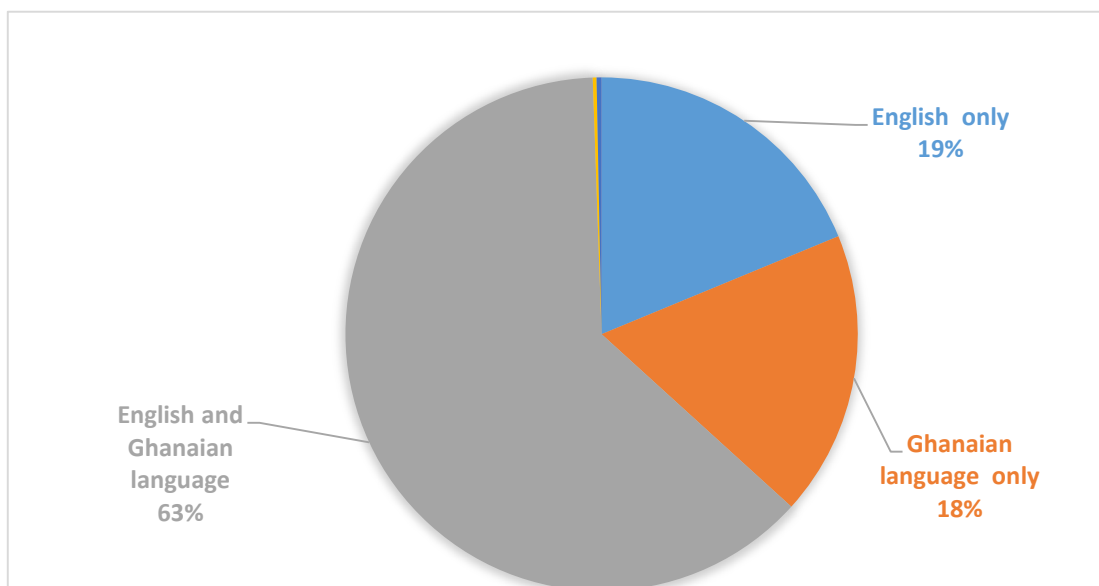
Figure 3.2: Literacy status by age of persons 11 years and older



Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 3.3 presents information on the languages in which the population can read and write. From the data, 18.8 percent of the literate population in the District can read and write in English only. About 18 percent can read and write in a Ghanaian language only, while 63 percent can read and write in both English and a Ghanaian language. Only 0.2 percent are able to read and write in English, French and a Ghanaian language.

Figure 3.3: Language of literacy of persons 11 years and older



Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6.2 Education

Table 3.9 shows the population 3 years and older who are currently attending school and the population who have attended school in the past. The Table shows that 29,017 persons 3 years and older were currently attending school in the District in 2010. Of those who are currently attending school majority (92.1%) are at the basic level of education (nursery, kindergarten, primary, and JHS) and another 6.8 percent are at the Senior High School level. Less than one percent are currently attending school at the tertiary level (0.7%). The proportion currently attending vocational/technical/commercial schools is also substantially low (0.2%). Similar proportions of males and females are currently attending school at the basic and secondary levels of education. However, relatively more males than females are currently attending tertiary institutions (0.9% and 0.6% respectively) although the proportions are substantially low.

From the data, 32,328 persons 3 years and older in the District have attended school in the past. Overall, past school attendance follow a similar pattern as current school attendance; majority (84.7%) of the population 3 years and older have achieved basic education, 6.5 percent have achieved SSS/SHS level of education and three percent have attended tertiary institutions in the past. A higher proportion of females (60.9%) than males (45.0%) have achieved basic education in the past. On the other hand, more males (7.6%) than females (5.2%) have attended SSS/SHS.

Table 3.9: 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	29,017	100.0	15,301	100.0	13,716	100.0	32,328	100.0	16,912	100.0	15,416	100.0
Nursery	1,858	6.4	996	6.5	862	6.3	-	0.0	-	0.0	-	0.0
Kindergarten	5,502	19.0	2,837	18.5	2,665	19.4	-	0.0	-	0.0	-	0.0
Primary	14,169	48.8	7,309	47.8	6,860	50.0	6,347	19.6	2,458	14.5	3,889	25.2
JSS/JHS	5,202	17.9	2,805	18.3	2,397	17.5	10,662	33.0	5,154	30.5	5,508	35.7
Middle	-	0.0	-	0.0	-	-	10,283	31.8	5,903	34.9	4,380	28.4
SSS/SHS	1,970	6.8	1,152	7.5	818	6.0	2,089	6.5	1,292	7.6	797	5.2
Secondary	-	0.0	-	0.0	-	-	682	2.1	518	3.1	164	1.1
Vocational/Technical	54	0.2	29	0.2	25	0.2	655	2.0	393	2.3	262	1.7
Post middle	46	0.2	33	0.2	13	0.1	653	2.0	448	2.6	205	1.3
Tertiary	216	0.7	140	0.9	76	0.6	957	3.0	746	4.4	211	1.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FOUR

ECONOMIC CHARACTERISTICS

4.1 Introduction

The overall socio-economic development of the Birim North District depends on the production of goods and services. Critical to the production process is human capital of the District, specifically the section of the working age or employed population. This chapter examines the economic characteristics of the population with regards to activity status by age and sex, occupation, industry, sector of employment and employment status of the employed population.

4.2 Economic Activity Status

The economic activity status of persons 15 years and older in the District is presented in this section. Table 4.1 presents information on the economic activity status of the population by sex. The data in the table indicates that majority of the population are economically active (75.5%), 24.5 percent are economically not active and 3.7 are unemployed. Of the economically active population a very high proportion are employed (96.3%).

The table further reveals that a higher proportion of males than females are economically active (78.3% and 72.8% respectively) and employed (97.0% and 95.5% respectively). About one in five males and a little over one-fourth of females reported not being economically active. More than half (51.7%) of males and 30.1 percent of females cited full time education as reason for their economically inactive status. Relatively more females than males cited doing home duties (household chores) the other reasons for their economic inactivity (39.3% and 20.6% respectively).

Table 4.1: Activity status of population 15years and older by sex

Activity status	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	47,456	100.0	23,380	100.0	24,076	100.0
Economically active	35,824	75.5	18,296	78.3	17,528	72.8
Employed	34,500	96.3	17,756	97.0	16,744	95.5
<i>Worked</i>	33,133	96.0	17,255	97.2	15,878	94.8
<i>Did not work but had job to go back to</i>	1,211	3.5	431	2.4	780	4.7
<i>Did voluntary work without pay</i>	156	0.5	70	0.4	86	0.5
Unemployed	1,324	3.7	540	3.0	784	4.5
<i>Worked before, seeking work and available</i>	514	38.8	181	33.5	333	42.5
<i>Seeking work for the first time and available</i>	810	61.2	359	66.5	451	57.5
Economically not active	11,632	24.5	5,084	21.7	6,548	27.2
<i>Did home duties (household chore)</i>	3,622	31.1	1,049	20.6	2,573	39.3
<i>Full time education</i>	4,600	39.5	2,627	51.7	1,973	30.1
<i>Pensioner/Retired</i>	188	1.6	131	2.6	57	0.9
<i>Disabled/Sick</i>	862	7.4	385	7.6	477	7.3
<i>Too old/young</i>	1,456	12.5	468	9.2	988	15.1
<i>Other</i>	904	7.8	424	8.3	480	7.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 4.2 shows the activity status of the population 15 years and older by sex and age. For all the age groups, about 72.7 percent of the population are employed, 2.8 percent are unemployed and the economically not active constitutes 24.5 percent. The data shows a gradual rise from 28 percent at age 15-19 years for the employed, and then peaks at 93.1 percent at age 45-49 years. It then decreases gradually from age 50-54 until it reaches age 65 years and older.

Between age 15-19 years, the proportion of the economically not active is 68.7 percent. This may be due to the fact that this group of people are expected to be in school. This proportion decreases sharply from 68.7 percent at age 15-19 to as low as 5.8 percent at age 45-49 years. The data by males and females show similar patterns. Male-female differentials show that for all the age groups, there are slightly more males who are employed (75.9%) than females (69.5%).

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

Sex/Age group	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	47,456	100.0	34,500	72.7	1,324	2.8	11,632	24.5
15-19	8,073	100.0	2,257	28.0	268	3.3	5,548	68.7
20-24	6,233	100.0	3,929	63.0	396	6.4	1,908	30.6
25-29	5,943	100.0	4,889	82.3	262	4.4	792	13.3
30-34	4,817	100.0	4,262	88.5	124	2.6	431	8.9
35-39	4,270	100.0	3,847	90.1	86	2.0	337	7.9
40-44	3,926	100.0	3,640	92.7	51	1.3	235	6.0
45-49	3,460	100.0	3,222	93.1	38	1.1	200	5.8
50-54	3,045	100.0	2,804	92.1	23	0.8	218	7.2
55-59	1,973	100.0	1,798	91.1	15	0.8	160	8.1
60-64	1,676	100.0	1,378	82.2	38	2.3	260	15.5
65+	4,040	100.0	2,474	61.2	23	0.6	1,543	38.2
Male								
Total	23,380	100.0	17,756	75.9	540	2.3	5,084	21.7
15-19	4,129	100.0	1,202	29.1	97	2.3	2,830	68.5
20-24	2,933	100.0	1,922	65.5	166	5.7	845	28.8
25-29	2,830	100.0	2,457	86.8	102	3.6	271	9.6
30-34	2,443	100.0	2,257	92.4	57	2.3	129	5.3
35-39	2,109	100.0	1,970	93.4	35	1.7	104	4.9
40-44	1,966	100.0	1,870	95.1	22	1.1	74	3.8
45-49	1,779	100.0	1,672	94.0	16	0.9	91	5.1
50-54	1,487	100.0	1,410	94.8	6	0.4	71	4.8
55-59	1,027	100.0	980	95.4	4	0.4	43	4.2
60-64	901	100.0	754	83.7	26	2.9	121	13.4
65+	1,776	100.0	1,262	71.1	9	0.5	505	28.4
Female								
Total	24,076	100.0	16,744	69.5	784	3.3	6,548	27.2
15-19	3,944	100.0	1,055	26.7	171	4.3	2,718	68.9
20-24	3,300	100.0	2,007	60.8	230	7.0	1,063	32.2
25-29	3,113	100.0	2,432	78.1	160	5.1	521	16.7
30-34	2,374	100.0	2,005	84.5	67	2.8	302	12.7
35-39	2,161	100.0	1,877	86.9	51	2.4	233	10.8
40-44	1,960	100.0	1,770	90.3	29	1.5	161	8.2
45-49	1,681	100.0	1,550	92.2	22	1.3	109	6.5
50-54	1,558	100.0	1,394	89.5	17	1.1	147	9.4
55-59	946	100.0	818	86.5	11	1.2	117	12.4
60-64	775	100.0	624	80.5	12	1.5	139	17.9
65+	2,264	100.0	1,212	53.5	14	0.6	1,038	45.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.3 Occupation

Occupation refers to the type of work the person was engaged in at the establishment where he/she worked at the time of the census. Table 4.3 presents the employed population 15 years and older by occupation and sex. According to the table, more than half (52.0%) of workers in the District are engaged as skilled agricultural, forestry, and fisheries workers, followed by service and sales workers (14.1%) and craft and related trade workers (12.8%). The occupation that accounted for the lowest proportion of employed persons is clerical support workers (0.5%). For the sexes, males dominate in the agricultural, forestry and fisheries occupations (56.2% and 47.5% respectively), whereas females dominate in the service and sales occupations (23.9% and 4.9% respectively).

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	34,500	100.0	17,756	100.0	16,744	100.00
Managers	559	1.6	226	1.3	333	2.00
Professionals	1,363	4.0	847	4.8	516	3.10
Technicians and associate professionals	463	1.3	346	1.9	117	0.70
Clerical support workers	172	0.5	116	0.7	56	0.30
Service and sales workers	4,862	14.1	864	4.9	3,998	23.90
Skilled agricultural forestry and fishery workers	17,929	52.0	9,980	56.2	7,949	47.50
Craft and related trades workers	4,400	12.8	2,000	11.3	2,400	14.30
Plant and machine operators and assemblers	3,259	9.4	2,806	15.8	453	2.70
Elementary occupations	1,489	4.3	567	3.2	922	5.50
Other occupations	4	0.0	4	0.0	0	0.00

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.4 Industry

Table 4.4 presents the employed population 15 years and older by industry and sex. The table indicates that skilled agriculture, forestry and fishing industry constitute the largest industry in the District employing more than half (53.2%) of the workforce. The other major employing industry is wholesale and retail; repair of motor vehicles and motorcycles (11.4%). Among the industries employing less than one percent of the workforce include electricity gas stream and air conditioning supply, water supply; sewerage waste management and remediation activities, information and communication, financial and insurance activities and so on. For both sexes, more males are employed in skilled agriculture, forestry and the fishing industry (58.2% and 47.8% respectively), while more females than males are employed in the following industries; manufacturing (11.4% and 6.4% respectively) and wholesale and retail (17.4% against 5.8%).

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

Industry	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	34,500	100.0	17,756	100.0	16,744	100.0
Agriculture forestry and fishing	18,350	53.2	10,337	58.2	8,013	47.9
Mining and quarrying	2,306	6.7	1,908	10.7	398	2.4
Manufacturing	3,040	8.8	1,138	6.4	1,902	11.4
Electricity gas steam and air conditioning supply	21	0.1	16	0.1	5	0.0
Water supply; sewerage waste management and remediation activities	28	0.1	14	0.1	14	0.1
Construction	657	1.9	643	3.6	14	0.1
Wholesale and retail; repair of motor vehicles and motorcycles	3,938	11.4	1,030	5.8	2,908	17.4
Transportation and storage	698	2.0	655	3.7	43	0.3
Accommodation and food service activities	1,872	5.4	173	1.0	1,699	10.1
Information and communication	35	0.1	30	0.2	5	0.0
Financial and insurance activities	116	0.3	95	0.5	21	0.1
Real estate activities	0	0.0	0	0.0	0	0.0
Professional scientific and technical activities	266	0.8	164	0.9	102	0.6
Administrative and support service activities	280	0.8	217	1.2	63	0.4
Public administration and defense; compulsory social security	256	0.7	192	1.1	64	0.4
Education	1,067	3.1	654	3.7	413	2.5
Human health and social work activities	203	0.6	91	0.5	112	0.7
Arts entertainment and recreation	81	0.2	63	0.4	18	0.1
Other service activities	1,084	3.1	261	1.5	823	4.9
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	202	0.6	75	0.4	127	0.8
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 presents the employed population 15 years and older by employment status and sex. The data shows that 64.7 percent of the workforce in the District are self-employed without employee(s), followed by employees (14.5%). Less than one percent of the employed population are domestic workers/house helps (0.5%).

The data further reveals that majority (63.9%) of the male workforce are self-employed without employees and 18.6 percent are employees. For the females, the corresponding figures are 65.6 percent and 7.7 percent respectively. Thus females are more likely to be self-employed without employees than males in the District and they are also more likely to be contributing family workers (19.5% and 9.8% respectively).

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

Employment Status	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	34,500	100.0	17,756	100.0	16,744	100.0
Employee	4,575	13.3	3,294	18.6	1,281	7.7
Self-employed without employee(s)	22,324	64.7	11,340	63.9	10,984	65.6
Self-employed with employee(s)	1,108	3.2	603	3.4	505	3.0
Casual worker	590	1.7	401	2.3	189	1.1
Contributing family worker	5,006	14.5	1,736	9.8	3,270	19.5
Apprentice	677	2.0	280	1.6	397	2.4
Domestic employee (House-help)	167	0.5	78	0.4	89	0.5
Other	53	0.2	24	0.1	29	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.6 Employment Sector

This section examines the sector of employment for the workforce in the Birim North District. Table 4.6 shows the distribution of the employed population by sector of employment. The Table shows that the informal private sector is the largest employer of the economically active persons in the District (90.4%), followed by the public (government) sector (5.2%) and private formal sector (4.1%). Very small proportions of employees are engaged by semi-public/parastatal (0.1%) and NGOs (0.2%). For both sexes, the data indicates that relatively more females (94.5%) than males (86.5%) are engaged in the private informal sector, whereas males dominate in the private formal sector and all the other sectors

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	34,500	100.0	17,756	100.0	16,744	100.0
Public (Government)	1,794	5.2	1,237	7.0	557	3.3
Private Formal	1,417	4.1	1,079	6.1	338	2.0
Private Informal	31,182	90.4	15,367	86.5	15,815	94.5
Semi-Public/Parastatal	27	0.1	19	0.1	8	0.0
NGOs (Local and International)	57	0.2	33	0.2	24	0.1
Other International Organizations	23	0.1	21	0.1	2	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FIVE

INFORMATION COMMUNICATION TECHNOLOGY

5.1 Introduction

Information Communication Technology (ICT) refers to the use of computers and other accessories to capture, process, analyze and interpret data and disseminate information as well as provide feedback to both the sender and recipient. Access to ICT has now been recognized as important for sustainable development worldwide. This chapter examines access to mobile phones, internet facility usage and ownership of desktop/laptop computers by individuals.

5.2 Ownership of Mobile Phones

Persons 12 years and older who own mobile phones and their usage of the internet by sex is shown in Table 5.1. There are 53,106 persons of this age cohort in the District. Slightly over four in ten (42.3%) of this population have mobile phones. There is a slight disparity between mobile phone ownership in the District by sex distribution. As shown in the Table, close to one-half (49.1%) of males compared to a little over one-third of females own mobile phones.

5.3 Use of Internet

The 2010 PHC recorded 2.9 percent users of internet facility out of 53,106 persons 12 years and older in the District. This indicates that slightly less than three percent of this population has access to the internet. In terms of sex distribution, the situation is not different with regards to access to internet compared to mobile phone usage. The situation however worsened, as the proportion of males (4.1%) increased and females dipped to 1.6 percent.

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	53,106	100.0	22,451	42.3	1,518	2.9
Male	26,343	100.0	12,935	49.1	1,083	4.1
Female	26,763	100.0	9,516	35.6	435	1.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.4 Households ownership of Desktop or Laptop computers

Household ownership of desktop or laptop computer is presented in this section. The data in Table 5.2 shows that only 3.8 percent of households in the District have either a desktop or laptop computers. Slightly more male-headed households have access to desktop or laptop computers than males. The proportion owned by males is 4.3 percent compared to 2.7 percent of females.

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

Sex	Households		Households having desktop/laptop computers	
	Number	Percent	Number	Percent
Total	18,511	100.0	703	3.8
Male	12,316	100.0	535	4.3
Female	6,195	100.0	168	2.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SIX

DISABILITY

6.1 Introduction

Persons with disabilities (PWD) have been defined as those who are unable to or are restricted in the performance of specific tasks/activities due to loss of function of some part of the body as a result of impairment or malformation. The prevention of disability and care of people with disability (PWDs) as productive citizens is an important aspect of national development. The government of Ghana has enacted the Disability Act to address issues of high poverty among PWDs due to low levels of education and lack of employable skills; inaccessible public transport; and unfriendly environmental facilities such as pedestrian walkways for PWDs and uncovered drains/gutters. The chapter examines disability in the district with respect to the number, sex, locality of residence, and activity status of PWDs.

6.2 Population with Disability

Table 6.1 shows data on persons with disability and sex. The data shows that, there are 3,067 persons with some form of disability, representing 3.9 percent of the total population. The data also shows that more males (4.0%) than females (3.8%) have some form of disability.

6.3 Type of disability

Table 6.1 shows the six common forms of disability that were reported by the population of the District. They include emotions, sight, intellect, physical, speech and hearing. The highest form of disability among the population is sight disability (39.6%) while disability in terms of speech is the least common type forming slightly over one-tenth (12.0%) of the disability population. It is important to note that there can be multiple PWDs in the District.

Sight disability dominates both males (36.8%) and females (42.6%) PWDs with emotional disability forming the least proportion among males. Speech disability on the other hand, is the least form of disability among females.

6.4 Distribution by type of locality

The distribution of PWDs by locality of residence in Table 6.1 shows that the type of disability varies in the rural and urban populations of the District. On the whole, the proportion of the total population with disability is higher in the urban population than the rural population (4.5% and 3.7% respectively). It is observed from the data that “other” form of PWDs constitute the highest proportion of persons with disability in urban areas (37.4%), whereas the commonest type of disability in rural areas is sight (44.6%). With the exception of emotional challenges, all the other types of disability are more prevalent in the rural areas than in urban areas.

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

Disability Type	Both sexes		Male		Female	
	Number	Percent	Number	percent	Number	percent
Total	78,907	100.0	39,572	100.0	39,335	100.0
Without disability	75,840	96.1	38,008	96.0	37,832	96.2
With disability	3,067	3.9	1,564	4.0	1,503	3.8
Sight	1,215	39.6	575	36.8	640	42.6
Hearing	422	13.8	211	13.5	211	14.0
Speech	367	12.0	222	14.2	145	9.6
Physical	706	23.0	391	25.0	315	21.0
Intellect	381	12.4	208	13.3	173	11.5
Emotion	386	12.6	202	12.9	184	12.2
Other	544	17.7	273	17.5	271	18.0
Urban						
Total	21,166	100.0	10,451	100.0	10,715	100.0
Without disability	20,214	95.5	9,964	95.3	10,250	95.7
With disability	952	4.5	487	4.7	465	4.3
Sight	271	28.5	118	24.2	153	32.9
Hearing	88	9.2	45	9.2	43	9.2
Speech	96	10.1	60	12.3	36	7.7
Physical	143	15.0	88	18.1	55	11.8
Intellect	94	9.9	53	10.9	41	8.8
Emotion	147	15.4	84	17.2	63	13.5
Other	356	37.4	171	35.1	185	39.8
Rural						
Total	57,741	100.0	29,121	100.0	28,620	100.0
Without disability	55,626	96.3	28,044	96.3	27,582	96.4
With disability	2,115	3.7	1,077	3.7	1,038	3.6
Sight	944	44.6	457	42.4	487	46.9
Hearing	334	15.8	166	15.4	168	16.2
Speech	271	12.8	162	15.0	109	10.5
Physical	563	26.6	303	28.1	260	25.0
Intellect	287	13.6	155	14.4	132	12.7
Emotion	239	11.3	118	11.0	121	11.7
Other	188	8.9	102	9.5	86	8.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.5 Disability and Economic Activity

Table 6.2 shows the distribution of persons 15 years and older with disability by economic activity status and sex in the District. The District has a PWD population of 2,495, out of which 60.9 percent of them are employed and 1.6 percent are unemployed. The rest, 37.5 percent are economically not active. PWDs with hearing disability has majority of its population being employed (66.7%) while a lot more of PWDs with intellectual disability are economically not active (50.8%). There are more males with sight disability among PWDs who are employed (70.4%) than their female counterparts (57.4%) and likewise for hearing disability.

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

Sex/Disability type	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	47,456	100.0	34,500	72.7	1,324	2.8	11,632	24.5
No disability	44,961	100.0	32,981	73.4	1,284	2.9	10,696	23.8
With a disability	2,495	100.0	1,519	60.9	40	1.6	936	37.5
Sight	1,071	100.0	680	63.5	10	0.9	381	35.6
Hearing	324	100.0	216	66.7	6	1.9	102	31.5
Speech	247	100.0	137	55.5	8	3.2	102	41.3
Physical	616	100.0	296	48.1	11	1.8	309	50.2
Intellectual	321	100.0	151	47.0	7	2.2	163	50.8
Emotional	337	100.0	201	59.6	8	2.4	128	38.0
Other	370	100.0	224	60.5	22	5.9	124	33.5
Male								
Total	23,380	100.0	17,756	75.9	540	2.3	5,084	21.7
No disability	22,131	100.0	16,942	76.6	528	2.4	4,661	21.1
With a disability	1,249	100.0	814	65.2	12	1.0	423	33.9
Sight	503	100.0	354	70.4	2	0.4	147	29.2
Hearing	154	100.0	108	70.1	2	1.3	44	28.6
Speech	142	100.0	77	54.2	2	1.4	63	44.4
Physical	326	100.0	175	53.7	3	0.9	148	45.4
Intellectual	170	100.0	78	45.9	2	1.2	90	52.9
Emotional	166	100.0	100	60.2	4	2.4	62	37.3
Other	187	100.0	118	63.1	7	3.7	62	33.2
Female								
Total	24,076	100.0	16,744	69.5	784	3.3	6,548	27.2
No disability	22,830	100.0	16,039	70.3	756	3.3	6,035	26.4
With a disability	1,246	100.0	705	56.6	28	2.2	513	41.2
Sight	568	100.0	326	57.4	8	1.4	234	41.2
Hearing	170	100.0	108	63.5	4	2.4	58	34.1
Speech	105	100.0	60	57.1	6	5.7	39	37.1
Physical	290	100.0	121	41.7	8	2.8	161	55.5
Intellectual	151	100.0	73	48.3	5	3.3	73	48.3
Emotional	171	100.0	101	59.1	4	2.3	66	38.6
Other	183	100.0	106	57.9	15	8.2	62	33.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.6 Disability, Education and Literacy

Education is not only one of the most important socio-economic factors that is known to significantly influence individual behavior and attitudes, but educational attainment is a fundamental indicator of a country's level of human capital development.

With reference to the data in Table 6.3, there are 2,942 PWDs who are 3 years and older in the District. From this number, nearly one-thirds (30.1%) have never attended school. Among PWDs, the highest educational level attained is Basic School defined to include Primary, Middle/JSS/JHS and it accounts for 56.6 percent of all PWDs in the District. The lowest proportion in the educational levels attained by PWDs in the District is Pre-Primary which accounts for 4.2 percent. Among the various types of PWDs who have never attended school,

sight and physical disabilities recorded 387 and 246 persons respectively being the highest numbers. Persons with sight disability recorded the highest number of all PWDs who attained Basic education (650 persons).

Among the male PWDs in the District, about 21.2 percent have never attended school while females on the other hand are 39.4 percent. A higher proportion of males than females of all PWDs in the District attained Basic level of education (60.8% and 52.2% respectively) compared to 13 percent of males and 4.8 percent of females who attained Senior High or Higher education (Table 6.3). More males with emotional disability are more likely to attain Basic education than females (66.2 percent and 55.5 percent respectively). In a similar vein, more males with physical disability are more likely to attain Senior High/Higher level of education than females (11.1 percent and 2.6 percent respectively).

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

Sex/Disability type	Total		Never attended		Pre-Prim		Basic		Sec/SHS and higher	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	72,038	100.0	10,693	14.8	7,360	10.2	46,663	64.8	7,322	10.2
No disability	69,096	100.0	9,806	14.2	7,235	10.5	44,998	65.1	7,057	10.2
With a disability	2,942	100.0	887	30.1	125	4.2	1,665	56.6	265	9.0
Sight	1,190	100.0	387	32.5	29	2.4	650	54.6	124	10.4
Hearing	404	100.0	171	42.3	9	2.2	198	49.0	26	6.4
Speech	331	100.0	136	41.1	22	6.6	157	47.4	16	4.8
Physical	689	100.0	246	35.7	13	1.9	380	55.2	50	7.3
Intellectual	363	100.0	149	41.0	7	1.9	182	50.1	25	6.9
Emotional	377	100.0	102	27.1	9	2.4	230	61.0	36	9.5
Other	499	100.0	88	17.6	56	11.2	308	61.7	47	9.4
Male										
Total	36,008	100.0	3,795	10.5	3,833	10.6	23,629	65.6	4,751	13.2
No disability	34,511	100.0	3,478	10.1	3,758	10.9	22,719	65.8	4,556	13.2
With a disability	1,497	100.0	317	21.2	75	5.0	910	60.8	195	13.0
Sight	562	100.0	114	20.3	15	2.7	347	61.7	86	15.3
Hearing	197	100.0	61	31.0	5	2.5	109	55.3	22	11.2
Speech	200	100.0	64	32.0	18	9.0	104	52.0	14	7.0
Physical	378	100.0	99	26.2	12	3.2	225	59.5	42	11.1
Intellectual	196	100.0	69	35.2	4	2.0	101	51.5	22	11.2
Emotional	195	100.0	35	17.9	7	3.6	129	66.2	24	12.3
Other	252	100.0	26	10.3	30	11.9	165	65.5	31	12.3
Female										
Total	36,030	100.0	6,898	19.1	3,527	9.8	23,034	63.9	2,571	7.1
No disability	34,585	100.0	6,328	18.3	3,477	10.1	22,279	64.4	2,501	7.2
With a disability	1,445	100.0	570	39.4	50	3.5	755	52.2	70	4.8
Sight	628	100.0	273	43.5	14	2.2	303	48.2	38	6.1
Hearing	207	100.0	110	53.1	4	1.9	89	43.0	4	1.9
Speech	131	100.0	72	55.0	4	3.1	53	40.5	2	1.5
Physical	311	100.0	147	47.3	1	0.3	155	49.8	8	2.6
Intellectual	167	100.0	80	47.9	3	1.8	81	48.5	3	1.8
Emotional	182	100.0	67	36.8	2	1.1	101	55.5	12	6.6
Other	247	100.0	62	25.1	26	10.5	143	57.9	16	6.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SEVEN

AGRICULTURAL ACTIVITIES

7.1 Introduction

Agriculture plays a vital role in the socio-economic development of the Birim North District. The District is mainly rural and its economy is dominated by the agricultural sector, which employs majority of the population. The aim of this chapter is to present analysis of data on the agricultural activities in the District. The main focus of the analysis is on households in agriculture and types of farming activities.

7.2 Households in Agriculture

Table 7.1 and Figure 7.1 show households by agricultural activities and locality. The data shows that there are 13,777 households engaged in agriculture in the District. This represents 74.4 percent of all households. It is further observed that there are more agricultural households in the rural areas (80.3 %) than in urban areas (59.4%).

7.3 Type of Farming Activities

Four types of agricultural activities in the District can be identified in Table 7.1. These are crop farming, livestock rearing, fish farming and tree planting. The major agricultural activity in the District is crop farming (97.8%), followed by livestock rearing (43.7%). Less than one percent of agricultural households are engaged in fish farming (0.3%) and tree planting (0.8%). As expected a higher proportion of rural agricultural households are engaged in crop farming (98.5%) compared to urban agricultural households (95.4%). Livestock rearing is also relatively common in the rural areas (45.6%) than in urban areas (37.1%).

Table 7.1: Households by agricultural activities and locality

Agricultural activities	Total		Urban		Rural	
	Number	Percent	Number	Percent	Number	Percent
Total Households	18,511	100.0	5,220	100.0	13,291	100.0
Households engages in Agriculture	13,771	74.4	3,099	59.4	10,672	80.3
Crop Farming	13,465	97.8	2,956	95.4	10,509	98.5
Tree Planting	105	0.8	11	0.4	94	0.9
Livestock Rearing	6,012	43.7	1,150	37.1	4,862	45.6
Fish Farming	37	0.3	7	0.2	30	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

7.4 Types of Livestock and other Animals Reared

Animal rearing is the second most important agricultural activity after crop farming. Table 7.2 shows the types of animals reared in the District. From the distribution, the number of animal species kept in the District is 142,656. Out of this number, there are 9,933 keepers and an average of 14 animals per keeper.

Among the ruminants, the top two are 14.5 percent with 30.9 percent of keepers for goats and 8.1 percent of sheep with 14.1 percent of keepers. The average animal per keeper for goat and

sheep are 7 and 8 respectively. In addition, there is approximately 66.8 percent of chicken being reared by 46.5 percent of persons and 1.8 percent of ducks being reared by 2.2 percent of keepers.

Table 7.2: Distribution of livestock and keepers

Livestock/other animals	Livestock/ other Animals		Keepers		Average animals per keeper
	Number	Percent	Number	Percent	
All livestock/ other animals	142,565	100.0	9,933	100.0	14
Beehives	220	0.2	6	0.1	37
Cattle	394	0.3	37	0.4	11
Chicken	95,201	66.8	4,621	46.5	21
Dove	218	0.2	23	0.2	9
Duck	2,579	1.8	223	2.2	12
Goat	20,729	14.5	3,074	30.9	7
Grass-cutter	73	0.1	16	0.2	5
Guinea fowl	511	0.4	60	0.6	9
Ostrich	76	0.1	3	0.0	25
Pig	2,666	1.9	293	2.9	9
Rabbit	200	0.1	31	0.3	6
Sheep	11,617	8.1	1,400	14.1	8
Silk worm	112	0.1	17	0.2	7
Snail	1,192	0.8	10	0.1	119
Turkey	95	0.1	12	0.1	8
Other	348	0.2	80	0.8	4
Fish farming	5,134	3.6	24	0.2	214
Inland fishing	1,200	0.8	3	0.0	400
Marine fishing	0	0.0	0	0.0	0
Other	348	0.2	80	0.8	4

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER EIGHT

HOUSING CONDITIONS

8.1 Introduction

In many developing countries, where population increase has been rapid while economic growth has been slow or stagnant, there have been deficits in the supply of housing. The situation in urban areas especially has been worsened due to rapid rates of urbanization. Concerns for human wellbeing conditions associated with housing led to the introduction of questions on housing in the 2000 Population and Housing Census. The 2010 Population and Housing Census is thus the second time questions on housing were asked. A number of housing characteristics and associated conditions such as overcrowding, poor access to basic services such as drinking water and sanitation facilities (toilet and bathroom) are important indicators that are required for monitoring progress in human development in the District.

This chapter provides information on housing conditions in the District including housing stocks, types of dwelling, room occupancy, holding and tenancy, lighting and cooking facilities, bathing and toilet facilities, waste disposal and source of water for domestic use among others.

8.2 Housing Stock, Households and Household Size

8.2.1 Housing stock

The distribution of housing stock and households in the District is presented in Table 8.1. The data shows that the total stock of houses in the District is 15,462 in 2010. The proportion of houses in rural areas (76.0%) is higher than that in urban areas (24.0%).

The data further indicates that there are 18,511 households and a total household population of 77,572 in the District. A larger number of the households resided in the rural areas (13,291) compared to the urban areas (5,220). On the average, there are 1.2 households per house in the compared to about 1.5 households per house in the region. The average number of persons per house of five persons in the District is also lower than the regional average of six persons per house. However, the average household size of 4.2 for the District is slightly higher than the regional average of 4.1 but below the national average of 4.4.

It can further be observed that both the average households per house and population per house are relatively lower in the rural areas (1.1 and 4.8 respectively) than urban (1.4 and 5.6 respectively). However, the average household size is slightly lower in the urban areas than rural areas (4.0 and 4.3 respectively).

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	2,633,154	78,907	21,166	57,741
Total household population	24,076,327	2,574,549	77,572	20,684	56,888
Number of houses	3,392,745	431,697	15,462	3,711	11,751
Number of households	5,467,054	632,045	18,511	5,220	13,291
Average households per house	1.6	1.5	1.2	1.4	1.1
Population per house*	7.1	6.0	5.0	5.6	4.8
Average household size	4.4	4.1	4.2	4.0	4.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3 Type of Dwelling, Holding and Tenancy Arrangements

8.3.1 Type of dwelling units

Table 8.2 shows that there are 18,511 dwelling units in the Birim North District. The highest proportion of dwelling units are compound houses (50.7%), followed by separate houses (32.6%). Huts/buildings (different compound), tents, living quarters attached to office/shop and uncompleted building accounts for less than one percent of dwelling units in the District.

A higher percentage of households who live in separate houses are headed by males than females (34.8% and 28.1% respectively), while the opposite is the case for compound houses (55.3% for female heads and 48.4% for male heads). With respect to locality, compound houses are more common in the urban areas than rural areas (67.2% against 44.3%). In contrast, the proportions of dwelling units classified as separate houses and semi-detached houses are higher in the rural areas (38.5% and 11.7% respectively) compared to urban areas (17.5% and 9.6% respectively).

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

Type of dwelling	Total		District					
	country	Region	Total		Male headed	Female headed	Urban	Rural
			Number	Percent				
Total	5,467,054	632,045	18,511	100.0	100.0	100.0	100.0	100.0
Separate house	1,471,391	193,719	6,033	32.6	34.8	28.1	17.5	38.5
Semi-detached house	391,548	42,458	2,057	11.1	10.7	12.0	9.6	11.7
Flat/Apartment	256,355	16,839	366	2.0	2.1	1.8	3.3	1.5
Compound house (rooms)	2,942,147	349,682	9,392	50.7	48.4	55.3	67.2	44.3
Huts/Buildings (same compound)	170,957	17,381	410	2.2	2.6	1.4	0.5	2.9
Huts/Buildings (different compound)	36,410	3,236	36	0.2	0.2	0.2	0.1	0.2
Tent	10,343	950	34	0.2	0.2	0.2	0.2	0.2
Improvised home (kiosk/container etc)	90,934	3,055	79	0.4	0.5	0.4	0.6	0.3
Living quarters attached to office/shop	20,499	1,736	45	0.2	0.3	0.2	0.3	0.2
Uncompleted building	66,624	2,335	38	0.2	0.2	0.2	0.6	0.1
Other	9,846	654	21	0.1	0.1	0.1	0.1	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3.2 Ownership status

Table 8.3 shows the ownership status of dwelling by sex of household head and locality. About 10,674 households occupy their own houses in the District. This forms 57.7 percent of total households in the District. Slightly more than one-fifth (22.2%) of households are owned by other private individuals whilst 15.7 percent live in households belonging to their relatives who is not a household member. Less than one percent of households live in purchased or mortgaged houses.

In the case of rural areas, nearly two-thirds (62.1%) of the dwelling units are owned by household members. About 15.9 percent of households occupy dwelling units which are owned by relatives who are not part of their households (Table 8.3). The distribution implies that majority of households in urban areas rent dwelling units compared to their counterparts in the rural areas.

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

Ownership status	Total country	Region	District					
			Total		Male headed	Female headed	Urban	Rural
			Number	Percent				
Total	5,467,054	632,045	18,511	100.0	100.0	100.0	100.0	100.0
Owned by household member	2,883,236	335,114	10,674	57.7	57.4	58.2	46.3	62.1
Being purchased (e.g. mortgage)	45,630	4,009	139	0.8	0.8	0.7	0.5	0.8
Relative not a household member	851,630	108,374	2,903	15.7	14.3	18.5	15.0	15.9
Other private individual	1,439,021	159,804	4,104	22.2	23.4	19.7	33.4	17.8
Private employer	83,610	6,862	206	1.1	1.3	0.7	0.9	1.2
Other private agency	21,123	2,797	109	0.6	0.7	0.4	0.6	0.6
Public/Government ownership	118,804	12,754	212	1.1	1.2	1.0	1.9	0.9
Other	24,000	2,331	164	0.9	0.9	0.8	1.4	0.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4 Construction Materials

The quality of construction materials used in building houses is a very important indicator that accesses the living standard of households. Quality materials used in the construction of houses will reduce the risk of collapse of structures due to natural disaster. The 2010 census captured information on materials used in construction. These are construction materials for outer wall, construction materials for floor and construction material for roofing.

8.4.1 Material for wall

As shown in Table 8.4, mud bricks/earth are the main construction material used for the outer walls of dwelling units (44.7%), followed closely by cement blocks or concrete (44.3%). Wood represents only 2.5 percent of construction materials. The Table further shows that there are urban-rural differences in the two main materials used for construction. It is observed that in the urban areas, about 18.3 percent of the outer walls are constructed from mud bricks, whereas in the rural areas the proportion is about 55 percent. Regarding the use of cement blocks/concrete, about 67.4 percent of outer walls of dwellings in urban areas are constructed with this material compared to 35.7 percent for dwellings in rural areas. The use of stone, bamboo and palm leaf/thatch grass/raffia as construction materials for outer walls of dwelling units in the District are all substantially low.

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

Material for Outer wall	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Total	5,817,607	686,478	22,682	100.0	100.0	100.0
Mud brick/Earth	1,991,540	266,725	10,141	44.7	18.3	54.5
Wood	200,594	12,028	578	2.5	1.7	2.9
Metal sheet/Slate/Asbestos	43,708	4,268	80	0.4	0.3	0.4
Stone	11,330	1,182	28	0.1	0.1	0.1
Burnt bricks	38,237	6,481	278	1.2	1.1	1.3
Cement blocks/Concrete	3,342,462	370,691	10,059	44.3	67.4	35.7
Landcrete	104,270	19,885	1,369	6.0	10.4	4.4
Bamboo	8,206	954	34	0.1	0.2	0.1
Palm leaf/Thatch (grass)/Raffia	38,054	1,202	48	0.2	0.1	0.3
Other	39,206	3,062	67	0.3	0.3	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.2 Main material for construction of floors

Table 8.5 shows the main material used for the floor of dwellings in the District. More than three-quarters (77.9%) of households use cement or concrete for the floor of their dwelling units. Earth/mud is also used by a significant proportion of households (20.0%) for the floor of their dwelling units. Burnt bricks, wood and terrazzo/terrazzo tiles are less used in the District. More households in the urban areas use cement/concrete for construction of floors than their counterparts in the rural areas (80.4% and 76.9% respectively). On the other hand, earth/mud as construction material for floors is more common in the rural areas compared to urban areas (21.5% and 16.2% respectively).

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

Materials for the floor	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
Earth/Mud	872,161	118,931	3,709	20.0	16.2	21.5
Cement/Concrete	4,255,611	491,586	14,412	77.9	80.4	76.9
Stone	32,817	6,076	124	0.7	1.1	0.5
Burnt brick	6,537	710	7	0.0	0.0	0.1
Wood	52,856	1,345	20	0.1	0.1	0.1
Vinyl tiles	57,032	2,914	42	0.2	0.5	0.1
Ceramic/Porcelain/Granite/ Marble tiles	88,500	5,404	119	0.6	0.7	0.6
Terrazzo/Terrazzo tiles	85,973	3,833	35	0.2	0.6	0.0
Other	15,567	1,246	43	0.2	0.3	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.3 Materials for roof

Regarding roofing materials used for dwelling units in the District, Table 8.5 shows that in 2010 more than nine in every ten households (92.3%) in the District live in dwelling units roofed with metal sheets while only a few dwelling units were roofed with roofing tile, cement/concrete, wood and so on. Urban-rural differentials exist regarding roofing materials used. Metal sheet is the most widely used roofing material in both places of residence though a higher percentage of dwellings in urban localities (96.7%) than rural localities (90.6%) were roofed with metal sheets. It can also be observed that a higher proportion of rural households use thatch/palm leaf/raffia as roofing material for their dwellings (5.2%) than urban households (1.2%). Finally, while mud/mud bricks/earth and roofing tile are together the least used roofing materials in urban localities (0.2%), wood, slate/asbestos and cement/concrete are the least used in rural localities.

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

Main Roofing material	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Total	5,817,607	686,478	22,682	100.0	100.0	100.0
Mud/Mud bricks/Earth	80,644	3,693	105	0.5	0.1	0.6
Wood	45,547	3,527	79	0.3	0.3	0.4
Metal sheet	4,152,259	604,209	20,933	92.3	96.7	90.6
Slate/Asbestos	759,039	8,831	83	0.4	0.3	0.4
Cement/Concrete	141,072	5,561	102	0.4	0.7	0.4
Roofing tile	31,456	1,012	8	0.0	0.1	0.0
Bamboo	71,049	4,630	308	1.4	0.3	1.8
Thatch/Palm leaf or Raffia	500,606	52,372	940	4.1	1.2	5.2
Other	35,935	2,643	124	0.5	0.4	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.5 Room Occupancy

The number of sleeping rooms provides an indication of the extent of crowding in households. Overcrowded rooms have health implications arising from, among others, disturbed sleep. More importantly, crowded living conditions increase the risk of spread of infectious diseases, such as meningococcal disease, tuberculosis and respiratory infections.

Table 8.7 shows the sleeping room occupancy for households in the District. More than one-half of households in the District have one sleeping room (59.7%). Two rooms constitute a little over one-fifth (22.2%) followed by three rooms (9.3%) and four rooms (4.4%). Together, about 95.6 percent of households in the District live in one to four rooms in dwelling units beyond which the proportion decreases up to eight rooms.

The highest proportion of households with one member (single member households) occupies one room (91.2%), two rooms (5.9%) and thereafter, the proportion decreases. The proportion of households occupying one sleeping room unit decreases as household size increases. However, the proportion of households occupying two rooms initially saw an increase for one to seven member households; it then decreased for eight member households and beyond.

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

Household size	Number of sleeping rooms										
	Total		One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
	Number	Percent									
Total	18,511	100.0	59.7	22.2	9.3	4.4	2.0	1.2	0.5	0.3	0.4
1	3,617	100.0	91.2	5.9	0.8	0.7	0.4	0.4	0.2	0.1	0.3
2	2,349	100.0	78.0	16.7	2.9	0.9	0.4	0.5	0.2	0.2	0.2
3	2,610	100.0	67.4	22.4	6.9	1.5	0.8	0.4	0.1	0.3	0.2
4	2,547	100.0	62.8	23.7	9.2	2.4	0.7	0.3	0.4	0.2	0.3
5	2,143	100.0	50.5	31.7	10.1	4.6	1.7	0.9	0.3	0.1	0.1
6	1,805	100.0	42.0	34.2	13.4	6.0	2.4	0.9	0.5	0.3	0.3
7	1,238	100.0	29.6	35.1	18.3	9.5	3.4	2.6	0.5	0.6	0.4
8	891	100.0	24.5	33.7	21.7	9.8	5.2	3.9	0.8	0.4	0.0
9	489	100.0	15.1	24.9	27.0	18.8	8.2	2.5	2.5	0.4	0.6
10+	822	100.0	6.8	19.3	25.9	19.5	11.6	8.6	3.0	1.9	3.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6 Access to Utilities and Household Facilities

Access to basic amenities, such as safe drinking water and sanitation, and clean cooking fuel, is not only an important measure of socioeconomic status of households but it is also fundamental to the health of its members. In this section, household access to source of lighting, other household characteristics including fuel used for cooking, water and sanitation facilities are discussed.

8.6.1 Main source of lighting

According to the data in Table 8.8, about 62 percent of dwelling units in Birim North District use electricity from the national grid as the main source of lighting/power as compared to the 58.5 percent for the region and 64.2 percent for the country. Kerosene lamp is the second most important source of lighting used in the District (19.2%). Only an insignificant proportion of the dwelling units use solar energy in the District (0.1%). Access to electricity is relatively higher in the urban areas (78.4%) compared to rural areas (56.1%). As expected the proportion of dwelling units using kerosene as main source of lighting is relatively higher in rural areas than urban areas (21.0% and 14.5% respectively). The other sources of lighting apart from flashlight/torch have very marginal use in the District.

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

Main source of light	Total		District			
			Total		Urban	Rural
	country	Region	Number	Percent		
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
Electricity (mains)	3,511,065	369,961	11,545	62.4	78.4	56.1
Electricity (private generator)	36,142	4,282	154	0.8	1.0	0.8
Kerosene lamp	971,807	159,439	3,545	19.2	14.5	21.0
Gas lamp	9,378	1,135	60	0.3	0.2	0.4
Solar energy	9,194	1,018	14	0.1	0.2	0.0
Candle	41,214	2,595	78	0.4	0.4	0.4
Flashlight/Torch	858,651	90,643	3,040	16.4	5.0	20.9
Firewood	13,241	1,593	40	0.2	0.3	0.2
Crop residue	4,623	447	9	0.0	0.0	0.1
Other	11,739	932	26	0.1	0.2	0.1

Source: Ghana Statistical Service-2010 Population and Housing Census

8.6.2 Main source of cooking fuel

Table 8.9 presents the main source of cooking fuel and cooking space used by households in the District. The data shows that majority (61.4%) of households use firewood as their main source of cooking fuel, followed by charcoal (24.9%) and gas (7.0%). The use of saw dust, animal waste and electricity for cooking are not common in the District. In the urban areas of the District, the most commonly used source of cooking fuel is charcoal (39.9%) followed closely by firewood (36.7%). In the rural areas, firewood is the most common source of cooking fuel (71.1%) while the next common source is charcoal (19.0%). Only 3.4 percent of rural households use gas as their main source of cooking.

8.6.3 Cooking space

Table 8.9 further shows the cooking spaces used by households in the District. Separate room for exclusive use of households (38.6%), veranda (21.9%) and open space in compound (12.7%) are the major spaces used for cooking in the District. About 41.7 percent of households in rural areas use separate rooms for exclusive use compared to nearly one-third (30.8%) of urban households. Similarly, over one-tenth (16.7%) of households in rural areas use open space in compound compared to 35.2 percent in urban households.

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

Source of cooking fuel/ cooking space	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Source of cooking fuel						
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
None no cooking	306,118	29,214	1,074	5.8	7.2	5.2
Wood	2,197,083	315,386	11,368	61.4	36.8	71.1
Gas	996,518	74,339	1,303	7.0	15.3	3.8
Electricity	29,794	3,438	42	0.2	0.2	0.3
Kerosene	29,868	3,393	65	0.4	0.4	0.3
Charcoal	1,844,290	203,053	4,605	24.9	39.9	19.0
Crop residue	45,292	2,198	35	0.2	0.1	0.2
Saw dust	8,000	548	16	0.1	0.1	0.1
Animal waste	2,332	147	2	0.0	0.0	0.0
Other	7,759	329	1	0.0	0.0	0.0
Cooking space used by household						
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
No cooking space	386,883	38,872	1,326	7.2	7.7	7.0
Separate room for exclusive use of household	1,817,018	230,426	7,144	38.6	30.8	41.7
Separate room shared with other household(s)	410,765	51,302	1,381	7.5	6.2	8.0
Enclosure without roof	117,614	10,220	317	1.7	0.9	2.0
Structure with roof but without walls	349,832	67,390	1,695	9.2	5.8	10.5
Bedroom/hall/living room)	74,525	7,798	107	0.6	0.7	0.5
Veranda	1,173,946	135,910	4,059	21.9	35.2	16.7
Open space in compound	1,115,464	87,662	2,342	12.7	12.0	12.9
Other	21,007	2,465	140	0.8	0.7	0.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.7 Main Source of Water for Drinking and for other Domestic use

The availability of and accessibility to improved drinking and domestic use of water is an important aspect of the health of households. This section presents information on sources of water for drinking and other domestic use in the District.

8.7.1 Main source of drinking water

Households in the District obtain their drinking water from diverse sources. As shown in Table 8.10, the major source of drinking water for a higher proportion of households in the District is borehole/pump/tube well (41.4%), followed by public tap/standpipe (22.8%) and pipe-borne outside dwelling (22.5%). Together, these improved sources of drinking water constitute about 87 percent of water sources for households. However, about 8 percent of drinking water sources are unsafe, such as unprotected wells, spring, rivers and streams.

There are slight variations in the main source of drinking water between urban and rural localities. The main source of drinking water for urban households is public tap/standpipe (44.9%), whereas the main source for rural households is borehole/pump/tube well (55.5%). The use of sachet water for drinking is relatively high in urban areas compared to rural localities.

8.7.2 Main source of water for other domestic use

Table 8.10 also shows the main sources of water for other domestic purposes by households. The data shows that sources of water for domestic use by households follow a similar pattern to that for drinking water. Borehole/pump/tube is the main source of water for domestic purposes for a higher proportion of households (41.2%), followed by public tap/standpipe (22.2%), and pipe-borne outside dwelling (21.7%). As in the case of access to drinking water, borehole/pump/tube well constitutes more than half (54.7%) of water sources in rural areas while public tap/standpipe forms 44.9 percent for urban households.

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

Sources of water	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Main source of water for drinking						
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
Pipe-borne inside dwelling	790,493	51,123	588	3.2	8.4	1.1
Pipe-borne outside dwelling	1,039,667	91,863	4,156	22.5	34.0	17.9
Public tap/Standpipe	712,375	71,616	4,213	22.8	44.9	14.0
Bore-hole/Pump/Tube well	1,267,688	177,097	7,659	41.4	5.3	55.5
Protected well	321,091	58,167	281	1.5	1.5	1.5
Rain water	39,438	7,948	38	0.2	0.0	0.3
Protected spring	19,345	2,570	41	0.2	0.3	0.2
Bottled water	20,261	1,232	88	0.5	1.1	0.2
Satchet water	490,283	53,638	459	2.5	3.6	2.0
Tanker supply/Vendor provided	58,400	1,562	3	0.0	0.1	0.0
Unprotected well	112,567	9,712	248	1.3	0.2	1.8
Unprotected spring	12,222	1,751	0	0.0	0.0	0.0
River/Stream	502,804	94,883	714	3.9	0.4	5.2
Dugout/Pond/Lake/Dam/Canal	76,448	8,624	23	0.1	0.2	0.1
Other	3,972	259	0	0.0	0.0	0.0
Main source of water for other domestic use of household						
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
Pipe-borne inside dwelling	905,566	55,588	592	3.2	8.1	1.3
Pipe-borne outside dwelling	1,089,030	83,245	4,018	21.7	32.8	17.4
Public tap/Standpipe	704,293	65,772	4,103	22.2	44.9	13.2
Bore-hole/Pump/Tube well	1,280,465	180,604	7,625	41.2	6.8	54.7
Protected well	465,775	95,179	519	2.8	3.7	2.5
Rain water	39,916	7,577	45	0.2	0.1	0.3
Protected spring	18,854	2,760	26	0.1	0.2	0.1
Tanker supply/Vendor provided	100,048	1,975	29	0.2	0.4	0.1
Unprotected well	152,055	13,230	372	2.0	1.5	2.2
Unprotected spring	15,738	2,196	17	0.1	0.2	0.0
River/Stream	588,590	112,728	1,101	5.9	1.0	7.9
Dugout/Pond/Lake/Dam/Canal	96,422	9,850	37	0.2	0.3	0.2
Other	10,302	1,341	27	0.1	0.1	0.2

Source: Ghana Statistical Service- 2010 Population and Housing Census

8.8 Bathing and Toilet Facilities

An efficient and hygienic method of human waste disposal available in a dwelling unit is a critical indicator of the sanitary condition of the dwelling unit and is an indirect measure of the socio-economic status of a household.

8.8.1 Toilet facilities

Table 8.11 shows that three major toilet facilities are used by households in the District. These are pit latrines (40.2%), public toilets (21.8%), and KVIP (18.2%). The use of bucket or pan is not common in the District. In addition, about 16 percent of households have no facilities and therefore resort to the use of bush, beach or field.

In both urban and rural localities, pit latrine is the highest reported facility used by households with each locality recording 31.8 percent and 43.5 percent respectively. It can also be observed that about a quarter of urban households and one out of five rural households use public toilets. About 8 percent of households in urban localities use in-built WC compared to only 1.7 percent of households in rural areas. Again, the use of bucket or pan is not common in both localities of the District.

8.8.2 Bathing facilities

Table 8.11 further shows the type of bathing facilities used by households. The most common type of bathing facility is shared separate bathroom in the same house (34.8%). This is common because most households live in compound houses and these facilities are shared. Nearly a quarter (24.0%) of households use own bathroom for exclusive use. The use of public bath house and river/pond/lake/dam are the least sources of bathing in the District.

Furthermore, 42 percent and 31.9 percent of dwelling units use shared separate bathroom in the same house in urban and rural localities respectively. Also about 17.7 percent of dwelling units in rural localities use shared open cubicle for bathing compared to 25.9 percent in urban localities.

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

Toilet facility/Bathing facility	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Toilet facility used by household						
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
No facilities (bush/beach/field)	1,056,382	71,384	2,929	15.8	9.1	18.5
W.C.	839,611	55,161	633	3.4	7.7	1.7
Pit latrine	1,040,883	203,246	7,439	40.2	31.8	43.5
KVIP	572,824	100,193	3,360	18.2	25.2	15.4
Bucket/Pan	40,678	3,926	13	0.1	0.1	0.1
Public toilet (WC/KVIP/Pan etc)	1,893,291	195,950	4,030	21.8	25.8	20.2
Other	23,385	2,185	107	0.6	0.4	0.7
Bathing facility used by household						
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
Own bathroom for exclusive use	1,535,392	163,394	4,442	24.0	15.9	27.2
Shared separate bathroom in the same house	1,818,522	209,248	6,436	34.8	42.0	31.9
Private open cubicle	381,979	56,572	1,682	9.1	5.4	10.5
Shared open cubicle	1,000,257	131,234	3,702	20.0	25.9	17.7
Public bath house	140,501	2,817	14	0.1	0.1	0.1
Bathroom in another house	187,337	19,316	758	4.1	2.4	4.8
Open space around house	372,556	45,833	1,319	7.1	7.2	7.1
River/Pond/Lake/Dam	14,234	1,996	61	0.3	0.1	0.4
Other	16,276	1,635	97	0.5	1.0	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.9 Method of Waste Disposal

Disposal of solid waste is quite a challenge to both urban and rural areas in the District and Ghana as a whole, and hence the need for modern and hygienic solid waste disposal systems. Acceptable waste management helps to prevent the spread of infectious diseases and improves the quality of the environment.

8.9.1 Solid waste disposal

Table 8.12 presents the different methods of solid waste disposal by households. The most common method of solid waste disposal is by dumping in a publicly designated open space (57.8%), followed by public dumping of refuse in container (12.3%). About one in ten households also burnt their solid wastes. It is further observed that close to one in ten of households dump their solid wastes indiscriminately. Only a small proportion of households have their solid wastes collected (1.8%).

With regards to localities, the most common method of solid waste disposal for both urban areas and rural areas is public dump in open space (54.2% and 59.2% respectively). Whereas only 3.9 percent of households in urban areas dump their solid waste indiscriminately, as high as 11.2 percent of households do so in rural communities.

8.9.2 Liquid waste disposal

Table 8.11 shows that 60.3 percent, being the highest proportion of households throw their liquid waste onto the compound of their homes while 25.3 percent of households throw theirs either onto the street or outside their houses. It is noted that less than one percent (0.4%) of households in the District dispose their liquid waste through the more modern sewerage

system. For the localities, the most common method of liquid waste disposal is throwing on to compound while the least method used is through the sewerage system.

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

Method of waste disposal	Total country	Region	District			
			Total		Urban	Rural
			Number	Percent		
Method of solid waste disposal						
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
Collected	785,889	26,049	332	1.8	1.8	1.8
Burned by household	584,820	102,501	1,958	10.6	15.4	8.7
Public dump (container)	1,299,654	143,820	2,370	12.8	17.7	10.9
Public dump (open space)	2,061,403	252,886	10,692	57.8	54.2	59.2
Dumped indiscriminately	498,868	63,321	1,695	9.2	3.9	11.2
Buried by household	182,615	37,144	1,260	6.8	5.6	7.3
Other	53,805	6,324	204	1.1	1.4	1.0
Method of liquid waste disposal						
Total	5,467,054	632,045	18,511	100.0	100.0	100.0
Through the sewerage system	183,169	8,228	80	0.4	0.3	0.5
Through drainage system into a gutter	594,404	33,511	404	2.2	4.0	1.5
Through drainage into a pit (soak away)	167,555	11,428	187	1.0	0.8	1.1
Thrown onto the street/outside	1,538,550	147,245	4,690	25.3	31.6	22.9
Thrown into gutter	1,020,096	106,945	1,785	9.6	11.2	9.0
Thrown onto compound	1,924,986	319,580	11,158	60.3	51.7	63.7
Other	38,294	5,108	207	1.1	0.5	1.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER NINE

SUMMARY OF FINDINGS, CONCLUSION AND POLICY RECOMMENDATIONS

9.1 Introduction

The formulation and implementation of development policies are often driven by data. The main objective for conducting the 2010 PHC is to provide the country with up-to-date socio-economic data for planning and for evaluating the various government policy interventions and programmes at National, Regional and District levels in areas such as Education, Housing, and Transport for socio-economic development of the District. It critically examined the social and cultural characteristics of the District in relation to the general well-being of the people.

9.2 Summary of Findings

Demographic Characteristics

The total population of the District is 78,907 representing three percent of the regional population. The male population is 39,572 and that of females is 39,335, an indication that there are slightly more males (50.2%) than females (49.8%) in the District. The Birim North District is one of the districts in the region dominated by the male population, with 101 males to 100 females. The age specific sex ratio ranges from about 61 males for every 100 females in the older ages of 85 years and older to 116 males for every 100 females in the age group 60-64 years.

Mortality among both sexes rises steadily from age 20 with that of the female population remaining slightly higher. Death rates are higher among males (13 deaths per 1000) and females (11 deaths per 1000) at age 0-4 years.

With regards to the duration of stay, about 12 percent of migrants had lived in the District for less than one year, 30.1 percent had lived in the District between one to 4 years, 17.3 percent between 5 to 9 years and 40 percent for over ten years.

Social Characteristics

There are 18,511 households in the District of which 71.8 percent reside in rural areas with the rest in urban settlements. The average household size for the District is almost the same as that of the region. While the average household size is slightly higher in rural areas, the number of household per house is lower in the rural areas compared to the urban areas.

In total, there are 106,155 persons living in households in the District comprising of 52,705 males and 53,450 females. There are four major types of household composition in the District, namely household heads (23.9%), spouses (11.2%), children (42.5%) and grandchildren (10.2%). For both sexes, a higher percentage of males than females are household heads (31.7% and 16.3% respectively) and there are more females than males who are spouses in the household (20.4% and 2.0% respectively).

The findings show that 37 percent of persons 12 years and older in Birim North District are never married compared to the regional average of 42 percent. The married population is 43.3

percent compared to the regional average of 42.9 percent. The divorced and the widowed constitute 5 percent each of the population.

About 75.9 percent of persons who have never been married have basic education and 14.8 percent have secondary education while only 5.4 percent have no education. Furthermore, while 72.7 percent and 63.9 percent of the separated and divorced respectively have basic education, 59 percent of the widowed have no education. Among the persons in all marital categories, between 52.4 percent and 74.3 percent of males as against 35 to 78.2 percent of females have attained basic education. Similarly, between 5.7 percent and 40.9 percent of males compared to 5 percent to 62.3 percent of females have no education. Out of the total population 12 years and older, 69.1 percent are economically active while 30.9 percent are economically not active.

Out of a total of 54,852 persons aged 11 years and older in the District, 45,963 or 83.8 percent were literate. This is against a regional average of 81 percent and a national average of 74.1 percent. Literacy is nearly universal among the youth population of the District. The population in the age group 11-24 years have a literacy rate of between 91.2 and 98.3 percent. From the data, 18.8 percent of the literate population in the District can read and write in English only. Male literacy rate in the District is 89.5 percent compared to the female literacy rate of 78.2 percent

The findings show that 29,017 persons 3 years and older are currently attending school in the District in 2010. A higher proportion of females (60.9%) than males (45%) have achieved basic education in the past.

For all the age groups, about 72.7 percent of the population are employed, 2.8 percent are unemployed and the economically not active constitutes 24.5 percent. The data shows a gradual rise from 28 percent at age 15-19 years for the employed, and then peaks at 93.1 percent at age 45-49 years. Between age 15-19 years, the proportion of the economically not active is 68.7 percent. This proportion decreases sharply from 68.7 percent at age 15-19 to as low as 5.8 percent at age 45-49 years. The data by males and females show similar patterns. Male-female differentials show that for all the age groups, there are slightly more males who are employed (75.9%) than females (69.5%).

Information Communication Technology

Slightly more male-headed households have access to desktop or laptop computers than males. The proportion owned by males is 4.3 percent compared to 2.7 percent of females.

Disability

Sight disability dominates both males (36.8%) and females (42.6%) Persons with emotional disability form the least proportion among males. On the whole, the proportion of the total population with disability is higher in the urban population than the rural population (4.5% and 3.7% respectively). The District has a PWD population of 2,495, out of which 60.9 percent of them are employed and 1.6 percent unemployed. The rest, 37.5 percent are economically not active. The lowest proportion in the educational levels attained by PWDs in the District is Pre-Primary which accounts for 4.2 percent.

Among the male PWDs in the District, about 21.2 percent have never attended school while females on the other hand are 39.4 percent. A higher proportion of males than females of all PWDs in the District have attained Basic level of education (60.8% and 52.2% respectively) compared to 13 percent of males and 4.8 percent of females who attained Senior High or

Higher education. More males with emotional disability are more likely to attain Basic education than females (66.2 percent and 55.5 percent respectively). In a similar vein, more males with physical disability are more likely to attain Senior High/Higher level of education than females (11.1 percent and 2.6 percent respectively).

Agricultural activities

There are 13,777 households engaged in agriculture in the District. This represents 74.4 percent of all households. As expected a higher proportion of rural agricultural households are engaged in crop farming (98.5%) compared to urban agricultural households (95.4%). Among the ruminants, the top two are 14.5 percent with 30.9 percent of keepers for goats and 8.1 percent of sheep with 14.1 percent of keepers.

Housing conditions

There are 18,511 households and a total household population of 77,572 in the District. The highest proportion of dwelling units is compound houses (50.7%), followed by separate houses (32.6%). About 10,674 households occupy their own houses in the District. This forms 57.7 percent of total households in the District. Less than one percent of households live in purchased or mortgaged houses.

About 15.9 percent of households occupy dwelling units which are owned by relatives who are not part of their households. Wood represents only 2.5 percent of construction materials. More than one-half of households in the District have one sleeping room (59.7%). Together, about 95.6 percent of households in the District live in one to four rooms in dwelling units beyond which the proportion decreases up to eight rooms.

The highest proportion of households with one member (single member households) occupies one room (91.2%), two rooms (5.9%) and thereafter, the proportion decreases. The proportion of households occupying one sleeping room unit decreases as household size increases.

Only 3.4 percent of rural households use gas as their main source of cooking fuel. About 41.7 percent of households in rural areas use separate rooms for exclusive use compared to nearly one-third (30.8%) of urban households. Similarly, over one-tenth (16.7%) of households in rural areas use open space in compound compared to 35.2 percent in urban households for cooking.

Together, the improved sources of drinking water constitute about 87 percent of water sources for households. The main source of drinking water for urban households is public tap/standpipe (44.9%), whereas the main source for rural households is borehole/pump/tube well (55.5%). In both urban and rural localities, pit latrine is the highest reported facility used by households with each locality recording 31.8 percent and 43.5 percent respectively. About 8 percent of households in urban localities use in-built WC compared to only 1.7 percent of households in rural areas. Furthermore, 42 percent and 31.9 percent of dwelling units use shared separate bathroom in the same house in urban and rural localities respectively. Also about 17.7 percent of dwelling units in rural localities use shared open cubicle for bathing compared to 25.9 percent in urban localities.

9.3 Conclusion

The total population of the District is 78,907 representing 3 percent of the regional population. The married population is 43.3 percent compared to the regional average of 42.9

percent. The divorced and the widowed constitute 5 percent each of the population, respectively.

Among the persons in all marital categories, between 52.4 percent and 74.3 percent of males as against 35 percent to 78.2 percent of females have attained basic education. Similarly, between 5.7 percent and 40.9 percent of males compared to 5 percent to 62.3 percent of females have no education. Male literacy rate in the District is 89.5 percent compared to the female literacy rate of 78.2 percent

For all the age groups, about 72.7 percent of the population are employed, 2.8 percent are unemployed and the economically not active constitutes 24.5 percent. This proportion decreases sharply from 68.7 percent at age 15-19 to as low as 5.8 percent at age 45-49 years.

Sight disability dominates both males (36.8%) and females (42.6%) The rest, 37.5 percent are economically not active.

Among the male PWDs in the District, about 21.2 percent have never attended school while females on the other hand are 39.4 percent. A higher proportion of males than females of all PWDs in the District attained Basic level of education (60.8% and 52.2% respectively) compared to 13 percent of males and 4.8 percent of females who attained Senior High or Higher education. More males with emotional disability are more likely to attain Basic education than females (66.2 percent and 55.5 percent respectively).

This represents 74.4 percent of all households. Among the ruminants, the top two are 14.5 percent with 30.9 percent of keepers for goats and 8.1 percent of sheep with 14.1 percent of keepers.

There are 18,511 households and a total household population of 77,572 in the District. This forms 57.7 percent of total households in the District. Less than one percent of households live in purchased or mortgaged houses.

The proportion of households occupying one sleeping room unit decreases as household size increases.

About 8 percent of households in urban localities use in-built W.C. compared to only 1.7 percent of households in rural areas. Whereas only 3.9 percent of households in urban areas dump their solid waste indiscriminately, as high as 11.2 percent of households do so in rural communities.

9.4 Policy Recommendations

- A key finding of the report is that the current population structure, with youthful population and a high dependency ratio as a result of relatively high level of fertility adversely affects the socio-economic development of a country. It is therefore recommended that family planning programs in the District are intensified to reduce fertility rate.
- Programs to promote girl-child education in the District need to be implemented as the education of women is strongly correlated with fertility in all populations.
- The report reveals that the level of education and skills development in the District are low as indicated by the very high proportion of the population who have achieved only basic education and low patronage of vocational and technical schools. The District Assembly should therefore collaborate with the Ministry of Education, the

Ministry of Employment and Social Welfare and other stakeholders to increase access to post-basic education, including vocational and technical training.

- The report shows that majority of the population in the District use charcoal or firewood for cooking. The use of gas as a source for cooking is quite low, particularly in the rural areas. Efforts should therefore be made by the District Assembly to encourage service providers of gas to establish more gas delivery points in both urban and rural areas of the District.
- Although the report shows that majority of households in the District have access to safe and portable drinking water there is an indication that about 8 percent of households have no such access and rely on such sources as unprotected wells, spring, and streams/streams. It is recommended that the District Assembly collaborates with water service providers to identify communities with poor access and provide them with facilities for safe water
- The report identified inadequate access to environmental sanitation facilities in the District. It is recommended that the District Assembly in collaboration with the relevant stakeholders, device strategies to promote the construction and use of domestic latrines and support public-private partnership in solid and liquid waste management.
- In order to increase access to the internet access, it is recommended that the District Assembly and private organizations set up internet centers in public places such as the community center and the library for public use.
- The District Assembly may need to encourage mobile phone network providers to expand to the underserved areas of the district to encourage mass use of mobile phones.
- The educational attainment of PWDs was generally low. Efforts should be made to expand the provision specialized schools for children with disability in the District.
- To enhance job opportunities for PWDs, skill development training centers need to be built and equipped to train PWDs in various skills that will make them employable and reduce their vulnerability.

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APPENDICES

Table A.1: Household composition by type of locality

Household Composition	Total		Urban		Rural	
	Total	Percent	Number	Percent	Number	Percent
Total	77,572	100.0	20,684	100.0	56,888	100.0
Head only	3,617	4.7	1,193	5.8	2,424	4.3
Household with head and a spouse only	1,452	1.9	412	2.0	1,040	1.8
Household with head and biological/adopted children only	7,775	10.0	2,464	11.9	5,311	9.3
Household with head spouse(s) and biological/adopted children only	25,019	32.3	5,839	28.2	19,180	33.7
Household with head spouse(s) biological/adopted children and relatives of the head only	15,456	19.9	3,702	17.9	11,754	20.7
Household with head spouse(s) biological/adopted children relatives and nonrelatives of the head	1,703	2.2	561	2.7	1,142	2.0
Household with head spouse(s) and other composition	3,498	4.5	1,102	5.3	2,396	4.2
Household with head biological/adopted children and relatives of the head only	11,990	15.5	3,279	15.9	8,711	15.3
Household with head biological/adopted children relatives and nonrelatives of the head	1,196	1.5	440	2.1	756	1.3
Household with head and other composition but no spouse	5,866	7.6	1,692	8.2	4,174	7.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A.2: Population 3 years and older by sex, disability type and level of education

Sex/Disability type	Educational level attained										
	Total	Never attended	Nursery	Kinder garten	Primary	Middle /JSS/ JHS	Sec. /SSS /SHS	Voc./ Tech./ Comm.	Post sec	Bachelor degree	Post graduate (Cert. Diploma Masters PHD ect)
Total	72,038	10,693	1,858	5,502	20,516	26,147	4,741	709	1,463	337	72
No disability	69,096	9,806	1,812	5,423	19,921	25,077	4,596	667	1,397	328	69
With a disability	2,942	887	46	79	595	1,070	145	42	66	9	3
Sight	1,190	387	7	22	201	449	62	23	31	7	1
Hearing	404	171	0	9	106	92	11	9	6	0	0
Speech	331	136	3	19	65	92	4	9	3	0	0
Physical	689	246	3	10	129	251	31	5	12	2	0
Intellectual	363	149	1	6	79	103	17	3	5	0	0
Emotional	377	102	5	4	83	147	19	6	8	1	2
Other	499	88	32	24	112	196	30	2	14	1	0
Male											
Total	36,008	3,795	996	2,837	9,767	13,862	2,962	422	1,043	265	59
No disability	34,511	3,478	962	2,796	9,459	13,260	2,867	387	988	258	56
With a disability	1,497	317	34	41	308	602	95	35	55	7	3
Sight	562	114	7	8	89	258	38	18	24	5	1
Hearing	197	61	0	5	56	53	8	9	5	0	0
Speech	200	64	3	15	50	54	2	9	3	0	0
Physical	378	99	3	9	71	154	23	5	12	2	0
Intellectual	196	69	1	3	45	56	15	2	5	0	0
Emotional	195	35	5	2	50	79	9	4	8	1	2
Other	252	26	20	10	58	107	17	2	11	1	0
Female											
Total	36,030	6,898	862	2,665	10,749	12,285	1,779	287	420	72	13
No disability	34,585	6,328	850	2,627	10,462	11,817	1,729	280	409	70	13
With a disability	1,445	570	12	38	287	468	50	7	11	2	0
Sight	628	273	0	14	112	191	24	5	7	2	0
Hearing	207	110	0	4	50	39	3	0	1	0	0
Speech	131	72	0	4	15	38	2	0	0	0	0
Physical	311	147	0	1	58	97	8	0	0	0	0
Intellectual	167	80	0	3	34	47	2	1	0	0	0
Emotional	182	67	0	2	33	68	10	2	0	0	0
Other	247	62	12	14	54	89	13	0	3	0	0

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A.3: Distribution of households engaged in tree growing or crop farming by type of crop and population engaged

Households/ Type of crop	Households	Population in occupied units			Population engaged in agricultural activities		
		Total	Male	Female	Total	Male	Female
Total households in occupied units	18,511	77,572	38,863	38,709	24,125	13,102	11,023
Households engaged in agricultural activities	13,771	64,094	32,150	31,944	24,125	13,102	11,023
Households engaged in crop farming or tree growing	13,471	62,912	31,629	31,283	23,566	12,855	10,711
Households engaged in crop farming	13,465	62,903	31,623	31,280	23,557	12,849	10,708
Households engaged in tree growing	105	516	263	253	199	107	92
Agro forestry (tree planting)	105	516	263	253	199	107	92
Alligator pepper	5	19	9	10	7	5	2
Apples	10	48	24	24	19	13	6
Asian vegetables (e.g. tinda, cauliflower)	5	31	14	17	8	5	3
Avocado	4	19	8	11	5	4	1
Banana	17	86	37	49	46	20	26
Beans	40	179	105	74	66	43	23
Black pepper	5	18	10	8	7	4	3
Black berries	2	2	2	0	2	2	0
Cabbage	27	98	47	51	50	25	25
Carrot	89	427	226	201	145	79	66
Cashew	21	127	65	62	38	16	22
Cassava	7,964	38,215	18,919	19,296	14,539	7,569	6,970
Citronella	85	306	147	159	145	68	77
Citrus	991	5,116	2,576	2,540	1,944	1,066	878
Cloves	13	91	45	46	39	21	18
Cocoa	8,441	40,825	20,770	20,055	15,083	8,470	6,613
Coconut	90	436	224	212	226	125	101
Cocoyam	2,682	13,185	6,529	6,656	5,109	2,557	2,552
Cocoyam / Taro (kooko)	114	559	300	259	260	148	112
Coffee	6	39	18	21	7	6	1
Cola	151	749	405	344	286	155	131
Cotton	2	12	8	4	2	0	2
Cucumber	10	79	42	37	32	15	17
Egg plant	4	17	14	3	4	4	0
Garden eggs	132	697	354	343	289	156	133
Ginger	3	21	12	9	5	2	3
Groundnut	7	32	15	17	14	7	7
Guava	11	37	22	15	16	9	7
Kenaf	2	6	4	2	4	2	2
Lettuce	4	22	10	12	12	5	7
Maize	2,347	11,063	5,700	5,363	4,347	2,406	1,941
Mango	11	40	24	16	14	11	3
Millet	4	21	9	12	7	1	6
Nut meg	2	13	6	7	4	2	2
Oil palm	4,561	23,165	11,808	11,357	8,517	4,723	3,794
Okro	307	1,641	794	847	580	320	260
Onion	12	65	28	37	20	10	10
Pawpaw	26	144	73	71	52	25	27

Table A.3: Distribution of households engaged in tree growing or crop farming by type of crop and population engaged (cont'd)

Households/ Type of crop	Households	Population in occupied units			Population engaged in agricultural activities		
		Total	Male	Female	Total	Male	Female
Peas	2	11	6	5	2	2	0
Pepper	320	1,533	724	809	574	298	276
Pineapple	58	274	140	134	97	59	38
Plantain	7,208	35,035	17,392	17,643	13,570	7,032	6,538
Potatoes	74	281	139	142	112	55	57
Rice	25	192	100	92	57	36	21
Shea tree	1	6	4	2	2	1	1
Soya beans	4	16	9	7	7	3	4
Spinach	1	4	1	3	1	1	0
Sugarcane	11	58	38	20	16	11	5
Sun flower	1	8	2	6	2	0	2
Sweet pepper	2	2	2	0	2	2	0
Tiger nut	7	37	18	19	8	4	4
Tobacco	4	36	16	20	10	6	4
Tomatoes	156	742	380	362	270	152	118
Water melon	13	73	43	30	31	17	14
Yam	387	2,022	985	1,037	828	410	418
Other (specify)	290	1,441	767	674	471	276	195

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A4: Total population, sex, number of households and houses in the 20 largest communities

No.	Community name	Sex			Households	Houses
		Both Sexes	Male	Female		
1	Akoase	8,878	4,358	4,520	2,226	1,430
2	Afosu	6,165	3,096	3,069	1,574	1,253
3	New Abirem	6,123	2,997	3,126	1,420	1,028
4	Amuana Praso	4,982	2,387	2,595	1,241	853
5	Ntronang	4,578	2,327	2,251	1,017	666
6	Pankese	3,962	1,892	2,070	983	648
7	Mamanso	3,434	1,709	1,725	785	596
8	Nkwateng	3,393	1,697	1,696	813	1,236
9	Old Abirem	2,887	1,406	1,481	694	534
10	Nwinso	2,619	1,319	1,300	567	428
11	Tweapease	2,022	1,070	952	426	357
12	Adausena	1,815	895	920	455	403
13	Hweakwae	1,803	910	893	473	331
14	Noyem	1,777	870	907	408	232
15	Praso-Kuma	1,775	926	849	398	324
16	Nyafomang	1,750	888	862	400	260
17	Yaayaaso	1,191	590	601	260	276
18	Amenam	1,094	579	515	222	196
19	Amoah	1,041	508	533	264	191
20	Abodom	932	445	487	224	192

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

No.	Community Name	Age group																
		All ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1	Akoase	8,878	1,235	982	1,141	986	812	668	520	460	447	394	338	218	185	122	133	237
2	Afosu	6,165	761	759	725	713	554	490	424	367	292	297	249	156	118	61	64	135
3	New Abirem	6,123	722	762	795	712	577	555	451	368	320	254	201	101	105	65	76	59
4	Amuana Praso	4,982	692	691	638	489	275	298	249	216	224	239	232	172	160	96	134	177
5	Ntronang	4,578	675	531	581	423	396	378	309	271	222	209	167	118	97	64	46	91
6	Pankese	3,962	647	442	514	388	287	280	219	230	206	160	146	77	91	60	91	124
7	Mamanso	3,434	472	456	394	402	325	292	178	178	161	149	134	95	57	29	51	61
8	Nkwateng	3,393	583	490	387	332	227	230	190	194	178	150	129	61	64	49	52	77
9	Old Abirem	2,887	440	398	405	285	204	239	200	168	125	102	91	55	44	21	25	85
10	Nwinso	2,619	421	318	269	237	271	205	159	107	127	115	89	48	89	37	51	76
11	Tweapease	2,022	283	298	278	178	163	142	138	113	92	71	79	40	50	22	41	34
12	Adausena	1,815	242	190	248	199	136	142	100	88	128	78	66	56	31	37	30	44
13	Hweakwae	1,803	272	252	245	152	118	116	96	97	83	89	91	44	35	37	36	40
14	Noyem	1,777	324	198	170	186	170	188	141	95	78	77	44	41	17	11	18	19
15	Praso-Kuma	1,775	259	218	240	202	138	130	108	108	96	68	56	46	38	22	21	25
16	Nyafomang	1,750	309	201	182	166	173	146	124	98	104	64	49	30	33	16	21	34
17	Yaayaaso	1,191	199	188	125	108	99	108	78	74	60	39	28	30	19	12	9	15
18	Amenam	1,094	164	124	103	101	91	113	88	70	64	47	38	28	19	16	14	14
19	Amoah	1,041	160	171	132	76	51	65	54	41	42	56	52	35	39	17	23	27
20	Abodom	932	153	142	124	91	44	55	55	41	47	39	41	31	26	12	14	17

Source: Ghana Statistical Service, 2010 Population and Housing Census

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