

# **2010** Population & Housing Census

# **DISTRICT ANALYTICAL REPORT**

# ATIWA DISTRICT





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#### PREFACE AND ACKNOWLEDGEMENT

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

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

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

The District Analytical Report for the Atiwa 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: <u>www.statsghana.gov.gh</u>.

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.

Styanlos

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# **ACRONYMS AND ABBREVIATIONS**

CBR	Crude Birth Rate
CEB	Children Ever Born
CS	Children Surviving
DFID	Department for International Development
DPs	Development Partners
EU	European Union
ECOWAS	Economic Community of West African States
GFR	General Fertility Rate
GSS	Ghana Statistical Service
ICT	Information, Communication and Technology
ICPD	International Conference on Population and Development
JHS	Junior High School
JSS	Junior Secondary School
KVIP	Kumasi Ventilated Improved Pit
MDGs	Millennium Development Goals
PHC	Population and Housing Census
PWD	Persons with Disability
SHS	Senior High School
SSS	Senior Secondary School
TFR	Total Fertility Rate
UNFPA	United Nations Population Fund
UN	United Nations
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 Atiwa District, according to the 2010 Population and Housing Census, is 110,622 representing 4.2 percent of the region's total population. There are more females (50.6%) than males (49.4%), giving a sex ratio of 97.7. Two-thirds (66.6%) of the population is in rural areas while one-third (33.4%) are in urban areas. The population of the district is youthful with about two-fifth (39.9%) aged below 15 years and the elderly persons aged 60 years and older in smaller proportion (9.0%). The District's population pyramid has a broad base and tapers off with a small number of elderly persons. The total age dependency ratio for the District is 86.3, (child dependency ratio is 74.3 and old age dependency ratio is 12.0.

#### Fertility, mortality and migration

The Total Fertility Rate for the district 4.2 which is higher than the regional average of 3.5. The General Fertility Rate is 125.9 births per 1000 women aged 15-49 years which is the second highest for the region. The Crude Birth Rate (CBR) is 28.6 per 1000 population. The crude death rate for the district is 9.6 per 1000. Accident/violence/homicide/suicide accounted for 8.8 percent of all deaths while other causes constitute 91.2 percent of deaths in the district. Majority of migrants (61.3%) living in the district were born elsewhere in the Eastern Region while 38.7 percent were born in another region. For migrants born in another region, those born in Greater Accra (18.7%) and Upper West (18.7%) are in high proportions followed by Volta (15.8%) and Ashanti (15.6%).

#### Household size, composition and structure

The district has a household population of 109,352 with a total number of 26,342 households. The average household size in the district is 4.2 persons per household. Children constitute the largest proportion of the household members accounting for 40.6 percent of the total household population. Spouses form 10.8 percent of the household population. Nuclear households (head, spouse(s) and children) constitute 29.7 percent of the total number of households in the district.

#### Marital status

About four in ten (42%) of the population aged 12 years and older are married, 37 percent have never married and 8 percent are in consensual unions. By age 25-29 years, more than half of females (53.5%) are married compared to less than one-third of males (31.7%). At age 65 and above, widowed females account for as high as 54.0 percent while widowed males account for only 11.9 percent. Among the married population, 18.1 percent have no education

while about 5.0 percent of the never married population have never been to school. About 85 percent of the married population are employed, 1.2 percent are unemployed and 13.5 percent are economically not active. On the contrary, a greater proportion of those who have never married (60.6%) are economically not active with 2.2 percent unemployed and 37.2 percent employed.

#### Nationality

The proportion of Ghanaians by birth in the district is 96.2 percent. Those who have naturalised constitute 0.5 percent and the non-Ghanaian population in the district is 1.6 percent.

#### **Religious affiliation**

Majority (84.9%) of the population in the district are Christians with Pentecostal/Charismatic dominating with a proportion of 32.0 percent, followed by the Protestants (29.1). People of the Islamic religion are 6.1 percent and those with no religion constitutes 7.4 percent. Females (88.4%) are more likely than males (81.6%) to be Christians. On the other hand, males (9.9%) are more likely than females (4.9%) to belong to no religion.

#### Literacy and education

Of the population 11 years and above, 84.9 percent are literate and 5 percent are non-literate. The proportion of literate males is higher (90.4 %) than that of females (79.8%). Six out of ten people (63%) indicated they could read and write both English and Ghanaian languages. Of the population aged 3 years and older in the district, 13.3 percent has never attended school, 46.3 percent have attended in the past and 40.4 percent are currently attending. Of those currently attending, 17.2 percent are in Kindergarten, 49.1 percent are at primary level and 18.5 percent are in Junior High Schools. Thus, 84.8 percent of the pupils in the district are in Basic schools.

#### **Economic activity status**

About 73 percent of the population aged 15 years and older are economically active while 27.0 percent are economically not active. Of the economically active population, 97.3 percent are employed while 2.7 percent are unemployed. Of the unemployed population, 63.9 percent are seeking work for the first time. For those who are economically not active, a larger percentage of them are students (38.7%), 30.0 percent perform household duties and 12.5 percent are either too old or too young to work.

#### Occupation

Of the employed population, 57.2 percent are engaged as Skilled agricultural, forestry and fishery workers, 14.0 percent in Service and sales work and 6.0 percent are engaged as Plant and machine operators and assemblers. Females (23.4%) are more likely than males (4.5%) to be engaged as service and sales workers. In contrast, males (62.7%) are more likely than females (51.8%) to be engaged as skilled agricultural, forestry and fishery workers.

#### Industry

In terms of sector of employment, 57.4 percent are engaged by the Agricultural sector, 29.6 percent by the Service sector and 13.0 percent by the Industry sector. Whereas more males than females are employed by the Agricultural and Industry sectors, more females than males are employed by the Service sector (38.2 percent and 21.0 percent respectively).

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

Of the population 15 years and older 67.4 percent are self-employed without employees, 13.2 percent are contributing family workers and 11.8 percent are employees. Male employees (16.3%) are in higher proportion than their female counterparts (7.4%). On the contrary, females (17.4%) are more likely than males (9.0%) to be contributing family workers. Female self-employed without employees (68.8%) are also in relatively higher proportion than their male counterparts (66.0%). The private informal sector is the largest employer in the district, employing 91.8 percent of the population followed by the public sector with 5.0 percent.

#### Information Communication Technology

Of the population 12 years and above, 41.8 percent own mobile phones. Males who own mobile phones constitute 47.3 percent as compared to 36.7 percent of females. A little over two percent (2.3%) of the population 12 years and older use internet facilities in the district. Males (3.5%) are more likely than females (1.3%) to use internet facility. A little over three percent (3.2%) of the total households in the district have desktop/laptop computers.

#### Disability

About six percent of the district's total population has one form of disability or the other. The proportion of the female population (6.4%) with disability is slightly higher than that of females (5.6%). The main types of disability in the district are sight (47.8%), physical (30.6%), hearing (21.6%) and speech (20.0%). In terms of locality, 6.9 percent of the population in urban localities and 5.6 percent of the population in rural localities have disability. Six in ten (61.2%) persons with disability are employed and 37.1 percent are economically not active. Of the population disabled, 29.0 percent have never been to school, 18.8 percent have primary school education and two-fifth (40.2%) have either Middle school or Junior High education.

#### Agriculture

More than three-fifth (76.7%) of households in the district are engaged in agriculture. Eight out of ten households (82.7%) in rural localities and 65.3 percent households in rural localities are engaged in agricultural activities. Most households (95.9%) are involved in crop farming and livestock rearing (45.3%). Poultry (68.1%) is the dominant animal reared in the district.

#### Housing

The housing stock of Atiwa District is 19,362 representing 4.4 percent of the total number of houses in the Eastern Region. The average number of persons per house is 5.6 which is higher in urban areas (6.3%) than in rural areas (5.4%).

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

Over half (51.0%) of all dwelling units in the district are compound houses and 38.7 percent are separate houses. More than half (54.8%) of the dwelling units in the district are owned by members of the household; 23.2 percent are owned by private individuals and 19.5 percent are owned by relatives who are not household members.

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

The main construction material for outer walls of dwelling units in the district is cement/concrete accounting for 52.5 percent and mud/mud bricks or earth which constitutes 37.3 percent of outer walls of dwelling units in the district. Cement (76.4%) and mud/earth (19.0%) are the two main materials used in the construction of floors of dwelling units. Metal sheets (92.1%) are the main roofing material for dwelling units in the district.

#### Room occupancy

One room constitutes the highest percentage (19.7%) of sleeping rooms occupied by households in housing units in the district. About 11.5 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 (64.2%) kerosene lamp (22.0%) and flashlight/torch (12.4%). The main source of fuel for cooking for most households in the district is wood (65.5%) and charcoal (20.4%). The four main sources of water in the district are bore-hole/pump/tube well (54.1%), pipe-borne outside dwelling (12.5%) and public tap (10.7%).

Pit latrine (39.6%), public toilet (28.0%) and KVIP (18.9%) are the most widely used toilet facilities in the district. About 9.1 percent of the population in the district has no toilet facility.

#### Waste disposal

The most widely method of solid waste disposal is by public dump in the open space accounting for 50.2 percent. About 18.2 percent of households burn their solid waste and 8.3 percent of households dump their solid waste indiscriminately. For liquid waste disposal, throwing waste onto the compound (59.2%) and onto the street (22.7%) are the two most common methods used by households in the district.

# CHAPTER ONE INTRODUCTION

#### 1.1 Background

The Atiwa District Assembly is one of the District Assemblies in the Eastern Region of Ghana, it was granted its present status by the Legislative Instrument (LI) 1784 of 2004. It was carved from the then East Akim District Assembly now East Akim Municipal Assembly, in the year 2004. Its Capital is Kwabeng which is situated at the foot of the Atiwa Range.

#### **1.2** Physical Features

#### **1.2.1** Location and size

The Atiwa District lies between longitudes  $0^{\circ} 3^{\circ}$  West and  $0^{\circ} 50$  East and latitudes  $6^{\circ} 10^{\circ}$ North and  $6^{\circ} 30^{\circ}$  North. The District is bounded on the North by Kwahu West and Kwahu South Districts, on the North-East by the Fanteakwa District, East Akim to the South-East, Kwaebibrim to the South and Birim North to the West. It has an estimated land area of about 1,165.3 km<sup>2</sup>.

#### 1.2.2 Climate

The Atiwa District lies in the wet semi equatorial zone characterized by a bi-modal rainy season, which reaches its maximum during the two peak periods of April-July and September-October. The annual rainfall is between 1,250mm and 1,750mm.Temperature ranges between a minimum of 26°C and maximum of 30°C. A relative humidity of 65-75 percent during the dry season and 75-80 percent in the rainy season is a characteristic of the district.

#### 1.2.3 Vegetation

The District is located within the moist semi-deciduous forest. The forest reserve covers the Atiwa Scarp and its surroundings. Commercial tree species covering the 12 percent land area include; Odum, Wawa, Ofram, Asamfra, Mahogany, Okyenkyen etc.

#### 1.2.4 Soils and suitability for agriculture

The predominant soil type in the Atiwa district is usually reddish-brown and well-drained, located on the relatively high lands. Food

#### **1.2.5** Natural resources

The District is endowed with mineral deposits (gold, diamond, bauxite and kaolin), which are found in the Birim river basin around Enyiresi, Abomosu, and Kwabeng. Bauxite and manganese are also found at Asamama and surrounding area whilst kaolin deposits are found at the Atiwa Ranges.

Forest reserves cover about 100 square kilometres of the Atiwa ranges and contain various timber species and medicinal plants, and are good attractions for eco-tourism timber species. The species include: Wawa (Tripochiton scleroxylon), Odum (milicia exelcsa), sapele (Guthaphragong) and mahogany (Kaya ivoreensis) etc.

#### Figure 1.1: District map the Atiwa District



**DISTRICT MAP OF ATIWA** 

Source: Ghana Statistical Service, GIS

Adenchemsu, Sea Abena, Akuku, Kankan, Abresu, Awusu, Kokobeng, Frempong, Kade, Subri, Anikorkor are some rivers and stream in the district. The Birim, Densu and Pra rivers trace the source from the Atiwa ranges which are potential source of water for irrigation and fishing. Butterfly sanctuary at the Atiwa forest also serves as a major tourist attraction site.

#### **1.3** Political and Administrative Structure

Like other districts in Ghana, Atiwa District has a decentralized political and administrative structure with a District Chief Executive (DCE), a Presiding Member, a Member of Parliament (MP), the District Co-ordinating Director (DCD), staffs of the Assembly and Assembly Members, forming the District Assembly. The District Chief Executive (DCE) represents the Central Government, while the DCD has oversight responsibility for the day-to-day administration of the District Assembly. At the grassroots, Assembly and the Unit Committee Members are immediate Political organs in the various communities. It is composed of thirty-four (34) Electoral Areas and is

#### **1.4** Social Structure

#### 1.4.1 Ethnicity/language

Indigenous people of the district are the Akyems and speak the Akan language. The Atiwa District also accommodates other ethnic groups who migrate to the district from other regions and neighbouring countries. These groups include the Ewes, Ga-Adangbes, Akwapims, Frafras, Dagartis, Guans, Brongs, Hausas and Fulanis.

#### **1.4.2** Traditional structure

The traditional authority consists of chiefs, queen-mothers, and sub-chiefs. Traditionally, the people of Atiwa district are organized in lineage groups under chiefs. A lineage comprises extended families that trace their genealogy to the same ancestor. The extended families also have heads who are most often the oldest male. Property is passed on by matrilineal inheritance. Basically, the traditional authorities administer stool lands, holding them in trust for the people, and arrange the celebration of traditional festivals. They are also the custodians of traditional beliefs and customs, passed on from one generation to another. The traditional authorities also have courts which adjudicate on matters relating to stool lands, lineage and family lands, chieftaincy title disputes, violations of traditions and disputes between localities, lineages, families and individuals.

#### 1.5 Economy

The key sectors of the District's economy can be categorized as Agriculture, Industry/manufacturing, Trading and services.

#### 1.5.1 Agriculture

Majority of the people in the district are engaged in agriculture. The district has substantial agricultural resources, which include large expanses of land suitable for cultivation of crops and rearing of animals. Major food crops cultivated are Cassava, Maize, Plantain, Cocoyam and yam. Cash crops cultivated in the district are cocoa, oil palm, coffee and citrus.

#### **1.5.2** Industry/manufacturing sector

The industrial sector is dominated by small-scale manufacturing activities including Gari Processing, Oil Palm Extraction, Small Scale Mining, Sawmills and Bakery.

#### **1.5.3** Services sectors

The services sector comprising transportation, hairdressing, dressmaking, and hospitality employs about 20 per cent of the population. The Atiwa District is endowed with an enviable potential for tourism development. The tourism potential of the District includes physical, historical and cultural variants that could be developed for conventional tourism. Tini waterfall which is located in a lush ever green forest about 6km from Adasawase, a small farming community of about 6km from Anyinam off the Accra-Kumasi highway in the Atiwa District of the Eastern region has been developed and being patronized by both local and international tourists. The attraction consists of spectacular cascading waterfalls over a giant rock formation and an ancient cave. A receptive centre has been development and the Assembly is seeking a private entrepreneur to run the place at a negotiated sharing formula.

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

#### 1.6.1 Introduction

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

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

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

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

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

#### Census secretariat and committees

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

training, publicity and education, field operations and logistics management, data processing, and data analysis and dissemination.

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

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

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

#### **Selection of census topics**

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

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

#### Census mapping

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

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

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

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

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

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

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

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

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

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

#### **1.6.3** Census enumeration

#### Method of enumeration and field work

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

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

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

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

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

#### **1.6.4** Post enumeration survey

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

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

#### **1.6.5** Release and dissemination of results

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

#### **1.6.6** Concepts and definitions

#### Introduction

The 2010 Population and Housing Census of Ghana followed the essential concepts and definitions of a modern Population and Housing Census as recommended by the United Nations (UN). It is important that the concepts, definitions and recommendations are adhered

to since they form the basis upon which Ghana could compare her data with that of other countries.

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

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

#### Region

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

#### District

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

#### Locality

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

#### Population

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

#### Household

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

#### Head of household

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

#### Household and non-household population

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

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

#### Age

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

#### Nationality

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

#### Ethnicity

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

#### **Birthplace**

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

#### **Duration of residence**

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

#### Religion

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

#### **Marital status**

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

#### Literacy

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

#### Education

#### School attendance

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

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

#### Level of education

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

#### **Activity status**

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

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

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

#### Occupation

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

#### Industry

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

#### **Employment status**

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

#### **Employment sector**

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

#### Disability

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

#### Information Communication Technology (ICT)

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

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

#### Fertility

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

#### Mortality

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

#### Agriculture

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

#### Housing conditions and facilities

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

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

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

#### **1.7** Organization of the Report

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

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

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

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

# CHAPTER TWO DEMOGRAPHIC CHARACTERISTICS

#### 2.1 Introduction

The demographic characteristics of the population in the district have social and economic implications and are the benchmark for the provision of social services such as recreational centres, housing, health services, and education. The age-sex structure also influences fertility and mortality levels. At the community level, age and sex are two attributes that largely influence an individual's status and role in society. This chapter presents information on the population size and distribution, age-sex structure, migration, fertility and mortality for the Atiwa District.

#### 2.2 **Population Size and Distribution**

#### 2.2.1 Population size and sex by locality

Table 2.1 shows the population size by locality of residence and sex in the Atiwa District. According to 2010 PHC the total population of the district stands at 110,622 representing 4.2 percent of the regional population. The population in the district is concentrated more in rural (66.6%) than urban areas (33.4%). The population in the district revealed that there are more females (50.6%) than males (49.4%). This characteristic is similar in both localities with more females residing in urban (51.5%) compared to those in rural areas (50.1%); while few males reside in urban (47.1%) than in rural areas (48.1%).

#### Table 2.1: Population by sex and locality of residence

	All Localities		Urb	Urban		Rural	
District/ Sex	Number	Percent	Number	Percent	Number	Percent	
Total	110,622	100.0	36,897	100.0	73,725	100.0	
Male	54,671	49.4	17,889	48.5	36,782	49.9	
Female	55,951	50.6	19,008	51.5	36,943	50.1	
Percent of regional population	4.2		3.2		5		

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.2.2 Age dependency ratio

Table 2.2 provides information on the dependency ratios which measures the number of persons dependent on the employed population. As indicated in the table, the dependency ratio in the Atiwa district is 86.3, which infers that for every 100 persons in the working-age population, there are 86 dependents (comprising children and aged) to cater for. Furthermore, the child dependency ratio (74.3) is higher than the old age dependency ratio (12).

<b>Table 2.2:</b>	Age dependency	ratio
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Age Group/Ratio	Number
All Ages	110,622
0-14	44,111
15-64	59,386
65+	7,125
Total dependency ratio	86.3
Child dependency ratio	74.3
Old age dependency ratio	12.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.3 Age-Sex Structure

Age and sex are the most critical characteristics of any population. The age-sex structure indicates the number of male and female in the 5 years age cohort. Table 2.3 reveals that the male cohort population is slightly higher than that of the female population aged 0-4 years through to 15-19 years and then reverses in favour of females from age 20-24 years onwards. The proportion of the population aged 0-14 years constitutes 45.2 percent, while population aged 15-64 years constitute 47.9 percent and that for those aged 65 years and older, is 6.9 percent.

Age Group	Both Sexes	Male	Female	Sex ratio	Urban	Rural
All Ages	110,622	54,671	55,951	97.7	33.4	66.6
0 - 4	15,963	8,172	7,791	104.9	31.5	68.5
5 - 9	14,379	7,451	6,928	107.5	31.5	68.5
10 - 14	13,769	7,171	6,598	108.7	32.8	67.2
15 - 19	10,949	5,875	5,074	115.8	35.8	64.2
20 - 24	8,145	3,761	4,384	85.8	37.1	62.9
25 - 29	7,534	3,447	4,087	84.3	35.7	64.3
30 - 34	6,139	2,896	3,243	89.3	33.9	66.1
35 - 39	5,837	2,813	3,024	93	32.8	67.2
40 - 44	5,432	2,697	2,735	98.6	33.9	66.1
45 - 49	4,937	2,353	2,584	91.1	31.5	68.5
50 - 54	4,545	2,123	2,422	87.7	33.8	66.2
55 - 59	3,070	1,504	1,566	96	32.4	67.6
60 - 64	2,798	1,367	1,431	95.5	30.7	69.3
65 - 69	1,918	912	1,006	90.7	33.2	66.8
70 - 74	2,189	971	1,218	79.7	32.9	67.1
75 - 79	1,185	537	648	82.9	35.5	64.5
80 - 84	877	331	546	60.6	29.9	70.1
85 - 89	519	160	359	44.6	37.6	62.4
90 - 94	309	94	215	43.7	34.6	65.4
95 +	128	36	92	39.1	43	57

 Table 2.3: Population by age, sex and type of locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 2 is a population pyramid which depicts the age-sex structure of the population. The pyramid has a broad base of the younger population and a narrow apex of the older population. With increasing age, the age-sex structure looks slightly thinner for the males than for the females, indicating that, at older ages, the proportion of males is lower than that of females. Particularly, for the age groups 10-14 years and 15-19 years there are more females than males. The high proportion of the populations aged 0-4 and 5-9 years indicate that the population in the district has the potential to grow for a considerable number of years with implications for economic development of the district. This type of age structure is typical of most developing countries.



Figure 2.1: Population pyramid

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.3.1 Population size, sex and distribution

Table 2.4 shows the distribution of population by sex and locality of residence. The total population of Atiwa is 110,622 in 2010. The distribution of the population by sex shows that there are more females (50.6%) than males (49.4%) residing in the district. The distribution of population of the district by locality exhibits rural dominance of 66.7 percent. Furthermore, the population of the district has a sex ratio of 97.7, indicating that there are about 98 males to every 100 females in the district. However, it can be observed that the sex ratio in the urban areas is relatively lower than the district average and that of rural areas.

<b>Table 2.4:</b>	<b>Population</b>	by sex and	locality of	f residence
	-		•	

	All Localities		Urb	Urban		ral
District/Sex	Number	Percent	Number	Percent	Number	Percent
Total	110,622	100.0	36,897	100.0	73,725	100.0
Male	54,671	49.4	17,889	48.5	36,782	49.9
Female	55,951	50.6	19,008	51.5	36,943	50.1
Sex Ratio	97.7		94.1		99.6	
Percent of regional population	4.2		3.2		5	

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.3.2 Age-sex structure

The age-sex structure is the results of past experiences in fertility, mortality and migration. From table 2.5 we observe that Atiwa district population age structure is characterised by youthful (0-14 year) population of about 40.0 percent, followed by persons (30-59) year group constituting 27.1 percent and (15-24) year group representing 17.3 percent. Apart from, populations aged (25-29 years) and 65 years and older which show higher proportion in favour of female population, other age groups is observed to have more males.

Age	Both Sexes		Ma	les	Fem	Females		
Group	Number	Percent	Number	Percent	Number	Percent		
All Ages	110,622	100.0	54,671	100.0	55,951	100.0		
Under 15	44,111	39.9	22,794	41.7	21,317	38.1		
15 - 24	19,094	17.3	9,636	17.6	9,458	16.9		
25 - 29	7,534	6.8	3,447	6.3	4,087	7.3		
30 - 59	29,960	27.1	14,386	26.3	15,574	27.8		
65 +	9,923	9.0	4,408	8.1	5,515	9.9		

Table 2.5: Age structure by broad age group and sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.4 Fertility, Mortality and Migration

There are three main factors that influence the population of a country or region namely; fertility, mortality and migration. These factors determine the size and age-sex composition of the population at a particular point in time and thus critical for the socio-economic development. The objective of this chapter is to provide analysis on migration, fertility and mortality levels in the district using data from the 2010 population and housing census.

#### 2.4.1 Fertility

Fertility refers to the number of children born to women. The reproductive health of the women in the district is also linked to childbearing patterns. In this chapter, two types of fertility measures, namely current fertility and cumulative fertility measures are used to examine the levels of fertility in the district.

#### **Current fertility**

Table 2.6 shows reported total fertility rate, general fertility rate and crude fertility rate in all districts in the Eastern region. The total fertility rate (TFR) for Atiwa District is 4.2 live births per woman aged 15-49 years higher than regional average (3.5 live births per woman). This implies that a woman living in the district would have an average of 4.2 children by the end of her reproductive period, if the age-specific fertility rates were observed. Similarly, the general fertility rate for the district which stands at 125.9 live births per 1,000 women between the ages of 15-49 years is higher compared to the regional figure (103.9 live births per 1,000 women) and is second highest in the region. The crude birth rate for the district stands at 28.6 which is also higher than the regional figure of 25.4, and again is the second highest in the region.

District	Population	Number of women 15-49 vears	Number of births in last 12 months	Total Fertility Rate	*General Fertility Rate	**Crude Birth Rate
All Districts	2 622 154	612 521	66.840	2.5	102.0	25 /
	2,055,154	045,554 51.001	00,840	5.5	105.9	23.4
New Juaben Municipal	183,727	51,991	3,535	2.4	68	19.2
East Akim Municipal	167,896	41,601	3,741	3.1	89.9	22.3
Birim Municipal	144,869	37,286	3,359	3.1	90.1	23.2
Akwapem North	136,483	33,245	3,439	3.6	103.4	25.2
Birim South	119,767	28,227	3,227	3.9	114.3	26.9
Kwahu Afram Plains South	115,812	25,424	3,575	4.7	140.6	30.9
Kwaebibirem	113,721	27,940	3,351	4.3	119.9	29.5
Atiwa	110,622	25,131	3,163	4.2	125.9	28.6
Fanteakwa	108,614	25,543	2,737	3.7	107.2	25.2
West Akim Municipal	108,298	26,983	2,885	3.6	106.9	26.6
Kwahu Afram Plains North	102,423	23,110	2,846	4.2	123.2	27.8
Asuogyaman	98,046	24,863	2,225	3.1	89.5	22.7
Akyem Mansa	97,374	22,080	2,701	4.3	122.3	27.7
Kwahu West Municipal	93,584	23,980	2,279	3.3	95	24.4
Suhum Municipal	90,358	22,423	2,109	3.1	94.1	23.3
Lower Manya	89,246	24,478	2,140	3	87.4	24
Yilo Krobo	87,847	22,199	2,001	2.9	90.1	22.8
Upper West Akyem	87,051	20,196	2,482	4.2	122.9	28.5
Nsawam Adoagyiri Municipal	86,000	22,241	1,996	3.1	89.7	23.2
Birim North	78,907	18,533	2,152	3.9	116.1	27.3
Denkyembuor	78,841	19,644	1,950	3.4	99.3	24.7
Ayensuano	77,193	17,192	2,169	4.2	126.2	28.1
Kwahu East	77,125	16,910	2,041	4.2	120.7	26.5
Upper Manya	72,092	16,616	1,852	3.7	111.5	25.7
Kwahu South	69,757	16,259	1,854	3.8	114	26.6
Akwapim South	37,501	9,439	1,031	3.8	109.2	27.5

# Table 2.6: Reported total fertility rate, general fertility rate and crude birth rate by district

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

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

#### **Cumulative (Lifetime) fertility**

The mean number of children ever born per woman in the reproductive age measures the lifetime or cumulative fertility performance of female 12 years and older. Table 2.7 shows the children ever born and children surviving in Atiwa District. The table shows that the district has 38,440 females with children ever born being 118,214 indicating that there are three children to every female (12 years and older). As expected, the average number of children ever born increases consistently from 16 children for women aged 12-14 years) to 13,287 children (for women aged 45-49 years) and then starts to decline for women aged 50 years and older. The same pattern is observed for both male children and female children even born and surviving.

Also, 'children ever born' to women aged 60 years and above is 29.5 percent which is the highest, whereas children ever born to women aged 12-14 years is the least. The table further reveals that, women aged 20-24 and 25-29 years have 89.0 percent of their children surviving while those aged 60+ years have the least percentage of 66.5 of their children surviving. Women aged 25-29 years have 88.1 percent (the highest) and women aged 12-14 years have 62.5 percent (the lowest) of their surviving children to be females. Similarly women aged 20-24 years have 91.1 percent (the highest) whilst women aged 60 years and older have 67.8 percent (the lowest) of their surviving children to be males.

	Number of	Children Ever Born			Childre	n Survivi	ng
Age	Females	Both sexes	Male	Female	Both sexes	Male	Female
All ages	38,440	118,214	59,989	58,225	102,455	51,730	50,725
12 - 14	3,806	16	6	10	12	4	8
15 - 19	5,074	798	392	406	734	354	380
20 - 24	4,384	4,161	2,124	2,037	3,863	1,963	1,900
25 - 29	4,087	8,260	4,217	4,043	7,764	3,950	3,814
30 - 34	3,243	10,114	5,227	4,887	9,535	4,909	4,626
35 - 39	3,024	11,990	6,146	5,844	11,104	5,640	5,464
40 - 44	2,735	12,995	6,584	6,411	11,913	6,015	5,898
45 - 49	2,584	13,287	6,716	6,571	11,934	5,977	5,957
50 - 54	2,422	12,970	6,623	6,347	11,292	5,748	5,544
55 - 59	1,566	8,760	4,460	4,300	7,539	3,847	3,692
60 +	5,515	34,863	17,494	17,369	26,765	13,323	13,442

<b>Table 2.7:</b>	Female population 12 years and older by age, children ever born,
	children surviving and sex of child

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.4.2 Mortality

Data on mortality provide an indication of the health status of the population as well as a measure of the living conditions of the people. However, the district share with the rest of Ghana the factors that mitigate against further improvement in the mortality conditions of the population such as the persistence of poor environmental sanitation, inadequate nutrition, poor access to drinking water and the prevalence of infectious and parasitic diseases, among others.

Table 2.8 presents information on total population of deaths in households and crude death rates by district and region. The data shows that a total of 1064 household deaths occurred in the district within the 12 months prior to the 2010 PHC representing 4.9 percent the regional household deaths. The data again shows that the district recorded a higher crude death rate (per 1,000) of 9.6 relative to that of the region (8.2).

District	Total Deaths in		*Crude
		21.510	
All Districts	2,033,134	21,519	8.2
New Juaben Municipal	183,727	1,085	5.9
East Akim Municipal	167,896	1,427	8.5
Birim Municipal	144,869	966	6.7
Akwapem North	136,483	1,317	9.6
Birim South	119,767	1,351	11.3
Kwahu Afram Plains South	115,812	539	4.7
Kwaebibirem	113,721	726	6.4
Atiwa	110,622	1,064	9.6
Fanteakwa	108,614	911	8.4
West Akim Municipal	108,298	866	8.0
Kwahu Afram Plains North	102,423	455	4.4
Asuogyaman	98,046	853	8.7
Akyem Mansa	97,374	805	8.3
Kwahu West Municipal	93,584	659	7.0
Suhum Municipal	90,358	632	7.0
Lower Manya	89,246	940	10.5
Yilo Krobo	87,847	1,198	13.6
Upper West Akyem	87,051	662	7.6
Nsawam Adoagyiri Municipal	86,000	448	5.2
Birim North	78,907	595	7.5
Denkyembuor	78,841	444	5.6
Ayensuano	77,193	741	9.6
Kwahu East	77,125	992	12.9
Upper Manya	72,092	607	8.4
Kwahu South	69,757	879	12.6
Akwapim South	37,501	357	9.5

# Table 2.8: Total population, deaths in households and crude death rate, by District

Source: Ghana Statistical Service, 2010 Population and Housing Census

Note: \*Number of deaths per 1000 population

Table 2.9 shows that death due to accident/violence/homicide/suicide accounted for 8.8 percent, while the remaining 91.2 percent is due to other causes. The data shows that the district has a relatively low accident/violence/homicide/suicide deaths compared to other district in the region (10.4%)

Table 2.9: Death in househ
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		Death due to				
		Accident/	violence/			
	Total	homicide /suicide		All oth	er causes	
Region/District	deaths	Number	Percent	Number	Percent	
All Districts	21,519	2,240	10.4	19,279	89.6	
East Akim Municipal	1,427	235	16.5	1,192	83.5	
Birim South	1,351	153	11.3	1,198	88.7	
Akwapem North	1,317	106	8.0	1,211	92.0	
Yilo Krobo	1,198	108	9.0	1,090	91.0	
New Juaben Municipal	1,085	121	11.2	964	88.8	
Atiwa	1,064	94	8.8	970	91.2	
Kwahu East	992	138	13.9	854	86.1	
Birim Municipal	966	118	12.2	848	87.8	
Lower Manya	940	63	6.7	877	93.3	
Fanteakwa	911	73	8.0	838	92.0	
Kwahu South	879	85	9.7	794	90.3	
West Akim Municipal	866	99	11.4	767	88.6	
Asuogyaman	853	85	10.0	768	90.0	
Akyem Mansa	805	53	6.6	752	93.4	
Ayensuano	733	49	6.7	684	93.3	
Kwaebibirem	727	78	10.7	649	89.3	
Upper West Akyem	662	62	9.4	600	90.6	
Kwahu West Municipal	659	58	8.8	601	91.2	
Suhum Municipal	640	35	5.5	605	94.5	
Upper Manya	607	32	5.3	575	94.7	
Birim North	595	83	13.9	512	86.1	
Kwahu Afram Plains South	539	60	11.1	479	88.9	
Kwahu Afram Plains North	455	92	20.2	363	79.8	
Nsawam Adoagyiri Municipal	448	46	10.3	402	89.7	
Denkyembuor	443	53	12.0	390	88.0	
Akwapim South	357	61	17.1	296	82.9	

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### Age-specific mortality rate

Figure 2.2 shows reported age specific death rates by sex. The age specific death rate for the sexes closely decline between under 5 year group and 5-9 year group but remained steady until they start rising for 15-19 year group. The rate declines for males (45-49) age group after being stable but starts to increase gradually and assumes a sharp increase for (60–64) age group and beyond, while that of the female age group fairly remains stable then increases sharply for (65-69) age group and beyond but relatively lower compared to the rate for male age groups.





Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 2.4.3 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. Migration patterns are analysed in this report by comparing locality of birth with locality of enumeration to provide an indication of migratory movements.

Table 2.10 shows the birthplace by duration of residence of migrants in the Atiwa District. The table indicates a total of 32,631 migrants in the district. Of which 61.3 percent were born elsewhere in the same region and 38.7 percent in other region of Ghana. The largest number of migrants is from Ashanti Region (2,399). This is followed by Volta Region (2,315), and Greater Accra (1,778). The region having the lowest representation of migrants in the district is Upper West Region (300)

Concerning the duration of residence, a higher proportion of migrants from regions other than Eastern had lived in the district between one to four years. The Volta Region (19.4%) had the highest proportion of its migrants who have lived in the district for 20 years or more, following closely is Upper West (18.3%). Migrants from Western region (7.0%) constitute the least of migrant population who have lived in the district for 20 years or more.

		Duration of residence (%)				
Birthplace	Number	Less than 1	1-4	5-9	10-19	20+
Bittiplace	Number	year	years	years	years	years
Total	32,631	13.8	31.8	17.9	17.5	19.0
Born elsewhere in the region	20,014	12.9	29.2	18.1	18.3	21.4
Born elsewhere in another region:						
Western	919	13.9	44.9	18.6	15.6	7.0
Central	1,705	15.1	33.9	17.7	16.0	17.3
Greater Accra	1,778	18.7	35.3	18.7	14.2	13.0
Volta	2,315	15.8	30.0	16.8	18.0	19.4
Ashanti	2,399	15.6	35.7	15.3	16.8	16.6
Brong Ahafo	1,087	13.4	41.6	22.5	13.7	8.7
Northern	842	13.7	41.1	15.3	14.3	15.7
Upper East	607	13.5	35.4	18.3	19.3	13.5
Upper west	300	18.7	33.0	17.3	12.7	18.3
Outside Ghana	665	11.7	35.2	16.8	20.6	15.6

## Table 2.10: Birthplace by duration of residence of migrants

Source: Ghana Statistical Service, 2010 Population and Housing Census
# CHAPTER THREE SOCIAL CHARACTERISTICS

# 3.1 Introduction

The 2010 PHC defines a household as a person or a group of persons, who lived together in the same house or compound and share the same house-keeping arrangements and constitute a single consumption unit. This section focuses on social characteristics, namely, household size, relation to head of household, distribution of households by locality of households in the Atiwa district.

# 3.2 Household Size, Composition and Headship

#### 3.2.1 Household size

Household size provides important information to policy makers and planners in allocating resources for social services such shelter, health and education. This section focuses on the analysis of data on household structure, size, and composition. As shown in Table 3.1 there are 26,342 households in Atiwa District with 65 percent located in rural areas. While the average household size for rural dwellers (3.2) is lower than the district figure of 4.2 that of the urban areas (5.9) is rather higher.

#### Table 3.1: Household Size by type of Locality

	Total				
Indicator	Country	Region	District	Urban	Rural
Total Household Population	24,076,327	2,633,154	109,352	54,019	55,333
Total Households	5,467,054	632,045	26,342	9,104	17,238
Average household per house	1.6	1.5	1.4	1.6	1.3
Average household size	4.4	4.2	4.2	5.9	3.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 3.2.2 Household Composition by sex

Table 3.2 shows household composition of Atiwa District. Out of 109,352 people living in the district, almost 41 percent are children, heads of households (24.1%), grandchildren (12.6%) and spouse (10.8%). The least of all the members of household is adopted/foster children, representing 0.4 percent.

The household population in the district exhibits similar pattern for the sexes, with proportion of male constituting children relatively higher compared with their female counterpart (42 % against 39.2%). Household head accounts for 31.2 percent of the male population which again is higher compared with female head of household (17.1%). The data further reveal that there are more female parent in-laws (1.4%) than male parent in-law (0.2%) in the district.

	Tot	tal	Ma	ıle	Female		
Household composition	Number	Percent	Number	Percent	Number	Percent	
Total	109,352	100.0	54,019	100.0	55,333	100.0	
Head	26,342	24.1	16,861	31.2	9,481	17.1	
Spouse (wife/husband)	11,856	10.8	925	1.7	10,931	19.8	
Child (son/daughter)	44,343	40.6	22,677	42.0	21,666	39.2	
Parent/parent in-law	885	0.8	124	0.2	761	1.4	
Son/daughter in-law	835	0.8	277	0.5	558	1.0	
Grandchild	13,744	12.6	7,066	13.1	6,678	12.1	
Brother/sister	3,177	2.9	1,789	3.3	1,388	2.5	
Step child	746	0.7	383	0.7	363	0.7	
Adopted/foster child	379	0.4	202	0.4	177	0.3	
Other relative	5,112	4.7	2,535	4.7	2,577	4.7	
Non-relative	1,933	1.8	1,180	2.2	753	1.4	

 Table 3.2: Household population by composition and sex

#### 3.2.3 Household structure

The household population by structure and sex are presented in table 3.3. The data show that the nuclear (head with spouse(s) and children) constitute the highest proportion of households population (29.7%), followed by extended (composed of the head with spouse(s) and biological/adopted children and relatives) (20.4%), and single parent extended (16.7%). Single parent extended with non-relatives constitutes the lowest proportion of households (1.6%). A similar pattern of the distribution of household population by structure can be observed for the sexes.

	Tot	al	Ма	ıle	Fei	nale
Household structure	Number	Percent	Number	Percent	Number	Percent
Total	109,352	100.0	54,019	100.0	55,333	100.0
Head only	5,191	4.8	3,518	6.5	1,673	3.0
Head and a spouse only	2,250	2.1	1,132	2.1	1,118	2.0
Nuclear (head, spouse(s) and children)	32,496	29.7	16,862	31.2	15,634	28.3
Extended (Head, spouse(s), children and						
head's relatives)	22,258	20.4	11,280	20.9	10,978	19.8
Extended + non relatives	2,064	1.9	1,134	2.1	930	1.7
Head, spouse(s) and other composition	4,682	4.3	2,380	4.4	2,302	4.2
Single parent Nuclear	11,348	10.4	4,915	9.1	6,433	11.6
Single parent extended	18,219	16.7	7,493	13.9	10,726	19.4
Single parent extended + non relative	1,729	1.6	769	1.4	960	1.7
Head and other composition but no spouse	9,115	8.3	4,536	8.4	4,579	8.3

 Table 3.3: Household population by structure and sex

Source: Ghana Statistical Service, 2010 Population and Housing Census

# **3.3** Marital status

#### 3.3.1 Introduction

Marriage in Ghanaian societies includes both formal unions and informal unions. Formal unions are those sanctioned by law under the ordinance, by tradition/customary law or religion. Informal unions are cohabiting unions recognized in Ghana but not sanctioned by law, tradition or religion. This section examines the marital status of the population 12 years and older.

#### **3.3.2** Marital status and age

Figure 3.1 presents the marital status of persons 12 years and older living in the district. The figure reveals that, 41.6 per cent of the population 12 years and older are married, a proportion of 36.7 percent belonging to never married population. Consensually, 8.5 percent live together, while widowed persons constitute 6.0 percent. About 7.0 percent of persons 12 years and older is either divorced or separated, whereas 13.2 per cent have once been married.



Figure 3.1: Persons 12 years and older by marital status

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.4 presents the distribution of persons 12 years and older by sex, age and marital status. As expected, majority (60 percent or more) of adolescents (12-19 years) and young adults (20-24) are never married. The reason may be that these groups may still be in school or in some form of training. For persons within the 5 year age group above 25 years, a proportion of 43 percent or more are married; with 45–49 years age group having the highest proportion (71.5%). Whilst, divorce constitutes 11.7 percent to 14.2 percent of persons 50 years and older, widowhood (36%) is more pronounced among 65 years and older generation. A similar characteristic of marital status by level of education can be observed for both sexes.

				Informal/				
G (A			NT	Consensual				
Sex/Age-	Number	Tatal	Never	union/Living	Manniad	Comparated	Divorad	Widowed
group	Nulliber	Total	married	together	Married	Separated	Divoiced	widowed
Both Sexes						• •		
Total	74,458	100.0	36.7	8.5	41.6	2.0	5.4	5.8
12 - 14	7947	100.0	95.4	0.7	3.9	0.0	0.0	0.0
15 - 19	10,949	100.0	89.8	4.2	5.7	0.2	0.1	0.1
20 - 24	8,145	100.0	61.1	15.6	21.4	1.1	0.6	0.2
25 - 29	7,534	100.0	33.8	18.4	43.5	1.7	2.3	0.4
30 - 34	6,139	100.0	16.2	15.2	60.9	2.4	4.2	1.1
35 - 39	5,837	100.0	9.0	12.9	68.4	2.5	5.7	1.5
40 - 44	5,432	100.0	5.2	8.4	71.5	3.6	8.0	3.3
45 - 49	4,937	100.0	3.4	6.8	72.2	4.0	9.7	3.9
50 - 54	4,545	100.0	2.9	5.5	68.1	3.7	11.7	8.1
55 - 59	3,070	100.0	2.5	4.9	65.0	3.8	11.8	12.1
60 - 64	2,798	100.0	1.6	4.1	60.8	3.0	14.2	16.3
65+	7,125	100.0	2.3	1.8	42.9	3.1	13.9	36.0
Male								
Total	36,018	100.0	43.9	7.6	41.5	1.6	3.7	1.8
12 - 14	4,141	100.0	95.7	0.7	3.6	0.0	0.0	0.0
15 - 19	5,875	100.0	94.5	1.1	4.2	0.0	0.1	0.0
20 - 24	3,761	100.0	79.7	9.1	10.7	0.3	0.2	0.1
25 - 29	3,447	100.0	48.8	17.3	31.7	1.0	0.9	0.3
30 - 34	2,896	100.0	22.9	16.5	55.6	2.0	2.9	0.2
35 - 39	2,813	100.0	13.3	14.3	66.0	1.8	3.8	0.8
40 - 44	2,697	100.0	6.9	9.3	73.5	3.6	5.5	1.2
45 - 49	2,353	100.0	4.7	8.1	75.6	3.4	6.5	1.8
50 - 54	2,123	100.0	4.4	6.4	76.0	3.1	7.8	2.3
55 - 59	1,504	100.0	4.0	6.6	73.6	3.4	8.4	4.0
60 - 64	1,367	100.0	2.3	5.6	74.8	2.2	11.0	4.1
65+	3,041	100.0	3.2	2.1	68.6	3.0	11.2	11.9
Female								
Total	38,440	100.0	29.9	9.3	41.7	2.4	7.0	9.6
12 - 14	3,806	100.0	95.0	0.7	4.3	0.0	0.0	0.0
15 - 19	5,074	100.0	84.3	7.7	7.4	0.4	0.2	0.1
20 - 24	4,384	100.0	45.1	21.3	30.6	1.7	0.9	0.3
25 - 29	4,087	100.0	21.1	19.2	53.5	2.2	3.4	0.5
30 - 34	3,243	100.0	10.3	14.1	65.6	2.7	5.5	1.9
35 - 39	3,024	100.0	5.0	11.6	70.7	3.1	7.4	2.2
40 - 44	2.735	100.0	3.5	7.5	69.6	3.6	10.5	5.3
45 - 49	2.584	100.0	2.2	5.7	69.1	4.5	12.7	5.8
50 - 54	2.422	100.0	1.6	4.7	61.2	4.3	15.2	13.1
55 - 59	1.566	100.0	1.1	3.1	56.8	4.2	15.0	19.8
60 - 64	1.431	100.0	0.9	2.7	47.4	3.8	17.2	28.0
65+	4.084	100.0	1.7	1.5	23.8	3.2	15.9	<u>54.0</u>

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

#### 3.3.3 Marital status by sex and level of education

In recent times, education may be one of the numerous attributes for delay in marriage for both men and women. Table 3.5 provides information on the distribution of the persons 12 years and older by marital status and education. The table shows that majority (70.9%) of people who are married have had basic education as their highest level of education. This is higher with the male married persons (71.3%) compared to female married persons (70.5%). The table further reveals that lack of formal education may have contributed to significant proportion of persons who are separated (24.8%) and divorced (25.8%). The proportion of persons divorced is more alarming with female population (30.4%) than male population (16. 4%).

The proportion of persons in the various categories of marital status that had tertiary education was generally low. Particularly, less than one percent of married persons had tertiary education (0.8%), with male (1.5%) higher compared to that of female (0.2%).

							Post	
							middle/	
						Vocational/	secondary	
		All	No		Secon-	Technical/	certificate/	
Sex/Marital status	Number	levels	Education	Basic <sup>1</sup>	dary <sup>2</sup>	Commercial	diploma <sup>3</sup>	Tertiary <sup>4</sup>
<b>Both Sexes</b>								
Total	74,458	100.0	15.5	71.9	7.8	1.4	2.7	0.6
Never married	27,312	100.0	5.0	77.7	13.5	0.8	2.4	0.6
Informal/consensual								
union/living	6,293	100.0	13.3	76.4	6.6	1.3	2.0	0.3
together								
Married	30,992	100.0	18.1	70.9	4.9	1.9	3.4	0.8
Separated	1,507	100.0	24.8	67.8	3.4	2.1	1.7	0.3
Divorced	4,016	100.0	25.8	67.2	2.9	2.1	1.9	0.2
Widowed	4,338	100.0	52.7	42.8	1.3	1.3	1.7	0.1
Male								
Total	36,018	100.0	9.8	73.9	9.8	1.7	3.7	1.0
Never married	15,806	100.0	5.3	76.9	13.7	0.8	2.6	0.8
Informal/consensual								
union/living	2,730	100.0	9.8	76.2	8.8	1.5	3.1	0.6
together								
Married	14,949	100.0	12.9	71.3	6.8	2.5	5.1	1.5
Separated	572	100.0	19.1	71.3	4.2	2.8	2.1	0.5
Divorced	1,318	100.0	16.4	71.5	5.4	3.4	2.9	0.4
Widowed	643	100.0	30.0	58.3	3.6	3.0	4.5	0.6
Female								
Total	38,440	100.0	20.7	70.1	6.0	1.2	1.8	0.2
Never married	11,506	100.0	4.7	78.7	13.1	0.9	2.2	0.4
Informal/consensual	,							
union/living	3,563	100.0	15.9	76.6	5.0	1.1	1.2	0.1
together								
Married	16,043	100.0	23.0	70.5	3.2	1.3	1.8	0.2
Separated	935	100.0	28.3	65.6	2.9	1.7	1.4	0.1
Divorced	2,698	100.0	30.4	65.0	1.6	1.5	1.4	0.1
Widowed	3,695	100.0	56.7	40.1	0.9	1.1	1.2	0.0

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

#### 3.3.4 Marital status and economic activity

Table 3.6, shows that out of a total of 74,458 persons who are 12 years and older living in Atiwa District, the employed constitute 65 percent, with the proportion of males (67.2%) employed slightly higher than that of female (62.9%). The unemployed population in the district though generally low (1.7%); is however higher among the female persons (1.9%) than male persons (1.6%). Furthermore, among the various categories of marital status, with the exception of "never married" group, the employed population constitute not less than 58 percent. Particularly, among the married persons 85.3 percent is employed. The table again, reveals high proportion of married females who may either be supporting or not being a burden on their husbands. In competition as 89.1 percent of males married population are employed, 81.7 percent of females who are married are employed.

Majority (60.6%) of persons who are never married are economically not active with females (65.6%) having higher proportion than males (57.0%).

	All Status						Economically		
-	All S	tatus	Empl	oyed	Unemp	loyed	not ac	tive	
Sex/Marital Status	Number	Percent	Number	Percent	Number	Percent	Number	Perce nt	
Both Sexes									
Total	74,458	100.0	48,408	65.0	1,295	1.7	24,755	33.2	
Never married	27,312	100.0	10,165	37.2	594	2.2	16,553	60.6	
Informal/consensual									
union/living together	6,293	100.0	4,992	79.3	212	3.4	1,089	17.3	
Married	30,992	100.0	26,422	85.3	383	1.2	4,187	13.5	
Separated	1,507	100.0	1,218	80.8	37	2.5	252	16.7	
Divorced	4,016	100.0	3,090	76.9	52	1.3	874	21.8	
Widowed	4,338	100.0	2,521	58.1	17	0.4	1,800	41.5	
Male									
Total	36,018	100.0	24,216	67.2	560	1.6	11,242	31.2	
Never married	15,806	100.0	6,452	40.8	348	2.2	9,006	57.0	
Informal/consensual									
union/living together	2,730	100.0	2,491	91.2	48	1.8	191	7.0	
Married	14,949	100.0	13,314	89.1	134	0.9	1,501	10.0	
Separated	572	100.0	489	85.5	7	1.2	76	13.3	
Divorced	1,318	100.0	1,043	79.1	20	1.5	255	19.3	
Widowed	643	100.0	427	66.4	3	0.5	213	33.1	
Female									
Total	38,440	100.0	24,192	62.9	735	1.9	13,513	35.2	
Never married	11,506	100.0	3,713	32.3	246	2.1	7,547	65.6	
Informal/consensual									
union/living together	3,563	100.0	2,501	70.2	164	4.6	898	25.2	
Married	16,043	100.0	13,108	81.7	249	1.6	2,686	16.7	
Separated	935	100.0	729	78.0	30	3.2	176	18.8	
Divorced	2,698	100.0	2,047	75.9	32	1.2	619	22.9	
Widowed	3,695	100.0	2,094	56.7	14	0.4	1,587	42.9	

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

## 3.4 Nationality

Table 3.7 shows the percentage distribution of the population by nationality and by sex in Atiwa District. The data shows that majority (96.2%) of the population of Atiwa district are Ghanaian by birth, followed by Ghanaians with dual citizenship (1.6%). Less than one percent of the population is Ghanaians by naturalization (0.5%). The table further shows that non-Ghanaians constitute the smallest proportion of persons enumerated in the region (1.6%). The nationality attribute of the population exhibits evenly distribution over the sexes.

	Both s	exes	Ma	ıle	Female		
Nationality	Number	Percent	Number	Percent	Number	Percent	
Total	110,622	100.0	54,671	100.0	55,951	100.0	
Ghanaian by birth	106,462	96.2	52,558	96.1	53,904	96.3	
Dual Nationality	1,787	1.6	856	1.6	931	1.7	
Ghanaian by naturalisation	570	0.5	275	0.5	295	0.5	
ECOWAS	1,008	0.9	589	1.1	419	0.7	
Africa other than ECOWAS	450	0.4	227	0.4	223	0.4	
Other	345	0.3	166	0.3	179	0.3	

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### **3.5** Religious Affiliation

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. Table 3.8 shows that, majority (84.9%) of the population in the district are Christians with Pentecostal/Charismatic dominating with a proportion of 32.0 percent, followed by the Protestants (29.1%), other Christians (16.0%). People of the Islamic religion are 6.1 percent, while Traditionalist and others are less than 2 percent.

For the sexes, there are relatively higher proportions of female Christians compared with male Christians who are members of Pentecostal/Charismatic churches (33.8% against 30.2%) and Protestant churches (30.9% against 27.4%). On the other hand, there are more males than females who profess to the Traditional religion (0.9% versus 0.6%)

	Both	sexes	Ma	ıle	Fen	nale
Religion	Number	Percent	Number	Percent	Number	Percent
Total	110,622	100.0	54,671	100.0	55,951	100.0
No Religion	8,157	7.4	5,433	9.9	2,724	4.9
Catholic	8,668	7.8	4,487	8.2	4,181	7.5
Protestant (Anglican Lutheran etc.)	32,242	29.1	14,979	27.4	17,263	30.9
Pentecostal/Charismatic	35,448	32.0	16,519	30.2	18,929	33.8
Other Christians	17,748	16.0	8,662	15.8	9,086	16.2
Islam	6,770	6.1	3,696	6.8	3,074	5.5
Traditionalist	788	0.7	466	0.9	322	0.6
Other (Specify)	801	0.7	429	0.8	372	0.7

Table 3.8: Population by religion and sex

# **3.6** Literacy and Education

Education, whether formal or informal, is essential for human and economic development. In Ghana, some people have become literate through informal educational programs such Adult education. The Millennium Development Goals which emphasizes on universal primary education by 2015 has become the benchmark for evaluating education policies and programs governments of most countries, including Ghana. This section seeks to examine Literacy and Education at Atiwa district.

#### 3.6.1 Literacy

According to 2010 PHC, literacy is defined as the ability to read and write in any language with understanding. The data indicate that there are 76,822 persons aged 11 years and older residing in the district of which 84.9 percent are literate in one language or another. Figure 3.2 depicts the distribution of the population 11 years and older according to the language of literacy. In the Atiwa District, 16.0 percent of the literate population can read and write English only, Ghanaian language only (21%), and English and Ghanaian language (63.0%). None of the literate population in the district could read and write in English and French only.



Figure 3.2: Population 11 years and older by language of literacy

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.9 shows the population 11 years and older who are literate in one language or another by sex and age. Majority of persons in the age categories are literate in English and Ghanaian languages only. Particularly, the adolescent age group (15-19) years has the highest (71.5%). Between 20.0 to 30.0 percent of persons 25 years and older in the age categories are literate in Ghanaian language only. The data again shows that those who could speak and write English only are mainly 50 years and younger, having the highest (25.0%) proportion in the (11-14) age group. A similar characteristic of language literacy among different age groups can be observed for both sexes. However, the distribution for male category are higher compared with that of the females

For persons 65 years and older living in the district, out of a total population of 7,125 more than half are non-literate. The high proportion of non-literate persons among this age group may be due to sight related problem attributable to old age and majority (75.7%) of this population is females.

		Lito	roto		English English,				
		Lite	rate		Ghanaian	and	English	French and	
	None (not			English	language	Ghanaian	and	Ghanaian	
Age Group	literate)	Number	Percent	only	only	language	French	language	
Both sexes									
Total	11,586	65,236	100.0	15.8	21.0	62.5	0.2	0.4	
11-14	182	10,129	100.0	25.0	15.1	59.5	0.1	0.3	
15-19	422	10,527	100.0	17.8	10.2	71.5	0.2	0.3	
20-24	667	7,478	100.0	18.0	16.7	64.4	0.3	0.6	
25-29	835	6,699	100.0	16.3	21.2	61.6	0.3	0.6	
30-34	888	5,251	100.0	15.8	26.7	56.7	0.3	0.4	
35-39	957	4,880	100.0	14.8	28.8	55.7	0.2	0.5	
40-44	988	4,444	100.0	12.4	29.2	57.9	0.2	0.2	
45-49	864	4,073	100.0	11.1	29.0	59.2	0.2	0.4	
50-54	874	3,671	100.0	9.0	27.5	62.7	0.2	0.5	
55-59	560	2,510	100.0	9.4	24.9	65.4	0.1	0.2	
60-64	743	2,055	100.0	6.6	26.1	66.8	0.1	0.4	
65+	3,606	3,519	100.0	6.8	28.0	64.7	0.1	0.4	
Male									
Total	3,582	33,646	100.0	15.7	16.6	67.0	0.2	0.5	
11-14	93	5,258	100.0	26.3	14.4	59.1	0.0	0.2	
15-19	213	5,662	100.0	18.1	9.3	72.1	0.1	0.3	
20-24	264	3,497	100.0	16.3	13.1	69.7	0.4	0.5	
25-29	286	3,161	100.0	15.4	17.0	66.3	0.5	0.8	
30-34	258	2,638	100.0	16.0	21.2	61.8	0.5	0.6	
35-39	320	2,493	100.0	14.6	22.2	62.1	0.3	0.8	
40-44	334	2,363	100.0	12.7	22.4	64.2	0.3	0.3	
45-49	277	2,076	100.0	11.8	21.0	66.1	0.3	0.7	
50-54	263	1,860	100.0	9.2	19.9	69.9	0.3	0.6	
55-59	200	1,304	100.0	9.1	17.0	73.5	-	0.3	
60-64	195	1,172	100.0	6.3	17.8	75.3	-	0.6	
65+	879	2,162	100.0	5.5	19.2	74.7	0.0	0.5	
Female									
Total	8,004	31,590	100.0	16	25.8	57.7	0.2	0.3	
11-14	89	4,871	100.0	23.6	15.9	60	0.1	0.4	
15-19	209	4,865	100.0	17.5	11.2	70.7	0.3	0.3	
20-24	403	3,981	100.0	19.4	19.9	59.8	0.2	0.7	
25-29	549	3,538	100.0	17	25	57.4	0.2	0.3	
30-34	630	2,613	100.0	15.6	32.4	51.6	0.1	0.3	
35-39	637	2,387	100.0	14.9	35.6	49.1	0.1	0.3	
40-44	654	2,081	100.0	12.1	37	50.6	0.1	0.2	
45-49	587	1,997	100.0	10.4	37.4	52	0.2	0.1	
50-54	611	1,811	100.0	8.7	35.3	55.3	0.2	0.4	
55-59	360	1,206	100.0	9.7	33.4	56.6	0.2	0.1	
60-64	548	883	100.0	7	37	55.5	0.3	0.1	
65+	2,727	1,357	100.0	8.8	41.9	48.9	0.1	0.3	

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

#### 3.6.2 Education

This section looks at the educational status of persons 3 years and older living in the Atiwa District. From figure 3.3, about 46 percent of persons 3 years and older had been to school in the past whereas 40.4 percent were in school at the time of the census. The remaining proportion (13.3%) had never been to school. This educational characteristic for the district is similar for both sexes, except that the proportions of male population which are now or had been to school in

the past are higher compared with female proportion. Particularly, 43.7 percent of male population are now in school while 37.2 percent of female population reported to be in school. The proportion of female population (17.3%) which has never been to school is higher than that of male population (9.1%).



Figure 3.3: Educational status by sex for persons 3 years and older

Table 3.10 presents level of education and school attendance by sex of the population three years and older in the district. The table shows that 40,914 persons in the district are currently attending school. Of those who are currently attending school, majority (93.2%) are at the basic level of education (nursery, kindergarten, primary, and JHS) and 5.6 percent are at the Senior High School level. The proportion currently attending vocational / technical / commercial schools, post-secondary and tertiary institutions are substantially low (0.2%, 0.2% and 0.8% respectively). However, relatively more females than males are currently enrolled basic in tertiary institution (1.1% against 0.5%).

Again with reference to table 3.10, a total of 46,836 persons who are 3 years and older have attended school in the past in the district. Overall, past school attendance follow similar pattern as current school attendance. Majority (85.9%) have completed basic education, SSS/SHS level (5.6%) and tertiary institutions (2.5%). It is interesting to note that whereas proportion of females (89.9%) that has completed basic level education is higher compared to that of males (85.0%), the opposite is the case for SSS/SHS level and other higher level of education.

Source: Ghana Statistical Service, 2010 Population and Housing Census

	Currently attending							Attended in the past						
	Both sexes		M	ale	Fer	nale	Both	Both sexes		Male		nale		
Level of education	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Total	40,914	100.0	21,813	100.0	19,101	100.0	46,863	100.0	23,507	100.0	23,356	100.0		
Nursery	3,448	8.4	1,717	7.9	1,731	9.1	-	-	-	-	-	-		
Kindergarten	7,025	17.2	3,646	16.7	3,379	17.7	-	-	-	-	-	-		
Primary	20,100	49.1	10,653	48.8	9,447	49.5	7,648	16.3	2,892	12.3	4,756	20.4		
JSS/JHS	7,570	18.5	4,185	19.2	3,385	17.7	15,234	32.5	7,091	30.2	8,143	34.9		
Middle	-	-	-	-	-	-	17,367	37.1	9,280	39.5	8,087	34.6		
SSS/SHS	2,277	5.6	1,286	5.9	991	5.2	2,625	5.6	1,533	6.5	1,092	4.7		
Secondary	-	-	-	-	-	-	940	2.0	716	3.0	224	1.0		
Vocational/technical/comm ercial	84	0.2	50	0.2	34	0.2	976	2.1	560	2.4	416	1.8		
Post middle/secondary certificate	69	0.2	36	0.2	33	0.2	923	2.0	575	2.4	348	1.5		
Tertiary	341	0.8	240	1.1	101	0.5	1,150	2.5	860	3.7	290	1.2		

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

# CHAPTER FOUR ECONOMIC CHARACTERISTICS

# 4.1 Introduction

The economic characteristics of a population help in examining population and development interrelationship so that appropriate policies can be adopted. The labour force of any population provides an indication of the size of the supply of labour available for the production of goods and services. This chapter presents the economic characteristics of the population of Atiwa District, considering the economic activity status, employment status, occupation, industry, employment status and sector of employment.

# 4.2 Economic Activity Status

A person is regarded as economically active if he/she worked for pay or profit or family gain for at least one hour within the reference period, or did not work, but had a job to return to or was unemployed (worked before and seeking work and available for work, or seeking work for the first time).

#### 4.2.1 Economic activity by sex

The distribution of the population 15 years and older by economic activity status and sex is shown in table 4.1. Data in the table indicate that out of 66,511 who are 15 years and older 73.0 percent are economically active. Of the economically active population, 97.3 percent are employed and only 2.7 percent constitute the unemployed.

For the sexes, there are more males who are economically active (75.8%) compared to females (70.5%). The proportion of the employed among the economically active males was also higher than that of females (75.8%) against. 70.5%).

The data again shows that, out of 17, 928 persons constituting the economically not active population, almost 39 percent attribute full time education as their reason for their activity status, household chores (30.0%), and being too old/too young (12.5%). The proportion citing household chores as reason was higher for the females than their male counterparts (37.0% against 20.7%), whereas in the case of full time education male proportion is higher than females (51.9% and 28.7% respectively).

	To	tal	Ма	ıle	Fem	ale
Activity status	Number	Percent	Number	Percent	Number	Percent
Total	66,511	100.0	31,877	100.0	34,634	100.0
Economically active	48,583	73.0	24,162	75.8	24,421	70.5
Employed	47,295	<i>97.3</i>	23,605	97.7	23,690	97.0
Worked	45,661	96.5	22,962	<i>97.3</i>	22,699	95.8
Did not work but had job to go						
back to	1,515	3.2	600	2.5	915	3.9
Did voluntary work without pay	119	0.3	43	0.2	76	0.3
Unemployed	1,288	2.7	557	2.3	731	3.0
Worked before, seeking work						
and available	465	36.1	199	35.7	266	36.4
Seeking work for the first time						
and available	823	63.9	358	64.3	465	63.6
Economically not active	17,928	27.0	7,715	24.2	10,213	29.5
Did home duties (household						
chore)	5,373	30.0	1,597	20.7	3,776	37.0
Full time education	6,930	38.7	4,007	51.9	2,923	28.6
Pensioner/Retired	467	2.6	333	4.3	134	1.3
Disabled/Sick	1,768	9.9	659	8.5	1,109	10.9
Too old/young	2,236	12.5	610	7.9	1,626	15.9
Other	1,154	6.4	509	6.6	645	6.3

sex

Table 4.2 shows the population 15 years and above by age group, sex and activity status in Atiwa district. The data reveal that the employment levels among the various age groups are high. With the exception of the (15-19) age group which has only 26.5 percent of persons employed, high proportion (at least 56.9 percent) of the population of various age specific groups are employed, with 45-49 age group having the highest (92%) proportion of persons employed. It is therefore observed that, the proportion of persons employed increases from age 15-19 years till 45-49 years and thereafter, start to decrease.

The Table again shows that, unemployment levels are generally low among the different age groups. However, higher proportion of the unemployed is mainly identified with (20-24) age group, recording levels of unemployment of about 5.0 percent. For the population economically not active, higher proportions are concentrated within the younger ages of 15-19 years (71.4%) and 20-24 years (32.8%) and also among the older ages of 65+ years (42.9%). Similar patterns are observed for both sexes among the different age groups. The male and female groups exhibit similar characteristic, with the male group having higher levels of the various activity status than their female counterpart.

	All S	tatus	Empl	Employed		Unemployed		cally not
Age group	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both sexes								
Total	66,511	100.0	47,295	71.1	1,288	1.9	17,928	27.0
15 - 19	10,949	100.0	2,901	26.5	225	2.1	7,823	71.4
20 - 24	8,145	100.0	5,070	62.2	402	4.9	2,673	32.8
25 - 29	7,534	100.0	6,069	80.6	234	3.1	1,231	16.3
30 - 34	6,139	100.0	5,345	87.1	136	2.2	658	10.7
35 - 39	5,837	100.0	5,201	89.1	85	1.5	551	9.4
40 - 44	5,432	100.0	4,935	90.9	46	0.8	451	8.3
45 - 49	4,937	100.0	4,542	92.0	57	1.2	338	6.8
50 - 54	4,545	100.0	4,138	91.0	35	0.8	372	8.2
55 - 59	3,070	100.0	2,731	89.0	17	0.6	322	10.5
60 - 64	2,798	100.0	2,310	82.6	33	1.2	455	16.3
65+	7,125	100.0	4,053	56.9	18	0.3	3,054	42.9
Male								
Total	31,877	100.0	23,605	74.1	557	1.7	7,715	24.2
15 - 19	5,875	100.0	1,563	26.6	89	1.5	4,223	71.9
20 - 24	3,761	100.0	2,445	65.0	175	4.7	1,141	30.3
25 - 29	3,447	100.0	2,970	86.2	94	2.7	383	11.1
30 - 34	2,896	100.0	2,679	92.5	63	2.2	154	5.3
35 - 39	2,813	100.0	2,609	92.7	40	1.4	164	5.8
40 - 44	2,697	100.0	2,523	93.5	29	1.1	145	5.4
45 - 49	2,353	100.0	2,207	93.8	18	0.8	128	5.4
50 - 54	2,123	100.0	1,986	93.5	21	1.0	116	5.5
55 - 59	1,504	100.0	1,372	91.2	9	0.6	123	8.2
60 - 64	1,367	100.0	1,195	87.4	13	1.0	159	11.6
65+	3,041	100.0	2,056	67.6	6	0.2	979	32.2
Female								
Total	34,634	100.0	23,690	68.4	731	2.1	10,213	29.5
15 - 19	5,074	100.0	1,338	26.4	136	2.7	3,600	70.9
20 - 24	4,384	100.0	2,625	59.9	227	5.2	1,532	34.9
25 - 29	4,087	100.0	3,099	75.8	140	3.4	848	20.7
30 - 34	3,243	100.0	2,666	82.2	73	2.3	504	15.5
35 - 39	3,024	100.0	2,592	85.7	45	1.5	387	12.8
40 - 44	2,735	100.0	2,412	88.2	17	0.6	306	11.2
45 - 49	2,584	100.0	2,335	90.4	39	1.5	210	8.1
50 - 54	2,422	100.0	2,152	88.9	14	0.6	256	10.6
55 - 59	1,566	100.0	1,359	86.8	8	0.5	199	12.7
60 - 64	1,431	100.0	1,115	77.9	20	1.4	296	20.7
65+	4,084	100.0	1,997	48.9	12	0.3	2,075	50.8

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

# 4.3 Occupation

The 2010 PHC refers to occupation as the type of work the person was engaged in at the establishment where he/she works or had worked in the past. Table 4.3, presents the employed population 15 years and older by occupation and sex in Atiwa District. As indicated in the table, More than half (57.2%) of the employed population are skilled agricultural, forestry and fishery workers, followed by sales and service workers (14.0%). The lowest proportion of the employed population is technical and associated professional

workers (1.1%). For the sexes, males dominate in the agricultural, forestry and fisheries occupations, while females dominate in the service and sales occupations.

	Both sexes		Ма	ale	Fen	Female	
Occupation	Number	Percent	Number	Percent	Number	Percent	
Total	47,295	100.0	23,605	100.0	23,690	100.0	
Managers	771	1.6	263	1.1	508	2.1	
Professionals	1,992	4.2	1,223	5.2	769	3.2	
Technicians and associate							
professionals	519	1.1	321	1.4	198	0.8	
Clerical support workers	355	0.8	205	0.9	150	0.6	
Service and sales workers	6,603	14.0	1,068	4.5	5,535	23.4	
Skilled agricultural forestry and							
fishery workers	27,064	57.2	14,798	62.7	12,266	51.8	
Craft and related trades							
workers	5,433	11.5	2,765	11.7	2,668	11.3	
Plant and machine operators							
and assemblers	2,843	6.0	2504	10.6	339	1.4	
Elementary occupations	1,713	3.6	456	1.9	1,257	5.3	
Other occupations	2	0.0	2	0.0	0	0.0	

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 4.4 Industry

Industry referred to the type of activity engaging a person. The industrial activities of employed persons 15 years and older by sex are shown in Table 4.4. The table indicates that agriculture, forestry and fishing is the largest industrial sector employing more than half (57.4 %) of the working population. The other two major industries are wholesale and retail trade, repair of motor vehicles and motorcycles (12.0%) and manufacturing (7.6%).

For both sexes, these industries remain the major ones in the same order. However, the proportion of males in skilled agricultural, forestry, and fishing is higher than that of females (63.2% and 51.5% respectively), while the opposite is the case for wholesale and retail trade; females (18.8%) and males (5.3%). Again manufacturing engages higher proportion of female (8.7%) than that of males (6.5%).

	Both	sexes	Ma	le	Fem	Female	
Industry	Number	Percent	Number	Percent	Number	Percent	
Total	47,295	100.0	23,605	100.0	23,690	100.0	
Agriculture forestry and fishing	27,134	57.4	14,922	63.2	12,212	51.5	
Mining and quarrying	1,646	3.5	1,318	5.6	328	1.4	
Manufacturing	3,602	7.6	1,530	6.5	2,072	8.7	
Electricity gas stream and air							
conditioning supply	15	0.0	12	0.1	3	0.0	
Water supply; sewerage waste							
management and remediation activities	58	0.1	32	0.1	26	0.1	
Construction	863	1.8	835	3.5	28	0.1	
Wholesale and retail; repair of motor							
vehicles and motorcycles	5,697	12.0	1,247	5.3	4,450	18.8	
Transportation and storage	1,032	2.2	995	4.2	37	0.2	
Accommodation and food service							
activities	2,182	4.6	189	0.8	1,993	8.4	
Information and communication	41	0.1	26	0.1	15	0.1	
Financial and insurance activities	172	0.4	111	0.5	61	0.3	
Real estate activities	0	0.0	0	0.0	0	0.0	
Professional scientific and technical							
activities	322	0.7	129	0.5	193	0.8	
Administrative and support service							
activities	152	0.3	113	0.5	39	0.2	
Public administration and defence;							
compulsory social security	329	0.7	233	1.0	96	0.4	
Education	1,645	3.5	1,003	4.2	642	2.7	
Human health and social work activities	403	0.9	144	0.6	259	1.1	
Arts entertainment and recreation	166	0.4	152	0.6	14	0.1	
Other service activities	1,556	3.3	521	2.2	1,035	4.4	
Activities of households as employers;							
undifferentiated goods - and services -							
producing activities of households for							
own use	280	0.6	93	0.4	187	0.8	
Activities of extraterritorial							
organizations and bodies	0	0.0	0	0.0	0	0.0	

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 4.5 Employment Status

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Employment status refers to the status of a person in the establishment where he/she currently works. Eight employment status categories are 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".

Table 4.5 shows the population 15 years and older by employment status and sex. It can be observed that 67.4 percent of the employed populations are self-employed without employees, 11.8 percent are employees and 13.2 percent are contributing family workers.

For the sexes, the proportion of employed population that belongs to self-employed without employees' category is higher for females (68.8%) than males (66.0%). There are also more females who are contributing family workers than males (17.4% against 9.0%).

	Both sexes		Ма	Male		nale
Employment Status	Number	Percent	Number	Percent	Number	Percent
Total	47,295	100.0	23,605	100.0	23,690	100.0
Employee	5,595	11.8	3,844	16.3	1,751	7.4
Self-employed without						
employee(s)	31,865	67.4	15,574	66.0	16,291	68.8
Self-employed with employee(s)	1,295	2.7	703	3.0	592	2.5
Casual worker	1,183	2.5	870	3.7	313	1.3
Contributing family worker	6,253	13.2	2,127	9.0	4,126	17.4
Apprentice	908	1.9	399	1.7	509	2.1
Domestic employee (House help)	150	0.3	61	0.3	89	0.4
Other	46	0.1	27	0.1	19	0.1

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

#### 4.6 Employment Sector

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

Table 4.6 shows the distribution of persons 15 years and older by employment sector and sex. The table indicates that the private informal sector (91.8%) is the largest employer in the district, followed by public (government) sector (5.0%). Less than one per cent of employed population are engaged by NGOs (0.2%) and semi-public/ parastatal (0.1%). A similar pattern is observed for the sexes, with the proportion of females slightly than males employed in the private informal sector (94.5% against 89.1%).

<b>Table 4.6:</b>	Employed	population 15	years and older b	v employment	t sector and sex
		1 1			

	Both sexes		Μ	ale	Fem	Female	
Employment Sector	Number Percent		Number	Number Percent		Percent	
Total	47,295	100.0	23,605	100.0	23,690	100.0	
Public (Government)	2,351	5.0	1,481	6.3	870	3.7	
Private Formal	1,404	3.0	1,027	4.4	377	1.6	
Private Informal	43,418	91.8	21,036	89.1	22,382	94.5	
Semi-Public/Parastatal	37	0.1	26	0.1	11	0.0	
NGOs (Local and International)	78	0.2	29	0.1	49	0.2	
Other International							
Organisations	7	0.0	6	0.0	1	0.0	

# CHAPTER FIVE INFORMATION COMMUNICATION TECHNOLOGY

### 5.1 Introduction

It is widely accepted that information communications technology (ICT) is an ever-important enabler of sustained economic growth. Access to information and communication technology is essential in increasing people's knowledge and awareness of what is taking place around them. The world is now linked together with advanced communication technology and access to information is through the computer, mobile phone and internet facilities which are fast becoming essential for living a meaningful life. The focus of this chapter is to present information on individuals and households access to ICT in the Atiwa District.

### 5.2 Ownership of Mobile phones

Ghana has benefited from the global diffusion of mobile telecommunication, when in 2003; mobile telephones became the primary mode of communication for social and business activities for the majority of Ghanaians (Ayensu, 2003).

Table 5.1 shows the distribution of mobile phone ownership by sex in Atiwa District. The data show that out a total of 74,458 persons who are 12 years and older, 31,145 representing 41.8 percent have mobile phones. In Atiwa District, more males are benefiting from mobile phone telecommunication than female; as the proportion of males having mobile phone is higher (47.3%) compared to that of females (36.7%).

	Total		Population mobile	n having phone	Population internet	Population using internet facility		
Sex	Number	Percent	Number	Percent	Number	Percent		
Both Sexes	74,458	100.0	31,145	41.8	1,734	2.3		
Male	36,018	100.0	17,021	47.3	1,250	3.5		
Female	38,440	100.0	14,124	36.7	484	1.3		

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 5.3 Use of internet

Internet has become a very useful communication tool for individuals, businesses and organizations. Some of the common uses of the Internet include electronic mailing, accessing information, conducting business transactions, social networking and shopping.

Table 5.1 presents data on the population 12 years and older with internet by sex. The data indicate that only 2.3 percent of the population 12 years and older use internet in the district. In further analysis, the proportion of male population using internet (3.5%) is higher than that of female population (1.3%). The use of the internet should be encouraged as it is a way of communicating with each other and also a way of transacting businesses.

## 5.4 Household ownership of Desktop/Laptop computer

Desktop and laptop computers are useful for accessing and processing information, including the use of the Internet, electronic mail and other services.

Table 5.2 depicts the distribution of desktop/laptop computers ownership by sex of household head. Ownership of either a desktop or laptop computer is generally low in the Atiwa District. The figure shows that only 833 households constituting 3.2 percent of a total of 26,342 households in the district own either a desktop or laptop computer. Again, the proportion of male headed households (3.8%) that own either a desktop or laptop computer is higher compared to that of female headed households (2.0%).

	Numb House	de	Househ esktop/lap	olds having otop computers	
Head of Household	Number	Percent	Nı	umber	Percent
Both Sexes	26,342	100.0		833	3.2
Male	16,861	100.0		646	3.8
Female	9,481	100.0		187	2.0

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

# CHAPTER SIX DISABILITY

## 6.1 Introduction

Disability reflects limitation that a person experiences in performing an activity considered normal, such as sight, hearing, speech, physical, intellect, emotion and others. The development of a district depends on the social and economic contributions of every individual, including persons with disability (PWD). For this reason, government and civil society organizations in recent years have attempted to address disability issues even at the district level. Notable among these is the Persons with Disability Act, 2006, (Act 715). The Act deals with issues such as rights, employment, education, transportation, housing facilities, effective health care, adequate medical rehabilitation services, generation and dissemination of relevant information and participation of PWDs in cultural activities.

This chapter aims at updating knowledge on prevalence and present some selected characteristics of persons with disability in the district.

# 6.2 **Population with disability**

It should be noted that, data on disability is a multiple response data and therefore total types of disability will not produce population with disability. Table 6.1 shows that, there are 6,664 persons with disability accounting for 6.0 percent of the entire population of Atiwa district. For the sexes, there are more PWDs in the female population (6.4%) than the male population (5.6%).

### 6.3 Type of disability

Table 6.1 shows the distribution of PWDs by type of disability in the district. The data indicates that visual impairment is the most common type of disability among PWDs (47.8%), followed by physical impairment (30.6%) and hearing impairment (21.6%). Substantial proportions of PWDs also suffer from intellectual disabilities (20.5%), speech disabilities (20.0%) and emotional challenges (19.0%). For the sexes, proportion of females living with disability attributable to visual impairment and emotional challenges (48.9% and 20.9% respectively) is relatively higher compared to their male counterparts (46.5% and 16.7% respectively). However, more males have speech impairment (22.8% against 17.7%) and physical disability (31.0% against 30.3%) compared with females

### 6.4 Distribution of disability by type of locality

The locality of residence of persons with disability has impact on their ability to access social services. This is particularly critical in Ghana, where most of the social service agencies are concentrated in the urban areas.

As shown in Table 6.1, disability varies by locality of residence in the district. Overall, the table indicates that there are relatively more persons with disability in the urban areas (6.9%) than rural areas (5.6%). The commonest type of disability in both localities was visual impairment. However, the proportion of persons suffering from visual impairment was higher in the rural areas (55.7%) than urban areas (35.0%). More also, emotional challenge is more

prevalent in urban areas (27.1%) than rural areas (14.0%). This may be due to social and economic challenges that accompany modernization usually characteristic of urban localities.

		Percent				
Disability Type	Number	Both sexes	Male	Female		
All Localities						
Total	110,622	100.0	100.0	100.0		
Without disability	103,958	94.0	94.4	93.6		
With disability	6,664	6.0	5.6	6.4		
Sight	3,186	47.8	46.5	48.9		
Hearing	1,438	21.6	20.9	22.1		
Speech	1,334	20.0	22.8	17.7		
Physical	2,041	30.6	31.0	30.3		
Intellectual	1,364	20.5	20.6	20.4		
Emotional	1,265	19.0	16.7	20.9		
Other	237	3.6	4.2	3.0		
Urban						
Total	36,897	100.0	100.0	100.0		
Without disability	34,355	93.1	93.4	92.8		
With disability	2,542	6.9	6.6	7.2		
Sight	890	35.0	32.3	37.3		
Hearing	379	14.9	12.5	16.9		
Speech	426	16.8	20.7	13.4		
Physical	590	23.2	24.7	21.9		
Intellectual	500	19.7	18.7	20.5		
Emotional	689	27.1	23.3	30.4		
Other	66	2.6	2.6	2.6		
Rural						
Total	73,725	100.0	100.0	100.0		
Without disability	69,603	94.4	94.8	94.0		
With disability	4,122	5.6	5.2	6.0		
Sight	2,296	55.7	55.2	56.1		
Hearing	1,059	25.7	26.1	25.3		
Speech	908	22.0	24.0	20.3		
Physical	1,451	35.2	34.9	35.5		
Intellectual	864	21.0	21.8	20.3		
Emotional	576	14.0	12.6	15.1		
Other	171	4.1	5.2	3.3		

Table 0.1. Tobulation with disability	<b>Table 6.1:</b>	<b>Population</b>	with	disability
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Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 6.5 Disability and economic activity status

Table 6.2 gives the economic activity status of persons with disability in the district. The table shows that same proportions (7.2%) of the employed and unemployed population in the district are persons with disability, while 11.5 percent of the not economically active population were PWDs. Considerably high employment rates exist among population with visual impairment (66.6%), Hearing (64.7%) and Speech challenge (62.3%). Unemployment is relatively high persons with intellectual challenge (3.5%) as their main disability. Furthermore, the proportions of PWDs who may not have sought for employment because of their disability are relatively higher among physical impairment (49.5%) and intellectual (45.3%) populations. A similar distributional pattern can be observed for the sexes, female PWDs being more disadvantaged.

				_			Economi	cally not
Sex/Disability	All s	tatus	Emplo	oyed	Unemp	loyed	act	ive
type	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	66,511	100.0	47,295	71.1	1,288	1.9	17,928	27.0
No disability	60,961	100.0	43,898	72.0	1,195	2.0	15,868	26.0
With a disability	5,550	100.0	3,397	61.2	93	1.7	2,060	37.1
Sight	2,702	100.0	1,800	66.6	42	1.6	860	31.8
Hearing	1,064	100.0	688	64.7	34	3.2	342	32.1
Speech	861	100.0	536	62.3	28	3.3	297	34.5
Physical	1,675	100.0	808	48.2	38	2.3	829	49.5
Intellectual	985	100.0	505	51.3	34	3.5	446	45.3
Emotional	1,035	100.0	583	56.3	23	2.2	429	41.4
Other	206	100.0	126	61.2	1	0.5	79	38.3
Male								
Total	31,877	100.0	23,605	74.1	557	1.7	7,715	24.2
No disability	29,390	100.0	21,947	74.7	521	1.8	6,922	23.6
With a disability	2,487	100.0	1,658	66.7	36	1.4	793	31.9
Sight	1,189	100.0	871	73.3	12	1.0	306	25.7
Hearing	452	100.0	337	74.6	12	2.7	103	22.8
Speech	443	100.0	296	66.8	13	2.9	134	30.2
Physical	781	100.0	428	54.8	18	2.3	335	42.9
Intellectual	428	100.0	242	56.5	13	3.0	173	40.4
Emotional	387	100.0	238	61.5	4	1.0	145	37.5
Other	111	100.0	74	66.7	0	0.0	37	33.3
Female								
Total	34,634	100.0	23,690	68.4	731	2.1	10,213	29.5
No disability	31,571	100.0	21,951	69.5	674	2.1	8,946	28.3
With a disability	3,063	100.0	1,739	56.8	57	1.9	1,267	41.4
Sight	1,513	100.0	929	61.4	30	2.0	554	36.6
Hearing	612	100.0	351	57.4	22	3.6	239	39.1
Speech	418	100.0	240	57.4	15	3.6	163	39.0
Physical	894	100.0	380	42.5	20	2.2	494	55.3
Intellectual	557	100.0	263	47.2	21	3.8	273	49.0
Emotional	648	100.0	345	53.2	19	2.9	284	43.8
Other	95	100.0	52	54.7	1	1.1	42	44.2

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 6.6 Disability, Education and Literacy

The general educational status among the disabled population in the district is very low. Table 6.3 indicates the educational level attained by PWDs 3 years and older in the district. The table shows that 6,436 persons constituting 6.3 percent of population 3 years and older in the district are PWDs. Out of this total almost 29 percent has never attended school, with a greater proportion of them being females (69.9%).

Of the proportion that is educated, majority (39.4%) has middle school level certificate, followed by Primary level (26.4%), Secondary level certificate (4.9%), Vocational/Technical (2.7%) and Tertiary education (0.2%). Among the PWDs, majority of those who have attained higher levels of education belong to the sight and physical impairments. Particularly, over 100 sight impaired persons have had either post-secondary (97 persons) or bachelor degree (12 persons) or postgraduate (6 persons).

						Middle/	Sec./	Voc./			Post graduate (Cert. Diploma
C (D' 1-11) T	T- (-1	Never	NT	Kinder-	D.:!	JSS /	SSS/	Tech./	De et Ce e	Bachelor	Masters PHD
Sex/Disability Type	Total	attended	Nursery	garten	Primary	JHS	5H5	Comm.	Post Sec.	degree	etc.)
Both Sexes									• • • •		
Total	101,219	13,442	3,448	7,025	27,748	40,171	5,842	1,060	2,018	399	66
No disability	94,783	11,577	3,357	6,867	26,539	37,586	5,644	937	1846	374	56
With a disability	6,436	1,865	91	158	1,209	2,585	198	123	172	25	10
Sight	3,103	849	50	67	539	1,327	84	72	97	12	6
Hearing	1,367	444	49	48	292	459	34	14	23	3	1
Speech	1,217	351	49	62	285	384	47	17	19	2	1
Physical	1,935	633	36	27	328	765	45	42	51	7	1
Intellectual	1,250	380	35	31	280	463	27	12	20	2	0
Emotional	1,183	358	14	19	240	473	31	10	28	7	3
Other	235	48	3	3	57	107	5	1	11	0	0
Male											
Total	49,871	4,551	1,717	3,646	13,545	20,556	3,535	610	1338	314	59
No disability	46,914	3,971	1,673	3,555	13,023	19,196	3,404	534	1210	297	51
With a disability	2,957	580	44	91	522	1,360	131	76	128	17	8
Sight	1,392	221	26	28	226	706	55	41	73	11	5
Hearing	610	143	25	25	132	233	20	10	19	2	1
Speech	639	147	27	30	151	215	35	14	18	2	0
Physical	903	181	19	7	138	432	39	33	47	6	1
Intellectual	569	143	19	15	123	227	20	8	12	2	0
Emotional	464	87	7	12	104	209	17	4	20	2	2
Other	129	21	1	3	27	63	4	1	9	0	0
Female											
Total	51,348	8,891	1,731	3,379	14,203	19,615	2,307	450	680	85	7
No disability	47,869	7,606	1.684	3.312	13.516	18.390	2,240	403	636	77	5
With a disability	3,479	1.285	47	67	687	1.225	67	47	44	8	2
Sight	1.711	628	24	39	313	621	29	31	24	1	1
Hearing	757	301	24	23	160	226	14	4	4	1	0
Speech	578	204	22	32	134	169	12	3	1	0	1
Physical	1.032	452	17	20	190	333	6	9	4	1	0
Intellectual	681	237	16	16	157	236	7	4	8	0	ů 0
Emotional	719	271	7	7	136	264	14	6	8	5	1
Other	106	27	2	0	30	44	1	0	2	0	0

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

# CHAPTER SEVEN AGRICULTURAL ACTIVITIES

# 7.1 Introduction

Agriculture plays a vital role in the socio-economic development of Atiwa District. The district's economy is mainly rural and dominated by the agriculture sector, which employs the largest proportion of the working 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

# 7.2 Households in Agriculture

The 2010 PHC defines an Agricultural household as a household having at least a member engaged in any type of agricultural activities such as crop farming, tree growing, livestock rearing and aquaculture. Table 7.1 shows the distribution of agricultural households by locality of residence. There are 20,206 agricultural households, representing 76.7 percent of all households in the district. As expected, majority (70.6%) of agricultural households are located in the rural localities in the district.

	Total		Urł	ban	Ru	Rural		
Agricultural activities	Number	Percent	Number	Percent	Number	Percent		
Total Households	26,342	100.0	9,104	100.0	17,238	100.0		
Households engages in Agriculture	20,206	76.7	5,949	65.3	14,257	82.7		
Crop Farming	19,703	97.5	5,707	95.9	13,996	98.2		
Tree Planting	69	0.3	13	0.2	56	0.4		
Livestock Rearing	9,151	45.3	2,083	35.0	7,068	49.6		
Fish Farming	18	0.1	8	0.1	10	0.1		

 Table 7.1: Households by agricultural activities and locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

# 7.3 Types of agricultural activities

Figure 7.1 identified four types of agricultural activities in the district namely crop farming, livestock rearing, fish farming and tree planting. The major agricultural activity in the district is crop farming (97.5%), followed by livestock rearing (45.3%). Less than one percent of agricultural households are engaged in fish farming (0.1%) and tree planting (0.3%). A relatively higher proportion of rural agricultural households are engaged in crop farming (98.2%) compared to urban agricultural households (95.9%). Livestock rearing is also relatively more common in the rural areas (49.6%) than urban areas (35.0%).



Figure 7.1: Households in agricultural activity by locality

#### 7.4 Distribution of livestock, animal reared and keepers

Livestock rearing is the second most important agricultural activity in the district, (both in the rural and urban areas). Table 7.2 reveals that, a total number of 190,045 livestock are reared in the district. There are 14,411 livestock keepers with an average of 13 animals per keeper. In the district, chicken are the most reared (68.1%) livestock and are kept by almost half (48.2%) of the total number of animal keepers, with an average of 19 chickens per keeper, followed by Goats (17.5%) which engages 33.1 percent of keepers and an average of 7 goats per keeper.

Sheep rearing is third in ranking, constituting 6.3 percent of total livestock, and accounts for 11.5 percent of keepers and an average of 7 sheep per keeper. Other animals; Pig (1.5%), Duck (1.5%), fish farming (1.4%), and Guinea fowl (1.2%) are considerably important in the district. Bees are the least in number of the animals kept in the district.

Source: Ghana Statistical Service, 2010 Population and Housing Census

	Anir	nals	Keej	pers	Average
Livestock	Number	Percent	Number	Percent	animal per keeper
All livestock	190,045	100.0	14,411	100.0	13
Cattle	576	0.3	55	0.4	10
Sheep	12,030	6.3	1,662	11.5	7
Goat	33,283	17.5	4,769	33.1	7
Pig	2,792	1.5	219	1.5	13
Guinea fowl	2,280	1.2	84	0.6	27
Chicken	129,386	68.1	6,953	48.2	19
Dove	1,559	0.8	86	0.6	18
Duck	2,774	1.5	275	1.9	10
Ostrich	475	0.2	24	0.2	20
Turkey	304	0.2	39	0.3	8
Rabbit	329	0.2	51	0.4	6
Grass-cutter	757	0.4	73	0.5	10
Beehives	34	0.0	5	0.0	7
Silk worm	272	0.1	31	0.2	9
Snail	400	0.2	5	0.0	80
Fish farming	2,635	1.4	11	0.1	240
Inland fishing	5	0.0	2	0.0	3
Other	154	0.1	67	0.5	2

 Table 7.2: Distribution of livestock, other animals and keepers

# CHAPTER EIGHT HOUSING CONDITIONS

# 8.1 Introduction

The provision of adequate housing facilities has long been recognized as imperative in improving the living conditions of people. The availability of housing facilities such as access to adequate sanitary facilities, safe water supplies and drainage systems is an essential requirement for enhancing the health status of men, women and children. This chapter examines the housing conditions the Atiwa district as at 2010. The focus of the analysis is on housing stock, type 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 total housing stock in the district is 19,362, representing 4.4 percent of the Eastern regional housing stock of 431,697. The distribution of housing units by type of locality shows that the rural areas take a share of 70 percent of the total housing stock in the district. This infers that in terms of housing, the Atiwa district can be considered as district with rural dominance.

## 8.2.2 Households and household size

As shown in Table 8.1, there are 26,342 households with household population of 109,352 in the district, accounting for an average household size of 4.2 which is slightly higher than the regional average (4.1). This is the same for the rural locality while the urban has an average household size of 4.0 persons. Furthermore in the district, there are 19,362 houses, with an average of 1.4 households per house, slightly lower than the regional average (1.5).

At the locality level, while the rural average (1.3) is slightly fewer than the district's average (1.4), the urban average of 1.6 households per house is more compared with even the regional average. Again, considering the population living in a house, the same pattern characterized by household per house is reflected. The population living in the houses in the district (5.6) is lower than the regional average of 6 persons. However, the urban localities have an average of 6.3 persons living in a house, which is higher than the regional average.

	Total				
Categories	country	Region	District	Urban	Rural
Total population	24,658,823	2,633,154	110,622	36,897	73,725
Total household population	24,076,327	2,574,549	109,352	36,532	72,820
Number of houses	3,392,745	431,697	19,362	5,845	13,517
Number of households	5,467,054	632,045	26,342	9,104	17,238
Average household per house	1.6	1.5	1.4	1.6	1.3
Population per house	7.1	6	5.6	6.3	5.4
Average household size	4.4	4.1	4.2	4	4.2

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

#### 8.3.1 Type of dwelling units

Table 8.2 shows that there are three most dominant types of dwelling units; compound house, separate house, and semi-detached house in both at the locality and district level. From table 8.2, there are 26,342 dwelling units in Atiwa District, of which the highest proportion of dwelling units are compound houses (51.0%), followed by separate houses (38.7%) and semi-detached houses (5.3%). Other dwelling units in popular use are Huts/buildings (1.8%) flats and apartments (1.2%). Each of the other categories of dwellings accounts for less than one percent of dwelling units in the district.

Table 8.2 further indicates that 54.8 percent of dwelling units with female as head of household are compound houses, followed by separate houses (36.2%), and Semi-detached houses (5.3%). In the case of male headed households, compound houses constitute 48.9 percent, followed by separate houses (40.1%) and Semi-detached houses (5.4%). This infers that male heads in the district can be considered to be richer than female heads.

The table again shows that, the proportion of dwellings units that are compound houses is higher in the urban areas than in rural areas (58.9% against 46.8%). On other hand, separate houses in rural areas constitute a higher proportion than in urban areas (42.3% against. 36.2%). As expected, there are more huts/buildings in the rural areas (2.3%) compared to urban localities (0.9%).

				District				
	Tota	Total		Total		Female		
Type of dwelling	Country	Region	Number	Percent	headed	headed	Urban	Rural
Total	5,467,054	632,045	26,342	100.0	100.0	100.0	100.0	100.0
Separate house	1,471,391	193,719	10,197	38.7	40.1	36.2	31.9	42.3
Semi-detached house	391,548	42,458	1,407	5.3	5.4	5.3	5.1	5.5
Flat/apartment	256,355	16,839	321	1.2	1.2	1.2	1.4	1.1
Compound house (rooms)	2,942,147	349,682	13,434	51.0	48.9	54.8	58.9	46.8
Huts/buildings (same								
compound)	170,957	17,381	475	1.8	2.2	1.1	0.9	2.3
Huts/buildings (different								
compound)	36,410	3,236	84	0.3	0.4	0.1	0.1	0.4
Tent	10,343	950	57	0.2	0.2	0.2	0.2	0.2
Improvised home								
(kiosk/container etc.)	90,934	3,055	185	0.7	0.7	0.7	0.8	0.6
Living quarters attached								
to office/shop	20,499	1,736	57	0.2	0.2	0.2	0.3	0.2
Uncompleted building	66,624	2,335	83	0.3	0.4	0.2	0.4	0.3
Other	9,846	654	42	0.2	0.2	0.1	0.0	0.2

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.3.2 Holding and tenancy agreement

Table 8.3 shows ownership status of dwelling by sex of household head and type of locality in the district. Ranking ownership of dwellings in the Atiwa District by the first three most dominant owners of dwelling units, the data indicate that 54.8 percent of the dwellings are owned by a household member, followed by private individuals (23.2%), and relative not a household member (19.5%). In addition, real estate companies (private agencies) and other constitute the least of ownership of dwellings (0.3%).

In terms of ownership by sex of head of households, of the number of dwelling units with female as head of occupants, the majority (56.4%) of dwelling units owned by a household member compared to 53.8 percent of male headed households. Again, there is higher proportion of female headed (22.2%) dwelling units owned by relatives who are not household members compared to that of male headed dwelling units (18.0%). The male heads on the other hand, dominate in comparison with female counterpart, in the proportion of dwellings owned by private individual (25.4% against 19.2%). Similarly, real estate companies (private agencies) and other constitute the least of ownership of dwellings, with the proportion for male (0.4%) being slightly higher than that of female (0.2%).

			District					
	Tota	Total		Total		Female		
Ownership status	Country	Region	Number	Percent	headed	headed	Urban	Rural
Total	5,467,054	632,045	26,342	100.0	100.0	100.0	100.0	100.0
Owned by household								
member	2,883,236	335,114	14,424	54.8	53.8	56.4	44.4	60.2
Being purchased (e.g.								
mortgage)	45,630	4,009	131	0.5	0.5	0.5	0.8	0.3
Relative not a household								
member	851,630	108,374	5,132	19.5	18.0	22.2	19.4	19.5
Other private individual	1,439,021	159,804	6,108	23.2	25.4	19.2	31.9	18.6
Private employer	83,610	6,862	172	0.7	0.8	0.4	0.8	0.6
Other private agency	21,123	2,797	89	0.3	0.4	0.2	0.7	0.1
Public/Government								
ownership	118,804	12,754	213	0.8	0.9	0.7	1.3	0.5
Other	24,000	2,331	73	0.3	0.3	0.2	0.6	0.1

Table 8.3: Ownership	status of dwelling by	y sex of household hea	d and type of locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

At the locality level, similar trend is observed. In rural localities, majority (60.2%) of dwellings are owned by household members, followed by dwellings are owned by relatives who are not members of household (19.5%), and 18.5 percent by other private individuals. The remaining categories constitute less than a percent. However in the urban localities though ownership of dwellings by household members (44.4%) again dominates, the proportion of dwellings owned by private individual (31.9%) is higher compared to its share in rural areas. Again, data reveal that public/government owns 1.3 percent of dwelling the rest accounts for less than a percent of dwellings in the district.



Figure 8.1: Ownership status of dwellings by type of locality

### 8.4 Construction materials

This section discusses the responses to questions on the main construction material used for the outer wall, the roof and the floor of houses in the district. The type of construction material used, the general condition of the dwelling, its location, and durability are indicators of the socio-economic status of the households.

#### 8.4.1 Construction materials for outer wall

Table 8.4 presents materials used for the construction of outer walls of houses in the district. The table shows that cement block/concrete and mud brick/earth are the two most popular materials used for outer walls of dwellings in the district. The data show that more than half (52.5%) of outer walls of houses in the district are cement block/concrete, whereas mud brick/earth constitute 37.3 percent. Wood follows Landcrete (5.1%) with a share of 3.0 percent. The rest, metal/sheet/slate/asbestos, stone and burnt bricks constitute about 2.0 percent of the materials in the district.

At the locality level, while, cement block/concrete (65.4%) is the most used material for outer walls of dwellings in the urban areas with mud brick/earth constituting 24.4 percent, in the rural localities a keen competition exist between the use of cement block/concrete (45.8%) and mud brick/earth (44.1%). A similar pattern exists for the use of the other materials as observed in the district, with palm tree accounting for just 0.1 percent.

				Distri	ct	
	Total		To	tal		
Material for Outer wall	country	Region	Number	Percent	Urban	Rural
Total	5,817,607	686,478	27,809	100.0	100.0	100.0
Mud brick/Earth	1,991,540	266,725	10,386	37.3	24.4	44.1
Wood	200,594	12,028	842	3.0	2.0	3.5
Metal sheet/Slate/Asbestos	43,708	4,268	121	0.4	0.7	0.3
Stone	11,330	1,182	36	0.1	0.1	0.2
Burnt bricks	38,237	6,481	210	0.8	0.8	0.7
Cement blocks/Concrete	3,342,462	370,691	14,598	52.5	65.4	45.8
Landcrete	104,270	19,885	1,431	5.1	6.1	4.7
Bamboo	8,206	954	60	0.2	0.2	0.2
Palm leaf/Thatch (grass)/Raffia	38,054	1,202	27	0.1	0.1	0.1
Other	39,206	3,062	98	0.4	0.3	0.4

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 8.4.2 Main construction material of floor

According to Table 8.5, shows the main construction materials for floor of dwelling units by type of locality. Two construction materials can be identified as the most commonly used materials for construction of floors of dwellings both at the district and locality levels. Cement/concrete (76.4%) being the most common material used for construction floor of dwelling units at the district is relatively higher in the urban locality (85.5%) than the rural areas (71.5%). In the case of earth/mud which has a representation of 19 percent at the district level, the reverse is the case at the locality level; rural areas (23.2%) against urban areas (11.1%).

It is further observed that, apart from stone accounting for 2.8 percent of materials for construction of floors of dwellings in the district, but 3.8 percent in the rural areas. Each of the remaining material-wood, burnt bricks, vinyl tiles and others constitutes less than 1.0 percent.

				Dist	rict	
	Total		То	Total		
Materials for the floor	Country	Region	Number	Percent	Urban	Rural
Total	5,467,054	632,045	26,342	100.0	100.0	100.0
Earth/mud	872,161	118,931	5,013	19.0	11.1	23.2
Cement/concrete	4,255,611	491,586	20,113	76.4	85.5	71.5
Stone	32,817	6,076	741	2.8	0.9	3.8
Burnt brick	6,537	710	19	0.1	0.1	0.1
Wood	52,856	1,345	96	0.4	0.6	0.2
Vinyl tiles	57,032	2,914	46	0.2	0.2	0.2
Ceramic/porcelain/granite/marble tiles	88,500	5,404	171	0.6	1.1	0.4
Terrazzo/terrazzo tiles	85,973	3,833	68	0.3	0.4	0.2
Other	15,567	1,246	75	0.3	0.2	0.3

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

#### 8.4.3 Main roofing material

The table 8.6 shows the distribution of type of materials used for roofing of dwelling units in the district. As shown in the table, metal sheet is the main roofing material used in the district constituting 92.1 percent, followed by thatch/palm leap / raffia (3.3%) and Bamboo (1.4%). The rest of the roofing materials constitute less than 1.0 percent in the district.

It is also indicated in the table 8.7 that, metal sheets are the most widely used roofing material in both urban areas (95.0%) and rural areas (90.6%). As expected the use of thatch/palm leap or raffia for roofing is more prevalent in the rural areas (4.3%) than the urban areas (1.3%).

				Dist	rict	
	Tot	al	To	tal		
Main Roofing material	Country	Region	Number	Percent	Urban	Rural
Total	5,817,607	686,478	27,809	100.0	100.0	100.0
Mud/mud bricks/earth	80,644	3,693	253	0.9	0.2	1.3
Wood	45,547	3,527	203	0.7	1.1	0.6
Metal sheet	4,152,259	604,209	25,621	92.1	95.0	90.6
Slate/asbestos	759,039	8,831	110	0.4	0.4	0.4
Cement/concrete	141,072	5,561	135	0.5	0.6	0.4
Roofing tile	31,456	1,012	37	0.1	0.2	0.1
Bamboo	71,049	4,630	383	1.4	0.7	1.7
Thatch/palm leaf or Raffia	500,606	52,372	923	3.3	1.3	4.3
Other	35,935	2,643	144	0.5	0.5	0.5

<b>Table 8.6:</b>	Main construction material for roofing of dwelling unit by type of
	locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.5 Room Occupancy

This section examines the total number of rooms occupied by the households which includes; living, dining and bed rooms. This however excludes bathrooms, toilet and kitchen. Sleeping rooms are the number of rooms used for sleeping. The extent of overcrowding is assessed by considering information on the number of sleeping rooms occupied by the household. It also reflects the socioeconomic status of the household.

#### 8.5.1 Household size and room occupancy

Table 8.7 provides information on household size and number of sleeping rooms in occupied dwellings. From the table, more than half (59.5%) of occupied dwellings in the district have only one sleeping room. This is followed by dwellings with two sleeping rooms (23.9%) three rooms (9.1%) and those with 4 or more sleeping rooms making up 8.5 percent.

Generally, it is observed as expected that the larger the household size the more sleeping rooms used by household and the reverse is the case. For one member households, 92.7 percent of use one room for sleeping and about 5.0 percent use two rooms for sleeping. Similarly, about 75.0 percent of two member households use one room for sleeping, and 20.3 percent of the same household use two sleeping rooms followed by 2.1 percent use three rooms for sleeping. Also, 81.3 percent of five member households sleep in either one room (50.0%) or two rooms (31.3%). Household size of ten or more, 11.5 percent sleep in one room, 2 rooms (21.5%), and three rooms (23.5%) and 4 rooms (19.2%).

			Number of sleeping rooms								
House-	Total										Nine
hold			One	Two	Three	Four	Five	Six	Seven	Eight	rooms
size	Number	Percent	room	rooms	or more						
Total	26,342	100.0	59.5	23.9	9.1	4.0	1.6	0.9	0.5	0.3	0.3
1	5,191	100.0	92.7	5.0	0.9	0.3	0.3	0.2	0.3	0.2	0.1
2	3,497	100.0	75.7	20.3	2.1	0.8	0.3	0.5	0.2	0.2	*
3	3,552	100.0	65.8	25.1	6.7	1.4	0.3	0.4	0.1	0.1	0.1
4	3,610	100.0	56.5	29.7	9.4	2.7	0.9	0.4	0.2	0.1	0.1
5	3,230	100.0	50.0	31.3	11.5	4.5	1.6	0.7	0.2	*	0.1
6	2,533	100.0	43.4	34.5	13.7	4.9	1.9	0.8	0.4	0.2	0.2
7	1,787	100.0	34.4	34.7	18.1	7.8	2.6	1.7	0.2	0.3	0.2
8	1,086	100.0	22.7	37.7	19.7	11.5	4.9	1.4	1.4	0.4	0.5
9	721	100.0	18.0	29.8	22.6	14.8	6.5	4.0	2.4	0.7	1.1
10+	1,135	100.0	11.5	21.5	23.5	19.2	10.0	5.8	3.2	2.3	3.0

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

#### 8.6 Access to Utilities and Household facilities

#### 8.6.1 Main source of lighting

The distribution of the main source of lighting of dwelling units by locality of residence is presented in Table 8.8. The table shows that more than half (64.2%) of all households in the district use electricity as their main sources of lighting. This is followed by kerosene lamp (22.0%) and flashlight/torch (12.4%). The proportion of households belonging to the categories that use either candles, electricity (generator), solar energy, firewood, crop residue or other sources constitute less than two percent of households in the district.

				District					
	Tot	al	То	tal					
Main source of light	Country	Region	Number	Percent	Urban	Rural			
Total	5,467,054	632,045	26,342	100.0	100.0	100.0			
Electricity (mains)	3,511,065	369,961	16,919	64.2	74.5	58.8			
Electricity (private generator)	36,142	4,282	146	0.6	0.7	0.5			
Kerosene lamp	971,807	159,439	5,802	22.0	19.2	23.5			
Gas lamp	9,378	1,135	36	0.1	0.1	0.2			
Solar energy	9,194	1,018	21	0.1	0.1	0.1			
Candle	41,214	2,595	88	0.3	0.5	0.3			
Flashlight/torch	858,651	90,643	3,254	12.4	4.7	16.4			
Firewood	13,241	1,593	44	0.2	0.2	0.2			
Crop residue	4,623	447	21	0.1	0.1	0.1			
Other	11,739	932	11	0.0	0.0	0.0			

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 8.2 shows the main source of lighting by locality type. The figure reveals that, electricity (mains) is the main source of lighting in urban area (74.5%), as against 58.8 percent for rural areas. Kerosene lamp still complements electricity usage as a source of lighting in rural area (23.5%) but accounts for 19.2 percent of lighting in urban areas. Again as expected, flashlight/torch as a source of lighting is mostly used in the rural areas (16.4%) compared to the urban ones (4.7%).



Figure 8.2: Main source of lighting by locality

#### 8.6.2 Main source of cooking fuel

Table 8.9 shows the various sources of cooking fuel by households in the Atiwa District. It can be observed that the most common fuel used by households for cooking is wood (65.5%). This is followed by charcoal (20.4%) and then Gas (7.3%). The other sources of cooking fuel such as electricity, kerosene, crop residue, saw dust animal waste together is less than 2 percent.

At the locality level, wood is the most popularly used fuel for cooking in the rural areas as it is in the urban locality with a share of 74.6 and 48.3 percent respectively. Also, households using gas in rural areas (4.5%) are minimal compared with urban locality (12.7%).

#### 8.6.3 Cooking space

As shown in Table 8.9, 42.7 percent of dwelling units in the district has separate room for exclusive use by households, 17.2 percent cook on the veranda, and 10.5 percent use structure with roof but no walls. A significant proportion of dwelling units either has separate room shared with other households (7.6%) or has no cooking space (7.2%).

There are urban-rural variations in the type of cooking space. A higher proportion of dwellings in the rural areas compared with urban areas have separate room for exclusive use of household (45.0% and 41.8% respectively). Veranda as a source of space for cooking is also more common in the urban areas (23.5%) than rural areas (13.8%). There are also more dwelling units with no space for cooking in the urban areas (7.6%) than rural areas (6.9%).

Source: Ghana Statistical Service, 2010 Population and Housing Census

			District				
Source of cooking fuel/	Total		To	Total			
cooking space	Country	Region	Number	Percent	Urban	Rural	
Main source of cooking fuel for household							
Total	5,467,054	632,045	26,342	100.0	100.0	100.0	
None no cooking	306,118	29,214	1,439	5.5	6.4	5.0	
Wood	2,197,083	315,386	17,258	65.5	48.3	74.6	
Gas	996,518	74,339	1,933	7.3	12.7	4.5	
Electricity	29,794	3,438	97	0.4	0.3	0.4	
Kerosene	29,868	3,393	119	0.5	0.9	0.2	
Charcoal	1,844,290	203,053	5,364	20.4	30.9	14.8	
Crop residue	45,292	2,198	110	0.4	0.4	0.4	
Saw dust	8,000	548	14	0.1	0.1	0.0	
Animal waste	2,332	147	4	0.0	0.0	0.0	
Other	7,759	329	4	0.0	0.0	0.0	
Cooking space used by household							
Total	5,467,054	632,045	26,342	100.0	100.0	100.0	
No cooking space	386,883	38,872	1,885	7.2	7.6	6.9	
Separate room for exclusive use of							
household	1,817,018	230,426	11,575	43.9	41.8	45.0	
Separate room shared with other							
household(s)	410,765	51,302	2,006	7.6	6.9	8.0	
Enclosure without roof	117,614	10,220	527	2.0	1.3	2.4	
Structure with roof but without walls	349,832	67,390	2,766	10.5	6.9	12.4	
Bedroom/hall/living room)	74,525	7,798	262	1.0	1.6	0.7	
Veranda	1,173,946	135,910	4,526	17.2	23.5	13.8	
Open space in compound	1,115,464	87,662	2,556	9.7	10.0	9.6	
Other	21,007	2,465	239	0.9	0.4	1.2	

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 8.7 Main Source of Water for drinking and for other domestic use

The availability and accessibility to improved drinking water is an important aspect of the health of household members. The UN Millennium Development Goal (MDG7) is to reduce by half the proportion of people without sustainable access to safe drinking water by 2015 based on 1990 levels.

#### 8.7.1 Main sources of drinking water for household

Table 8.10 shows the various sources of drinking water for households in the district. The table indicates that more than half (54.1%) of all the households in the district use borehole/pump/tube well as the main source of drinking, followed by pipe-borne outside dwelling (12.5%) and river/stream (9.4%). Bottled water (0.1%) and unprotected well (0.1%) constitute the least source of drinking water in the district.

Similarly, it can be observed from figure8.3 that households' sources of drinking water vary by locality of residence. About three-quarters (74.3%) of households located in the rural localities use bore-hole/pump/tube, it is however less than a fifth (15.8%) in urban areas. This is followed by 'pipe borne outside dwelling' accounting for 28.9 percent in urban and only 3.9 in the rural localities; Sachet water and protected well are also more important to urban households (11.3% and 8.8% respectively) than rural households (2.4% and 2.1% respectively).



Figure 8.3: Main source of drinking water for household by locality

#### 8.7.2 Main sources of water for other domestic use for household

Table 8.10 further shows that, again more than half (52.0%) of households in the district use bore-hole/pump/tube well, as the main sources of water for other domestic use, pipe-borne outside dwelling (12.8%), river/stream (12.6%), and public tap/standpipe (10.0%). It can be observed in the table that very small proportion of households use pipe-borne inside dwellings (2.4%) and unprotected well (0.4%) for other domestic purposes.

With regard to urban-rural distribution, about three out of ten households in urban areas use pipe-borne outside the dwelling for other domestic purposes, while about 7 out of 10 households in the rural areas use bore-hole/pump/tube well. The use of protected well for other domestic purposes is more common in the urban areas (13.4%) than rural areas (4.2%).

Source: Ghana Statistical Service, 2010 Population and Housing Census
				District					
	Tot	al	Tot	tal					
Sources of water	Country	Region	Number	Percent	Urban	Rural			
Main source of drinking water for house	ehold								
Total	5,467,054	632,045	26,342	100.0	100.0	100.0			
Pipe-borne inside dwelling	790,493	51,123	631	2.4	6.0	0.5			
Pipe-borne outside dwelling	1,039,667	91,863	3,303	12.5	28.9	3.9			
Public tap/standpipe	712,375	71,616	2,815	10.7	20.9	5.3			
Bore-hole/pump/tube well	1,267,688	177,097	14,244	54.1	15.8	74.3			
Protected well	321,091	58,167	1,165	4.4	8.8	2.1			
Rain water	39,438	7,948	64	0.2	0.3	0.2			
Protected spring	19,345	2,570	50	0.2	0.2	0.2			
Bottled water	20,261	1,232	34	0.1	0.3	0.1			
Sachet water	490,283	53,638	1,440	5.5	11.3	2.4			
Tanker supply/vendor provided	58,400	1,562	3	0.0	0.0	0.0			
Unprotected well	112,567	9,712	105	0.4	0.5	0.3			
Unprotected spring	12,222	1,751	15	0.1	0.1	0.1			
River/stream	502,804	94,883	2,463	9.4	6.8	10.7			
Dugout/pond/lake/dam/canal	76448	8624	5	0.0	0.0	0.0			
Other	3972	259	5	0.0	0.1	0.0			
Main source of water for other domestic	use of hous	ehold							
Total	5,467,054	632,045	26,342	100.0	100.0	100.0			
Pipe-borne inside dwelling	905,566	55,588	743	2.8	6.9	0.7			
Pipe-borne outside dwelling	1,089,030	83,245	3,361	12.8	29.2	4.1			
Public tap/standpipe	704,293	65,772	2,640	10.0	19.9	4.8			
Bore-hole/pump/tube well	1,280,465	180,604	13,703	52.0	16.6	70.7			
Protected well	465,775	95,179	1,943	7.4	13.4	4.2			
Rain water	39,916	7,577	266	1.0	2.1	0.4			
Protected spring	18,854	2,760	37	0.1	0.3	0.1			
Tanker supply/vendor provided	100,048	1,975	15	0.1	0.1	0.0			
Unprotected well	152,055	13,230	259	1.0	1.4	0.8			
Unprotected spring	15,738	2,196	17	0.1	0.1	0.1			
River/stream	588,590	112,728	3,322	12.6	10.0	14.0			
Dugout/pond/lake/dam/canal	96,422	9850	7	0.0	0.0	0.0			
Other	10,302	1,341	29	0.1	0.1	0.1			

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.8 Bathing and toilet facilities

### 8.8.1 Toilet facilities

The type of toilet facilities used by households in the Atiwa District is presented in table 8.11. The three main toilet facilities available to households in the districts are pit latrine in the house (39.6%), Public toilet (28.0%) and KVIP (18.9%). This pit latrine is more common in the rural communities (44.0%) compared to urban communities (31.2%). The reverse is the case for Public toilet being more common in urban settlement (34.0%) compared to rural communities (24.8%). Similarly, KVIP is more available in the Urban compared to rural localities (20.3% against 18.2%). The data also show that about 9.0 percent of households have no toilet facility and thus resort to the use of the bush/ beach/field. The bucket/pan as a source of toilet facility though has been banned is still in use in the district with a representation of (0.4%).



Figure 8.4: Type of toilet facility used by household by locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.8.2 Bathing Facilities

There are four main sources of household bathing facilities in the district as presented in Table 8.11. About a third (31.0%) of households in the district share separate bathrooms in the same house. This is closely followed by own bathroom for exclusive use (26.6%), shared open cubicle (22.1%) and private open cubicle (11.1%). use

Urban-rural differences in the type of bathing facilities available to households can be observed in the table. The proportion of dwelling units with bathroom for exclusive use of household members is higher in the rural areas compared to urban areas (30.4% and 19.2% respectively), whereas the use of shared bathroom in the same house is more prevalent in urban areas than rural areas (36.6% and 28.1% respectively). A higher proportion of households in urban areas than rural areas also shares open cubicle for bathing purposes (27.4% against 19.4%).

			District					
	Tot	al	To	tal				
Toilet facility/Bathing facility	Country	Region	Number	Percent	Urban	Rural		
Toilet facility used by household								
Total	5,467,054	632,045	26,342	100.0	100.0	100.0		
No facilities (bush/beach/field)	1,056,382	71,384	2,392	9.1	6.9	10.3		
W.C.	839,611	55,161	959	3.6	6.8	2.0		
Pit latrine	1,040,883	203,246	10,421	39.6	31.2	44.0		
KVIP	572,824	100,193	4,982	18.9	20.3	18.2		
Bucket/Pan	40,678	3,926	93	0.4	0.3	0.4		
Public toilet (WC, KVIP, Pit Pan etc.)	1,893,291	195,950	7,364	28.0	34.0	24.8		
Other	23,385	2,185	131	0.5	0.7	0.4		
Bathing facility used by household								
Total	5,467,054	632,045	26,342	100.0	100.0	100.0		
Own bathroom for exclusive use	1,535,392	163,394	6,998	26.6	19.3	30.4		
Shared separate bathroom in the same house	1,818,522	209,248	8,177	31.0	36.6	28.1		
Private open cubicle	381,979	56,572	2,927	11.1	8.9	12.3		
Shared open cubicle	1,000,257	131,234	5,833	22.1	27.4	19.4		
Public bath house	140,501	2,817	20	0.1	0.1	0.1		
Bathroom in another house	187,337	19,316	735	2.8	2.8	2.8		
Open space around house	372,556	45,833	1,477	5.6	4.7	6.1		
River/pond/lake/dam	14,234	1,996	50	0.2	0.1	0.2		
Other	16,276	1,635	125	0.5	0.2	0.6		

# Table 8.11: Type of toilet facility and bathing facility used by household and<br/>type of locality

Source: Ghana Statistical Service, 2010 Population and Housing Census

## 8.9 Method of Waste Disposal

### 8.9.1 Solid waste disposal

According to Table 8.12, about half (50.2%) of households in the district dispose of their solid waste at public dumps (open space), about 18.0 percent households burn their solid waste, while 12.0 percent dispose their solid waste at public dump (container). A similar pattern of solid waste disposal is observed in all the localities. However, indiscriminate disposal of solid waste is more common in the rural areas compared to urban areas (10.9% against 3.4%) in Atiwa district.

### 8.9.2 Liquid waste disposal

Disposal of liquid waste in Atiwa district calls for attention. Table 8.12 reveals that about 94.0 percent of households in the district either dispose their liquid waste onto their compounds (59.2%), on the street/outside (22.7%) or into gutter (12.3%), with only 0.3 percent using the sewerage system.

The situation is similar at the locality level, but obviously worse in the rural localities than urban. Disposal of liquid waste onto compound is observed to be more common among rural households compared to urban households (63.4% against. 51.1%). Also, liquid waste disposed onto the street and gutter in the district is more common in rural than the urban communities.

			District							
	Tot	al	То	tal	_					
Method of waste disposal	Country	Region	Number	Percent	Urban	Rural				
Solid waste										
Total	5,467,054	632,045	26,342	100.0	100.0	100.0				
Collected	785,889	26,049	457	1.7	1.6	1.8				
Burned by household	584,820	102,501	4,784	18.2	14.4	20.1				
Public dump (container)	1,299,654	143,820	3,156	12.0	30.9	2.0				
Public dump (open space)	2,061,403	252,886	13,217	50.2	42.6	54.2				
Dumped indiscriminately	498,868	63,321	2,191	8.3	3.4	10.9				
Buried by household	182,615	37,144	2,241	8.5	6.3	9.7				
Other	53,805	6,324	296	1.1	0.8	1.3				
Liquid waste										
Total	5,467,054	632,045	26,342	100.0	100.0	100.0				
Through the sewerage system	183,169	8,228	92	0.3	0.6	0.2				
Through drainage system into a gutter	594,404	33,511	896	3.4	3.3	3.5				
Through drainage into a pit (soak away)	167,555	11,428	335	1.3	1.1	1.4				
Thrown onto the street/outside	1,538,550	147,245	5,973	22.7	24.0	22.0				
Thrown into gutter	1,020,096	106,945	3,252	12.3	19.1	8.8				
Thrown onto compound	1,924,986	319,580	15,583	59.2	51.1	63.4				
Other	38,294	5,108	211	0.8	0.9	0.8				

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

Source: Ghana Statistical Service, 2010 Population and Housing Census

## CHAPTER NINE SUMMARY OF FINDINGS, CONCLUSIONS AND POLICY IMPLICATIONS

## 9.1 Introduction

This chapter presents the summary of findings, policy implication and recommendations. The chapter highlights on demographic and social characteristics, education and literacy, economic characteristics, ICT, disability and agriculture activities.

## 9.2 Summary on Findings

## **Demographic characteristics**

The Atiwa District is one of the richest sources of Ghana's natural resources with land area of 1,165.3 square kilometres. The district was carved from the then East Akim District Assembly now East Akim Municipal Assembly, in the year 2004. Its total population of 110,622 in 2010 is 4.2 percent of Eastern regional population. The population which is dominated by females (50.6%) again shows that, there are 98 males to every 100 females in the district. The district has a youthful (24 years or younger) population constituting more than half (57.2%) of the entire population. This may have contributed to a high dependency ratio; about 86 dependents (child and old age) for every 100 people working. The population distribution of the district exhibits rural dominance with only a third (33.3%) of the population living in the urban localities. The district has a population density of about 95 persons per square kilometre, lower than the regional figure of about 139 persons per square kilometre.

### **Social characteristics**

According to 2010 PHC, a total of 26,242 households hold a population of 109,325 having an average household size of 4.2 persons per household. Sixty-four percent of households are headed by males. The composition of household membership in relation to head reveals children (39.2%) forming the highest proportion, followed by spouses (10.2%), grandchildren (9.9%) and other relatives (8.1%). Considering the structure of households in the Atiwa district, the extended family household (spouses and biological/adopted children) a close competition (20.4% against 29.7% respectively). In 2010 about 42.0 per cent of the population 12 years and older in the district were married, 36.7 percent had never married and 8.5 percent were in consensual union. More than half (54.7%) of married population are employed and unemployed population (29.9%). Similarly, about two-thirds (66.9%) of the economically not active population has never been married. The people of Atiwa are predominantly Christians with about 85.0 percent belonging either to Pentecostal/Charismatic, Protestants, or other orthodox, whereas only 6.1 percent are affiliated to Islamic religion.

## Fertility

In 2010, the Total Fertility Rate (TFR) for Atiwa District was 4.2 births per woman which was higher than regional average of 3.5 births per woman. Regarding other measures of

fertility the district records a higher general fertility rate of 125.9 live births per 1,000 women of reproductive age compared to the Eastern Regional figure (103.9). Similarly, the crude birth rate was 29.0 percent which is higher than the regional crude birth rate of 25.8. The district's average completed family size was 3.1 children. The mean number of children ever born to young teenage girls (12-19 years) was less than one, indicating a low level of teenage fertility in district.

## Mortality

A total of 299 household deaths occurred in the district within the 12 months prior to the 2010 PHC. The proportional share of all deaths was highest among the age group 50-54 years (15.7%), closely followed by persons in the age group 30-34 years (15.3%) and then age group 45-49 years (14.4%). No deaths were reported on persons 54 years or more. With regard to the risk of death related to pregnancy, only 22 out of the total deaths in the district were reported as maternal deaths.

### **Education and literacy**

There are 76,822 persons aged 11 years and older residing in the district. Out of this total 65,236 representing 95.0 percent are literate, with majority (63.0%) being literate in English and Ghanaian language only, while none of the people in the district reported that could read and write in English and French.

In 2010, a total of 40,914 persons in the district were in school. Of those who are currently attending school, majority (75.1%) are at the basic level of education (nursery, kindergarten, primary, and JHS) and only 5.6 percent at the Senior High School level. Generally, enrolment at the tertiary level and vocational/technical training of education by the people of Atiwa district is as low as 0.8 percent. There are also 46,836 persons 3 years and older who have attended school in the past in the district. Majority of individuals have had basic education (85.9%), 5.6 percent have achieved SSS/SHS level of education and only 2.5 percent have attended tertiary institutions

## 9.3 Economic characteristics

According 2010PHC, almost three-quarters (73.0%) of the population 15 years and older in the district are economically active, with employed population constituting 97.3 percent. The district's economy is agricultural driven, employing almost sixty (57.4%) percent of working population of which males dominate with 55.0 percent. More than half (57.2%) of workforce in this sector are skilled workers.

The services sector engages almost 30.0 percent of population 15 years and older, having about 65.0 percent being females. The sector draws its employment strength from 'wholesale and retail, motor and repairs' and 'accommodation and food services' engaging 12.0 and 4.6 percent of entire workforce of the district respectively.

The remaining workforce (13.6%) employed in industrial sector are mainly working in Manufacturing subsector, which contributes to employment in the district by engaging 7.6 percent of population 15 years and older and Mining (3.5%). The sector employs more males (80.1%) in mining subsector whereas in the Manufacturing subsector females dominate with 57.5 percent representation.

Furthermore, majority (64.4%) of the workforce in the district are self-employed without employee(s), followed by employees (14.5%) and contribution family workers (13.2%).

Again, majority (91.6%) of the district's working population are in the informal sector, followed by public (government) sector (5.0%). Less than one per cent of employees are engaged by NGOs (0.2%) and semi-public/parastatal (0.1%).

## 9.4 Information Communication Technology

Out a total of 74,458 persons who are 12 years and older, 41.8 percent have mobile phones, only 2.3 percent have access to Internet. The total number of households in the district stands at 26,342 with only 0.3 percent having fixed telephone lines in their homes and 3.1 percent owning desktop/laptop computers. These ICT monitoring indicators are lower for the district compared to the regional average.

## 9.5 Disability

In 2010 a total of 6,664 persons accounting for 6.0 percent of the entire population in the Atiwa district have some form of disability. Visual impairment (47.8%) is the most common kind of disability among PWDs in the district, followed by physical impairment (30.6%) and hearing impairment (21.6%).

## 9.6 Agricultural Activities

Though Atiwa district has mining communities, a total of 20,206 households constituting more three-quarters (76.7%) of the entire household in the district are agricultural households. Most (70.6%) of the agricultural households are located in the rural localities in the district. The major agricultural activity in the district is crop farming (97.5%), followed by livestock rearing (45.3%). Less than one percent of agricultural households are engaged in fish farming (0.1%) and tree planting (0.3%)

## 9.7 Housing Condition

Less than one percent (0.3%) of households in the district disposes their liquid waste through the sewerage system. About 94.0 percent of 26,342 households in the district either dispose their liquid waste onto their compounds (59.2%) or on the street/outside (22.7%) or into gutter (12.3%). Disposal of liquid waste onto compounds is observed to be common among rural households (63.4%) compared with urban households (51.1%). More also, about half of all households (50.2%) in the district dispose of their solid waste at public dumps (open space).

More than half (54.1%) of all households in the district use bore-hole/pump/tube, and river/stream (9.4%) as their main source of drinking, followed by pipe-borne outside dwelling (12.5%). Bottled water (0.1%) and unprotected well (0.1%) constitute the least sources of drinking water in the district.

## 9.8 Policy Implications

The following recommendations are made based on the results of the analysis of the district data from the 2010 Population and Housing Census.

## 9.8.1 Population

The Total Fertility Rate (TFR) for Atiwa District (4.2 births per woman) is relatively higher compared with the regional average of 3.5 births per woman. This needs attention as it has the tendency to lead to high population growth in the district. It is therefore recommended

that family planning campaign programs in the district be strengthened to boost the contraceptive prevalence rate which in effect would reduce the level of fertility. Particularly, programs aimed at eliminating misconceptions and barriers to accessing family planning services should be educational focus

## 9.8.2 Education and Literacy

The technology advancement has put the world at a pedestal that is disadvantage to nonliterate and uneducated population of modern societies. For any country to explore the full potential of its populace, education and literacy must be encouraged particular among youthful population. In the district about 1.0 percent of those attending school are either in tertiary level (0.8%) or vocational/technical training (0.2%). The district assembly needs to institute programs that complement the effort of FCUBE to encourage education to tertiary level or skills development through vocational/technical training. This may be achieved with the collaborative effort of the Ministry of Education, the Ministry of Employment and Social Welfare and other stakeholders.

## 9.8.3 Employment

The major challenge for most countries in reducing unemployment rate particularly among the youth is to breed a generation that seeks to offer employment rather than being employed by others. While government aim at ensuring that majority of workforce is employed, it usually can afford lower rate of employment. Only 5.0 percent of working population in Atiwa is employed by the government, whereas the private informal engages over ninety percent (91.6%). The private informal engages more than half (57.2%) in Agricultural sector, followed by Retail and Wholesale (12.0%) and then Manufacturing (5.0%) needs the kind of impetus that has the potential to sustain the livelihood of people living in district. The district needs trained persons in various vocational fields capable of embracing the changing trends in business.

Currently the workforce of the district lacks adequate formally trained personals with technical skills and higher level of education. This is due to low enrolment levels at technical/vocational training in the district. The district assembly should institute programs that would encourage the youth to undertake technical / vocational training with entrepreneurship programs or pursue high learning programs at tertiary level.

## 9.8.4 Information Communication Technology

Information Communication technology is a tool for disseminating information and thus has the potential to increase productivity. Lack of access to ICT facilities therefore impedes developments. About 42.0 percent of persons 11 years and older in the district have mobile phones and whiles only 2.3 percent have access to Internet. Again, out of a total of 26,342 households, only 0.3 percent had fixed telephone lines and 3.1 percent own desktop/laptop computers their homes. It is recommended that the district assembly and private organizations set up internet browsing centres in public places such as the community centres and the libraries. More also, 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.

## 9.8.5 Housing condition

## **Environment and sanitation**

Sanitation is a major problem confronting many developing countries. In Ghana, apart from health consequences arising from indiscriminate disposal of solid waste, choked drainage system have caused floods which on many occasions has led to fatal road accidents and lives lost. Disposal of liquid and solid waste in the district is highly indiscriminate and needs to be addressed with a sense of urgency. Almost sixty percent of households in Atiwa either dump solid waste in an open space (50.2%) or indiscriminately (8.2%). More also, about 94.0 percent of households in the district either dispose their liquid waste onto their compounds (59.2%) or on the street/outside (22.7%) or into gutter (12.3%). The district in collaboration with community based organizations should undertake regular communal labour and implement educative programs to discourage indiscriminate dumping of waste. More also, district assembly with support from relevant stakeholders, should construct domestic latrines and encourage public-private partnership in solid and liquid waste management.

### Source of drinking water

A healthy workforce is a necessary requirement for achieving economic growth and development. Lack of safe drinking water has been a major problem in many developing countries. In Ghana, many people have had burulli ulcer and lives have been lost through consumption of unsafe drinking water. For this reason, safe drinking water is one of the MDGs and so it achievement is a vision for all countries including Ghana. In Atiwa district, almost a tenth of households either uses river/stream (9.4%) or unprotected well (0.1%). Efforts should be made by the district assembly to get assistance from NGOs to sink borehole in each community.

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## **APPENDICES**

			SEX						
S/No.	Community Name	Male	Female	Total	House holds	Houses			
1	Anyinam	5,581	5,936	11,517	2,899	1,490			
2	Kwabeng	3,950	4,235	8,185	2,113	1,369			
3	Abomoso	3,187	3,097	6,284	1,462	1,187			
4	Akim Sekyere	2,588	2,983	5,571	1,389	995			
5	Enyiresi	2,583	2,757	5,340	1,241	804			
6	Asamang - Tamfoe	1,923	2,135	4,058	960	633			
7	Tumfa	1,925	2,020	3,945	904	760			
8	Akim Akropong	1,957	1,905	3,862	886	701			
9	Moseaso	1,817	1,943	3,760	953	644			
10	Akrofufu	1,609	1,809	3,418	857	588			
11	Asunafo	1,688	1,712	3,400	815	793			
12	Abakoase	1,503	1,589	3,092	767	541			
13	Asamama	1,457	1,489	2,946	722	517			
14	Adasawase	1,426	1,477	2,903	799	593			
15	Awuransua	1,375	1,449	2,824	660	485			
16	Banso	1,214	1,323	2,537	704	561			
17	Awenare	1,150	1,195	2,345	546	384			
18	New Jejeti	1,016	1,172	2,188	591	351			
19	Sankubease	1,069	1,093	2,162	449	354			
20	Ankaase	966	844	1,810	365	254			

# Table A1: Total population, sex, number of households and houses in the 20 largest communities

										AGE G	ROUP							
S/No.	Community Name	All ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1	Anyinam	11,517	1,526	1,375	1,491	1,275	1,013	969	761	617	547	465	450	264	211	133	189	231
2	Kwabeng	8,185	1,133	959	944	841	631	581	418	456	424	390	364	230	200	165	181	268
3	Abomoso	6,284	836	806	730	631	541	422	344	308	312	269	272	166	172	146	134	195
4	Akim Sekyere	5,571	744	735	724	591	379	344	279	245	270	224	240	198	167	114	127	190
5	Enyiresi	5,340	792	652	633	583	459	374	280	290	290	206	209	137	110	79	90	156
6	Asamang - Tamfoe	4,058	613	517	517	406	320	261	271	190	204	170	149	108	103	56	68	105
7	Tumfa	3,945	606	549	552	355	218	225	190	221	205	166	181	102	107	72	92	104
8	Akim Akropong	3,862	625	554	436	354	253	265	225	210	195	185	142	112	79	51	75	101
9	Moseaso	3,760	506	507	457	374	324	304	223	202	153	173	128	87	110	51	74	87
10	Akrofufu	3,418	515	456	455	298	163	188	168	203	150	166	164	116	86	76	90	124
11	Asunafo	3,400	525	476	408	350	230	199	179	205	145	130	116	119	97	67	50	104
12	Abakoase	3,092	435	371	431	313	197	169	136	170	151	149	153	83	89	66	77	102
13	Asamama	2,946	431	370	378	251	196	181	171	149	140	151	124	92	96	44	66	106
14	Adasawase	2,903	432	378	322	231	176	195	158	146	159	156	103	107	92	58	72	118
15	Awuransua	2,824	431	436	364	269	178	156	131	172	140	128	112	64	77	45	41	80
16	Banso	2,537	389	314	284	181	167	183	153	119	127	108	119	86	86	58	64	99
17	Awenare	2,345	331	364	341	226	137	124	99	114	107	110	119	56	58	40	42	77
18	New Jejeti	2,188	288	275	275	245	136	133	140	106	96	102	98	64	66	52	47	65
19	Sankubease	2,162	365	277	264	220	151	152	129	113	97	86	75	67	52	36	32	46
20	Ankaase	1,810	257	234	215	198	171	140	97	88	76	93	69	36	35	31	30	40

 Table A2: Population by age groups in the 20 largest communities

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