



2010

POPULATION & HOUSING CENSUS

REGIONAL ANALYTICAL REPORT

CENTRAL REGION



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PREFACE AND ACKNOWLEDGEMENT

There cannot be any meaningful developmental activity 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, and socio-economic characteristics are all important in development planning. The Kilimanjaro Programme of Action on Population adopted by African countries in 1984 stressed the need for population to be considered as a key factor in the formulation of development strategies and plans.

A population census is the most important source of data on the population in a country. It provides information on the size, composition, growth and distribution of the 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 resources, government services and the allocation of government funds among various regions and districts for education, health and other social services.

The Ghana Statistical Service (GSS) is delighted to provide data users with an analytical report on the 2010 PHC at the regional level to facilitate planning and decision-making. This follows the publication of the National Analytical Report in May, 2013 which contained information on the 2010 PHC at the national level with regional comparisons. Conclusions and recommendations from these reports are expected to serve as a basis for improving the quality of life of Ghanaians through evidence-based policy formulation, planning, monitoring and evaluation of developmental goals and intervention programs.

The Regional Analytical Report for the Central Region is one of ten regional reports aimed at making data available to planners and decision makers at the regional and district levels. In addition to presenting district profiles, the report also discusses the social and economic dimensions of demographic variables.

For ease of accessibility of the census data, the regional reports and other census reports produced by the GSS will be disseminated widely in both print and electronic formats, including posting on the GSS website: www.statsghana.gov.gh.

The GSS wishes to express its profound gratitude to the Government of Ghana for providing the required resources for the conduct of the 2010 PHC. We also appreciate the contribution of our Development Partners (DPs) towards the successful implementation of the Census. Special mention must be made of the European Union (EU) and the Department for International Development (DFID) for providing resources for the preparation of the report, the World Bank for managing the resources and the United Nations Population Fund (UNFPA) for the lead role it played in mobilizing resources from the UN System and from other DPs for the 2010 PHC.

Finally, we wish to thank all households and individuals in Ghana who contributed to the success of the 2010 Population and Housing Census.

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ACRONYMS

AGI:	Association of Ghanaian Industries
AIDS:	Acquired Immune Deficiency Syndrome
ASCII:	American Standard Code for Information Interchange
CEB:	Children Ever Born
CIDA:	Canadian International Development Agency
CS:	Children Surviving
CEDAW:	Convention on Elimination of All forms of Discrimination
CERSGIS:	Centre for Remote Sensing and Geographic Information Survey
CHIPS:	Community Health Planning Services
CWIQ:	Core Welfare Indicator Questionnaire
DANIDA:	Danish International Development Agency
DFID:	Department for International Development
ECOWAS:	Economic Community of West African States
EMIS:	Education Management Information System
EA:	Enumeration Area
EU:	European Union
fCUBE:	Free Compulsory Universal Basic Education
GETFund:	Ghana Education Trust Fund
GREDA:	Ghana Real Estate Developers Association
GDP:	Gross Domestic product
GSS:	Ghana Statistical Service
GSDP:	Ghana Statistics Development Plan
GPS:	Global Positioning System
GPRTU:	Ghana Private Road Transport Union
GES:	Ghana Education Service
GDHS:	Ghana Demography Health Survey
HIV:	Human Immune Virus
ISCO:	International Standard Classification of Occupation
ISIC:	International Standard Classification of Industry
ICU:	International Communication Union
ICT:	Information Communication Technology
ISSER:	Institute of Statistical Social and Economic Research
JSS:	Junior Secondary School
JHS:	Junior High School
SSS:	Senior Secondary School
SHS:	Senior High School
LEAP:	Livelihood Empowerment Against Poverty Programme
LESDEP:	Local Enterprise and Skills Development

LISGIS: Liberia Institute of Statistics and Geo-Information Services
 MMDAs: Metropolitan, Municipal and District Assemblies
 MDGs: Millennium Development Goals
 MER: Migration Effectiveness Ratio
 MOE: Ministry of Education
 MICS: Multiple Indicator Cluster Survey
 MOFA: Ministry of Food and Agriculture
 MOTI: Ministry of Trade and Industry
 NCA: National Communication Authority
 NCPEC: The National Census Publicity and Evaluation Committee
 NCTAC: National Census Technical Advisory Committee
 NIPORT: National Institute of Population Research and Training
 NHIS: National Health Insurance Scheme
 ICT4AD: National ICT for Accelerated Development Policy
 NDPC: National Development Planning Commission
 NGOs: Non-governmental Organisations
 OIC: Opportunities Industrialisation Centre
 PHC: Population and Housing Census
 PPP: Public-Private Partnerships
 PNDC: Provisional National Defence Council
 PAS: Population Analysis Spreadsheet
 PES: Post Enumeration Survey
 PWDs: Persons with disabilities
 PASEX: Population Analysis System
 PES: Post Enumeration Survey
 SADA: Savanna Accelerated Development Authority
 SAP: Structural Adjustment Programme
 SMAM: Singulate Mean Age at Marriage
 UNICEF: United Nations International Children's Education Fund
 UN: United Nations
 UNDP: United Nations Development Programme
 UNFPA: United Nations Population Fund
 WHO: World Health Organization
 W.C: Water Closet
 ZIMSTAT: Zimbabwe National Statistics Agency

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Central region was historically part of the Western Region until 1970 when it was carved out as a separate regional entity just before the 1970 Population Census. It occupies an area of 9,826 square kilometres or 4.1 percent of Ghana’s land area, making it the third smallest in area after Greater Accra and Upper East. It shares common boundaries with Western Region on the west, Ashanti and Eastern Regions on the north, and Greater Accra Region on the east. On the south is the 168-kilometre length Atlantic Ocean (Gulf of Guinea) coastline

Figure 1.1: Map of Central Region showing metropolitan, municipal and districts



1.2 History and geography

The Central Region was the former administrative centre of the Gold Coast. The region was the first area in the country to make formal contact with the Europeans. Its capital, Cape Coast, with the local name Oguaa was the capital of the Gold Coast until 1877, when the capital was moved to Accra. It was in the castle of Cape Coast that the historic Bond of 1844 was signed between the British and the 17 coastal and near-coastal states. The region is home to historical monuments such as forts and castles. The renowned ones are the Cape Coast Castle in Cape Coast, the Elmina Castle and Fort Sao Jago both in Elmina, the Fort William at Anomabo and Fort Good Hope at Senya. It was in the castle of Cape Coast that the historic Bond of 1844 was signed between the British and the Fante Confederation.

The region has two universities, the University of Cape Coast and the University of Education, Winneba. The Cape Coast Municipality has reputable secondary schools such as the Mfantshipim School, St. Augustine's College, Wesley Girls High School, Adisadel College and Holy Child School and has produced some of the prominent citizens in the country.

1.3 Physical features

The region can be broadly divided into two: the coast, which consists of undulating plains with isolated hills and occasional cliffs characterized by sandy beaches and marsh in certain areas and the hinterland, where the land rises between 250 metres and 300 metres above sea level.

The region lies within the dry equatorial zone and the moist semi – equatorial zone. Annual rainfall ranges from 1,000 mm along the coast to about 2000 mm in the interior. The wettest months are May - June and September – October while the drier period occurs in December – February and a brief period in August. The Mean monthly temperature ranges from 24°C in the coolest month (August) to about 30°C in the hottest months (March – April).

1.4 Vegetation

Along the coast can be found coastal savannah with grassland and few trees while semi-deciduous forest predominate the inland areas. Much of the original dense forest vegetation has been cleared for the cultivation of cocoa and oil palm.

1.5 Natural Resources

The region is endowed with rich natural resources like: gold, beryl and bauxite in the Upper Denkyira District; petroleum and natural gas at Saltpond; kaolin in the Mfantsiman district; diamond at Nwomaso, Enikokow, Kokoso all in the Asikuma – Odoben – Brakwa District; clay including pigment clay in all the districts; tantalite and columbite at Nyanyano in the Awutu – Effutu – Senya District; quartz, muscovite; and other minerals like mica, granite, feldspar as well as timber in all the forest areas; rich fishing grounds along the coast; forests and rich arable land.

1.6 Political and Administrative Structure

The region was created in 1970 with Cape Coast as the administrative capital and also consisted of three districts and 18 local authorities. In 1988, the existing 18 local authorities

were recombined into 12 administrative districts. At the time of the 2010 Population and Housing Census it had 17 district authorities and 19 constituencies.

1.7 Tourism

Central Region is steeped in history. There are castles and other monuments that attract tourists and other travellers who wish to discover the historical links between Africa and the Americas and Europe originating from the trans-Atlantic slave trade. This region is known as "the heartbeat of Ghana tourism" because of its pivotal role in the development of tourism in the country, and its wealth of beaches, forts and castles and festivals. . The main dishes of the the costal part of Central Region is "*dorkunu*" or kenkey with fish and gravy.

The coastline is famous for its ancient forts and castles built by early European traders, and three of them, two at Elmina and St. Jago and one in Cape Coast have been identified as World Heritage Monuments by the World heritage Foundation under UNESCO. The Region is also famous for its palm-fringed beaches, fascinating fishing villages and historic towns, and rich natural attractions. Kakum National Park, just 30 kilometres north of Cape Coast, is the foremost nature reserve in Southern Ghana. Almost untouched virgin rainforest has been preserved as a habitat for birds, butterflies and rare local animals. It has excellent walking tours (and a canopy walkway) through the forest. The other popular tourist attraction in the region is the Elmina Castle. Built in 1482, it is said to be the oldest European-built structure in black Africa and is rated as one of the World's Heritage Sites. It was built by the Portuguese strategically located for their trading.

1.8 Traditional Fishing and craft Villages and Towns

Along the coast of the Central Region is a succession of busy fishing villages and traditional market towns that reflect the distinct cultures of the region. Of particular interest are Winneba, famous for its fishing fleet, masquerade festival and local ceramics and Mankessim well known for its busy market.

The villages of the Central Region are famed for their traditional crafts. They all make great souvenirs for tourists to the Central Region. Particularly important villages are: Winneba - beautiful and unusual ceramics; Gomoa-Otsew-Jukwa - village of pottery makers and Bobikuma - rattan products.

The Cape Coast Castle was the headquarters of British merchants and the seat of government until 1877. It now houses the West African Historical Museum where exhibits range from the pre Gold Coast period to the mid-19th Century. The dark underground dungeons where the slaves were held and the auction halls are places of great importance to most African-Americans because of the nostalgia they evoke. It was visited by President Barak Obama, the first African-American president of the United States in 2009.

Table 1.1: Traditional festivals

Traditional town	Name of festival	Significance	Dates of celebration/climax	Duration
Winneba	Aboakyer	Pacification	First or second Saturday of may	One week
Elmina	Bakatue	Harvest festival	First Tuesday of July	Six weeks
Bremen Esiam	Akwambo	Path clearing	Last Saturday of July	One week
Senya beraku	Akomase	Harvest	Third week of August	One week
Saltpond	Adambea	Harvest/ remembrance	Last week of August	One week
Awutu	Awubia	Harvest	Last week of August-first week in September	Nine days
Agona Nyar/krom	Akwambo	Path clearing	First Sunday of August	One week
Ekumfi	Akwambo	Path clearing	Second Saturday of August	One week
Ajumako	Awambo	Path clearing	First Saturday of August	One week
Eguafo	Eguadoto	Remembrance	Last Saturday of August	Three days
Abirem	Eguadoto	Remembrance	Last Saturday of August	Three days
Twifo-Praso	Eguadoto	Remembrance	Last Saturday of August	Three days
Etsii Mokwaa	Eguadoto	Remembrance	Last week of August	Three days
Cape Coast	Fetu	Festival of plenty	First week of September	Three days
Kwamankese	Ahobaakese	Remembrance	First Friday of September	One week
Gomoa Assin	Ahobaakese	Remembrance	First Friday September	One week
Gomoa Ajumako	Ahobaa	Remembrance	First Friday September	One week
Abeadze	Ahobaa	Remembrance	First Friday September	One week
Enyanmaim	Ahobaa	Remembrance	First Friday of September	One week
Enyan Denkyira	Ahobaa	Remembrance	First Friday of September	One week
Mankessim	Ahobaa	Remembrance	Frist Friday of September	One week
Enyan Abaasa	Akwambo	Path clearing	First Tuesday of September	One week
Breman Asikuma	Odwira	Remembrance	Last week of September to first week of October	Two weeks
Anomabu	Okyir	Cleansing	Second Sunday of October	One week
Assin Apimaniam	Tutu	Remembrance	Last week of October	One week
Abura Dunkwa	Odumkwaa	Path clearing	Last Saturday of October	One week
Asebu	Kae Arko	Remembrance	Third week of October	One week
Jukwa	Odwira	Remembrance	Begins first Saturday of November	Two weeks
Komenda	Nyeyi	Mourning festival	First Thursday of November	Two weeks
Assin Atandanso	Tutu	Remembrance	Last week of November	One week
Abura Dunkwa	Odumkwaa	Path clearing	Last Saturday of October	One week
Asebu	Kae Arko	Remembrance	Third Week of October	One week
Jukwa	Odwira	Remembrance	Begins first Saturday of November	Two weeks
Komenda	Nyeyi	Mourning festival	First Thursday of November	Three days
Agona Nsaba	Akwambo	Path clearing	Last week of November-first week of December	One week
Assin Fosu	Tutu	Remembrance	Second week of December	Two weeks

Source: Centre for National Culture, Cape Coast.

Table 1.2: Forts and castles

Name	Date built	Builders	Location
Fort of Good Hope (Goede Hope)	1667-1704	The Netherlands	Senya Beraku
Fort Patience (Leydsa)	1697-1700	The Netherlands	Apam
Fort Amsterdam	1631-1638	The Netherlands	Komantse (Abanze)
Fort William (Fort Anomabo)	1753-1770	Britain	Anomabo
Cape Coast Castle	1673-1674	Sweden	Cape Coast
Fort William	1653	Britain	Cape Coast
Fort Victoria	1665	Britain	Cape Coast
Elmina Castle (Sao Jorge d'Mina)	1820	Britain	Elmina
	1821	Portuguese	
	1482	The Netherlands	
	1637	Britain	
	1872		
Fort St. Jago(Sao Iago Coenraasourg)	1665	The Netherlands	Elmina
English Fort (Komenda Fort)	1663	Britain	Komenda

CHAPTER TWO

CENSUS METHODOLOGY

2.1 Introduction

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. In conducting the 2010 PHC, the Ghana Statistical Service (GSS) was guided by the principle of international comparability and the need to obtain accurate information on population and housing Census in the country. Therefore, the 2010 PHC was 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. The exercise was also informed by experience from previous post-independence censuses of Ghana (1960, 1970, 1984 and 2000). From the previous experiences, it was recognized that a large scale statistical operation as the 2010 Population and Housing Census required meticulous planning for its successful implementation. This chapter presents information on the pre-census planning, enumeration and post enumeration activities. It is organized into five sections namely, pre-enumeration activities, the census enumeration itself, post enumeration activities, challenges and lessons learnt, summary and recommendations.

2.2 Pre-Enumeration Activities

The pre-enumeration period consisted of a number of discreet and related activities. This section outlines the major pre-enumeration activities which were undertaken.

2.2.1 Development of Census Project Document and Work plans

The first stage of the exercise involved the setting up of a working group at the head office of Ghana Statistical Service which was charged with the responsibility of preparing the census project document with the assistance of consultants. The document contained the rationale and objectives of the census, census organisation, a work plan and a budget. The project document was launched in November 2008 as part of the Ghana Statistics Development Plan (GSDP). In November 2009, the document was reviewed and updated to take into account the changes which had occurred over the period. Secondly, a management and supervisory framework which outlined the responsibilities of the various stakeholders essential for the effective implementation of a population and housing census was also produced as part of the initial preparation.

2.2.2 Census Secretariat and Committees

To implement the activities outlined in the 2010 PHC project document, a National Census Secretariat was set up at GSS head office in January 2008. The Secretariat comprised professional and technical staff of GSS as well as staff of other Ministries, Departments and Agencies (MDAs), some of whom were seconded to GSS. The Secretariat, primarily responsible for the day-to-day planning and implementation of the census activities, consisted

of 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 planning the Census. In 2009, the Census Secretariat was re-organised with the Government Statistician as the National Chief Census Officer and overall Coordinator of the census. As part of the re-organization, a Census Management Team and a Census Coordinating Team were established to assist the National Chief Census Officer/Coordinator. The Census Management Team had oversight responsibility for the implementation of the Census took 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.

Census committees were set up at both national and sub-national levels to provide technical advice and assist with resource mobilization. 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 (RCIC) and the District Census Implementation Committee (DCIC) respectively.

At the apex of the structure of the 2010 PHC management was the National Census Steering Committee as the main policy making body. The Committee was responsible for policy setting and direction on all aspects of the 2010 PHC. The composition of the NCSC was inter-sectoral with representation at the highest level, from both public and private institutions, such as, the Ministry of Finance and Economic Planning, Ministry of Education, National Population Council, United Nations Population Fund (UNFPA), Electoral Commission and National House of Chiefs.

The next tier was the National Census Technical Advisory Committee (NCTAC) which was multi-disciplinary in its membership, comprising subject-matter specialists from a broad spectrum of Ministries, Departments and Agencies (MDAs), universities, other research institutions and private consultants. This Committee served as a think-tank and an advisory body to the Census Management Team and supported the Census Coordinating Team at specific stages of the census programme. For instance, the Committee assisted in developing the questionnaires and ancillary documents used for the census.

A National Census Publicity and Education Committee comprising senior level representatives in communication, civic education and advocacy from relevant public and private institutions was set up to advice on education and publicity. The Committee provided technical advice to the Census Secretariat in the development of publicity and educational materials and implementation of the publicity programmes for the census.

Inter-sectoral Regional and District Census Implementation Committees were formed in all the regions and districts in the country. With membership drawn mainly from decentralized departments, Regional and District Coordinating Directors chaired the Committees respectively. The Central Regional Census Implementation Committee worked closely with the Regional/District Census officials to plan the regional, district and locality level activities in areas such as recruitment, training, publicity and field operations. The Committee also assisted in mobilising logistical support for the census.

2.2.3 Census Mapping

A timely and well implemented census mapping was considered pivotal for the success of the 2010 PHC as it is the process for delineating the country into enumeration areas to facilitate smooth enumeration of the population. For the 2010 PHC, the process involved updating the 2000 Census Enumeration Area (EA) maps, which started in the last quarter of 2007, the acquisition of topographic and digital sheets of all indices from the Geographical Information System Unit of the Survey and Mapping Division of the Lands Commission.

Updating of the 2000 PHC enumeration areas in the region was faced with a number of challenges including the problem of demarcating fast growing areas. One other major challenge for the mapping teams was the reconciliation of administrative boundaries following the creation of new districts. Field cartographic work in the region was completed in August, 2009.

2.2.4 Development of Questionnaire and Manuals

For effective data collection, there is the need to design appropriate documents to solicit the required information from respondents. In developing questionnaires and other materials, the GSS consulted widely with main data users and other stakeholders such as MDAs, research institutions, civil society organisations and development partners. The aim was to give these institutions and bodies, the opportunity to indicate the type of questions they felt should be included in the census questionnaire.

The documents developed for the census consisted of questionnaires, manuals and field operation documents. Three types of questionnaires were developed to cover different population groups: (1) PHC1A to enumerate the household population; (2) PHC1B for non-household (Group Quarters) population; and (3) PHC1C to enumerate out-door sleepers/floating population.

The field operation documents were the Enumerator's Visitation Record Book, Supervisor's Record Book, and operational control forms. Enumerators and supervisors used the record books as operational and quality control tools to control and monitor field activities respectively. The supervisor's record book consisted of checklists and was used to monitor enumerators under his/her supervision, to record all errors identified in the work of an enumerator and the measures which were taken to rectify the situation. Two summary sheets were developed for recording summaries of information collected at the enumeration and locality level: The PHC3 and the PHC4 forms. The PHC3 form was used to record total number of persons in each enumeration area by sex and the data from that form were collated and used to publish the provisional results. The PHC4 form was used to record information at the locality level on total number of persons enumerated and the availability of social facilities such as health and educational institutions, public toilets, and the distance to the nearest facility if that facility was not available in the locality. This form is used to prepare the Gazetteer, which is the alphabetical listing of all localities in the country by region and by district with their population and the identified facilities.

The topics which were eventually selected for the 2010 Population and Housing Census were based on recommendations from the United Nations Principles and Recommendations for 2010 Round of Population and Housing Censuses, the African Addendum to that document and the needs of data users. 2010 PHC adopted 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 adopted and included in the census.

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

The specific items of information collected from the population encountered on census night were name, sex, age, date of birth, nationality, ethnicity, birthplace, religion, internal migration, marital status, literacy, full time education, fertility, mortality, economic activity, occupation, industry, employment status, employment sector, disability, use of ICT, and agricultural activity. All questions were pre-coded except those on ethnic group, agricultural activity, occupation and industry, which were coded in the field.

Two manuals were developed: enumerator and supervisor’s manuals. The first, the enumerator’s manual, contained procedures, definitions and concepts used in the census, instructions on how to enumerate all persons and households in localities and a historical calendar of national and regional events which was used to estimate the ages of persons who did not know their date of birth or age. The second, the supervisor’s manual, contained information on the duties of a supervisors and how to conduct checks on the work of enumerators.

For the coding of occupations and industrial activities in the country, a codebook based on the International Standard Classification of Industry (ISIC) and International Standard Classification of Occupation (ISCO) was developed. The codes, which were a four-digit alphabetical ordering, were prepared taking into consideration the ISCO and ISIC structure as well as occupations and industrial activities specific to Ghana.

2.2.5 Pre-tests and Trial Census

The census questionnaire was pre-tested twice in the course of its development in line with the internationally accepted practices for conducting censuses. The first pre-test was carried out in March 2009 and was used to assess the suitability of questions and instructions, adequacy and completeness of questions and respondents’ understanding of the questions. The second pre-test was conducted in 10 selected enumeration areas in August 2009. The objective of the second pre-test was to examine the sequencing of questions, testing of new questions which were introduced in the 2010 PHC such as date of birth and migration and assess how the introduction of ‘date of birth’ could help to reduce ‘age heaping’. For the questions on fertility, the pre-tests sought to find out the difference, if any, between proxy responses and responses by respondents themselves. Both pre-tests were carried out in the Greater Accra Region. Experiences from the pre-tests informed the development of the final census questionnaires.

In May 2010, GSS with the support of the United Nations Population Fund conducted a special test-census in the Awutu Senya District of the Central Region. The aim of the exercise was to test the hypothesis that questions on children ever born and children surviving could be asked in a census and secondly, if answered by respondents themselves or through proxy would generate useful and good quality data. The results from this test showed that it was

possible to obtain lifetime fertility data in a census and that there were no significant differences between the responses given by proxy and the eligible women themselves. Based on this finding, lifetime fertility questions were re-introduced in the questionnaire.

A trial census was held in October/November 2009 as a dress rehearsal for all the activities and procedures which had been planned for the main census. These were recruitment and training, distribution of census materials, administration of questionnaires 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 including the Awutu/Senya District in the Central region. The selection of districts for the trial census districts was informed by factors such as administrative boundary issues, ecological zones, accessibility, and availability of outdoor-sleepers/floating and institutional populations, fast-growing areas and enumeration areas with scattered settlements.

The trial census provided an opportunity to assess plans, procedures and the state of preparedness for the conduct of the 2010 PHC. Results from the trial census were used to estimate the number of persons per questionnaire and the average number of persons in the household roster, to assess the question on migration, the placement of the mortality question, serial numbering of houses/housing structures and method of collection of information on community facilities. Some of the common errors encountered during the editing of the completed questionnaires resulted in modifications to the questionnaire and the enumerator's manual. Lessons learnt from the trial census also guided the planning of the recruitment process, the procedures for training of field staff, publicity and education on the census.

2.2.6 Distribution of Census Materials

Experience from trial census guided in the distribution of census materials in the region. The Regional Census office liaised with institutions that had the capacity to transport large volumes of materials to the districts. The District Assemblies, Ghana Education Service (GES), the Electoral Commission, Information Services Department were the institutions that assisted in transporting the census materials from Accra to the district capitals for distribution to field personnel.

2.2.7 Publicity and Education

Publicity and public education on the census were considered essential for the success of the 2010 PHC. The objectives of the census education campaign were to sensitize the public on the importance of the census, to create awareness on the census topics/questions, to solicit for support from the public on the exercise and to assure the population of the confidentiality of the information provided. The publicity programme was implemented in two phases. Phase one was the publicity for the trial census and was restricted to the six trial census districts. For this phase, the publicity was mostly through direct community such as interpersonal communication through the Information Service Department vans and traditional forms such as drums and drama as some of the trial districts were rural and some of the people did not have access to radio or television. Phase two was the publicity for the main census and this involved sensitization of civil society groups, religious leaders and community leaders; seminars; workshops; television and radio programmes; and use of public address systems.

Materials used for the publicity of main census publicity included jingles, posters, banners, car stickers, brochures, handbills, flyers and t-shirts. These materials were distributed freely through Regional and District Offices of GSS, and Regional and District Census Implementation Committees.

The Census Night, Sunday, 26th September 2010, was observed in all Districts in the region with various activities to make the day memorable. The rationale for celebrating the Census Night was to create public awareness on the commencement of the census and also for people to remember that night since information on the census was collected with reference to that night.

Activities organised in communities included:

- Sounding of sirens using Information Service Department, Police vehicles and Fire Service tenders
- Television and radio discussions explaining the importance of the census on Census Night.
- Tooting of horns by Ghana Private Road Transport Union (GPRTU) vehicles
- Tolling of church bells
- Brass band floats and street processions
- Bonfires (especially in Greater Accra)
- Traditional drumming, gong-gong beating and firing of muskets (especially in the rural and semi-urban areas)
- Cultural shows and music by spinning groups
- Film shows.

2.2.8 Recruitment and Training of Census Personnel

Recognising the importance of using high calibre personnel, training and motivation in conducting a successful census, the GSS developed elaborate plans for the recruitment and training of field personnel. The Census Secretariat developed a criterion for field personnel. Using the developed criteria, an online recruitment process was adopted and interested person's selection which was used in all regions. Applicants were requested to complete an online application form after which qualified candidates were shortlisted and interviewed in the district of their choice. The names of successful applicants were forwarded to the Census Secretariat after which the names were posted to the districts for interviews and selection of successful applicants.

Given the large number of personnel that had to be trained for the census enumeration a four-tier training programme was implemented at the national level. In the first tier, GSS trained about 50 national level trainers. These together with senior officials of GSS formed the core of trainers who trained about 250 regional level trainers. The regional level trainers then trained about 2000 district level trainers who in turn trained about 50,000 enumerators, supervisors and senior supervisors. These district level trainers were mainly from Ghana Education Service (GES) and officials of MDAs. In August 2010, a one-week training programme was conducted at the national level for all district level trainers. This was to ensure standardized training. After the training of the district level trainers, they in-turn organized training for field personnel in their respective districts.

The training of the field personnel for the main census took place concurrently in all the 20 districts in the region. The training focused on the objectives of the census, interview techniques, map reading skills, listing of households, administration of the census questionnaires and how to complete the operational control forms. The field personnel who were trained included senior field supervisors, field supervisors and enumerators.

Based on results from an assessment of the trainers, some of them were selected as supervisors. Those selected were given additional training which focused mainly on supervision of enumerators, field checks, and the completion of census operational control forms and summary sheets.

Enumerators and supervisors were trained to undertake the census due to the fact that Ghana is largely an illiterate society. Thus, the canvasser method, which involves trained field personnel visiting houses and households to enumerate, was adopted for the 2010 PHC. Specific arrangements were made for the coverage of special population groups, such as the homeless and the floating population.

2.3 Census Enumeration

2.3.1 Enumeration

In the 2010 PHC, people were enumerated at where they were on census night (de facto) as in all the four post-independence censuses (1960, 1970, 1984, and 2000) conducted in the country and not at where they usually resided (de jure). The de facto count was adopted because it is based on physical presence on a defined date and therefore it is simple, straightforward, and easy to interpret as well as minimizes the risks of under-enumeration and over enumeration. The reference period, the census night, was fixed for 20th September 2010.

The field personnel used the week preceding the Census Night to identify EA boundaries, list houses and other structures in their enumeration areas and enumerated institutional populations (health facilities, boarding schools and prisons). Prior to the census enumeration, officials of the Regional Census office identify possible locations of out-door sleepers in the region. This was to assist the officials to plan on how to enumerate the floating. Field officers were deployed to enumerate the floating population on Census Night using the census questionnaire (PHC1C).

Following the census night on 26th September 2010, enumeration of household populations started on Monday, 27th September 2010 with visits to houses, compounds and structures in enumeration areas. The enumeration was carried out in the order in which houses/structures were listed. Where the members of a household were absent, the enumerator left a call-back-card indicating when he/she would return to enumerate the household. The enumeration process took off smoothly and on schedule. However, after a few days' work, some enumerators ran short of questionnaires, delaying the process for about three days.

Enumeration resumed in all districts when the shortage of questionnaires was resolved and by 17th October, 2010, enumeration was completed in most districts. Enumerators who completed their work early were mobilized to assist in the enumeration of localities that had lagged EAs especially the district capitals and other fast growing areas such as Kosoa.

2.3.2 Supervision and Monitoring of Field work

To achieve effective supervision, one supervisor was assigned to five enumerators. The supervisors ensured that enumerators followed all the instructions and procedures in carrying out their assigned responsibilities. In addition, District and Regional Census Officials and census committee members also went round to ensure that the enumeration exercise was successful.

2.3.3 Retrieval of Census Materials

One of the post enumeration activities in the region involved the collection and transportation of census forms to Accra for data processing. At the end of field work on 17th October, 2010, enumerators submitted their completed questionnaires, summary forms (PHC3 & PHC4) and other census materials to their supervisors who in turn forwarded them to the District Census Office. Materials received at the District Office were documented and the receipts which accompanied the census materials were used to reconcile the items given to an enumerator and those returned. The PHC3 forms were quickly dispatched to the Census Secretariat from which the provisional results were compiled. Vehicles were sent from Accra to collect the completed questionnaires and other documents from the districts to the Census Secretariat.

2.4 Post Enumeration Survey

In line with United Nations' recommendations, GSS conducted a Post Enumeration Survey (PES) in April, 2011. The objective was to use the results to check for content and coverage errors and to provide feedback on aspects such as concepts and procedures on census operations. Findings from PES can also guide users in their interpretation of the 2010 PHC results. Five items of information were collected in the PES: name, sex, age, relationship to head of household and marital status. Similar PESs were undertaken in previous post-independence censuses. The results of the 1960 and the 1970 PESs were published but not those of 1984 and 2000.

For the PES a sample of 250 (0.67%) out of 37,642 enumeration areas, was selected across the country. To ensure reliability of the survey estimates of the PES, the 2010 PHC frame was used. First stratified into the 10 administrative regions, enumeration areas were allocated to each stratum (region) according to the proportion of EAs in each region. Systematic sampling with probability proportional to size (number of households) was applied in selecting the enumeration areas in each region. A matching exercise was conducted to check both coverage and content errors.

Some of the personnel who took part in the 2010 PHC field enumeration exercise were recruited and trained for six days on the instruments prepared for the PES. The field work was carried out for 21 days in April 2011 and was closely monitored and supervised to ensure quality output. The main findings of the PES were that:

- 97.0 percent of all household residents who were in the country on Census Night (26th September, 2010) were enumerated in the 2010 PHC representing an omission rate of 3.0 percent.
- 1.3 percent of the population was erroneously included in the census.
- The PES count recorded a population of 24.0 million for Ghana on Census Night against 24.1 from the main 2010.
- The true population which is the population estimated from the PES multiplied by the population from the census after correcting for erroneous inclusions and divided by matched population between the census and the PES is 24.5 million.

- 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%).

2.5 Lessons Learnt and Challenges

This section highlights some of the challenges and lessons learnt before, during and after the planning and implementation of the 2010 PHC in the Central region. The lessons learnt cover aspects such as recruitment and training of field personnel, publicity and education, demarcation of enumeration areas, and field challenges.

2.5.1 Boundary Disputes

Disputes relating to district boundaries arose during the demarcation of enumeration areas and also during the actual enumeration of the population. During the delineation of EAs, some community leaders and District Assembly officials confronted the cartographic field personnel for placing their communities in districts other than those they claimed they belonged to. Similar confrontations occurred during the enumeration where some communities initially refused to be enumerated due to district boundary disputes. They claimed that enumerators assigned to their area were from different districts and therefore could not be allowed to enumerate them. In some cases, senior census officials, District Chief Executives and officials of the Central Regional Coordinating Council had to intervene before the aggrieved communities accepted to be enumerated. The assurance given was that their population will be allocated to the district they claimed to belong to. Such disputes affected the timely completion of both exercises.

2.5.2 Large Enumeration Areas

The usual practice is to assign one enumerator to one enumeration area. As such enumeration areas are usually created in such a way that the enumerator is able to complete enumeration within the stipulated time. Unfortunately some enumeration areas in the region were larger and therefore the enumerators of those enumeration areas were unable to complete enumeration within the given time. When this became known, additional enumerators were deployed to assist them to enumerate the remaining areas. This situation led to late completion of work in such enumeration areas, which contributed to the overall delay in the fieldwork in the region.

2.5.3 Shortage of Census Questionnaires

The initial shortage of questionnaires was one of the major setbacks in the 2010 PHC. As a result, some enumerators resorted to the use of exercise books to record information of

households. Enumerators who did this were asked to transfer such information to the questionnaire when the situation improved. This was done with the guidance of supervisors.

2.5.4 Supervision

Although conscious effort was made to select knowledgeable, experienced and committed people as supervisors, some of them could not perform as expected in the field. Such people did not have the necessary skills to supervise and monitor the work of others. In some cases, there were problems with supervision because some teachers were selected as supervisors over their superiors at work. This affected working relationships. In future, the selection of supervisors should be done with more care than was the case in some of the areas.

2.5.5 Logistics

During the mapping exercise, an inadequate number and frequent breakdown of vehicles was a challenge. Another challenge GSS faced by the Regional Census office was the late delivery of bags/satchels that were to be used for packaging of the census questionnaires. Due to the late delivery of the bags/satchels, cartons were used to package and transport the census materials from the districts to the Census Secretariat in Accra.

2.6 Summary and Recommendations

2.6.1 Summary

Methodologies adopted for the 2010 census were derived from the recommendations from the United Nations Principles and Recommendations for the countries taking part in the 2010 round of population and housing census as well as experience from previous censuses in Ghana.

Topics covered in the census were: demographic and social characteristics, such as, age, sex, marital status, ethnicity, religion, literacy, education, economic characteristics, ICT, disability, fertility, mortality, agricultural activity and housing.

In the area of census mapping, both manual and digital mapping techniques were used. In previous censuses, only manual mapping techniques were used to produce census enumeration area maps.

A trial census was carried out in the Awutu/Senya district in the Central region. The 2010 Population and Housing Census was widely publicized in every community in the region. The involvement of many stakeholders such as Ministry of Information, Information Service Department, and the National Commission for Civic Education, MMDAs and the private media contributed to the success of the census publicity campaign in the region. Training of field personnel was done at the district level.

Some of the major challenges were encountered in the areas of census mapping, field data collection and supervision. However, staff of GSS in the Central region, and members of the Regional and District Census Implementation Committees were able to find solutions to these challenges.

2.6.2 Recommendations

The institutions responsible for the creation of districts, constituencies and electoral areas and enumeration areas should build consensus in the creation of these units to avoid conflicts in the conduct of national exercises such as elections and censuses.

In the future, every effort should be made to maintain the ten-year periodicity as well as conduct the census in March as has been the practice. This calls for timely release of funds for the conduct of the census exercise.

The field operations group should collaborate with the cartography section in the creation of enumeration areas (EAs). This would help in minimizing cases where some EAs are exceptionally large. Field officers should also be requested to report cases of large EAs at the end of house listing to avoid the situation where some portions of EAs are left un-attended to.

The Census Coordinator should ensure that all the census materials, especially the census questionnaires, are procured in good time and in sufficient quantities and sent to the regions ahead of training of field personnel. This will avoid delays in census activities and shortages of census materials.

Management should recognize the importance of supervision and monitoring and budget adequately for them in future censuses.

2.7 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 those of other countries.

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

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

Region

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

District

In 1988, Ghana changed from the local authority system of administration to the district assembly system. In that year, the then existing 140 local authorities were demarcated into 110 districts. In 2004, 28 new districts were created; this increased the number of districts in the country to 138. In 2008, 32 additional districts were created bringing the total number of districts to 170. The 2010 Population and Housing Census was conducted in these 170 administrative districts (these are made-up of 164 districts/municipals and 6 metropolitan areas). The six metropolitan areas in all have 33 sub-metros which the Statistical Service considered as districts for the purpose of the exercise. Thus, the total number of statistical districts was 197.

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 they:

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

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

Occupation

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

Industry

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

Employment Status

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

Employment Sector

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

Disability

Persons with disability were defined as those who were unable to or were restricted in the performance of specific tasks/activities due to loss of function of some part of the body as a result of impairment or malformation. Information was collected on persons with visual/sight

impairment, hearing impairment, mental retardation, emotional or behavioural disorders and other physical challenges.

Information and Communication Technology (ICT)

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

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

Fertility

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

Mortality

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

Agriculture

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

Housing Conditions and Facilities

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

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

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

CHAPTER THREE

POPULATION SIZE, COMPOSITION AND AGE-SEX STRUCTURE

3.1 Introduction

One of the most important characteristics of a population is its age-sex structure. Age and sex influence many demographic trends. An understanding the age and sex structure of a population yields insights into changing population composition and highlights social and economic challenges. All levels of government need information on age and sex composition of the population in planning and development and in provision of services. For example, an important use of census data on age and sex is the planning of adequate schools for school age population. This chapter describes the population size, and age and sex composition of Central Region in 2010.

3.2 Population Size

In 2010 the population of Central region was 2,201,863, which accounted for 8.9% of the population of Ghana. Only three regions, Volta, Upper East, and Upper West, had populations lower than that of the Central Region. The recorded percentage increase of 38.1 percent between 2000 and 2010 was the highest in the country. Similarly, Central region had the highest annual average inter-censal growth rate of 3.1%.

As shown in Table 3.1, the 17 districts of the region have varying population sizes. With nearly one-tenth of the regional population (9.4%), Gomoa East has the largest share of the population. The next two most populous Districts are Mfantiman and Ewutu Senya, each with 8.9 percent followed by Cape Coast (7.7% of the population). Upper Denkyira West (2.7%) recorded the lowest percentage share of the regional population.

Table 3.1: Population by district

District	Total Population	Percent Share of Population
Komenda-Edina-Eguafo-Abirem	144,705	6.6
Cape Coast Metropolis	169,894	7.7
Abura-Asebu-Kwamankese	117,185	5.3
Mfantsiman Municipal	196,563	8.9
Ajumako-Enyan-Essiam	138,046	6.3
Gomoa West	135,189	6.1
Effutu Municipal	68,597	3.1
Gomoa East	207,071	9.4
Ewutu Senya	195,306	8.9
Agona East	85,920	3.9
Agona West Municipal	115,358	5.2
Asikuma-Odoben-Brakwa	112,706	5.1
Assin South	104,244	4.7
Assin North Municipal	161,341	7.3
Twifo-Hemang-Lower Denkyira	116,874	5.3
Upper Denkyira East Municipal	72,810	3.3
Upper Denkyira West	60,054	2.7
Total	2,201,863	100.0

Source: 2010 Population and Housing Census

3.3 Urban and Rural Distribution

The proportion of the population in the region living in urban areas is 47.1 percent. This proportion is below the national average of 50.9 percent. The region, however, presents a marked diversity of districts regarding the proportion of the population living in urban areas. As shown in Table 3.2 only six out of the 17 districts have over one-half of the population living in urban areas. The most urbanized district in the Region in 2010 is Effutu with 93.3 percent of the population living in urban localities. The district consists predominantly of the urban locality of Winneba. In contrast, two Districts, Assin South and Upper Denkyira west, have no urban populations. These two Districts, in addition to two others in the Upper West Region, are the only Districts in Ghana with no urban population.

Table 3.2: Urban and rural distribution of regional population by district

District	Total Population	Urban	Rural
2000*	1,593,823	37.5	62.5
All Districts	2,201,863	47.1	52.9
Komenda -Edina-Eguafo-Abirem	144,705	35.7	64.3
Cape Coast Metropolis	169,894	76.7	23.3
Abura-Asebu-Kwamankese	117,185	33.6	66.4
Mfantsiman Municipal	196,563	50.4	49.6
Ajumako-Enyan-Essiam	138,046	31.9	68.1
Gomoa West	135,189	42.6	57.4
Effutu Municipal	68,597	93.3	6.7
Gomoa East	207,071	52.4	47.6
Ewutu Senya	195,306	73.6	26.4
Agona East	85,920	43.4	56.6
Agona West Municipal	115,358	76.6	23.4
Asikuma-Odoben-Brakwa	112,706	48.1	51.9
Assin South	104,244	***	100.0
Assin North Municipal	161,341	35.8	64.2
Twifo-Hemang-Lower Denkyira	116,874	25.2	74.8
Upper Denkyira East Municipal	72,810	44.4	55.6
Upper Denkyira West	60,054	***	100.0

Note: *** No urban localities in the district; * Population of Central Region in 2000
Source: 2010 and 2000 Population and Housing Census

3.4 Age Structure

Although there are some variations among the Districts, the Region as a whole and all the Districts depict typical youthful populations. For the region, the proportion of the population under 15 years is 39.5 percent compared to a national average of 34.4 percent. However, as shown in Table 3.3, there exist inter district differentials in the proportion of population under 15 years which are relatively high in three Districts, Asikuma-Odoben-Brakwa (43.5%), Assin South (42.9%), and Assin North (42.0%), but low in Cape Coast (28.3%) and Effutu (33.1%).

The proportion of population under five years declined from 15.3 percent in 2000 to 14.2 percent in 2010. The comparatively smaller proportion of population under five years witnessed in the Region over the past ten years may be an indication of the onset in fertility decline. At the district level, Cape Coast (10.3%) and Effutu (12.4%) recorded relatively low proportions of under five population.

The population of Central region is youthful. As shown in Table 3.3, the median age is 19.7 years and the mean is 24.4 years compared with 20 years and 24 years respectively at the national level. The district with the lowest median age is Assin South (18.3 years) and those with the highest are Effutu Municipal (22.6 years) and Cape Coast (22.4 years). As urban districts, Cape Coast and Effutu draw a considerable number of persons into the districts who may have left their young children in the villages. This may explain the high median ages in the two districts.

The dependency ratio for Central region is 81.4 (Table 3.3). Among the districts, dependency ratios are lowest in the urban districts where the proportions of the dependent population (less than 15 years and over 65 years) are the lowest. The lowest dependency ratios are in Cape Coast (49.1) and Effutu (61.0) while the highest are in Ajumako-Enyan-Essiam (97.8) and Asikuma-Odoben-Brakwa (95.4).

Table 3.3: Age structure by age and district

Age group	Districts									
	Central	Komenda-Edina-Egyafo-Abirem	Cape Coast Metro	Abura-Asebu-Kwaman	Mfantseman Municipal	Ajumako-Enyan-Essiam	Gomoa West	Effutu Municipal	Gomoa East	Ewutu Senya
Total	2,201,863	144,705	169,894	117,185	196,563	138,046	135,189	68,597	207,071	195,306
Less than 1	3.2	3.1	2.5	3.0	3.2	3.9	3.5	3.2	3.6	3.4
1-4	11.0	10.9	7.8	11.1	10.9	11.6	11.4	9.2	11.5	11.3
5-9	12.8	13.3	8.7	13.3	12.9	13.6	13.4	10.3	12.9	12.8
10-14	12.5	12.9	9.3	13.1	13.0	12.9	12.7	10.4	12.1	12.1
15 - 19	11.1	10.8	13.1	11.2	13.1	10.6	10.8	10.5	10.1	10.6
20 - 24	8.9	8.0	17.4	7.8	7.6	6.7	7.6	12.4	8.8	9.3
25 - 29	7.4	7.0	9.6	6.3	6.4	5.7	6.3	10.6	8.8	8.6
30 - 34	6.0	5.6	6.7	5.3	5.3	5.0	5.1	7.9	7.3	7.1
35 - 39	5.4	5.2	5.2	5.0	5.0	4.7	4.9	5.5	6.2	6.2
40 - 44	4.6	4.6	4.3	4.5	4.5	4.4	4.2	4.3	4.8	4.8
45 - 49	3.8	3.9	3.5	3.9	3.8	4.0	3.7	3.6	3.5	3.7
50 - 54	3.6	3.7	3.2	3.9	3.5	4.3	3.9	3.3	3.0	3.1
55 - 59	2.3	2.4	2.3	2.6	2.3	2.7	2.4	2.2	1.9	1.9
60 - 64	2.1	2.3	1.9	2.5	2.3	2.6	2.5	1.9	1.7	1.7
65 - 69	1.4	1.6	1.2	1.6	1.6	1.7	1.7	1.3	1.0	1.1
70 - 74	1.5	1.8	1.2	1.9	1.7	2.3	2.1	1.3	1.0	0.9
75 - 79	0.9	1.1	0.8	1.1	1.1	1.2	1.2	0.8	0.6	0.5
80 - 84	0.7	0.9	0.6	1.0	1.0	1.1	1.1	0.7	0.6	0.4
85 - 89	0.4	0.5	0.4	0.5	0.6	0.6	0.6	0.4	0.3	0.3
90 - 94	0.3	0.3	0.2	0.3	0.3	0.4	0.5	0.2	0.2	0.2
95+	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Median	19.7	19.6	22.4	19.2	18.9	18.8	19.2	22.6	19.9	19.9
Mean	24.4	25.0	25.4	25.1	24.7	25.4	25.3	25.3	23.4	23.2
Dependent Population (less than 15 & 65+)	988,203	46.5	32.9	47.2	46.3	49.4	48.5	37.9	44.0	43.1
Population(15+)	1,330,029	59.8	71.6	59.4	60.1	58.0	59.0	66.9	59.	60.3
Population(18+)	1,180,896	53.1	64.9	52.4	51.7	51.4	52.2	61.1	53.7	53.9
Dependency Ratio	81.4	86.8	49.1	89.2	86.3	97.8	94.2	61.0	78.5	75.8

Table 3.3: Age structure by age and district (cont'd.)

Age group	Districts							
	Agona East	Agona West	Asikuma-Odoben-Brakwa	Assin South	Assin North Municipal	Twifo-Hemang-Lower Denkyira	Upper Denkyira East Municipal	Upper Denkyira West
Total	85,920	115,358	112,706	104,244	161,341	116,874	72,810	60,054
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 1	3.0	2.9	3.5	3.2	3.2	3.0	3.0	3.4
1-4	11.8	10.5	11.9	12.2	11.8	11.9	10.0	11.6
5-9	13.5	12.4	14.3	14.2	13.8	13.6	12.2	13.8
10-14	12.8	12.9	13.8	13.4	13.2	13.3	12.8	13.0
15 - 19	10.6	11.0	10.4	10.6	11.0	11.0	11.0	10.4
20 - 24	7.6	8.4	6.9	7.2	8.4	8.2	9.3	8.1
25 - 29	6.7	7.1	6.0	6.4	7.2	7.4	7.8	7.4
30 - 34	5.6	5.9	5.3	5.4	5.9	6.0	6.6	6.1
35 - 39	5.2	5.6	5.1	5.1	5.5	5.7	5.8	5.6
40 - 44	4.6	4.8	4.6	4.6	4.5	4.8	4.8	4.7
45 - 49	3.9	4.1	4.1	4.1	3.8	3.9	4.0	3.9
50 - 54	3.7	4.0	4.0	3.8	3.5	3.4	3.8	3.3
55 - 59	2.6	2.7	2.5	2.4	2.2	2.1	2.4	2.1
60 - 64	2.4	2.2	2.2	2.1	1.9	1.8	2.0	1.9
65 - 69	1.6	1.5	1.4	1.4	1.1	1.1	1.3	1.1
70 - 74	1.8	1.6	1.7	1.7	1.4	1.1	1.5	1.5
75 - 79	1.0	0.9	0.9	0.8	0.7	0.6	0.8	0.8
80 - 84	0.8	0.7	0.7	0.7	0.5	0.5	0.6	0.6
85 - 89	0.5	0.4	0.3	0.4	0.2	0.2	0.3	0.3
90 - 94	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95+	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Median	19.2	20.1	18.2	18.3	18.6	18.7	20.6	18.9
Mean	24.7	25.1	24.1	23.9	23.3	23.1	24.7	23.5
Dependent Population (less than 15 & 65+)	47.2	44.2	48.8	48.3	46.2	45.6	42.6	46.5
Population(15+)	58.8	61.3	56.6	57.0	58.1	58.2	62.1	58.2
Population(18+)	52.3	54.4	50.0	50.2	51.3	51.4	55.4	51.8
Dependency Ratio	89.4	79.1	95.4	93.4	85.9	83.8	74.2	86.8

Source: 2010 Population and Housing Census

3.5 Sex structure

The sex ratio in 2010 (91.2) presented in Table 3.4 shows that there are more females than males in the Central Region. The region has the lowest sex ratio in the country. In contrast, Brong-Ahafo region has the highest sex ratio of 104. In all districts in the region there are more females than males, except Upper Denkyira West, with a sex ratio of 101.1. This may be explained by the presence of mining activities which attract predominantly male workers needed for the industry. The lowest sex ratio is in Gomoa West where there are 80.8 males to every 100 females.

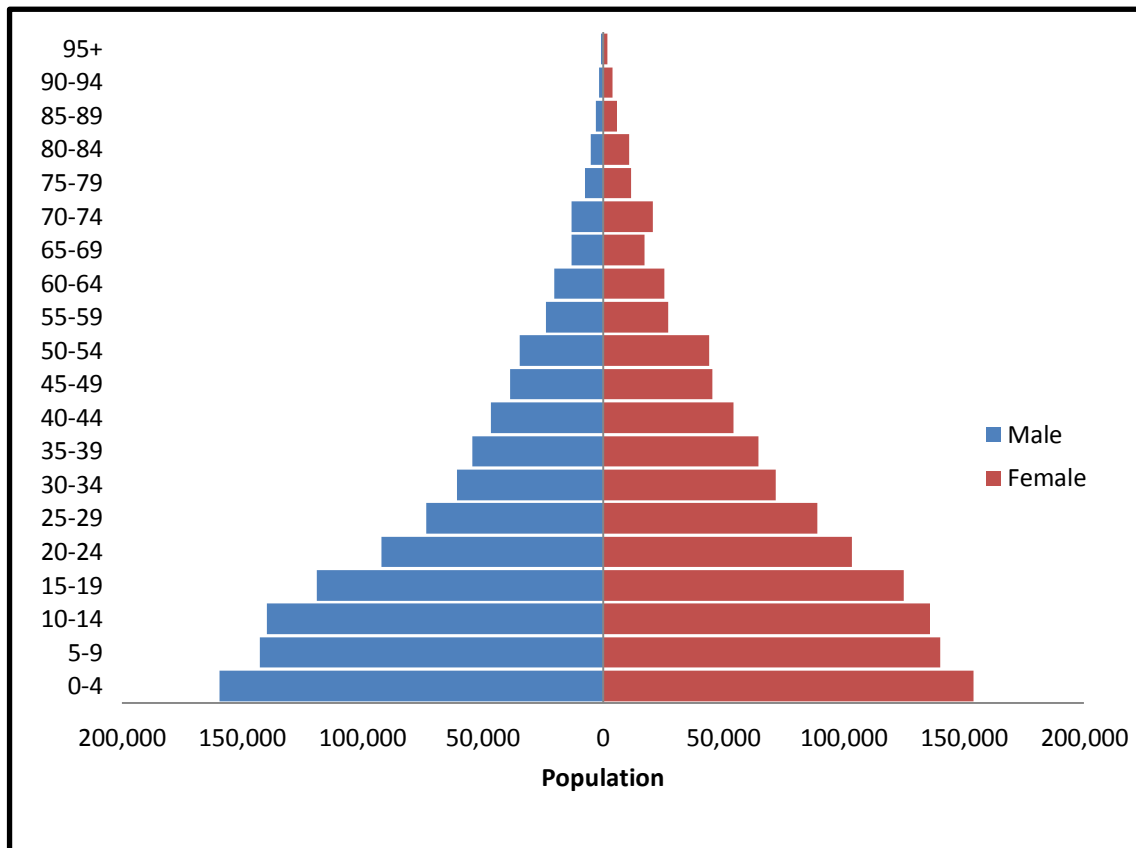
Table 3.4: Population by sex and sex ratio by district

District	Population			Sex Ratio
	Male	Female	Total	
Total	1,050,112	1,151,751	2,201,863	91.2
Komenda -Edina-Eguafo- Abirem	69,665	75,040	144,705	92.8
Cape Coast Metropolis	82,810	87,084	169,894	95.1
Abura-Asebu-Kwamankese	55,275	61,910	117,185	89.3
Mfantiman Municipal	89,025	107,538	196,563	82.8
Ajumako-Enyan-Essiam	64,418	73,628	138,046	87.5
Gomoa West	60,417	74,772	135,189	80.8
Effutu Municipal	32,795	35,802	68,597	91.6
Gomoa East	98,323	108,748	207,071	90.4
Ewutu Senya	93,100	102,206	195,306	91.1
Agona East	41,035	44,885	85,920	91.4
Agona West Municipal	54,159	61,199	115,358	88.5
Asikuma-Odoben-Brakwa	54,293	58,413	112,706	92.9
Assin South	50,936	53,308	104,244	95.6
Assin North Municipal	80,254	81,087	161,341	99.0
Twifo-Hemang-Lower Denkyira	57,624	59,250	116,874	97.3
Upper Denkyira East Municipal	35,790	37,020	72,810	96.7
Upper Denkyira West	30,193	29,861	60,054	101.1

Source: 2010 Population and Housing Census

An important tool for analyzing age and sex composition of a population is the age-sex pyramid. Figure 3.1 shows the population pyramid of Central region in 2010. The shape of a population pyramid provides important information about population composition. The shape closely mirrors that of the national pyramid, and typical of developing countries. It has a broad base gradually tapering off at the older ages. This is an indication of a youthful, growing population.

Fig 3.1: Population pyramids



Source: 2010 Population and Housing Census

3.6 Dependency

Age dependency ratio may be used to study the support needed or given to young and/or older population relative to working age population. Table 3.5 shows that the dependency ratio is highest in districts with large proportions of population younger than 15 years old and persons 65 and older. The regional dependency ratio is 81.4 implying that every 100 persons aged 15-65 years support about 81 dependents. The highest dependency ratios of 97.8 and 95.4 are in Ajumako-Enyan-Essiam and Abura-Asebu-Kwamankese respectively. In these districts, almost every person in the working age group is supporting another person. The two districts with the lowest dependency ratios are Cape Coast (49.1) and Effutu (61.0). This implies that in the predominantly rural districts, those in the working age group carry a heavier burden of dependency.

Table 3.5: Dependency and working population by sex

District	Age	Composition by Age (%)			Total Dependency Ratio	District	Age	Composition by Age (%)			Total Dependency Ratio
		Male	Female	Both Sexes				Male	Female	Both Sexes	
Total	<15	42.1	37.3	39.6	81.4	Ewutu Senya	<15	41.6	38	39.7	75.8
	15-64	53.7	56.4	55.1			15-64	55.5	58.2	56.9	
	65+	4.2	6.2	5.3			65+	3.0	3.8	3.4	
Komenda- Edina-Eguafo- Abirem	<15	42.3	38.1	40.2	86.8	Agona East	<15	43.9	38.7	41.2	89.4
	15-64	52.9	54.1	53.5			15-64	51	54.4	52.8	
	65+	4.7	7.8	6.3			65+	5.1	6.9	6.0	
Cape Coast Metropolitan	<15	28.8	28	28.4	49.1	Agona West Municipal	<15	41.8	36	38.7	79.1
	15-64	67.5	66.7	67.1			15-64	53.8	57.7	55.8	
	65+	3.7	5.3	4.5			65+	4.5	6.3	5.5	
Abura-Asebu- Kwamankese	<15	43.5	37.9	40.6	89.2	Asikuma- Odoben- Brakwa	<15	46.4	40.6	43.4	95.4
	15-64	51.4	54.2	52.8			15-64	49.1	53.2	51.2	
	65+	5.1	7.9	6.6			65+	4.6	6.2	5.4	
Mfantseman Municipal	<15	44.4	36.2	39.9	86.3	Assin South	<15	45.0	41.1	43	93.4
	15-64	50.8	56.1	53.7			15-64	50.4	53.0	51.7	
	65+	4.9	7.7	6.4			65+	4.6	6.0	5.3	
Ajumako- Enyan-Essiam	<15	46.6	37.9	42.0	97.8	Assin North Municipal	<15	43.4	40.5	41.9	85.9
	15-64	47.6	53.2	50.6			15-64	52.6	54.9	53.8	
	65+	5.8	9.0	7.5			65+	3.9	4.6	4.3	
Gomoa West	<15	46.2	36.8	41	94.2	Twifo- Hemang- Lower Denkyira Upper	<15	43.2	40.4	41.8	83.8
	15-64	48.7	53.8	51.5			15-64	53.3	55.5	54.4	
	65+	5.1	9.4	7.5			65+	3.5	4.1	3.8	
Effutu Municipal	<15	34.2	32.0	33.1	61	Denkyira East Municipal	<15	39.1	36.7	37.9	74.2
	15-64	62.3	62.0	62.1			15-64	56.5	58.3	57.4	
	65+	3.6	6.0	4.8			65+	4.4	5	4.7	
Gomoa East	<15	42.6	37.8	40.1	78.5	Upper Denkyira West	<15	42.2	41.5	41.8	86.8
	15-64	54.5	57.4	56.0			15-64	53.6	53.4	53.5	
	65+	2.9	4.8	3.9			65+	4.1	5.1	4.6	

Source: 2010 Population and Housing Census

3.7 Nationality

Data on nationality status are presented in Table 3.6 below shows that 97.6 percent of all residents in the Region in 2010 were Ghanaians, including 0.6 percent Ghanaian by naturalisation. The proportion of non-Ghanaians in the region is 2.4 percent, ranging from 1.1 percent in Gomoa West to 7.8 percent in Gomoa East. On the whole, the urban districts have the highest proportions of non-Ghanaians since they are involved in trading and other commercial activities in urban localities. The relatively high proportion of non-Ghanaians in Gomoa East (7.8%) may be attributed to a high concentration of settlements for refugees from Liberia in the area.

Table 3.6: Population by nationality and district

District	Population	Ghanaians		Non-Ghanaians
		Birth	Naturalisation	
Total	2,201,863	97.0	0.6	2.4
Komenda-Edina-Eguafo-Abirem Municipal	144,705	97.9	0.5	1.6
Cape Coast Metropolis	169,894	96.3	1.0	2.7
Abura-Asebu-Kwamankese	117,185	97.9	0.5	1.6
Mfantiman Municipal	196,563	97.6	0.6	1.9
Ajumako-Enyan-Essiam	138,046	98.0	0.5	1.5
Gomoa West	135,189	98.6	0.3	1.1
Effutu Municipal	68,597	97.6	0.6	1.8
Gomoa East	207,071	91.4	0.7	7.8
Ewutu Senya	195,306	95.5	1.1	3.3
Agona East	85,920	97.8	0.5	1.6
Agona West Municipal	115,358	97.2	0.7	2.1
Asikuma-Odoben-Brakwa	112,706	97.8	0.5	1.7
Assin South	104,244	98.2	0.4	1.3
Assin North Municipal	161,341	98.1	0.5	1.4
Twifo-Hemang-Lower Denkyira	116,874	98.2	0.4	1.4
Upper Denkyira East Municipal	72,810	97.3	0.7	1.9
Upper Denkyira West	60,054	97.9	0.5	1.6

Source: 2010 Population and Housing Census

3.8 Ethnicity

Table 3.7 shows the ethnic composition of the Ghanaian population in the Central region in 2010. The region consists mainly of Akans (Fantis) who constitute 81.7 percent of the population. The other ethnic groups in the Region are Ewes (6.2%) and Guans (5.3%). In six districts, Akans make up over 90 percent; the highest proportions are in Asikuma-Odoben-Brakwa (98.4%) and Gomoa West (97.4%). Two districts need special mention regarding their ethnic composition. Ewutu-Effutu is the language spoken by the indigenous people of Awutu, Senya, and Winneba. The Effutus are Guans therefore in Effutu district, the largest ethnic group

is the Guan who constitutes 58.5 percent of the population. Similarly, in Ewutu Senya, 28.5 percent are Guans and 17.4 percent are Ewes. The sizeable Ewe community in Effutu-Senya may be linked with fishing. About one in ten persons in Agona East (10.0%) and Assin North Municipal (10.2%) are Ewes. In the farming districts, there are Ewes, Ga Adangbes and other ethnic groups from the north who are engaged in agricultural work in cocoa and oil palm plantations.

Table 3.7: Ghanaians by ethnic group and district

Ethnicity		Akan	Ga- Dangme	Ewe	Guan	Gurma	Mole_ Dagbon	Grusi	Mande	All other tribes
Total	2,134,930	81.7	2.5	6.2	5.3	0.9	1.7	0.5	0.4	0.8
KEEA Municipal	141,694	93.4	0.8	3.9	0.6	0.1	0.6	0.2	0.1	0.4
Cape Coast Metro	163,667	83.0	2.7	6.4	0.8	0.2	3.5	0.8	0.9	1.7
Abura-Asebu-Kwamankese	114,735	96.9	0.4	1.0	0.2	0.0	0.9	0.3	0.1	0.2
Mfantiman Municipal	191,815	94.4	1.9	2.2	0.2	0.1	0.4	0.3	0.1	0.4
Ajumako-Enyan-Essiam	135,258	98.4	0.2	0.7	0.4	0.0	0.2	0.2	0.0	0.0
Gomoa West	133,292	97.4	0.6	1.3	0.3	0.0	0.2	0.1	0.0	0.0
Effutu Municipal	66,919	27.7	2.4	7.1	58.5	0.3	2.1	0.9	0.2	0.8
Gomoa East	189,329	78.3	4.0	8.6	2.7	1.3	2.1	0.8	0.7	1.5
Ewutu Senya	186,597	38.9	5.4	17.4	28.5	3.0	2.4	0.9	0.6	2.9
Agona East	84,035	79.3	1.1	10.0	3.9	3.5	0.7	0.3	0.6	0.7
Agona West Municipal	112,159	87.0	1.2	5.2	1.1	2.9	0.8	0.3	0.5	0.9
Asikuma-Odoben- Brakwa	110,262	94.3	0.9	2.5	0.5	0.8	0.4	0.3	0.1	0.2
Assin South	102,396	89.0	3.6	4.3	0.9	0.1	1.6	0.2	0.1	0.1
Assin North Municipal	158,294	78.5	5.8	10.2	1.7	0.5	2.0	0.7	0.3	0.4
Twifo-Hemang-Lower Denkyira	114,823	83.1	3.5	9.3	2.2	0.3	0.9	0.3	0.1	0.2
Upper Denkyira East Municipal	70,862	74.0	4.7	6.4	0.4	2.0	8.3	1.3	1.9	1.1
Upper Denkyira West	58,793	85.1	1.0	2.8	0.2	1.0	8.4	0.5	0.7	0.3

Source: 2010 Population and Housing Census

3.9 Religion

The religious affiliations of the population in the Region are shown in Table 3.8. The Christian religion is categorized into four: Catholic, Protestant, Pentecostal-Charismatic and other Christians. At the regional level the largest religious group is the Pentecostal-Charismatic who constitute 29.8 percent of the population. The Protestants represent 21.0 percent and the Catholics 11.1 percent. Other Christian groups constitute 21.4 percent of the population. Muslims are 8.6 percent of the population in Central region. About seven percent of the population (6.6%) have no religion.

Although the size of the proportions vary, the pattern at the regional level is replicated across the districts. In all the districts, except Ajumako-Enyan-Essiam, the largest religious group is the Pentecostal-Charismatic group. In six districts, Pentecostal-Charismatics form about one-third of the population. These are Ewutu Senya (36.1%), Agona West (35.5%), Effutu (34.1%), Gomoa

East (34.0%), Assin South (32.3%) and Twifo-Hemang-Lower Denkyira (32.0%). Some districts in Central region are noted for the existence of Pentecostal healing and deliverance prayer camps. The districts with a long history of contact with the Europeans have a high proportion of Catholics and Protestants. The three districts with the largest proportions of Protestants are Cape Coast (28.3%), Ajumako-Enyan-Essiam (27.0%) and Mfantsiman (25.1%). The districts with the largest proportion of Catholics are Komenda-Edina-Eguafo Abirem (18.2%), Cape Coast (17.8%) and Upper Denkyira West (16.4%). The higher concentrations of Catholics and Protestants in Cape Coast, Mfantsiman and Komenda-Edina-Eguafo-Abirem may be attributed to the early contact with missionaries. Across districts, the largest proportions of Muslims are found in Ewutu Senya (13.5%), Upper Denkyira East (10.9%) and Gomoa East (10.7%).

Table 3.8: Population by religion and district

Religion	Total	No religion	Catholic	Protestants	Pentecostal/ Charismatic	Other Christian	Islam	Tra- ditionalist	Other
Total	2,201,863	6.6	11.1	21.0	29.8	21.4	8.6	0.6	0.9
KEEA	144,705	8.3	18.2	17.8	28.4	20.9	5.3	0.6	0.7
Cape Coast									
Metropolis	169,894	3.9	17.8	28.3	28.7	10.3	9.8	0.3	0.9
Abura-Asebu- Kwamankese	117,185	8.3	15.2	18.9	25.9	25.6	4.8	0.7	0.7
Mfantsiman									
Municipal	196,563	6.0	11.1	25.1	25.5	20.8	9.5	0.9	1.2
Ajumako-Enyan- Essiam	138,046	5.2	13.3	27.0	24.8	20.4	8.0	0.5	0.8
Gomoa West	135,189	8.2	8.4	23.6	25.8	24.8	6.1	1.2	2.0
Effutu Municipal	68,597	9.2	8.4	18.7	34.1	23.4	4.1	1.0	1.2
Gomoa East	207,071	5.8	5.3	17.9	34.0	25.2	10.7	0.4	0.8
Ewutu Senya	195,306	7.3	5.8	14.4	36.1	20.8	13.5	1.3	0.9
Agona East	85,920	7.6	6.5	21.9	26.5	25.3	10.5	0.9	0.8
Agona West									
Municipal	115,358	5.7	6.3	21.2	35.5	20.4	9.7	0.4	0.7
Asikuma-Odoben- Brakwa	112,706	6.4	11.0	22.4	29.0	20.7	9.1	0.5	1.0
Assin South	104,244	6.0	14.3	19.7	32.3	18.8	7.6	0.6	0.7
Assin North	161,341	6.5	8.8	18.4	29.1	28.2	7.6	0.5	0.9
Twifo-Hemang-Lower Denkyira	116,874	6.1	12.7	19.3	32.0	21.7	6.9	0.3	1.1
Upper Denkyira East	72,810	5.6	15.2	20.2	28.8	18.6	10.9	0.3	0.5
Upper Denkyira West	60,054	9.4	16.4	22.7	27.3	15.1	8.0	0.3	0.7

Source: 2010 Population and Housing Census

CHAPTER FOUR

HOUSEHOLD SIZE, STRUCTURE AND COMPOSITION

4.1 Introduction

The 2010 Population Housing Census defined a household as a person or group of persons who live together in the same house or compound and share the same house-keeping arrangement. In general, a household consist of a man, his wife/wives and children and some relatives or house helps who may be living with them. Members of a household are not necessarily related by blood or marriage. The household has a defined structure and has a head recognized by all members as such by all members. This chapter discusses some key aspects of household. They include household composition, average household size, the proportion of households of a defined size (e.g. one-member, two- member households), and description of household heads. Information on household composition is important in the study of several aspects of family and household studies with special reference to economic dependency, migration and social welfare.

4.2 Household Composition

The household composition in Central region in 2010 is shown in Table 4.1. There are 526,764 households in Central region of which 255,365 (48.5%) are in urban areas and 271,399 (51.5%) in rural areas. The majority of households (62.9%) consist of nuclear families, made up of the head only or the head and the combination of spouse and/or biological or adopted children. About one in five households (20.5%) consist of the household head only. About a similar proportion (23.6%) consist of the head, spouse and biological or adopted children. Only 3.8 percent of households consist of head and spouse only, indicating the near universality of the presence of children in the households. Furthermore, thirty-seven percent of households include extended family members. There is little difference in household composition by type of locality. The data reveal that the level of nuclearization of the family is slightly higher in urban areas compared to rural areas and the proportions of extended families slightly higher as expected in rural areas.

Table 4.1: Household composition by type of locality

Household composition	Population			Percent		
	Total	Urban	Rural	Total	Urban	Rural
Total	526,764	255,365	271,399	100.0	48.5	51.5
Nuclear Family	331,459	161,189	170,270	62.9	63.1	62.7
Head only	107,816	55,921	51,895	20.5	21.9	19.1
Head and a spouse only	19,984	10,233	9,751	3.8	4.0	3.6
Head, spouse(s) and children only	124,069	55,289	68,780	23.6	21.7	25.3
Head and biological/adopted children only	79,590	39,746	39,844	15.1	15.6	14.7
Extended Family	195,305	94,176	101,129	37.1	36.9	37.3
Head, spouse(s) biological/adopted children and relatives of the head only	51,224	22,175	29,049	9.7	8.7	10.7
Head, spouse(s) biological/adopted children relatives and nonrelatives of the head	2,961	1,573	1,388	0.6	0.6	0.5
Head, spouse(s) and other composition	14,529	6,928	7,601	2.8	2.7	2.8
Head, biological/adopted children and relatives of the head only	63,119	30,560	32,559	12.0	12.0	12.0
Head, biological/adopted children relatives and nonrelatives of the head	3,130	1,746	1,384	0.6	0.7	0.5
Head and other composition but no spouse	60,342	31,194	29,148	11.5	12.2	10.7

Source: 2010 Population and Housing Census

4.3 Household Composition by Relationship and Age

Living arrangement is an important aspect of the cultural settings in Ghana. Table 4.2 shows that a higher proportion of household members are children (42.2%) while about a quarter (24.9%) is household heads. The data also show that less than two percent of the household members are not related to the head of household. Majority of the household members (69.5%) are children (aged 0-14 years) of the household head, followed by grandchildren (20.2%) and other relatives (6.5%). Household heads constitute 39.1 percent of the members of the households aged 15-64 years while 26.0 percent (in the same age group) are children of the head. The data also show that about seven in ten members of the household aged 65 years and older are heads, while 10.6 percent are parents or parent in-laws.

Table 4.2: Household composition by relationship and age

Relationship to head	Total	Total	Age		
			0-14	15-64	65+
All relationships	2,113,766	100.0	100.0	100.0	100.0
Head	526,764	24.9	0.0	39.1	69.1
Spouse (wife/husband)	212,767	10.1	0.0	17.8	8.0
Child (son/daughter)	892,307	42.2	69.5	26.0	0.8
Parent/Parent in-law	16,879	0.8	0.0	0.4	10.6
Son/Daughter in-law	7,996	0.4	0.0	0.7	0.0
Grandchild	214,104	10.1	20.2	3.6	0.0
Brother/Sister	61,966	2.9	1.5	4.0	3.1
Step child	15,039	0.7	1.1	0.5	0.0
Adopted/Foster child	6,452	0.3	0.4	0.2	0.0
Other relative	126,251	6.0	6.5	5.5	7.3
Non-relative	33,241	1.6	0.8	2.2	1.1

Source: 2010 Population and Housing Census

4.4 Household headship by district, type of locality and sex of head

Table 4.3 shows household headship by district and locality. Sixty percent of households are headed by males and the remaining 40 percent by females. This is quite a high proportion indicating a trend toward an increase in female household headship in Ghana. Among the likely reasons are male migration, unmarried adolescent female fertility and the emergence of female-only career-oriented single-member households. The proportion of male versus female heads observed at the regional level is replicated in the rural areas while in urban localities the proportions of female-headed households is slightly higher at 42 percent.

The proportion of female-headed households, vary across the 17 districts. In eight districts, the proportions of female-headed households are higher than the regional average. The proportions of female-headed households are highest in three districts. In Gomoa West there are more female-headed households (52.4%) than male-headed (47.6%), which might be the result of migration of males and husbands. Ajumako-Enyan-Essiam (47.5%) and Mfantiman (47.3%) also have high proportions of female-headed households. The lowest proportions of female-headed households are in the three Districts in Denkyira area, namely, Upper Denkyira West (30.7%), Twifo-Hemang-Lower Denkyira (31.8%) and Upper Denkyira East (33.0%).

Table 4.3 shows that the proportions of female-headed households in rural areas generally mirror the pattern at the regional level. However, Gomoa West has the singular characteristic of having higher female than male headed households in both urban (51.0%) and rural (53.4%) localities. In Ajumako-Enyan-Essiam the proportion of female-headed households (51.6%) is higher than that of males (48.4%) in urban localities. The data also show that relatively high proportions of female-headed households in both urban and rural localities of Mfantiman and Effutu.

Table 4.3: Household headship by district, type of locality and sex of head

District	Total			Urban			Rural		
	Total	Male head	Female head	Total	Male head	Female head	Total	Male head	Female head
All districts	526,764	59.5	40.5	255,365	58.3	41.7	271,399	60.5	39.5
Komenda-Edina-Eguafo-Abirem	35,403	58.1	41.9	13,239	54.6	45.4	22,164	60.2	39.8
Cape Coast Metropolis	40,386	59.9	40.1	30,354	58.1	41.9	10,032	65.4	34.6
<i>Cape Coast South</i>	23,786	56.8	43.2	23,559	56.6	43.4	227	74.9	25.1
<i>Cape Coast North</i>	16,600	64.5	35.5	6,795	63.5	36.5	9,805	65.2	34.8
Abura-Asebu-Kwamankese	28,704	56.3	43.7	9,914	55.8	44.2	18,790	56.6	43.4
Mfantiman Municipal	48,304	52.7	47.3	24,770	52.8	47.2	23,534	52.5	47.5
Ajumako-Enyan-Essiam	35,106	52.5	47.5	11,477	48.4	51.6	23,629	54.5	45.5
Gomoa West	32,715	47.6	52.4	13,497	49.0	51.0	19,218	46.6	53.4
Effutu Municipal	17,121	55.4	44.6	15,984	55.6	44.4	1,137	52.2	47.8
Gomoa East	52,898	61.8	38.2	27,961	67.0	33.0	24,937	56.0	44.0
Ewutu Senya	46,277	65.1	34.9	34,501	65.1	34.9	11,776	65.3	34.7
Agona East	21,021	59.0	41.0	9,648	53.9	46.1	11,373	63.3	36.7
Agona West Municipal	29,478	58.0	42.0	23,125	56.2	43.8	6,353	64.8	35.2
Asikuma-Odoben-Brakwa	26,997	61.9	38.1	13,684	58.8	41.2	13,313	65.0	35.0
Assin South	23,200	61.3	38.7	***	***	***	23,200	61.3	38.7
Assin North Municipal	36,317	66.5	33.5	13,725	62.9	37.1	22,592	68.7	31.3
Twifo-Hemang-Lower Denkyira	25,201	68.2	31.8	6,740	63.5	36.5	18,461	70.0	30.0
Upper Denkyira East Municipal	14,200	67.0	33.0	6,746	61.1	38.9	7,454	72.3	27.7
Upper Denkyira West	13,436	69.3	30.7	***	***	***	13,436	69.3	30.7

Note: *** No urban localities in the district

Source: 2010 Population and Housing Census

4.5 Household head by Age, Type of Locality and Sex of Head

Table 4.4 shows that 45 percent of household heads are aged 25-44 years old. On the whole, each of the five-year age groups from 25-54, has a share of about 10 percent of household heads. Furthermore, about two percent of households are headed by a teenager aged 15-19 years old. There are slight variations in gender of household heads by age. One-half of male household heads (49.7%) are in the age group 25-44 years; compared with 38.2 percent of females heads of the same age group its proportion is 38.2 percent. While the highest proportions of male household heads are in the age group 30-39 years (13.1%), that of female heads (10.2%) is in older age group 50-54 years. After age 50, the share of female households is higher than male heads in all age groups. This pattern is true for both urban and rural localities and may be because wives often outlive their husbands.

Table 4.4: Household head by age, type of locality and sex of head

Age	Total			Urban			Rural		
	Total	Male head	Female head	Total	Male head	Female head	Total	Male head	Female head
15 - 19	1.9	1.8	2.0	2.0	1.8	2.1	1.9	1.8	2.0
20 - 24	6.3	6.3	6.4	7.0	6.9	7.1	5.7	5.7	5.7
25 - 29	10.8	11.7	9.5	11.9	12.8	10.7	9.8	10.7	8.3
30 - 34	11.6	13.1	9.4	12.9	14.5	10.5	10.4	11.8	8.3
35 - 39	11.7	13.1	9.7	12.4	13.8	10.5	11.0	12.4	8.9
40 - 44	10.9	11.8	9.6	11.2	11.9	10.1	10.7	11.7	9.0
45 - 49	9.6	10.0	8.9	9.3	9.5	8.9	9.8	10.5	8.8
50 - 54	9.6	9.1	10.2	8.9	8.4	9.6	10.2	9.8	10.8
55 - 59	6.6	6.4	7.0	6.3	5.9	6.7	7.0	6.8	7.2
60 - 64	6.0	5.4	7.0	5.3	4.8	6.2	6.7	6.0	7.8
65 - 69	4.0	3.4	5.0	3.7	3.1	4.6	4.4	3.7	5.4
70 - 74	4.5	3.4	6.2	3.8	2.8	5.1	5.3	4.0	7.3
75 - 79	2.5	1.9	3.4	2.2	1.6	3.1	2.8	2.2	3.7
80 - 84	1.9	1.3	3.0	1.6	1.0	2.4	2.3	1.5	3.5
85 - 89	1.0	0.7	1.5	0.9	0.6	1.3	1.1	0.8	1.7
90 - 94	0.6	0.4	0.9	0.5	0.3	0.7	0.7	0.5	1.2
95+	0.3	0.2	0.4	0.2	0.1	0.3	0.4	0.2	0.5
Number	526,764	313,307	213,457	255,365	149,003	106,362	271,399	164,304	107,095

Source: 2010 Population and Housing Census

4.6 Household Size by Districts

The size of households by district is shown in Table 4.5. The largest proportion of households in Central region (20.5%) is single-member households, followed by two-member households (14.3%). A consistent pattern then emerges where the proportion declines as household size increases. This pattern also virtually holds true for each of the districts.

There are substantial variations in the proportions of single-member households across districts. While 13.0 percent of households in Upper Denkyira West and 14.8 percent in Twifo-Hemang-Lower Denkyira are single-member households, the proportions are 27.4 percent in Effutu and 27.0 percent in Cape Coast. In all districts, except one, the proportion of household with ten or more members is five percent or lower, but in Upper Denkyira East 16.3 percent of households have at least ten members. This may be attributed to the inclusion of migrant agricultural farm workers into indigenous established local households.

Table 4.5 further shows that the average household size for the Central Region is 4.0, and this is below the national average of 4.4. Thus, Central region has the second lowest average household size after Greater Accra region (3.8). At the district level, there are marked variations in average household size. The lowest average household sizes are in the two most urbanised districts of Cape Coast (3.5) and Effutu (3.6). Upper Denkyira East (5.0 persons) has the largest household size. This may be in line with the relatively larger family size in rural areas compared with urban districts.

Table 4.5: Households by district and size

District	Population in Households	Household size											Ave. Household Size
		Total	1	2	3	4	5	6	7	8	9	10+	
All Districts	2,113,766	526,764	20.5	14.3	13.9	13.8	11.9	9.2	6.2	4.0	2.3	3.9	4.0
Komenda-Edina-Eguafo-Abirem	139,056	35,403	21.9	14.5	13.9	13.5	11.6	8.8	6.1	3.9	2.3	3.6	3.9
Cape Coast Metropolis	140,405	40,386	27.0	16.7	14.0	13.7	10.2	7.4	4.0	2.8	1.3	3.0	3.5
<i>Cape Coast South</i>	81,560	23,786	27.9	16.8	14.1	13.8	9.7	7.1	3.5	2.7	1.2	3.2	3.4
<i>Cape Coast North</i>	58,845	16,600	25.7	16.5	14.0	13.4	10.8	7.7	4.6	3.0	1.5	2.6	3.5
Abura-Asebu-Kwamankese	114,220	28,704	22.8	13.6	13.2	13.1	11.4	9.0	6.5	4.1	2.4	3.9	4.0
Mfantiman Municipal	186,856	48,304	21.6	15.1	14.2	13.6	11.9	8.7	5.7	3.7	2.2	3.3	3.9
Ajumako-Enyan-Essiam	136,633	35,106	21.7	14.4	13.9	13.4	11.6	9.2	6.8	3.9	2.5	2.6	3.9
Gomoa West	132,833	32,715	20.4	14.5	14.0	13.4	11.6	8.7	6.2	4.1	2.5	4.5	4.1
Effutu Municipal	60,891	17,121	27.4	15.6	13.9	12.3	10.6	7.6	4.8	3.2	1.8	3.0	3.6
Gomoa East	202,446	52,898	19.7	15.8	15.4	14.8	12.1	8.9	5.6	3.2	1.9	2.7	3.8
Ewutu Senya	189,736	46,277	17.1	13.9	15.1	15.4	13.1	9.7	6.2	3.8	2.1	3.5	4.1
Agona East	84,738	21,021	20.0	13.6	14.0	14.0	12.2	9.8	6.5	3.9	2.4	3.6	4.0
Agona West Municipal	111,447	29,478	22.4	15.0	14.5	14.0	12.2	8.5	5.5	3.2	1.8	2.9	3.8
Asikuma-Odoben-Brakwa	111,094	26,997	19.3	13.4	13.6	13.4	12.5	10.0	7.2	4.4	2.6	3.5	4.1
Assin South	102,062	23,200	18.2	11.4	12.3	13.4	12.7	10.7	8.0	5.1	3.2	4.9	4.4
Assin North Municipal	157,749	36,317	18.3	12.0	13.2	13.2	12.5	10.4	7.6	5.1	3.1	4.7	4.3
Twifo-Hemang-Lower Denkyira	113,331	25,201	14.8	11.8	13.3	14.6	13.5	10.9	7.8	5.2	2.9	5.2	4.5
Upper Denkyira East	71,519	14,200	13.0	15.6	9.2	13.9	7.6	11.2	4.3	7.1	1.8	16.3	5.0
Upper Denkyira West	58,750	13,436	17.6	12.4	12.6	13.4	12.5	10.3	8.4	5.0	3.0	4.9	4.4

Source: 2010 Population and Housing Census

CHAPTER FIVE

MARITAL CHARACTERISTICS

5.1 Introduction

This chapter focuses on an analysis of marriage and marital characteristics in Central region based on the 2010 Population and Housing Censuses (PHC) of Ghana. Distribution of marital status has implications for the size and distribution of households, as well as the demand for housing units and residential related services. Marital status is an important factor in population because it particularly affects contraceptive use and fertility.

5.2 Marital Status of Persons 12 years and Older

The marital status of persons 12 years and older presented in Table 5.1 shows that 40.6 percent are currently married and 5.8 percent are living together or in informal consensual union. The proportion never married is 40.9 percent, and 12.7 percent have ever been married but currently not in a union. The proportion separated is 2.0%, divorced is 5.0% and widowed is 5.7%. There are some slight variations in the marital status across the districts. Proportions never married are highest in the most urbanised Districts, Cape Coast (55.5%) and Effutu (47.9%) and lowest in Gomoa West (36.3%). The variations may be due to the relatively higher age at first marriage in urban localities compared with rural Districts probably arising from longer years of schooling in urban areas. Conversely, the proportions married are highest in the rural Districts of Upper Denkyira West (46.1%) and Twifo-Hemang-Lower Denkyira (45.1%). The proportion widowed is highest in Gomoa West (8.7%) and it is twice that of Ewutu Senya, Twifo-Hemang-Lower Denkyira or Upper Denkyira West.

Table 5.1 also shows the sex differentials in marital status. Just under one-half of males 12 years and older (48.2%), in contrast with about one third (34.6%) of females have never married. In two Districts, more than one-half of males 12 years and older have never married. These Districts are Cape Coast (61.3%) and Effutu (54.5%). For the remaining 15 Districts, there are only slight variations ranging from 44.4 percent in Upper Denkyira West to 49.1 percent in Agona West. As expected, Districts with higher proportions of never marrieds also have the lowest levels of marrieds. Consequently, the lowest proportions of married male persons 12 years and older are in Cape Coast (29.5%) and Effutu (35.8%), the two urban Districts are also university towns with unmarried students. For all other Districts the proportion is around 40 percent. Compared with males, the proportion never married females is lower in all districts. Among females the proportions of 12 years and older who are married vary across Districts. The lowest proportions are 30.2 percent in Cape Coast, 36.4 percent in Effutu, while the highest proportions are in Upper Denkyira West (46.8%) and Twifo-Hemang-Lower Denkyira (45.4%). The proportions of females living in informal consensual unions or living together are highest in Assin North (10.8%) and lowest in Ajumako-Enyan-Essiam (4.0%). The proportion of females widowed is lowest in Ewutu Senya (6.8%). However in six districts, about one in ten females 12

years and older are widowed. These are Gomoa West (13.7%), Ajumako-Enyan-Essiam (12.3%), Abura-Asebu-Kwamankese (11.3%), Mfantseman (11.1%), Komenda- Edina-Eguafo-Abirem (10.7%) and Agona East (10.5%).

5.3 Marital Status and Age

Table 5.2 shows that the proportion married increases with age and peaks at the age group 40-44. Thereafter, the proportion declines apparently as a result of increasing rates of separation, divorce and widowhood. Conversely, the proportion never married declines with age. The proportion never married in the age group 20-24 is 67.3 percent but reduces significantly to 36.7 percent in the age group 25-29. Among persons 30-34 years, only 16.2 percent have never married. It is important to note that 5.4% and 6.0% of children aged 12-14 years and persons aged 15-19 years, are respectively married. A further 0.7 and 2.7 of 12-14 years and 15-19 years are, respectively, living in informal/consensual unions. Inadequate opportunities for women arising from lack of schooling compel many to seek early marriage as teenagers. In addition, in many rural farming settings there is the tendency of some men to marry young girls help to develop their farms. It is likely that those who marry in their early teens will be unable to complete their secondary education. They will be further exposed to the risk of teenage pregnancy and motherhood.

As expected, the proportions of persons widowed increases with age. At age 60-64 years one in five persons (20.6%) are widowed, but the proportion increases to 45 percent at age 70 years and older. Age at marriage and the proportions in marital union varies by sex, with females marrying earlier than males. In addition, while only 24.5 percent of males aged 25-29 years have never married, the proportion for males is slightly over one half (51.5%).

For all age groups, the proportions divorced or widowed are consistently higher for females than males. For example, only 7.7 percent of males aged 60-65 years are widowed in contrast with 40.9 percent females. The differentials may be explained by that fact women tend to marry relatively older men, and have a higher life expectancy than men.

Table 5.1: Population 12 years and older by district, marital status and sex

Marital status	Total	KEEA	Cape Coast Metro.	Abura-Asebu-Kwaman kese	Mfantsi man	Ajuma ko-Enyan-Essiam	Gomoa West	Effutu Municipal	Gomoa East	Ewutu Senya	Agona East	Agona West	Asikuma-Odoben-Brakwa	Assin South	Assin North	Twifo-Heman-Lower Denk	Upper Denky. East	Upper Denk. West	
Both sexes																			
Never married	40.9	39.4	55.5	38.9	41.2	36.8	36.3	47.9	39.4	40.7	37.4	41.3	36.8	37.5	40.1	39.2	41.2	37.5	
Informal/Consensual union	5.8	4.1	4.9	4.0	3.9	3.5	4.3	5.4	7.4	8.6	5.7	6.2	5.3	6.7	9.6	5.1	7.7	5.5	
Married	40.6	41.4	29.8	42.0	40.1	42.0	41.5	36.1	42.2	41.5	43.3	38.9	44.6	43.5	39.7	45.1	40.6	46.1	
Separated	2.0	2.0	1.7	1.8	2.4	2.7	2.5	2.0	1.9	1.8	2.2	1.9	1.5	1.9	1.7	1.8	1.3	1.7	
Divorced	5.0	6.5	3.9	6.3	5.3	7.1	6.7	3.1	4.3	3.3	4.8	5.5	5.9	4.8	4.4	4.6	4.6	4.8	
Widowed	5.7	6.6	4.2	7.0	7.2	7.9	8.7	5.5	4.9	4.1	6.6	6.1	5.9	5.4	4.5	4.1	4.6	4.3	
Total	1,490,517	97,614	131,136	78,570	132,925	90,432	89,830	50,198	138,418	131,556	56,845	79,442	72,826	67,441	106,031	77,079	50,684	39,490	
Male																			
Never married	48.2	46.5	61.3	47.8	48.0	46.0	46.8	54.5	45.8	46.5	45.4	49.1	45.0	45.3	47.4	45.6	47.2	44.4	
Informal/Consensual union	5.2	3.7	4.6	3.5	3.5	2.9	3.8	5.2	7.0	7.9	5.0	5.6	4.5	5.8	8.2	4.4	6.9	4.6	
Married	40.7	42.1	29.5	41.4	41.5	42.8	42.3	35.8	42.6	41.6	42.7	39.1	44.6	42.8	39.0	44.7	40.6	45.5	
Separated	1.3	1.4	1.1	1.4	1.7	1.7	1.7	1.2	1.1	1.2	1.6	1.2	0.9	1.4	1.3	1.2	1.1	1.2	
Divorced	3.1	4.5	2.2	4.2	3.3	4.4	3.6	1.9	2.4	1.8	3.3	3.4	3.5	3.2	2.8	2.8	3.0	3.0	
Widowed	1.5	1.9	1.3	1.8	2.0	2.3	1.9	1.4	1.2	1.1	2.0	1.6	1.5	1.5	1.3	1.2	1.2	1.2	
Total	689,359	45,745	63,325	35,834	57,035	39,662	37,606	23,654	63,485	61,083	26,349	35,956	33,838	32,266	51,859	37,354	24,515	19,793	
Female																			
Never married	34.6	33.2	50.0	31.4	36.1	29.7	28.8	42.0	33.9	35.7	30.5	34.9	29.8	30.4	33.1	33.3	35.7	30.6	
Informal/Consensual union	6.3	4.6	5.2	4.3	4.2	4.0	4.6	5.6	7.9	9.2	6.3	6.7	6.0	7.6	10.8	5.8	8.4	6.4	
Married	40.6	40.7	30.2	42.6	39.1	41.4	40.9	36.4	41.8	41.4	43.8	38.7	44.6	44.2	40.4	45.4	40.6	46.8	
Separated	2.5	2.6	2.3	2.3	2.8	3.5	3.1	2.7	2.5	2.3	2.8	2.6	2.0	2.4	2.1	2.4	1.5	2.2	
Divorced	6.7	8.3	5.4	8.0	6.7	9.2	8.9	4.2	5.9	4.6	6.1	7.3	8.0	6.4	6.0	6.3	6.1	6.5	
Widowed	9.3	10.7	6.9	11.3	11.1	12.3	13.7	9.2	8.0	6.8	10.5	9.8	9.6	9.0	7.6	6.9	7.7	7.5	
Total	801,158	51,869	67,811	42,736	75,890	50,770	52,224	26,544	74,933	70,473	30,496	43,486	38,988	35,175	54,172	39,725	26,169	19,697	

Source: 2010 Population and Housing Census

Table 5.2: Population 12 years and older by marital status, age and sex

Marital status	Total	12-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
Both Sexes														
Never married	40.9	93.9	90.8	67.3	36.7	16.2	7.9	4.6	3.1	2.3	2.0	2.3	2.8	3.2
Informal/ Consensual union	5.8	0.7	2.7	9.6	12.4	10.2	8.3	6.0	4.7	3.4	2.8	2.3	1.9	1.5
Married	40.6	5.4	6.0	21.0	46.2	65.2	72.7	74.1	73.1	67.8	63.9	56.2	50.5	35.2
Separated	2.0	0.0	0.3	1.0	1.8	2.5	2.9	3.3	3.6	3.8	3.8	3.9	3.6	2.9
Divorced	5.0	0.0	0.2	0.9	2.4	4.6	6.2	8.3	9.8	12.6	13.8	14.8	14.5	12.2
Widowed	5.7	0.0	0.1	0.3	0.5	1.3	2.0	3.7	5.6	10.0	13.7	20.6	26.6	45.1
Total	1,490,517	160,488	244,020	195,729	162,630	132,339	118,873	100,753	83,934	78,775	50,729	45,878	30,245	86,124
Male														
Never married	48.2	93.5	94.6	83.7	51.5	23.4	11.1	5.9	3.9	3.0	2.4	2.9	3.5	4.4
Informal/ Consensual union	5.2	0.7	0.9	5.3	11.5	11.1	9.4	6.8	5.5	4.1	3.7	3.0	2.6	2.4
Married	40.7	5.8	4.3	10.2	34.6	60.8	72.9	78.3	80.2	80.3	79.3	76.0	72.6	64.2
Separated	1.3	0.0	0.1	0.4	0.9	1.7	2.0	2.6	2.6	2.6	2.9	3.0	3.2	3.2
Divorced	3.1	0.0	0.1	0.3	1.2	2.6	4.0	5.2	6.0	7.5	8.3	9.8	10.4	10.9
Widowed	1.5	0.0	0.0	0.1	0.2	0.4	0.7	1.2	1.8	2.5	3.4	5.3	7.7	14.8
Total	689,359	81,196	119,095	92,178	73,498	60,685	54,300	46,570	38,568	34,625	23,794	20,411	13,018	31,421
Female														
Never married	34.6	94.3	87.2	52.7	24.5	10.2	5.2	3.5	2.5	1.8	1.6	1.8	2.3	2.4
Informal/ Consensual union	6.3	0.8	4.3	13.3	13.1	9.4	7.4	5.4	4.0	2.8	2.0	1.7	1.4	1.0
Married	40.6	5.0	7.6	30.5	55.7	68.9	72.5	70.4	67.0	58.0	50.3	40.3	33.8	18.5
Separated	2.5	0.0	0.5	1.5	2.5	3.3	3.7	4.0	4.5	4.9	4.6	4.6	4.0	2.7
Divorced	6.7	0.0	0.3	1.5	3.4	6.2	8.1	10.9	13.1	16.6	18.7	18.7	17.6	12.9
Widowed	9.3	0.0	0.2	0.5	0.8	2.0	3.1	5.8	8.8	15.9	22.8	33.0	40.9	62.5
Total	801,158	79,292	124,925	103,551	89,132	71,654	64,573	54,183	45,366	44,150	26,935	25,467	17,227	54,703

Source: 2010 Population and Housing Census

5.4 Marital Status and Education

Table 5.3 shows that while 70.7 percent of people with Middle school education are married, only 20.3 percent of those with secondary education are married. This may be due to the fact that Middle schools were phased out several years ago and all who terminated their education at that level are in their middle age. On the whole, the proportions who have never married among those who have never attended school (10.9%), is lower than all other educational categories except 'Middle School'.

Table 5.3: Persons 12 years and older by level of education and marital status

Level of education	Total	Never married	Informal/ Consensual union	Married	Separated	Divorced	Widowed
Total	1,490,517	40.9	5.8	40.6	2.0	5.0	5.7
Never attended	333,747	10.9	5.5	52.9	3.3	9.8	17.6
Primary	268,629	55.7	5.7	30.7	1.5	3.7	2.7
JSS/JHS	417,607	59.1	7.6	29.8	1.2	1.8	0.4
Middle	179,937	3.5	4.6	70.7	3.4	10.4	7.4
SSS/SHS	142,432	72.7	5.0	20.3	0.7	0.9	0.4
Secondary	17,003	14.9	4.6	66.4	3.0	6.4	4.7
Vocational/Technical/Commercial	29,030	31.4	6.0	51.1	2.4	5.7	3.4
Post middle/secondary certificate	17,532	34.5	4.2	50.1	1.9	4.6	4.8
Post-secondary diploma	34,085	46.7	4.3	43.9	1.2	2.3	1.6
Bachelor degree	45,616	69.7	2.1	26.4	0.5	0.8	0.5
Post graduate (Cert. Diploma Masters PHD etc.)	4,899	18.6	1.6	74.2	1.2	2.3	2.1

Source: 2010 Population and Housing Census

5.5 Marital Status and Religion

Table 5.4 shows that the proportions never married among the three main Christian categories, Catholics, Protestants and Pentecostal/Charismatics, are about the same (43%). The lowest proportions of those who have never married are among the traditionalists (24.4%) and those with no religion (31.1%). It is likely that persons in these religious groups live in rural areas and may also have lower education, both of which may lead to early marriage. The highest proportions of married persons are among traditionalists (48.2%) and Muslims (46.0%). Again, the proportions married among the three main Christian groups show no marked variations: Pentecostal/Charismatic (40.2%), Protestant (38.7%) and Catholics (38.1 %).

On divorce, there is very little difference among the various Christian groups, although it is slightly lower (4.2%) among the Pentecostal/Charismatic (4.2%) than among the Protestants (5.2%) and Catholics (5.3%). This may be attributed to the fact that the Pentecostal-Charismatic Christians are often younger than the Protestants and Catholics, and divorce is often higher in the old-age groups. The highest proportion of divorced is among traditionalists (8.3%) and the lowest among Muslims (3.3%).

Table 5.4: Persons 12 years and older by religion and marital status

Religious affiliation	Total	Never married	Informal/ Consensual union	Married	Separated	Divorced	Widowed
Total	1,490,517	40.9	5.8	40.6	2.0	5.0	5.7
No religion	108,673	31.1	9.9	41.9	3.0	7.9	6.1
Catholic	172,433	43.2	4.8	38.1	1.9	5.3	6.7
Protestants	321,392	42.5	4.9	38.7	2.0	5.2	6.7
Pentecostal/Charismatic	428,425	43.5	6.2	40.2	1.8	4.2	4.1
Other Christian	305,102	38.5	6.4	41.6	2.0	5.3	6.2
Islam	129,874	40.7	3.5	45.4	1.2	3.5	5.6
Traditionalist	10,842	24.4	6.5	48.2	2.9	8.3	9.7
Other	13,776	37.0	5.1	44.1	1.9	5.5	6.5

Source: 2010 Population and Housing Census

5.6 Economic Activity Status and Marital Status

As shown in Table 5.5, the proportion never married is higher among those who are economically not active (72.3%) compared to those economically active (23.3%). The higher rate among those economically not active is due to the inclusion of school age children and young students. Among those who are economically active, the proportion never married is higher among the unemployed (52.5%) than the employed (21.4%). Conversely, the proportion married is lower among the unemployed (30.3%) compared to the employed (56.3%).

Table 5.5: Persons 12 years and older by economic activity status and marital status

Activity Status	Number	Never married	Informal/ Con-sensual union	Married	Separated	Divorced	Widowed
Total	1,490,517	40.9	5.8	40.6	2.0	5.0	5.7
Economically active	955,524	23.3	7.7	54.8	2.5	6.4	5.4
<i>Employed</i>	899,773	21.4	7.6	56.3	2.5	6.5	5.6
<i>Unemployed</i>	55,751	52.5	8.8	30.3	2.0	3.7	2.6
Economically not active	534,993	72.3	2.5	15.2	1.0	2.6	6.3

Source: 2010 Population and Housing Census

CHAPTER SIX

INFORMATION COMMUNICATION TECHNOLOGY (ICT)

6.1 Introduction

Information and communication technologies (ICTs) developments have taken place in Africa with the significant growth over the past decade. ICTs bring about social and economic development and transformation by creating an enabling environment for accelerating economic growth. These multi-dimensional changes have been observed in almost all aspects of life: economics, education, communication, health, manufacturing, etc. As a result of ICTs, it is possible to quickly find and distribute information.

6.2 Persons with Mobile Phones

Table 6.1 shows that the proportion of persons 12 years and older in the Central region who own mobile phones is 44.9 percent. As expected, mobile phone ownership is highest in the predominantly urban Districts and lowest in rural Districts. The cost of mobile phones and poor quality of services in rural areas are some of the reasons for low ownership, predominantly in rural Districts. Ownership is lowest in Assin South (30.5%) and Asikuma-Odoben-Brakwa (34.0%) and highest in the predominantly urban Districts of Cape Coast (69.5%) and Effutu (59.2%).

Furthermore, the proportions of females 12 years and older owning mobile phones is 39.2 percent in contrast with 51.5 percent among males. In Cape Coast, slightly lower than 3 in 10 males 12 years and older (74.1%), have mobile phones, compared to 36.9 percent in Assin South. The highest proportion of females owning mobile phones is in Cape Coast (65.2%) compared with Assin South where only about one-quarter of females (24.7%) have mobile phones. Higher proportions of males than females are in all the districts, with variations well-pronounced in predominantly rural Districts own mobile phones. For example, the male-female proportions are 43.7 percent and 26.9 percent respectively in Upper Denkyira West, compared with 74.1 percent and 65.2 percent in Cape Coast.

Table 6.1: Population 12 years and older having mobile phone (within districts) by sex and district

Districts	Total			Male			Female		
	Population 12 years and older	Having mobile phone		Population 12 years and older	Having mobile phone		Population 12 years and older	Having mobile phone	
		Number	Percent		Number	Percent		Number	Percent
All Districts	1,490,517	669,083	44.9	689,359	355,087	51.5	801,158	313,996	39.2
Komenda-Edina- Eguafo-Abirem	97,614	38,440	39.4	45,745	20,269	44.3	51,869	18,171	35.0
Cape Coast Metropolis	131,136	91,170	69.5	63,325	46,924	74.1	67,811	44,246	65.2
<i>Cape Coast South</i>	62,438	38,902	62.3	28,706	18,887	65.8	33,732	20,015	59.3
<i>Cape Coast North</i>	68,698	52,268	76.1	34,619	28,037	81.0	34,079	24,231	71.1
Abura-Asebu- Kwamankese	78,570	30,237	38.5	35,834	16,489	46.0	42,736	13,748	32.2
Mfantiman Municipal	132,925	55,122	41.5	57,035	26,361	46.2	75,890	28,761	37.9
Ajumako-Enyan- Essiam	90,432	31,263	34.6	39,662	16,235	40.9	50,770	15,028	29.6
Gomoa West	89,830	32,446	36.1	37,606	16,602	44.1	52,224	15,844	30.3
Effutu Municipal	50,198	29,713	59.2	23,654	15,359	64.9	26,544	14,354	54.1
Gomoa East	138,418	74,497	53.8	63,485	39,262	61.8	74,933	35,235	47.0
Ewutu Senya	131,556	73,694	56.0	61,083	38,618	63.2	70,473	35,076	49.8
Agona East	56,845	20,904	36.8	26,349	11,582	44.0	30,496	9,322	30.6
Agona West Municipal	79,442	40,449	50.9	35,956	20,216	56.2	43,486	20,233	46.5
Asikuma-Odoben- Brakwa	72,826	24,726	34.0	33,838	14,050	41.5	38,988	10,676	27.4
Assin South	67,441	20,594	30.5	32,266	11,894	36.9	35,175	8,700	24.7
Assin North Municipal	106,031	40,913	38.6	51,859	23,727	45.8	54,172	17,186	31.7
Twifo-Hemang-Lower Denkyira	77,079	27,150	35.2	37,354	15,825	42.4	39,725	11,325	28.5
Upper Denkyira East	50,684	23,831	47.0	24,515	13,030	53.2	26,169	10,801	41.3
Upper Denkyira West	39,490	13,934	35.3	19,793	8,644	43.7	19,697	5,290	26.9

Source: 2010 Population and Housing Census

6.3 Mobile phone Ownership by District

Table 6.2 shows the percentage share per district of the total number of phone users in central region. About 35 percent of the total number of persons with mobile phones resides in three Districts (out of 17), Cape Coast (13.6%), Gomoa East (11.1%) and Ewutu Senya (11.0%). Five districts, with the lowest share of mobile phones, altogether have only about 15 percent of persons who have mobile phones in the region. The five districts are Upper Denkyira West (2.1%), Assin South (3.1%), Agona East (3.1%), Upper Denkyira East (3.6%), and Asikuma-Odoben-Brakwa (3.7%). When the percentage share for districts is disaggregated by sex, the picture is similar to that of the general population. The Districts with high (or low) percentage share do not vary. While 13.2 percent of males and 14.1 of females with mobile phones in Central region are in Cape Coast, the proportions in Upper Denkyira West are 2.4 percent and 1.7 percent for females.

Table 6.2: Population 12 years and older having mobile phones by district and sex

Regions	Total		Male		Female	
	Population	Percent	Population	Percent	Population	Percent
Total	669,083	100.0	355,087	100.0	313,996	100.0
Komenda-Edina-Eguafo-Abirem	38,440	5.7	20,269	5.7	18,171	5.8
Cape Coast Metropolis	91,170	13.6	46,924	13.2	44,246	14.1
<i>Cape Coast South</i>	38,902	5.8	18,887	5.3	20,015	6.4
<i>Cape Coast North</i>	52,268	7.8	28,037	7.9	24,231	7.7
Abura-Asebu-Kwamankese	30,237	4.5	16,489	4.6	13,748	4.4
Mfantsiman Municipal	55,122	8.2	26,361	7.4	28,761	9.2
Ajumako-Enyan-Essiam	31,263	4.7	16,235	4.6	15,028	4.8
Gomoa West	32,446	4.8	16,602	4.7	15,844	5.0
Effutu Municipal	29,713	4.4	15,359	4.3	14,354	4.6
Gomoa East	74,497	11.1	39,262	11.1	35,235	11.2
Ewutu Senya	73,694	11.0	38,618	10.9	35,076	11.2
Agona East	20,904	3.1	11,582	3.3	9,322	3.0
Agona West Municipal	40,449	6.0	20,216	5.7	20,233	6.4
Asikuma-Odoben-Brakwa	24,726	3.7	14,050	4.0	10,676	3.4
Assin South	20,594	3.1	11,894	3.3	8,700	2.8
Assin North Municipal	40,913	6.1	23,727	6.7	17,186	5.5
Twifo-Hemang-Lower Denkyira	27,150	4.1	15,825	4.5	11,325	3.6
Upper Denkyira East Municipal	23,831	3.6	13,030	3.7	10,801	3.4
Upper Denkyira West	13,934	2.1	8,644	2.4	5,290	1.7

Source: 2010 Population and Housing Census

6.4 Mobile Phone Ownership by District and Locality of Residence

Table 6.3 shows the urban-rural distribution of persons with mobile phones in each District. At the regional level, 60.4 percent of all persons with mobile phones reside in urban areas and 39.6 percent are in rural areas.

Across Districts, there are marked differentials in the proportion of phone users 12 years and older, who live in urban areas. In Effutu, nearly all persons 12 years and older who have mobile phones (96.5%) live in urban areas. Three other Districts with a high proportion of mobile phone users resident in urban areas are Agona West (86.0%), Ewutu Senya (83.6%) and Cape Coast (78.9%). In the predominantly rural Districts, the proportions of mobile phone users are higher than those living in urban areas. These are Abura-Asebu-Kwamankese (64.2% v. 35.8%), Twifo-Hemang-Lower Denkyira (60.6 % vs. 39.4%) and Ajumako-Enyan-Essiam (57.9% vs. 42.1%).

Table 6.3: Population 12 years and older having mobile phone within district and locality of residence

District	Total Urban Population 12+	Total Urban Population 12+ having mobile phone	Percentage Urban Population 12+ having mobile phone	Total Rural Population 12+	Total Rural Population 12+ having mobile phone	Percentage Rural Population 12+ having mobile phone
All Districts	724,503	404,340	60.4	766,014	264,743	39.6
Komenda-Edina-Eguafo-Abirem	35,414	17,003	44.2	62,200	21,437	55.8
Cape Coast Metropolis	101,788	71,957	78.9	29,348	19,213	21.1
<i>Cape Coast South</i>	61,855	38,440	98.8	583	462	1.2
<i>Cape Coast North</i>	39,933	33,517	64.1	28,765	18,751	35.9
Abura-Asebu-Kwamankese	26,457	10,824	35.8	52,113	19,413	64.2
Mfantiman Municipal	67,789	32,163	58.3	65,136	22,959	41.7
Ajumako-Enyan-Essiam	29,512	13,150	42.1	60,920	18,113	57.9
Gomoa West	38,498	15,837	48.8	51,332	16,609	51.2
Effutu Municipal	47,164	28,664	96.5	3,034	1,049	3.5
Gomoa East	72,938	46,685	62.7	65,480	27,812	37.3
Ewutu Senya	98,012	61,588	83.6	33,544	12,106	16.4
Agona East	25,349	10,938	52.3	31,496	9,966	47.7
Agona West Municipal	62,114	34,794	86.0	17,328	5,655	14.0
Asikuma-Odoben-Brakwa	36,064	14,781	59.8	36,762	9,945	40.2
Assin South	***	***	***	67,441	20,594	100.0
Assin North Municipal	39,470	20,370	49.8	66,561	20,543	50.2
Twifo-Hemang-Lower Denkyira	20,158	10,705	39.4	56,921	16,445	60.6
Upper Denkyira East Municipal	23,776	14,881	62.4	26,908	8,950	37.6
Upper Denkyira West	***	***	***	39,490	13,934	100.0

Note: *** No urban localities in the district

Source: 2010 Population and Housing Census

6.5 Mobile Phone Ownership by Age

Table 6.4 shows the proportion of each age category who own mobile phones. Overall, 44.9 percent of persons aged 12 years or older own mobile phones. The proportion using mobile phones is lowest among persons aged 12-14 years (3.8%) and highest among the 25-29 age group two in three persons (65.2%) who own mobile phone. For all age groups, the proportion of males who own mobile phones is higher than females. This may be a reflection of the poor economic power of females compared with males.

Table 6.4: Population 12 and older having mobile phones by age and sex

Age group	Total			Male			Female		
	Population 12 years and older	Having mobile phone		Population 12 years and older	Having mobile phone		Population 12 years and older	Having mobile phone	
		Number	Percent		Number	Percent		Number	Percent
Total	1,490,517	669,083	44.9	689,359	355,087	51.5	801,158	313,996	39.2
12-14	160,488	6,048	3.8	81,196	3,080	3.8	79,292	2,968	3.7
15-19	244,020	66,436	27.2	119,095	32,845	27.6	124,925	33,591	26.9
20-24	195,729	119,666	61.1	92,178	62,278	67.6	103,551	57,388	55.4
25-29	162,630	105,970	65.2	73,498	54,540	74.2	89,132	51,430	57.7
30-34	132,339	85,046	64.3	60,685	45,389	74.8	71,654	39,657	55.3
35-39	118,873	72,399	60.9	54,300	39,108	72.0	64,573	33,291	51.6
40-44	100,753	56,957	56.5	46,570	31,280	67.2	54,183	25,677	47.4
45-49	83,934	45,712	54.5	38,568	24,620	63.8	45,366	21,092	46.5
50-54	78,775	39,015	49.5	34,625	20,951	60.5	44,150	18,064	40.9
55-59	50,729	25,115	49.5	23,794	14,148	59.5	26,935	10,967	40.7
60-64	45,878	18,109	39.5	20,411	10,554	51.7	25,467	7,555	29.7
65-69	30,245	10,436	34.5	13,018	5,915	45.4	17,227	4,521	26.2
70+	86,124	18,174	21.1	31,421	10,379	33.0	54,703	7,795	14.2

Source: 2010 Population and Housing Census

6.6 Mobile Phone Ownership by Education

Data presented on Table 6.5 show that mobile phone ownership is highest among persons with highest level of education (98.0%). The lowest is among persons with primary education (22.9%). Variations in mobile phone ownership among males and females with similar educational levels are observed only among those with education below senior secondary level. For example, one-third of males who have never attended school (33.0%) have mobile phones, compared to about one-fifth (21.9%) of females. For persons with at least senior school level education, there are no substantial variations in mobile phone ownership between the two sexes.

Table 6.5: Population 12 and older having mobile phones by level of education and sex

Level of education	Total			Male			Female		
	Population 12 years and older	Having mobile phone		Population 12 years and older	Having mobile phone		Population 12 years and older	Having mobile phone	
		Number	Percent		Number	Percent		Number	Percent
Total	1,490,517	669,083	44.9	689,359	355,087	51.5	801,158	313,996	39.2
Never attended	333,747	83,875	25.1	96,454	31,834	33	237,293	52,041	21.9
Primary	268,629	61,596	22.9	120,848	27,220	22.5	147,781	34,376	23.3
JHS /Middle	597,544	290,276	48.6	306,414	160,607	52.4	291,130	129,669	44.5
Secondary/ SSS/SHS	159,435	111,774	70.1	85,592	61,163	71.5	73,843	50,611	68.5
Vocational/Technical /Commercial	29,030	24,441	84.2	15,508	13,122	84.6	13,522	11,319	83.7
Post middle/ secondary certificate	17,532	15,241	86.9	9,185	7,695	83.8	8,347	7,546	90.4
Post- secondary diploma	34,085	32,387	95	21,901	20,750	94.7	12,184	11,637	95.5
Higher	50,515	49,493	98	33,457	32,696	97.7	17,058	16,797	98.5

Source: 2010 Population and Housing Census

6.7 Economic Activity Status

Among the general population 12 years and older, Table 6.4 shows that there is little difference in proportions having mobile phones among the employed (53.0%) and unemployed (50.9%). However among those who are economically not active, only 30.6% have mobile phones compared with about 50 percent for the economically active population. Among females, although the variation is slight, the proportion with mobile phones is higher among the unemployed (47.2%) than the employed (44.8). With males however, the proportion is higher among the employed (62.7%) compared to the unemployed (55.5%).

Table 6.6: Population 12 and older having mobile phones by economic activity status and sex

Economic Activity Status	Total			Male			Female		
	Population 12 years and older	Having mobile phone		Population 12 years and older	Having mobile phone		Population 12 years and older	Having mobile phone	
		Number	Percent		Number	Percent		Number	Percent
Total	1,490,517	669,083	44.9	689,359	355,087	51.5	801,158	313,996	39.2
Employed	899,773	477,084	53.0	414,867	260,076	62.7	484,906	217,008	44.8
Unemployed	55,751	28,377	50.9	24,965	13,852	55.5	30,786	14,525	47.2
Not active	534,993	163,622	30.6	249,527	81,159	32.5	285,466	82,463	28.9

Source: 2010 Population and Housing Census

6.8 Population 12 years and Older using Internet by District and Sex

Table 6.7 shows the proportion of residents in urban and rural areas in each district that use the internet. For Central region, as a whole, only 7.0 percent of population 12 years and older use the internet. The proportions using internet are highest in two districts, namely, Cape Coast (32.0 %), and Effutu (23.2%) and lowest in Upper Denkyira West (1.1%). In ten of the 17 Districts, the proportion using the internet is less than five percent of the population 12 years and older. The relatively low usage of internet at the household level is more likely due to inadequate levels of internet facilities in the area. The importance of ICTs in the development process was long recognized and access to ICT was even made one of the targets of the Millennium Development Goal No. 8 (MDG 8). This emphasizes the benefits of new technologies, especially ICTs in the fight against poverty. Internet and mobile phones are increasingly bringing market information, financial services, and health services to remote areas, and is helping to change people's lives in unprecedented ways.

Internet usage in all 17 districts is higher among males (9.3%) than females (5.0%). For males, persons 12 years and older who use the internet, the proportions range from 1.5 percent in Upper Denkyira West to 38.9 percent in Cape Coast. Apart from Cape Coast (38.9%) and Effutu (29.8%), internet use by males in all the remaining 15 districts is below 10 percent. In eight Districts the proportions of males 12 years and older using the internet are below five percent. Only 5.0 percent of females 12 years and older use the internet. One-quarter of females in Cape Coast (25.6%) and 17.4% in Effutu use the internet. In all other Districts in Central region, the proportion of females using the internet is five percent or lower, with the lowest recorded in Upper Denkyira West where less than one percent (0.7%) use the internet.

Table 6.7: Population 12 years and older using internet by district and sex

District	Total			Male			Female		
	Population 12+	Using internet		Population 12+	Using internet		Population 12+	Using internet	
		Number	Percent		Number	Percent		Number	Percent
All districts	1,490,517	104,301	7.0	689,359	64,410	9.3	801,158	39,891	5.0
Komenda-Edina-Eguafo- Abirem	97,614	4,444	4.6	45,745	2,914	6.4	51,869	1,530	2.9
Cape Coast Metropolis	131,136	41,987	32.0	63,325	24,626	38.9	67,811	17,361	25.6
<i>Cape Coast South</i>	62,438	10,017	16.0	28,706	6,192	21.6	33,732	3,825	11.3
<i>Cape Coast North</i>	68,698	31,970	46.5	34,619	18,434	53.2	34,079	13,536	39.7
Abura-Asebu-Kwamankese	78,570	3,251	4.1	35,834	2,164	6.0	42,736	1,087	2.5
Mfantsiman Municipal	132,925	7,151	5.4	57,035	3,278	5.7	75,890	3,873	5.1
Ajumako-Enyan-Essiam	90,432	2,212	2.4	39,662	1,555	3.9	50,770	657	1.3
Gomoa West	89,830	2,046	2.3	37,606	1,428	3.8	52,224	618	1.2
Effutu Municipal	50,198	11,671	23.2	23,654	7,046	29.8	26,544	4,625	17.4
Gomoa East	138,418	7,423	5.4	63,485	4,917	7.7	74,933	2,506	3.3
Ewutu Senya	131,556	8,208	6.2	61,083	5,410	8.9	70,473	2,798	4.0
Agona East	56,845	1,502	2.6	26,349	1,078	4.1	30,496	424	1.4
Agona West Municipal	79,442	4,952	6.2	35,956	3,394	9.4	43,486	1,558	3.6
Asikuma-Odoben-Brakwa	72,826	1,257	1.7	33,838	886	2.6	38,988	371	1.0
Assin South	67,441	1,180	1.7	32,266	866	2.7	35,175	314	0.9
Assin North Municipal	106,031	2,512	2.4	51,859	1,773	3.4	54,172	739	1.4
Twifo-Hemang-Lower Denkyira	77,079	1,635	2.1	37,354	1,108	3.0	39,725	527	1.3
Upper Denkyira East Municipal	50,684	2,435	4.8	24,515	1,666	6.8	26,169	769	2.9
Upper Denkyira West	39,490	435	1.1	19,793	301	1.5	19,697	134	0.7

Source: 2010 Population and Housing Census

6.9 Internet Usage by Type of Locality and District

Table 6.8 shows the proportion of urban and rural dwellers who use the internet by District. As expected, there are wide rural-urban differentials in internet use. Eleven percent of urban, in contrast with 3.2 percent in rural localities use the internet. In the two most urbanised Districts, Cape Coast and Effutu, about one-third (34.0%) and one-quarter (24.6%) respectively use the internet. In all other Districts, five percent or lower of urban dwellers use the internet. In rural localities, apart from Cape Coast where 25.3 percent use the internet, the proportions using the internet range from 1.1 percent in Upper Denkyira West to 5.3 percent in Mfantseman.

Table 6.8: Population 12 years and older using internet by district and locality of residence

District	Urban			Rural		
	Population 12+	Using internet		Population 12+	Using internet	
		Number	Percent		Number	Percent
All districts	724,503	79,628	11.0	766,014	24,673	3.2
Komenda-Edina-Eguafo-Abirem	35,414	2,371	6.7	62,200	2,073	3.3
Cape Coast Metropolis	101,788	34,563	34.0	29,348	7,424	25.3
<i>Cape Coast South</i>	61,855	9,820	15.9	583	197	33.8
<i>Cape Coast North</i>	39,933	24,743	62.0	28,765	7,227	25.1
Abura-Asebu-Kwamankese	26,457	1,009	3.8	52,113	2,242	4.3
Mfantseman Municipal	67,789	3,709	5.5	65,136	3,442	5.3
Ajumako-Enyan-Essiam	29,512	1,257	4.3	60,920	955	1.6
Gomoa West	38,498	1,161	3.0	51,332	885	1.7
Effutu Municipal	47,164	11,595	24.6	3,034	76	2.5
Gomoa East	72,938	5,326	7.3	65,480	2,097	3.2
Ewutu Senya	98,012	7,574	7.7	33,544	634	1.9
Agona East	25,349	907	3.6	31,496	595	1.9
Agona West Municipal	62,114	4,593	7.4	17,328	359	2.1
Asikuma-Odoben-Brakwa	36,064	893	2.5	36,762	364	1.0
Assin South	***	***	***	67,441	1,180	1.7
Assin North Municipal	39,470	1,669	4.2	66,561	843	1.3
Twifo-Hemang-Lower Denkyira	20,158	908	4.5	56,921	727	1.3
Upper Denkyira East Municipal	23,776	2,093	8.8	26,908	342	1.3
Upper Denkyira West	***	***	***	39,490	435	1.1

Note: *** No urban localities in the district

Source: 2010 Population and Housing Census

6.10 Population 12 years and Older Using Internet by Age and Sex

Table 6.9 shows the population 12 years and older using the internet by age and sex. As expected, internet usage is highest among the age group 15-34 years. For both the general population and for males and females separately, the proportion using the internet peaks at age 20-24 year group and declines gradually. In the 20-24 years age group, 22.7 percent of males and 12.1 percent of females use the internet. Less than two percent (1.7%) of persons 12-14 years old use the internet. Furthermore, the only age group where a higher proportion of females (9.1%) than males (8.1%) use the internet is the 15-19 years age group. For all other age groups the proportion of males using the internet is higher than females. Among the elderly (60 years and older), less than three percent of males and less than one percent of females use the internet. About one percent males and 0.5 percent females 70 years and older use the internet.

Table 6.9: Population 12 years and older using internet by age and sex

Age Group	Total			Male			Female		
	Population 12+	Using internet Number	Using internet Percent	Population 12+	Using internet Number	Using internet Percent	Population 12+	Using internet Number	Using internet Percent
Total	1,490,517	104,301	7.0	689,359	64,410	9.3	801,158	39,891	5.0
12-14	160,488	2,655	1.7	81,196	1,410	1.7	79,292	1,245	1.6
15-19	244,020	21,013	8.6	119,095	9,618	8.1	124,925	11,395	9.1
20-24	195,729	33,493	17.1	92,178	20,951	22.7	103,551	12,542	12.1
25-29	162,630	18,852	11.6	73,498	12,361	16.8	89,132	6,491	7.3
30-34	132,339	10,563	8.0	60,685	7,403	12.2	71,654	3,160	4.4
35-39	118,873	5,766	4.9	54,300	4,160	7.7	64,573	1,606	2.5
40-44	100,753	3,684	3.7	46,570	2,641	5.7	54,183	1,043	1.9
45-49	83,934	2,789	3.3	38,568	1,963	5.1	45,366	826	1.8
50-54	78,775	2,252	2.9	34,625	1,599	4.6	44,150	653	1.5
55-59	50,729	1,399	2.8	23,794	1,050	4.4	26,935	349	1.3
60-64	45,878	748	1.6	20,411	534	2.6	25,467	214	0.8
65-69	30,245	319	1.1	13,018	209	1.6	17,227	110	0.6
70+	86,124	768	0.9	31,421	511	1.6	54,703	257	0.5

Source: 2010 Population and Housing Census

6.11 Percentage Distribution of Internet Users by District and Sex

Table 6.10 shows the share of internet users per District and sex. There are 104,301 persons 12 years and older in Central region using the internet, of which one-half (51.5%) reside in two districts, Cape Coast Metropolis (40.3%) and Effutu Municipal (11.2%). The following five Districts altogether have only about five percent (5.7%) share of internet users: Upper Denkyira West (0.4%), Assin South (1.1%), Asikuma-Odoben-Brakwa (1.2%), Agona East (1.4%) and Twifo-Hemang-Lower Denkyira (1.6%). Analysed separately, the pattern observed for the general population is similar for male and female internet users.

Table 6.10: Population 12 years and older using internet facility by district and sex

District	Total Region		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
All districts	104,301	100	64,410	100	39,891	100
Komenda-Edina-Eguafo-Abirem	4,444	4.3	2,914	4.5	1,530	3.8
Coast Metropolis	41,987	40.3	24,626	38.2	17,361	43.5
<i>Cape Coast South</i>	10,017	9.6	6,192	9.6	3,825	9.6
<i>Cape Coast North</i>	31,970	30.7	18,434	28.6	13,536	33.9
Abura-Asebu-Kwamankese	3,251	3.1	2,164	3.4	1,087	2.7
Mfantseman Municipal	7,151	6.9	3,278	5.1	3,873	9.7
Ajumako-Enyan-Essiam	2,212	2.1	1,555	2.4	657	1.6
Gomoa West	2,046	2	1,428	2.2	618	1.5
Effutu Municipal	11,671	11.2	7,046	10.9	4,625	11.6
Gomoa East	7,423	7.1	4,917	7.6	2,506	6.3
Ewutu Senya	8,208	7.9	5,410	8.4	2,798	7
Agona East	1,502	1.4	1,078	1.7	424	1.1
Agona West Municipal	4,952	4.7	3,394	5.3	1,558	3.9
Asikuma-Odoben-Brakwa	1,257	1.2	886	1.4	371	0.9
Assin South	1,180	1.1	866	1.3	314	0.8
Assin North Municipal	2,512	2.4	1,773	2.8	739	1.9
Twifo-Hemang-Lower Denkyira	1,635	1.6	1,108	1.7	527	1.3
Upper Denkyira East Municipal	2,435	2.3	1,666	2.6	769	1.9
Upper Denkyira West	435	0.4	301	0.5	134	0.3

Source: 2010 Population and Housing Census

6.12 Population 12 years and Older using Internet

by Sex and Education

Unlike mobile phone ownership, internet use is mainly restricted to the population with at least senior high school level education. There is little variation in the proportions using the internet among persons who have never attended school (0.1%), Primary (0.8%) and JHS/Middle (2.3%). As expected, and confirmed in Table 6.11, the highest proportion using internet is among persons with higher education (78.1%). The proportion of males compared with females with senior secondary education using the internet is about the same, about 17 percent. However, the proportion of females with post middle or secondary school level education using internet is higher (24.7%) than that of males (18.6%). Similarly, for those with higher education, the proportion of females using the internet (79.2%) is slightly higher than that of males (77.6%).

Table 6.11: Population 12 years and older using the internet by level of education and sex

Age Group	Total			Male			Female		
	Population 12+	Using internet Number	Percent	Population 12+	Using internet Number	Percent	Population 12+	Using internet Number	Percent
Total	1,490,517	104,301	7.0	689,359	64,410	9.3	801,158	39,891	5.0
Total	1,490,517	1,083	0.1	689,359	427	0.1	801,158	656	0.1
Primary	268,629	2,226	0.8	120,848	1,260	1.0	147,781	966	0.7
JHS/Middle	597,544	13,863	2.3	306,414	9,217	3.0	291,130	4,646	1.6
Secondary/ SSS/SHS	159,435	26,591	16.7	85,592	14,363	16.8	73,843	12,228	16.6
Vocational/ Technical/ Commercial	29,030	3,054	10.5	15,508	2,055	13.3	13,522	999	7.4
Post middle/second ary certificate	17,532	3,773	21.5	9,185	1,710	18.6	8,347	2,063	24.7
Post- secondary diploma	34,085	14,254	41.8	21,901	9,424	43.0	12,184	4,830	39.6
Higher	50,515	39,457	78.1	33,457	25,954	77.6	17,058	13,503	79.2

Source: 2010 Population and Housing Census

6.13 Fixed Telephone Lines

With the onset of mobile technology, the use of fixed line telephones appears to be on the decline. The census asked questions on whether or not there were fixed telephone lines in households. Table 6.12 shows that there are 7,595 households with fixed telephone lines in Central Region in 2010. This represents only 1.4 percent of total households. The low rate for fixed telephone may be due to the expansion of mobile subscription in the country and the

subsequent decline in investment in fixed telephony. Nearly two thirds of households with fixed telephone lines (64.1%) are headed by males. Almost three out of 10 households with fixed line telephones in Central Region (28.3%) are in Cape Coast. Altogether, nearly two-thirds (63.5%) of households with fixed telephones are in the following four Districts: These are Cape Coast (28.3%), Ewutu Senya (18.0%), Agona West (9.8%) and Effutu (7.2%). Conversely, four districts have only three percent share of the total number of households with fixed telephone lines. These are Upper Denkyira West (0.4%), Agona East (0.5%), Twifo-Hemang-Lower Denkyira (0.7%), and Assin South (1.5%).

Table 6.12: Households with fixed-line telephone by district and sex of household head

District	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All Districts	7,595	100.0	4,872	100.0	2,723	100.0
Komenda-Edina-Eguafo- Abirem	283	3.7	166	3.4	117	4.3
Cape Coast Metropolis	2,153	28.3	1,327	27.2	826	30.3
<i>Cape Coast South</i>	1,268	16.7	715	14.7	553	20.3
<i>Cape Coast North</i>	885	11.7	612	12.6	273	10.0
Abura-Asebu-Kwamankese	125	1.6	87	1.8	38	1.4
Mfantiman Municipal	286	3.8	174	3.6	112	4.1
Ajumako-Enyan-Essiam	303	4.0	170	3.5	133	4.9
Gomoa West	343	4.5	185	3.8	158	5.8
Effutu Municipal	545	7.2	364	7.5	181	6.6
Gomoa East	498	6.6	368	7.6	130	4.8
Ewutu Senya	1,366	18.0	948	19.5	418	15.4
Agona East	37	0.5	26	0.5	11	0.4
Agona West Municipal	745	9.8	431	8.8	314	11.5
Asikuma-Odoben-Brakwa	173	2.3	112	2.3	61	2.2
Assin South	117	1.5	84	1.7	33	1.2
Assin North Municipal	200	2.6	127	2.6	73	2.7
Twifo-Hemang-Lower Denkyira	52	0.7	44	0.9	8	0.3
Upper Denkyira East Municipal	340	4.5	234	4.8	106	3.9
Upper Denkyira West	29	0.4	25	0.5	4	0.1

Source: 2010 Population and Housing Census

6.14 Age of Heads of Households with Fixed Telephone Line

Table 6.13 shows that the proportion of households heads having fixed line telephones rises steadily with age from 0.8 percent in the age group 15-19 years peaking at 2.0 percent among the age group 55-59 years before falling to 1.5 percent among the age group 70 years and older. The fixed line telephone system was common in the past. However, with the introduction of mobile phones, most young persons use current devices or have switched to mobile technologies. This may partly explain why the proportion of use of fixed telephone line is higher in households headed by older persons.

Table 6.13: Age of heads of households with fixed telephone line

Age Group	Total			Male-headed			Female-headed		
	Total Households	Having fixed telephone line		Total Households	Having fixed telephone line		Total Households	Having fixed telephone line	
		Number	Percent		Number	Percent		Number	Percent
Total	526,763	7,595	1.4	313,306	4,872	1.6	213,457	2,723	1.3
15-19	10,006	83	0.8	5,673	47	0.8	4,333	36	0.8
20-24	33,353	280	0.8	19,708	174	0.9	13,645	106	0.8
25-29	56,996	591	1.0	36,702	371	1.0	20,294	220	1.1
30-34	61,173	741	1.2	41,029	517	1.3	20,144	224	1.1
35-39	61,668	779	1.3	41,041	516	1.3	20,627	263	1.3
40-44	57,384	912	1.6	36,973	634	1.7	20,411	278	1.4
45-49	50,341	835	1.7	31,394	567	1.8	18,947	268	1.4
50-54	50,392	908	1.8	28,628	592	2.1	21,764	316	1.5
55-59	34,881	698	2.0	20,034	465	2.3	14,847	233	1.6
60-64	31,792	530	1.7	16,883	323	1.9	14,909	207	1.4
65-69	21,305	378	1.8	10,665	231	2.2	10,640	147	1.4
70+	57,472	860	1.5	24,576	435	1.8	32,896	425	1.3

Source: 2010 Population and Housing Census

Table 6.14 shows the proportion of household heads in different educational categories who own fixed-line telephones. Generally only 1.4 percent of all household heads have fixed-line telephone. The proportions of households having fixed-line telephone increases as the level of education of household heads. The highest proportions of households with fixed-line telephone are household heads with higher education (9.5%), followed by post secondary diploma (4.8%), post middle/secondary certificate (4.0%) and vocational/technical/commercial (3.2%). The proportion of household headed by a male (1.6%) with fixed-line telephone is higher than female heads (1.3%).

Table 6.14: Household heads having fixed telephone line within levels of education and sex

Age Group	Total			Male-headed			Female-headed		
	Total Households	Having fixed telephone line		Total Households	Having fixed telephone line		Total Households	Having fixed telephone line	
		Number	Percent		Number	Percent		Number	Percent
Total	526,764	7,595	1.4	313,307	4,872	1.6	213,457	2,723	1.3
Never attended	161,191	842	0.5	62,234	287	0.5	98,957	555	0.6
Primary	58,760	401	0.7	31,331	204	0.7	27,429	197	0.7
JHS/Middle	209,477	2,280	1.1	146,383	1,407	1.0	63,094	873	1.4
Secondary/ SSS/SHS	40,524	940	2.3	30,500	670	2.2	10,024	270	2.7
Vocational/Technical / Commercial	14,529	463	3.2	10,254	279	2.7	4,275	184	4.3
Post middle/ secondary certificate	9,418	374	4.0	6,409	189	2.9	3,009	185	6.1
Post-secondary diploma	17,459	836	4.8	13,566	626	4.6	3,893	210	5.4
Higher	15,406	1,459	9.5	12,630	1,210	9.6	2,776	249	9.0

Source: 2010 Population and Housing Census

6.15 Households Owning Desktop or Laptop Computer

A total of 28,167 households (5.3% of all households) own desktop or laptop computers in Central region. The main explanation of the low desktop/laptop ownership in households in the region is principally the cost of a desktop/laptop in relation to its possible uses in the household, particularly since those who use it normally have access to it in the office or at the internet café. The ownership share per District varies considerably. Table 6.15 indicates that about one-quarter (22.5%) of households with desktop or lap top are in Cape Coast. An additional 30.0 percent of households in three other Districts, Ewutu Senya (11.2%), Gomoa East (10.4%) and Effutu Municipal (8.4), altogether have desktops or laptops. The Districts with the lowest shares are Upper Denkyira West (0.9%), Assin South (1.8%) and Agona East (2.1%). Table 6.15 reveals that the pattern is similar irrespective of sex of household head.

Table 6.15: Households owning desktop and laptop by district and sex of household heads

District	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All Districts	28,167	100.0	21,271	100.0	6,896	100.0
Komenda-Edina-Eguafo-Abirem	1,733	6.2	1,275	6.0	458	6.6
Cape Coast Metropolis	6,337	22.5	4,626	21.7	1,711	24.8
<i>Cape Coast South</i>	3,302	11.7	2,331	11.0	971	14.1
<i>Cape Coast North</i>	3,035	10.8	2,295	10.8	740	10.7
Abura-Asebu-Kwamankese	919	3.3	689	3.2	230	3.3
Mfantseman Municipal	1,947	6.9	1,416	6.7	531	7.7
Ajumako-Enyan-Essiam	853	3.0	635	3.0	218	3.2
Gomoa West	897	3.2	664	3.1	233	3.4
Effutu Municipal	2,361	8.4	1,739	8.2	622	9.0
Gomoa East	2,938	10.4	2,297	10.8	641	9.3
Ewutu Senya	3,141	11.2	2,485	11.7	656	9.5
Agona East	598	2.1	455	2.1	143	2.1
Agona West Municipal	1,978	7.0	1,503	7.1	475	6.9
Asikuma-Odoben-Brakwa	760	2.7	614	2.9	146	2.1
Assin South	508	1.8	370	1.7	138	2.0
Assin North Municipal	1,296	4.6	1,023	4.8	273	4.0
Twifo-Hemang-Lower Denkyira	738	2.6	581	2.7	157	2.3
Upper Denkyira East Municipal	900	3.2	682	3.2	218	3.2
Upper Denkyira West	263	0.9	217	1.0	46	0.7

Source: 2010 Population and Housing Census

6.16 Desktop/Laptop Ownership by Education

Modern ICT is considered to be used mainly by the young and educated persons. Table 6.16 shows that the proportion of households owning laptop or desktop increases with higher levels of education. At the regional level, only 1.7 percent of households with primary education, and 2.9 percent of those with JHS/Middle own desktops or laptops. In contrast, slightly over one-half (50.9%) of household heads with higher education, and about one-quarter (27.6%) of those with post-secondary education own desktop or laptop. Similar patterns are observed for both male-headed and female headed households.

Table 6.16: Household heads having desktop/laptop by level of education and sex of household head

Level of Education	Total			Male-Headed Households			Female-Headed Households		
	House-holds	Having desktop/laptop		House-holds	Having desktop/laptop		House-holds	Having desktop/laptop	
		Number	Percent		Number	Percent		Number	Percent
Never attended	161,191	1,127	0.7	62,234	369	0.6	98,957	758	0.8
Primary	58,760	979	1.7	31,331	483	1.5	27,429	496	1.8
JHS/Middle	209,477	6,141	2.9	146,383	4,288	2.9	63,094	1,853	2.9
Secondary/SSS/SHS	40,524	4,220	10.4	30,500	3,410	11.2	10,024	810	8.1
Vocational/Technical / Commercial	14,529	1,652	11.4	10,254	1,173	11.4	4,275	479	11.2
Post middle/secondary certificate	9,418	1,378	14.6	6,409	935	14.6	3,009	443	14.7
Post-secondary diploma	17,459	4,822	27.6	13,566	3,970	29.3	3,893	852	21.9
Higher	15,406	7,848	50.9	12,630	6,643	52.6	2,776	1,205	43.4
Total	526,764	28,167	5.3	313,307	21,271	6.8	213,457	6,896	3.2

Source: 2010 Population and Housing Census

CHAPTER SEVEN

LITERACY AND EDUCATION

7.1 Introduction

The Central region is considered the hub and the home of some of the finest and oldest secondary schools in Ghana. In addition, the region was the first to have contacts with Europeans and with western education. There is therefore a perception in Ghana that literacy levels in Central region are high. This chapter presents information on literacy and education status.

7.2 Literacy

Literacy is defined here as the ability to read and write with understanding. In Ghana most people obtain this skill by enrolling in formal educational settings, although some obtain it through informal evening or night classes. Table 7.1 shows that 78.2 percent of the population of Central Region are literate and 21.8 percent are not literate. This is higher than the national average of 74.1 percent, but falls below the rates of three other Regions- Greater Accra (89.3%), Ashanti (82.6%) and Eastern Region (81.0%). Although the regional capital has the concentration of the best secondary schools in Ghana, most of the enrolled students came from outside the Region. At the District level, there are marked variations in literacy levels. The highest literacy rates in the Region are recorded at Cape Coast Metropolis (89.7%) and Agona West Municipal (83.4%). Higher proportions of 80 percent or higher are recorded in Gomoa East (81.5%), Ewutu Senya (81.0%), Upper Denkyira (81.0%), Effutu Municipal (80.7%) and Assin North Municipal (80.0%). The lowest literacy rates are recorded in Gomoa West (66.6%) and Abura-Asebu-Kwa mankesa (70.8%).

Table 7.1: Population 11 years and older by district and literacy status

District	Total		Male		Female	
	Literacy		Literacy		Literacy	
	Total	Rate	Total	Rate	Total	Rate
All Districts	1,538,091	78.2	713,500	86.3	824,591	71.1
Komenda-Edina-Egyafo-Abirem	100,791	73.8	47,379	82.4	53,412	66.2
Cape Coast Metropolis	133,946	89.7	64,670	94.1	69,276	85.6
Abura-Asebu-Kwamankese	81,227	70.8	37,165	80.8	44,062	62.5
Mfantsiman Municipal	137,124	74.5	59,146	82.8	77,978	68.1
Ajumako-Enyan-Essiam	93,456	76.0	41,185	86.4	52,271	67.8
Gomoa West	92,755	66.7	39,059	79.1	53,696	57.6
Effutu Municipal	51,484	80.7	24,277	87.5	27,207	74.7
Gomoa East	142,877	81.5	65,729	89.9	77,148	74.4
Ewutu Senya	135,665	81.0	63,167	88.3	72,498	74.6
Agona East	58,731	75.4	27,333	84.9	31,398	67.0
Agona West Municipal	82,166	83.4	37,329	90.8	44,837	77.2
Asikuma-Odoben Brakwa	75,462	78.6	35,227	87.3	40,235	70.9
Assin South	69,862	77.3	33,517	85.3	36,345	70.0
Assin North Municipal	109,695	80.0	53,756	86.9	55,939	73.4
Twifo-Heman-Lower Denkyira	79,699	76.7	38,753	84.6	40,946	69.2
Upper Denkyira East Municipal	52,351	81.0	25,319	86.9	27,032	75.4
Upper Denkyira West	40,800	73.7	20,489	81.0	20,311	66.3

Source: 2010 Population and Housing Census

Rural-urban variations in literacy levels are presented in Table 7.2. As expected, literacy levels are higher in urban than in rural localities for all Districts. Urban dwellers comparatively, place higher values on education than rural dwellers but the real and opportunity costs of education are also relatively higher in rural communities. The proportion literate in urban localities is 82.0 percent compared with 74.6 percent in rural localities. Urban literacy rates are higher than rural literacy in all Districts except the following two districts where rural rates are higher: Abura-Asebu-Kwamankese (74.6% rural, 63.3% urban) and Gomoa West (68.0% rural, 64.9% urban). This may to some extent be explained by high levels of literacy in Ghanaian languages in rural areas.

Table 7.2: Population 11 years and older by district, literacy status and type of locality

Districts	Total	Urban		Total	Rural	
		Not literate	Literate		Not literate	Literate
All Districts	746,276	18.0	82.0	791,815	25.4	74.6
Komenda-Edina-Eguafo-Abirem	36,544	25.9	74.1	64,247	26.4	73.6
Cape Coast Metropolis	103,870	9.9	90.1	30,076	11.6	88.4
<i>Cape Coast South</i>	63,424	13.2	86.8	601	6.7	93.3
<i>Cape Coast North</i>	40,446	4.7	95.3	29,475	11.7	88.3
Abura-Asebu-Kwamankese	27,262	36.7	63.3	53,965	25.4	74.6
Mfantiman Municipal	69,969	22.8	77.2	67,155	28.4	71.6
Ajumako-Enyan-Essiam	30,482	19.7	80.3	62,974	26.0	74.0
Gomoa West	39,767	35.1	64.9	52,988	32.0	68.0
Effutu Municipal	48,345	18.4	81.6	3,139	32.5	67.5
Gomoa East	75,282	13.4	86.6	67,595	24.1	75.9
Ewutu Senya	101,006	16.1	83.9	34,659	27.5	72.5
Agona East	26,159	20.0	80.0	32,572	28.4	71.6
Agona West Municipal	64,188	14.7	85.3	17,978	23.4	76.6
Asikuma-Odoben-Brakwa	37,261	18.7	81.3	38,201	24.0	76.0
Assin South	***	***	***	69,862	22.7	77.3
Assin North Municipal	40,853	13.6	86.4	68,842	23.7	76.3
Twifo-Hemang-Lower Denkyira	20,809	15.2	84.8	58,890	26.2	73.8
Upper Denkyira East Municipal	24,479	11.2	88.8	27,872	25.9	74.1
Upper Denkyira West	***	***	***	40,800	26.3	73.7

*** No urban locality in the district

Source: 2010 Population and Housing Census

7.3 Population 11 years and older by language of literacy district and sex

From Table 7.3, about one-half (48.8%) of the population 11 years and older are literate in English and a Ghanaian language while about one-fifth (21.8%) are literate in English language only. About six percent (6.3%) are literate in a Ghanaian language only. The proportions of persons who are literate in English only are highest in Ewutu Senya (39.8%), and Gomoa East (30.1%). The two Districts are now within commuting distance from Accra and is the home for many literate persons who work in Accra. In contrast, the proportions literate in English only are 13.1% in in Upper Denkyira East, 14.7% in Asikuma-Odoben-Brakwa and 14.8% in Abura-Asebu-Kwamankese. The proportion literate in English and a Ghanaian language is lower than two-thirds in all districts. It is higher than 50 percent in eight of seventeen Districts and is highest in Cape Coast (60.3%). In Ewutu Senya, only 36.2 percent are literate in English and a Ghanaian language. The following three Districts have the highest proportion of persons literate in Ghanaian language(s) only: Upper Denkyira West (13.3%), Upper Denkyira East (9.1%) and

Ajumako-Enyan-Essiam (9.0%). The lowest literacy rate in Ghanaian Languages only is in Effutu (3.1%) Ewutu Senya (3.6%). In all districts, less than one percent is literate in English and French except Cape Coast Metropolis (3.5%) and Effutu (2.4%).

There are sex differentials in proportions literate (Table 7.3). While only about 14 percent males are not literate in any language, the proportion for females is 28.9 percent. Fifty six percent of males compared with 42.1 percent females are literate in English and a Ghanaian language with high disparities observed across Districts. In nearly all the Districts the proportion of females not literate is about twice that of males. Gomoa West (42.4%) and Abura-Asebu-Kwamankese (37.5%) are the District with the lowest proportion of females not literate.

Table 7.3: Population 11 years and older by district, literacy and sex

Districts	Total	None (Not literate)	English only	Ghanaian language only	English and Ghanaian language	English and French	English French and Ghanaian Language	Other
Both Sexes								
All Districts	1,538,091	21.8	21.8	6.3	48.9	0.3	0.9	0
Komenda-Edina-Egyafo-Abirem	100,791	26.2	20.5	5.5	47.0	0.2	0.6	0
Cape Coast Metropolis	133,946	10.3	23.0	2.5	60.3	0.4	3.5	0
Abura-Asebu-Kwamankese	81,227	29.2	14.8	6.2	49.2	0.2	0.5	0
Mfantiman Municipal	137,124	25.5	15.8	5.8	50.9	0.3	1.6	0
Ajumako-Enyan-Essiam	93,456	24.0	15.1	9.0	51.6	0.1	0.2	0
Gomoa West	92,755	33.3	15.6	6.1	44.6	0.1	0.3	0
Effutu Municipal	51,484	19.3	23.6	3.1	51.4	0.3	2.4	0
Gomoa East	142,877	18.5	30.1	5.1	45.1	0.5	0.6	0
Ewutu Senya	135,665	19.0	39.8	3.6	36.2	0.5	0.8	0
Agona East	58,731	24.6	21.4	7.5	45.7	0.3	0.5	0
Agona West Municipal	82,166	16.6	24.5	5.9	52.2	0.3	0.6	0
Asikuma-Odoben Brakwa	75,462	21.4	14.7	8.8	54.7	0.1	0.2	0
Assin South	69,862	22.7	21.8	8.3	46.7	0.1	0.3	0
Assin North Municipal	109,695	20.0	22.8	8.1	48.6	0.2	0.3	0
Twifo-Heman-Lower Denkyira	79,699	23.3	17.0	8.1	51.1	0.1	0.4	0
Upper Denkyira East Municipal	52,351	19.0	17.5	9.1	53.7	0.2	0.5	0
Upper Denkyira West	40,800	26.3	13.1	13.3	47.0	0.1	0.1	0

Source: 2010 Population and Housing Census

Table 7.3: Population 11 years and older by district, literacy rate and sex (males.)

Districts	Total	None (Not literate)	English only	Ghanaian language only	English and Ghanaian language	English and French	English French and Ghanaian Language	Other
Male								
All Districts	713,500	13.7	22.5	5.9	56.8	0.3	0.8	0.0
Komenda-Edina-Egyafo-Abirem	47,379	17.6	21.5	5.5	54.3	0.3	0.7	0.0
Cape Coast Metropolis	64,670	5.9	23.1	2.2	65.6	0.4	2.7	0.0
Abura-Asebu-Kwamankese	37,165	19.2	15.4	5.8	58.7	0.2	0.6	0.0
Mfantsiman Municipal	59,146	17.2	16.8	5.5	59.5	0.4	0.6	0.0
Ajumako-Enyan-Essiam	41,185	13.6	15.9	8.7	61.4	0.1	0.3	0.0
Gomoa West	39,059	20.9	15.9	6.1	56.6	0.1	0.4	0.0
Effutu Municipal	24,277	12.5	23.8	2.7	58.0	0.4	2.5	0.0
Gomoa East	65,729	10.1	31.4	4.6	52.4	0.7	0.8	0.0
Ewutu Senya	63,167	11.7	41.7	3.2	41.7	0.7	1.0	0.0
Agona East	27,333	15.1	22.6	7.3	54.2	0.3	0.6	0.0
Agona West Municipal	37,329	9.2	24.5	5.1	60.2	0.3	0.6	0.0
Asikuma-Odoben Brakwa	35,227	12.7	14.7	8.1	64.1	0.1	0.3	0.0
Assin South	33,517	14.7	22.0	7.6	55.0	0.2	0.5	0.0
Assin North Municipal	53,756	13.1	22.8	7.3	56.1	0.2	0.4	0.0
Twifo-Heman-Lower Denkyira	38,753	15.4	17.5	7.6	58.9	0.2	0.4	0.0
Upper Denkyira East Municipal	25,319	13.1	17.1	7.9	61.1	0.2	0.5	0.0
Upper Denkyira West	20,489	19.0	12.9	12.7	55.0	0.2	0.2	0.0

Source: 2010 Population and Housing Census

Table 7.3: Population 11 years and older by district, literacy rate and sex (Females)

Districts	Total	None (Not literate)	English only	Ghanaian language only	English and Ghanaian language	English and French	English French and Ghanaian Language	Other
Female								
All Districts	824,591	28.9	21.2	6.7	42.1	0.2	0.9	0.0
Komenda-Edina-Egyafo-Abirem	53,412	33.8	19.6	5.4	40.5	0.2	0.5	0.0
Cape Coast Metropolis	69,276	14.4	22.8	2.8	55.3	0.4	4.2	0.0
Abura-Asebu-Kwamankese	44,062	37.5	14.3	6.6	41.2	0.1	0.3	0.0
Mfantsiman Municipal	77,978	31.9	15.2	6.0	44.3	0.2	2.4	0.0
Ajumako-Enyan-Essiam	52,271	32.2	14.4	9.2	43.9	0.1	0.2	0.0
Gomoa West	53,696	42.4	15.3	6.1	35.9	0.1	0.2	0.0
Effutu Municipal	27,207	25.3	23.4	3.4	45.5	0.2	2.2	0.0
Gomoa East	77,148	25.6	29.1	5.5	38.9	0.3	0.5	0.0
Ewutu Senya	72,498	25.4	38.1	4.0	31.5	0.4	0.6	0.0
Agona East	31,398	33.0	20.3	7.7	38.3	0.3	0.4	0.0
Agona West Municipal	44,837	22.8	24.5	6.5	45.5	0.2	0.5	0.0
Asikuma-Odoben Brakwa	40,235	29.1	14.7	9.4	46.5	0.1	0.2	0.0
Assin South	36,345	30.0	21.7	8.9	39.1	0.1	0.3	0.0
Assin North Municipal	55,939	26.6	22.8	8.8	41.4	0.1	0.3	0.0
Twifo-Heman-Lower Denkyira	40,946	30.8	16.5	8.6	43.8	0.1	0.3	0.0
Upper Denkyira East Municipal	27,032	24.6	17.9	10.1	46.8	0.1	0.4	0.0
Upper Denkyira West	20,311	33.7	13.3	13.8	39.0	0.1	0.0	0.0

Source: 2010 Population and Housing Census

7.4 School Attendance

This section provides information on school attendance of the population three years and older. Table 7.4 shows that 19.1 percent of the population have never attended any formal school in their lifetime while 43.1 percent are attending school now and 37.7 percent have attended in the past. A higher proportion of females (24.7%) than males (12.9%) have never attended school.

Gomoa West (28.6%) has the highest proportion of the population who have never attended school, followed by Abura-Asebu-Kwamankese (25.5%), Komenda/Edina/Eguafo (22.6%) and Mfantiman Municipal (22.3%). Cape Coast Metropolitan has the lowest proportion of the population who have never attended school as the hub of educational centre of Ghana. The proportion of females who have never attended school ranks high compared to males in all the Districts. A higher proportion of the population in the rural (22.5%) areas have never attended school compared to those in the urban (16.2%) areas; this pattern pertains in all the Districts.

Generally, about four in ten of the population in the Central Region are currently attending school while 37.7 percent have attended school in the past. Cape Coast Metropolitan and Effutu Municipal have more than half of their population attending school currently. Cape Coast Metropolis (49.3%) and Effutu Municipal (47.2%) recorded the highest proportions of the population currently in school while Gomoa West (40.9%) and Ewutu Senya (40.6%) recorded the lowest. In all the districts, the proportion of males currently attending school is higher than that of females. Table 7.4 shows that, the proportion of the population never attended school in rural (21.8%) areas is higher than those in urban (16.2%) areas.

Table 7.4: Population 3 years and older by district, school attendance, type of locality and sex

District	Total			Never			Now			Past		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Both Localities												
All Districts	2,012,853	953,678	1,059,175	19.1	12.9	24.7	43.1	46.9	39.7	37.7	40.1	35.6
KEEA	132,664	63,576	69,088	22.6	16.1	28.6	41.6	44.6	38.8	35.8	39.2	32.5
Cape Coast Metro	158,995	77,305	81,690	9.6	5.9	13.1	49.3	52.7	46.0	41.1	41.4	40.8
Abura-Asebu-Kwamankese	107,329	50,267	57,062	25.5	18.0	32.1	41.6	46.3	37.5	32.9	35.8	30.3
Mfantiman Municipal	180,058	80,743	99,315	22.3	15.9	27.5	43.8	47.7	40.6	33.9	36.5	31.9
Ajumako-Enyan-Essiam	124,897	57,154	67,743	20.3	12.5	26.9	43.7	49.6	38.7	36.0	38.0	34.4
Gomoa West	123,102	54,365	68,737	28.6	19.1	36.1	40.9	47.6	35.6	30.5	33.3	28.3
Effutu Municipal	63,325	30,095	33,230	18.5	13.1	23.4	47.2	51.9	42.8	34.3	35.0	33.8
Gomoa East	187,814	88,664	99,150	15.9	9.5	21.6	41.6	44.9	38.6	42.6	45.6	39.8
Ewutu Senya	177,742	84,214	93,528	17.0	11.4	22.0	40.6	43.4	38.2	42.4	45.3	39.8
Agona East	78,458	37,269	41,189	21.2	14.2	27.6	41.7	45.6	38.1	37.1	40.2	34.3
Agona West Municipal	106,222	49,517	56,705	14.8	9.2	19.8	41.6	45.8	38.0	43.6	45.0	42.3
Asikuma-Odoben-Brakwa	102,342	48,978	53,364	18.4	12.0	24.2	44.1	48.6	40.0	37.5	39.4	35.8
Assin South	94,682	46,040	48,642	19.4	13.6	25.0	44.3	47.8	41.0	36.3	38.6	34.1
Assin North Municipal	146,853	72,817	74,036	17.8	12.8	22.7	43.9	47.1	40.9	38.2	40.1	36.4
Twifo-Hemang-Lower Denkyira	106,700	52,439	54,261	20.0	14.2	25.6	44.1	46.9	41.4	35.9	38.9	33.0
Upper Denkyira East	67,082	32,809	34,273	16.6	12.1	21.0	41.3	43.2	39.4	42.1	44.7	39.6
Upper Denkyira West	54,588	27,426	27,162	21.8	16.5	27.2	41.8	43.5	40.1	36.4	40.1	32.7

Source: 2010 Population and Housing Census

Table 7.4: Population 3 years and older by district, school attendance, type of locality and sex (Urban)

District	Total			Never			Now			Past		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Urban												
All Districts	953,450	446,356	507,094	16.2	11.0	20.7	43.1	46.8	39.9	40.7	42.2	39.4
KEEA	47,507	21,874	25,633	22.8	17.1	27.6	40.9	45.1	37.4	36.2	37.7	35.0
Cape Coast Metro	122,441	58,814	63,627	9.4	6.1	12.5	49.3	52.4	46.4	41.3	41.5	41.1
Abura-Asebu-Kwamankese	35,922	16,681	19,241	33.8	28.6	38.4	36.9	40.5	33.8	29.3	30.9	27.8
Mfantseman Municipal	90,885	41,211	49,674	20.7	15.9	24.6	42.0	45.9	38.8	37.3	38.1	36.6
Ajumako-Enyan-Essiam	39,952	17,995	21,957	16.5	8.9	22.7	45.0	51.4	39.7	38.6	39.7	37.6
Gomoa West	52,389	23,163	29,226	31.2	24.0	36.9	39.1	44.6	34.7	29.7	31.4	28.4
Effutu Municipal	59,101	28,135	30,966	17.9	12.6	22.6	47.5	52.3	43.2	34.6	35.1	34.2
Gomoa East	98,381	47,796	50,585	11.7	7.3	15.8	40.9	42.8	39.0	47.4	49.8	45.2
Ewutu Senya	131,182	61,907	69,275	14.4	9.5	18.7	40.5	43.0	38.3	45.1	47.4	43.0
Agona East	34,116	15,678	18,438	17.0	10.1	22.9	41.7	46.4	37.7	41.3	43.5	39.4
Agona West Municipal	81,768	37,467	44,301	12.8	7.2	17.5	41.8	46.1	38.1	45.5	46.7	44.4
Asikuma-Odoben-Brakwa	49,485	22,936	26,549	15.9	9.5	21.4	43.8	49.0	39.4	40.3	41.5	39.2
Assin South	***	***	***	***	***	***	***	***	***	***	***	***
Assin North Municipal	53,032	25,710	27,322	11.9	7.9	15.7	46.3	49.6	43.3	41.8	42.6	41.0
Twifo-Hemang-Lower Denkyira	27,065	12,791	14,274	13.3	8.8	17.4	45.7	48.4	43.3	40.9	42.8	39.3
Upper Denkyira East	30,224	14,198	16,026	9.6	5.6	13.1	43.5	46.1	41.2	46.9	48.2	45.7
Upper Denkyira West	***	***	***	***	***	***	***	***	***	***	***	***

Note: *** No urban localities in the district

Source: 2010 Population and Housing Census

Table 7.4: Population 3 years and older by district, school attendance, type of locality and sex (Rural)

District	Total			Never			Now			Past		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Rural												
All Districts	1059403	507,322	552,081	21.8	14.6	28.5	43.1	47.0	39.5	35.1	38.4	32.0
KEEA	85,157	41,702	43,455	22.5	15.6	29.2	42.0	44.4	39.7	35.5	40.0	31.1
Cape Coast Metro	36,554	18,491	18,063	10.4	5.3	15.5	49.3	53.9	44.6	40.3	40.8	39.8
Abura-Asebu-Kwamankese	71,407	33,586	37,821	21.3	12.7	29.0	44.0	49.1	39.4	34.7	38.2	31.6
Mfantseman Municipal	89,173	39,532	49,641	24.0	15.8	30.5	45.5	49.5	42.3	30.5	34.7	27.2
Ajumako-Enyan-Essiam	84,945	39,159	45,786	22.1	14.1	29.0	43.0	48.7	38.2	34.9	37.2	32.9
Gomoa West	70,713	31,202	39,511	26.7	15.5	35.6	42.2	49.8	36.2	31.1	34.8	28.2
Effutu Municipal	4,224	1,960	2,264	27.4	19.6	34.2	42.0	47.6	37.2	30.6	32.9	28.6
Gomoa East	89,433	40,868	48,565	20.5	12.0	27.6	42.3	47.3	38.1	37.2	40.7	34.3
Ewutu Senya	46,560	22,307	24,253	24.3	16.5	31.5	40.9	44.3	37.9	34.7	39.2	30.6
Agona East	44,342	21,591	22,751	24.5	17.2	31.4	41.6	45.0	38.4	33.9	37.8	30.2
Agona West Municipal	24,454	12,050	12,404	21.7	15.4	27.8	41.2	45.0	37.5	37.2	39.6	34.7
Asikuma-Odoben-Brakwa	52,857	26,042	26,815	20.7	14.3	27.0	44.4	48.3	40.6	34.9	37.4	32.5
Assin South	94,682	46,040	48,642	19.4	13.6	25.0	44.3	47.8	41.0	36.3	38.6	34.1
Assin North Municipal	93,821	47,107	46,714	21.1	15.5	26.9	42.6	45.7	39.4	36.3	38.8	33.7
Twifo-Hemang-Lower Denkyira	79,635	39,648	39,987	22.3	16.0	28.5	43.6	46.4	40.7	34.2	37.6	30.7
Upper Denkyira East	36,858	18,611	18,247	22.5	17.1	27.9	39.4	41.0	37.9	38.1	41.9	34.2
Upper Denkyira West	54,588	27,426	27,162	21.8	16.5	27.2	41.8	43.5	40.1	36.4	40.1	32.7

Source: 2010 Population and Housing Census

7.5 Current School Attendance

Table 7.6 provides information on the population who are currently attending school. Over eight in ten of the population currently attending school are in basic schools comprising nursery (6.7%), kindergarten (16.0%), primary (45.4%) and JHS (17.8%). The proportion currently pursuing a Bachelor Degree is 3.8 percent and 0.2 percent are at the post graduate level. Asikuma-Odoben-Brakwa (51.9%) has the highest proportion of the population currently attending primary school in the Central Region followed by Agona East (50.6%), Upper Denkyira West (49.8%) and Gomoa West (49.1%), with Cape Coast Metropolis (27.0%) recording the lowest primary school attendance. About one-quarter of the population currently attending school in Cape Coast Metropolis and Effutu Municipal are in a Bachelor Degree Programme. The high proportions of the population currently attending Bachelor Degree Programme may be due to the location of the University of Cape Coast and the University of Education in Cape Coast Metropolis and Effutu Municipal respectively. Furthermore, the Cape Coast Polytechnic also offers Bachelor Degree programmes.

7.6 Past School Attendance

Table 7.7 shows that the highest levels of school attained by those who have ever been to school are JSS/JHS (32.9%) and Middle School (26.0%). In addition, 18.9% of the population of the Central Region has attained primary school level of education. At the Districts level, JSS/JHS is the highest level of education attained by persons in Upper Denkyira West (38.1%) and Twifo-Hemang-Lower Denkyira (37.8%). The proportions that have attained JSS/JHS level education only are lower in Cape Coast Metropolis (23.9%) and Effutu Municipal (27.3%). Furthermore, in Cape Coast Metropolis, 13.8 percent have attained tertiary (post secondary diploma, bachelors degree and post graduate) education while in Upper Denkyira, less than two percent have attained tertiary education.

Table 7.6: Population 3 years and older by district and current school attendance

District	All Levels	Nursery	Kinder garten	Primary	JHS	SHS	Vocational/ Technical / Commercial	Post middle/sec. certificate	Post secondary diploma	Bachelor degree	Post graduate (Cert., Diploma, Masters, PHD, ect)
All Districts	868,129	6.7	16.0	45.4	17.8	7.9	0.4	0.5	1.3	3.8	0.2
Komenda/Edina/Eguafo/Abirem	55,203	11.3	15.7	45.8	18.0	6.4	0.5	0.4	1.1	0.6	0.2
Cape Coast Metro	78,379	4.2	8.7	27.0	13.1	11.4	0.6	0.5	6.2	27.3	0.9
Abura-Asebu-Kwamankese	44,669	7.1	17.1	48.8	17.9	7.0	0.4	0.3	0.9	0.5	0.0
Mfantsiman Municipal	78,813	8.6	14.3	44.7	18.6	11.7	0.3	0.5	0.8	0.5	0.1
Ajumako-Enyan-Essiam	54,536	6.6	19.2	47.3	18.3	6.4	0.4	0.3	0.8	0.6	0.0
Gomoa West	50,321	8.3	16.1	49.1	19.0	6.1	0.3	0.2	0.6	0.3	0.0
Effutu Municipal	29,862	5.6	9.9	33.8	13.3	6.9	0.7	2.0	1.7	25.4	0.6
Gomoa East	78,059	8.1	16.7	46.8	17.7	7.9	0.5	0.4	1.0	0.9	0.1
Ewutu Senya	72,222	8.2	16.1	46.9	17.9	8.5	0.3	0.3	0.9	0.8	0.1
Agona East	32,681	6.6	17.3	50.6	18.6	5.6	0.3	0.2	0.5	0.4	0.1
Agona West Municipal	44,209	5.4	15.4	48.0	19.9	8.7	0.4	0.3	0.9	0.8	0.1
Asikuma-Odoben-Brakwa	45,131	5.0	18.3	51.9	18.2	5.1	0.4	0.2	0.5	0.4	0.0
Assin South	41,931	4.8	19.7	48.8	18.6	6.6	0.2	0.3	0.7	0.3	0.0
Assin North Municipal	64,528	4.2	18.3	48.6	18.6	8.4	0.4	0.3	0.9	0.4	0.1
Twifo-Hemang-Lower Denkyira	47,077	7.1	18.5	47.0	18.8	6.4	0.2	0.9	0.6	0.3	0.0
Upper Denkyira East	27,686	4.6	15.9	47.3	19.5	9.7	0.1	1.6	0.9	0.5	0.1
Upper Denkyira West	22,822	5.8	19.8	49.8	18.0	5.9	0.1	0.2	0.2	0.1	0.0

Source: 2010 Population and Housing Census

Table 7.7: Past school attendance (six years and older) by highest level attained and district

District	Total	Primary	JSS/ JHS	Middle	SSS/ SHS	Secondary	Vocational/ Technical/ Commercial	Post middle/ secondary certificate	Post Sec. Diploma	Bachelor degree	Post graduate (Cert. Diploma Masters PHD)
Total	759,387	18.9	32.9	26.0	9.1	2.9	3.4	1.8	3.0	1.7	0.5
Komenda/Edina/Eguafo/Abirem	47,431	21.9	30.6	26.5	8.0	2.5	3.8	1.8	3.0	1.5	0.4
Cape Coast Metro	65,326	14.2	23.9	22.2	11.8	4.2	7.6	2.3	6.7	5.2	1.9
Abura-Asebu-Kwamankese	35,291	24.5	30.4	27.2	6.9	2.2	3.1	1.6	2.7	1.3	0.3
Mfantso	61,101	18.8	32.8	27.6	8.0	2.8	3.3	2.0	3.1	1.4	0.3
Ajumako-Enyan-Essiam	45,007	20.1	32.7	32.4	6.2	1.8	2.1	1.7	2.2	0.7	0.2
Gomoa West	37,543	21.9	36.7	25.6	6.6	2.0	2.3	1.9	2.1	0.7	0.2
Effutu	21,750	19.0	27.3	22.0	9.7	3.6	5.6	2.0	4.2	4.3	2.1
Gomoa East	79,952	16.6	34.4	20.9	13.5	4.2	3.6	1.7	3.3	1.5	0.4
Ewutu Senya	75,342	19.7	32.6	21.1	11.7	3.8	4.0	1.7	3.3	1.8	0.4
Agona East	29,118	20.3	36.0	28.2	6.3	2.2	2.3	1.4	1.8	1.2	0.2
Agona West	46,268	17.4	31.9	26.7	10.1	3.4	3.4	1.8	3.0	2.0	0.4
Asikuma-Odoben-Brakwa	38,382	21.3	34.4	29.8	6.1	1.8	2.1	1.6	2.1	0.7	0.1
Assin South	34,343	18.5	35.1	31.5	6.9	1.8	2.0	1.7	1.7	0.7	0.1
Assin North	56,166	19.7	36.5	26.2	8.1	2.2	2.5	1.6	2.1	1.0	0.2
Twifo-Hemang-Lower Denkyira	38,278	17.3	37.8	28.0	8.3	1.9	2.1	1.6	2.1	0.8	0.2
Upper Denkyira East	28,227	14.8	34.2	29.1	9.7	3.4	2.6	1.9	2.6	1.4	0.3
Upper Denkyira West	19,862	19.5	38.1	29.2	7.2	1.7	1.2	1.3	1.3	0.4	0.1

Source: 2010 Population and Housing Census

7.8 Level of Education (Persons Three years and Older)

Table 7.8 shows the level of education for persons three years and older in the Central region in 2010. At the regional level, about one in five (19.1%) have never attended school. Slightly more than one-quarter (26.7%) have attended up to primary level, and a further 21% up to JSS/JHS level. About ten percent of the population three years and older (9.8%) are either in nursery (2.9%) or kindergarten (6.9%).

There are also substantial differences between males and females regarding levels of education. The proportion of females who have never attended school (24.7%) is almost twice that of males (12.9%). The disparities between males and females in proportions that have never attended school hold true in urban (11.0% males and 20.7% females) and rural localities (14% males, 28.5% females). As observed in earlier sections, levels of education among persons in urban areas are higher than rural areas, even among the same sex. Twenty one percent of females have never attended school in urban localities; compared with 28.5 percent in rural localities.

The disparity between males and females who have never been to school, which is wide at the higher educational levels disappearing gradually as one moves to the lower levels and is almost the same from JSS (21.6% males and 20.4% females), to Primary school level (26.8% males and 26.6% females). This is illustrative of a situation of increasing schooling attendance of females. This implies that the increasing investment in female education is paying dividend and more needs to be done to address the many obstacles which militate against female education particularly at post JSS levels. For instance in the rural areas, girls (28.0%) and boys (28.7%) at the Primary School level and girls (20.1%) and boys (22.5%) at the JHS level but the differential widens from SHS/SSS. This points to increasing barriers to female education after the JHS.

Table 7.8: Population three years and older by level of education, type of locality and sex

Level of education	Population			Percent		
	Total	Male	Female	Total	Male	Female
Both localities						
Total	2,012,853	953,678	1,059,175	100.0	100.0	100.0
Never attended	385,337	123,342	261,995	19.1	12.9	24.7
Nursery	58,503	29,498	29,005	2.9	3.1	2.7
Kindergarten	139,034	70,877	68,157	6.9	7.4	6.4
Primary	537,579	255,786	281,793	26.7	26.8	26.6
JSS/JHS	421,866	206,139	215,727	21.0	21.6	20.4
Middle	179,937	102,393	77,544	8.9	10.7	7.3
SSS/SHS	142,432	74,559	67,873	7.1	7.8	6.4
Secondary	17,003	11,033	5,970	0.8	1.2	0.6
Vocational/ Technical/ Commercial	29,030	15,508	13,522	1.4	1.6	1.3
Post middle/ secondary certificate	17,532	9,185	8,347	0.9	1.0	0.8
Post- secondary diploma	34,085	21,901	12,184	1.7	2.3	1.2
Bachelor degree	45,616	29,663	15,953	2.3	3.1	1.5
Post graduate (Cert. Diploma Masters Ph.D etc.)	4,899	3,794	1,105	0.2	0.4	0.1

Source: 2010 Population and Housing Census

Table 7.8: Population 3 years and older by level of education, type of locality and sex (Urban)

Level of education	Population			Percent		
	Total	Male	Female	Total	Male	Female
Urban						
Total	953,450	446,356	507,094	100.0	100.0	100.0
Never attended	154,047	49,168	104,879	16.2	11.0	20.7
Nursery	27,172	13,737	13,435	2.8	3.1	2.6
Kindergarten	56,787	29,020	27,767	6.0	6.5	5.5
Primary	237,361	109,947	127,414	24.9	24.6	25.1
JSS/JHS	196,811	92,007	104,804	20.6	20.6	20.7
Middle	86,602	44,560	42,042	9.1	10.0	8.3
SSS/SHS	88,683	45,148	43,535	9.3	10.1	8.6
Secondary	11,265	6,946	4,319	1.2	1.6	0.9
Vocational /Technical/ Commercial	19,413	9,812	9,601	2.0	2.2	1.9
Post middle/ secondary certificate	11,120	4,994	6,126	1.2	1.1	1.2
Post-secondary diploma	22,079	13,643	8,436	2.3	3.1	1.7
Bachelor degree	38,265	24,420	13,845	4.0	5.5	2.7
Post graduate (Cert. Diploma Masters Ph.D etc.)	3,845	2,954	891	0.4	0.7	0.2

Source: 2010 Population and Housing Census

Table 7.8: Population three years and older by level of education, type of locality and sex (Rural)

Level of education	Population			Percent		
	Total	Male	Female	Total	Male	Female
Rural						
Total	1,059,403	507,322	552,081	100.0	100.0	100.0
Never attended	231,290	74,174	157,116	21.8	14.6	28.5
Nursery	31,331	15,761	15,570	3.0	3.1	2.8
Kindergarten	82,247	41,857	40,390	7.8	8.3	7.3
Primary	300,218	145,839	154,379	28.3	28.7	28.0
JSS/JHS	225,055	114,132	110,923	21.2	22.5	20.1
Middle	93,335	57,833	35,502	8.8	11.4	6.4
SSS/SHS	53,749	29,411	24,338	5.1	5.8	4.4
Secondary	5,738	4,087	1,651	0.5	0.8	0.3
Vocational/ Technical/ Commercial	9,617	5,696	3,921	0.9	1.1	0.7
Post middle/secondary certificate	6,412	4,191	2,221	0.6	0.8	0.4
Post-secondary diploma	12,006	8,258	3,748	1.1	1.6	0.7
Bachelor degree	7,351	5,243	2,108	0.7	1.0	0.4
Post graduate (Cert. Diploma Masters Ph.D etc.)	1,054	840	214	0.1	0.2	0.0

Source: 2010 Population and Housing Census

CHAPTER EIGHT

FERTILITY, MORTALITY AND MIGRATION

8.1 Introduction

The 2010 census collected data on fertility which is the natural capability of producing offspring and mortality which refers to all deaths that occurred in the household during the 12 months preceding the Census Night. Migration on the other hand is the physical movement by humans from one area to another, sometimes over long distances or in large groups. For the 2010 census, migration of the population is measured by combining data on the place of birth, place of enumeration, duration of stay at place of enumeration and former household members emigrated to outside the borders of Ghana.

All over the world there is sufficient evidence that attests to differences in the indicators for these three components of population dynamics. These differences are the result of a complex interplay of demographic, economic, socio-cultural, environmental and political factors. It has been established that specific factors such as educational attainment, occupation, marital status, place of residence and the quality of health facilities exert some influence on fertility, mortality and migration

8.2 Fertility

Information on fertility is key in analysing the growth of a country's population. Women were asked some questions to determine the total number of live births they have in their lifetime, children surviving and births in the past 12 months. Data collected include that of females 12-14 years which is below the recommended age-specific fertility range of 15-19 years usually used in computing adolescent fertility. This is done because evidence from 2000 census, other research works and administrative records from the health sector show that there are girls below 15 years who have been pregnant and either gave birth or aborted the pregnancy.

8.3 Definition of Measures

Fertility refers to the actual birth performance i.e. frequency or childbearing among a population and fecundity denotes the physiological capacity of a woman, man or couple to reproduce (International Union for the Scientific Study of Population, 1982). Two types of fertility data were collected: lifetime fertility and current fertility. Lifetime fertility refers to the total number of live births females 12 years and older have ever given birth to during their life time (children ever born). Current fertility refers to the number of live births that females 12-54 years old have in the 12 months preceding the Census Night.

The Crude Birth Rate (CBR) is defined as the number of births in a given year divided by the number of people in the population in the middle of that year. The general fertility rate (GFR) is

the number of births in a given year divided by the mid-year population of women in the age groups 15-44 and 15-49. This analysis used women between 15 and 49 years because women still have births after age 45. An age specific fertility rate (ASFR) is defined as the number of births to women of a given age group per 1,000 women in that age group. It is usually calculated for 5-year age groups from 15-19 years to 45-49 years. The total fertility rate (TFR) which is widely used in the analysis is the average number of live births among 1,000 women exposed throughout their childbearing years (15-49 years) to the schedule of a given set of age specific fertility rates, assuming no women died during the childbearing years. In other words, it is the average number of children a woman will have given birth by the end of her reproductive years if current fertility rates prevailed. The contraceptive prevalence rate is the percentage of currently married women aged 15-49 years currently using any method of contraception (modern and traditional).

Table 8.1 shows that the Central region recorded a total fertility rate of 3.60 which is higher than the national average of 3.28. There are variations in fertility with regards to urban and rural women. The total fertility for women in the rural areas is one child higher (4.1) than in the urban areas (3.1).

The Region also recorded a General Fertility Rate (GFR) of 105.3. As expected, the GFR, which is the number of births per 1000 women aged 15- 49 years, is higher in rural (120.4) than urban (90.8) areas. The table shows that Crude Birth Rate (CBR) is 26.8. CBR is low in the urban (25.0) than rural (28.4) areas.

The age-specific fertility rates reflect changes in fertility rates for each specific age group at a given time period. The region recorded highest fertility rates among age group 20-39.

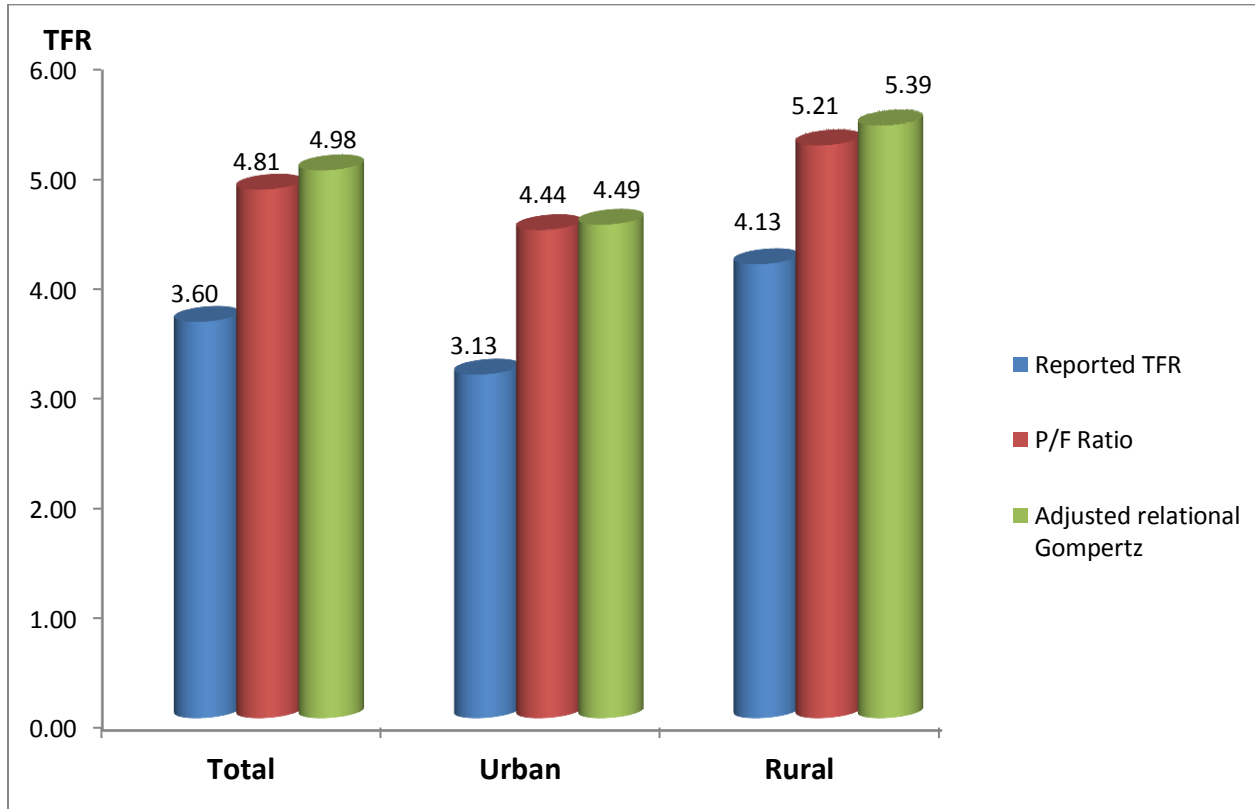
Table 8.1: Age specific fertility rates, total fertility rate, the general fertility rate, and crude birth rate by type of locality

Age	Total	Urban	Rural
15-19	0.05	0.03	0.05
20-24	0.14	0.09	0.17
25-29	0.18	0.15	0.20
30-34	0.16	0.15	0.18
35-39	0.12	0.12	0.14
40-44	0.06	0.06	0.07
45-49	0.02	0.02	0.03
TFR	3.6	3.1	4.1
GFR	105.3	90.8	120.4
CBR	26.8	25.0	28.4

Source: 2010 Population and Housing Census

The reported TFR for Central region may be underestimated, probably due to underreporting of current fertility and age misreporting. To correct this errors, the Brass relational Gompertz and P/F ratio model were computed to adjust for fertility. Figure 8.1 shows that the estimated adjusted fertility derived from the Brass relational Gompertz model for Central region is 1.68 children higher than the reported fertility. The difference between reported and adjusted fertility in urban (1.33) is slightly higher than those in the rural (1.26) areas.

Figure 8.1: Reported and adjusted total fertility rates

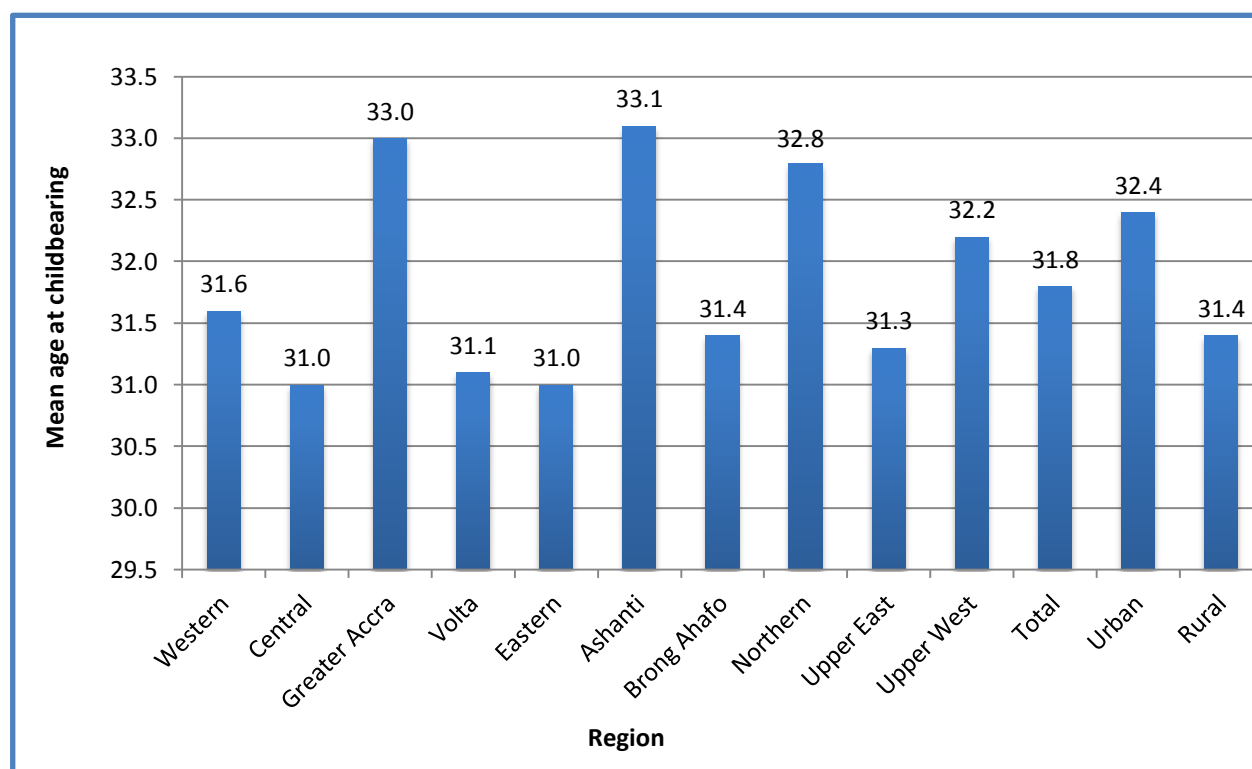


Source: 2010 Population and Housing Census

8.4 Mean Age at Child Bearing

The age of a woman at the time of her first birth is one of the factors that influence fertility. Early child bearing contributes to increasing fertility while delay in giving birth leads to decreasing fertility. Figure 8.2 indicates that the Central and Eastern regions have the lowest mean age at childbearing (31.0) in Ghana. This is evident as the Central region has the highest reported TFR of 3.60 in Ghana.

Figure 8.2: Mean age at childbearing, Ghana, 2010



Source: 2010 Population and Housing Census

8.5 Children Ever Born (CEB) and Mean Children Ever Born

Table 8.2 provides information on age specific children ever born in both rural and urban localities. The mean number of children ever born to women is 5.4; with those in the rural (5.7) recording about one child more than those in the urban (5.0) areas. The data also show that mean number of children ever born increases with age. The age specific mean number of children ever born highlights the differences in fertility behaviour at different ages. Child bearing starts as early as ages 12-14 with a mean number of CEB of 1.3. The mean number of childbearing increases from 1.4 for women aged 15-19 to 6.7 at ages 45-49. Mean CEB at ages 12-14 is higher in urban (1.3) areas than rural (1.2). However, the situation is different in all the other ages where mean CEB is higher in rural areas than urban.

Table 8.2: Children ever born, mean children ever born by type of locality

Age	Total		Urban		Rural	
	Children ever born		Children ever born		Children ever born	
	Total	Mean	Total	Mean	Total	Mean
Total	1,458,731	5.4	624,678	5.0	834,053	5.7
12 - 14	393	1.3	178	1.3	215	1.2
15 - 19	14,942	1.4	6,220	1.4	8,722	1.4
20 - 24	79,544	2.2	33,792	2.1	45,752	2.3
25 - 29	159,884	3.2	70,676	3.0	89,208	3.4
30 - 34	213,644	4.3	97,323	4.0	116,321	4.6
35 - 39	254,374	5.3	110,622	4.8	143,752	5.6
40 - 44	255,949	6.2	109,440	5.7	146,509	6.6
45 - 49	233,868	6.7	96,785	6.1	137,083	7.1
50 - 54	246,133	7.1	99,642	6.6	146,491	7.5

Source: 2010 Population and Housing Census

8.6 Fertility at District Level

There are substantial variations in fertility across the Districts and the unadjusted figures are presented in Table 8.3. The District with the highest TFR is Asikuma-Odoben-Brakwa (4.68), followed by Upper Denkyira West (4.52), Assin South (4.31) and Abura-Asebu-Kwamankese (4.15). The comparison of districts by CBR and GFR roughly follows a similar pattern as TFR. On the whole districts with high CBR and GFR also have high TFR. Factors explaining the fertility variations may include low use of contraceptives and lower ages at first marriage in these districts.

Table 8.3: Total fertility rate, the general fertility rate, and crude birth rate by district

District	Population	Number of women	Births in the last 12 months	TFR	GFR	CBR
Komenda-Edina-Eguafo-Abirem	144,705	33,902	3,604	3.60	106.3	24.9
Cape Coast Metropolis	169,894	51,308	3,038	2.21	59.2	17.9
Abura-Asebu-Kwamankese	117,185	27,603	3,353	4.15	121.5	28.6
Mfantseman Municipal	196,563	51,056	4,888	3.51	95.7	24.9
Ajumako-Enyan-Essiam	138,046	31,419	3,629	4.01	115.5	26.3
Gomoa West	135,189	32,740	3,689	3.82	112.7	27.3
Effutu Municipal	68,597	19,261	1,644	2.85	85.4	24.0
Gomoa East	207,071	54,787	6,262	3.71	114.3	30.2
Ewutu Senya	195,306	52,519	5,301	3.34	100.9	27.1
Agona East	85,920	20,368	2,434	3.97	119.5	28.3
Agona West Municipal	115,358	29,580	2,703	3.09	91.4	23.4
Asikuma-Odoben-Brakwa	112,706	25,731	3,518	4.68	136.7	31.2
Assin South	104,244	23,709	3,002	4.31	126.6	28.8
Assin North Municipal	161,341	38,331	4,789	4.14	124.9	29.7
Twifo-Hemang-Lower Denkyira	116,874	28,591	3,262	3.85	114.1	27.9
Upper Denkyira East Municipal	72,810	18,690	1,986	3.53	106.3	27.3
Upper Denkyira West	60,054	13,789	1,899	4.52	137.7	31.6
All Districts	2,201,863	553,384	59,001	3.60	106.6	26.8

Source: 2010 Population and Housing Census

8.7 Mortality

8.7.1 Definition of Concepts

The mortality estimates used in this chapter are childhood and maternal mortality ratio and rate, crude death rate, infant death rate, age-specific death rate and life expectancy at birth. Childhood mortality measures the risk of dying from birth to exact age five years. The specific measures considered are infant, child and under-five mortality rates (in years).

Infant Mortality ($1q_0$ or q_1) is the probability of dying between birth and age one. This is expressed per 1,000 live births

Child Mortality ($4q_1$ or q_4) is the probability of dying between age one and five.

Under-five Mortality ($5q_0$ or q_5) is a combination of infant and child mortality and is defined as the probability of dying between birth and exact age five. The rate is expressed per 1,000 children.

Maternal Mortality Ratio is defined as the number of deaths due to pregnancy related causes (puerperal causes) per 100,000 live births.

Maternal Mortality Rate relates the number of deaths due to pregnancy related causes to the number of women of the child-bearing age group (15-49 years). The death due to pregnancy related causes must occur whilst pregnant, during delivery, or within six weeks after the end of the pregnancy or childbirth.

Crude Death Rate is the number of deaths per 1,000 population in a given year.

Infant Death Rate is the number of deaths to infants in a given year per total live births in that same year.

Age-Specific Death Rate is the number of deaths of people in a specified age group per 1,000 population of that age group.

Life Expectancy (e°_0) is an estimate of the *average* number of additional years a person could expect to live if the age-specific death rates for a given year prevailed for the rest of a person's life.

8.8 Household Deaths

The highest proportions of deaths, as shown in Table 8.3, occurred in children less than five years (28.8%) and those 70 years and older (20.1%). The pattern of age specific death rates for males and females are similar to the regional total figures. Additionally, the proportion of under-five male deaths (32.0%) is higher than that of female (25.4%). Between ages 15-49, the proportions of female deaths are higher than males.

Table 8.3: Proportion of deaths in the last 12 months by age and sex

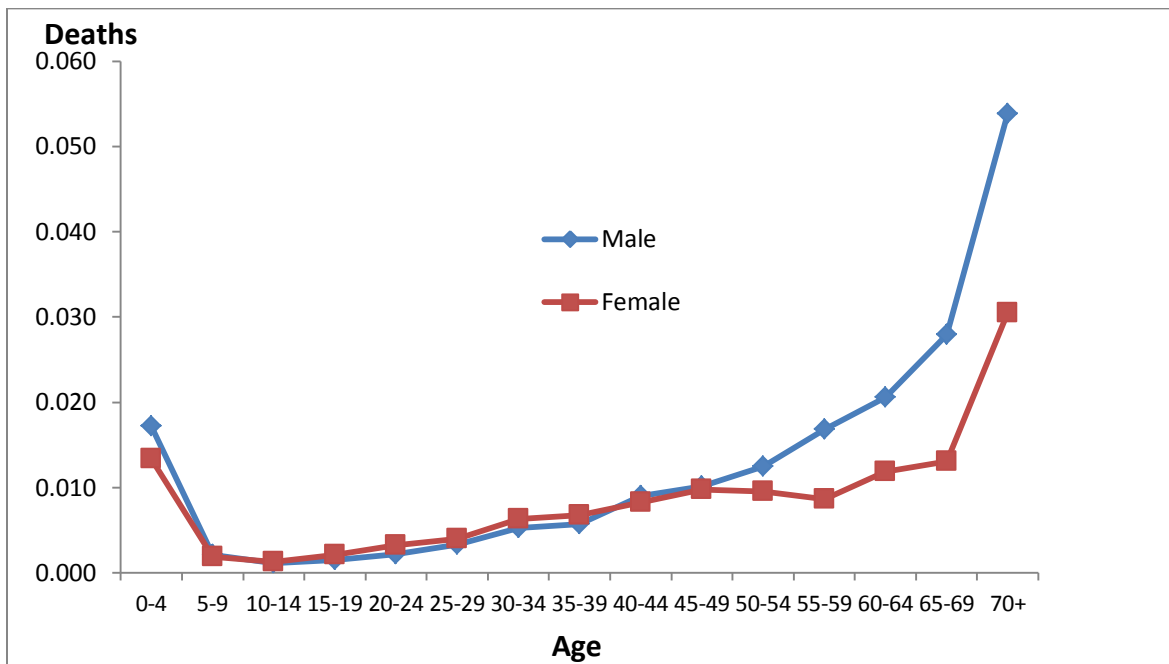
Age	Number	Total	Male	Female
Total	16,694	100.0	100.0	100.0
0-4	4,807	28.8	32.0	25.4
5-9	579	3.5	3.6	3.3
10-14	333	2.0	1.8	2.2
15-19	453	2.7	2.1	3.3
20-24	541	3.2	2.4	4.2
25-29	598	3.6	2.8	4.4
30-34	770	4.6	3.7	5.6
35-39	750	4.5	3.6	5.4
40-44	867	5.2	4.9	5.5
45-49	836	5.0	4.6	5.5
50-54	854	5.1	5.0	5.2
55-59	634	3.8	4.7	2.9
60-64	723	4.3	4.9	3.7
65-69	590	3.5	4.2	2.8
70+	3,359	20.1	19.7	20.6

Source: 2010 Population and Housing Census

8.9 Age Specific Death Rates

Table 8.4 and Figure 8.3 provide information on age specific death rates (ASDRs). The data show that death rates for males and females are higher in ages 0-4 but lowest at ages 5-14. The death rates start rising at ages 15-19 and intensifies with increase in age. Between ages 15-49 (the reproductive period), ASDRs for females are higher than males and this may be attributed to maternal mortality. ASDRs for males are higher at ages 50 years and older than females and this is an indication of a lower life expectancy for males compared to females. Additionally, at ages 50 years and older, differences between male and female ASDRs are very high compared with the lower age groups.

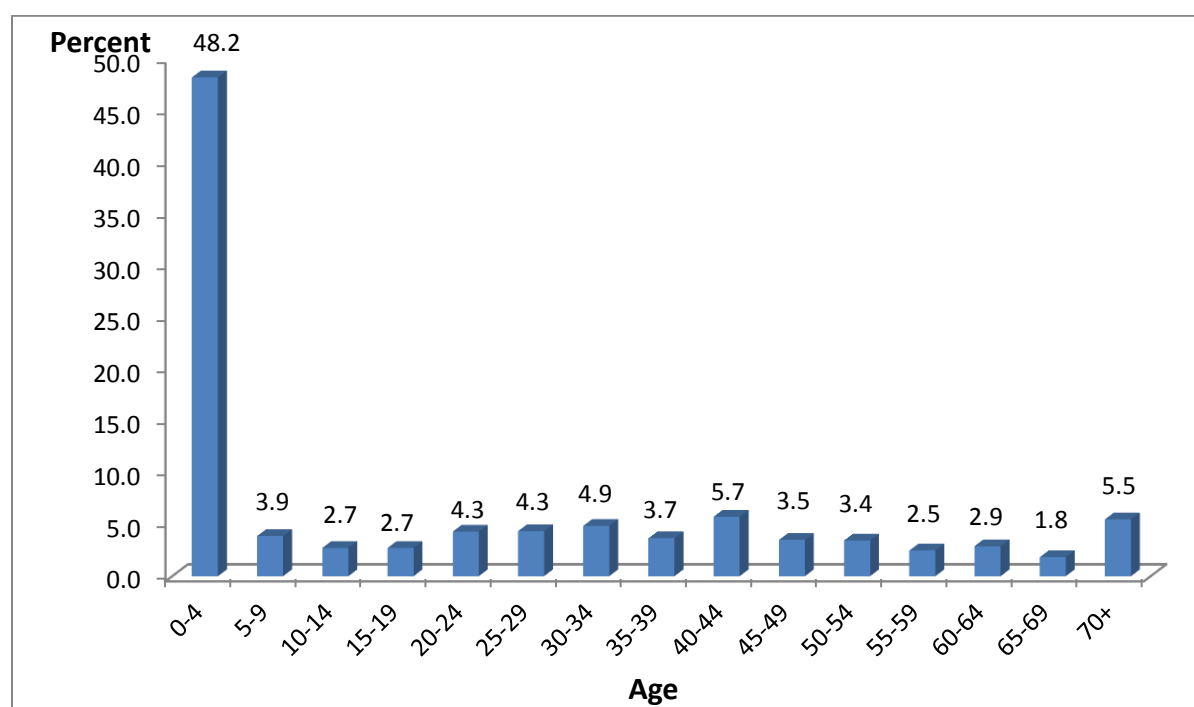
Figure 8.3: Reported age-specific death rates by sex, 2010



Source: 2010 Population and Housing Census

Figure 8.4 provides information on deaths which occurred in the household during the last 12 months due to accidents, violence, homicide or suicide. The data show that children under five years recorded the highest proportion (48.8%) of deaths due to accidents, violence, homicide and suicide. The second highest proportion of deaths occurred in the age group 40-44 years (5.7%), followed by those who were 70 years and older (5.5%), 30-34 years (4.9%) with those aged 65-69 years (1.8%) recording the least.

Figure 8.4: Proportion of deaths due to accident/violence/homicide/suicide



Source: 2010 Population and Housing Census

8.10 Infant and Under-Five Mortality

The 2010 PHC data enables indirect estimation of basic early age mortality indicators (infant and under five mortality). Questions were asked on children ever born and children surviving to mothers aged 15-49. Data on children ever born and children surviving classified by age of mother can be used to determine probabilities of surviving to specific ages. Using the Q-FIVE model, the probabilities of surviving to exact ages can then be fitted to a model life table that allows the computation of approximate infant and under five mortality rates. Table 8.5 shows that in Central region, the highest infant mortality rate (i.e. infant deaths per 1,000 live births) was recorded in Effutu (80), followed by Komenda-Edina-Eguafo-Abirem (70), Cape Coast (67), and Agona West (66) and Gomoa West (65). The district with the lowest infant mortality rate is Twifo-Hemang-Lower Denkyira (49).

Apart from Effutu recording the highest infant mortality rate, it also had the highest under-five mortality rate of 128 deaths per 1,000 children. Komenda-Edina-Eguafo-Abirem, Cape Coast, Agona West and Gomoa West also had relatively high under-five mortality rates of 100 or higher. Two districts, Twifo-Hemang-Lower Denkyira (73) and Upper Denkyira (73) recorded the lowest under-five mortality rates. Further studies may be needed to examine the reasons for the mortality differentials across the districts.

Table 8.5: Infant and child mortality by district and reference period

District	Infant mortality	Under five mortality	Reference period
All Districts	61	94	2002.7-2006.8
Komenda-Edina-Eguafo-Abirem Municipal	70	110	2002.2-2006.7
Cape Coast Metropolis	67	105	2005.1-2007.3
Abura-Asebu-Kwamankese	64	99	2002.1-2006.7
Mfantiman Municipal	63	98	2002.0-2006.9
Ajumako-Enyan-Essiam	59	90	2002.3-2006.8
Gomoa West	65	100	2002.1-2006.7
Effutu Municipal	80	128	2002.8-2006.7
Gomoa East	57	91	2002.3-2006.7
Ewutu Senya	60	92	2002.7-2006.9
Agona East	57	87	2002.3-2006.7
Agona West Municipal	66	103	2002.9-2006.8
Asikuma-Odoben-Brakwa	59	89	2002.2-2006.7
Assin South	54	81	2002.4-2006.8
Assin North Municipal	59	90	2002.5-2006.8
Twifo-Hemang-Lower Denkyira	49	73	2002.4-2006.8
Upper Denkyira East Municipal	59	90	2003.0-2007.0
Upper Denkyira West	53	73	2002.1-2006.7

Source: 2010 Population and Housing Census

8.11 Maternal Deaths

There is growing interest in the use of decennial censuses for the generation of data on maternal mortality because of its ability to disaggregate data compared with surveys. This section presents information on deaths of women 15-49 years due to maternal mortality or pregnancy-related deaths (i.e. died during pregnancy, delivery or within 42 days of the termination of a pregnancy). A true maternal death requires specific cause of death information. As recommended, the 2010 PHC used the WHO pregnancy-related death model which is determined solely by timing of death relative to pregnancy, childbirth and the postpartum period to measure maternal mortality.

Table 8.6 shows that in the Central region, a total of 307 maternal deaths were recorded. The maternal mortality ratio (MMR) is 520 deaths per 100,000 live births which is higher than the national average of 485 deaths per 100,000 live births. The age specific maternal mortality ratios indicate that a high figure at age 15-19 (499) then declines through age 20-24 (392) to 25-29 (388). From ages 30-34, MMR starts rising and this phenomenon continues with increase in age.

An important indicator of maternal mortality is the lifetime risk of maternal death (LTR). The LTR reflects the chances of a woman dying from maternal causes over the course of her 35-year reproductive life span. This indicator takes into account the probability of a death due to maternal causes each time a woman becomes pregnant. Table 8.6 shows that the life time risk of maternal deaths in Central region is about 16 per 1,000 women. The proportion of deaths due to maternal causes is generally expected to follow the age-specific fertility distribution, but to be rather high at both very young and older ages to reflect greater obstetric risks for women in these categories.

Table 8.6: Maternal mortality by age

Age	Number of Women	Female Deaths	Maternal Deaths	Births in last 12 months	MM Ratio (per 100,000 live births)	MM Rate (per 1,000 women)	Lifetime Risk of Maternal Deaths (per 1,000 women)
12-14	79,292		5	105			
15 - 19	124,925	270	23	5,127	449	0.18	0.9
20 - 24	103,551	339	52	13,262	392	0.50	2.5
25 - 29	89,132	354	60	15,468	388	0.67	3.4
30 - 34	71,654	451	46	11,564	398	0.64	3.2
35 - 39	64,573	438	45	8,342	539	0.70	3.5
40 - 44	54,183	447	41	3,391	1,209	0.76	3.8
45 - 49	45,366	444	21	1,138	1,845	0.46	2.3
50-54	44,150	422	14	604			
Total	676,826	3,165	307	59,001	520	0.45	15.9

Source: 2010 Population and Housing Census

8.12 Birth Place and Migratory Pattern

Table 8.7 shows the birthplace of residents and shows the proportion born in the same locality and for those born outside the Region of birth. For the purpose of this analysis, all persons born outside the place of enumeration are considered as migrants. In 2010, about two-thirds (64.8%) of all persons in the Central Region were born in the same locality in which they were enumerated. A further 16.3 percent were born outside the locality but in the same region. Altogether, 81.1 percent of persons were born in the Region, 17 percent in other regions of Ghana and about two percent outside Ghana. About four percent of persons in the Central Region (3.9%) were born in the Greater Accra Region, 3.5 percent in Eastern Region, and 2.8 percent in Ashanti Region.

The locality of birth varies across the Districts. In three Districts, about three-quarters of persons were born in the same locality of enumeration, Gomoa West (79.6%), Ajumako-Enyan-Essiam (76.2%) and Abura-Asebu-Kwamankese (75.7%). In two Districts, Ewutu Senya (43.7%) and Gomoa East (45.2 percent), less than one-half of their population were born in their locality of enumeration. Ewutu Senya and Gomoa East attract migrants many of whom reside there and commute to Accra. More than a third of the population of Ewutu Senya (38.0%) and 34.6 percent of Gomoa East were born outside of the Central Region.

Given their proximity to Accra, 13.5 percent of persons in Ewutu Senya and 10.0 percent in Gomoa East were born in Greater Accra region. The two Districts with the lowest proportions of in-migrants are Ajumako-Enyan-Essiam and Gomoa West where only 7.9 percent were born outside Central Region. In five Districts, one in five persons are migrants from other parts of the Region. These are Asikuma-Odoben-Brakwa (20.3%), Assin South (20.3%), Twifo-Hemang-Lower Denkyira (20.3%), Gomoa East (20.2%), and Assin North (19.1%). Gomoa East (6.3%) and Komenda-Edina-Eguafo- Abirem (4.8%) are the two Districts with the highest proportion of persons born in other ECOWAS countries.

Table 8.7: Population by district and birthplace

Birthplace	Population	Same locality	Different locality in this region	Born outside region	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	Other ECOWAS	African other than ECOWAS	Outside Africa
Total	2,201,863	64.8	16.3	18.7	2.6	0.0	3.9	2.1	3.5	2.8	0.8	0.6	0.4	0.2	1.7	0.0	0.1
KEEA Municipal	144,705	70.8	13.0	16.1	4.4	0.0	1.7	1.6	1.1	1.5	0.4	0.3	0.1	0.1	4.8	0.0	0.1
Cape Coast Metropolis	169,894	57.5	14.0	28.3	4.9	0.0	6.6	2.7	3.7	5.3	1.4	0.9	0.7	0.5	1.5	0.1	0.3
Abura-Asebu-Kwamankese	117,185	75.7	14.3	9.8	2.6	0.0	1.3	0.5	0.9	2.1	0.5	0.2	0.3	0.1	1.3	0.0	0.0
Mfantseman Municipal	196,563	71.9	15.5	12.5	3.0	0.0	2.4	1.0	1.6	2.0	0.5	0.3	0.1	0.1	1.4	0.0	0.1
Ajumako-Enyan-Essiam	138,046	76.4	15.5	7.9	2.1	0.0	1.5	0.4	1.4	1.4	0.4	0.1	0.1	0.0	0.5	0.0	0.0
Gomoa West	135,189	79.6	12.5	7.9	2.0	0.0	1.7	0.7	1.4	1.0	0.3	0.1	0.1	0.0	0.6	0.0	0.0
Effutu Municipal	68,597	67.7	8.3	24.1	2.7	0.0	4.4	4.2	3.5	4.0	1.6	1.1	0.9	0.5	1.1	0.0	0.1
Gomoa East	207,071	45.2	20.2	34.6	2.3	0.0	10.0	3.7	6.3	3.1	0.9	1.2	0.5	0.2	6.3	0.0	0.1
Ewutu Senya	195,306	43.7	18.3	38.0	2.3	0.0	13.5	5.8	7.2	3.8	1.2	1.4	0.6	0.2	1.7	0.1	0.2
Agona East	85,920	74.0	15.4	10.8	1.2	0.0	1.3	1.7	3.3	1.1	0.3	0.3	0.1	0.1	1.3	0.0	0.1
Agona West Municipal	115,358	66.8	19.3	14.0	1.9	0.0	2.3	1.4	4.7	1.8	0.5	0.3	0.1	0.1	0.8	0.0	0.1
Asikuma-Odoben-Brakwa	112,706	71.2	20.3	8.4	1.5	0.0	1.1	0.7	2.7	1.3	0.3	0.2	0.1	0.0	0.5	0.0	0.0
Assin South	104,244	68.7	20.3	10.9	1.5	0.0	1.2	1.2	2.9	2.1	0.6	0.4	0.4	0.2	0.4	0.0	0.0
Assin North Municipal	161,341	64.2	19.1	16.7	1.5	0.0	1.5	2.2	5.0	3.6	0.9	0.6	0.4	0.2	0.6	0.1	0.1
Twifo-Hemang-Lower Denkyira	116,874	64.5	20.3	15.4	2.8	0.0	1.4	3.0	4.6	1.7	0.6	0.3	0.2	0.1	0.6	0.0	0.1
Upper Denkyira East Municipal	72,810	61.7	11.6	26.8	5.1	0.0	1.4	1.9	3.0	8.8	1.5	1.5	2.1	0.8	0.6	0.0	0.1
Upper Denkyira West	60,054	71.3	9.1	19.6	3.2	0.0	0.6	1.0	1.5	5.8	2.5	1.8	1.7	1.0	0.5	0.0	0.0

Source: 2010 Population and Housing Census

8.13 Net Migration

A total of 374,443 persons recorded in the Central Region were not born in the Region (Table 8.8). In contrast, 612,458 persons were recorded outside the Region who were born in the Central region. In effect Central region experiences negative net migration of 238,015 persons born in the region but living elsewhere in Ghana. Three top destinations of migrants from the Central Region are Greater Accra, Western and Ashanti Regions. In return, the Central Region experiences positive net migration mainly from the Volta Region.

Table 8.8: In migration, out-migration and net migration by birth

Region of birth	In-migration	Out-migration	Net migration
Total	374,443	612,458	-238,015
Western	58,122	143,606	-85,484
Central	0	0	0
Greater Accra	86,072	255,637	-169,565
Volta	47,044	9,354	37,690
Eastern	76,265	68,151	8,114
Ashanti	61,861	112,583	-50,722
Brong-Ahafo	17,388	16,686	702
Northern	13,864	3,866	9,998
Upper East	8,991	1,360	7,631
Upper West	4,836	1,215	3,621

Source: 2010 Population and Housing Census

8.14 International Migration

8.14.1 Immigration

A total of 35,626 non-Ghanaians were recorded in Central region. Table 8.9 shows nearly all international immigrants in the Central Region are from the ECOWAS sub-region. In terms of individual countries of origin, the largest proportion of immigrants (22.2%) is Liberians while 16.7 percent are Nigerians. The Central Region has been the home to a large number of Liberian refugees in Ghana since the onset of the civil strife in Liberia. Twelve percent of non-Ghanaian nationals living in the Central Region are Asians while one percent are from Europe or the Americas.

Table 8.9: In-migrant population 15 years older by country of origin and activity status

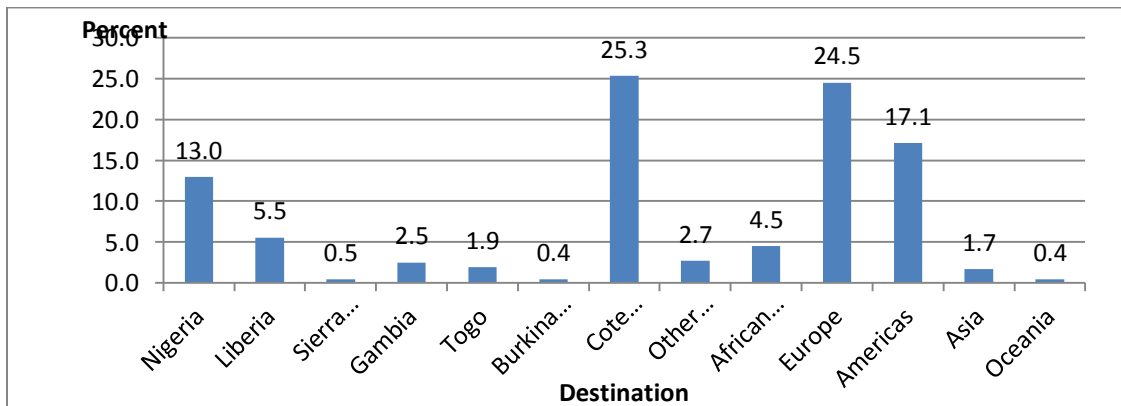
Country of Origin	Number	Percent
Nigerian	5,947	16.7
Liberian	7,920	22.2
Sierra Leonean	145	0.4
Gambian	141	0.4
Togolese	1,451	4.1
Burkinabe	619	1.7
Ivorian	308	0.9
Other ECOWAS states	8,731	24.5
African, other than ECOWAS	5,796	16.3
European	175	0.5
Americas	166	0.5
Asian	4,214	11.8
Oceania	13	0.0
Total	35,626	100.0

Source: 2010 Population and Housing Census

8 14.2 Emigration

The 2010 National Population and Housing Census collected information on the extent of international emigration of Ghanaian nationals. Household head were asked to mention the number of household members who have travelled outside for more than six months or those who have travelled outside with an intention living outside. A total of 18,056 emigrants aged 15 years or older were recorded in the Central Region. Figure 8.5 shows that Cote d' Ivoire is the destination of one-quarter (25.3%) of the emigrants from the Central Region while a further one-quarter(24.5%) travel to Europe

Figure 8.5: Place of destination of emigrants



Source: 2010 Population and Housing Census

8.14.3 Activity Abroad of the Emigrants

Table 8.10 provides information on activity status of Ghanaian emigrants. About four-fifth of all emigrants are employed while 11.5 percent and 5.5 percent are students and unemployed respectively. The proportion of employed emigrants is higher among males (80.6%) than females (74.8%). In contrast, the proportion of female students (12.7%) is higher than that of males (10.7%).

Table 8.10: Emigrants 15 years and older by Activity Abroad

Activity abroad	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Employed	14,141	78.3	8,827	80.6	5,314	74.8
Unemployed	994	5.5	496	4.5	498	7.0
Student	2,074	11.5	1,171	10.7	903	12.7
Other	847	4.7	454	4.1	393	5.5
Total	18,056	100.0	10,948	100.0	7,108	100.0

8.15 Urbanization

The proportions of the population living in urban localities are shown in Table 8.10. Just under one-half (47.1%) of persons in the Central Region live in urban localities. The most urbanised district is Effutu where 93.3 percent of the population live in urban localities. In five other Districts more than one-half of the population live in urban areas: Cape Coast (76.7%), Agona West (76.6%), Ewutu Senya (73.6%), Gomoa East (52.4%), and Mfantiman (50.4%). Two districts in the Central region, Assin South and Upper Denkyira West, have no urban localities and are therefore wholly rural. The next most rural district is Twifo-Hemang-Lower Denkyira where only one-quarter (25.2%) of the population live in urban localities.

Table 8.10: Population urban by sex

District	Population			Percent Urban		
	Total	Male	Female	Total	Male	Female
Total	2,201,863	1,050,112	1,151,751	47.1	46.6	47.6
KEEA Municipal	144,705	69,665	75,040	35.7	34.4	37.0
Cape Coast Metro	169,894	82,810	87,084	76.7	75.9	77.5
Abura-Asebu-Kwamankese	117,185	55,275	61,910	33.6	33.3	33.9
Mfantsiman Municipal	196,563	89,025	107,538	50.4	51.0	50.0
Ajumako-Enyan-Essiam	138,046	64,418	73,628	31.9	31.3	32.4
Gomoa West	135,189	60,417	74,772	42.6	42.5	42.6
Effutu Municipal	68,597	32,795	35,802	93.3	93.4	93.1
Gomoa East	207,071	98,323	108,748	52.4	53.8	51.2
Ewutu Senya	195,306	93,100	102,206	73.6	73.3	73.9
Agona East	85,920	41,035	44,885	43.4	42.1	44.6
Agona West Municipal	115,358	54,159	61,199	76.6	75.4	77.6
Asikuma-Odoben-Brakwa	112,706	54,293	58,413	48.1	46.8	49.3
Assin South	104,244	50,936	53,308	***	***	***
Assin North Municipal	161,341	80,254	81,087	35.8	35.0	36.5
Twifo-Hemang-Lower Denkyira	116,874	57,624	59,250	25.2	24.3	26.1
Upper Denkyira East	72,810	35,790	37,020	44.4	42.8	46.0
Upper Denkyira West	60,054	30,193	29,861	***	***	***

Note: *** No urban localities in the district

Source: 2010 Population and Housing Census

The 2010 PHC enumerated 101,639 (4.6%) more females than males in the Central Region. The percentage of females residing in urban areas (47.6%) is also higher than that of males (46.6%) and the percentage of females residing in urban areas is higher in ten of the 17 Districts than that of males.

CHAPTER NINE

ECONOMIC CHARACTERISTICS

9.1 Introduction

This chapter describes the economic activities of residents in the Central Region based on the 2010 Population and Housing Census. The nature, type and size of the labour force are critical factors in the production of goods and services. Labour force participation is a key driver of economic growth. The sex and age composition of the work force may affect its efficiency. Labour force participation rate is driven by structural factors such as demographics and culture, as well as cyclical factors such as demand for workers by employers, including government ministries, agencies and departments. The labour force participation rate is a measure of the proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work; it provides an indication of the relative size of the supply of labour available to engage in the production of goods and services. The information on labour force is also used to formulate employment policies, to determine training needs and to calculate the expected working lives of the male and female populations and the rates of accession to, and retirement from economic activity.

9.2 Economic Activity Status by Districts (Persons 15 years and Older)

The economic activity status as well as employment activities by District are shown in Table 9.1. For the Region as a whole, and for both males and females, more than six out of every ten persons are economically active (i.e. those employed or unemployed). Thus, for both males and females, about 30 percent are not economically active (i.e. not working and not looking for work).

The three Districts with the highest proportions of economically active persons are Upper Denkyira West (77.6%), Assin North (76.5%) and Upper Denkyira East (76.4%). The lowest proportions of economically active persons are recorded in the two most urbanized Districts, Cape Coast (49.6%) and Effutu (52.1%). The differentials may be explained by the involvement in agriculture of nearly all persons in rural Districts. The figures for males and females are about the same and follow the regional pattern. Slightly more than four in ten persons, 15 years and older in Cape Coast (54.3%), are economically not active. In five other Districts, at least three in ten are economically not active. These are Effutu (43.8%), Mfantiman (33.4%), Komenda-Edina-Eguafo-Abirem (32.4%), Gomoa East (31.0%) and Gomoa West (30.4%). The three Districts with the lowest proportions of economically not active persons are in the following three Districts: Upper Denkyira West (22.5%), Assin North (23.5%) and Upper Denkyira East (23.7%).

Table 9.1 further shows that 66.1 percent of persons 15 years and older are employed and 3.6 unemployed. The figures for the Region are virtually the same for both males and females. Such low unemployment figures do tend to question widely used employment and unemployment indicators which focus on measuring quantity of employment. The informal nature of jobs, widespread underemployment and the quality of jobs, together reduce the level of unemployment. At the District level, there are marked variations in the proportion of the population 15 years and older who are employed. About three-quarters are employed in three districts, Assin North (74.8%), Upper Denkyira West (74.5%), and Asikuma-Odoben-Brakwa (73.2%). In contrast, only about one-half (49.6%) are employed in Cape Coast Metropolis and Effutu (52.1). Unemployment is relatively low in the Region with only 4.0 percent of persons 15 years and older recorded as unemployed. Across districts there are no marked variations in unemployment. The lowest proportions of unemployment are 1.7 percent in Assin North and 1.9 percent Asikuma-Odoben-Brakwa, and the highest is 5.2 percent in Gomoa East.

9.3 Occupation of Employed Persons (15 years and Older) by District

The types of occupations of persons 15 years and older employed in the Central Region in 2010 are shown in Table 9.2. Skilled agricultural, forestry and fishery workers form the largest occupation group in the Region, employing 42.5 percent of all employed persons. The second largest group is service and sales workers (20.3%). Seventeen percent of employed persons are engaged in crafts and related trades. Managers, professionals, associate professionals and technicians altogether form nine percent of employed persons.

Predominantly, rural Districts have largest proportions of employed persons engaged in agriculture and fishery while in urban Districts; the largest proportions are engaged in service and sales or in craft and related trades. The three districts with the highest proportions of employed persons engaged in agriculture and fishery are Upper Denkyira West (72.1%), Assin South (67.0%) and Asikuma-Odoben-Brakwa (65.2%). The lowest proportions of employed persons are in the following three Districts: Cape Coast (6.8%), Effutu (15.9%) and Ewutu Senya (22.7%). As expected, Cape Coast has the highest proportion of professionals (13.2%) and Upper Denkyira West (2.4%) the lowest. Nearly one third of employed persons in Cape Coast (32.5%) and Ewutu Senya (30.2%) are service and sales workers. In contrast, only 7.6 percent of employed persons in Upper Denkyira West and 11.2 percent in Assin South are service or sales workers. Furthermore the two most urbanised Districts, Effutu (31.4%) and Cape Coast (23.6%) are also those with the highest proportion of employed persons engaged in craft and related activities. Crafts and related activities are secondary in nature as they receive their inputs largely from rural areas.

Table 9.1: Population 15 years and older by economic activity and sex

District	Total				Male				Female			
	Both sexes	Economically active		Not econ. active	Both sexes	Economically active		Not econ. active	Both sexes	Economically active		Not econ. active
		Employed	Un-employed			Em-ployed	Un-employed			Employed	Un-employed	
Total	1,330,029	66.1	4.0	30.0	608,163	66.4	3.9	29.7	721,866	65.7	4.1	30.2
Komenda-Edina-Eguafo-Abirem	86,603	63.2	4.6	32.1	40,162	61.5	4.6	33.9	46,441	64.7	4.7	30.6
Cape Coast Metropolis	121,654	49.6	5.7	44.7	58,938	49.0	5.3	45.6	62,716	50.1	6.0	43.8
Abura-Asebu-Kwamankese	69,661	67.9	3.7	28.5	31,228	67.7	3.7	28.5	38,433	68.0	3.6	28.4
Mfantiman Municipal	118,117	62.9	4.1	33.0	49,515	63.6	4.3	32.1	68,602	62.4	4.0	33.7
Ajumako-Enyan-Essiam	80,122	71.7	3.0	25.3	34,380	71.6	2.8	25.6	45,742	71.8	3.1	25.1
Gomoa West	79,731	66.4	3.6	30.0	32,507	65.1	3.7	31.3	47,224	67.4	3.5	29.1
Effutu Municipal	45,920	52.1	4.4	43.5	21,584	48.4	4.3	47.3	24,336	55.4	4.5	40.1
Gomoa East	124,105	63.8	5.6	30.6	56,472	65.6	5.3	29.1	67,633	62.4	5.8	31.9
Ewutu Senya	117,801	67.5	4.8	27.7	54,415	69.4	4.5	26.1	63,386	65.9	5.0	29.1
Agona East	50,552	68.8	3.9	27.4	23,022	69.9	4.0	26.1	27,530	67.8	3.8	28.4
Agona West Municipal	70,699	68.3	4.3	27.5	31,527	68.6	4.4	27.1	39,172	68.1	4.2	27.8
Asikuma-Odoben-Brakwa	63,800	73.2	2.2	24.6	29,078	73.5	2.2	24.4	34,722	72.9	2.3	24.8
Assin South	59,405	70.6	2.9	26.5	27,993	71.6	3.0	25.4	31,412	69.8	2.9	27.4
Assin North Municipal	93,673	74.8	2.2	23.0	45,397	75.5	2.2	22.3	48,276	74.1	2.2	23.7
Twifo-Hemang-Lower Denkyira	68,034	70.9	2.3	26.8	32,709	72.6	2.0	25.4	35,325	69.3	2.6	28.1
Upper Denkyira East	45,230	72.6	4.1	23.3	21,790	74.5	3.6	21.9	23,440	70.8	4.5	24.7
Upper Denkyira West	34,922	74.5	3.3	22.2	17,446	76.7	3.1	20.2	17,476	72.2	3.5	24.3

Source: 2010 Population and Housing Census

Table 9.2: Employed persons 15 years and older by district and type of occupation

	Total	Managers	Professionals	Technicians and associate professionals	Clerical support workers	Service and sales workers	Skilled agricultural forestry and fishery workers	Craft and related trades workers	Plant and machine operators and assemblers	Elementary occupations	Other
Total	878,593	2.0	5.5	1.5	1.1	20.3	42.5	17.1	4.6	5.3	0.0
KEEA Municipal	54,767	1.9	4.8	1.3	1.0	20.6	42.2	18.0	3.2	6.9	0.0
Cape Coast Metro	60,330	3.7	13.2	3.5	3.5	32.5	6.8	23.6	4.9	8.2	0.0
Abura-Asebu-Kwamankese	47,292	1.3	4.3	1.1	0.7	14.7	50.0	19.5	3.9	4.5	0.0
Mfantsiman Municipal	74,286	2.1	5.4	1.2	0.9	24.7	33.5	21.2	4.8	6.0	0.1
Ajumako-Enyan-Essiam	57,465	1.6	4.0	0.9	0.6	15.5	58.5	12.4	2.6	4.0	0.0
Gomoa West	52,975	1.6	4.3	1.0	0.6	16.0	46.0	21.6	3.2	5.7	0.0
Effutu Municipal	23,937	3.1	9.5	2.5	2.0	24.9	15.9	31.4	3.5	7.2	0.0
Gomoa East	79,199	2.7	5.5	2.0	1.4	25.8	25.6	21.0	7.6	8.3	0.0
Ewutu Senya	79,517	2.6	6.0	2.2	1.3	30.2	22.7	21.9	6.4	6.4	0.1
Agona East	34,757	1.9	4.5	0.9	0.6	19.7	50.6	15.1	3.7	3.0	0.0
Agona West Municipal	48,281	2.6	6.5	1.8	1.7	27.3	33.9	16.9	3.7	5.7	0.0
Asikuma-Odoben-Brakwa	46,683	1.2	4.1	1.0	0.5	13.1	65.2	10.3	2.2	2.5	0.0
Assin South	41,957	0.9	4.2	0.8	0.3	11.2	67.0	10.1	2.3	3.1	0.0
Assin North Municipal	70,072	1.4	4.1	1.3	0.6	13.9	59.4	11.8	3.6	3.8	0.1
Twifo-Hemang-Lower Denkyira	48,243	1.1	4.2	1.0	0.5	12.8	60.8	11.2	4.6	3.8	0.0
Upper Denkyira East	32,829	2.0	5.6	1.5	1.1	18.3	46.1	11.7	8.6	5.2	0.0
Upper Denkyira West	26,003	0.7	2.4	0.4	0.2	7.6	72.1	4.8	9.9	1.9	0.0

Source: 2010 Population and Housing Census

9.4 Industry of Employed Persons (15 years and Older)

The types of industry of all employed persons are shown in Table 9.3. Over four out of ten employed persons (42.6%) are in agriculture, forestry or fishing industry, 17.3 percent are in wholesale and retail, 11.6 percent are in manufacturing and 4.7 percent in education. The lowest proportions of employed persons engaged in agriculture, forestry and fishing are in Cape Coast (7.4%) and Effutu (16.1%) and the highest proportions are in Upper Denkyira West (71.7%) and Assin South (66.9%). With the exception of Gomoa West, all Districts have wholesale and retail trade as the second largest share of the employed, ranging from 5.8 percent in Upper Denkyira West to 27.0 percent in Ewutu.

The highest proportion employed in manufacturing is reported in Effutu (21.6%) and the lowest in Upper Denkyira West (3.0%). The proportion of the employed engaged in mining and quarrying is one percent or less in all Districts except in Upper Denkyira West (8.6%) and Upper Denkyira East (5.3%). The proportion engaged in construction industry ranges from about one percent in Upper Denkyira West to 5.9 percent in Ewutu Senya. The proportion of the employed in education is highest in the two most urbanised Districts, i.e., Cape Coast (14.1%) and Effutu (9.2%), and lowest in the rural Districts of Upper Denkyira West (2.2%), Ajumako-Enyan-Essiam (3.3%) and Gomoa West (3.3%). In Cape Coast, 10.0 percent of employed persons are in accommodation and food service activities; the proportion is only 2.6 percent in Upper Denkyira West.

Table 9.3: Industry of employed persons (15 years and older)

District	Total	KEEA Municipal	Cape Coast Metro	Abura- Asebu- Kwamankese	Mfantsiman Municipal	Ajumako- Enyan- Essiam	Gomoa West	Effutu Municipal	Gomoa East
Agriculture forestry and fishing	42.6	42.0	7.4	50.4	33.7	58.5	45.0	16.1	25.8
Mining and quarrying	0.9	0.6	0.2	0.2	0.5	0.1	0.6	0.8	1.0
Manufacturing	11.6	14.3	13.1	14.8	14.1	8.8	16.7	21.6	13.3
Electricity gas steam and air conditioning supply	0.1	0.0	0.4	0.1	0.1	0.1	0.0	0.2	0.1
Water supply; sewerage waste management and remediation activities	0.2	0.6	0.5	0.3	0.4	0.2	0.3	0.5	0.1
Construction	3.3	3.1	5.3	2.5	3.2	2.0	2.4	6.4	6.2
Wholesale and retail; repair of motor vehicles and motorcycles	17.3	16.7	25.1	12.2	21.4	12.8	14.8	19.9	24.4
Transportation and storage	3.5	2.6	4.0	3.5	4.3	2.4	2.8	2.4	6.6
Accommodation and food service activities	6.3	7.3	10.0	5.8	8.7	6.1	6.0	7.5	5.9
Information and communication	0.3	0.2	0.9	0.2	0.2	0.1	0.1	0.4	0.3
Financial and insurance activities	0.4	0.4	1.2	0.3	0.4	0.2	0.2	0.6	0.5
Real estate activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Professional scientific and technical activities	0.9	0.3	1.9	0.5	0.9	0.4	0.6	1.6	0.9
Administrative and support service activities	0.5	0.4	1.3	0.2	0.5	0.3	0.5	0.8	0.9
Public administration and defence; compulsory social security	1.1	1.5	3.3	0.7	1.0	0.7	0.8	2.3	1.1
Education	4.7	4.5	14.1	4.0	4.3	3.3	3.3	9.2	3.9
Human health and social work activities	1.1	1.3	3.3	0.8	0.9	0.6	0.7	1.8	0.9
Arts entertainment and recreation	0.5	0.6	1.2	0.3	0.5	0.3	0.3	1.0	0.7
Other service activities	4.0	3.4	6.1	2.7	4.3	2.8	3.8	5.9	6.3
Activities of households as employers	0.6	0.4	0.8	0.5	0.5	0.3	1.1	0.9	1.1
Activities of extraterritorial organizations and bodies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	878,593	54,767	60,330	47,292	74,286	57,465	52,975	23,937	79,199

Table 9.3: Industry of employed persons (15 years and older) – (cont.)

	Ewutu Senya	Agona East	Agona West Municipal	Asikuma- Odoben Brakwa	Assin South	Assin North Municipal	Twifo- Heman- Lower Denkyira	Upper Denkyira East	Upper Denkyira West
Agriculture forestry and fishing	23.2	50.6	34.4	65.6	66.9	59.5	61.4	46.6	71.7
Mining and quarrying	0.2	0.1	0.1	0.0	0.1	1.1	1.6	5.3	8.6
Manufacturing	13.8	8.9	10.0	6.8	8.1	8.5	9.3	7.6	3.0
Electricity gas stream and air conditioning supply	0.2	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0
Water supply; sewerage waste management and remediation activities	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1
Construction	5.9	3.0	3.5	1.6	1.8	1.8	1.7	1.7	0.9
Wholesale and retail; repair of motor vehicles and motorcycles	27.0	15.1	23.6	10.0	9.2	12.2	10.6	15.9	5.8
Transportation and storage	6.0	3.1	3.3	1.9	1.9	2.3	2.5	2.5	1.1
Accommodation and food service activities	7.1	7.9	8.0	4.4	3.3	4.2	4.1	5.5	2.6
Information and communication	0.4	0.1	0.3	0.1	0.0	0.2	0.1	0.3	0.0
Financial and insurance activities	0.8	0.2	0.7	0.2	0.2	0.3	0.2	0.5	0.1
Real estate activities	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Professional scientific and technical activities	1.2	1.5	1.7	0.7	0.2	0.6	0.2	0.9	0.4
Administrative and support service activities	0.6	0.4	0.5	0.3	0.1	0.3	0.2	0.5	0.3
Public administration and defence; compulsory social security	1.0	0.5	1.3	0.8	0.5	0.9	0.6	1.6	0.3
Education	4.2	3.6	5.0	3.6	4.1	3.5	3.7	4.2	2.2
Human health and social work activities	1.1	0.7	1.1	0.8	0.6	0.9	0.6	1.5	0.4
Arts entertainment and recreation	0.6	0.2	0.6	0.1	0.1	0.2	0.2	0.8	0.6
Other service activities	5.6	3.4	4.9	2.6	2.4	2.8	2.5	3.9	1.8
Activities of households as employers	0.8	0.5	0.6	0.4	0.4	0.4	0.2	0.4	0.2
Activities of extraterritorial organizations and bodies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	79,517	34,757	48,281	46,683	41,957	70,072	48,243	32,829	26,003

Source: 2010 Population and Housing Census

9.5 Employed Persons 15 years and Older by Status of Employment

Table 9.4 shows that two-thirds of employed persons in the Central Region (65.2%) are self-employed without employee, and 16.5 percent are employees. Nearly one in ten (9.4%) of employed persons are 'contributing family workers', 1.8 percent are casual workers while 2.4 percent are apprentices. On the whole, the proportion of the self-employed with employees is low (4.1%).

The proportion of people who are self-employed (without employee) is far higher in females (72.3%) than males (56.8%). This is also true for those classified as 'contributing family workers'. Conversely, the proportion of employees is higher for males (25.2%) than females (9.1%). These findings may be explained by low educational levels of females which make it difficult for them to be engaged in the formal sectors. Many enter sales because of the small capital outlay for self-employment often in the form of petty trading.

In the urban areas (23.8%), the proportion of employees is higher than in rural areas (10.5%). In contrast, the proportions who are self-employed (without employees) or 'contributing family workers' are higher in rural (69.5% and 13.3 % respectively) than in urban areas (60.0% and 4.7% respectively). This is because there are more formal job openings in urban than in rural areas while in rural areas a lot more are engaged as farmers and other agricultural work either for themselves or the family..

Although in all Districts the largest proportions of the employed are self-employed without employees, the exact proportions vary substantially. Thus, while slightly under one-half (47.0%) in Cape Coast are self-employed without employees, the proportion is three-quarters (75.6%) in Agona East, 72.5 percent in Assin South and 71.0 percent in Ajumako-Enyan-Essiam and Gomoa West (70.6%). It is likely most of the self-employed (without employees) are predominantly farmers and traders. Similarly, there are differences in the proportions of the employed who are employees, ranging from 8.8 percent in Ajumako-Enyan-Essiam to 39.0 percent in Cape Coast.

The highest proportions of the self-employed with employees is 5.5 percent in Cape Coast, and Ewutu Senya and 5.4 percent in Effutu. The lowest of 2.2 percent is in Upper Denkyira West. The proportion of the employed who are apprentices ranges from 1.1 percent in Upper Denkyira West and Assin South to 4.5 percent in Effutu. In nearly all Districts about 0.5% of the employed are domestic employees.

Table 9.4: Employed persons 15 years and older by sex and status of employment

	Total	Employee	Self employed		Casual worker	Contributing family worker	Apprentice	Domestic employee (House-help)	Other
			Without employee(s)	With employee(s)					
Total	878,593	16.5	65.2	4.1	1.8	9.4	2.4	0.5	0.1
<u>Sex</u>									
Male	404,022	25.2	56.8	5.0	2.7	7.3	2.4	0.5	0.1
Female	474,571	9.1	72.3	3.3	0.9	11.2	2.5	0.5	0.1
<u>Locality type</u>									
Urban	397,974	23.8	60.0	5.4	1.9	4.7	3.5	0.5	0.1
Rural	480,619	10.5	69.5	2.9	1.6	13.3	1.5	0.5	0.1
<u>District</u>									
Komenda-Edina-Eguafo-Abirem	54,767	17.8	63.8	3.9	2.3	9.0	2.5	0.5	0.2
Cape Coast Metropolis	60,330	39.0	47.0	5.5	1.8	2.6	3.5	0.4	0.2
Abura-Asebu-Kwamankese	47,292	15.3	65.9	3.8	1.3	11.1	2.1	0.4	0.2
Mfantiman Municipal	74,286	17.2	67.3	4.8	1.6	5.9	2.6	0.4	0.1
Ajumako-Enyan-Essiam	57,465	8.8	71.0	3.2	1.2	14.0	1.5	0.3	0.1
Gomoa West	52,975	14.3	70.6	4.3	1.5	6.1	2.4	0.6	0.2
Effutu Municipal	23,937	27.5	56.4	5.4	1.3	4.2	4.5	0.5	0.1
Gomoa East	79,199	19.1	65.5	5.3	1.8	4.9	3.0	0.4	0.1
Ewutu Senya	79,517	19.8	64.2	5.5	2.2	4.3	3.4	0.5	0.1
Agona East	34,757	10.8	75.6	3.3	0.9	6.6	2.2	0.4	0.1
Agona West Municipal	48,281	16.5	66.0	4.3	1.3	8.2	3.2	0.5	0.1
Asikuma-Odoben-Brakwa	46,683	9.3	69.7	2.7	1.0	15.5	1.4	0.3	0.1
Assin South	41,957	8.9	72.5	3.0	1.4	12.5	1.1	0.6	0.1
Assin North Municipal	70,072	12.1	62.7	3.5	1.3	17.9	2.0	0.4	0.1
Twifo-Hemang-Lower Denkyira	48,243	10.9	67.1	2.8	1.9	14.9	1.6	0.6	0.1
Upper Denkyira East	32,829	17.2	58.2	2.5	5.0	13.4	3.0	0.6	0.1
Upper Denkyira West	26,003	9.8	65.6	2.2	4.1	16.6	1.1	0.6	0.1

Source: 2010 Population and Housing Census

9.6 Employment Sector of Employed (persons 15 years and Older)

Table 9.5 shows that 6.5 percent of the employed work in the public or government sector with the remaining employed in the private sector. A substantial proportion of the employed (88.2%) are in the private informal sector predominantly as farmers and traders. The proportions of males (9.0%) and females (4.3%) in public or government service are higher than those in private formal sector (7.3% males, 2.8% females). The proportion of females in the private informal sector is higher (92.6%) than males (83.1%). On the whole, there are more males in the formal sectors while more females are in the informal sector. This has implications for women on social security, availability of banking and credit facilities.

Table 9.5: Population 15 years and older by sex, locality and employment sector

	Total	Public (Government)	Private Formal	Private Informal	Semi- Public/ Parastatal	NGOs (Local and International)	Other International Organisations
Total	878,593	6.5	4.9	88.2	0.1	0.3	0.0
Sex							
Male	404,022	9.0	7.3	83.1	0.1	0.4	0.0
Female	474,571	4.3	2.8	92.6	0.1	0.3	0.0
Locality							
Urban	397,974	9.1	7.2	83.2	0.1	0.4	0.0
Rural	480,619	4.3	3.0	92.4	0.1	0.3	0.0
District							
Komenda-Edina-Eguafo-Abirem	54,767	6.9	4.6	87.8	0.0	0.6	0.0
Cape Coast Metropolis	60,330	21.4	9.5	68.4	0.3	0.4	0.1
Abura-Asebu-Kwamankese	47,292	5.2	3.0	91.4	0.1	0.3	0.0
Mfantiman Municipal	74,286	5.6	4.2	89.8	0.1	0.3	0.0
Ajumako-Enyan-Essiam	57,465	4.5	2.4	92.8	0.1	0.2	0.0
Gomoa West	52,975	4.4	4.0	91.3	0.1	0.2	0.0
Effutu Municipal	23,937	13.0	6.4	80.0	0.1	0.3	0.0
Gomoa East	79,199	4.3	7.8	87.4	0.1	0.3	0.0
Ewutu Senya	79,517	4.4	8.8	86.4	0.1	0.3	0.0
Agona East	34,757	4.2	3.3	92.1	0.0	0.3	0.0
Agona West Municipal	48,281	6.7	4.8	88.1	0.1	0.2	0.0
Asikuma-Odoben-Brakwa	46,683	5.2	2.3	92.2	0.1	0.3	0.0
Assin South	41,957	5.1	2.2	92.3	0.0	0.4	0.0
Assin North Municipal	70,072	5.2	3.2	91.1	0.1	0.4	0.0
Twifo-Hemang-Lower Denkyira	48,243	4.6	4.4	90.6	0.0	0.4	0.0
Upper Denkyira East Municipal	32,829	8.0	4.0	87.7	0.1	0.2	0.0
Upper Denkyira West	26,003	2.9	3.5	93.3	0.1	0.2	0.0

There are rural-urban differentials in sector of employment. The proportions of persons in both public (government) and private formal sections are higher for urban localities (9.1% and 7.2% respectively) than in rural areas (4.3% and 3.0% respectively). Given the predominant role played by agricultural activities, it is not surprising that the proportion of persons in the private informal sector in rural localities (92.4%) is much higher than in urban (83.2%).

At the District level, only two Districts have more than ten percent of the employed working in the public sector. The highest proportions are in Cape Coast where one-fifth of the employed (21.4%) are in the public sector and Effutu where the proportion is 13.0 percent. In eleven out of the 17 districts, the proportion of the employed in government sector is five percent or lower. This illustrates the concentration of government services in the Regional Capital. For all Districts in the Central Region, except Cape Coast and Effutu, about nine out ten of the employed are in the private informal sector. In nine Districts, the proportions in the private informal sector are more than 90 percent.

CHAPTER TEN

DISABILITY

10.1 Introduction

Over the past few decades there has been an international consensus on the recognition of the rights of persons with disabilities with emphasis on the promotion of their dignity, and inclusive development. Evidence is needed to make informed decisions on policies and programmes. Knowing the characteristics and understanding the numbers of people with disabilities and their circumstances can enhance policies that address barriers that prevent persons with disabilities (PWDs) from participating more effectively in national development. The Ghana 2010 Population and Housing was the first census in the country to include questions on disabilities. This chapter presents data on the prevalence of disability, and the social-demographic characteristics of people with disabilities in the Central Region.

10.2 Population with Disability

As shown in Table 10.1, 3.4 percent of people in the Central Region have some form of disability. The proportion of PWDs is higher among females (3.6%) than males (3.3%). The levels of disability vary across the 17 Districts with the proportions in some Districts twice as low or high as others. The proportion of population with disability is highest in the following three Districts: Komenda-Edina-Eguafo-Abirem (6.3%), Ajumako-Enyan-Essiam (4.7%) and Abura-Asebu-Kwamankese (4.1%). The proportions are lowest in Upper Denkyira West (2.3%) and Ewutu Senya (2.4%). The pattern is similar among the male and female populations. In four Districts: Assin North Municipal, Twifo-Hemang-Lower Denkyira, Ewutu Senya and Upper Denkyira East Municipal, the proportion of females with disability is slightly higher than males.

Table 10.1: Population with disability by district and sex

	Population			Population with disability		
	Total	Male	Female	Total	Male	Female
All Districts	2,201,863	1,050,112	1,151,751	3.4	3.3	3.6
Komenda-Edina-Eguafo-Abirem	144,705	69,665	75,040	6.3	6.0	6.5
Cape Coast Metropolis	169,894	82,810	87,084	2.5	2.4	2.6
Cape Coast South	84,337	39,747	44,590	3.2	3.0	3.3
Cape Coast North	85,557	43,063	42,494	1.8	1.8	1.8
Abura-Asebu-Kwamankese	117,185	55,275	61,910	4.1	3.9	4.3
Mfantsiman Municipal	196,563	89,025	107,538	3.9	3.5	4.3
Ajumako-Enyan-Essiam	138,046	64,418	73,628	4.7	4.4	5.0
Gomoa West	135,189	60,417	74,772	3.8	3.4	4.1
Effutu Municipal	68,597	32,795	35,802	2.7	2.5	2.8
Gomoa East	207,071	98,323	108,748	2.8	2.6	3.0
Ewutu Senya	195,306	93,100	102,206	2.4	2.4	2.4
Agona East	85,920	41,035	44,885	2.5	2.4	2.6
Agona West Municipal	115,358	54,159	61,199	3.6	3.4	3.8
Asikuma-Odoben-Brakwa	112,706	54,293	58,413	3.8	3.5	4.0
Assin South	104,244	50,936	53,308	3.2	3.1	3.2
Assin North Municipal	161,341	80,254	81,087	3.3	3.3	3.3
Twifo-Hemang-Lower Denkyira	116,874	57,624	59,250	3.2	3.4	3.0
Upper Denkyira East Municipal	72,810	35,790	37,020	2.7	2.9	2.5
Upper Denkyira West	60,054	30,193	29,861	2.3	2.2	2.4

Source: 2010 Population and Housing Census

Table 10.2 shows the proportion of persons in rural and urban localities with disabilities. On the whole, the proportion with disability is slightly higher in rural areas (3.8%) than in urban areas (3.0%). Except Cape Coast, Ajumako-Enyan-Essiam, Effutu and Assin North Municipal, the proportion of PWDs is higher in rural than in urban areas. Komenda-Edina-Eguafo-Abirem has the highest proportion of persons with disability in urban (5.0%) and rural areas (7.0%) while has the lowest rural and urban figures are recorded in Cape Coast (1.9%) and Upper Denkyira east (2.0%).

Table 10.2: Population with disability by district and type of locality

Districts	Total			Urban			Rural		
	Total	Disabled Population	Percentage disabled	Total	Disabled Population	Percentage disabled	Total	Disabled Population	Percentage disabled
All Districts	2,201,863	75,939	3.4	1,037,878	31,412	3.0	1,163,985	44,527	3.8
Komenda-Edina-Eguafo-Abirem	144,705	9,079	6.3	51,690	2,570	5.0	93,015	6,509	7.0
Cape Coast Metropolis	169,894	4,226	2.5	130,348	3,491	2.7	39,546	735	1.9
<i>Cape Coast South</i>	84,337	2,665	3.2	83,561	2,654	3.2	776	11	1.4
<i>Cape Coast North</i>	85,557	1,561	1.8	46,787	837	1.8	38,770	724	1.9
Abura-Asebu-Kwamankese	117,185	4,855	4.1	39,428	1,402	3.6	77,757	3,453	4.4
Mfantsiman Municipal	196,563	7,710	3.9	99,156	3,243	3.3	97,407	4,467	4.6
Ajumako-Enyan-Essiam	138,046	6,472	4.7	43,996	2,205	5.0	94,050	4,267	4.5
Gomoa West	135,189	5,115	3.8	57,568	2,056	3.6	77,621	3,059	3.9
Effutu Municipal	68,597	1,828	2.7	63,969	1,709	2.7	4,628	119	2.6
Gomoa East	207,071	5,848	2.8	108,568	2,395	2.2	98,503	3,453	3.5
Ewutu Senya	195,306	4,609	2.4	143,794	3,304	2.3	51,512	1,305	2.5
Agona East	85,920	2,136	2.5	37,283	908	2.4	48,637	1,228	2.5
Agona West Municipal	115,358	4,146	3.6	88,351	2,893	3.3	27,007	1,253	4.6
Asikuma-Odoben-Brakwa	112,706	4,277	3.8	54,213	1,946	3.6	58,493	2,331	4.0
Assin South	104,244	3,303	3.2	***	***	***	104,244	3,303	3.2
Assin North Municipal	161,341	5,300	3.3	57,710	2,045	3.5	103,631	3,255	3.1
Twifo-Hemang-Lower Denkyira	116,874	3,694	3.2	29,468	608	2.1	87,406	3,086	3.5
Upper Denkyira East Municipal	72,810	1,961	2.7	32,336	637	2.0	40,474	1,324	3.3
Upper Denkyira West	60,054	1,380	2.3	***	***	***	60,054	1,380	2.3

Note: *** No urban localities in the district

Source: 2010 Population and Housing Census

10.3 Disability by Type and District

The proportions of persons with disability by type of disability are shown in Table 10.3. At the Regional level, and in all Districts, the most common type of disability is sight or visual impairment. Forty three percent of persons with disability in the Region have challenges with sight or visual impairment. One-half of all persons with disability in Komenda-Edina-Eguafo-Abirem (51.6%) and Mfantsiman (51.1%) have sight problems while the lowest percentage of PWDs is in Twifo-Hemang-Lower Denkyira (31.2%).

The second most common type of disability in the Central Region is Physical Disability. While the two Districts with the lowest proportions of the Physically Challenged are in Twifo-Hemang-Lower Denkyira (22.8%) and Assin North (23.2%), the highest proportions of the physical challenged are in Upper Denkyira West (36.9%) and Agona East (35.7%).

Table 10.3: Population with disability by type of disability

District	Total Population with disability	Disability type (Percent)						
		Sight	Hearing	Speech	Physical	Intellectual	Emotional	Other
All Districts	75,939	42.9	14.1	12.9	28.6	13.0	15.3	8.2
Komenda-Edina-Eguafo-Abirem	9,079	51.6	11.8	8.2	29.2	11.1	12.4	9.3
Cape Coast Metropolis	4,226	46.2	12.1	14.0	26.9	12.8	12.3	7.1
<i>Cape Coast South</i>	2,665	43.5	12.6	13.7	29.0	13.4	13.1	6.9
<i>Cape Coast North</i>	1,561	50.8	11.4	14.5	23.3	11.6	10.9	7.4
Abura-Asebu-Kwamankese	4,855	43.7	16.0	16.1	29.2	14.6	12.6	4.3
Mfantsiman Municipal	7,710	51.1	12.9	10.9	30.5	8.7	8.2	6.8
Ajumako-Enyan-Essiam	6,472	46.3	14.4	10.7	26.6	9.5	14.5	6.6
Gomoa West	5,115	41.9	13.6	13.2	33.3	13.5	13.7	9.3
Effutu Municipal	1,828	41.8	19.5	16.0	31.9	14.9	13.9	11.2
Gomoa East	5,848	43.7	13.4	12.9	25.6	12.2	17.6	8.9
Ewutu Senya	4,609	33.9	13.0	15.2	27.8	18.9	15.7	9.3
Agona East	2,136	33.5	12.5	14.7	35.7	11.2	8.6	15.4
Agona West Municipal	4,146	39.9	14.5	13.9	28.2	15.8	17.0	8.4
Asikuma-Odoben-Brakwa	4,277	41.7	15.6	13.1	29.1	10.8	16.2	10.4
Assin South	3,303	41.1	18.2	14.9	32.2	14.8	14.7	6.8
Assin North Municipal	5,300	35.5	14.9	14.9	23.2	20.1	26.3	7.3
Twifo-Hemang-Lower Denkyira	3,694	31.2	13.5	12.1	22.8	10.2	33.5	5.6
Upper Denkyira East Municipal	1,961	40.5	15.8	15.5	29.4	14.7	9.6	12.5
Upper Denkyira West	1,380	35.9	18.0	19.3	36.9	17.5	16.5	9.0

Source: 2010 Population and Housing Census

Komenda-Edina-Eguafo-Abirem, as noted earlier, has the highest proportion of persons with impaired vision. However, the District has the lowest proportion of persons with hearing disability (11.8%) and speech disability (8.2%). This is highest in Effutu (19.5%). The proportion of persons with disability in speech in Upper Denkyira West (19.3%) is about twice that of Komenda-Edina-Eguafo-Abirem (8.2%). Mfantiman recorded the highest proportion of persons with the hearing disability and the lowest in intellectual (8.7%) and emotional disability (8.2%). The highest proportions of persons with emotional disability (26.3%) and intellectual disability (20.1%) are found in Assin North.

Table 10.3 further shows that 12.0 percent of all persons with disability in the Central Region are in Komenda-Edina-Eguafo-Abirem and a further 10.2 percent in Mfantiman, followed by Ajumako-Enyan-Essiam (8.5%). Upper Denkyira West has the lowest percentage (1.8%). Across the six disability types, three Districts, Komenda-Edina-Eguafo-Abirem, Mfantiman and Ajumako-Enyan-Essiam. Further community level studies are needed to explain district level variations in types of disability in the Central Region.

10.4 Disability by Age

Table 10.4 shows the various age groups of persons with disability in each District. As expected, the highest proportion of persons with disability is among the age group 65 years and older. One in four (25.5%) PWDs are in this category. The second highest proportion is the age group 0-14 years which has a share of 15.7 percent of all disabled in the Central Region. On the whole, there is little variation in the proportions with disability in the other age groups.

At the Districts, the proportions of persons with disability in the age-group 0-14 years range from 11.1 percent in Cape Coast to 22.9 percent in Twifo-Hemang-Lower Denkyira. The relatively high disability rates among persons under 15 years need to be explored further. In two other Districts, one in five persons with disability are aged 14 years or younger. These are Assin North (21.4%) and Ewutu Senya (20.3%). The proportions of the elderly PWDs differ widely.

The lowest proportions are in Assin North (17.3%), Ewutu Senya (18.0%) and Twifo-Hemang-Lower Denkyira (18.3%). In three other Districts, Gomoa West (32.5%), Mfantiman (31.7%) and Ajumako-Enyan-Essiam (31.1%), nearly one-third of persons with disability are 65 years or older. In the following three Districts, Ewutu Senya, Assin North and Twifo-Hemang-Lower Denkyira the proportion of persons with disability in the age group 0-14 years are higher than those aged 65 years and older.

Table 10.4: Population with disability by age and district

District	Number	Age						
		0-14	15-24	25-34	35-44	45-54	55-64	65+
All Districts	75,939	15.7	12.6	11.4	11.5	12.7	10.7	25.5
Komenda-Edina-Eguafo-Abirem	9,079	14.2	13.3	12.1	11.6	13	10.5	25.4
Cape Coast Metropolis	4,226	11.1	16.9	12.5	10.5	12.1	11.4	25.5
<i>Cape Coast South</i>	2,665	11	13.6	10.5	10.1	13.2	12.0	29.5
<i>Cape Coast North</i>	1,561	11.2	22.6	15.8	11.1	10.2	10.3	18.6
Abura-Asebu-Kwamankese	4,855	14.2	12.3	9.2	9.6	12.6	12.3	29.8
Mfantsiman Municipal	7,710	13.6	11.6	8.5	10.0	12.9	11.6	31.7
Ajumako-Enyan-Essiam	6,472	13.1	10.4	9.4	10.2	15	10.8	31.1
Gomoa West	5,115	14.3	10.3	10.2	10.2	11.4	11.2	32.5
Effutu Municipal	1,828	13.6	14.1	16.5	12.4	12.0	10.4	21.0
Gomoa East	5,848	15.9	12.2	13.8	14.2	11.9	10.4	21.5
Ewutu Senya	4,609	20.3	14.2	14.8	12.3	11.1	9.3	18.0
Agona East	2,136	16.4	8.2	11.1	11.7	12.2	11.6	28.8
Agona West Municipal	4,146	13.6	11.2	10.7	12.4	13.8	11.8	26.4
Asikuma-Odoben-Brakwa	4,277	16.6	11.9	9.8	11.7	14.3	11.9	23.7
Assin South	3,303	15.7	12.3	10.8	11.7	14.5	9.9	25.1
Assin North Municipal	5,300	21.4	16	12.9	12.1	11.5	8.8	17.3
Twifo-Hemang-Lower Denkyira	3,694	22.9	15.4	12.9	12.5	10.2	7.9	18.3
Upper Denkyira East Municipal	1,961	16.2	10.4	10.6	12.6	13.6	11.0	25.7
Upper Denkyira West	1,380	19.3	13.3	11.3	11.7	12.0	8.7	23.7

Source: 2010 Population and Housing Census

10.5 Persons with Disability by Marital Status

Marital status of persons with disability is shown in Table 10.5. At the Regional level, about a third (35.8%) of all persons with disability are married, a quarter (24.6%) have never married, while one-fifth (19.5%) are widowed. Two Districts Mfantsiman and Ajumako-Enyan-Essiam, have the lowest proportion of PWDs (20.4%) who never married. By contrast Cape Coast (34.9%) and Effutu (31.3%) have the highest percentage of PWDs who never married. For all districts, the proportion married is around one-third, except Cape Coast where it is 29.2% and in Twifo-Hemang-Lower Denkyira and Upper Denkyira East where the proportion is 40 percent.

The proportion of persons with disability in the Region who are widowed is 19.5 percent, but in two districts, Gomoa West (26.4%) and Mfantsiman (25.9%) one quarter are widowed. In some districts, such as Abura-Asebu-Kwamankese, Mfantsiman, Gomoa West and Ajumako-Enyan-Essiam, the proportion of divorced and widowed together are about the same as the proportion married. The proportion widowed is lowest in Twifo-Hemang-Lower Denkyira (12.2%) and Assin North (12.6%).

Table 10.5: Population with disability (aged 12 years and older) by district and marital status

	Number	Never married	Informal/ Consensual union/Living together	Married	Separated	Divorced	Widowed
Total	66,848	24.6	4.9	35.8	3.6	11.7	19.5
Komenda-Edina-Eguafo-Abirem	8,114	24.2	3.6	36.6	4.1	13.2	18.3
Cape Coast Metropolis	3,862	34.9	3.6	29.2	4.8	9.9	17.6
<i>Cape Coast South</i>	2,434	30.2	5.1	27.8	6.4	11.1	19.4
<i>Cape Coast North</i>	1,428	42.8	1.0	31.7	2.1	8.0	14.5
Abura-Asebu-Kwamankese	4,325	22.2	2.1	35.6	2.9	14.4	22.8
Mfantiman Municipal	6,899	20.4	2.9	35.2	3.8	11.9	25.9
Ajumako-Enyan-Essiam	5,837	20.4	2.8	36.6	4.2	14.5	21.4
Gomoa West	4,574	20.7	2.6	32.6	3.4	14.2	26.4
Effutu Municipal	1,634	31.3	3.8	34.5	4.7	8.3	17.6
Gomoa East	5,135	24.7	7.3	34.9	4.0	9.4	19.8
Ewutu Senya	3,867	27.2	8.5	38.5	3.0	7.4	15.4
Agona East	1,844	21.4	2.9	38.7	4.0	11.5	21.5
Agona West Municipal	3,735	23.3	7.3	33.7	3.7	11.7	20.3
Asikuma-Odoben-Brakwa	3,727	21.9	7.8	37.1	2.1	13.4	17.6
Assin South	2,909	23.7	5.8	38.0	3.2	11.1	18.2
Assin North Municipal	4,455	31.0	9.5	34.7	3.2	9.1	12.6
Twifo-Hemang-Lower Denkyira	3,041	30.3	5.2	40.3	2.7	9.3	12.2
Upper Denkyira East Municipal	1,718	24.5	3.8	40.0	3.1	12.6	15.9
Upper Denkyira West	1,172	27.1	3.7	39.1	1.9	12.2	16.0

Source: 2010 Population and Housing Census

10.6 Persons with Disability by School Attendance

Table 10.6 shows the level of education of persons three years and older with disability. At the regional level, four out of ten persons with disability (41.4%) have never attended school. Forty five percent of persons with disability have basic education (JSS or Middle School). Less than four percent (3.7%) of persons with disability have post-secondary or tertiary education.

At least two reasons could be offered to explain the low educational levels of persons with disabilities. The major reason is the lack of special schools for persons with disabilities. The facilities and other resources in conventional schools hardly facilitate teaching and learning for persons with disabilities. It is also likely that some parents do not find the need to send their children with disability to school, because of the nature and form of disability.

There are variations among Districts regarding the educational level of PWDs. The proportion of PWDs who have never attended school in Gomoa West (54.0%) is about twice the proportion in Cape Coast (24.9%). It is in only in the following four Districts that one-half of PWDs have basic (JSS or equivalent) education: Upper Denkyira East Municipal (53.4%), Assin North Municipal (52.0%), Agona West Municipal (52.0%), and Asikuma-Odoben-Brakwa (50.2%). The proportion of PWDs who have ever attended tertiary schools is highest in Effutu (9.9%) and

Cape Coast (8.5%). This may be explained by the presence of universities and other tertiary institutions in Cape Coast and Winneba. In all other Districts, less than one percent of persons with disability have had tertiary education.

Table 10.6: Persons 3 years and older with disability by district, school attendance and level of education.

District	Total	Never attended	Ever attended					
			Pre-primary	Basic sch.	Sec./SSS/SHS	Voc./Tech./Comm.	Post-Sec.	Tertiary
All Districts	73,937	41.4	3.3	45.2	4.8	1.6	2.4	1.3
Komenda-Edina-Eguafo-Abirem	8,876	42.5	3.3	44.7	4.9	1.8	1.9	0.9
Cape Coast Metropolis	4,150	24.9	2.2	44.5	8.7	4.1	7.1	8.5
<i>Cape Coast South</i>	2,613	25.9	2.2	48.8	9.8	4.8	5.4	3.0
<i>Cape Coast North</i>	1,537	23.0	2.3	37.2	6.9	2.8	9.9	18.0
Abura-Asebu-Kwamankese	4,734	48.2	2.3	41.4	4.1	1.3	2.2	0.4
Mfantseman Municipal	7,544	46.6	3.2	40.2	5.1	1.4	2.8	0.6
Ajumako-Enyan-Essiam	6,358	44.5	2.9	45.1	3.4	1.2	2.3	0.6
Gomoa West	4,992	54.0	3.0	37.6	2.7	0.8	1.6	0.4
Effutu Municipal	1,773	36.9	2.2	40.4	5.2	2.5	2.9	9.9
Gomoa East	5,706	39.6	3.8	43.1	7.6	2.4	2.7	0.8
Ewutu Senya	4,394	37.3	3.9	46.9	6.9	2.0	2.3	0.8
Agona East	2,070	47.1	3.7	43.2	2.6	0.9	1.9	0.5
Agona West Municipal	4,062	36.5	2.1	52.0	4.8	1.8	2.0	0.8
Asikuma-Odoben-Brakwa	4,181	40.2	3.9	50.2	2.7	1.0	1.7	0.3
Assin South	3,228	42.0	2.7	48.2	3.8	1.1	1.7	0.6
Assin North Municipal	5,095	35.4	3.9	52.0	5.3	1.3	1.7	0.4
Twifo-Hemang-Lower Denkyira	3,561	38.2	6.1	48.8	3.8	0.8	1.8	0.4
Upper Denkyira East Municipal	1,880	35.6	2.7	53.4	4.8	1.0	1.6	0.8
Upper Denkyira West	1,333	45.2	4.0	45.8	3.5	0.7	0.8	0.2

Source: 2010 Population and Housing Census

10.7 Disability by Activity Status and District

The economic activity status of persons with disability 15 years and older is shown in Table 10.7. At the Regional level, slightly more than one-half (53.1%) of PWDs are employed, 2.7 percent are unemployed and 44.2 percent are economically not active. The proportion of PWDs who are employed varies across the Districts. In three Districts, Twifo-Hemang-Lower Denkyira (62.6%), Assin North (62.2%) and Upper Denkyira East (60.8%) the proportions employed are higher than sixty percent. The lowest proportions of persons with disability who are employed are in the most urbanised districts: Effutu (42.1%) and Cape Coast (42.4%). The proportion of

persons with disability who are economically not active ranges from 35.7 percent in Assin North to 53.2 percent in Effutu.

Table 10.7: Population 15 years and older with disability by activity status and district

District	Population with disability	Economically Active		Not economically active
		Employed	Unemployed	
All Districts	64,040	53.1	2.7	44.2
Komenda-Edina-Eguafo-Abirem	7,787	48.0	3.1	48.9
Cape Coast Metropolis	3,758	42.4	4.9	52.7
<i>Cape Coast South</i>	2,372	40.6	5.3	54.1
<i>Cape Coast North</i>	1,386	45.5	4.3	50.2
Abura-Asebu-Kwamankese	4,168	51.9	2.8	45.3
Mfantseman Municipal	6,659	50.2	2.5	47.3
Ajumako-Enyan-Essiam	5,623	57.9	1.6	40.5
Gomoa West	4,384	46.4	2.3	51.3
Effutu Municipal	1,579	42.1	4.7	53.2
Gomoa East	4,918	51.0	4.4	44.7
Ewutu Senya	3,674	55.6	3.6	40.8
Agona East	1,785	50.2	1.6	48.2
Agona West Municipal	3,583	56.8	2.3	41.0
Asikuma-Odoben-Brakwa	3,565	59.4	1.2	39.3
Assin South	2,783	57.3	1.5	41.2
Assin North Municipal	4,167	62.2	2.1	35.7
Twifo-Hemang-Lower Denkyira	2,849	62.6	1.6	35.8
Upper Denkyira East Municipal	1,644	60.8	3.0	36.2
Upper Denkyira West	1,114	55.8	2.8	41.4

Source: 2010 Population and Housing Census

CHAPTER ELEVEN

POPULATION IN AGRICULTURE

11.1 Introduction

This chapter provides a description of household members and heads of households engaged in agricultural activities. These include crop farming, tree growing, livestock rearing and fish farming. Excluded from this discussion are those engaged in fishing, hunting and other 'non farming' agricultural activities.

11.2 Number of Persons Engaged in Agricultural Activities

Data from the 2010 Population and Housing census show that there are 270, 854 households in Central Region engaged in farming. This constitutes slightly more than half (51.4%) of all households. The proportion of females (51.6%) engaged in farming is more than males (48.4%). There are 513, 448 persons engaged in farming activities in the Central Region. Table 11.1 shows that in eight out of the 17 Districts there are more female farmers than males in rural localities.

11.3 Households Engaged in Farming by District, Sex of Household Head and Type of Locality

Table 11.2 shows the proportions of male and female-headed households engaged in farming. Of the 270,854 households, 62.6 percent are headed by males. In all Districts, except Gomoa West, a higher proportion of households engaged in agriculture are male-headed. The highest proportions of male-headed farming households are in Upper Denkyira East (73.4%) and Twifo-Hemang-Lower Denkyira (71.3%). In urban localities, except in Gomoa West, higher proportions of farming households are male-headed. Similarly, in rural localities, higher proportions of farming households are male-headed except Effutu (53.7%) and Gomoa West (52.3%) where higher proportions of farming households are female-headed.

Table 11.1: Number of persons engaged in farming activities by district, sex and type of locality

District	Total			Urban			Rural		
	Number	Male	Female	Number	Male	Female	Number	Male	Female
Total	513,448	48.4	51.6	135,525	49.3	50.7	377,923	48.1	51.9
Komenda-Edina-Eguafo-Abirem	35,008	46.5	53.5	6,584	45.7	54.3	28,424	46.7	53.3
Cape Coast Metropolis	8,518	52.2	47.8	4,788	53.5	46.5	3,730	50.5	49.5
<i>Cape Coast South</i>	3,157	53.6	46.4	3,101	53.6	46.4	56	53.6	46.4
<i>Cape Coast North</i>	5,361	51.4	48.6	1,687	53.3	46.7	3,674	50.5	49.5
Abura-Asebu-Kwamankese	30,924	46.3	53.7	5,794	46.2	53.8	25,130	46.3	53.7
Mfantiman Municipal	34,213	44.8	55.2	8,792	48.3	51.7	25,421	43.6	56.4
Ajumako-Enyan-Essiam	49,456	45.6	54.4	13,711	45.4	54.6	35,745	45.7	54.3
Gomoa West	31,314	41.6	58.4	4,802	43.3	56.7	26,512	41.3	58.7
Effutu Municipal	4,586	46.9	53.1	3,297	49.2	50.8	1,289	41	59
Gomoa East	33,797	46.6	53.4	7,445	51	49	26,352	45.4	54.6
Ewutu Senya	28,304	49.5	50.5	11,437	50.6	49.4	16,867	48.7	51.3
Agona East	25,677	51.3	48.7	9,993	51	49	15,684	51.5	48.5
Agona West Municipal	27,451	50.4	49.6	16,561	50	50	10,890	51.1	48.9
Asikuma-Odoben-Brakwa	40,176	49	51	17,325	47.7	52.3	22,851	50	50
Assin South	36,311	49.8	50.2	***	***	***	36,311	49.8	50.2
Assin North Municipal	51,025	52.6	47.4	14,396	52.6	47.4	36,629	52.6	47.4
Twifo-Hemang-Lower Denkyira	36,780	51.1	48.9	6,466	51.3	48.7	30,314	51	49
Upper Denkyira East Municipal	17,222	52.1	47.9	4,134	54.7	45.3	13,088	51.3	48.7
Upper Denkyira West	22,686	50.3	49.7	****	***	***	22,686	50.3	49.7

*** No urban locality in the district

Source: 2010 Population and Housing Census

Table 11.2: Households engaged in farming by district, sex of household head and type of locality

District	Total			Urban			Rural		
	Number	Male headed	Female headed	Number	Male headed	Female headed	Number	Male headed	Female headed
Total	270,854	62.6	37.4	72,151	61.9	38.1	198,703	62.8	37.2
Komenda-Edina-Eguafo-Abirem	17,346	61.0	39.0	3,645	57.2	42.8	13,701	62.0	38
Cape Coast Metropolis	4,141	70.3	29.7	2,269	71.2	28.8	1,872	69.2	30.8
<i>Cape Coast South</i>	1,526	70.8	29.2	1,512	70.8	29.2	14	71.4	28.6
<i>Cape Coast North</i>	2,615	70.0	30.0	757	71.9	28.1	1,858	69.2	30.8
Abura-Asebu-Kwamankese	17,419	57.0	43.0	3,331	52.9	47.1	14,088	58.0	42.0
Mfantiman Municipal	18,328	55.6	44.4	4,126	61.6	38.4	14,202	53.9	46.1
Ajumako-Enyan-Essiam	27,073	55.5	44.5	7,548	52.2	47.8	19,525	56.7	43.3
Gomoa West	16,224	47.9	52.1	2,288	49.6	50.4	13,936	47.7	52.3
Effutu Municipal	2,166	57.8	42.2	1,510	62.8	37.2	656	46.3	53.7
Gomoa East	17,834	60.1	39.9	3,499	69.6	30.4	14,335	57.8	42.2
Ewutu Senya	13,975	67.5	32.5	5,357	68.8	31.2	8,618	66.7	33.3
Agona East	14,624	63.7	36.3	5,943	58.4	41.6	8,681	67.4	32.6
Agona West Municipal	14,573	63.2	36.8	9,103	60.8	39.2	5,470	67.3	32.7
Asikuma-Odoben-Brakwa	22,403	64.0	36.0	10,153	61.4	38.6	12,250	66.1	33.9
Assin South	18,822	63.4	36.6	***	***	***	18,822	63.4	36.6
Assin North Municipal	27,009	70.5	29.5	7,509	69.4	30.6	19,500	70.9	29.1
Twifo-Hemang-Lower Denkyira	19,297	71.3	28.7	3,553	69.0	31.0	15,744	71.8	28.2
Upper Denkyira East Municipal	8,480	73.4	26.6	2,317	71.1	28.9	6,163	74.2	25.8
Upper Denkyira West	11,140	70.3	29.7	***	***	***	11,140	70.3	29.7

*** No urban locality in the district

Source: 2010 Population and Housing Census

11.4 Households Engaged in Farming by Type of Farming Activities

The proportions of household heads engaged in various types of farming are presented in Table 11.3. The highest proportion of farming households are engaged in crop farming (94.1%), while about a third (34.9%) are into livestock rearing. Only a very small percentage of farming households are engaged in tree growing (1.7%) and fish farming (0.2%).

Table 11.3: Households engaged in agricultural activities

District	Number of Households	Crop farming	Tree growing	Livestock rearing	Fish farming
Total	270,854	94.1	1.7	34.9	0.2
Komenda-Edina-Eguafo-Abirem	17,346	90.3	7.9	40.2	0.3
Cape Coast Metropolis	4,141	76.6	6.3	29.5	0.5
<i>Cape Coast South</i>	<i>1,526</i>	<i>68.9</i>	<i>3.0</i>	<i>34.4</i>	<i>0.1</i>
<i>Cape Coast North</i>	<i>2,615</i>	<i>81.0</i>	<i>8.1</i>	<i>26.7</i>	<i>0.7</i>
Abura-Asebu-Kwamankese	17,419	92.5	6.6	41.5	0.2
Mfantsiman Municipal	18,328	87.3	2.8	36.3	0.1
Ajumako-Enyan-Essiam	27,073	96.6	0.4	37.7	0.1
Gomoa West	16,224	93.0	1.3	29.3	0.0
Effutu Municipal	2,166	60.1	1.6	53.2	0.6
Gomoa East	17,834	89.1	0.6	29.3	0.2
Ewutu Senya	13,975	89.4	1.1	31.8	0.1
Agona East	14,624	97.4	0.7	20.5	0.3
Agona West Municipal	14,573	97.0	0.4	20.7	0.1
Asikuma-Odoben-Brakwa	22,403	97.9	0.3	43.8	0.1
Assin South	18,822	98.1	0.5	38.9	0.4
Assin North Municipal	27,009	97.6	0.4	35.8	0.5
Twifo-Hemang-Lower Denkyira	19,297	97.8	0.9	34.6	0.1
Upper Denkyira East Municipal	8,480	95.6	0.5	33.6	0.2
Upper Denkyira West	11,140	98.6	1.1	39.4	0.2

Source: 2010 Population and Housing Census

Because of climatic and other geographical conditions, there are variations among Districts in the proportions of farming households engaged in various types of farming. In Effutu, while only 60 percent of farming households are engaged in crop farming, the proportions are 98.6 percent in Upper Denkyira West and 98.1 percent in Assin South, two Districts which are wholly rural. Three Districts with the highest proportions of farming households engaged in tree growing are Komenda-Edina-Eguafo-Abirem (7.9%), Abura-Asebu-Kwamankese (6.6%) and Cape Coast Metropolis (6.3%). In all other Districts, the proportion of farming households engaged in tree growing is less than three percent. The four Districts with the highest proportions of farming households engaged in livestock are Effutu (53.2%), Asikuma-Odoben-Brakwa (43.8%), Abura-

Asebu-Kwamankese (41.5%) and Komenda-Edina-Eguafo-Abirem (40.2%). In all Districts the proportion of farming households engaged in fish farming is less than one percent.

The 2010 census data show that the total number of farms in the Central Region is 668,460 consisting of about 47 different crops (Table 11.4). Nearly all the main food crops are farmed in the Central Region. These include tubers such as yam, cassava and cocoyam; grains (e.g. maize, rice and millet); and tree crops including cocoa, oil palm and citrus. In terms of the number of farms (not acreage size), the top four crops are cassava (29.2%), cocoa (19.1%), maize (12.8%) and plantain (12.5%). About 58 percent of all farms in the Central Region produce food crops. Altogether, there are 270,854 farming households in Central region, mostly growing more than one crop. Nearly three-quarters of farming households cultivate cassava farms, while 41.1 percent have cocoa farms and about a third each grow both maize (31.5%) and plantain (30.9%). About one in five farming households grow oil palm.

Farming in the region is about evenly split among the three main types of cropping; mixed cropping (34.6%), mono cropping (33.5%) and inter cropping (31.9%). As expected, there are variations in types of cropping according to type of crops. Generally, a higher proportion of tree crops are mono cropped in contrast with vegetables which are fairly split among the three types of cropping. Thus, while 73.5 percent of 'forestry trees' (such as teak), and 69.5 percent of rubber are mono cropped, the proportions for cocoyam and yam in this category are 7.9 percent and 11.3 percent respectively.

Table 11.4: Selected crops, number of farms and types of cropping in Central region

Type of Crop	Total farms	% of Total Farms	% Farm Owning Households	Mixed cropping %	Inter cropping %	Mono cropping %
Total	668,460	100.0	270,854	34.6	31.9	33.5
Cocoa	127,499	19.1	47.1	24.8	15.2	60.0
Oil palm	55,841	8.4	20.6	17.8	19.1	63.1
Citrus	15,850	2.4	5.9	19.8	16.3	63.9
Coconut	3,167	0.5	1.2	28.8	26.2	45.1
Rubber	560	0.1	0.2	12.5	18.0	69.5
Cashew	957	0.1	0.4	29.3	34.0	36.8
Cola	82	0.0	0.0	36.6	36.6	26.8
Apples	510	0.1	0.2	33.3	34.5	32.2
Mango	340	0.1	0.1	23.2	28.2	48.5
Avocado	202	0.0	0.1	28.2	25.7	46.0
Coffee	43	0.0	0.0	23.3	37.2	39.5
Forestry trees	6,235	0.9	2.3	9.8	16.7	73.5
Cassava	195,451	29.2	72.2	33.8	41.8	24.5
Cocoyam	11,047	1.7	4.1	74.1	18.0	7.9
Taro (koko)	1,202	0.2	0.4	74.0	16.0	10.0
Yam	8,688	1.3	3.2	69.7	19.1	11.3
Potatoes	662	0.1	0.2	37.0	28.4	34.6
Sweet potatoes	658	0.1	0.2	42.4	20.8	36.8
Plantain	83,738	12.5	30.9	52.1	37.9	10.1
Banana	423	0.1	0.2	38.3	44.2	17.5
Maize	85,444	12.8	31.5	33.9	48.8	17.3
Rice	1,115	0.2	0.4	28.7	18.7	52.6
Millet	438	0.1	0.2	29.5	53.0	17.6
Pepper	21,143	3.2	7.8	56.1	26.1	17.8
Tomatoes	13,792	2.1	5.1	50.4	28.2	21.4
Okro	2,944	0.4	1.1	53.8	24.2	22.0
Garden eggs	5,882	0.9	2.2	41.6	31.7	26.8
Egg plant	220	0.0	0.1	51.8	19.5	28.6
Onion	556	0.1	0.2	45.7	25.2	29.1
Shallot	41	0.0	0.0	19.5	36.6	43.9
Beans	1,477	0.2	0.5	48.6	21.3	30.1
Melon (agusi)	133	0.0	0.0	42.1	37.6	20.3
Groundnut	1,669	0.2	0.6	33.9	30.1	36.0
Tiger nut	999	0.1	0.4	32.6	34.0	33.3
Peas	195	0.0	0.1	42.6	34.4	23.1
Soya beans	91	0.0	0.0	35.2	45.1	19.8
Carrot	4,100	0.6	1.5	19.4	25.4	55.1
Cabbage	587	0.1	0.2	35.1	27.9	37.0
Lettuce	445	0.1	0.2	46.1	31.9	22.0
Cucumber	661	0.1	0.2	34.6	43.0	22.4
Asian vegetables (e.g. tinda, cauliflower)	208	0.0	0.1	34.1	31.3	34.6
Pineapple	3,421	0.5	1.3	22.4	19.4	58.2
Pawpaw	447	0.1	0.2	49.9	29.8	20.4
Water melon	425	0.1	0.2	32.5	25.6	41.9
Citronella	875	0.1	0.3	33.7	38.6	27.7
Sugarcane	2,222	0.3	0.8	18.2	16.9	64.9
Tobacco	179	0.0	0.1	53.1	27.9	19.0

Source: 2010 Population and Housing Census

CHAPTER TWELVE

HOUSING CONDITION

12.1 Introduction

Collecting and analysing housing data helps in understanding key aspects of housing and housing conditions. It assists planners make evidence-informed decisions on housing policies and interventions. This chapter provides an overview of housing and housing conditions in Central region. Data presented include housing stock and types of houses, ownership, household room occupancy and housing conditions with particularly reference to water and sanitation as well as information on cooking space and household energy sources.

12.2 Housing Stock

Table 12.1 shows the number of houses, the annual growth rate and the number of persons per house for Ghana from 1960 to 2010. Data from the 2010 Population and Housing Census show that there were 364, 699 houses in the Central Region compared to 223,239 houses in 2000. The annual growth in housing stock between 2000 and 2010 was 4.4 percent, same as the national growth rate. This is the highest annual growth rate for the past four inter-censal periods. In the Central Region, there has been a general decline in the number of persons per house from 9.5 persons per house in 1960 to 6.4 in 2010.

Table 12.1: Number of houses, annual rate of increase and number of persons per house, 1960 - 2010

Region	Number of Houses					Annual Rate of Increase ¹				Number of persons per house				
	1960	1970	1984	2000	2010	1960-1970	1970-1984	1984-2000	2000-2010	1960	1970	1984	2000	2010
All Regions	636,189	945,639	1,204,395	2,181,975	3,392,745	4.0	1.7	3.7	4.4	10.6	9.0	10.2	8.7	7.3
Western	61,103	87,061	128,427	259,874	380,104	3.5	2.8	4.4	3.8	10.2	8.8	9.0	7.4	6.3
Central	79,196	111,753	129,154	223,239	346,699	3.4	1.0	3.4	4.4	9.5	8.0	8.8	7.1	6.4
Greater Accra	36,643	71,189	116,211	287,840	474,621	6.6	3.5	5.7	5.0	13.4	12.0	12.3	10.1	8.4
Volta	84,927	141,382	164,513	264,451	399,953	5.1	1.1	3.0	4.1	9.2	6.7	7.4	6.2	5.3
Eastern	108,136	159,246	182,690	283,461	431,697	3.9	1.0	2.7	4.2	10.1	7.9	9.2	7.4	6.1
Ashanti	94,459	136,428	173,969	328,751	574,066	3.7	1.7	4.0	5.6	11.7	10.9	12.1	11.0	8.3
Brong-Ahafo	46,749	80,889	115,873	216,275	331,967	5.5	2.6	3.9	4.3	12.6	9.5	10.4	8.4	7.0
Northern	50,333	71,808	96,090	177,785	257,311	3.6	2.1	3.8	3.7	10.6	10.1	12.1	10.2	9.6
Upper East	58,455	64,801	70,967	88,401	114,034	1.0	0.6	1.4	2.5	8.5	8.4	10.9	10.4	9.2
Upper West	16,188	21,082	26,501	51,898	82293	2.6	1.6	4.2	4.6	16.0	15.2	16.5	11.1	8.5

Source: Ghana (Census Office) 1960 Population Census of Ghana, Vol. I, Accra, 1963;Ghana (Census Office) 1970 Population Census of Ghana, Vol. I, Accra, 1973;Ghana (Statistical Service) 1984 Population Census of Ghana, Demographic and Economic characteristics Report, Vol. I, Accra, 1987;Ghana (Statistical Service (2002), 2000 Population and Housing Census, Summary report of Final Results, March 2002, Table 14;Ghana Statistical Service, (2012) , 2010 Population and Housing Census: Summary Report of Final Results,;2010 Population and Housing Census report.

¹ The annual rates of increase were calculated by the authors based on geometric growth (compound growth rate).

12.3 Types of Dwelling, Construction Materials, Ownership and Tenureship Arrangements

Houses in the Central Region are constructed of various materials. This section describes the three key characteristics of dwelling units: the type of dwelling, and the construction material for the wall and the roof. The analysis is based on the total number of both occupied and unoccupied dwellings. Additional analysis in relation to the floor, room occupancy, and number of sleeping rooms, tenure and other holdings arrangements, as well as other housing conditions of the dwelling units is based on occupied dwellings only since the information could not be determined for unoccupied dwellings.

12.4 Type of dwelling Units (Occupied and Vacant)

As shown in Table 12.2, in 2010, there are 567,051 dwelling units in the Central Region of which 92.9 percent (526, 763) are occupied and the rest vacant dwelling units. The compound house is the most common type of dwelling unit in the Central Region. Just over one-half of dwelling units in the Region (51.3%) are compound houses. The proportion of compound houses in the Region is similar to the national average of 51.5 percent. The proportion of dwelling units which are flats or apartments was 4.4 percent in 2010. Makeshift and other improvised dwellings constitute less than one percent of all dwellings. There are more dwelling units in rural than in urban areas. The proportion of separate or detached houses is higher in rural (41.4%) than urban localities. This may be due to availability of land and the relatively cheaper construction materials used in rural areas. Over one-half of houses in urban areas are compound houses (58.4%) compared with 45 percent in rural areas.

In all the Districts, the compound house is the most common form of dwelling unit accounting for more than one-half of the total number of dwelling units in 12 out of the 17 Districts. Agona West (65.2%) and Effutu (61.1%), are the two Districts with the highest proportions of compound houses while Gomoa East (40.4%) and Komenda-Edina-Eguafo-Abirem (43.0%) the two Districts with the lowest proportions of compound houses in the Region. In Cape Coast about one in ten dwelling units (11.4%) are flats or apartments compared with Assin South with the lowest proportion of flats.

Table: 12.2: Type of dwelling by district

District	Total	Separate house	Semi-detached house	Flat/ Apartment	Compound house (rooms)	Huts /Buildings (same compound)	Huts /Buildings (different compound)	Tent	Improvised home (kiosk/container etc.)	Living quarters attached to office/shop	Uncompleted building	Other
Total	567,051	32.6	6.8	4.4	51.3	1.6	0.4	0.2	0.8	0.3	1.5	0.2
Urban	267,104	22.7	7.4	6.4	58.4	0.7	0.2	0.2	1.2	0.4	2.2	0.3
Rural	299,947	41.4	6.3	2.6	45.0	2.3	0.6	0.2	0.4	0.2	0.8	0.2
KEEA Municipal	38,308	39.9	7.9	5.0	43.0	0.8	0.2	0.3	1.4	0.3	0.8	0.4
Cape Coast Metropolis	41,308	17.8	9.4	11.4	57.1	1.2	0.1	0.2	1.3	0.4	0.6	0.5
Abura-Asebu-Kwamankese	31,498	35.4	4.7	2.1	55.3	0.8	0.2	0.2	0.2	0.2	0.9	0.1
Mfantsiman Municipal	52,493	32.9	5.3	5.1	52.3	0.9	0.4	0.2	0.8	0.2	1.7	0.1
Ajumako-Enyan-Essiam	38,413	35.0	5.9	2.3	53.9	1.3	0.3	0.2	0.2	0.1	0.7	0.1
Gomoa West	36,719	28.6	7.6	4.3	54.4	0.8	0.3	0.2	1.0	0.2	2.1	0.4
Effutu Municipal	17,764	22.5	4.4	6.4	61.1	0.8	0.3	0.3	1.7	0.4	1.5	0.7
Gomoa East	59,218	34.7	11.1	6.1	40.4	0.6	0.4	0.2	1.1	0.3	4.7	0.5
Ewutu Senya	49,340	30.6	6.2	4.0	52.1	1.8	0.4	0.2	1.4	0.4	2.7	0.1
Agona East	22,482	34.0	5.2	3.3	52.3	2.1	0.8	0.1	0.5	0.3	1.2	0.1
Agona West Municipal	30,695	21.0	4.1	4.5	65.2	2.0	0.3	0.1	1.1	0.7	0.7	0.1
Asikuma-Odoben-Brakwa	29,008	33.6	5.0	2.0	56.3	1.6	0.5	0.1	0.2	0.1	0.4	0.1
Assin South	25,082	42.3	6.1	1.8	43.2	4.4	0.8	0.2	0.2	0.3	0.6	0.1
Assin North Municipal	38,398	37.4	5.5	2.6	50.3	3.0	0.3	0.2	0.3	0.2	0.3	0.1
Twifo-Hemang-Lower Denkyira	26,827	38.4	10.5	2.5	44.0	2.6	0.8	0.2	0.4	0.2	0.4	0.0
Upper Denkyira East	15,035	35.1	5.2	3.3	52.2	1.9	0.3	0.1	0.6	0.7	0.4	0.2
Upper Denkyira West	14,463	39.6	6.6	1.9	47.3	2.6	0.8	0.1	0.4	0.1	0.4	0.1

Source: 2010 Population and Housing Census

12.5 Materials for Outer Wall (Occupied and Vacant)

The two main construction materials for outer walls in the Central Region are cement or concrete and mud or mud bricks. At the Regional level, as shown in Table 12.3 the proportion of outer walls constructed with mud or mud bricks is 36.4 percent while the proportion of outer walls made of cement or concrete is 57.4 percent. In the rural areas, however, over one-half of outer walls (53.2%) are made of mud bricks or earth. Only 1.8 percent of outer walls in Region are made of wood. Other materials such as stone, burnt bricks and bamboo are hardly used in the construction of outer walls in the Region. Slightly more than one-half of outer walls in rural areas are constructed with mud or mud bricks, compared with only 17.5 percent in urban areas. In contrast, three quarters of houses in urban areas have cement walls compared with 40.3 percent in rural areas. The high cost of building materials (e.g. cement) and the availability of low-cost local building materials (e.g. mud bricks) explain the differentials.

As shown in Table 12.3, the proportions of outer walls made of mud or mud bricks vary substantially across Districts. For example, while in the two most urbanised Districts, Effutu (6.5%) and Cape Coast (16.2%) the outer walls are constructed with mud or mud bricks, the proportions in the two wholly rural Districts are 70.4 percent in Assin South and 66.5 percent in Upper Denkyira West. Although there are wide variations in terms of proportions, the most common material for constructing outer walls in Region is cement or concrete. The proportion ranges from 25.1 percent in Assin South to 87.7 percent in Effutu Municipal. In nine out of the 17 Districts, at least one-half of outer walls are made of cement or concrete.

Table 12.3: Main construction material for outer wall by district

District	Total	Mud brick /Earth	Wood	Metal sheet/ Slate/ Asbestos	Stone	Burnt bricks	Cement blocks/ Concrete	Landcrete	Bamboo	Palm leaf / Thatch (grass) /Raffia	Other
Total	567,051	36.4	1.8	0.5	0.2	1.0	57.4	1.9	0.1	0.2	0.5
Urban	267,104	17.5	2.3	0.6	0.2	0.8	76.7	1.3	0.1	0.1	0.5
Rural	299,947	53.2	1.5	0.4	0.1	1.1	40.3	2.5	0.2	0.3	0.5
Komenda-Edina-Eguafo-Abirem	38,308	27.1	4.2	0.4	0.5	0.7	65.0	0.8	0.2	0.3	0.9
Cape Coast Metropolis	41,308	16.2	2.7	0.5	0.2	1.3	77.2	1.0	0.1	0.1	0.7
Abura-Asebu-Kwamankese	31,498	46.3	0.6	0.3	0.1	0.9	49.0	2.4	0.1	0.1	0.2
Mfantsiman Municipal	52,493	25.6	1.6	0.4	0.2	0.5	69.0	1.0	0.1	1.1	0.4
Ajumako-Enyan-Essiam	38,413	48.3	0.9	0.4	0.1	1.9	45.2	2.5	0.2	0.0	0.5
Gomoa West	36,719	29.9	2.0	0.5	0.1	1.4	62.0	2.3	0.2	0.1	1.4
Effutu Municipal	17,764	6.5	3.7	0.4	0.3	0.4	87.7	0.2	0.1	0.3	0.5
Gomoa East	59,218	20.0	1.9	0.8	0.1	0.8	74.4	1.4	0.1	0.1	0.4
Ewutu Senya	49,340	16.2	2.2	0.6	0.2	0.4	79.3	0.7	0.1	0.0	0.3
Agona East	22,482	44.1	1.3	0.4	0.1	0.7	50.8	2.2	0.2	0.0	0.2
Agona West Municipal	30,695	32.0	2.0	0.6	0.1	0.5	60.6	3.9	0.1	0.0	0.2
Asikuma-Odoben-Brakwa	29,008	63.0	1.1	0.3	0.1	2.0	29.5	3.7	0.1	0.1	0.2
Assin South	25,082	70.4	0.9	0.3	0.1	1.2	25.1	1.0	0.2	0.1	0.7
Assin North Municipal	38,398	57.9	1.0	0.4	0.1	0.4	33.3	6.1	0.1	0.5	0.3
Twifo-Hemang-Lower Denkyira	26,827	56.9	1.3	0.5	0.1	1.5	38.5	0.5	0.2	0.1	0.2
Upper Denkyira East Municipal	15,035	52.0	2.1	0.4	0.1	0.4	43.3	1.3	0.2	0.0	0.2
Upper Denkyira West	14,463	66.5	2.1	0.4	0.2	1.7	26.2	2.0	0.2	0.6	0.2

Source: 2010 Population and Housing Census

12.6 Materials for Roof (Occupied and Vacant)

Table 12.4 shows that in 2010, roofs in the Central Region are made of two main materials. About two-thirds of dwelling units (65.2%) have roofs made of metal sheets, and one-quarter (25.8%) made of slates or asbestos. Less than one percent of roofs are made of tiles. At the Regional level, the proportion of dwellings with thatched or palm as the main roofing material is 3.4 percent compared with 5.6 percent in rural areas. Although only 1.9 percent of roofs are made of cement or concrete, it may give an indication of commercialization of some houses. Most houses with concrete or cement roofs are often originally two-storey buildings but only the ground floor is completed. It is referred to as a “flow” in the Ghanaian parlance. Most of these are later used as multi-purpose buildings, i.e. residential upstairs and stores downstairs. About three quarters (73.3%) of roofs in rural areas and 56.1 percent in urban areas are made of metal sheets. Given its cost, slates and asbestos are used more in urban areas (37.8%) than in rural areas (15.2%). About six percent of roofs in rural areas are made of thatched palm leaves or raffia with another three percent made of bamboos.

The highest proportion of roofs made up of metal sheets are in Agona West (93.5%), Agona East (91.3%) and Ajumako-Enyan-Essiam (90.7%) and the lowest are in Cape Coast Metropolis (26.8%) and Effutu (28.3%). The two most urbanised Districts have the highest proportions of roofs made of slates or asbestos. The proportions are 63.8 percent in Effutu and 61.0 percent in Cape Coast. The lowest proportion of roofs made of asbestos or slates is in Upper Denkyira West. About one in ten roofs in Assin South (10.0%) and Twifo-Hemang-Lower Denkyira (9.5%) are made of thatch, palm leaves or raffia. Although at the Regional level bamboos are hardly used in roofing, in three Districts nearly one in twenty roofs are made of bamboo: Upper Denkyira West (4.9%), Assin South (4.7%) and Twifo-Hemang-Lower Denkyira (4.7%). The use of thatch, palm leaves and bamboo in these Districts reflect their rural nature and the agricultural orientation of the households.

Table 12.4: Main construction material for the roof by district

District	Total	Mud/Mud bricks/ Earth	Wood	Metal sheet	Slate/ Asbestos	Cement/ Concrete	Roofing tile	Bamboo	Thatch/ Palm leaf or Raffia	Other
Total	567,051	0.5	0.5	65.2	25.8	1.9	0.3	1.7	3.4	0.6
<i>Urban</i>	267,104	0.2	0.5	56.1	37.8	3.0	0.4	0.4	0.9	0.5
<i>Rural</i>	299,947	0.7	0.5	73.3	15.2	0.9	0.3	3.0	5.6	0.6
Komenda-Edina-Eguafo-Abirem	38,308	0.3	1.0	32.0	56.8	2.7	0.3	4.1	2.2	0.6
Cape Coast Metropolis	41,308	0.2	0.6	26.8	61.0	8.6	0.5	0.4	1.2	0.6
Abura-Asebu-Kwamankese	31,498	0.3	0.4	58.9	32.9	2.2	0.2	2.4	2.0	0.5
Mfantsiman Municipal	52,493	0.4	0.4	36.5	56.1	1.9	0.5	0.5	3.2	0.4
Ajumako-Enyan-Essiam	38,413	0.5	0.5	90.7	3.1	0.7	0.6	2.0	1.2	0.6
Gomoa West	36,719	0.3	0.4	57.9	36.8	1.2	0.1	0.6	1.4	1.2
Effutu Municipal	17,764	0.4	0.6	28.3	63.8	2.7	0.6	0.3	2.6	0.6
Gomoa East	59,218	0.3	0.6	71.9	22.9	1.3	0.5	0.2	1.7	0.6
Ewutu Senya	49,340	0.3	0.5	61.3	33.4	1.4	0.4	0.2	2.0	0.4
Agona East	22,482	1.0	0.5	91.3	4.4	0.5	0.1	0.6	1.3	0.5
Agona West Municipal	30,695	0.3	0.4	93.5	1.0	1.0	0.1	1.3	2.1	0.4
Asikuma-Odoben-Brakwa	29,008	0.6	0.4	86.4	1.2	0.8	0.4	2.8	6.9	0.5
Assin South	25,082	0.6	0.6	80.0	3.0	0.4	0.0	4.7	10.0	0.5
Assin North Municipal	38,398	0.6	0.5	87.1	1.0	0.7	0.1	2.4	7.3	0.4
Twifo-Hemang-Lower Denkyira	26,827	0.9	0.6	81.2	1.8	0.6	0.2	4.7	9.5	0.4
Upper Denkyira East Municipal	15,035	0.3	0.5	87.9	1.7	3.7	0.0	3.3	2.1	0.4
Upper Denkyira West	14,463	1.2	0.6	83.2	0.9	0.9	0.6	4.9	7.2	0.6

Source: 2010 Population and Housing Census

12.7 Materials for Floor

Floor type affects not only the aesthetics of the house but more importantly the quality and health status of a house. Some floors are easily contaminated and are difficult to clean or disinfect. As shown in Table 12.5, floors in the Central Region are largely made of cement or concrete (85.2%), the highest in the country. About one in ten houses have floors (11.3%) made of earth or mud. Although cement floors are the most common in both rural and urban areas, the proportion is higher in urban (89.0%) than in rural areas (81.5%). Sixteen percent of floors in rural areas are made of earth or mud compared with only 5.9 percent in urban areas.

At the District level, cement is the most common material for floors with proportions ranging from 72.8 percent in Assin South to 90.6 percent in Ewutu Senya. In two other Districts the proportion is 90 percent, Komenda-Edina-Eguafo Abirem (90.1%) and Abura-Asebu-Kwamankese (90.1%). In two rural Districts, Assin South (25.4%) and Asikuma-Odoben-Brakwa (20.2%), at least 20 percent of floors are made of earth or mud.

At the Regional level, only 2.4 percent of floors are made of tiles (vinyl, ceramic, porcelain) marble or terrazzo. Floor tiles are very expensive and are therefore comparatively predominant in urban areas rather than rural areas. In Cape Coast, the proportion of floors made of tiles is more than twice the regional average (6.2%). In Effutu, the proportion of floors tiles is 5.1 percent. In at least six Districts the proportion of floors with tiles is only 1.0 percent or lower.

Table 12.5: Main construction material for floor of dwelling by district and type of locality

District	Total	Earth/ Mud	Cement/ Concrete	Stone	Burnt brick	Wood	Vinyl tiles	Ceramic/ Porcelain/ Granite/ Marble tiles	Terrazzo/ Terrazzo tiles	Other
Total	526,763	11.3	85.2	0.4	0.1	0.4	0.6	1.1	0.7	0.2
<i>Urban</i>	255,365	5.9	89.0	0.4	0.1	0.6	1.0	1.5	1.2	0.2
<i>Rural</i>	271,398	16.4	81.5	0.5	0.2	0.1	0.3	0.6	0.3	0.2
Komenda-Edina-Eguafo-Abirem	35,402	5.1	90.1	0.4	0.1	0.9	0.7	1.0	1.1	0.5
Cape Coast Metropolis	40,386	5.7	86.2	0.3	0.3	0.9	1.6	1.9	2.7	0.3
Abura-Asebu-Kwamankese	28,704	7.9	90.1	0.5	0.1	0.1	0.3	0.5	0.3	0.2
Mfantsiman Municipal	48,304	9.6	87.8	0.3	0.1	0.3	0.4	0.9	0.3	0.2
Ajumako-Enyan-Essiam	35,106	15.0	83.3	0.4	0.1	0.1	0.1	0.7	0.2	0.2
Gomoa West	32,715	12.4	85.1	0.5	0.2	0.3	0.2	0.7	0.3	0.3
Effutu Municipal	17,121	4.5	88.6	0.4	0.1	1.0	1.4	1.6	2.1	0.3
Gomoa East	52,898	8.3	87.0	0.5	0.1	0.3	1.4	1.5	0.7	0.2
Ewutu Senya	46,277	4.5	90.6	0.3	0.1	0.6	1.2	1.6	0.9	0.2
Agona East	21,021	18.4	78.8	0.6	0.0	0.2	0.3	1.0	0.5	0.2
Agona West Municipal	29,478	8.9	87.5	0.4	0.1	0.5	0.5	1.2	0.7	0.1
Asikuma-Odoben-Brakwa	26,997	20.2	78.3	0.5	0.1	0.1	0.1	0.4	0.1	0.1
Assin South	23,200	25.4	72.8	0.5	0.1	0.1	0.1	0.6	0.2	0.2
Assin North Municipal	36,317	14.6	83.0	0.5	0.1	0.1	0.3	0.9	0.3	0.2
Twifo-Hemang-Lower Denkyira	25,201	18.0	80.1	0.5	0.1	0.1	0.2	0.6	0.2	0.2
Upper Denkyira East Municipal	14,200	11.7	85.1	0.4	0.1	0.4	0.4	1.4	0.4	0.1
Upper Denkyira West	13,436	19.4	78.7	0.5	0.5	0.1	0.1	0.6	0.1	0.2

Source: 2010 Population and Housing Census

12.8 Tenure and Holding Arrangements

Table 12.6 shows tenure and other holding arrangements of dwelling units in the Central Region. According to the data, three major types of tenure exist in Central region: owner-occupier, rented, and rent-free. Nearly one-half of all dwelling units (46.12%) are owner-occupiers while about similar proportions of houses are either rented (26.4%) or are occupied on rent-free basis (26.8%). Compared with urban areas, the proportion of owner-occupier dwelling units is higher in rural areas (56.6% vs. 35%) while renting is higher in urban areas (35.9% vs. 17.5%). This is because most people in rural areas build houses with no commercial motives in mind but are regarded as properties with bequest values, a form of investment for use by future generations. The proportion occupying their dwelling units on rent-free basis is similar in both rural (25.4%) and urban areas (28.4%).

Data on tenure arrangements of dwelling units at the District level reveal that owner-occupied tenure is highest in the rural districts: Assin South (64.7%) and Upper Denkyira West (62.4%). Conversely, owner-occupier status is lowest in the two most urbanised districts, Cape Coast (31.3%) and Effutu (32.0%). The proportion of dwelling units occupied on rental basis is highest in Cape Coast (41.0%) and lowest in Upper Denkyira West (17.0%). The practice of occupying dwelling units on rent-free basis is common in all Districts whether predominantly rural or urban. According to the data, the proportion of dwelling units occupied on rent-free basis ranges from 17.6 percent in Twifo-Hemang-Lower Denkyira to 35.9 percent in Gomoa West.

Table 12.6: Present holding/tenancy arrangements of households by district

District	Total	Owner occupied	Renting	Rent-free	Perching	Squatting	Other
Total	526,763	46.1	26.4	26.8	0.4	0.1	0.2
<i>Urban</i>	255,365	35.0	35.9	28.4	0.4	0.1	0.2
<i>Rural</i>	271,398	56.6	17.5	25.4	0.3	0.1	0.2
Komenda-Edina-Eguafo-Abirem	35,402	48.5	23.9	26.8	0.5	0.1	0.3
Cape Coast Metropolitan	40,386	31.3	41.0	26.8	0.5	0.2	0.2
<i>Cape Coast South</i>	23,786	26.3	39.6	33.0	0.6	0.2	0.3
<i>Cape Coast North</i>	16,600	38.4	43.1	17.9	0.4	0.2	0.1
Abura-Asebu-Kwamankese	28,704	52.0	18.3	29.3	0.3	0.0	0.2
Mfantsiman Municipal	48,304	41.5	25.4	32.5	0.4	0.1	0.1
Ajumako-Enyan-Essiam	35,106	50.0	17.3	32.0	0.2	0.1	0.4
Gomoa West	32,715	44.5	19.0	35.9	0.3	0.1	0.3
Effutu Municipal	17,121	32.0	34.4	33.0	0.4	0.1	0.0
Gomoa East	52,898	38.9	33.2	27.3	0.5	0.1	0.1
Ewutu Senya	46,277	40.9	36.2	22.0	0.5	0.3	0.0
Agona East	21,021	50.0	20.1	29.5	0.2	0.0	0.2
Agona West Municipal	29,478	36.8	34.0	28.3	0.7	0.1	0.1
Asikuma-Odoben-Brakwa	26,997	56.7	17.4	25.4	0.3	0.0	0.1
Assin South	23,200	64.7	15.8	19.0	0.3	0.1	0.2
Assin North Municipal	36,317	55.5	23.8	20.1	0.3	0.2	0.1
Twifo-Hemang-Lower Denkyira	25,201	59.7	22.1	17.6	0.2	0.1	0.3
Upper Denkyira East Municipal	14,200	41.0	34.4	24.1	0.3	0.0	0.1
Upper Denkyira West	13,436	62.4	17.0	20.1	0.3	0.1	0.0

Source: 2010 Population and Housing Census

12.9 House Ownership

Table 12.7 shows that the proportion of houses owned by members of household is slightly over one-half (51.6%) in 2010. The proportion of houses owned by a relative who is not a household member is 22.0 percent while the proportion of dwelling units owned by other private individuals (not relatives) is 22.5 percent. Public or government-owned housing forms only a small proportion, 1.4 percent. Private employers own 1.0 percent of private dwelling units while less than one percent of dwelling units are owned through mortgage schemes. In rural areas the proportion of dwelling units owned by a household member is higher (61.4%) than in urban areas (41.3%).

There are notable variations in ownership status across Districts. The proportion of dwelling units owned by householders is lowest in the most urbanised Districts, Cape Coast (35.7%), and Effutu (37.4%) and highest in predominantly rural districts of Assin South (69.5%), Twifo-Hemang-Lower Denkyira (67.5%), and Upper Denkyira West (64.4%). In Cape Coast, Effutu, Upper Denkyira East as well as some Districts within the daily commuting belt of Accra such as Ewutu-Senya and Gomoa East where private ownership is high because investment in houses comes with high rental income. In each of these five Districts, about one-third of all dwelling units are owned by private individuals who do not live in the house, apparently on rented basis.

Table 12.7: Ownership of dwelling households occupy by district

District	Total Households	Owned by household member	Being purchased (mortgage)	Relative not a household member	Other private individual	Private employer	Other private agency	Public/Govt ownership	Other
Total	526,763	51.6	0.7	22.0	22.5	1.0	0.3	1.4	0.4
Urban	255,365	41.3	0.9	23.4	30.4	1.1	0.4	2.0	0.5
Rural	271,398	61.4	0.6	20.6	15.1	0.9	0.3	0.9	0.3
Komenda-Edina-Eguafo-Abirem	35,402	55.7	0.9	21.8	16.9	1.1	0.2	2.8	0.6
Cape Coast Metropolis	40,386	35.7	0.7	22.5	33.5	1.6	0.6	4.8	0.5
Cape Coast South	23,786	32.5	0.9	27.5	31.2	1.6	0.7	5.1	0.5
Cape Coast North	16,600	40.3	0.4	15.4	36.9	1.4	0.6	4.5	0.5
Abura-Asebu-Kwamankese	28,704	55.5	0.3	25.9	16.2	0.6	0.1	1.0	0.3
Mfantsiman Municipal	48,304	47.5	0.8	28.6	20.8	0.6	0.2	1.1	0.3
Ajumako-Enyan-Essiam	35,106	53.0	0.9	29.7	14.8	0.4	0.2	0.8	0.3
Gomoa West	32,715	49.9	1.2	32.7	14.1	0.5	0.3	0.7	0.6
Effutu Municipal	17,121	37.4	0.3	26.9	30.5	0.9	0.7	3.0	0.4
Gomoa East	52,898	46.6	0.8	18.8	30.8	1.1	0.5	0.8	0.5
Ewutu Senya	46,277	47.2	0.7	16.6	33.2	1.4	0.2	0.5	0.3
Agona East	21,021	54.7	0.2	25.0	17.4	1.1	0.3	0.9	0.4
Agona West Municipal	29,478	43.4	0.6	24.7	28.9	0.7	0.3	1.0	0.4
Asikuma-Odoben-Brakwa	26,997	63.2	0.6	19.6	14.9	0.5	0.3	0.6	0.3
Assin South	23,200	69.5	0.4	15.0	12.6	0.7	0.3	1.0	0.4
Assin North Municipal	36,317	59.6	1.1	15.7	20.6	1.1	0.2	1.2	0.4
Twifo-Hemang-Lower Denkyira	25,201	67.5	0.8	11.7	17.0	1.4	0.3	0.9	0.4
Upper Denkyira East	14,200	45.2	0.1	14.8	33.8	2.1	0.5	3.2	0.3
Upper Denkyira West	13,436	64.4	1.7	16.3	14.0	1.7	1.0	0.6	0.3

Source: 2010 Population and Housing Census

12.10 Room Occupancy

The number of rooms occupied by a household is one of the best indicators for assessing how crowded dwelling units in a locality are and the space available per person. Table 12.8 shows that an increasing number of households are using fewer rooms. Dwelling units in the Region are more crowded than the average Ghanaian dwelling unit. Slightly more than one-half of households (54.5%) in the Region occupy a single room in contrast with 44.5 percent nationwide. Cape Coast, the capital, has not experienced the boom in housing compared with other Regional Capitals. There appears to be little difference regarding the number of rooms per household between rural and urban areas. The proportions of households occupying single rooms are 56.6 percent in urban areas and 52.5 percent in rural areas; for two rooms the figures are 24.0 percent and 23.8 percent respectively.

As shown in Table 12.8 across districts, there appears to be little variation in the number of rooms occupied by dwelling units. The proportion of households occupying single rooms is between 50 percent and 60 percent in all Districts except in Assin South (43.3%) and Assin North (49.1%) where proportions are below 50 percent.

Table 12.8: Room occupancy of households by district

District	Total Households	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Total	526,763	54.5	23.9	9.8	5.1	2.6	1.6	1.0	0.6	0.9
<i>Urban</i>	255,365	56.6	24.0	8.5	4.8	2.4	1.5	0.9	0.5	0.7
<i>Rural</i>	271,398	52.5	23.8	10.9	5.5	2.7	1.8	1.0	0.7	1.1
Komenda-Edina-Eguafo-Abirem	35,402	58.3	22.0	8.9	4.6	2.3	1.6	0.9	0.5	0.8
Cape Coast Metropolis	40,386	57.7	22.3	9.3	5.0	2.3	1.5	0.8	0.5	0.6
<i>Cape Coast South</i>	23,786	59.1	23.6	9.0	4.1	1.8	1.1	0.6	0.4	0.4
<i>Cape Coast North</i>	16,600	55.7	20.5	9.8	6.3	3.2	2.2	1.1	0.6	0.8
Abura-Asebu-Kwamankese	28,704	57.2	23.1	9.3	4.6	2.3	1.3	0.8	0.5	0.7
Mfantseman Municipal	48,304	57.9	22.8	8.5	4.6	2.1	1.6	1.0	0.6	0.9
Ajumako-Enyan-Essiam	35,106	53.7	23.7	10.6	4.7	2.4	1.9	0.9	0.7	1.4
Gomoa West	32,715	58.4	20.7	8.4	4.3	2.4	1.8	1.2	0.9	1.8
Effutu Municipal	17,121	62.0	21.7	7.0	4.0	2.0	1.4	0.9	0.4	0.6
Gomoa East	52,898	54.2	26.2	8.5	5.3	2.4	1.5	0.8	0.4	0.7
Ewutu Senya	46,277	52.2	27.5	8.3	5.5	2.9	1.6	0.9	0.5	0.5
Agona East	21,021	57.6	22.7	9.0	4.6	2.3	1.5	0.9	0.7	0.7
Agona West Municipal	29,478	50.9	28.5	9.6	4.7	2.6	1.5	1.0	0.5	0.7
Asikuma-Odoben-Brakwa	26,997	57.7	22.3	9.4	4.3	2.4	1.5	0.9	0.6	0.9
Assin South	23,200	43.3	25.1	13.2	7.3	3.9	2.4	1.5	1.1	2.1
Assin North Municipal	36,317	49.1	23.1	13.7	6.4	3.1	1.8	1.1	0.6	1.0
Twifo-Hemang-Lower Denkyira	25,201	51.7	22.8	11.9	6.5	3.1	1.7	0.9	0.6	0.8
Upper Denkyira East Municipal	14,200	50.1	25.8	11.9	5.4	3.0	1.6	1.0	0.6	0.6
Upper Denkyira West	13,436	50.2	24.7	11.8	6.2	2.9	1.8	1.0	0.5	0.9

Source: 2010 Population and Housing Census

12.11 Number of Sleeping Rooms

The number of 'sleeping rooms' provides an indication of the extent of crowding in households. Overcrowded rooms have health implications arising from, among others, disturbed sleep. More importantly, crowded living conditions increase the risk of the spread of infectious diseases, such as meningococcal disease, tuberculosis and respiratory infections. Considering the hot and humid conditions in Ghana, overcrowding can lead to psychological distress; lack of tolerance, reduced levels of concentration and can affect mental health. Data on household sleeping room occupancy and number of 'sleeping rooms' per household are presented in Table 12.9. As stated earlier, the average household size in the Region is 4.0 persons. Nearly two-thirds of households in the Region (64.0%) have one sleeping room compared with, the national average of 54.4 percent. The data show that dwelling units in rural areas in Central region are nearly as crowded as those in urban areas. Two-thirds of all urban households (65.7%) have one sleeping room, the compared with 62.5 percent in rural areas.

Table 12.9: Number of sleeping rooms households occupy by district

District	Total	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Total	526,763	64.0	22.3	7.5	3.3	1.4	0.7	0.3	0.2	0.3
<i>Urban</i>	255,365	65.7	21.8	6.7	3.2	1.3	0.7	0.3	0.2	0.2
<i>Rural</i>	271,398	62.5	22.8	8.2	3.5	1.4	0.8	0.3	0.2	0.3
Komenda-Edina-Eguafo-Abirem	35,402	68.4	19.7	6.4	2.9	1.3	0.6	0.3	0.2	0.2
Cape Coast Metropolis	40,386	67.9	20.2	6.8	2.8	1.1	0.6	0.2	0.1	0.2
<i>Cape Coast South</i>	23,786	70.1	20.3	5.8	2.2	0.8	0.4	0.1	0.1	0.1
<i>Cape Coast North</i>	16,600	64.9	20.0	8.3	3.8	1.5	0.8	0.3	0.2	0.3
Abura-Asebu-Kwamankese	28,704	66.4	20.7	7.2	3.0	1.3	0.7	0.3	0.2	0.2
Mfantiman Municipal	48,304	66.5	21.3	6.5	3.0	1.2	0.7	0.3	0.3	0.3
Ajumako-Enyan-Essiam	35,106	65.4	21.5	7.5	2.9	1.2	0.7	0.3	0.2	0.3
Gomoa West	32,715	68.1	19.0	6.5	2.9	1.2	0.8	0.5	0.3	0.5
Effutu Municipal	17,121	71.9	18.6	5.1	2.2	1.0	0.6	0.2	0.2	0.2
Gomoa East	52,898	65.5	23.2	6.4	2.9	1.0	0.5	0.2	0.1	0.2
Ewutu Senya	46,277	62.2	24.6	7.0	3.7	1.3	0.6	0.2	0.2	0.2
Agona East	21,021	65.9	21.1	7.0	3.1	1.4	0.7	0.3	0.3	0.3
Agona West Municipal	29,478	60.2	26.1	7.3	3.4	1.5	0.8	0.4	0.2	0.2
Asikuma-Odoben-Brakwa	26,997	65.4	21.0	7.2	3.2	1.5	0.8	0.4	0.2	0.4
Assin South	23,200	53.0	26.4	10.7	5.0	2.2	1.1	0.5	0.4	0.7
Assin North Municipal	36,317	57.0	24.3	10.3	4.6	1.8	1.0	0.4	0.3	0.4
Twifo-Hemang-Lower Denkyira	25,201	59.2	23.3	9.9	4.4	1.7	0.8	0.3	0.2	0.3
Upper Denkyira East Municipal	14,200	58.0	25.9	9.2	3.9	1.6	0.8	0.3	0.2	0.2
Upper Denkyira West	13,436	59.5	24.0	9.1	4.1	1.7	0.8	0.3	0.2	0.3

Source: 2010 Population and Housing Census

There are variations at the District level in the number of sleeping rooms. The proportions of households with only one sleeping room are highest in Effutu (71.9%) and Komenda-Edina-Eguafo-Abirem (68.4%) and lowest in Assin South district (53.0%), and Assin North (57.0%).

12.12 Access to Utilities and Household Facilities

This section analyses the household amenities, cooking space and sanitation issues in dwellings units at the, regional, district and locality level.

12.13 Dwelling facilities: Source of Lighting

As shown in Table 12.10 the three main sources of non-natural lighting in households are electricity (grid) [66.1%], kerosene lamp (20.7%) and flashlight (11.2%). The proportion of dwelling units using electricity in Central region is the third highest in Ghana, after Greater Accra Region and Ashanti Region. The proportion of dwelling units using electricity generators as the main source of lighting is under one percent (0.7%). The use of private generators is a recent phenomenon which was brought about by the frequent power outages and load shedding. Kerosene lamp which used to be the most common source of light for majority of households in the Region decade ago is no longer the dominant source. Although flashlight has always been used in Ghana, it is gradually becoming a major source of light with the introduction of several long-lasting batteries and other rechargeable varieties. In the Region, flashlight is the main source of light for about one in ten households (11.2%). There are rural-urban variations in the sources of domestic light. Over three quarters of households in urban areas (78.4%) obtain light from electricity (national grid), compared with 54.5 percent in rural areas. One-quarter of dwelling units in rural areas (25.5%) use kerosene lamp as main source of light, 15.7 percent in urban areas do so. Eighteen percent of rural dwelling units use flashlight as main source of light compared with only 3.9 percent in urban areas.

At the District level, the percentage of households that use electricity ranges from 42.0 percent in Assin South to 90.3 percent in Cape Coast. It is important to note that in 10 of the 17 Districts, over 60 percent of dwellings use electricity as the main source of non-natural lighting. Private generators are used by 1.0 percent or less of households as the main source of lighting in all the Districts. Kerosene lamp is still used by a fairly large number of dwelling units, with the proportions using it ranging from 5.8 percent in Cape Coast to 39.8 in Agona East. In 10 (out of 17) Districts, at least one-fifth of dwelling units use kerosene lamp. Flash light is used most in Assin North, by nearly one-third (31.0%) of households. As expected, flashlight is least used in the two most urbanised Districts, Cape Coast Metropolis (1.8%) and Effutu (1.8%).

Although there are efforts to introduce non-conventional energy sources in the country, only a very small proportion of dwelling units, as elsewhere in Ghana, use these sources. Solar energy as the main source of lighting is consistently very low. Table 12.10 shows that only 0.1 percent of dwelling units in the Region use solar as main source of lighting. The District Assemblies may need to educate households on solar energy to increase the proportion of homes using solar energy.

Table 12.10: Main source of lighting for the dwelling by district

District	Total Households	Electricity (mains)	Electricity (private generator)	Kerosene lamp	Gas lamp	Solar energy	Candle	Flashlight /Torch	Firewood	Crop residue	Other
Total	526,763	66.1	0.7	20.7	0.2	0.1	0.5	11.2	0.2	0.1	0.2
<i>Urban</i>	255,365	78.4	0.7	15.7	0.1	0.1	0.8	3.9	0.1	0.1	0.2
<i>Rural</i>	271,398	54.5	0.8	25.5	0.2	0.1	0.3	18.2	0.2	0.1	0.2
Komenda-Edina-Eguafo-Abirem	35,402	75.9	0.8	18.0	0.1	0.1	0.4	4.3	0.2	0.0	0.3
Cape Coast Metropolis	40,386	90.3	0.4	5.8	0.1	0.0	1.1	1.8	0.1	0.0	0.3
<i>Cape Coast South</i>	23,786	91.4	0.4	5.1	0.1	0.0	1.1	1.5	0.1	0.0	0.3
<i>Cape Coast North</i>	16,600	88.8	0.6	6.8	0.1	0.0	1.2	2.2	0.1	0.0	0.2
Abura-Asebu-Kwamankese	28,704	65.7	1.0	26.0	0.2	0.1	0.4	6.2	0.2	0.0	0.2
Mfantsiman Municipal	48,304	71.4	0.8	24.4	0.1	0.1	0.5	2.4	0.1	0.1	0.1
Ajumako-Enyan-Essiam	35,106	64.8	0.8	24.2	0.2	0.1	0.2	9.4	0.2	0.1	0.2
Gomoa West	32,715	70.0	0.7	24.0	0.1	0.0	0.3	4.2	0.2	0.1	0.3
Effutu Municipal	17,121	82.9	0.7	13.0	0.2	0.1	0.7	1.8	0.2	0.1	0.3
Gomoa East	52,898	75.1	1.1	16.4	0.2	0.1	1.1	5.7	0.1	0.1	0.2
Ewutu Senya	46,277	72.7	0.7	18.6	0.1	0.2	0.9	6.3	0.1	0.1	0.3
Agona East	21,021	43.5	0.6	39.8	0.2	0.1	0.5	14.8	0.2	0.1	0.1
Agona West Municipal	29,478	65.7	0.5	21.4	0.1	0.1	0.5	11.0	0.1	0.1	0.4
Asikuma-Odoben-Brakwa	26,997	44.8	0.7	27.6	0.2	0.2	0.2	25.8	0.1	0.1	0.2
Assin South	23,200	42.0	0.9	31.7	0.2	0.1	0.3	24.1	0.3	0.1	0.4
Assin North Municipal	36,317	48.0	0.7	19.5	0.2	0.2	0.2	31.0	0.1	0.0	0.2
Twifo-Hemang-Lower Denkyira	25,201	57.6	0.7	20.8	0.2	0.2	0.2	20.0	0.2	0.1	0.3
Upper Denkyira East Municipal	14,200	57.2	0.4	8.0	0.1	0.1	0.3	33.6	0.2	0.0	0.2
Upper Denkyira West	13,436	56.9	0.5	17.8	0.2	0.4	0.2	24.0	0.1	0.0	0.0

Source: 2010 Population and Housing Census

12.14 Dwelling Facilities: Source of Energy for Cooking

As shown in Table 12.11 the three main sources of energy for cooking in households in the Central Region in 2010 are firewood (44.2%), charcoal (36.9%), and gas (12.5%). The use of gas is becoming more common with 12.5 percent dwelling units using gas. The proportion of dwelling units where no cooking is done is 5.1 percent which may be a reflection on the increase in single-member households. In rural areas, because wood is locally available, it is the main source of cooking fuel for 67.0 percent of households compared with 20.0 percent in urban areas. In contrast, charcoal, which is often produced for urban dwellers, is used by 52.9 percent of households in urban areas, and 21.8 percent in rural areas. The use of wood and charcoal as the main sources of fuel has implications for the rapid deforestation in region.

For the Districts, with the exception of Cape Coast and Effutu, where only 3.7 percent and 16.6 percent of households use wood, in all other Districts at least one-quarter of households use wood, with the highest proportions in Assin South (77.1%) and Upper Denkyira West (75.3%). Charcoal is the main source of energy for cooking in six predominantly urban Districts, with the highest proportions in Cape Coast (58.6%) and Mfantsiman (54.7%). There has been a concern on the impact of charcoal on deforestation in Ghana. Charcoal is least used in rural Districts, particularly Assin South (12.9%), mainly because of the predominance of wood as the main source of energy for cooking. Nearly one-third of households in Cape Coast (30.6%) and a quarter in Effutu (26.9%) use gas as the main source of energy for cooking. In nearly all other Districts the proportions of households using gas are relatively low, with Upper Denkyira West recording the lowest (3.7%).

12.15 Dwelling Facilities: Cooking Space

The percentage distribution of the different cooking spaces is presented in Table 12.12. The most common type of cooking space, for most households is a separate room for exclusive use by households. About one in three dwelling units (33.5%) have cooking spaces that are separate for exclusive use of households while in about one-fifth of dwelling units members cook in open spaces in the compound. In one in five households (20.6%), cooking takes place on verandas. The proportion of dwelling units in Central region with no cooking space is 6.6 percent. The proportion of urban houses with separate room for exclusive use for household cooking is far lower (24.8%) than rural (41.6%). Similarly, the proportions cooking on verandas and in open spaces are lower in rural than in urban areas.

Table 12.11: Main source of cooking fuel for households

District	Total Households	None no cooking	Wood	Gas	Electricity	Kerosene	Charcoal	Crop residue	Saw dust	Animal waste	Other
Total	526,763	5.1	44.2	12.5	0.2	0.6	36.9	0.3	0.1	0.0	0.1
<i>Urban</i>	255,365	5.8	20.0	19.8	0.3	0.7	52.9	0.2	0.1	0.1	0.1
<i>Rural</i>	271,398	4.4	67.0	5.7	0.2	0.4	21.8	0.4	0.1	0.0	0.1
Komenda-Edina-Eguafo-Abirem	35,402	5.5	35.4	8.4	0.2	0.7	49.2	0.2	0.1	0.0	0.2
Cape Coast Metropolis	40,386	5.4	3.7	30.6	0.3	0.7	58.6	0.1	0.3	0.1	0.3
<i>Cape Coast South</i>	23,786	6.1	2.6	26.6	0.3	0.8	63.0	0.0	0.2	0.1	0.4
<i>Cape Coast North</i>	16,600	4.4	5.3	36.2	0.3	0.6	52.5	0.1	0.4	0.1	0.2
Abura-Asebu-Kwamankese	28,704	5.2	48.2	5.7	0.3	0.4	39.8	0.2	0.1	0.0	0.1
Mfantsiman Municipal	48,304	4.5	30.1	9.2	0.3	0.8	54.7	0.2	0.0	0.0	0.1
Ajumako-Enyan-Essiam	35,106	4.2	69.2	5.0	0.2	0.4	20.4	0.5	0.0	0.0	0.1
Gomoa West	32,715	5.1	54.3	4.7	0.1	0.5	34.6	0.4	0.1	0.0	0.1
Effutu Municipal	17,121	5.2	16.6	26.9	0.5	1.0	49.1	0.2	0.2	0.1	0.2
Gomoa East	52,898	4.9	27.1	18.5	0.2	0.7	48.1	0.2	0.1	0.1	0.0
Ewutu Senya	46,277	5.3	26.7	21.8	0.2	0.7	44.8	0.2	0.2	0.1	0.0
Agona East	21,021	5.6	60.2	7.3	0.2	0.5	25.5	0.7	0.1	0.0	0.0
Agona West Municipal	29,478	7.0	39.9	17.4	0.2	0.6	34.4	0.3	0.1	0.0	0.0
Asikuma-Odoben-Brakwa	26,997	5.5	71.9	5.3	0.2	0.4	16.2	0.4	0.0	0.0	0.0
Assin South	23,200	3.9	77.1	5.0	0.1	0.4	12.9	0.4	0.0	0.0	0.0
Assin North Municipal	36,317	4.3	65.1	8.0	0.2	0.3	21.6	0.3	0.1	0.0	0.0
Twifo-Hemang-Lower Denkyira	25,201	4.0	65.7	8.3	0.3	0.3	20.9	0.3	0.1	0.0	0.0
Upper Denkyira East Municipal	14,200	6.5	48.6	14.2	0.2	0.3	29.8	0.2	0.1	0.0	0.0
Upper Denkyira West	13,436	5.4	75.3	3.7	0.2	0.2	14.8	0.4	0.0	0.0	0.0

Source: 2010 Population and Housing Census

Table 12.12: Cooking space used by household by districts

District	Total Households	No cooking space	Separate room for exclusive use of household	Separate room shared with other household(s)	Enclosure without roof	Structure with roof but without walls	Bedroom/Hall/Living room	Veranda	Open space in compound	Other
Total	526,763	6.6	33.5	6.8	1.6	6.5	1.6	20.6	22.3	0.5
<i>Urban</i>	255,365	7.2	24.8	6.8	1.5	4.1	2.0	28.5	24.7	0.5
<i>Rural</i>	271,398	6.1	41.6	6.8	1.8	8.8	1.3	13.1	20.2	0.5
Komenda-Edina-Eguafo-Abirem	35,402	7.5	38.4	5.9	1.6	3.6	1.4	19.5	21.5	0.6
Cape Coast Metropolis	40,386	7.1	30.3	7.5	1.0	2.1	4.5	22.8	24.1	0.5
<i>Cape Coast South</i>	23,786	8.0	25.6	9.2	0.9	1.7	2.1	25.9	25.9	0.6
<i>Cape Coast North</i>	16,600	5.9	37.1	5.2	1.1	2.6	7.9	18.2	21.5	0.3
Abura-Asebu-Kwamankese	28,704	6.5	40.6	6.7	1.3	4.3	1.5	14.9	23.9	0.4
Mfantiman Municipal	48,304	6.1	25.4	5.9	2.0	6.5	1.0	22.8	29.8	0.6
Ajumako-Enyan-Essiam	35,106	5.3	36.2	9.7	2.4	11.1	0.9	11.2	22.7	0.6
Gomoa West	32,715	6.2	22.6	6.2	2.0	9.7	1.2	18.1	33.4	0.7
Effutu Municipal	17,121	6.2	19.9	5.3	1.8	5.5	6.7	24.7	29.4	0.5
Gomoa East	52,898	6.3	25.1	3.0	2.0	4.1	1.9	29.8	27.3	0.5
Ewutu Senya	46,277	6.9	22.2	2.4	1.6	7.7	1.9	32.6	24.3	0.5
Agona East	21,021	6.8	25.6	6.9	1.9	13.1	1.0	16.5	27.7	0.5
Agona West Municipal	29,478	8.3	29.1	10.2	1.8	6.5	1.3	18.1	24.0	0.7
Asikuma-Odoben-Brakwa	26,997	7.1	43.9	10.6	1.5	7.0	0.8	12.1	16.5	0.7
Assin South	23,200	5.8	49.6	7.6	1.8	9.6	0.7	12.4	12.0	0.5
Assin North Municipal	36,317	6.0	46.6	9.3	1.3	6.5	0.5	18.6	11.1	0.2
Twifo-Hemang-Lower Denkyira	25,201	5.9	50.1	5.5	0.8	6.4	0.5	21.0	9.6	0.2
Upper Denkyira East Municipal	14,200	8.0	43.1	13.0	1.2	4.3	0.4	21.4	8.3	0.3
Upper Denkyira West	13,436	7.7	47.8	9.2	1.2	5.0	0.2	15.6	13.0	0.2

Source: 2010 Population and Housing Census

Three Districts with the highest proportions of dwelling units with separate cooking room for exclusive use of household members are highest in Twifo-Hemang-Lower Denkyira (50.1%), Assin South (49.6%) and Upper Denkyira West (47.8%). Cooking on the veranda is also a common feature in many dwelling units. The highest proportions of dwelling units using the veranda as cooking space are reported in Ewutu-Senya (32.6%) and Gomoa East (29.8%), the lowest is in Ajumako-Enyan-Essiam (11.2%). In one-third of dwelling units (33.4%) in Gomoa West, 29.8 percent in Mfantiman and 29.4 percent in Effutu, households cook in open spaces in the housing compound. The lowest (8.3%) is recorded in Upper Denkyira East. Some dwelling units have no cooking space of any kind. In four Districts: Agona West, Upper Denkyira East, Upper Denkyira West and Komenda-Edina-Eguafo-Abirem, about eight percent of dwelling units have no cooking space. In Effutu, 6.7 percent of households cook in their bedrooms or living rooms.

12.16 Sanitation- Bathing Facilities

Table 12.13 presents bathing facilities available in dwelling units in the Central Region in 2010. Bathing facilities used in the Region are primarily of three main types: shared bathroom in the same house (30.4%), bathroom for exclusive use (23.0%), and shared open bathing cubicle (22.4.0%). One in three dwellings units have a separate bathroom shared with other non-household members. The proportion of dwelling units that share an open cubicle as a bathroom with others in the compound is 22.4 percent. At the National level, 3.5 percent of dwellings use bathroom in another house compared with 7.3 percent in the Central Region. Open space around the house is used as a bathroom by 6.8 percent of dwelling in the Region.

There are differentials across districts in the types of bathing facilities used by households. The lowest proportion of dwelling units with bathrooms for the exclusive use of household members is recorded in Agona West (17.2%), and the highest is in Assin South District (31.5%). Sharing of bathing facilities is highest in two Districts: Cape Coast (43.6%) and Agona West (40.5%). About 17% of dwelling units in the Region have no bathing facilities. Household members use an open space around the house (6.8%), facilities in another house (7.3%), public bath house (2.4%), or rivers, lakes, dams and ponds (0.3%).

Table 12:13: Bathing facility used by the household by district

District	Total Households	Own bathroom for exclusive use	Shared separate bathroom in the same house	Private open cubicle	Shared open cubicle	Public bath house	Bathroom in another house	Open space around house	River/Pond /Lake/Dam	Other
Total	526,763	23.0	30.4	6.9	22.4	2.4	7.3	6.8	0.3	0.4
Komenda-Edina-Eguafo-Abirem	35,402	22.2	26.0	6.6	21.0	5.9	11.1	6.3	0.7	0.3
Cape Coast Metropolis	40,386	22.4	43.6	3.4	18.5	4.7	3.3	3.2	0.2	0.7
<i>Cape Coast South</i>	23,786	19.2	51.8	2.7	15.7	5.0	2.0	3.0	0.1	0.6
<i>Cape Coast North</i>	16,600	27.0	31.9	4.4	22.7	4.2	5.2	3.4	0.4	0.8
Abura-Asebu-Kwamankese	28,704	22.2	29.7	5.5	17.2	6.8	10	7.4	0.1	1.0
Mfantsiman Municipal	48,304	19.1	28.7	6.1	26.0	5.0	8.0	6.2	0.5	0.4
Ajumako-Enyan-Essiam	35,106	25.2	30.2	7.4	19.5	1.2	7.5	8.1	0.5	0.3
Gomoa West	32,715	20.0	27.3	5.0	27.1	1.9	11.1	6.9	0.2	0.6
Effutu Municipal	17,121	18.4	37.6	4.1	25.4	3.2	5.0	5.8	0.3	0.2
Gomoa East	52,898	24.9	25.7	9.2	23.2	2.3	6.5	7.9	0.1	0.2
Ewutu Senya	46,277	20.9	23.7	10.2	32.2	0.8	4.4	7.1	0.2	0.5
Agona East	21,021	17.9	29.4	6.2	26.2	2.1	7.7	9.1	1.1	0.4
Agona West Municipal	29,478	17.2	40.5	5.8	24.8	0.7	3.9	6.8	0.2	0.2
Asikuma-Odoben-Brakwa	26,997	23.2	28.5	8.3	22.3	1.0	8.3	7.5	0.5	0.3
Assin South	23,200	31.5	23.8	9.6	19.2	0.4	7.2	7.5	0.3	0.7
Assin North Municipal	36,317	26.9	34.6	6.8	16.4	0.3	7.5	7.1	0.1	0.1
Twifo-Hemang-Lower Denkyira	25,201	30.7	27.5	5.9	18.8	0.9	10	5.6	0.4	0.2
Upper Denkyira East Municipal	14,200	24.6	39.3	7.8	17.4	0.3	4.9	5.2	0.3	0.2
Upper Denkyira West	13,436	29.6	30.8	6.2	15.5	0.3	9.3	8.0	0.1	0.1

Source: 2010 Population and Housing Census

12.17 Sanitation - Toilet Facilities

The type of toilet facility available in a dwelling unit is an important indicator of the sanitary condition of the unit as well as an indirect measure of the poverty status of a household. Table 12.14 shows that five main types of toilet facilities are used in the Central Region. Arranged in order of availability for household members, they are the public toilet (39.5%), the pit latrine (23.1%), the Kumasi Ventilated Improved Pit Latrine (KVIP) [11.8%] and the water closet (WC) [(9.2%]. In Region, the proportion of households whose members use public toilet (39.5%) is higher than the national average of 34.6 percent.

In 2010, about 15 percent of dwelling units had no toilet facilities. The high use of shared bathrooms, public bathrooms and toilets are indications of poverty. Household members who have no toilet facilities use the bush/beach and open fields. The use of the bucket/pan toilet is almost out of use (0.5%), as a result of a ban on its use. Although the proportion of households use the pan toilet has declined, 2,633 households are still using the bucket/pan toilet facilities, even though its use has been declared illegal by law. The proportion of households with no toilet facilities is slightly higher in rural (16.1%) than in urban areas (14.6%). While the proportions using the W.C (15.1% urban, 3.6% rural) and KVIP (14.2% urban, 9.5% rural) are higher in urban areas, pit latrines and public toilets are more common in rural areas.

The type of toilet facilities varies considerably by Districts. One-third of dwelling units in Gomoa East (32.6%) and 23.5 percent in Abura-Asebu-Kwamankese have no toilet facilities, in contrast with only 5.4 percent in Upper Denkyira East. As noted earlier, the public toilet is the single most common type of toilet facility in the Region, with 39.5 percent of all dwelling units using this facility. The proportion is lowest in Ewutu-Senya (25.3%). In contrast about 52 percent of dwellings in Asikuma-Odoben-Brakwa, Agona East, and Komenda-Edina-Eguafo-Abirem use public toilet facilities. The second most common type of toilet facility is the pit latrine. At least one-third of all dwelling units in the following five Districts use the public toilet: Twifo-Hemang-Lower Denkyira (40.3%), Upper Denkyira West (36.5%), Assin South (36.0%), Assin North (35.4%) and Upper Denkyira East (34.8%). Nearly one-quarter of households (23.8%) in Ewutu-Senya and 17.6 percent in Assin North use KVIP. In contrast it is used by only 4.4 percent of dwelling units in Upper Denkyira West.

Table 12:14: Toilet facility used by the households

District	Total Households	No facilities (bush/beach/field)	W.C.	Pit latrine	KVIP	Bucket /Pan	Public toilet (WC/KVIP/Pit/ Pan etc)	Other
Total	526,763	15.4	9.2	23.1	11.8	0.5	39.5	0.5
<i>Urban</i>	255,365	14.6	15.1	19.7	14.2	0.8	35.0	0.6
<i>Rural</i>	271,398	16.1	3.6	26.3	9.5	0.3	43.8	0.4
Komenda-Edina-Eguafo-Abirem	35,402	18.3	9.8	9.6	8.3	0.6	52.5	0.9
Cape Coast Metropolis	40,386	8.6	34.4	5.0	10.8	0.4	40.0	0.8
<i>Cape Coast South</i>	23,786	8.1	37.6	3.4	10.1	0.4	39.3	1.0
<i>Cape Coast North</i>	16,600	9.3	29.9	7.3	11.8	0.3	41.0	0.5
Abura-Asebu-Kwamankese	28,704	23.5	4.1	21.3	10.3	0.4	39.9	0.4
Mfantiman Municipal	48,304	19.6	9.8	15.5	11.2	1.3	42.2	0.4
Ajumako-Enyan-Essiam	35,106	12.9	3.0	28.7	8.7	0.2	46.2	0.3
Gomoa West	32,715	32.6	4.1	19.0	8.6	1.2	34.2	0.4
Effutu Municipal	17,121	16.1	24.7	5.4	12.2	1.8	38.8	1.0
Gomoa East	52,898	17.6	8.6	24.4	13.7	0.2	35.3	0.2
Ewutu Senya	46,277	14.8	8.2	26.8	23.8	0.5	25.3	0.5
Agona East	21,021	10.4	5.4	23.3	7.9	0.4	52.2	0.4
Agona West Municipal	29,478	7.3	14.2	22.6	12.0	0.3	43.2	0.4
Asikuma-Odoben-Brakwa	26,997	6.1	2.7	27.7	10.1	0.2	52.8	0.5
Assin South	23,200	16.1	1.6	36.0	9.9	0.1	35.7	0.6
Assin North Municipal	36,317	13.1	3.0	35.4	17.6	0.2	30.3	0.4
Twifo-Hemang-Lower Denkyira	25,201	11.7	2.8	40.3	7.0	0.3	37.6	0.3
Upper Denkyira East Municipal	14,200	5.4	10.3	34.8	9.0	0.6	39.7	0.3
Upper Denkyira West	13,436	18.7	2.7	36.5	4.4	0.3	36.9	0.5

Source: 2010 Population and Housing Census

12.18 Sanitation- Disposal of Solid Waste

One of most intractable challenges of both urban and rural areas in Ghana, and in the Central Region in particular, is efficient solid waste (refuse) disposal. As shown in Table 12.15, the most popular means of disposing solid waste (refuse) in Region is by public dump, either dumping in a container (18.7%) or dumping unto open dump site (53.8%). Routine collection of waste from houses is hardly practised. It is in only in 3.9 percent of dwellings units in the Region that solid wastes are collected from the homes. About 1 in 20 dwelling units (5.4%) dump solid wastes indiscriminately compared with 13.4 percent of dwelling units burning solid waste generated by them. Although the proportions are very different, the dumping of solid waste in open spaces is the most common method of waste disposal in both rural (72.2%) and urban areas (34.3 percent) in the Region.

There are only very little differentials in the disposal of solid waste across Districts. In Ewutu-Senya apparently because of its proximity to Accra, 16.9 percent of dwelling units have their solid wastes collected from houses, the corresponding proportions are less than two percent in Gomoa West, Ajumako-Enyan-Essiam, Abura-Asebu-Kwamankese, Asikuma-Odoben-Brakwa, Komenda-Edina-Eguafo-Abirem, and Agona East. In all Districts, except Gomoa East and Ewutu-Senya, over 70 percent of dwelling units dispose solid wastes by either dumping them in a container or dumping unto open dump site. At least three in ten dwelling units in Gomoa East (31.8%) and Ewutu-Senya Districts dispose of their solid wastes by burning them. Indiscriminate dumping of refuse is the main means of solid waste disposal in at least one-tenth of dwelling units in five districts; the highest proportions are recorded in Upper Denkyira East (15.4%) and Assin South District (12.5%). The practice of indiscriminate dumping of refuse has potential negative health implications such as the breeding of mosquitoes.

Table 12.15: Solid waste disposal by district

District	Total	Collected	Burned	Public dump (container)	Public dump (open space)	Dumped indiscriminately	Buried	Other
Total	526,763	3.9	13.4	18.7	53.8	5.4	3.4	1.5
<i>Urban</i>	255,365	6.2	18.7	32.8	34.3	3.0	3.1	1.9
<i>Rural</i>	271,398	1.7	8.4	5.4	72.2	7.7	3.6	1.1
Komenda-Edina-Eguafo-Abirem	35,402	1.4	7.6	17.3	66.8	2.7	2.4	1.8
Cape Coast Metropolis	40,386	5.5	9.2	56.7	21.9	2.2	1.8	2.9
Abura-Asebu-Kwamankese	28,704	1.1	9.2	8.7	71.3	4.1	2.4	3.2
Mfantiman Municipal	48,304	2.4	15.2	12.8	60.7	4.5	2.9	1.4
Ajumako-Enyan-Essiam	35,106	1.0	8.7	13.5	70.7	2.4	3.0	0.7
Gomoa West	32,715	0.7	9.6	6.3	72.8	4.9	2.1	3.6
Effutu Municipal	17,121	6.0	15.7	43.2	30.4	1.6	1.3	1.7
Gomoa East	52,898	4.2	31.8	13.8	43.7	2.6	3.4	0.5
Ewutu Senya	46,277	16.9	30.3	6.0	34.8	5.9	4.7	1.4
Agona East	21,021	1.5	10.1	15.3	65.9	3.6	2.9	0.6
Agona West Municipal	29,478	2.8	6.0	45.3	40.1	3.1	2.2	0.6
Asikuma-Odoben-Brakwa	26,997	1.2	7.3	14.3	68.3	4.1	4.0	0.8
Assin South	23,200	2.4	8.6	13.0	57.5	12.5	5.2	0.8
Assin North Municipal	36,317	3.6	10.7	14.2	53.1	11.1	6.2	0.9
Twifo-Hemang-Lower Denkyira	25,201	2.9	6.1	6.7	67.6	11.2	4.3	1.3
Upper Denkyira East	14,200	2.4	4.7	32.2	40.4	15.4	3.9	1.0
Upper Denkyira West	13,436	2.2	3.5	11.9	64.0	11.9	5.2	1.4

Source: 2010 Population and Housing Census

12.19 Sanitation- Disposal of Liquid Waste

In the majority of dwelling units in the Central Region, as shown in Table 12.16, liquid waste is disposed of by either throwing it onto the compound or throwing it onto the street or outside the house. About 2 out five dwelling units (41.0%) throw liquid waste onto the compound while 31.1 percent throw liquid waste onto the street or outside the house; or into a gutter (16.9%). One in 10 dwelling units (6.7%) dispose of liquid waste through a drainage system into a gutter and another 1.7 percent have drainage into a pit (or soak away system). In the region the percentage of dwelling units connected to a central sewage system is only 1.3 percent. The current proportion is far below the national average of 3.4 percent. Nearly one-half of dwelling units in rural areas (49.1%), and one third in urban areas (32.5%) dispose of liquid waste by throwing onto the compound.

Over one-half of dwellings in five Districts, Twifo-Hemang-Lower Denkyira (56.2%), Ewutu-Senya (55.5%), Upper Denkyira West (54.9%), Assin North (52.8%), Assin South (50.8%) and Gomoa East (50.6%), dispose of liquid waste by throwing onto the compound. Throwing liquid waste onto the street or outside the house is the most popular method of liquid waste disposal in Gomoa West (43.7%), Ajumako-Enyan-Essiam (43.3%), and Mfantsiman (40.5%). The proportion of dwelling units with liquid waste drainage connected to a gutter is relatively high in predominantly urban Districts of Cape Coast (25.6%), Effutu (13.7%) and Agona West (12.8%). Disposal of liquid waste through a formal or public sewage system is very low in all the Districts including the most urbanised Districts, 3.5 percent in Cape Coast Metropolis and 3.0 percent in Effutu. It is pertinent to note that the proportion is as low as 1.8 percent in Ewutu-Senya, given that the District is the fastest growing and consists of relatively new houses.

Table 12.16: Liquid waste disposal

District	Total	Sewerage	Drainage system (gutter)	Drainage (soak away)	Street/ outside	Gutter	Compound	Other
Total	526,763	1.3	6.7	1.7	31.1	16.9	41.0	1.3
<i>Urban</i>	255,365	1.8	10.6	2.2	27.1	24.4	32.5	1.5
<i>Rural</i>	271,398	0.8	3.0	1.3	34.9	9.9	49.1	1.0
Komenda-Edina-Eguafo-Abirem	35,402	1.6	5.3	1.7	29.4	18.3	39.6	4.2
Cape Coast Metropolis	40,386	3.5	25.6	3.0	12.2	36.0	18.0	1.8
Abura-Asebu-Kwamankese	28,704	0.6	3.9	0.8	34.5	21.6	35.1	3.5
Mfantsiman Municipal	48,304	0.9	5.8	1.6	40.5	14.1	35.4	1.6
Ajumako-Enyan-Essiam	35,106	0.3	5.2	0.6	43.3	16.1	33.4	1.1
Gomoa West	32,715	0.9	2.6	1.8	43.7	12.0	37.8	1.1
Effutu Municipal	17,121	3.0	13.7	3.5	20.7	22.8	35.3	1.1
Gomoa East	52,898	0.9	5.8	2.4	29.9	9.7	50.6	0.7
Ewutu Senya	46,277	1.8	1.9	2.2	26.3	11.7	55.5	0.5
Agona East	21,021	2.4	4.6	0.8	33.0	14.8	43.8	0.7
Agona West Municipal	29,478	1.1	12.8	2.9	29.1	29.1	24.4	0.6
Asikuma-Odoben-Brakwa	26,997	0.3	4.8	0.6	35.7	16.9	40.8	1.0
Assin South	23,200	0.6	2.2	1.1	32.9	11.9	50.8	0.4
Assin North Municipal	36,317	0.8	2.3	1.3	29.8	12.6	52.8	0.4
Twifo-Hemang-Lower Denkyira	25,201	1.0	4.1	1.8	26.8	9.6	56.2	0.4
Upper Denkyira East Municipal	14,200	1.1	7.7	0.6	25.3	28.1	36.6	0.6
Upper Denkyira West	13,436	0.7	4.4	0.6	30.5	8.7	54.9	0.1

Source: 2010 Population and Housing Census

12.20 Main Source of Drinking Water

The source of water supply particularly for drinking has tremendous effect on the burden of disease in a community. The main health benefit of clean water supply is a reduction in diarrhoeal disease, although the effects on other diseases are also substantial. Water is often classified as 'improved' or 'unimproved'. Sources considered as improved are household connection to public pipe borne water supply system, public standpipe, borehole, protected (lined) dug well, protected spring, and rainwater collection. Unprotected wells and springs, vendors, and tanker-trucks are considered unimproved.

The main sources of drinking water in Central Region are presented in Table 12.17. Household drinking water in Central region is obtained from six main sources as follows: public standpipe (23.3%), pipe-borne water outside the dwelling unit (20.9%), borehole or pump tube well (18.3%), pipe-borne water inside the dwelling (9.3%), sachet water (8.1%), and rivers and streams (7.8%).

Altogether, over-half (53.6%) of dwelling units in the Region obtain their main source of water from pipe-borne source. This is above the national average of 46.5%. It is important to note that about 8.1 percent of dwelling units in the Region use sachet water as the main source of drinking water, a practice which was hardly known in 2000. While the production of sachet water may provide jobs, the challenges posed by sachet water are worth mentioning. Issues of unhygienic production and disposal of plastic are a nightmare in most big cities and towns in the country. Finally, about 10 percent of dwelling units obtain water from springs, rivers, streams, ponds and lakes- sources considered as 'unprotected'.

There are differentials at the District level in the main source of drinking water. In two Districts, Assin North (14.1%) and Assin South, (22.2%) of dwelling units obtain water from a piped source. Thirty-three percent in Cape Coast and 28.4 percent in Effutu obtain their drinking water from pipe-borne connection inside the dwelling, while the proportions are only 0.5 percent in Assin North, 1.0 percent in Upper Denkyira West, and 1.7 percent in Asikuma-Odoben-Brakwa. Harvested rain water is the main source of drinking water in 10.0 percent of dwelling units in Gomoa West, and 3.0 percent in Ewutu-Senya District, but in all other districts the proportions are below 2.0 percent. The following four Districts have the highest proportions of dwelling units whose main source of drinking water are rivers and streams: Asikuma-Odoben-Brakwa (18.2%), Assin South (16.5%), Twifo-Hemang-Lower Denkyira (15.6%) and Upper Denkyira East (14.0%). While in 13 out of the 17 Districts one percent or less of dwelling units obtain drinking from water tanker services, the proportions are 13.9 percent in Gomoa West and 12.8 percent in Gomoa East. Sachet water, a product hardly unknown a decade ago, is now the main source of water for nearly one-quarter of dwelling units (23.2%) in Ewutu-Senya, 16.8 percent in Gomoa East, 14.3 percent in Cape Coast , and 10.0 percent in Effutu.

Table 12.17: Main source of drinking water

District	Total Households	Pipe-borne inside dwelling	Pipe-borne outside dwelling	Public tap/ Standpipe	Bore-hole/ Pump/ Tube well	Protected well	Rain water	Protected spring	Bottled water	Sachet water	Tanker supply/ Vendor provided	Unprotected well	Unprotected spring	River/ Stream	Dugout / Pond/ Lake/ Dam/ Canal	Other
Total	526,763	9.3	20.9	23.3	18.2	4.3	1.6	0.3	0.3	8.1	2.9	1.9	0.2	7.8	0.8	0.1
Urban	255,365	15.3	27.0	24.2	6.3	5.0	0.9	0.3	0.4	13.4	5.0	0.8	0.0	1.0	0.3	0.1
Rural	271,398	3.6	15.1	22.5	29.4	3.7	2.2	0.3	0.2	3.1	0.9	3.1	0.3	14.3	1.3	0.1
Komenda-Edina-Eguafo-Abirem	35,402	11.8	25.4	45.3	7.4	1.8	0.6	0.4	0.4	3.8	0.2	0.9	0.1	1.2	0.4	0.0
Cape Coast Metropolis	40,386	33.0	17.6	32.9	0.5	0.3	0.0	0.3	0.8	14.3	0.1	0.0	0.0	0.1	0.0	0.1
Cape Coast South	23,786	39.8	13.1	33.6	0.5	0.1	0.0	0.3	0.9	11.4	0.1	0.0	0.0	0.1	0.0	0.1
Cape Coast North	16,600	23.3	23.9	31.8	0.5	0.5	0.0	0.3	0.7	18.3	0.0	0.1	0.0	0.2	0.0	0.2
Abura-Asebu-Kwamankese	28,704	4.8	22.7	25.6	32.2	4.3	0.4	0.3	0.2	2.7	0.5	1.7	0.0	4.1	0.4	0.0
Mfantsiman Municipal	48,304	14.3	25.2	31.1	10.4	1.6	1.7	0.2	0.2	3.2	0.9	1.5	0.5	8.3	0.6	0.3
Ajumako-Enyan-Essiam	35,106	5.7	27.8	22.6	18.4	3.6	1.7	0.4	0.2	2.1	1.1	2.5	0.0	13.2	0.7	0.1
Gomoa West	32,715	4.2	17.9	17.2	8.0	7.6	10.0	0.4	0.2	7.4	13.9	2.6	0.2	8.1	2.3	0.0
Effutu Municipal	17,121	28.4	45.9	12.3	0.7	0.1	0.1	0.3	0.4	10.0	1.0	0.0	0.0	0.3	0.3	0.0
Gomoa East	52,898	5.0	25.9	26.6	3.5	2.8	2.1	0.2	0.4	16.8	12.8	1.3	0.1	1.7	0.7	0.0
Ewutu Senya	46,277	4.8	28.5	12.1	5.4	3.4	3.0	0.6	0.3	23.2	5.3	2.9	0.6	8.0	1.8	0.0
Agona East	21,021	6.6	16.9	38.3	19.0	2.8	0.2	0.1	0.3	2.2	0.0	1.3	0.1	11.6	0.5	0.1
Agona West Municipal	29,478	19.2	24.2	32.1	5.8	1.8	0.4	0.2	0.3	5.8	0.0	1.9	0.1	7.0	1.2	0.0
Asikuma-Odoben-Brakwa	26,997	1.7	9.5	13.8	37.8	10.9	1.0	0.1	0.1	4.0	0.0	1.8	0.2	18.2	0.9	0.0
Assin South	23,200	1.4	8.6	12.2	45.9	7.7	0.6	0.4	0.1	2.5	0.0	2.5	0.4	16.5	1.1	0.0
Assin North Municipal	36,317	0.5	6.7	6.9	47.2	13.3	0.5	0.2	0.1	9.3	0.0	5.0	0.1	9.7	0.3	0.2
Twifo-Hemang-Lower Denkyira	25,201	2.0	11.5	15.2	44.0	5.9	0.2	0.4	0.1	2.9	0.0	1.5	0.2	15.6	0.5	0.0
Upper Denkyira East Municipal	14,200	9.3	16.7	14.5	34.6	2.4	0.1	0.2	0.3	4.5	0.0	2.5	0.1	14.0	0.8	0.0
Upper Denkyira West	13,436	1.0	13.7	25.1	42.3	4.2	0.3	0.2	0.1	1.4	0.0	3.0	0.1	8.0	0.5	0.0

Source: 2010 Population and Housing Census

CHAPTER THIRTEEN

SUMMARY OF FINDINGS

13.1 Basic Population Characteristics

In 2010 the population of Central Region was 2,201,863, accounting for about 8.9 percent of the population of Ghana with an annual growth rate of 3.1 percent between 2000 and 2010. Gomoa East District recorded the largest share of the population of the Region (9.4%) compared with Upper Denkyira West District which has the smallest (2.7%) share of the regional population. The proportion of the population in the region living in urban areas is 47.1 percent with only 6 out of the 17 Districts recording over one-half of their population living in urban areas. The most urbanized District in the Region in 2010, Effutu has 93.3 percent of its population living in urban localities. There are no urban localities in two of the districts, Assin South and Upper Denkyira West.

The Region generally depicts a typical youthful population with a median age of 19.7 years and mean of 24.4 years. The proportion of the Regional population under 15 years is 39.5 percent being relatively high in three Districts, Asikuma-Odoben-Brakwa (43.5%), Assin South (42.9%), and Assin North (42.0%), but low in Cape Coast (28.3%) and Effutu (33.1%). The dependency ratio for the Region is 81.4, with the lowest dependency ratios recorded in Cape Coast (49.1) and Effutu (61.0) and the highest in Ajumako-Enyan-Essiam (97.8) and Asikuma-Odoben-Brakwa (95.4).

The Region consists mainly of Akans who constitute 81.7 percent of the population, Ewes form 6.2 percent and the Guans 5.3 percent, who constitute the largest ethnic group in Effutu District (58.5%) and in Ewutu Senya (28.5%). The largest religious group is the Pentecostal-Charismatic constituting 29.8 percent of the population, the Protestants (21.0%) and Catholics 11.1 percent. Other Christian groups form 21.4 percent of the population and Muslims account for 8.6 percent of the population in the Region. About seven percent of the population (6.6%) claimed to adhere to no religions preferences.

13.2 Households

There are 526,764 households in the Region of which 255,365 (48.5%) are in urban areas and 271,399 (51.5%) in rural areas. The majority of households (62.9%) consist of nuclear families, made up of the head only or the head and the combination of spouse and/or biological or adopted children. About four out of 10 household members (42.3%) are children (42.2%) while about a quarter (24.9%), are household heads. Sixty percent of households are headed by males and the remaining 40 percent by females. It is only in one District- Gomoa West- that the proportion of female-headed households (52.4%) is higher than that of males. The average household size for the Region is 4.0, which is below the national average of 4.4. The region has the second lowest average household size (4.0) after Greater Accra (3.8). At the district level, there are marked

variations in average household size, the lowest average household sizes being in the two most urbanised Districts of Cape Coast (3.5) and Effutu (3.6). Upper Denkyira East recorded the largest household size of 5.0 persons.

13.3 Marital Characteristics

About forty percent (40.6%) of persons 12 years and older are married while 5.8 percent are living together or in informal consensual union. Two-fifth (40.9%) are never married while 12.7 percent have ever been married but currently not in a union. The proportion separated is 2.0 percent, divorced is 5.0 percent and widowed is 5.7 percent. There are sex differentials in marital status. Just under one-half of males 12 years and older (48.2%), compared with about one third (34.6%) of females have never married. In two Districts, Cape Coast (61.3%) and Effutu (54.5%) more than one-half of males 12 years and older have never married.

13.4 Information Communication Technology (ICT)

13.4.1 Persons with Mobile Phones

The proportion of persons 12 years and older in the Central Region who owned mobile phones in 2010 is 44.9 percent. As expected, mobile phone ownership is highest in the predominantly urban Districts and lowest in rural Districts. Mobile phone ownership is lowest in Assin South (30.5%) and Asikuma-Odoben-Brakwa (34.0%) and highest in Cape Coast (69.5%) and Effutu (59.2%). Furthermore, the proportion of females 12 years and older owning mobile phones is 39.2 percent compared with 51.5 percent male mobile phone ownership. Cape Coast (65.2%) has the highest proportion of females owning mobile phones compared with Assin South where only about one-quarter of females (24.7%) own mobile phones. The proportion using mobile phones is lowest among persons aged 12-14 years (3.8%) and highest among the 25-29 age group where two in three persons (65.2%) have mobile phones. For all age groups the proportion of males who own mobile phones is higher than that of females. This may be a reflection of the relatively weaker economic power of females compared with males. Table 6.3 shows that mobile phone ownership is highest among persons with highest level of educational attainment (98% among those with higher education) and is lowest among persons with primary school education (22.9%). Variations in mobile phone ownership among males and females with similar educational levels are observed only among those with educational attainment below the Senior Secondary Level. For example, one-third of males who have never attended school (33.0%) have mobile phones, compared with about one-fifth (21.9%) of females who never attended school.

13.4.2 Characteristics of Mobile Phone Users by District

About 35 percent of the total number of persons with mobile phones in the Central Region are in the following three districts: Cape Coast (13.6%), Gomoa East (11.1%) and Ewutu Senya (11.0%). The following five Districts, with the lowest share of mobile phones, altogether have about 15 percent of persons who have mobile phones in the Region: Upper Denkyira West (2.1%), Assin South (3.1%), Agona East (3.1%), Upper Denkyira East (3.6%), and Asikuma-Odoben-Brakwa (3.7%). Of the total number having mobile phones in the Region, 60.4 percent

are in urban areas and 39.6 percent in rural areas. Of the total number of urban dwellers who have mobile phones, about 45 percent are found in three Districts, Cape Coast (17.8%), Ewutu Senya (15.2%) and Gomoa East (11.5%).

13.4.3 Internet Users

For the Central Region, as a whole, only 7.0 percent of population 12 years and older use the internet. The proportions using the internet are highest in two Districts, Cape Coast (32.0 %), and Effutu (23.2%) and lowest in Upper Denkyira West (1.1%). Internet usage in all 17 Districts is higher among males (9.3%) than females (5.0%). For males, 12 years and older who use the internet, the proportions range from 1.5 percent in Upper Denkyira West to 38.9 percent in Cape Coast. One-quarter of females in Cape Coast (25.6%) and 17.4% in Effutu use the internet while in Upper Denkyira West the proportion is lower than one percent (0.7%). Internet usage is highest among the age group 15-34 years. For both the general population and for males and females separately, the proportion using the internet peaks at age 20-24 year group and declines gradually. In the 20-24 years age group, 22.7 percent of males and 12.1 percent of females use the internet.

13.4.4 Internet Users by District and Sex

Of the total of 104,301 persons 12 years and older in the Central Region using the internet, about one-half (51.5%) reside in two Districts, Cape Coast Metropolis (40.3%) and Effutu Municipal (11.2%). Five Districts altogether accounted for 5.7 percent share of internet users: Upper Denkyira West (0.4%), Assin South (1.1%), Asikuma-Odoben-Brakwa (1.2%), Agona East (1.4%) and Twifo-Hemang-Lower Denkyira (1.6%).

13.4.5 Households with Fixed Telephone Lines

There were 7,595 households with fixed telephone lines in the Central Region in 2010. This represents only 1.4 percent of total households. The low rate for fixed telephone may be due to the expansion of mobile subscription in the country and the subsequent decline in investment in fixed telephony. Nearly two-thirds (63.5%) of households with fixed telephones are in four Districts: Cape Coast (28.3%), Ewutu Senya (18.0%), Agona West (9.8%) and Effutu (7.2%). The following four Districts altogether have only three percent share of the total number of households with fixed telephone lines. These are Upper Denkyira West (0.4%), Agona East (0.5%), Twifo-Hemang-Lower Denkyira (0.7%), and Assin South (1.5%).

13.4.6 Households Owning Desktop or Laptop Computer

A total of 28,167 households (5.3% of all households) own desktop or laptop computers in the Central Region. The ownership share per District varies considerably. About one-quarter (22.5%) of households with desktop or lap top are in Cape Coast followed by Ewutu Senya (11.2%), Gomoa East (10.4%) and Effutu Municipal (8.4). Upper Denkyira West (0.9%), Assin South (1.8%) and Agona East (2.1%) are the Districts with the lowest shares.

13.5 Literacy and Education

About eight in ten (78.2 %) of the population 11 years and older in the Central Region are literate, i.e. 21.8 percent are not literate. At the District level, there are marked variations in

literacy levels. Cape Coast Metropolis (89.7%) and Agona West Municipal (83.4%) are the Districts with the highest literacy rate compared with the lowest literacy rates recorded in Gomoa West (66.6%) and Abura-Asebu-Kwamankese (70.8%).

Literacy levels are higher in urban than in rural localities for all Districts. The proportion literate in urban localities is 82.0 percent compared with 74.6 percent in rural localities. Urban literacy rates are higher than rural rates in all Districts except in the following two districts where rural rates are higher: Abura-Asebu-Kwamankese (74.6% rural, 63.3% urban) and Gomoa West (68.0% rural, 64.9% urban). This may be explained by high levels of literacy in Ghanaian languages in these rural areas. There are sex differentials in the proportions literate. While only about 14 percent males are not literate in any language, the corresponding proportion for females is 28.9 percent. Fifty six percent of males compared with 42.1 percent females are literate in English and a Ghanaian language. High disparities are observed across Districts. In nearly all the Districts, the proportion of females not literate is about twice that of males. The District with the lowest proportion of females not literate is Gomoa West (42.4%), followed by Abura-Asebu-Kwamankese (37.5%).

13.6 School Attendance

About one out of five (19.1%) of the population three years and older have never attended any formal school while 43.1 percent are currently attending school and 37.7 percent have attended school in the past. A higher proportion of females (24.7%) than males (12.9%) have never attended school. Gomoa West (28.6%) has the highest proportion of the population who have never attended school, followed by Abura-Asebu-Kwamankese (25.5%), Komenda/Edina/Eguafo (22.6%) and Mfantseman Municipal (22.3%). Cape Coast Metropolitan has the lowest proportion of the population who have never attended. A higher proportion of the population in the rural (22.5%) areas have never attended school compared to those in the urban (16.2%) areas; this pattern is exhibited in all the Districts.

13.7 Fertility, Mortality and Migration

13.7.1 Fertility

The Region recorded a general fertility rate (GFR) of 105.3. As expected, the GFR, which is the number of births per 1000 women aged 15- 49 years, is higher in rural (120.4) than urban (90.8) areas. crude birth rate (CBR) is 26.8. CBR is low in the urban (25.0) than rural (28.4) areas. Central Region recorded a total fertility rate of 3.60, which is higher than the national average of 3.28. The total fertility for women in the rural areas is one child higher (4.1) than in the urban areas (3.1). Adjusting for underreporting of current fertility and age misreporting the total fertility rate is 1.68 children higher than the reported fertility. The difference between reported and adjusted fertility in urban (1.33), is slightly higher than those in the rural (1.26) areas.

13.7.2 Mortality

The highest proportions of deaths occurred in children younger than five years (28.8%) and adults 70 years and older (20.1%). The pattern of age specific death rates for males and females is similar to the Regional total figures. Additionally, the proportion of under-five male deaths

(32.0%) is higher than their female (25.4%) counterparts. Between ages 15-49, the proportions of female deaths are higher than that of males between the ages of 15-49 years.

13.7.3 Infant and Under-Five Mortality

The highest infant mortality rate (i.e. infant deaths per 1,000 live births) was recorded in Effutu (80), followed by Komenda-Edina-Eguafo-Abirem (70), Cape Coast (67), and Agona West (66) and Gomoa West (65). The District which recorded the lowest infant mortality rate is Twifo-Hemang-Lower Denkyira (49). Apart from Effutu recording the highest infant mortality rate, it also had the highest under-five mortality rate of 128 deaths per 1,000 children. Komenda-Edina-Eguafo-Abirem, Cape Coast, Agona West and Gomoa West also had relatively high under-five mortality rates of 100 or higher. Two districts, Twifo-Hemang-Lower Denkyira (73) and Upper Denkyira (73) recorded the lowest under-five mortality rates

13.7.4 Maternal Deaths

A total of 307 maternal deaths were recorded translating into a maternal mortality ratio (MMR) of 520 deaths per 100,000 live births which is higher than the national average of 485 deaths per 100,000 live births. The age-specific maternal mortality ratios indicate a high figure at age 15-19 (499) then declining through age 20-24 (392) to 25-29 (388). From ages 30-34, MMR starts rising, a phenomenon which continues with increase in age.

13.8 Birth Place and Migratory Pattern

In 2010, about two-thirds (64.8%) of all persons in the Central Region were born in the same locality in which they were enumerated. A further 16.3 percent were born outside the locality but in the same Region. Altogether, 81 percent of persons were born in the Region, 17 percent in other Regions of Ghana and about two percent outside Ghana. About four percent of persons in the Central Region (3.9%) were born in the Greater Accra Region, 3.5 percent in the Eastern Region, and 2.8 percent in the Ashanti Region.

The locality of birth varies across the Districts. In the following three districts, over three-quarters of persons were born in the same locality of enumeration: Gomoa West (79.6%), Ajumako-Enyan-Essiam (76.2%) and Abura-Asebu-Kwamankese (75.7%). In two Districts, Ewutu Senya (43.7%) and Gomoa East (45.2 percent), lower than one-half of the population were born in their locality of enumeration. More than a third of persons in Ewutu Senya (38.0%) and 34.6 percent in Gomoa East were born outside of Central region. The two districts with the lowest proportions of in-migrants are Ajumako-Enyan-Essiam and Gomoa West where only 7.9 percent were born outside the Central Region.

13.9 Migration

A total of 374,443 persons were recorded in the Region who were not born in the Region. In contrast, 612,458 persons were recorded outside the region who were born in the Central Region. In effect Central region experienced a negative net migration of 238,015 persons born in the region but living elsewhere in Ghana. Three top destinations of migrants from the Region are

the Greater Accra, the Western and the Ashanti regions. However, the Central Region experiences positive net migration mainly from the Volta Region.

13.9.1 International Migration

A total of 35,626 non-Ghanaians were recorded in the Central Region. Nearly all international immigrants in the Region are from the ECOWAS sub-region. In terms of individual countries of origin, the largest proportion of immigrants (22.2%) are Liberians while 16.7 percent are Nigerians. The Central Region has been the home to a large number of Liberian refugees in Ghana since the onset of the civil strife in Liberia. Twelve percent of non-Ghanaian nationals living in the Central Region are Asians compared with one percent are from Europe or the Americas.

The 2010 National Population and Housing Census collected information on the extent of international emigration of Ghanaian nationals. A total of 18,056 emigrants (household members who have travelled outside Ghana for more than six months or those who have travelled outside with an intention living outside) aged 15 years or older were recorded in the Central Region. Cote d'Ivoire is the destination of one-quarter (25.3%) of the emigrants from the Central Region while a further one –quarter (24.5%) travel to Europe.

13.10 Economic Characteristics

13.10.1 Economic Activity Status by Districts (persons 15 years and older)

The economic activity status as well as employment activities by Districts are shown in Table 9.1. For the Region as a whole, and for both males and females, seven out of every ten persons (70.1%) are economically active (i.e. those employed or unemployed). Thus, for both males and females, about 30 percent are not economically active (i.e. not working and not looking for work).

13.10.2 Occupation of Employed Persons (15 years and older) by District

In terms of types of occupations of persons 15 years and older employed in the Central Region, skilled agricultural, forestry and fishery workers form the largest occupation group employing 42.5 percent of all employed persons. The second largest group is service and sales workers (20.3%). Seventeen percent of employed persons are engaged in crafts and related trades. Managers, professionals, associate professionals and technicians altogether form nine percent of employed persons. Predominantly rural Districts have largest proportions of employed persons engaged in agriculture and fishery while in urban Districts the largest proportions are engaged in services and sales or are in craft and related trades. The three Districts with the highest proportions of employed persons engaged in agriculture and fishery are Upper Denkyira West (72.1%), Assin South (67.0%) and Asikuma-Odoben-Brakwa (65.2%). The three with the lowest proportions are Cape Coast (6.8%), Effutu (15.9%) and Ewutu Senya (22.7%).

13.10.3 Employed Persons 15 years and Older by Status of Employment

Two-thirds of employed persons in the Central Region (65.2%) are self-employed without employee(s), and 16.5 percent are employees. Nearly one in ten (9.4%) of employed persons are 'contributing family workers', 1.8 percent are casual workers while 2.4 percent are apprentices.

On the whole the proportion of the self-employed with employees is low (4.1%). The proportion of people who are self-employed (without employees) is far higher for females (72.3%) than for males (56.8%). This is also true for those classified as ‘contributing family workers’. Thus, the proportion of employees is higher for males (25.2%) than for females (9.1%).

13.10.4 Employment Sector of Employed (persons 15 years and older)

About seven percent (6.5%) of the employed work in the public or government sector with the remaining employed in the private sector. A substantial proportion of the employed (88.2%) are in the private informal sector predominantly as farmers and traders. Only two Districts have more than ten percent of the employed working in the public sector. The highest proportions are in Cape Coast where one-fifth of the employed (21.4%) are in the public sector and Effutu where the proportion is 13.0 percent. In eleven out of the 17 Districts, the proportion of the employed in the government sector is five percent or lower.

13.11 Disability

13.11.1 Population with Disability

In Central Region, 3.4 percent of persons have some form of disability. The proportion of persons with disability (PWDs) is higher among females (3.6%) than males (3.3%). The three districts with the highest proportions of persons with disabilities are Komenda-Edina-Eguafo-Abirem (6.3%), Ajumako-Enyan-Essiam (4.7%) and Abura-Asebu-Kwamankese (4.1%): the Districts with the lowest proportions of PWDs are Upper Denkyira West (2.3%) and Ewutu Senya (2.4%). At the Regional level, and in all districts, the most common type of disability is sight or visual impairment. Forty three percent of persons with disability in the region have challenges related to sight or visual impairment.

13.11.2 Characteristics of Persons with Disability (PWDs) by Marital Status

At the regional level, about a third (35.8%) of all persons with disabilities are married, a quarter (24.6%) have never married, while one-fifth (19.5%) are widowed. The proportion of persons with disability in the Region who are widowed is 19.5 percent, but in two Districts, Gomoa West (26.4%) and Mfantiman (25.9%), over one quarter are widowed. At the Regional level, four out of ten persons with disability (41.4%) have never attended school. Forty five percent of persons with disability have basic education (JSS or Middle School). Less than four percent (3.7%) of persons with disability have post-secondary or tertiary education. There are variations among Districts regarding the educational level of PWDs. The proportion of PWDs who have never attended school in Gomoa West (54.0%) is about twice the proportion in Cape Coast (24.9%).

Slightly more than one-half (53.1%) of PWDs are employed, 2.7 percent are unemployed and 44.2 percent are economically not active. The proportion of PWDs who are employed varies across the Districts. In three Districts, Twifo-Hemang-Lower Denkyira (62.6%), Assin North (62.2%) and Upper Denkyira East (60.8%) the proportions employed are higher than sixty percent. The lowest proportions of persons with disability who are employed are in the two most urbanised Districts: Effutu (42.1%) and Cape Coast (42.4%). The proportion of PWDs who are economically not active ranges from 35.7 percent in Assin North to 53.2 percent in Effutu.

13.12 Agricultural Activities

There are 270, 854 households in the Central Region engaged in farming. This constitutes slightly more than half (51.4%) of all households. Sixty three percent of farming households are headed by males. The proportion of females engaged in farming is more than that of males.

13.12.1 Households engaged in Farming by Type of Farming Activities

The highest proportion of farming households are engaged in crop farming (94.1%), while about a third (34.9%) are into livestock rearing. Only 1.7 percent and 0.2% of farming households are engaged in tree growing and fish farming respectively. In Effutu, while only 60 percent of farming households are engaged in crop farming, the corresponding proportions are 98.6 percent in Upper Denkyira West and 98.1 percent in Assin South. Three Districts with the highest proportions of farming households engaged in tree growing are Komenda-Edina-Eguafo-Abirem (7.9%), Abura-Asebu-Kwamankese (6.6%) and Cape Coast Metropolis (6.3%). The four Districts with the highest proportions of farming households engaged in livestock are Effutu (53.2%), Asikuma-Odoben-Brakwa (43.8%), Abura-Asebu-Kwamankese (41.5%) and Komenda-Edina-Eguafo-Abirem (40.2%). In all Districts the proportion of farming households engaged in fish farming is less than one percent.

Farming in the Central Region is about evenly split among the three main types of cropping; mixed cropping (34.6%), mono cropping (33.5%) and inter cropping (31.9%). There are variations in types of cropping according to type of crops. Generally, a higher proportion of tree crops are mono cropped in contrast with vegetables which are fairly split among the three types of cropping. Thus, while 73.5 percent of 'forestry trees' (such as teak), and 69.5 percent of rubber are mono cropped, the proportions for cocoyam and yam in this category are 7.9 percent and 11.3 percent.

13.13 Housing Conditions

There were 364, 699 houses in the Central Region compared to 223,239 houses in 2000, giving an annual growth in housing stock between 2000 and 2010 as 4.4%.

13.13.1 Type of Dwelling Units (Occupied and Vacant)

There are 567,051 dwelling units in the Central Region of which 92.9 percent (526, 763) are occupied and the rest vacant dwelling units. The compound house is the most common type of dwelling unit in the Region. Just over one-half of dwelling units in the Region (51.3%) are compound houses. The two districts, Agona West (65.2%) and Effutu (61.1%), have the highest proportions of compound houses while the two with the lowest proportions are Gomoa East (40.4%) and Komenda-Edina-Eguafo-Abirem (43.0%). Cape Coast where about one in ten dwelling units (11.4%) are flats or apartments is the district with the highest proportion of flats in the Region. The lowest proportion of flats is found in Assin South (1.8%).

13.13.2 Materials for Outer wall (occupied and vacant)

The two main construction materials for outer walls in the Central Region are cement or concrete and mud or mud bricks. At the Regional level, the proportion of outer walls constructed with mud or mud bricks is 36.4 percent while the proportion of outer walls made of cement or concrete is 57.4 percent. In the rural areas, however, over one-half of outer walls (53.2%) are made of mud bricks or earth. The proportions of outer walls made of mud or mud bricks vary substantially across Districts. For example, while in the two most urbanised Districts of Effutu (6.5%) and Cape Coast (16.2%), of the outer walls are constructed with mud or mud bricks, the corresponding proportions are 70.4 percent in Assin South and 66.5 percent in Upper Denkyira West.

13.13.3 Materials for Roof (occupied and vacant)

Roofs for dwellings in the Central Region are made of two main materials. About two-thirds of dwelling units (65.2%) have roofs made of metal sheets, and one-quarter (25.8%) made of slates or asbestos. Less than one percent of roofs are made of tiles. The highest proportion of roofs made up of metal sheets are in three districts, Agona West (93.5%), Agona East (91.3%) and Ajumako-Enyan-Essiam (90.7%) and the lowest lowest proportions of metal sheet are Cape Coast Metropolis (26.8%) and Effutu (28.3%). The two most urbanised Districts, Cape Coast (61.0%) and Effutu (63.8%) have the highest proportions of roofs made of slates or asbestos. In Upper Denkyira West less than one percent of roofs are made of asbestos or slates.

13.13.4 Materials for Floor

Floors in the Central Region are largely made of cement or concrete (85.2%), the highest in the country. About one in ten houses (11.3%) have floors made of earth or mud. Although cement floors are the most common in both rural and urban areas, the proportion is higher in urban (89.0%) than in rural areas (81.5%). Sixteen percent of floors in rural areas are made of earth or mud compared with only 5.9% in urban areas.

13.13.5 Tenure and Holding Arrangements

There are three major types of holding arrangements of dwelling units, in the Central Region: (1) owner-occupier, (2) rented, and (3) rent-free. Nearly one-half of all dwelling units (46.12%) are owner-occupied while about the same proportions of houses are either rented (26.4%) or are occupied on rent-free basis (26.8%). Compared with urban areas (35.0%), the proportion of owner-occupied dwelling units is higher in rural areas (56.6%) while renting is higher in urban areas (35.9%) than in rural areas (17.5%). The proportion of dwelling units occupied on a rent-free basis is about similar in both rural (25.4%) and urban areas (28.4%). Data on tenure arrangements of dwelling units at the District level reveal that owner-occupied tenure is highest in the following rural Districts: Assin South (64.7%) and Upper Denkyira West (62.4%). Conversely, owner-occupied tenure is lowest in the two most urbanised Districts, Cape Coast (31.3%) and Effutu (32.0%).

13.13.6 House Ownership

The proportion of houses owned by members of the household is slightly over one-half (51.6 percent). The proportion of houses owned by a relative who is not a household member is 22.0 percent while the proportion of dwelling units owned by other private individuals (not relatives)

is 22.5 percent. Public or government-owned housing constitute only a small proportion, 1.4 percent. The proportion of private dwelling units owned by private employers is 1.0 percent while less than one percent of dwelling units are owned through mortgage schemes. In rural areas the proportion of dwelling units owned by a household member is higher (61.4%) than in urban areas (41.3%).

13.13.7 Room Occupancy

Slightly more than one-half of households (54.5%) in the Region occupy a single room in contrast with 44.5 percent nationwide. There appears to be little difference regarding the number of rooms per household between rural and urban areas. The proportions of households occupying single rooms are 56.6 percent in urban areas and 52.5 percent in rural areas. The corresponding figures for two rooms are 24.0 percent and 23.8 percent respectively. Nearly two-thirds of households in the Region (64.0%) have one sleeping room while the national average is 54.4 percent. The data show that dwelling units in rural areas in the Region are nearly as crowded as those in urban areas. Two-thirds of all households (65.7%) have one sleeping room, the corresponding figure is 62.5 percent in rural areas. There are variations at the District level in the number of sleeping rooms. The proportions of households with only one sleeping room are highest in Effutu (71.9%) and Komenda-Edina-Eguafo-Abirem (68.4%) and lowest in Assin South district (53.0%), and Assin North (57.0%).

13.14 Access to Utilities and Household Facilities

13.14.1 Dwelling Facilities: Source of Lighting

The three main sources of non-natural lighting in households are electricity (grid) [66.1%], kerosene lamp (20.7%) and flashlight (11.2%). The proportion of dwelling units using electricity in the Region (66.1%) is the third highest in Ghana, after Greater Accra (87.1%) and Ashanti (73.6%). In the Region, flashlight is the main source of light for about one in ten households (11.2%). There are rural-urban variations in the sources of domestic light. Over three quarters of households in urban areas (78.4%) obtain light from electricity (national grid), compared with 54.5 percent in rural areas. One-quarter of dwelling units in rural areas (25.5%) use kerosene lamp as main source of light, compared with 15.7 percent in. Eighteen percent of rural dwelling units use flashlight as main source of light compared with only 3.9 percent in rural areas.

13.14.2 Dwelling Facilities: Source of Energy for Cooking

The three main sources of energy for cooking in households in the Central Region in 2010 are firewood (44.2%), charcoal (36.9%), and gas (12.5%). The use of gas is becoming more common. The proportion of dwelling units where no cooking is done is 5.1 percent. In rural areas wood is the main source of cooking fuel for 67.0 percent of households compared with 20.0 percent in urban areas. In contrast, charcoal, is used by 52.9 percent of households in urban areas and 21.8 percent in rural areas.

13.14.3 Dwelling Facilities: Cooking Space

The most common type of cooking space for most households is a separate room for exclusive use by households. About one in three dwelling units (33.5%) have cooking spaces that are

separate for exclusive use of households while in about one-fifth of dwelling units members cook in open spaces in the compound. In one in five households (20.6%), cooking takes place on the veranda. The proportion of dwelling with no cooking space is 6.6 percent.

13.14.4 Sanitation- Bathing Facilities

Bathing facilities used in the Region are primarily of three main types: shared bathroom in the same house (30.4%), bathroom for exclusive use (23.0%), and shared open bathing cubicle (22.4.0%). One in three dwellings units have a separate bathroom shared with other non-household members. The proportion of dwelling units that share an open cubicle as a bathroom with others in the compound is 22.4 percent. At the national level, 3.5 percent of dwellings use bathroom in another house; the corresponding figure for the Region is 7.3 percent, with an additional 6.8 percent using open space around the house as bathrooms.

13.14.5 Sanitation- Toilet Facilities

Five main types of toilet facilities are used in the Region. They are in order of availability for household members, the public toilet (39.5%), the pit latrine (23.1%), the Kumasi Ventilated Improved Pit Latrine (KVIP) [11.8%] and the water closet (WC) [(9.2%]. In the Region, the proportion of households whose members use public toilet (39.5%) is higher than the national average of 34.6 percent. About 15 percent of dwelling units have no toilet facilities. Household members who have no toilet facilities use the bush/beach and the open fields. The proportion of households with no toilet facilities is slightly higher in rural (16.1%) than in urban areas (14.6%).

13.14.6 Sanitation- Disposal of Solid Waste

The most popular means of disposing solid waste (refuse) in the Region is by the public dump, either dumping in a container (18.7%) or dumping unto an open dump site (53.8%). Routine collection of waste from houses is hardly practised. It is in only 3.9 percent of dwellings units that solid wastes are collected from the homes. The proportion of dwelling units which dump solid wastes indiscriminately is 5.4 percent; the proportion of dwellings that burn their solid wastes is 13.4 percent. Although the proportions are different, the dumping of solid waste in open spaces is the most common method of waste disposal in both rural (72.2%) and urban areas (34.3 percent).

13.14.7 Sanitation- Disposal of Liquid Waste

In the majority of dwelling units in the Region, liquid waste is disposed of by either throwing it onto the compound (41.0%) or onto the street or outside the house (16.9%).

About one in 16 dwelling units (6.7%) dispose of liquid waste through a drainage system into a gutter and another 1.7 percent have drainage into a pit (or soak away system). In region the percentage of dwelling units connected to a central sewerage system is only 1.3 percent. Nearly one-half of dwelling units in rural areas (49.1%) and one third in urban areas (32.5%) dispose of liquid waste by throwing it onto the compound.

13.14.8 Main Source of Drinking Water

Household drinking water is obtained from the following six main sources: public standpipe (23.3%), pipe-borne water outside the dwelling unit (20.9%), borehole or pump tube well

(18.3%), pipe-borne water inside the dwelling (9.3%), sachet water (8.1%), and rivers and streams (7.8%). Altogether, over-half (53.6%) of dwelling units obtain their main source of water from a pipe-borne source. This is above the national average of 46.5%. It is important to note that about 8.1 percent of dwelling units use sachet water as the main source of drinking water, a practice which was hardly known in 2000. Finally, about 10 percent of dwelling units obtain water from springs, rivers, streams, ponds and lakes- sources considered as ‘unprotected’.

13.15 Conclusions and Policy Implications

The Central Region has the highest population growth rate in the country. With an inter-censal annual growth rate of 3.1%, the population grew by 38.1 percent between 2000 and 2010. One in four households is headed by a female. Policy makers, health promotion professionals and other development experts should recognise the shifting nature of household headship whenever they are designing messages and interventions at the community or household level.

In some Districts of the Region, only about one-third of persons 12 years or older own mobile phones. Given the importance of mobile phones usage in the community and health development through m-health, the National Communication Authority should encourage and motivate private phone companies to expand access to mobile phones to rural communities.

Only seven percent of persons 12 years and older use the internet in the Region. In some Districts only 1.1 percent do so. Similarly, only 5.3 percent of households own a laptop or desktop computer. Considering the important role of the computer and the internet in teaching and learning, information dissemination and other facets of community development, public-private partnerships are needed to expand computer ownership and the use of internet in the Region.

The use of wood and charcoal as the main sources of fuel has implications for the rapid deforestation in the Region. The intermittent shortages of gas and relatively high cost of the product should be addressed to encourage more households to shift to the use of gas to help save the environment.

Even though the Region has the best secondary schools in Ghana and its people were the first to make contacts with European traders and missionaries, a quarter of the population are not literate and about one in five people in the Region have never attended school. The famed characteristic of the Region as an important source of excellent secondary schools and two universities is flawed as these schools are largely concentrated in Cape Coast and mainly serve non-residents. Very few of its citizens attend these schools and there are not many good secondary schools in the region outside Cape Coast, this partly explains the relatively high level of illiteracy in the Region.

The Region as a whole suffers from the centralization of all key facilities and modern services in the Regional Capital and a few other towns mainly Winneba. The Region remains very poor with some of the worst human development indicators in Ghana. The relatively high concentration of government workers in the Cape Coast and Effutu districts illustrates the overconcentration of government services in the Regional Capital and Winneba.

There is the need to address the extremely skewed nature of development in the Region. Emphasis needs to be placed on citing some regional facilities outside Cape Coast. The Region is one of the only two Regions in Ghana (the other being Upper West) with Districts with no urban areas. There is the need to develop the District capitals, particularly in Assin South and Upper Denkyira West, to reach urban status to reduce the migration of people. The Region experiences negative net migration of 238,015 persons born in the region but living elsewhere in Ghana mainly in the Greater Accra, the Western and the Ashanti Regions. This may be explained by the poverty status of the Region.

One key finding of important social and health implication is the poor nature of housing condition in the Region which confirms the relative poverty of the residents of the Region. The number of rooms occupied by a household is one of the best indicators of poverty. Dwelling units in the Region are more crowded than the average Ghanaian dwelling unit. The number of persons who sleep in one room in the Region is higher than the national average. At the national level, in Ghana, only 3.5 percent of dwellings use bathrooms in another house; the corresponding figure is 7.3 percent for the Central region. Furthermore, 6.8 percent of dwellings in the Region use the open space around the house as bathrooms and about 17 percent of all dwellings in the Region have no bathing facilities at all. About 15 percent of dwelling units in the Region have no toilet facilities at all. The proportion with no facility in rural areas is 16.1 percent and 14.6 percent in urban areas. Besides, only 9.5 percent of dwelling facilities have water closet toilet facilities, a good measure of middle-class status of the population. The relatively high proportion of dwellings without toilet facilities in the Region also supports the poverty-stricken nature of the Region. The relatively poor housing conditions in the region as a whole suggests the need for government intervention, especially in the area of provision of modern toilet facilities.

Overall, the Central Region which has the fastest growing population in the country is relatively impoverished. Given the Region's closeness to the three main Regional population centres of Accra, Kumasi and Sekondi-Takoradi, it is imperative that targeted government interventions are undertaken to increase socio-economic development in the region to reduce migration.

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