



2010

POPULATION & HOUSING CENSUS

REGIONAL ANALYTICAL REPORT

EASTERN REGION



Ghana Statistical Service
June, 2013

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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 special distribution, growth and change over time, in addition to socio-economic characteristics are all important in development planning. The Kilimanjaro Programme of Action on Population adopted by African countries in 1984 stressed that population should be a key factor in the formulation of development strategies and plans and pointed out that population and development are related.

A population census is the most important source of data on the population and its characteristics in the 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 analysed data on the 2010 PHC at the regional level to facilitate their 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 and 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 Eastern 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 policy implications and interventions.

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 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 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 Background

The Eastern Region was part of the British Colony, one of the three administrative areas of the then Gold Coast until independence. The other two administrative areas were Ashanti and Northern Territories. The administrative areas were divided into Districts and the Districts were also divided into native authorities. Native authorities during the colonial regime corresponded to what were known as states or traditional areas and were headed by paramount chiefs (Census Office 1962).

The Districts in the Colony that were located in the Eastern Region were the Akwapem-New Juaben and Birim which respectively had two and four native authorities. These Districts still belong to the Eastern Region of today but other areas have been added at different times after independence. There are 21 districts in the region today.

1.2 Physical Features

The Eastern Region lies between latitudes 6 and 7 degrees North and longitude 1.30 West 0.30 degrees East. It is the sixth largest region with a land area of 19,323 kilometres square, which is 8.1% of the land area of Ghana (Ghana Statistical Survey, 2005). It shares boundaries with five other regions: Greater Accra, Volta, and Brong Ahafo, Ashanti and Central regions.

The topography of the region is quite diverse with low lying areas around the valley of the Volta River and Lake and one of the highest reliefs, the Akwapim-Togo- Ranges. The region is well drained with the Volta Lake covering large stretches of the land. By it, transportation is made possible between the southern and northern parts of the country. The suspension bridge on the lake, the Adomi Bridge, is also a major connection between south eastern parts of the country and the Greater Accra region.

The vegetation of the Region is tropical and the rainfall pattern is the double maxima with dry and wet seasons. The cultivation of several food crops and cocoa as well as animal rearing have been major agricultural activities in the Region. The Kwahu North is a major food crop producing area and belongs to the wide stretch of land referred to as the Afram Plains.

1.3 Political and Administrative Structure

The political administrative structure is made of a regional administration and local government structures, namely district assemblies and chieftaincies. The Eastern Region is one of the ten administrative regions of Ghana. Its capital is Koforidua which is located in the New Juaben Municipality. They can be seen on Figure 1.1.

The next in the hierarchy of political administrative structures are districts and municipalities. While the districts have a capital with a number of settlements (both rural and urban), the municipalities are larger urban areas covering a wide stretch of urbanized areas but not without clusters of rural areas within their boundaries. The Eastern Region had sixteen (16) Districts and one (1) Municipality at the 2000 Population and Housing Census (PHC) but had fifteen (15) Districts and six (6) Municipalities at the 2010 PHC. The following are the municipalities: New Juaben, Akuapem South, West Akyem, Kwahu West, East Akim and Birim Central. The Districts are Kwaebibirem, Suhum Kraboa Coaltar, Asuogyaman, Atiwa, Fanteakwa, Akyem Manso, Yilo Krobo, Upper Manya Krobo, Lower Manya Krobo, Akuapem North and Birim North. The rest are Kwahu East, Kwahu North, Brim South and Kwahu South.

1.4 Social Structure

The Akan is the dominant ethnic group. Other major ethnic groups are the Ga-Dangme and the Ewe. The presence of diverse ethnic groups is explained by the presence of migrants who seek employment in the agricultural and other sectors of the economy of the region.

Both patrilineal and matrilineal systems of kinship are found in the region because of the diverse ethnic backgrounds of the residents. (The practices of inheritance are observed by the patrilineal and matrilineal systems of kinship and descent. . The institution of chieftaincy is an important component of the social organization of the region as in the rest of the country.

1.5 Economy and living conditions

The economy of the Eastern Region is predominantly agrarian, with both subsistent and commercial production of food and cash crops. Cocoa is a major traditional cash crop produced in the region while pineapple has been the main non-traditional commercially-grown food crop. Pineapple has been a major non-traditional export crop of Ghana too. Agrarian economic activities are the major types of employment in the region, particularly in rural areas.

The physical characteristics of the region support inland fishing, inland water transportation as well as flourishing tourist industry, with ecotourism and festival tourism products. The Akwapem-Togo-Ranges and the Boti Falls are the major ecotourism products while the *Odwira* Festival of the Akwapem and the annual home-coming of the Kwahu are the festivals that attract both domestic and international visitors and tourists.

Mining of bauxite (a traditional mineral) and gold (a more recent activity) are also some important economic activities in the Eastern Region. Trade and service sectors have been vibrant in the region. The region comes third after the Greater Accra and Ashanti regions in terms of infrastructural development. It has also benefited from social amenity provision as the level of urbanization has been relatively high.

1.6 Demographics

A total of 2,633,154 persons were enumerated in the Eastern Region at the 2010 Ghana PHC, made up of 1,290,539 (49%) males and 1,342,615 (51%) females. This is 10.7 percent of the total national population of Ghana, a little more than its share of 8.1 percent of the total land area of the country. The population of the Eastern Region is the third highest after Ashanti (19.4%) and Greater Accra (16.3%) regions. The population density of the region rose from 109 to 136.3 per square kilometer between 2000 and 2010 PHC.

At the 2010 Ghana PHC, 1,143,918 out the total regional population of 2,633,154 resided in urban centres, that is, settlements with population of 5,000 and over. The rate of urbanization of the region is 43.4 percent.

1.7 Organization of the Report

The report is in thirteen chapters, with twelve on the various subjects examined and the last on the conclusion and policy recommendations. The first chapter is the introduction, with the background, the political structures and institutions and the physical characteristics. The economic and demographic characteristics and the economy of the region are also discussed in this chapter. The third chapter is on the methodology of the census. The characteristics of the population and its composition are presented in chapters four and five respectively. The succeeding chapters are on other characteristics of the population: marital, educational, literacy and disability status, economic activity, fertility, mortality and migration. These are followed by access to Information Communication Technology (ICT), agriculture and housing conditions.

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 advise 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 Eastern 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.

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. This trial census was held in six selected districts across the country. 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 select 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 large EAs mainly in the district capitals.

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 Eastern 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 Eastern 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.

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 Eastern 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

It is important that the size composition and distribution of any population be analyzed to facilitate development planning, programme and policy implementation. With the current decentralized governance system and administration of planning in Ghana, it will be desirable that statistics be provided on the size, growth as well as spatial distribution, patterns and trends of the population. The population size and growth, composition and age-sex structure, nationality, birth place, ethnicity and religion of the Eastern region are discussed in this chapter.

3.2 Population Size and Growth

The population size and growth rate of the region is presented in Table 3.1. As can be observed from the Table 3.1, the population of the Eastern Region increased consistently between 1960 and 2010. The results of the 1960 census indicated that population size of the region was 1,094,196. It increased by 15.3 percent by 1970. Higher but decreasing percentage increases were recorded between 1970 and 1984 (38.1%), 1984 and 2000 (25.4%) and 2000 and 2010 (25.0%).

The population figure also yielded increasing densities of 54, 63, 87, 109, and 136 persons per square kilometer between the five censal periods while intercensal growth rates decreased between 1970 and 2000 but increased between the 2000 and 2010 intercensal period. The decrease in growth rates between 1970 and 2000 could be attributed to factors such as out-migration (internal and international) from the region as in other parts of the country as economic conditions were not favourable. The implementation of the Alien's Compliance Order in 1969 that led to the expulsion of foreign nationals from Ghana is also a frequently cited factor associated with the decline in population growth in the region as in other parts of Ghana. At the 1960 census, 12 percent of the total national population was of foreign citizenship. The percentage reduced to about 3 percent since then. The Eastern Region was a major destination of the immigrants who worked on cocoa farms and other sectors of the regional economy. The region consequently lost the immigrant workers and residents. Massive emigration of Ghanaians in the late 1970s and after early 1980s due to adverse economic conditions led to decline in the growth of population in the country at regional and national levels. There has been a reversal of the trends in emigration from around the early 2000s. A number of policy measures adopted to stem emigration from the country have been modestly successful and relatively better economic conditions have also been returning to the country.

3.3 Sex Structure

Except in 1960 when the sex ratio was high (102.2%), a declining trend started from 97.9 in 1970, rose slightly to 98.1 in 1984 but dropped further at subsequent censuses, reaching 96.1 at the 2010 PHC. The dependency ratio which was in the excess of 100 at the 1970 census also decreased consistently and reached 79 at the 2010 PHC. This is an indication of declining fertility rate as the proportion of the population aged below 15 years declines.

Table 3.1: Population by size 1960-2010

Year	Population			Per-centage increase	Popu-lation Density	Per-centage share	Growth Rate	Sex Ratio	Depen-ency Ratio
	Total	Male	Female						
1960	1,094,196	527,682	516,438		54	16.3		102.2	96.0
1970	1,261,661	599,595	610,233	15.3	63	14.7	2.0	97.9	108.8
1984	1,679,483	834,962	845,928	38.8	87	13.8	1.8	98.1	94.9
2000	2,106,696	1,036,371	1,070,325	25.4	109	11.1	1.4	96.8	90.6
2010	2,633,154	1,290,539	1,342,615	25.0	136.3	10.7	2.1	96.1	79.0

Source: 1960, 1970, 1984, 2000, 2010 Census Report Central Bureau of Statistics and Ghana Statistical Service

3.4 District and Rural-Urban Distribution of the Population

The share of the population in the region at the district level is presented in Table 3.2. Kwahu North has the largest share (8.3%) of the total population followed by three municipalities- West Akim, Kwaebibirem and New Juaben. The Upper Manya Krobo (2.4%) has the least share. The distribution pattern shows that almost 40 percent of the total regional population resides in just four of the 21 districts- the three municipalities listed above and Kwahu North..

With the exception of the New Juaben (93.3%), Birim (67.7%) and East Akim (59.0%) which are predominantly urban and Kwahu West (51.2%), which also has a little more than half of the population of the district residing in urban centres, the rest of districts of the region have their populations concentrated in rural areas. The Upper Manya district is the least urbanized, with only 13 percent of its residents in urban areas.

The level of urbanization in New Juaben is explained by the location of the regional capital there. Vast disparities in district share and rural-urban distribution of the regional population suggests that employment opportunities and access to some amenities are not equitable in the region.

Table 3.2: District population by urban-rural

Districts	District share of population	Urban	Rural	Total	Urban	Rural
Total	100	43.4	56.6	2633154	1143918	1489236
Birim South	4.5	47.5	52.3	119767	56193	62854
Birim Municipal	5.5	67.7	32.3	144869	98044	46825
West Akim Municipal	7.4	38.6	61.4	195349	75260	120089
Suhum-Kraboacoaltar	6.4	26.3	73.7	167551	44072	123479
Akwapem South Municipipal	4.7	49.3	50.7	123501	60861	62640
Akwapem North	5.2	34.1	65.9	136483	46562	89921
New Juaben Municipopal	7.0	93.3	6.7	183727	171376	12351
YiloKrobo	3.3	30.9	69.1	87847	27159	60688
Lower Manya	3.4	83.3	16.2	89246	74733	14513
Asuogyaman	3.7	29.4	70.6	98046	28788	69258
Upper Manya	2.6	12.8	87.2	72098	9189	62903
Fanteakwa	4.1	27.5	72.5	108614	29911	78703
East Akim Municipal	6.4	59.6	40.4	167896	100068	67828
Kwaebirem	7.3	48.8	51.2	192562	94062	98500
Akyem Manso	3.7	38.8	61.2	97374	33963	63411
Birim North	3.0	26.8	73.2	78907	21166	57741
Atiwa	4.2	33.4	66.6	110622	36897	73725
Kwahu West Municipal	3.6	51.2	48.8	93584	47968	45616
Kwahu South	2.4	27.1	72.9	69757	18874	50883
Kwahu East	2.9	32.9	67.1	77125	25353	51772
Keahu North	8.3	19.6	80.4	218235	42699	175536

Source: 2010 Population and Housing Census. Ghana Statistical Service.

3.5 Population Distribution by District and Sex

The distribution of the population by district and sex are shown on Table 3.3. The results of the 2010 PHC show that a total of 2,633,154 are in the Eastern Region. The 2010 population size of the region is an increase of 25 percent over the 2000 population of 2,106,696. More females (51.0%) than males (49.1%) are residing in the region. The district results revealed that Kwahu North district has the greatest share of the total population of the region, with a population size of 218,235 representing 8.3 percent. While is Kwahu South has the least population share (2.4%). The distribution of the population by sex shows slightly higher male than female percentages are recorded in four districts- Suhum-Krabo- Coaltar, Upper Manya, Fanteakwa and Kwahu North, (Table 3.4). Similarly, slightly higher female than male percentages are reorded in some districts as can be observed from Table 3.4.

Table 3.3: Population distribution by sex

District	Population			Percent share		
	Total	Male	Female	Total	Male	Female
All Total	2633154	1290539	1342615	100	100	100
Birim South	119767	57981	61786	4.5	4.5	4.6
Birim Municipal	144869	69304	75565	5.5	5.4	5.6
West Akim Municipal	195349	95047	100302	7.4	7.4	7.5
Suhum-Krabo Coaltar	167551	82402	85149	6.4	6.4	6.3
Akwapem South Municipal	123501	60907	62594	4.7	4.7	4.7
Akwapem North	136483	64028	72455	5.2	5.0	5.4
New Juaben Municipal	183727	88687	95040	7.0	6.9	7.1
Yilo Krobo	87847	42378	45469	3.3	3.3	3.4
Lower Manya	89246	41470	47776	3.4	3.2	3.6
Asuogyaman	98046	47030	51016	3.7	3.6	3.8
Upper Manya	72092	36500	35592	2.7	2.8	2.7
Fanteakwa	108614	54010	54604	4.1	4.2	4.1
East Akim Municipal	167896	81767	86129	6.4	6.3	6.4
Kwaebibirem	192562	94560	98002	7.3	7.3	7.3
Akyem Manso	97374	48003	49371	3.7	3.7	3.7
Birim North	78907	39572	39335	3.0	3.1	2.9
Atiwa	110622	54671	55951	4.2	4.2	4.2
Kwahu West Municipal	93584	44875	48709	3.6	3.5	3.6
Kwahu South	69757	33094	36663	2.6	2.6	2.7
Kwahu East	77125	37620	39505	2.9	2.9	2.9
Kwahu North	218235	116633	101602	8.3	9.0	7.6

Source: 2010 Population and Housing Census Ghana Statistical Service

3.6 Age Sex Structure and Pyramid

The age structure and the sex composition of the region follow the national pattern. It shows a youthful structure that is characteristic of a developing country such as Ghana. As shown in Table 3.4, the age-sex structure is broad based, comprising of concentration of children at younger ages. The percentage in higher ages reduces gradually in subsequent age groups with a small number of elderly and more females than males at advanced years. The Region has a young population comprising between 31.0 and 40.0 percent of the population of the districts. This reflects a declining fertility since the proportion of children exceeded 40.0 percent at the previous censuses. While the largest proportion of youthful population is in Kwahu North district (53.4%), one of the least urbanized districts with predominantly agricultural economic activity. Akwapem South has the highest percentage (8.18%) of population aged 65 years and older while New Juaben municipal, the most urbanized area with the regional capital, has the lowest percentage of children aged below 15 years. One underlying reason for the small population of younger persons in New Juaben Municipal may be explained by preference for small families resulting from a higher maternal educational status in the municipality.

Table 3.4: Population by 5 year age group by district

District	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Total	13.6	12.5	12.3	10.6	8.4	7.3	6.1	5.6	4.9	4.2	3.9	2.6	2.2	5.73	100.0
Birim South	14.1	13.1	12.9	11.1	7.5	6.3	5.4	5.3	4.9	4.1	4.0	2.8	2.4	6.07	100.0
Birim Muni cipal	13.5	12.4	13.1	11.3	8.7	7.2	6.1	5.7	5.0	4.1	3.7	2.4	2.1	4.76	100
West Akim Muni cipal	14.2	13.1	12.6	10.4	7.8	7.0	5.9	5.5	4.9	4.3	3.9	2.6	2.3	5.51	100
Suhum-KraboCoaltar	14.0	12.9	12.2	10.0	7.7	7.1	6.0	5.7	4.9	4.4	4.0	2.7	2.5	6.08	100
Akwapem South Muni cipal	12.4	11.4	11.5	9.9	9.2	8.6	7.3	6.5	5.2	4.2	4.0	2.5	2.2	5.15	100
Akwapem North	12.8	11.9	12.0	10.4	8.2	7.3	6.0	5.3	4.5	4.0	3.9	2.7	2.7	8.18	100
New Juaben Muni cipal	10.8	9.7	10.3	10.9	12.2	9.5	7.3	6.0	5.0	4.2	4.1	2.8	2.2	5.15	100
YiloKrobo	13.0	12.0	12.0	10.4	8.7	8.3	6.6	5.6	4.7	3.8	3.7	2.5	2.2	6.49	100
Lower Manya	11.8	11.3	11.9	11.8	9.4	8.2	6.8	5.5	4.8	4.1	3.7	2.4	2.2	6.17	100
Asuogyaman	12.7	11.8	12.8	11.1	8.3	7.3	6.2	5.5	5.1	4.3	4.1	2.7	2.4	5.79	100
Upper Manya	2.4	13.6	12.5	10.5	7.7	6.9	5.8	5.4	5.1	4.3	3.7	2.1	2.3	5.88	100
Fanteakwa	13.8	12.7	12.6	10.7	7.9	6.9	5.8	5.4	4.8	4.3	4.0	2.6	2.4	6.25	100
East Akim Muni cipal	12.7	11.3	11.9	11.3	8.8	7.1	6.0	5.5	4.8	4.2	4.2	2.9	2.6	6.7	100
Kwaebibirem	13.5	12.9	13.0	11.1	7.8	6.8	5.9	5.8	5.3	4.5	3.9	2.6	2.0	4.85	100
Akyem Manso	15.2	13.9	13.0	10.4	7.0	6.2	5.2	5.3	4.9	4.4	3.9	2.6	2.2	5.68	100
Birim North	14.7	12.8	12.4	10.2	7.9	7.5	6.1	5.4	5.0	4.4	3.9	2.5	2.1	5.12	100
Atiwa	14.4	13.0	12.4	9.9	7.4	6.8	5.5	5.3	4.9	4.5	4.1	2.8	2.5	6.44	100
Kwahu West Municipal	13.2	12.4	12.2	11.1	9.3	7.7	6.0	5.3	4.7	4.2	3.9	2.6	2.1	5.41	100
Kwahu South	13.8	12.8	12.7	10.6	7.8	6.7	5.4	5.1	4.4	4.1	4.0	2.8	2.3	7.35	100
Kwahu East	14.3	13.0	12.2	10.0	7.5	6.3	5.1	5.0	4.6	4.2	4.1	2.9	2.7	8.14	100
Kwahu North	16.6	14.3	12.5	9.9	8.1	7.6	6.5	5.7	5.0	4.0	3.2	1.8	1.5	3.23	100

Source: 2010 Population and Housing Census, Ghana Statistical Service

3.7 Sex Structure and Dependency Ratio by District

The sex structure of the population in the region indicates that a higher percentage of males (19.7%) than females (18.7%) are in the age group 0 to 14 years. This situation is reversed between ages 15 to 64 years with the tempo being maintained at age 65 years and older (Table 3.5). The distribution, to a large extent, conforms to the conventional pattern of the sex ratio decreasing at advanced ages, confirming that females live longer than males.

Almost all the districts have slightly higher proportion of males in their population under 15 years of age. A slightly higher male percentage within age 0-14 years is recorded in all the districts except Upper Manya district (12.4% males, 13.6% females) recorded only in Lower Manya.

Analysis of the structure of the population using sex ratio (the number of males per 100 females) shows a predominance of females over males in the region. At the districts levels except Upper Manya Krobo (102.6%), Birim North (100.6%) and Kwahu North (114.8%) where males outnumber females, the sex ratio is low for the rest of the districts. The observed higher sex ratios in these three districts could be due to a number of factors. In the Birim district, for example, it may be due to an influx of males to the mining and farming areas. The high number of males in Kwahu North district could be due to the high agriculture potentials (farming and fishing along the Volta Lake) which attract male migrant farmers and fishermen.

Table 3.5: Population by sex, dependency and sex ratios

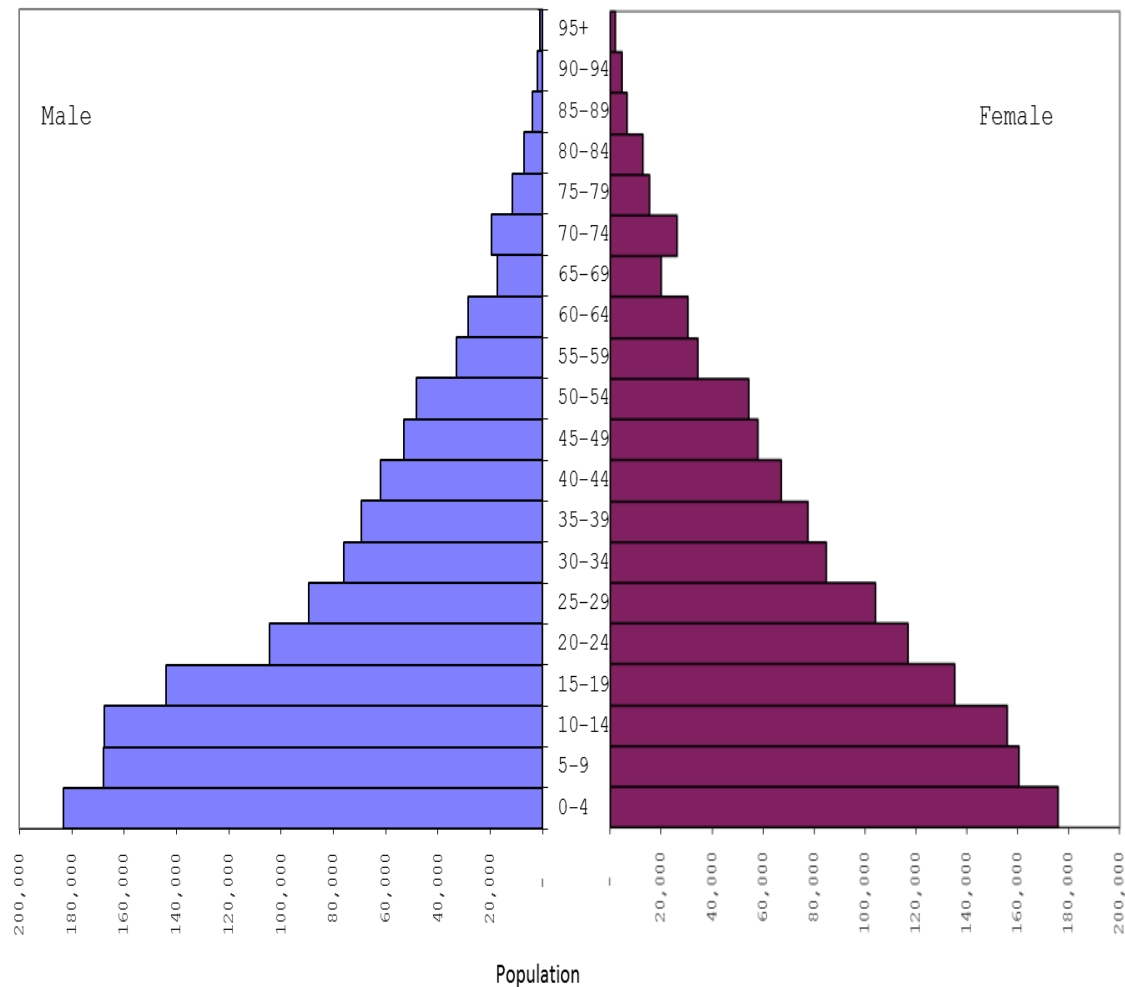
Districts	Under 15		15-64		65+		Depen- dency Ratio	Sex Ratio		
	Male	Female	Male	Female	Male	Female		Male	Female	
Total	19.7	18.7	26.9	29.0	2.4	3.3	79.0	1,290,539	1,342,615	96.1
Birim South	20.6	19.5	25.4	28.5	2.4	3.6	85.8	57,981	61,786	93.8
Birim Muni cipal	19.7	19.3	26.1	30.1	2.0	2.8	77.9	69,304	75,565	91.7
West Akim Muni cipal	20.5	19.3	25.8	28.8	2.3	3.2	83.1	95,047	100,302	94.8
Suhum-KraboCoaltar	20.1	18.9	26.4	28.5	2.7	3.4	82.2	82,402	85,149	96.8
Akwapem South Muni	17.9	17.4	29.3	30.2	2.1	3.0	67.9	60,907	62,594	97.3
Akwapem North	18.7	18.0	25.3	29.8	2.9	5.2	81.3	64,028	72,455	88.4
New Juaben Muni	15.4	15.4	30.8	33.3	2.1	3.0	56.1	88,687	95,040	93.3
YiloKrobo	18.7	18.3	26.8	29.6	2.7	3.8	77.1	42,378	45,469	93.2
Lower Manya	17.4	17.7	26.8	31.9	2.2	3.9	70.2	41,470	47,776	86.8
Asuogyaman	18.9	18.4	26.7	30.2	2.4	3.4	75.9	47,030	51,016	92.2
Upper Manya	20.8	19.4	27.0	26.9	2.8	3.0	85.5	36,500	35,592	102.6
Fanteakwa	20.3	18.8	26.7	27.9	2.7	3.6	83.0	54,010	54,604	98.9
East Akim Muni cipal	18.4	17.5	27.5	29.9	2.8	3.9	74.3	81,767	86,129	94.9
Kwaebibirem	20.1	19.3	26.8	28.9	2.2	2.7	79.6	94,560	98,002	96.5
Akyem Manso	21.7	20.4	25.1	27.1	2.4	3.2	91.7	48,003	49,371	97.2
Birim North	20.5	19.3	27.4	27.6	2.3	2.9	81.7	39,572	39,335	100.6
Atiwa	20.6	19.3	26.1	27.6	2.7	3.7	86.3	54,671	55,951	97.7
Kwahu West Muni	19.2	18.7	26.5	30.3	2.3	3.1	76.2	44,875	48,709	92.1
Kwahu South	19.9	19.5	24.9	28.4	2.7	4.7	87.8	33,094	36,663	90.3
Kwahu East	20.5	18.9	25.2	27.2	3.0	5.1	90.9	37,620	39,663	95.2
Kwahu North	23.3	20.1	28.3	25.0	1.8	1.4	87.6	116,633	101,602	114.8

Source: 2010 population and Housing Census, Ghana Statistical Service

The age-sex structure is graphically represented by a pyramid in Figure 3.1. The figure indicates a broad base which narrows as the population ages peaking after age 45 years. The phenomenon confirms assertion that large cohorts are born at a particular year but the members exit through either migration, death or both. For both sexes, more females than

males survive to higher ages although more males than females are in the age group 0-4 years.

Figure 1: Population pyramid



3.8 Ethnicity

The classification of the Ghanaian population by ethnicity as used in the previous censuses is one provided by the Ghana Bureau of languages and which has been used in the 2010 census. The classifications include a wider coverage of ethnic groupings. Consistent with past trends, the Akan (51.1%) constitute the largest ethnic group in the region, followed by Ewe (18.9%), Ga-Adangbe (17%) and the Guan (5.3%). While the largest ethnic group in 12 of the 21 districts is Akan, the concentration of this group is in Birim South where four out of every five persons is Akan. The Ga-Adangbe constitutes more than 90 percent in the three districts of lower Manya (73.8%), Upper Manya (85.3%) and Yilo Krobo (82.3%). The higher proportion of the Ewe in Kwahu North (53.1%) could be attributed to the economic potential of the district for fishing and farming which are major economic activities of the Ewe migrants who have been displaced when the Volta Dam was created. The district is endowed with rich agricultural land and its proximity to the Volta Lake may have attracted migrants, particularly the Ewe, to the area.

Table 3.6: Ethnicity by district

District	Total	Akan	Ga-Dangme	Ewe	Guan	Gurma	Mole Dagbon	Grusi	Mande	All other tribes
Total	2,569,475	1,312,977	460,814	486,136	137,386	42,291	83,311	19,412	6,771	20,377
Birim South	117,431	88.0	2.9	4.5	2.4	0.8	0.9	0.1	0.2	0.1
Birim Muni	141,379	82.7	3.7	6.0	1.4	1.8	3.1	0.5	0.2	0.5
West Akim Muni cipal	190,789	47.2	10.3	26.5	7.4	5.4	1.7	0.4	0.2	1.0
Suhum-Krabo Coalta Akwapem South Muni cipal	163,912	37.1	25.0	21.8	11.8	1.4	1.5	0.6	0.1	0.7
Akwapem North	120,054	57.6	9.6	25.1	1.9	0.8	2.5	0.8	0.2	1.5
New Juaben Muni cipal	134,716	40.1	5.6	20.2	31.5	0.2	1.8	0.3	0.0	0.3
Yilo Krobo	177,537	56.9	10.7	17.0	5.1	2.2	5.2	0.8	0.4	1.7
Lower Manya Asuogyaman	86,013	6.4	82.3	8.4	0.9	0.2	0.7	0.4	0.1	0.6
Upper Manya Fanteakwa	87,021	4.1	73.8	18.7	0.6	0.4	0.9	0.3	0.0	1.2
East Akim Muni cipal	95,927	28.1	11.6	45.8	10.8	0.9	1.9	0.2	0.1	0.5
Kwaebibirem	70,239	2.2	85.3	10.3	0.2	0.6	0.4	0.4	0.0	0.7
Akyem Manso	106,509	43.7	40.1	7.9	2.3	1.5	2.6	1.3	0.1	0.4
Birim North	164,208	62.8	13.1	15.6	2.0	1.8	2.9	0.6	0.5	0.7
Atiwa	188,519	65.8	10.4	14.6	2.5	1.4	3.3	0.6	0.5	0.9
Kwahu West Municipal	95,587	79.5	6.3	8.0	3.8	0.8	0.9	0.3	0.1	0.2
Kwahu South	77,077	66.4	12.0	12.0	2.4	1.0	3.9	1.2	0.6	0.5
Kwahu East	108,249	70.5	14.6	7.1	1.8	1.6	2.7	0.7	0.3	0.6
Kwahu North	90,537	79.0	3.4	6.1	1.1	1.2	6.2	1.3	0.6	1.1
	67,948	73.8	8.3	10.8	0.3	0.8	4.3	0.6	0.5	0.6
	75,232	70.3	5.0	17.6	0.4	0.8	3.3	1.5	0.4	0.6
	210,591	13.4	9.4	53.1	6.6	3.2	10.7	2.3	0.2	1.1

Sources: 2010 Population and Housing Census, Ghana Statistical Service

3.9 Religion

Table 3.7 indicates that the dominant religious group in the Eastern Region is Christianity with more than four-fifth (84.5%) professing adherence to the Christian faith. Moslems form only 6.7 percent of the population. The adherents to traditional religion form (1.4%) and those who have no religion constitute 6.5 percent.

At the district level, the proportion of Christians is highest in the Yilo Krobo District (93.9%). Pentecostals/Charismatic Christians account for large proportions of Christians in almost all the districts. Moslems are concentrated mostly in the New Juaben Municipality (10.5%) and Kwahu West Districts (10.0%). Persons who profess to have no Religion are found mostly in Kwahu South (12.0%) and Kwahu East Districts (13.0%).

Table 3.7: Population by district and religion

	Total	No religion	Per-cent	Christians	Per-cent	Islam	Per-cent	Tradition-alist	Per-cent	Other	Per-cent
All Districts	2,633,154	172,381	6.5	2,223,845	84.5	175,579	6.7	36,707	1.4	24,642	0.9
Birim South	119,767	9,277	7.7	102,257	85.4	6,808	5.7	570	0.5	855	0.7
Birim Municipal	144,869	8,710	6	121,663	84	11,946	8.2	605	0.4	1,945	1.3
West Akim Municipal	195,349	18,547	9.5	154,033	78.9	17,803	9.1	4,183	2.1	783	0.4
Suhum-Kraboia Coalta Akwapem South Municipal	167,551	11,799	7	142,366	85	9,347	5.6	2,084	1.2	1,955	1.2
Akwapem North	123,501	6,113	4.9	106,588	86.3	8,049	6.5	1,623	1.3	1,128	0.9
New Juaben Municipal	136,483	8,110	5.9	121,439	89	3,029	2.2	2,533	1.9	1,372	1
Yilo Krobo	183,727	6,996	3.8	154,391	84	19,309	10.5	730	0.4	2,301	1.3
Lower Manya	87,847	1,910	2.2	82,459	93.9	2,502	2.8	472	0.5	504	0.6
Asuogyaman	89,246	2,281	2.6	82,879	92.9	3,327	3.7	397	0.4	362	0.4
Upper Manya	98,046	4,005	4.1	87,364	89.1	3,586	3.7	2,306	2.4	785	0.8
Fanteakwa	72,092	1,846	2.6	66,716	92.5	2,304	3.2	544	0.8	682	0.9
East Akim Municipal	108,614	5,492	5.1	95,752	88.2	5,422	5	793	0.7	1,155	1.1
Kwaebibirem	167,896	8,982	5.3	145,885	86.9	10,924	6.5	1,101	0.7	1,004	0.6
Akyem Manso	192,562	14,366	7.5	160,697	83.5	14,749	7.7	1,139	0.6	1,611	0.8
Birim North	97,374	6,920	7.1	81,903	84.1	6,155	6.3	676	0.7	1,720	1.8
Atiwa	78,907	6,504	8.2	65,604	83.1	5,414	6.9	511	0.6	874	1.1
Kwahu West Municipal	110,622	8,157	7.4	94,106	85.1	6,770	6.1	788	0.7	801	0.7
Kwahu South	93,584	6,806	7.3	75,640	80.8	9,376	10	706	0.8	1,056	1.1
Kwahu East	69,757	8,544	12.2	55,435	79.5	4,504	6.5	862	1.2	412	0.6
Kwahu North	77,125	10,050	13	61,149	79.3	3,849	5	1,321	1.7	756	1
Kwahu North	218,235	16,966	7.8	165,519	75.8	20,406	9.4	12,763	5.8	2,581	1.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

CHAPTER FOUR

HOUSEHOLD SIZE, STRUCTURE AND COMPOSITION

4.1 Introduction

The welfare of a nation, the community and the people can be better understood in the light of the household groups and their characteristics: living arrangements of the members, migration of household members, household relations, among others. The size, structure and composition of households are influenced by social, economic and demographic factors while the total size of a population and its characteristics are in effect largely a reflection of what pertains at the household level (Weeks 2012, Shyrock et al. 1976).

The household is recognized as the logical population unit for analyzing home ownership and other aspects of housing and the family is acknowledged as the basic economic and social unit of any population. Household formation is distinguished in Ghana based on the nuclear and extended family system. The former consists of the father, mother and children whether adopted or biological and the extended family is structured around the parents, siblings and other relatives.

The 2010 PHC defines a household as a person or a group of persons, who lived together in the same house or compound and share the same house-keeping arrangements and constitute a single consumption unit. Household members are not necessarily related by blood or marriage because friends and hired domestic workers may also be part of households. The information on households basically includes household structure, composition, and relationship to head of household. The head of the household provides (or is assumed to do so) for the daily running of the household and ensures that the needs and welfare of members are provided. Household heads are, therefore, important when considering social and demographic issues. Thus household dynamics and standard of living are better understood within a context of age, sex and socio-economic characteristics of household heads.

4.2 Household Headship

Table 4.1 shows the distribution of households by age and sex of household head in the Eastern Region. The households in the region are predominantly male-headed (63.2%). This is a reflection of the national pattern which shows predominantly male household headship. But the proportion of households headed by females (41.3%) is higher in urban areas. In rural areas, on the other hand, male-headed households (67.1%) are slightly higher than the regional average (63.2%). This is due to socio-cultural transformations in urban areas (childbearing outside marriage and the tendency of couples not to co-reside) that encourage female household headship.

The proportion of female household is consistently lower than that of males for the regional population and for rural females up to age 80-84 years after which female household headship is higher than that of males. The pattern is similar for urban females except that it picks earlier at age 70-74 years. The striking higher percentage of female household heads at advanced ages reflects the demographic phenomenon of higher mortality rate among males at

advanced ages and higher life expectancy of females in Ghana, as in other populations. Consequently, the proportion of males in the population declines at the advanced ages and a higher proportion of females then assume headship among the elderly at advanced ages.

Table 4.1 Household headship by age and sex

	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	632,048	63.2	36.8	293,549	58.7	41.3	338,499	67.1	32.9
15 - 19 years	10,323	57.8	42.2	5,424	55.7	44.3	4,899	60.2	39.8
20 - 24 years	36,626	60.2	39.8	19,936	56.5	43.5	16,690	64.5	35.5
25 - 29 years	64,622	65.9	34.1	33,128	60.9	39.1	31,494	71.2	28.8
30 - 34 years	69,492	69.9	30.1	34,169	65.4	34.6	35,323	74.3	25.7
35 - 39 years	72,165	69.5	30.5	33,711	64.4	35.6	38,454	73.9	26.1
40 - 44 years	69,131	68	32	31,307	63.6	36.4	37,824	71.7	28.3
45 - 49 years	63,889	66.4	33.6	28,342	61	39	35,547	70.7	29.3
50 - 54 years	62,855	62	38	27,815	57.2	42.8	35,040	65.8	34.2
55 - 59 years	44,411	61.9	38.1	20,039	57.2	42.8	24,372	65.7	34.3
60 - 64 years	39,506	59.6	40.4	16,883	54.8	45.2	22,623	63.2	36.8
65 - 69 years	25,200	56.8	43.2	10,913	52.2	47.8	14,287	60.3	39.7
70 - 74 years	31,268	51.2	48.8	13,304	46.9	53.1	17,964	54.4	45.6
75 - 79 years	18,463	52	48	8,178	48.3	51.7	10,285	54.9	45.1
80 - 84 years	12,602	44.2	55.8	5,447	39.9	60.1	7,155	47.4	52.6
85 - 89 years	6,236	46.4	53.6	2,738	40.7	59.3	3,498	50.9	49.1
90 - 94 years	3,693	41	59	1,549	37.2	62.8	2,144	43.7	56.3
95+ years	1,566	42.8	57.2	666	34.8	65.2	900	48.8	51.2

The distribution of household headship by sex in the various districts follows the same pattern described above (Table 4.2). However, there are variations in the male headship. The percentages are higher in some districts than the Regional average as is the case in Kwahu North (79.5%), Upper Manya (77.0%) and Fantekwa (72.7%). It is pertinent to note that these are also among the least urbanised districts in the region

The relatively high proportion of female head in some districts that have lower rates of urbanization may be explained by the residential practices of matrilineal societies that encourage matrikin living arrangements of kin groups or extended family units with female household heads. The Eastern Region has both matrilineal and patrilineal kinship systems. Without much socio-cultural transformation in some of the districts that are predominantly matrilineal societies, female household headship may be persisting in the Region.

Table 4.2 Household headship by district, type of locality and sex of head

Districts	Total			Urban			Rural		
	Total	Male head	Female head	Total	Male head	Female head	Total	Male head	Female head
All Districts	632,048	63.2	36.8	293,549	58.7	41.3	338,499	67.1	32.9
Birim South	28,800	61.5	38.5	14,288	58.1	41.9	14,512	64.8	35.2
Birim Municipal	36,354	61.2	38.8	25,317	59.2	40.8	11,037	65.7	34.3
West Akim Municipal	46,806	60.8	39.2	19,733	54.8	45.2	27,073	65.1	34.9
Suhum-Kraboia Coaltar	40,413	62.7	37.3	11,885	56.3	43.7	28,528	65.3	34.7
Akwapem South Muni	30,519	61.6	38.4	15,397	59	41	15,122	64.2	35.8
Akwapem North	33,322	55.2	44.8	12,146	50	50	21,176	58.1	41.9
New Juaben Municipal	49,474	61.4	38.6	46,505	61.3	38.7	2,969	63.7	36.3
Yilo Krobo	20,613	63.8	36.2	7,226	55.2	44.8	13,387	68.4	31.6
Lower Manya	22,150	56.1	43.9	18,771	54.4	45.6	3,379	65.6	34.4
Asuogyaman	23,551	58.5	41.5	6,960	57.9	42.1	16,591	58.7	41.3
Upper Manya	15,379	75.4	24.6	2,341	66.1	33.9	13,038	77	23
Fanteakwa	24,026	68.1	31.9	7,194	57.5	42.5	16,832	72.7	27.3
East Akim Municipal	42,093	61.5	38.5	25,866	59.3	40.7	16,227	65.1	34.9
Kwaebibirem	47,954	66.5	33.5	24,333	63.7	36.3	23,621	69.4	30.6
Akyem Manso	21,361	65	35	7,683	60.3	39.7	13,678	67.7	32.3
Birim North	18,511	66.5	33.5	5,220	63.6	36.4	13,291	67.7	32.3
Atiwa	26,342	64	36	9,104	60.5	39.5	17,238	65.8	34.2
Kwahu West Muni	23,296	59.3	40.7	12,503	57.5	42.5	10,793	61.3	38.7
Kwahu South	16,725	58	42	4,770	50.9	49.1	11,955	60.9	39.1
Kwahu East	18,409	59.3	40.7	6,215	50.3	49.7	12,194	63.9	36.1
Kwahu North	45,950	77.2	22.8	10,092	68.7	31.3	35,858	79.5	20.5

Source: 2010 Population and Housing Census. Ghana Statistical Service.

Household Size

The welfare of household members sometimes tends to be linked to household size. This is because the resources that are available to the individual household members may be determined by the size. The information on household size is also important for planning purposes regarding provision of amenities, among other services that are provided at household level.

Table 4.3 provides information on household size in the Eastern Region across the districts. The regional average household size from the 2010 PHC data is 4.1 persons per household. This is, however, not reflective of the average household sizes in the districts. Overall, and in all the districts, one-member household type recorded the highest percentage members (19.9%) followed by household sizes of three (13.9%) and four (13.9%). Household with nine members constitute the least proportion of all households in the region and districts. The district with highest percentage of one-member household is New Juaben (24.9%), followed by Birim municipal (21.8%), Kwahu West (21.2%) and Kwahu East (21.2%). These are the more urbanized districts and could be expected to have small family size. The lowest percentages of one-member households are recorded in the least urbanized districts of Kwahu North (16.0%), and Upper Manya (15.2%).

The majority of households in the region and the various districts are two to six-member household sizes. Household sizes of seven and above constitute the lowest proportion of between 2 to 7 percent in all the districts. It must be noted, however, that all the districts irrespective of their rate of urbanization have large household sizes. New Juaben, the district with the regional capital, has 2.4 percent of its households with 10+ members. This is the smallest percentage though. All the other districts have 3 to 6 percent, with 4 or 5 percent being the most recorded percentage in the districts. The districts with the highest proportion of 10+ household members are Kwahu North, (6.8%), Upper Manya (6.7%) Akyem Manso (5.9%) and Fanteakwa (5.6%). These districts have predominantly rural and agrarian populations.

Table 4.3: Households by districts and size

	Total No.	1	2	3	4	5	6	7	8	9	10+
All Districts	632,048	19.9	14	13.9	13.9	12.1	9.3	6.2	4	2.5	4.1
Birim South	28,800	19.9	13.8	14.2	13.1	11.9	9.7	6.4	4.4	2.7	4
Birim Municipal	36,354	21.8	14.5	13.7	13.6	11.9	9.4	6.1	3.7	2.1	3.2
West Akim Municipal	46,806	18.7	14.1	14.3	13.9	12.7	9.4	6.3	4	2.5	4.1
Suhum-Kraboia Coaltar	40,413	19.2	13.9	14.5	14.2	12.5	9.6	6	3.8	2.4	3.8
Akwapem South Municipal	30,519	20.7	15.4	15.3	14.7	12	8.4	5.4	3.3	1.8	2.9
Akwapem North	33,322	20.4	14.1	14	14	12.2	9.1	5.8	3.9	2.4	4.2
New Juaben Municipal	49,474	24.9	16.7	14.9	14.3	11.2	7.6	4.3	2.5	1.3	2.4
Yilo Krobo	20,613	18.4	14.1	14.3	14.3	12.1	9	6.3	4	2.7	4.8
Lower Manya	22,150	19.7	15.3	15.4	14.3	11.4	8.4	5.6	3.5	2.4	3.9
Asuogyaman	23,551	20.2	13.5	13.9	13.8	12.4	9.4	6	4.3	2.4	4.1
Upper Manya	15,379	15.2	11.8	12	13.8	13.2	10.6	7.6	5.7	3.3	6.7
Fanteakwa	24,026	17.3	12.2	12.8	13.7	12.7	10.8	7.3	4.6	2.9	5.6
East Akim Municipal	42,093	21.1	14.6	14.7	14.1	11.3	8.8	6.2	3.7	2.1	3.4
Kwaebibirem	47,954	21.1	13.8	13.6	13.9	12.7	9.4	6.2	3.9	2.3	3.1
Akyem Manso	21,361	17.1	12.3	12.1	13	12.8	10.4	7.5	5.4	3.4	5.9
Birim North	18,511	19.5	12.7	14.1	13.8	11.6	9.8	6.7	4.8	2.6	4.4
Atiwa	26,342	19.7	13.3	13.5	13.7	12.3	9.6	6.8	4.1	2.7	4.3
Kwahu West Municipal	23,296	21.2	14.6	14.7	14.1	12.1	9.1	5.6	3.4	2.1	3.1
Kwahu South	16,725	20.6	14.6	13.2	13.5	11.5	8.9	6.1	4.3	2.7	4.5
Kwahu East	18,409	21.2	14	13.1	13	11.4	8.8	6.4	4.4	2.7	5.2
Kwahu North	45,950	16	11.2	12.5	13.5	13.1	10.4	7.5	5.5	3.6	6.8

Source: 2010 Population and Housing Census. Ghana Statistical Service.

4.4 Household Composition and Structure

The composition and relationship of members of households to the heads are presented in Table 4.4. About a fifth (24%) of all household members are household heads while a little more than half are children (40.1%) grandchildren (10.1%) and other relatives. The high percentage of children in the households is an indication of the high fertility of the population. Spouses, other relatives and non-relatives form less than a quarter of households

in the region. Though the proportions of other relatives (5.7%) and siblings (3.3%) of the head are relatively low, they are indications that extended family living arrangements still persist in the country.

Spousal relations are largely female. Female spouses constitute a higher percentage (18.8 percent) compared to male spouses (1.7 percent). Table 4.4 shows such gender characteristics of household composition which is expected since a male would normally have his wife/wives or sexual partner(s) co-resident. Males do not normally reside with a female head in Ghana.

There are rural-urban differentials in the household structure and composition. The percentages of household members that are female heads are lower in both urban and rural areas but children and grandchildren constitute a higher percentage in rural than urban areas (Table 4.4). Also, household heads form a slightly smaller proportion of household members in rural areas (22.7%) compared to urban areas (25.7%). This may be explained by the higher proportion of household members who are children in rural areas. Analysis shows that 25.7 percent are heads, 37.6 percent children 9.7 percent grand children and other relatives (6.1%). Females residing as spouses constitute a higher percentage in rural areas (20.4%) than urban areas (16.8%). Moreover, the difference between male and female household heads in urban areas (25.7% male household heads and 20.2 percent female household heads) is slightly smaller than in rural areas (22.7% male household heads and 15.0% female household heads).

Female household heads have been characterised as having less access to critical livelihood resources (land, credit and information) required for economic production. They also have low levels of education and employable skills (AdomakoAmpofo 2006, Manuh 2004, Lloyd 1999) even though some studies indicate that resources are more equitably shared in female-headed household than in male head households. The household headship characteristics of the Eastern Region and the policy implications would have to take these evidences into consideration.

Table 4.4: Household relationship by district

	Total	Percent	Male	Percent	Female	Percent
All Districts						
Total	2,633,154	100.0	1,290,539	100.0	1,342,615	100.0
Head	632,048	24.0	399,342	30.9	232,706	17.3
Spouse (wife/husband)	274,276	10.4	22,012	1.7	252,264	18.8
Child (son/daughter)	1,056,422	40.1	540,672	41.9	515,750	38.4
Parent/Parent in-law	22,425	0.9	3,337	0.3	19,088	1.4
Son/Daughter in-law	15,775	0.6	4,375	0.3	11,400	0.8
Grandchild	264,663	10.1	133,708	10.4	130,955	9.8
Brother/Sister	85,803	3.3	46,957	3.6	38,846	2.9
Step child	18,242	0.7	9,310	0.7	8,932	0.7
Adopted/Foster child	8,627	0.3	4,142	0.3	4,485	0.3
Other relative	151,010	5.7	70,546	5.5	80,464	6.0
Non-relative	45,258	1.7	24,991	1.9	20,267	1.5
Group quarters/Outdoor sleeper	58,605	2.2	31,147	2.4	27,458	2.0
Urban						
Total	1,143,918	100.0	542,670	100.0	601,248	100.0
Head	293,549	25.7	172,343	31.8	121,206	20.2
Spouse (wife/husband)	111,453	9.7	10,371	1.9	101,082	16.8
Child (son/daughter)	430,382	37.6	213,068	39.3	217,314	36.1
Parent/Parent in-law	9,704	0.8	1,308	0.2	8,396	1.4
Son/Daughter in-law	5,335	0.5	1,692	0.3	3,643	0.6
Grandchild	110,774	9.7	54,640	10.1	56,134	9.3
Brother/Sister	39,664	3.5	20,527	3.8	19,137	3.2
Step child	7,474	0.7	3,617	0.7	3,857	0.6
Adopted/Foster child	4,070	0.4	1,807	0.3	2,263	0.4
Other relative	70,164	6.1	31,502	5.8	38,662	6.4
Non-relative	24,983	2.2	12,284	2.3	12,699	2.1
Group quarters/Outdoor sleeper	36,366	3.2	19,511	3.6	16,855	2.8
Rural						
Total	1,489,236	100.0	747,869	100.0	741,367	100.0
Head	338,499	22.7	226,999	30.4	111,500	15.0
Spouse (wife/husband)	162,823	10.9	11,641	1.6	151,182	20.4
Child (son/daughter)	626,040	42.0	327,604	43.8	298,436	40.3
Parent/Parent in-law	12,721	0.9	2,029	0.3	10,692	1.4
Son/Daughter in-law	10,440	0.7	2,683	0.4	7,757	1.0
Grandchild	153,889	10.3	79,068	10.6	74,821	10.1
Brother/Sister	46,139	3.1	26,430	3.5	19,709	2.7
Step child	10,768	0.7	5,693	0.8	5,075	0.7
Adopted/Foster child	4,557	0.3	2,335	0.3	2,222	0.3
Other relative	80,846	5.4	39,044	5.2	41,802	5.6
Non-relative	20,275	1.4	12,707	1.7	7,568	1.0
non-relative	22,239	1.5	11,636	1.6	10,603	1.4

Source: 2010 Population and Housing Census. Ghana Statistical Service.

4.5 Summary

Households in the Eastern Region are predominantly male-headed. Differences, however, exist among the various districts and seem to be due to variations in their levels of urbanization. The more urbanized districts have higher percentages of female-headed households. Household sizes are relatively large in the region. The average household size is four but the less urbanized districts have higher proportion of their households with seven and more members. Children and grandchildren constitute the largest percentage of household members in both rural and urban areas. The presence of relatives and siblings in both rural and urban households is an indication that extended family living arrangements still exist in Ghana.

CHAPTER FIVE

MARITAL CHARACTERISTICS

5.1 Introduction

Marital status is one of the social characteristics of a population that is determined by biological, social, economic, legal and, in many cases, religious factors. Marriage is socially defined to include formal unions that are legally, traditionally or religiously sanctioned as well as cohabiting unions. Marriage is associated with population dynamics as it affects the processes and levels of fertility and, to a lesser extent, mortality and migration.

Information on marital status, usually classified by age and sex, shows the extent to which people of different ages have never married, are married (formally or consensually/living together), were formerly married (separated, widowed or divorced). Each person in any given population will fall into one of these categories at any given time.

Marriages are recognized by society as a union between a man and a woman for the purpose of procreation, mutual support and companionship. While it is recognized that there is a legal minimum age prescribed for marriage, females below the prescribed age have been given into marriage in traditional settings, as a cultural practice. To capture such child spouses in the 2010 PHC, it was decided to reduce the eligible age for marriage from 15 years (which was used in previous censuses) to 12 years.

The discussion of some aspects of marital status in the Eastern Region is first examined within the national context. Some of the characteristics are compared to the 2000 levels, followed by detailed description of the subject with respect to subgroups of the population.

5.2 Singulate

The singulate mean age at marriage in the Eastern Region in the 2000 and 2010 censuses are also close to that of the national average for the years under consideration (Table 5.1). The singulate mean ages for the region were 24.0 years and 25.4 years, respectively in 2000 and 2010, which are close to the national averages of 24.3 years in 2000 and 25.9 years in 2010.

Table 5.1: Singulate mean age at marriage by Region, Ghana

Singulate mean age of Marriage		
Region	2000	2010
All Regions	24.3	25.9
Western	23.4	25.3
Central	23.8	25.4
Greater Accra	26.3	27.7
Volta	23.9	24.7
Eastern	24.0	25.4
Ashanti	24.6	26.5
Brong Ahafo	24.0	25.4
Northern	23.2	24.1
Upper East	22.7	24.6
Upper West	22.8	24.7

Source: 2000 and 2010 Population and Housing Census,
Ghana Statistical Service

5.3 Marital Status by Age, Sex and Type of Residence

The marital status of the Eastern Region by age and residential types is presented in Table 5.2. Approximately 2 out of every 5 (39.7%) persons aged 12 years and older in the region have never been married while slightly higher proportion are married (40.6%). The proportion in consensual union formed a relatively small percentage (7.0%). Those who were formerly in a marital union constituted more than a tenth (12.7%), including those separated (2.4%), divorced (4.6%) and widowed (5.7%).

A very high proportion of the population in the age groups 12-14 years (94.9%), 15-19 years (90.7%), and 20-24 (65.8%) were not married (refer to Table 5.2). The delay in marriage might be a result of schooling, especially in the case of the younger cohorts aged below 20 years. The fact that the 5.1 percent of the children aged 12-14 years who are currently married (0.7%) or living together (4.4%) demands some policy interventions. These children are supposed to be in Junior High School (JHS). As children, they should also be receiving care from adults. Being in marital union at their tender ages denies them some period of their childhood and preparation towards adulthood in terms of career, for example. Capturing the marital characteristics of this age group at the census is strategic for policy consideration on child marriage in the Eastern Region.

The highest percentage (8.0% to 15.0%) in consensual union was reported among those in the age group 20-44 years. Since sexual activity rate is highest among this age bracket, a higher proportion of them may decide to live together with their sexual partners when they do not have the opportunity to be married. The percentage married increases rapidly from age group 20-24 years and reaches a peak at age groups 40-44 years (71.3%) and 45-49 years (70.9%). It then systematically declines from age group 50-54 years (67.6%) to 70 years and older (39.2%).

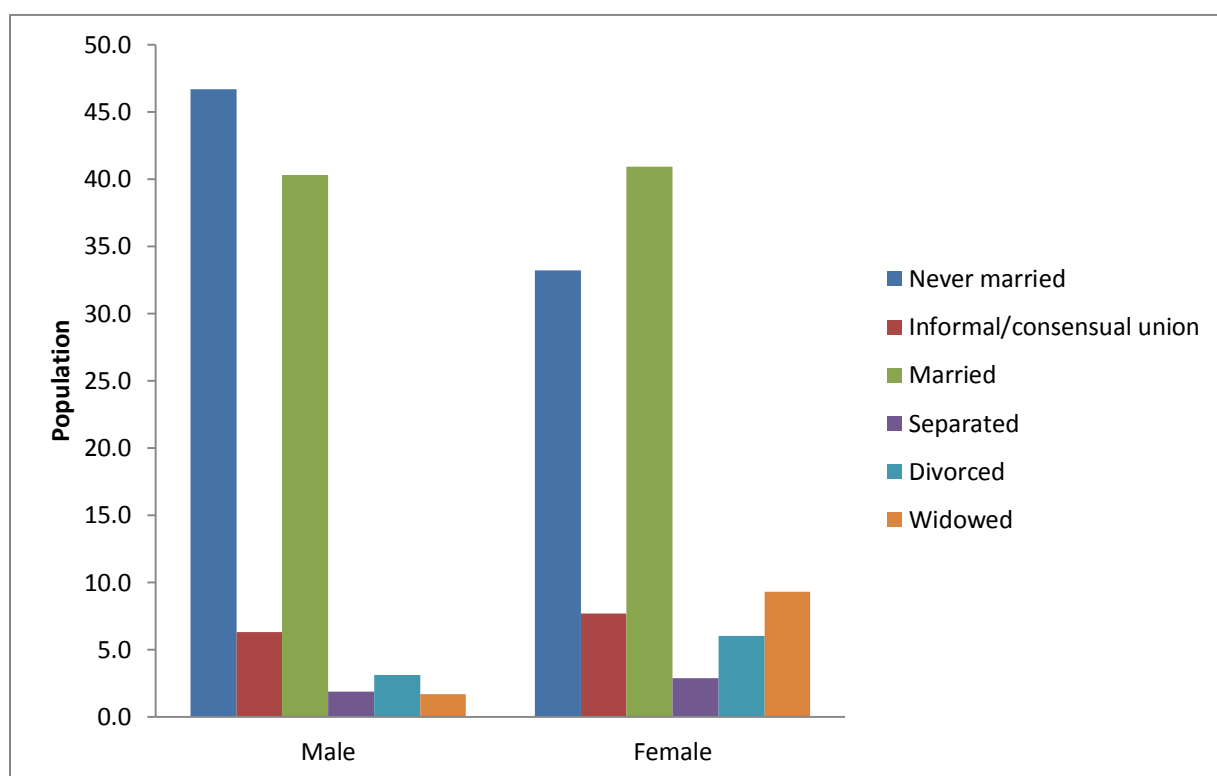
Divorce is below 1.0 percent under 25 years of age then shows a relative increases from age group 25-29 years (1.9%) to age group 50-54 years (10.9%) before stabilizing around 12.0-

12.6 percent for the age groups 55-69 years, the peak years for divorce in the Eastern region (Table 5.2).

The incidence of widowhood is below 1.0 percent under the age of 30 years. It then increases gradually to 12.3 percent at age group 55-59 years. After which the incidence of widowhood increases rapidly at age group 60-64 years (18.9%) and reaches a quarter of the population widowed (25.1%) at 65-69 years. By age 70 years and older, over two-fifths (42.2%) the population 12 years is widowed. The relatively high incidence of widowhood in the region for the older age groups is a strong indication for policy action to mitigate the impact of widowhood in the region.

Figure 5.1 shows that a higher proportion of males (46.7%) than females (33.2%) had never been married. Conversely, females are more likely to be married (40.9%) than males (41.7%) while the proportion of females divorced or widowed was higher than that of males.

Figure 5.1: Marital status by sex



Source: 2010 Population and Housing Census. Ghana Statistical Service.

Across urban-rural areas, notable variations are observed as can be (Table 5.2). In urban areas of the Region, a higher proportion (43.7%) than in rural (36.3%) had never married. On the other hand, a higher proportion of the rural residents are in a marital union (43.3% married and 7.7% in consensual union) compared to those in urban areas (37.4% married and 6.2% in consensual union) as shown on Table 5.2. Similar proportions are divorced, separated and widowed in urban and rural areas.

The higher proportion of urban residents who are not married are young people who may be attending school, and consequently, delaying their marriage. In rural areas, school attendance rates decline after early teen years due to several reasons, including those at the domestic level and also as a result of early child bearing.

A higher percentage of urban (44.0%) than rural (36.0%) never married. On the other hand, a higher percentage of rural (43.3%) than urban (37.4%) are married (Table 5.2). The incidence of informal consensual union is also slightly higher in the rural areas (7.7%) than in the urban areas (6.2%). Separation is slightly higher in the rural areas (2.6%) than in the urban areas (2.3%). The opposite obtains for the divorced in the rural areas (4.5%) than urban areas (4.7%) while the incidence of widowhood is the same for both locality types (5.7%).

The percentage never married makes is higher (47.0%) than that of females (33.0%) while the percentage of married makes (40.3%) is almost the same as that of females (40.9%). Informal consensual union is slightly higher for females (7.7%) than for males (6.3%). Marriage separation is higher among females (2.9%) than among males (1.9%), while divorce is also higher for females (6.0%) than for males (3.1%). The greatest disparity is in the widowhood among females (9.3%) compared with males (1.7%) as shown in Table 5.2.

Table 5.2: Marital status by type of locality, sex and age

Type of Locality/Sex Age Group	Total	%	Never married	%	Informal/ Consensual union	%	Married	%	Separated	%	Divorced	%	Widowed	%
Type of locality														
Total	1,810,449	100.0	718,045	40.0	127,197	7.0	735,395	40.6	43,893	2.4	82,925	4.6	102,994	5.7
Urban	820,517	100.0	358,691	44.0	50,594	6.2	306,829	37.4	18,553	2.3	38,862	4.7	46,988	5.7
Rural	989,932	100.0	359,354	36.0	76,603	7.7	428,566	43.3	25,340	2.6	44,063	4.5	56,006	5.7
Sex														
Total	1,810,449	100.0	718,045	40.0	127,197	7.0	735,395	40.6	43,893	2.4	82,925	4.6	102,994	5.7
Male	869,286	100.0	405,761	47.0	54,898	6.3	350,397	40.3	16,138	1.9	26,907	3.1	15,185	1.7
Female	941,163	100.0	312,284	33.0	72,299	7.7	384,998	40.9	27,755	2.9	56,018	6.0	87,809	9.3
Age group														
Total	1,810,449	100.0	718,045	40.0	127,197	7.0	735,395	40.6	43,893	2.4	82,925	4.6	102,994	5.7
12-14	188,349	100.0	178,668	95.0	1,402	0.7	8,279	4.4	0	0.0	0	0.0	0	0.0
15-19	279,234	100.0	253,196	91.0	8,274	3.0	16,128	5.8	783	0.3	500	0.2	353	0.1
20-24	221,624	100.0	145,789	66.0	24,961	11.0	45,922	20.7	2,732	1.2	1,652	0.7	568	0.3
25-29	193,386	100.0	73,053	38.0	28,632	15.0	82,986	42.9	3,988	2.1	3,763	1.9	964	0.5
30-34	160,582	100.0	29,692	19.0	20,360	13.0	97,736	60.9	4,926	3.1	6,059	3.8	1,809	1.1
35-39	146,892	100.0	14,194	10.0	15,241	10.0	101,468	69.1	5,128	3.5	7,979	5.4	2,882	2.0
40-44	129,241	100.0	7,731	6.0	9,991	7.7	92,136	71.3	5,380	4.2	9,454	7.3	4,549	3.5
45-49	111,096	100.0	4,532	4.0	6,636	6.0	78,802	70.9	5,014	4.5	10,274	9.2	5,838	5.3
50-54	102,535	100.0	3,196	3.0	4,672	4.6	69,266	67.6	4,906	4.8	11,180	10.9	9,315	9.1
55-59	67,498	100.0	1,720	3.0	2,394	3.5	43,758	64.8	3,209	4.8	8,130	12.0	8,287	12.3
60-64	59,224	100.0	1,562	3.0	1,742	2.9	34,616	58.4	2,680	4.5	7,447	12.6	11,177	18.9
65-69	37,379	100.0	1,036	3.0	878	2.3	19,879	53.2	1,573	4.2	4,640	12.4	9,373	25.1
70+	113,409	100.0	3,676	3.0	2,014	1.8	44,419	39.2	3,574	3.2	11,847	10.4	47,879	42.2

Source: 2010 Population and Housing Census. Ghana Statistical Service

5.3 Marital Status by District

The distribution of the population aged 12 years or older by marital status within the districts is presented in Table 5.3. The proportion never married is highest in the most urbanized district of New Juaben (48.5%) while the least proportion is recorded in Kwahu North, (38.3%) the least urbanized. Yilo Krobo (17.7%), Lower Manya Krobo (11.5%) and Upper Manya (9.5%) recorded the highest proportions in consensual marital union. The proportion divorced ranges from 2.4 in Upper Manya to more than three times that rate in Kwahu East (7.7%). The proportion widowed is less variable than the other categories of marital status among the districts. Since widowhood is due to death of spouse which is a natural occurrence, all the districts are experiencing it to the same degree.

Table 5.3: Marital status by district

District	Total	Never married	Informal/ Consensual union/ Living together	Married	Separated	Divorced	Widowed
Birim South	83,501	39.5	6.5	40.9	1.6	6.0	5.6
Birim Municipal	102,840	44.1	4.7	39.9	1.8	4.7	4.8
West Akim Municipal	136,012	40.1	6.7	40.8	2.5	4.2	5.7
Suhum-KraboaCoaltar	117,367	39.1	7.4	40.3	2.4	4.6	6.3
Akwapem South Municipal	90,687	41.2	7.5	39.1	2.6	4.6	5.1
Akwapem North	98,823	42.6	3.9	37.7	3.3	5.0	7.7
New Juaben Municipal	141,902	48.5	5.4	35.3	1.9	4.0	5.0
YiloKrobo	63,302	41.3	17.7	27.8	3.6	2.7	6.9
Lower Manya	66,110	45.3	11.5	29.8	3.8	2.5	7.2
Asuogyaman	71,163	43.8	6.9	37.2	2.3	4.1	5.8
Upper Manya	49,826	38.9	9.5	39.7	3.5	2.4	6.1
Fanteakwa	76,429	39.5	5.9	42.1	2.5	4.0	6.0
East Akim Municipal	122,818	43.0	8.1	35.2	2.3	5.1	6.1
Kwaebibirem	135,607	41.3	7.2	40.5	1.9	4.5	4.6
Akyem Manso	65,821	39.6	4.5	44.3	2.2	4.5	4.9
Birim North	54,842	38.9	8.1	40.9	2.3	4.8	5.0
Atiwa	76,822	38.6	8.2	40.3	2.0	5.2	5.6
Kwahu West Municipal	66,859	43.6	4.1	40.1	1.9	5.3	4.9
Kwahu South	49,002	39.9	4.8	40.4	1.7	6.8	6.4
Kwahu East	53,833	39.2	5.3	39.3	1.9	7.7	6.7
Kwahu North	143,143	38.3	4.6	49.3	2.4	2.6	2.7

Source: 2010 Population and Housing Census, Ghana Statistical Service

5.4 Marital Status in the Districts by Sex

There are higher proportions of females in consensual union than males in all the districts Tables 5.4 and 5.5. Yilo Krobo has the highest proportion of female (18.6%) in consensual union followed by Lower Manya (12.3%) and Upper Manya (10.4%) compared to lower percentages reported in the rest of the districts such as Akwapem North (4.2%), Birim Municipality (5.1%) and Akyem Manso (5.1%). A higher proportion of males (54.9%) than

females (45.3%) are married in Kwahu North, Akyem Manso (45.4% females and 43.1% males), Birim South (41.4% females and 40.3% males). The opposite was reported in other districts, such as, Yilo Krobo (27.4% females and 28.2% males) and Manya Krobo districts. The percentage of married males is highest in Kwahu North (45.3%), Akyem Manso (43.1%) but lowest in Yilo Krobo (28.2%).

Prevalence of divorce shows similar pattern as widowhood, with higher proportions of females than males in all the districts. The region recorded more than two folds the proportions divorced among the females than the males. Analysis of separated cases shows similar pattern like divorce and widowhood with lower proportion of males than females recorded as divorcees.

Table 5.4: Marital Status by District-female

District	Total	Never married	Informal/ Consensual union/Living together	Married	Separated	Divorced	Widowed
Total	968,408	339,529	72,299	384,998	27,755	56,018	87,809
Birim South	44,047	32.2	7.3	41.4	2.0	8.0	9.2
Birim Municipal	54,844	38.6	5.1	39.9	2.2	6.4	7.7
West Akim Municipal	71,392	33.3	7.5	41.6	3.0	5.2	9.4
Suhum-KraboCoaltar	60,629	32.2	8.2	40.9	2.9	5.6	10.3
Akwapem South Municipal	46,485	35.6	7.9	38.8	3.1	6.0	8.6
Akwapem North	54,047	35.6	4.2	37.4	4.0	6.6	12.1
New Juaben Municipal	74,473	42.9	5.6	35.3	2.4	5.6	8.2
YiloKrobo	33,341	35.3	18.6	27.4	4.4	3.4	10.9
Lower Manya	36,237	39.3	12.3	29.1	4.8	3.2	11.3
Asuogyaman	37,740	37.8	7.5	37.2	2.8	5.3	9.3
Upper Manya	24,699	32.2	10.4	41.1	4.0	2.7	9.6
Fanteakwa	39,015	32.9	6.5	42.5	3.0	5.2	9.8
East Akim Municipal	64,159	36.8	8.8	34.8	2.9	6.6	10.1
Kwaebibirem	70,101	35.7	7.8	41.0	2.2	5.6	7.6
Akyem Manso	33,969	32.4	5.1	45.4	3.0	5.9	8.2
Birim North	27,594	32.6	9.0	41.1	2.9	6.1	8.4
Atiwa	39,594	32.0	9.0	40.5	2.4	6.8	9.3
Kwahu West Municipal	35,558	37.7	4.6	40.1	2.4	7.1	8.1
Kwahu South	26,283	32.5	5.4	40.4	1.9	9.1	10.6
Kwahu East	28,159	31.4	5.9	39.1	2.2	10.3	11.2
Kwahu North	66,042	30.2	5.4	54.0	2.6	3.1	4.7

Source: 2010 Population and Housing Census, Ghana Statistical Service

Table 5.5: Marital status by Sex and District – male

District	Marital Status						
	Total	Never married	Informal/ Consensual union/Living together	Married	Separated	Divorced	Widowed
Total	898,301	434,776	54,898	350,397	16,138	26,907	15,185
Birim South	39,454	47.7	5.6	40.3	1.2	3.7	1.5
Birim Municipal	47,996	50.5	4.2	39.9	1.2	2.8	1.4
West Akim Municipal	64,620	47.6	5.9	39.9	2.0	3.0	1.7
Suhum-KraboCoaltar	56,738	46.5	6.5	39.6	1.9	3.5	2.0
Akwapem South Municipal	44,202	47.0	7.1	39.4	2.0	3.1	1.4
Akwapem North	44,776	50.9	3.5	38.0	2.3	3.0	2.3
New Juaben Municipal	67,429	54.6	5.1	35.2	1.3	2.3	1.4
YiloKrobo	29,961	47.9	16.7	28.2	2.7	1.9	2.5
Lower Manya	29,873	52.6	10.5	30.6	2.5	1.6	2.3
Asuogyaman	33,423	50.5	6.2	37.1	1.7	2.7	1.9
Upper Manya	25,127	45.4	8.6	38.3	3.0	2.1	2.6
Fanteakwa	37,414	46.3	5.2	41.7	2.0	2.8	2.0
East Akim Municipal	58,659	49.8	7.4	35.7	1.8	3.4	1.9
Kwaebibirem	65,506	47.3	6.4	39.9	1.6	3.4	1.4
Akyem Manso	31,852	47.2	3.8	43.1	1.5	3.0	1.4
Birim North	27,248	45.4	7.1	40.7	1.7	3.4	1.5
Atiwa	37,228	45.7	7.3	40.2	1.5	3.5	1.7
Kwahu West Municipal	31,301	50.3	3.6	40.2	1.4	3.2	1.3
Kwahu South	22,719	48.3	4.0	40.5	1.4	4.2	1.6
Kwahu East	25,674	47.7	4.7	39.5	1.5	4.8	1.9
Kwahu North	77,101	45.3	3.9	45.3	2.1	2.2	1.1

Source: 2010 Population and Housing Census, Ghana Statistical Service

5.4 Summary

Overall, marital status varies among the age-sex categories and other subgroups of the population districts but to different degrees. The proportions of the younger age groups who are married are the lowest in all districts. Almost all the children aged 12- 14 years are in informal marital union. Ages 25-44 years recorded the highest percentages in consensual union. Consensual union is higher in the Krobo districts than in all the other districts. The proportion never married is highest in the more urbanized districts while the percentages in marital union is highest in the districts that are least urbanized. The rural residents may tend to marry earlier than their urban counterparts who may pursue higher education and thereby delay their marriage.

CHAPTER SIX

INFORMATION COMMUNICATION TECHNOLOGY

6.1 Introduction

Access to information and communication technology is essential in increasing people's knowledge and awareness of what is taking place around them even at the global level. The world is now linked together with advanced communication technology and access to information is through the computer, mobile phone and internet facilities which are fast becoming essential for living a meaningful life. Globally, education or various systems of learning is now based on information and technology. HIV/AIDS campaign programmes that aim at behavioral change, for example, use the ICT considerably. The banking sector and other sectors and businesses also depend heavily on information technology systems. There are plans underway in Ghana to transform the agricultural sector through the by ICT and make it attractive to the youth. distance education programmes in tertiary institutions in Ghana, as elsewhere in the world, has flourished through the use of ICT. ICT facilities also enable individuals and groups to use the social media for all kinds of entertainment too. The relevance of ICT to individuals, households, businesses and various sectors of the economy cannot be overemphasized.

During the 2010 PHC, ownership and usage of information communication technology facilities and services were assessed by collecting data on both individuals/persons aged 12 years and older and households. Persons using internet facility refers to those who have access to internet facility at home, internet café, mobile phone or by other mobile device. Internet access is assumed to be not only via computer but also by mobile phone, game machine and digital televisions.

6.2 Distribution of Mobile Phone Owners

A total of 806,291 persons aged 12 years and older in the Eastern Region reported at the 2010 PHC that they had mobile phones. Out of that total, a little more than half (53.1%, 428,534) were males (Table 6.1). The gap between the sexes is not as large as those in education and other socioeconomic characteristics. This is because mobile phone is owned by people of all socioeconomic backgrounds even though higher proportions of urban dwellers and those with formal education own the mobile phone. There should, therefore, be no vast differences in its ownership by sex.

The distribution of mobile phone owners in the region by district as shown in Table 6.1 indicates that the highest percentages are recorded in the districts with the largest urban centres- New Juaben (11.8%), Kwaebibiren (7.5%), East Akim municipal (7.4%), West Akim Municipality (6.4%), Birim municipality (5.9%) Akwapem South Municipality (5.7%) and Akwapem North (5.7%). Slightly more than half (50.4%) of all persons who own a mobile phone in the Region are in these seven Districts. The remaining 14 Districts each reported 4 percent or less of all mobile phone owners in the Region.

Generally, the distribution of mobile phone owners by sex in the districts rather shows slight differences in the percentage of males and females who own mobile phone in all the districts (Table 6.1). There were five districts in which the differences between the sexes are however quite large: females recorded higher percentages than males in three of them (New Juaben, Akwapem North and Birim municipality) while males recorded higher percentages than females in two (Upper Manya and Kwahu North). Even in these five districts the differences in the percentages are small. For example, in New Juaben municipality, a slightly lower percentage of males (11.1%) than females (12.6%) own mobile phones.

Table 6.1: Distribution of population 12 years and older having mobile phones by district and sex

Districts	Ownerships of mobile phone/sex of ownership					
	All localities		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All Districts	806,291	100.0	428,543	100.0	377,748	100.0
Birim South	31,930	4.0	17,154	4.0	14,776	3.9
Birim Municipal	47,866	5.9	24,771	5.8	23,095	6.1
West Akim Municipal	51,689	6.4	28,267	6.6	23,422	6.2
Suhum-Krabo Coalta	44,709	5.5	24,771	5.8	19,938	5.3
Akwapem South Municipal	46,121	5.7	23,662	5.5	22,459	5.9
Akwapem North	45,765	5.7	22,572	5.3	23,193	6.1
New Juaben Municipal	95,059	11.8	47,587	11.1	47,472	12.6
Yilo Krobo	26,729	3.3	14,465	3.4	12,264	3.2
Lower Manya	32,797	4.1	16,435	3.8	16,362	4.3
Asuogyaman	35,088	4.4	18,211	4.2	16,877	4.5
Upper Manya	11,792	1.5	7,557	1.8	4,235	1.1
Fanteakwa	25,664	3.2	14,116	3.3	11,548	3.1
East Akim Municipal	60,023	7.4	31,148	7.3	28,875	7.6
Kwaebibirem	60,459	7.5	32,386	7.6	28,073	7.4
Akyem Manso	20,667	2.6	11,908	2.8	8,759	2.3
Birim North	22,451	2.8	12,935	3.0	9,516	2.5
Atiwa	31,145	3.9	17,021	4.0	14,124	3.7
Kwahu West Municipal	35,667	4.4	17,931	4.2	17,736	4.7
Kwahu South	22,537	2.8	11,401	2.7	11,136	2.9
Kwahu East	23,217	2.9	11,954	2.8	11,263	3.0
Kwahu North	34,916	4.3	22,291	5.2	12,625	3.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

6.2 The Rate of Mobile Phone Ownership

Approximately 45 percent of the regional population aged 12 years and over own a mobile phone as can be seen (Table 6.2). There are vast differences among the district populations, ranging from 24 percent in Upper Manya to 69 percent in the New Juaben Municipality. Apart from New Juaben, only four other Districts have more than half of their district population aged 12 years and older owning a mobile phone - Kwahu West municipality (55%), Lower Manya (51.1%), Asuogyaman (51.0%) and East Akim municipality (50.3%).

Eight other districts have over 40 percent while the rest recorded close to or less than 40 percent.

There are marked differences in the rate of mobile phone ownership between the sexes (Table 6.2). The rate of ownership among the males is higher than that of females in all the districts. The largest differences are found in Birim South (45% of males and 35% of females) and Upper Manya (31% of males and 18% of females). In the rest of the districts, the differences are 10 percentage points or lower.

Table 6.2: Percentage of population 12 years and older having mobile phones

Region/District	Total Country		Male				Female			
	Population 12+ years	Pop 12+ years having mobile phones	Percentage 12+ years having mobile phones	Pop 12+ years	Male Pop 12+ years having mobile phones	% Male 12+ years percentage having mobile phones	Female Pop 12+ years	Female Pop 12+ years having mobile phones	% Female 12+ years having mobile phones	
All district	1,810,449	806,291	44.5	869,286	428,543	49.3	941,163	377,748	40.1	
Birim South	80,904	31,930	39.5	38,117	17,154	45.0	42,787	14,776	34.5	
Birim Municipal	99,521	47,866	48.1	46,302	24,771	53.5	53,219	23,095	43.4	
West Akim Municipal	131,716	51,689	39.2	62,407	28,267	45.3	69,309	23,422	33.8	
Suhum-Kraboia Coalta	113,927	44,709	39.2	54,920	24,771	45.1	59,007	19,938	33.8	
Akwapem South Municipal	88,246	46,121	52.3	42,998	23,662	55.0	45,248	22,459	49.6	
Akwapem North Municipal	96,015	45,765	47.7	43,391	22,572	52.0	52,624	23,193	44.1	
New Juaben Municipal	138,479	95,059	68.6	65,792	47,587	72.3	72,687	47,472	65.3	
Yilo Krobo	61,490	26,729	43.5	29,012	14,465	49.9	32,478	12,264	37.8	
Lower Manya	64,202	32,797	51.1	28,951	16,435	56.8	35,251	16,362	46.4	
Asuogyaman	68,816	35,088	51.0	32,231	18,211	56.5	36,585	16,877	46.1	
Upper Manya	48,277	11,792	24.4	24,287	7,557	31.1	23,990	4,235	17.7	
Fanteakwa	74,106	25,664	34.6	36,207	14,116	39.0	37,899	11,548	30.5	
East Akim Municipal	119,377	60,023	50.3	56,846	31,148	54.8	62,531	28,875	46.2	
Kwaebibirem	131,080	60,459	46.1	63,169	32,386	51.3	67,911	28,073	41.3	
Akyem Manso	63,600	20,667	32.5	30,717	11,908	38.8	32,883	8,759	26.6	
Birim North	53,106	22,451	42.3	26,343	12,935	49.1	26,763	9,516	35.6	
Atiwa	74,458	31,145	41.8	36,018	17,021	47.3	38,440	14,124	36.7	
Kwahu West Municipal	64,825	35,667	55.0	30,279	17,931	59.2	34,546	17,736	51.3	
Kwahu South	47,417	22,537	47.5	21,881	11,401	52.1	25,536	11,136	43.6	
Kwahu East	52,177	23,217	44.5	24,794	11,954	48.2	27,383	11,263	41.1	
Kwahu North	138,710	34,916	25.2	74,624	22,291	29.9	64,086	12,625	19.7	

Source: 2010 Population and Housing Census. Ghana Statistical Service.

6.3 Rural-Urban Mobile Phone Ownership

The analysis of rural-urban rate of mobile phone ownership is presented in Table 6.3. The rural-urban differences in the rate of ownership are also high. Mobile phone ownership in the region is largely urban. A far higher percentage of urban (56.8%) than their rural counterparts (34.3%) have mobile phones. In two of the districts, the rate of ownership in rural areas is lower than half that of urban areas. (Table 6.3) - Upper Manya and Kwahu North. New Juaben Municipal has the highest urban mobile phone ownership rate (69.9%) followed by East Akim Municipal (57.1%), Birim municipal (55.3%) and Kwaebiberem (52.7%) while

the least percentage of urban residents owning mobile phones are in Birim South (45.4%), Kwahu North (44.6%) and Akyem Manso (40.4%) where less than one-half of the urban population during mobile phone.

In the rural populations in most of the districts have between 30 percent and a little more than 40 percent have mobile phones, with the exception of New Juaben where a little over one-half of the rural population own mobile phones.

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

Region/District	Mobile phone ownership/type of locality					
	Total Urban Population 12+	Urban Population 12+ having mobile phone	Percentage 12+ urban having mobile phones	Total Rural Population 12+	Rural Population 12+ having mobile phone	Percentage 12+ rural having mobile phones
Eastern	820,517	466,310	56.8	989,932	339,981	34.3
Birim South	39,178	17,844	45.5	41,726	14,086	33.8
Birim Municipal	69,069	38,179	55.3	30,452	9,687	31.8
West Akim Municipal	52,880	27,610	52.2	78,836	24,079	30.5
Suhum-Kraboia Coaltar	31,504	18,417	58.5	82,423	26,292	31.9
Akwapem South Municipal	45,451	26,557	58.4	42,795	19,564	45.7
Akwapem North	34,373	20,292	59.0	61,642	25,473	41.3
New Juaben Municipal	129,769	90,666	69.9	8,710	4,393	50.4
Yilo Krobo	19,804	11,452	57.8	41,686	15,277	36.6
Lower Manya	53,981	28,851	53.4	10,221	3,946	38.6
Asuogyaman	21,018	13,427	63.9	47,798	21,661	45.3
Upper Manya	6,590	3,488	52.9	41,687	8,304	19.9
Fanteakwa	21,284	11,148	52.4	52,822	14,516	27.5
East Akim Municipal	72,493	41,370	57.1	46,884	18,653	39.8
Kwaebibirem	65,489	34,516	52.7	65,591	25,943	39.6
Akyem Manso	22,730	9,186	40.4	40,870	11,481	28.1
Birim North	14,901	7,953	53.4	38,205	14,498	37.9
Atiwa	25,449	13,054	51.3	49,009	18,091	36.9
Kwahu West Municipal	34,367	22,264	64.8	30,458	13,403	44.0
Kwahu South	13,446	7,462	55.5	33,971	15,075	44.4
Kwahu East	18,078	9,792	54.2	34,099	13,425	39.4
Kwahu North	28,663	12,782	44.6	110,047	22,134	20.1

Source: 2010 Population and Housing Census. Ghana Statistical Service.

6.4 Mobile Phone Ownership by Age and Sex

Overall, more than two-fifths (44.5%) of the region's population own mobile phones of which 49.3 percent are males and 40.1 percent are females. The highest proportion of the population who own mobile phones are the age groups 20-59 years. For example, three out of five persons in age groups 25-29 years (62.1%) and 30-34 years (61.8%) own mobile phones. Higher male percentages are recorded for ages 20-64 where more than one-half of the populations have mobile phones while lower proportions are recorded ages 12-14 years (4.0%) and 70 years and over (26.1%). Higher male percentages are recorded for ages 20-64 where more than one-half of the population have mobile phones while lower ages 12-14 year (4.2%), 15-19 (26.1%) and 70 years and older have smaller number of persons owing a mobile phone. However, the higher proportions for females are aged 25-49 where at least one in two persons own mobile phones while the least proportions are in the lower ages 70 years and older.

Higher proportions of males than females of all ages own the mobile phone. More than two-thirds of the male population in age 20-49 years compared to one half (50%) on the average of females own mobile phones. On the whole, lesser proportions who own a mobile phone are observed among younger (19 years and below) and older ages age groups (70 years and over).

Table 6.4: Population 12 years and older having mobile phones within age group and sex

Age group	Population 12+ by age group	Population 12+ having mobile phone	Percentage 12+ having mobile phone	Male Population 12+	Male Population 12+ having mobile phone	Males 12+ Percentage having mobile phone	Female Population 12+	Female Population 12+ having mobile phone	Female 12+ Percentage having mobile phone
Total	1,810,449	806,291	44.5	869,286	428,543	49.3	941,163	377,748	40.1
12-14	188,349	7,547	4.0	97,725	4,104	4.2	90,624	3,443	3.8
15-19	279,234	68,328	24.5	144,066	37,625	26.1	135,168	30,703	22.7
20-24	221,624	124,589	56.2	104,571	64,204	61.4	117,053	60,385	51.6
25-29	193,386	120,129	62.1	89,334	61,560	68.9	104,052	58,569	56.3
30-34	160,582	99,232	61.8	75,888	52,838	69.6	84,694	46,394	54.8
35-39	146,892	87,863	59.8	69,418	46,965	67.7	77,474	40,898	52.8
40-44	129,241	74,322	57.5	62,014	40,131	64.7	67,227	34,191	50.9
45-49	111,096	62,238	56.0	53,230	33,050	62.1	57,866	29,188	50.4
50-54	102,535	54,967	53.6	48,238	28,785	59.7	54,297	26,182	48.2
55-59	67,498	35,876	53.2	33,007	19,486	59.0	34,491	16,390	47.5
60-64	59,224	26,510	44.8	28,649	14,918	52.1	30,575	11,592	37.9
65-69	37,379	15,064	40.3	17,459	8,389	48.0	19,920	6,675	33.5
70+	113,409	29,626	26.1	45,687	16,488	36.1	67,722	13,138	19.4

Source: 2010 Population and Housing Census. Ghana Statistical Service.

6.5 Mobile Phone Ownership by Level of Education and Sex

Mobile phone ownership in the Eastern Region increases with increase in the level of education (Table 6.5). While less than a quarter of persons with primary or no education own a mobile phone, two thirds and more of those with secondary education, whether male or female own a mobile phone. However, a slightly higher percentage of females than males with the highest levels of education own mobile phone. For example, 97.5% of the females compared with 96.2% of the males with tertiary education own mobile phones. Women with primary education (24.5%) are more likely to own mobile phones than their male counterparts (23.0%).

Table 6.5: Percentage of population 12 years and older owning mobile phone by educational level and sex

Level of Education	Mobile phone ownership								
	Popu- lation 12+ having mobile phone	Popu- lation 12+ having mobile phone	Per- centage 12+ having mobile phone	Male popu- lation 12+ having mobile phone	Male populati- on 12+ having mobile phone	Males 12+ percen- tage having mobile phone	Female popu- lation 12+ having mobile phone	Female popu- lation 12+ having mobile phone	Female 12+ per- centage having mobile phone
Total	1,810,449	806,291	44.5	869,286	428,543	49.3	941,163	377,748	40.1
Notappl	351,050	85,128	24.2	115,835	33,057	28.5	235,215	52,071	22.1
Primary	352,419	84,031	23.8	159,334	36,680	23.0	193,085	47,351	24.5
JHS/Middle	796,469	397,562	49.9	411,091	215,425	52.4	385,378	182,137	47.3
Secondary/SSS/SHS	182,182	124,348	68.3	105,277	73,588	69.9	76,905	50,760	66.0
Vocational/Technical/ Commercial	35,524	28,797	81.1	19,097	15,426	80.8	16,427	13,371	81.4
Post middle/secondary certificate	25,772	22,575	87.6	13,613	11,648	85.6	12,159	10,927	89.9
Post secondary diploma	40,348	38,092	94.4	25,762	24,183	93.9	14,586	13,909	95.4
Higher	26,685	25,758	96.5	19,277	18,536	96.2	7,408	7,222	97.5

Source: 2010 Population and Housing Census. Ghana Statistical Service

6.7 Distribution of Internet Facility Users

As can be seen from Table 6.6, New Juaben municipal (27.3%) recorded the highest percentage of internet users in the region, followed by Akwapem South municipality (6.6%), Akwapem North (5.5%). while the least percentage of internet users was reported by Upper Manya (0.9%), Akyem Mansoh (1.0%) and Birim North (1.7%). The districts with higher urban residents have recorded the highest percentages of internet users in the Region and vice versa for those with lower rates of urbanization.

The distribution of internet users in the districts by sex also shows the same pattern - higher percentages of internet users in the districts are recorded in the more urbanized districts, that is the municipalities.

Table 6.6: Population 12 years and older using the internet facilities by region, district and sex

Region/District	Total		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
Eastern	88,869	100	58,830	100	30,039	100
Birim South	4,269	4.8	2,665	4.5	1,604	5.3
Birim Municipal	4,375	4.9	2,866	4.9	1,509	5
West Akim Municipal	3,561	4	2,540	4.3	1,021	3.4
Suhum-Kraboia Coaltar	3,655	4.1	2,523	4.3	1,132	3.8
Akwapem South Municipal	5,889	6.6	3,775	6.4	2,114	7
Akwapem North	5,791	6.5	3,799	6.5	1,992	6.6
New Juaben Municipal	24,225	27.3	15,398	26.2	8,827	29.4
Yilo Krobo	2,808	3.2	1,948	3.3	860	2.9
Lower Manya	2,967	3.3	2,002	3.4	965	3.2
Asuogyaman	5,369	6	3,580	6.1	1,789	6
Upper Manya	835	0.9	588	1	247	0.8
Fanteakwa	1,780	2	1,215	2.1	565	1.9
East Akim Municipal	4,549	5.1	3,209	5.5	1,340	4.5
Kwaebibirem	4,244	4.8	2,835	4.8	1,409	4.7
Akyem Manso	900	1	657	1.1	243	0.8
Birim North	1,518	1.7	1,083	1.8	435	1.4
Atiwa	1,734	2	1,250	2.1	484	1.6
Kwahu West Municipal	4,286	4.8	2,746	4.7	1,540	5.1
Kwahu South	1,935	2.2	1,282	2.2	653	2.2
Kwahu East	2,125	2.4	1,431	2.4	694	2.3
Kwahu North	2,054	2.3	1,438	2.4	616	2.1

Source: 2 010 Population and Housing Census. Ghana Statistical Service

6.8 Sex Distribution of Internet Facility

Internet usage across the 21 districts by sex shows that the percentage of users is low in the region. The highest percentage of users was recorded in the New Juaben municipality (17.5%). This is followed by Asuogyaman (7.8%) and Akwapem South municipal (6.7%) while the Akyem Manso (61.4%) recorded the lowest internet usage in the region. Usage of the facility by sex shows that the percentage is highest for males in New Juaben municipality, followed by Birim South, Birim municipal, Akwapem South municipal, Akwapem North, Yilo Krobo, Lower Manya Krobo, Asuogyaman, East Akim Municipal, Kwahu West Municipal, Kwahu South Kwahu West municipal, and the Kwahu East which recorded higher percentage than the regional average of 4.9 percent.

Higher percentages of males in all the districts using the internet may be due to the higher educational status of men. Only one district (Kwahu North) had less than 2 percent of the male population using the internet compared with eight Districts with that same percentage for their females. While the highest rate of internet use for males is 23.4 percent that for females is as low as 12.1 percent; and all these are recorded in New Juaben Municipality.

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

	Population 12 years and older	Population 12years and older using internet	Percentage 12+ years older using internet	Male Population 12+ years and older	Male Population 12 years and older using internet	Males 12+ Percentage using internet	Female Population 12 years and older	Female Population 12 years and older using internet	Female 12+ Percentage using internet
Eastern	1,810,449	88,869	4.9	869,286	58,830	6.8	941,163	30,039	3.2
Birim South	80,904	4,269	5.3	38,117	2,665	7.0	42,787	1,604	3.7
Birim Municipal	99,521	4,375	4.4	46,302	2,866	6.2	53,219	1,509	2.8
West Akim Municipal	131,716	3,561	2.7	62,407	2,540	4.1	69,309	1,021	1.5
Suhum-Kraboia Coaltar	113,927	3,655	3.2	54,920	2,523	4.6	59,007	1,132	1.9
AkwapemSouth Municipal	88,246	5,889	6.7	42,998	3,775	8.8	45,248	2,114	4.7
Akwapem North	96,015	5,791	6.0	43,391	3,799	8.8	52,624	1,992	3.8
New Juaben Municipal	138,479	24,225	17.5	65,792	15,398	23.4	72,687	8,827	12.1
Yilo Krobo	61,490	2,808	4.6	29,012	1,948	6.7	32,478	860	2.6
Lower Manya	64,202	2,967	4.6	28,951	2,002	6.9	35,251	965	2.7
Asuogyaman	68,816	5,369	7.8	32,231	3,580	11.1	36,585	1,789	4.9
Upper Manya	48,277	835	1.7	24,287	588	2.4	23,990	247	1.0
Fanteakwa	74,106	1,780	2.4	36,207	1,215	3.4	37,899	565	1.5
East Akim Municipal	119,377	4,549	3.8	56,846	3,209	5.6	62,531	1,340	2.1
Kwaebibirem	131,080	4,244	3.2	63,169	2,835	4.5	67,911	1,409	2.1
Akyem Manso	63,600	900	1.4	30,717	657	2.1	32,883	243	0.7
Birim North	53,106	1,518	2.9	26,343	1,083	4.1	26,763	435	1.6
Atiwa	74,458	1,734	2.3	36,018	1,250	3.5	38,440	484	1.3
Kwahu West Municipal	64,825	4,286	6.6	30,279	2,746	9.1	34,546	1,540	4.5
Kwahu South	47,417	1,935	4.1	21,881	1,282	5.9	25,536	653	2.6
Kwahu East	52,177	2,125	4.1	24,794	1,431	5.8	27,383	694	2.5
Kwahu North	138,710	2,054	1.5	74,624	1,438	1.9	64,086	616	1.0

Source: 2010 Population and Housing Census. Ghana Statistical Service.

6.9 Use of Internet by Locality

Generally, a higher percentage of urban residents in the region use internet facilities than rural residents (Table 6.8). At the regional level, less than one-tenth (8.2%) of urban dwellers use the internet facility and as low as 2.2 percent of rural dweller do so. Differences in usage of internet facilities are especially more pronounced for New Juaben Municipal (18.3% in urban areas and 5.0 percent in rural areas), followed by Asuogyaman (15.8% in urban areas and 4.3 percent rural areas). The district with the lowest proportion of urban usage rate is again Akyem Manso, which is also one of the least urbanized districts of the Region.

Table 6.8: Population 12 years and older using internet within region and locality of residence

Region/District	Internet usage by locality					
	Total Urban Population 12+	Urban Population 12+ using internet	% 12+ urban using internets	Total Rural Population 12+	Rural Population 12+ using internet	% 12+ rural using internets
Eastern	820,517	67,543	8.2	989,932	21,326	2.2
Birim South	39,178	2,742	7.0	41,726	1,527	3.7
Birim Municipal	69,069	3,963	5.7	30,452	412	1.4
West Akim Municipal	52,880	2,503	4.7	78,836	1,058	1.3
Suhum-Kraboia Coaltar	31,504	2,374	7.5	82,423	1,281	1.6
Akwapem South Municipal	45,451	3,919	8.6	42,795	1,970	4.6
Akwapem North	34,373	3,287	9.6	61,642	2,504	4.1
New Juaben Municipal	129,769	23,793	18.3	8,710	432	5.0
Yilo Krobo	19,804	1,508	7.6	41,686	1,300	3.1
Lower Manya	53,981	2,755	5.1	10,221	212	2.1
Asuogyaman	21,018	3,329	15.8	47,798	2,040	4.3
Upper Manya	6,590	396	6.0	41,687	439	1.1
Fanteakwa	21,284	991	4.7	52,822	789	1.5
East Akim Municipal	72,493	3,832	5.3	46,884	717	1.5
Kwaebibirem	65,489	3,164	4.8	65,591	1,080	1.6
Akyem Manso	22,730	630	2.8	40,870	270	0.7
Birim North	14,901	889	6.0	38,205	629	1.6
Atiwa	25,449	1,066	4.2	49,009	668	1.4
Kwahu West Municipal	34,367	3,034	8.8	30,458	1,252	4.1
Kwahu South	13,446	880	6.5	33,971	1,055	3.1
Kwahu East	18,078	1,386	7.7	34,099	739	2.2
Kwahu North	28,663	1,102	3.8	110,047	952	0.9

Source: 2010 Population and Housing Census. Ghana Statistical Service.

6.10 Internet Usage by Age

This section highlights the findings of the 2010 census of the internet usage population by age. One of the objectives of the census is to examine internet access across age groups in the region. Table 6.9 reveals that 88,869 persons use the internet facility, with higher rates among

males than females for all age groups. The age structure of the internet usage shows that the facility usage is largely concentrated in the age group 12-39 years with a the largest percentage in age group 20-24 years. This is true for both males and females but with slight differentials.

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

Age Group	Population 12+ by age group	Population 12+ using internet	Percentage 12+ using internet	Male Population 12 years and older	Male Population 12 years and older using internet	Males 12+ Percentage using internet	Female Population 12 years and older	Female Population 12 years and older using internet	Female 12+ Percentage using internet
Total	1,810,449	88,869	4.9	869,286	58,830	6.8	941,163	30,039	3.2
12-14	188,349	2,904	1.5	97,725	1,773	1.8	90,624	1,131	1.2
15-19	279,234	15,827	5.7	144,066	9,962	6.9	135,168	5,865	4.3
20-24	221,624	23,864	10.8	104,571	14,856	14.2	117,053	9,008	7.7
25-29	193,386	17,122	8.9	89,334	11,080	12.4	104,052	6,042	5.8
30-34	160,582	9,282	5.8	75,888	6,665	8.8	84,694	2,617	3.1
35-39	146,892	5,861	4	69,418	4,342	6.3	77,474	1,519	2
40-44	129,241	4,038	3.1	62,014	2,988	4.8	67,227	1,050	1.6
45-49	111,096	3,241	2.9	53,230	2,312	4.3	57,866	929	1.6
50-54	102,535	2,816	2.7	48,238	2,011	4.2	54,297	805	1.5
55-59	67,498	1,799	2.7	33,007	1,319	4	34,491	480	1.4
60-64	59,224	913	1.5	28,649	673	2.3	30,575	240	0.8
65-69	37,379	374	1	17,459	278	1.6	19,920	96	0.5
70+	113,409	828	0.7	45,687	571	1.2	67,722	257	0.4

Source: 2010 Population and Housing Census. Ghana Statistical Service

6.11 Internet Use by Level of Education and Sex

The percentage using the internet in the region increases with increase in level of education (Table 6.10). While a negligible percentage of those with no education use the internet about a fifth of the males and a little more of females with secondary education do so. Among those with higher education, a slightly higher percentage of the females (61.3%) compared with the males (61.1%) use the internet.

Table 6.10: Population 12 years and older using the internet by level of education and sex

Educational level	Internet usage by sex								
	Popu- lation 12+ by age group	Popu- lation 12+ using internet	Per- centage 12+ using internet	Male Popu- lation 12 years and older	Male Popu- lation 12years and older using internet	Males 12+ Per- centage using internet	Female Popu- lation 12 years and older	Female Popu- lation 12years and older using internet	Female 12+ Per- centage using internet
Total	1,810,449	88,869	4.9	869,286	58,830	6.8	941,163	30,039	3.2
Notappl	351,050	1,284	0.4	115,835	525	0.5	235,215	759	0.3
Primary	352,419	2,699	0.8	159,334	1,637	1.0	193,085	1,062	0.6
JHS/Middle	796,469	16,571	2.1	411,091	11,272	2.7	385,378	5,299	1.4
Secondary/SSS/SHS	182,182	26,067	14.3	105,277	17,383	16.5	76,905	8,684	11.3
Vocational/Technical/ Commercial	35,524	3,460	9.7	19,097	2,204	11.5	16,427	1,256	7.6
Post middle /secondary certificate	25,772	5,128	19.9	13,613	2,571	18.9	12,159	2,557	21.0
Post secondary diploma	40,348	17,339	43.0	25,762	11,456	44.5	14,586	5,883	40.3
Higher	26,685	16,321	61.2	19,277	11,782	61.1	7,408	4,539	61.3

Source: 2010 Population and Housing Census. Ghana Statistical Service

6.12 Household Ownership of Desktop/Laptop

At the household level, ownership of desktop/laptop was examined to find out the extent to which household members in the Region may have access to internet and other forms of social media. These have become indispensable resources for daily living.

The rate of ownership of desktop/laptop by households is very low in the Eastern Region (Table 6.11), with an average of 5.2 percent of all households having these facilities. It is only 8 of the 21 of the districts that have rates exceeding the region (5.2%) average as shaded in Table 6.12. New Juaben Municipality has the highest percentage of 15.3 percent, compared with the rest of the districts having only up to 10 percent of the households owning the desktop/laptop. These districts are also among the most urbanized.

Table 6.11: Percentage of households having desktop/laptop computer by district

District	Total Households	Households having desktop/laptop	% having desktop/laptop
All Districts	632,048	32,554	5.2
Birim South	28,800	996	3.5
Birim Municipal	36,354	2,028	5.6
West Akim Municipal	46,806	1,368	2.9
Suhum-Kraboia Coaltar	40,413	1,097	2.7
Akwapem South Municipal	30,519	2,153	7.1
Akwapem North	33,322	1,934	5.8
New Juaben Municipal	49,474	7,557	15.3
Yilo Krobo	20,613	854	4.1
Lower Manya	22,150	1,473	6.7
Asuogyaman	23,551	2,337	9.9
Upper Manya	15,379	275	1.8
Fanteakwa	24,026	728	3.0
East Akim Municipal	42,093	2,272	5.4
Kwaebibirem	47,954	1,769	3.7
Akyem Manso	21,361	360	1.7
Birim North	18,511	703	3.8
Atiwa	26,342	833	3.2
Kwahu West Municipal	23,296	1,387	6.0
Kwahu South	16,725	812	4.9
Kwahu East	18,409	844	4.6
Kwahu North	45,950	774	1.7

6.13 Conclusion

Ownership of a mobile phone, internet facilities and desktop/laptop are inequitably distributed in the Eastern Region. Vast disparities were observed amongst Districts and other subgroups of the population. On the whole, males, more educated and urban residents have better access to the ICT facilities and services. Younger people also have greater access than older people in the Region.

CHAPTER SEVEN

EDUCATION AND LITERACY

7.1 Introduction

Since Ghana attained independence in 1957, much investment has been made in the educational sector to ensure that every child of school-going age has access to education. The first post independent government made education a priority sector. Since the late 1980s, an educational policy captioned “Free Compulsory Universal Basic Education” (FCUBE) has been implemented and recently modified to emphasize reduction in drop-out rate. Gender gaps in education have also been tackled with a number of strategies, including the setting up of the Girls’ Education Unit at the Ghana Education Service to ensure higher enrolment rate of girls, among other objectives. Literacy programmes have also been implemented to improve the rate of literacy in the adult population. Some moderate achievements have been made, with increase in enrolment and greater accessibility to education even in rural communities. But the educational status and literacy rates of the population still need improvement. Education is one of the indicators of human development and the second of the Millennium Development Goals (MDG2) is on attainment of universal primary education by 2015 Ghana has been committed to the achievement of the MDGs.

The literacy and education status of the population of the Eastern Region by socio-demographic and economic status based on 2010 PHC is discussed in this chapter. The purpose is to describe the characteristics and identify the differentials among the population subgroups of the population of the Region and of the component districts.

7.2 Literacy

The questions on literacy in the population were on English, Ghanaian languages and French. The literacy rates of the Eastern Region and its component districts are presented in Table 7.1. On the average, a little more than a third (35.8%) of the population in the region is not literate in any of the languages. The percentages of those who are literate in English only (11.6%) or a Ghanaian language only (11.6%) are the same. The proportion literate in the combination of English and a Ghanaian language is far higher, exceeding 40 percent in more than half of the districts and up to 30 percent in the remainin districts.

Illiteracy rates are higher than the average for the Region in districts with Upper Manya and Kwahu North (54.1 %) recording the highest rates 56.9 percentage of 54.1 percent. The rates are in excess of 40 percent in. New Juaben has the lowest illiteracy rate (21.9%); and 8 other districts recored lower have less than the regional average. The rates of literacy in English and a Ghanaian language also vary widely among the districts, ranging from 25 percent in Upper Manya to 54.3 percent in New Juaben. Literacy rates in English only (ranging from 2.8% in Lower Manya to 18.7 percent in Atiwa) and a literacy Ghanaian language only (ranging from 5.7% in Kwahu West Municipal to 20.4% in Yilo Krobo).

Table 7.1: Literacy rate by district

	None (Not literate)	English only	Ghanaian language only	English and Ghanaian language	English and French	English French and Ghanaian Language	Total
All	35.8	11.6	11.4	40.6	0.2	0.5	100.0
Birim South	40.4	6.5	11.0	41.6	0.1	0.4	100.0
Birim Municipal	31.1	10.2	11.7	46.3	0.2	0.6	100.0
West Akim Municipal	42.1	12.6	8.7	36.1	0.3	0.2	100.0
Suhum-Kraboia Coaltar	34.5	12.3	12.6	40.1	0.1	0.4	100.0
Akwapem South Municipal	30.2	14.0	11.1	43.7	0.3	0.6	100.0
Akwapem North	39.0	9.1	10.8	40.8	0.1	0.2	100.0
New Juaben Municipal	21.9	14.6	7.8	54.2	0.3	1.3	100.0
Yilo Krobo	37.7	20.4	6.0	35.3	0.2	0.5	100.0
Lower Manya	43.0	18.5	2.8	34.6	0.4	0.7	100.0
Asuogyaman	39.3	16.2	9.1	34.7	0.0	0.7	100.0
Upper Manya	56.9	13.0	4.9	25.0	0.0	0.1	100.0
Fanteakwa	37.1	13.1	11.3	38.2	0.1	0.2	100.0
East Akim Municipal	29.8	11.1	11.2	47.3	0.1	0.5	100.0
Kwaebibirem	33.1	9.5	12.9	43.6	0.1	0.7	100.0
Akyem Manso	44.1	7.5	12.1	36.0	0.1	0.0	100.0
Birim North	31.7	12.9	16.4	38.6	0.2	0.2	100.0
Atiwa	30.6	9.8	18.7	40.3	0.2	0.4	100.0
Kwahu West Municipal	30.6	5.7	17.6	45.2	0.4	0.4	100.0
Kwahu South	39.4	6.9	14.7	38.6	0.0	0.3	100.0
Kwahu East	37.7	8.8	16.5	36.4	0.1	0.5	100.0
Kwahu North	54.1	9.5	9.6	26.5	0.1	0.2	100.0

Source: 2010 Population and Housing Census. Ghana Statistical Service

7.3 Literacy Rate by Sex and Residential Status

Rural-urban differentials exist on the literacy rates in the region. Differences exist between males and females (Table 7.2). In the total regional population, over a fifth (21.2%) are not literate and a little more than half (52.6%) are literate in English and Ghanaian language. The differences in the rates of illiteracy of the rural population are almost twice (26.8%) that of the urban (14.5%). As a consequence, the proportion literate in English and Ghanaian language in the urban population (60.2%) is higher than that in the rural. These differences are higher than the rates for literacy in either English language only or Ghanaian language. The proportions are literate in the combinations of English and French and English, French and Ghanaian language in the rural areas than in urban areas are lower.

The differences in literacy rate between the sexes are also large. In the urban populations, less than a tenth (8.4%) of the males compared to almost a fifth (19.7%) of the females are not literate while more than two-thirds (67.9%) of the males compared with a little more than half (53.5%) of the females are literate in English and Ghanaian language. Similar differences exist in the rural populations: almost twice (34%) the proportion of the females compared with males (19.2%) are illiterates; and 55 Percent of the males compared with 38 percent of the females are literate in English and Ghanaian language. Consistently lower proportions of the females are literate in all the combinations of the languages.

Table 7.2: Literacy rate by sex and type of residence

Type of Residence Sex/Locality	None (Not literate)	English only	Ghanaian language only	English and Ghanaian language	English and French	English French and Ghanaian Language	All
Total	21.2	14.4	11	52.6	0.2	0.6	100.0
Urban	14.5	15	9.2	60.2	0.3	0.9	100.0
Rural	26.8	13.9	12.5	46.2	0.2	0.3	100.0
Male							
Total	14.4	14.9	9.2	60.5	0.3	0.7	100.0
Urban	8.4	15.4	6.9	67.9	0.3	1.0	100.0
Rural	19.2	14.6	10.9	54.6	0.3	0.5	100.0
Female							
Total	27.3	14.0	12.7	45.4	0.2	0.5	100.0
Urban	19.7	14.7	11.1	53.5	0.2	0.8	100.0
Rural	34.0	13.3	14.1	38.2	0.2	0.2	100.0

Source: 2010 Population and Housing Census. Ghana Statistical Service

7.4 Age Specific Literacy Rate of Household Heads

Literacy rates vary among age groups, with the younger and older age groups usually recording lower rates than the other age groups. Literacy status of household heads is important since they make decisions, sometimes solely, on issues that pertain to the wellbeing of their household members. Accordingly, their literacy status by sex is examined and presented in Table 7.3. On the average, literacy rate increases with age but declines from 60 years. Similar patterns are observed for both sexes. The differences in the rates between the sexes are, however, large at all ages. Literacy rate ranges from 1.6% for age group 11-19 years to 31.5 percent for those aged 50- 59 years among the female household heads compared to 2.1 percent to 68.5 percent for the same age groups of their male counterparts.

Table 7.3: Age specific literacy rates of household heads

Age	Male	Female	Total
11 - 19	2.1	1.6	1.8
20 - 29	29.7	14.6	21.6
30 - 39	58.3	20.5	38.4
40 - 49	64.9	25.1	44.2
50 - 59	68.5	31.5	49.2
60 - 69	64.3	26.1	44.4
70 - 99	47.3	13.6	27.2
All	36.7	15.6	25.8

Source: 2010 Population and Housing Census. Ghana Statistical Service

7.5 Educational Status

Educational status in the region is discussed with respect to various population subgroups—district, sex, locality and economic characteristics. These provide the basis for policies that seeks to target specific subgroups of the population. Moreover, inequalities in educational attainment can be observed better when data is disaggregated by different backgrounds.

7.5.1 Educational Status in the Districts

On the average, 20 percent of all persons aged 15 years and older have never attended school in the Eastern Region as shown in Table 7.4. The majority (59.8%) have primary or JSS/JHS/Middle school education with less than 10 percent having senior secondary/high education and negligible proportions have vocational technical, post-secondary and higher education.

Disparities in educational attainment exist among the districts. In the New Juaben Municipal where the regional capital is located and rate of urbanization is highest, 9.8 percent have no education. The rates for the least urbanized districts are far higher, some reaching more than twice that of the more urbanized districts, for example, the rate for Kwahu North (44.6%) and Upper Manya, (37.5%). A few other districts have higher proportions with no education than the district average. (The differences in the proportions that have primary and JSS/JHS/Middle education are not as large as those for other levels of education. At least a little more than a quarter have attained these JSS/JHS/Middle levels of education in all the districts. This is an indication of the almost universal access to primary and JSS/JHS/Middle school education. Secondary and higher education are not accessible physically and financially to most communities, particularly the poor and rural. As can be seen from Table 7.4, only three districts (Akwapem South, 10.8%; New Juaben, 12.2% and Lower Manya, 10.6%) have more than one tenth of their population aged 15 years and older with SSS/SHS and higher education (Table 7.4%). Consequently, the average for the entire region (7.6%) is far lower than those of the three districts. The differences in the proportions that have attained the other levels of education are explained by the rate of urbanization, For example, New Juaben recorded the highest percentage of those who have post secondary education. All the municipalities, including New Juaben, have higher proportions with secondary or higher education. They are highlighted in Table 7.4.

It must be noted, however, that rural-urban migration of secondary and university graduates also accounts for the larger proportions of those with secondary and higher education in the more urbanized districts.

Table 7.4: Educational status by district

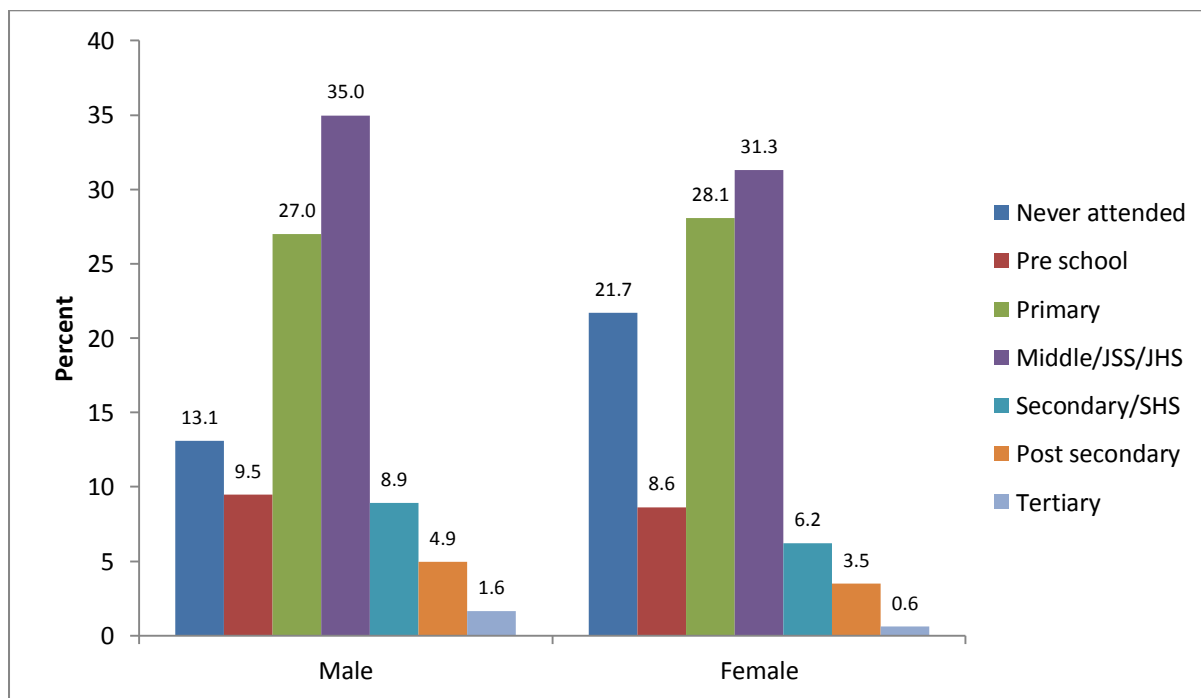
District	Never attended	Primary	JSS/JHS Middle	SSS/SHS	Secondary	Voc./ Tech./ Com.	Post mid./sec. cert.	Post sec. diploma	Bachelor degree	Post graduate	Total
Total	21.2	14.5	45.3	9.3	1.9	2.2	1.6	2.5	1.5	0.3	100
Birim South	22.5	15.1	47.9	8.4	1.3	1.4	1.2	1.2	0.9	0.1	100
Birim Municipal	18.3	12.5	47.6	11.5	2.1	2.2	2.1	2.1	1.7	0.3	100
West Akim	23.9	16.4	45.7	7.2	1.6	1.6	1.4	1.4	0.8	0.1	100
Suhum / Kraboa Coaltar	19.5	18.1	49.1	6.6	1.6	1.7	1.2	1.3	0.8	0.1	100
Akwapem South	15.7	14.2	45.0	12.0	2.9	2.9	1.7	3.3	2.1	0.5	100
Akwapem North	17.5	14.6	44.6	10.5	2.8	2.6	1.9	2.9	2.1	0.5	100
New Juaben Municipal	9.8	9.7	41.2	14.8	3.4	4.5	2.5	8.5	3.7	1.0	100
Yilo Krobo	23.6	13.2	45.4	9.3	1.7	1.6	1.4	2.5	1.2	0.2	100
Lower Manya-Krobo	20.5	14.5	42.1	12.5	1.9	2.2	1.6	2.7	2.0	0.4	100
Asuogyaman	18.3	14.1	44.5	10.6	1.7	2.9	1.6	3.6	2.4	0.6	100
Upper Manya-Krobo	37.5	18.5	35.2	4.9	0.9	0.6	0.8	1.2	0.6	0.1	100
Fanteakwa	24.7	15.9	44.7	7.6	1.6	1.7	1.5	1.5	0.9	0.1	100
East Akim	13.9	12.6	49.3	12.5	2.0	3.2	1.9	2.8	1.8	0.3	100
Kwaebibirem	17.6	14.2	50.6	9.3	1.7	2.3	1.5	1.8	0.8	0.2	100
Akyemansa	24.6	15.7	48.1	7.0	1.1	1.1	1.0	1.1	0.5	0.1	100
Birim North	18.4	15.0	51.2	8.5	1.4	1.5	1.5	1.6	0.8	0.2	100
Atiwa	17.1	12.9	56.0	7.3	1.4	1.6	1.5	1.5	0.5	0.1	100
Kwahu West	14.7	11.7	50.6	11.0	2.3	2.8	2.2	2.5	1.3	0.2	100
Kwahu South	23.1	15.1	45.3	7.5	1.4	2.3	2.2	1.9	1.3	0.2	100
Kwahu East	24.7	16.1	44.0	6.5	1.4	2.4	1.5	1.6	1.5	0.4	100
Kwahu North	44.6	17.7	28.8	4.6	1.0	1.0	0.8	1.1	0.5	0.1	100

Source: 2010 Population and Housing Census. Ghana Statistical Service

7.5.2 Educational Status by Sex

There are wide gaps between the educational status of the males and females (Figure 7.1) which shows school attendance among the population aged 3+ years. The percentage of females almost twice the percentage of the males who have never attended school. On the other hand, higher proportions of the males than the females have post-secondary and higher education. Between the sexes, very negligible differences are observed regarding the proportion that has primary education and (pre-school education).

Figure 7.1: Educational status by sex



Source: 2010 Population and Housing Census. Ghana Statistical Service

7.5 Level of Education and Type of Employment for Persons

15 years and Older

Overall, more than 9 out of every 10 (95.3%) of the employed population in the Eastern Region are in four categories - employees (15.1%), self-employed without employees (68.4%), self-employed with employees (4.0%) and contributing to family labour (7.8%). The majority (80.3%) of those who have no education are the self-employed without employees and contributing to family labour (9.6%) (Table 7.5). These categories of the employed also constitute the highest proportion of all the employed in the Eastern Region. In Ghana, self-employed without employees and those contributing to family labour are usually farmers (producing cash and food crops) or those working in the informal sector. The self-employed without employees in particular have low skills and they form the bulk of the agricultural sector, the backbone of the economy. Agricultural activity is important in the Eastern Region (as discussed in chapter 11) but most farmers are self-employed and have low levels of education. This largely accounts for the moderate achievement of modernization of the agricultural sector.

Those with basic education (JSS/JHS/Middle) are mostly self-employed with employees while those with secondary and higher education are mostly employees. Approximately, a third of secondary and vocational/technical/commercial graduates are employees. This category of educational subgroup also recorded the highest percentage of those who are self-employed with employees. Almost all persons with higher education in the region are employees (90.3%). There has been shrinking employment opportunity in the public sector where those with higher education usually seek for jobs.

Overall, the majority of those with less than secondary education or none at all are self-employed without employees while those with post-secondary education and above are employees.

Table 7.5: Level of education and type of employment of population aged 15+ years

Status in employment	Total	Percent	Never attended	Basic	SSS/SHS/secondary	Voc/Tech/Comm	Post middle/sec certificate	Post sec diploma	Tertiary
Total	1,112,138	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employee	167,835	15.1	4.2	10.3	34.4	31.4	72.0	81.5	90.3
Self employed without employee(s)	760,503	68.4	80.3	71.9	47.3	55.2	21.8	12.0	5.2
Self employed with employee(s)	44,994	4.0	3.1	4.2	5.4	7.4	3.2	3.7	2.9
Casual worker	19,384	1.7	1.3	1.9	2.6	1.6	0.8	1.0	0.7
Contributing family worker	86,213	7.8	9.6	7.8	7.7	3.0	1.6	1.2	0.5
Apprentice	25,966	2.3	0.8	3.2	1.9	0.9	0.2	0.1	0.1
Domestic employee (Househelp)	5,487	0.5	0.6	0.5	0.5	0.3	0.2	0.2	0.1
Other	1,756	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3
Male									
Total	542,479	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employee	114,417	21.1	7.3	15.2	36.5	34.7	66.8	78.5	89.3
Self employed without employee(s)	341,745	63.0	78.4	67.6	45.4	51.1	26.6	14.1	5.5
Self employed with employee(s)	25,064	4.6	3.5	4.6	5.8	8.5	3.7	4.4	3.6
Casual worker	13,339	2.5	2.0	2.7	3.1	2.3	0.9	1.3	0.7
Contributing family worker	32,929	6.1	7.1	6.4	6.8	2.1	1.4	1.2	0.4
Apprentice	11,347	2.1	0.9	2.8	1.7	0.8	0.1	0.1	0.0
Domestic employee (Househelp)	2,561	0.5	0.6	0.5	0.5	0.4	0.3	0.2	0.1
Other	1,077	0.2	0.1	0.2	0.3	0.2	0.1	0.3	0.2

Table 7.5: Level of education and type of employment of population aged 15+ years (Contd)

Status in employment	Total	Percent	Never attended	Basic	SSS/SHS/secondary	Voc/Tech/Comm	Post middle/sec certificate	Post sec diploma	Tertiary
Female									
Total	569,659	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employee	53,418	9.4	2.5	5.3	30.8	27.1	78.2	87.0	92.7
Self employed without employee(s)	418,758	73.5	81.4	76.2	50.6	60.4	16.1	8.2	4.3
Self employed with employee(s)	19,930	3.5	2.8	3.7	4.8	6.0	2.5	2.5	1.1
Casual worker	6,045	1.1	0.9	1.1	1.7	0.8	0.7	0.6	0.8
Contributing family worker	53,284	9.4	11.0	9.2	9.2	4.1	1.8	1.2	0.6
Apprentice	14,619	2.6	0.7	3.7	2.3	1.0	0.3	0.2	0.1
Domestic employee (Househelp)	2,926	0.5	0.6	0.5	0.5	0.3	0.2	0.1	0.1
Other	679	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3

Source: 2010 Population and Housing Census. Ghana Statistical Service

7.5.1 Level of Education and Employment Status by Sex

It can be seen from Table 7.5 that the same patterns of educational status by employment types are observed among both males and females. Slight differentials, however, exist between the sexes with regard to the percentages of various educational categories with the different types of employment.

It can be observed from Table 7.6 that the majority of those with little or no education are self-employed. But a slightly higher percentage of the females (81.4%) than the males (78.4%) with no education are self-employed without employees, Almost 10 percent of the females with no education compared with 6 percent of the males are contributing to family labour. But a slightly higher percentage of the males (4.6%) with similar educational status are self-employed with employees compared with (3.5%) of their female counterparts. A higher percentage of the females with basic education (76.2%) and secondary education (50.6%) are self-employed without employees compared with males with similar educational status who recorded 67.6 percent and 45.4 percent respectively for those with basic and secondary education. A higher proportion of the females than the males with basic and secondary education also are contributing to family labour but about the same percentage of both males and females with post-secondary education are doing the same. A higher percentage of the males (35%) than the females (27%) with vocational/technical/commercial education are employees while almost twice the percentage of the females (4.1%) compared to the males (2.1%) are contributing to family labour.

Among those with higher education, a higher proportion of the females (93%) than the males (89%) are employees while higher percentage of males (5.5%) with higher education than female (4.3%) are self-employed without employee.

7.6 Level of Education and Occupation

The results of the analysis of the educational status by occupation show that, on the average, three types of occupation constitute the major occupations in the Eastern Region: those who are skilled agricultural, forestry and fishery workers (45.2%) recorded the highest percentage, followed by service and sales workers (19.3%) and crafts and related trades workers (15.2%). The distribution of occupation by level of education shows that these three types of occupation are the occupations of the majority of those with no education and all the other categories up to vocational/technical/commercial level. The percentages range from 63.6 percent among secondary education to 91.7 percent among those who have never attended school. Those with post-secondary education or higher are mostly professionals. These are shaded in (Table 7.6).

Table 7.6: Economically active population 15 years and older by level of education, sex and occupation

Occupation	Total	Per- cent	Never attended	Basic	SSS/ SHS/ Sec.	Voc./ Tech/ Comm	Post middle/sec. certificate	Post secondary diploma	Tertiary
Total	1,112,138	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers	23,115	2.1	1.2	1.7	3.1	3.6	4.1	6.6	12.9
Professionals	59,290	5.3	0.5	1.5	11.8	8.0	57.0	56.9	64.6
Technicians and associate professionals	17,123	1.5	0.4	1.1	4.3	4.1	7.1	7.2	5.8
Clerical support workers	10,710	1.0	0.1	0.4	3.2	4.9	2.5	7.6	6.5
Service and sales workers	215,073	19.3	13.9	21.4	26.3	25.7	8.2	8.1	3.7
Skilled agricultural forestry and fishery workers	502,343	45.2	66.0	44.2	22.9	21.7	15.0	6.6	3.5
Craft and related trades workers	169,434	15.2	12.0	17.5	14.4	20.3	3.0	4.0	1.2
Plant and machine operators and assemblers	56,633	5.1	1.7	6.4	7.6	5.8	1.4	1.7	1.0
Elementary occupations	57,874	5.2	4.2	5.8	6.1	5.6	1.6	1.3	0.4
Other occupations	543	0.0	0.0	0.0	0.2	0.3	0.1	0.2	0.3
Male									
Total	542,479	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers	9,621	1.8	0.5	1.1	2.9	3.0	4.8	7.5	14.1
Professionals	34,709	6.4	0.4	1.6	11.2	8.7	51.0	52.2	62.6
Technicians and associate professionals	12,354	2.3	0.6	1.6	5.2	5.5	6.0	8.6	6.5
Clerical support workers	6,420	1.2	0.1	0.7	2.7	3.0	2.6	6.6	5.7
Service and sales workers	39,940	7.4	4.7	6.8	16.0	11.4	5.8	6.8	3.5
Skilled agricultural forestry and fishery workers	286,462	52.8	78.8	55.2	29.4	30.3	22.6	9.0	4.2
Craft and related trades workers	78,644	14.5	7.1	17.2	15.5	23.9	3.4	5.2	1.4
Plant and machine operators and assemblers	53,522	9.9	4.1	12.0	11.7	10.0	2.4	2.5	1.2
Elementary occupations	20,327	3.7	3.6	3.9	4.9	3.9	1.3	1.4	0.5
Other occupations	480	0.1	0.0	0.0	0.3	0.4	0.2	0.2	0.3

Table 7.6: Economically active population 15 years and older by level of education, sex and occupation (Contd)

Occupation	Total	Per- cent	Never attended	Basic	SSS/ SHS/ Sec.	Voc./ Tech/ Comm	Post middle/sec. certificate	Post secondary diploma	Tertiary
Female									
Total	569,659	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers	13,494	2.4	1.6	2.4	3.4	4.4	3.3	4.8	9.7
Professionals	24,581	4.3	0.5	1.3	12.8	7.2	64.3	65.4	70.1
Technicians and associate professionals	4,769	0.8	0.3	0.5	2.6	2.3	8.5	4.7	4.1
Clerical support workers	4,290	0.8	0.0	0.2	4.1	7.3	2.4	9.3	8.7
Service and sales workers	175,133	30.7	19.0	36.3	43.6	44.0	11.1	10.3	4.2
Skilled agricultural forestry and fishery workers	215,881	37.9	58.9	33.0	11.9	10.7	6.0	2.1	1.6
Craft and related trades workers	90,790	15.9	14.7	17.8	12.5	15.8	2.4	1.9	0.6
Plant and machine operators and assemblers	3,111	0.5	0.3	0.7	0.7	0.5	0.2	0.2	0.4
Elementary occupations	37,547	6.6	4.6	7.8	8.1	7.7	1.9	1.1	0.3
Other occupations	63	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2

Source: 2010 Population and Housing Census. Ghana Statistical Service

7.6.1 Level of Education and Occupation by Sex

The distribution of occupation by level of education among the sexes shows that skilled agricultural, forestry and fishery workers, service and sales workers and crafts and related trades workers constitute the majority of occupation among those with education below secondary school or with no education. Those who have post secondary and higher levels of education, whether males or females, are professionals. These are shaded in Table 7.6. It can also be seen from the table that the proportions of the females with secondary education or higher educational status who are professionals are higher than their males. Higher proportions of the females than their male counterparts with secondary and above education or higher belong to the service and sales workers occupational category.

Conclusion

Literacy rate and educational status are generally low in the region. Less than two thirds of the populations on the average are literate. There are wide disparities in illiteracy rate and educational attainment among the districts and the socioeconomic subgroups of the population. The majority of those with low levels of educational attainment are in occupations that do not require high skills. (Overall, those with high levels of education are mostly employees while the less educated are predominantly self-employed without employees.

CHAPTER EIGHT

FERTILITY, MORTALITY AND MIGRATION

8.1 Introduction

The levels and changes of the three components of population- fertility, mortality and migration are important for socioeconomic planning and policy adoption. In developing countries such as Ghana, where population registers are non-existent, censuses provide the more comprehensive data on fertility, mortality and migration in terms of coverage than surveys and other sources. Censuses, however, may not capture all aspects of the components of population as surveys do.

The aspects of fertility, mortality and migration covered by the Ghana 2010 PHC that are relevant for socioeconomic planning and policy adoption in the Eastern Region are examined in this chapter. For some variables, the analysis is not extended in all cases to inter-district and population subgroup levels (urban/rural, for example) but limited to the regional averages that are compared to the national averages and those of other regions.

8.2 Fertility

A number of fertility measures were derived from the census data. Children ever born and Total Fertility Rate (TFR) are presented in this section. These are relevant fertility measures that are often used in population and development planning.

8.2.1 Children ever born

An average of 5.1 children have ever been born by women aged 12- 54 years in the region (Table 8.1). The difference between age groups 12- 14 years (1.3%) and 15- 19 years (1.4%) is negligible. This is an indication that children aged below 15 years are bearing children almost as teenagers do. The inclusion of children in the census for interview on fertility issues is therefore justified. Policy makers now have to address childbearing among children (child pregnancy) in addition to teenage pregnancy. Such early childbearing has implications for the school attendance and career development of the child mothers.

Rural women reported higher number of children having ever been born at all ages with the exception of age group 15- 19 years who recorded the same number as their urban dwellers. The differences between the urban and rural women are negligible at ages below 25 years and pronounced at older ages, that is 40+ years. (This suggests that younger cohorts of women in rural areas reported about the same number of children ever born as their corresponding urban cohorts while older cohorts differed markedly from their urban counterparts.

In the total national population, rural-urban differences in fertility exist and have persisted even after fertility decline begun in the late 1980s.

Table 8.1a: Children ever born, mean children ever born by type of locality

	Total		Urban		Rural	
	Children ever born		Children ever born		Children ever born	
Total	1,666,499	5.1	653,611	4.6	1,012,888	5.4
12 - 14	448	1.3	177	1.2	271	1.3
15 - 19	17,288	1.4	5,868	1.4	11,420	1.4
20 - 24	93,550	2.2	32,547	2.0	61,003	2.3
25 - 29	182,100	3.1	68,207	2.8	113,893	3.3
30 - 34	239,129	4.1	95,081	3.7	144,048	4.4
35 - 39	285,690	5.0	113,561	4.5	172,129	5.3
40 - 44	294,638	5.8	115,557	5.2	179,081	6.2
45 - 49	275,763	6.3	110,323	5.7	165,440	6.7
50 - 54	277,893	6.7	112,290	6.1	165,603	7.1

Source: 2010 Population and Housing Census. Ghana Statistical Service

8.2.2 Total Fertility Rate (TFR)

The TFR varies among the districts. Both the highest TFR (5.0) and lowest (2.0) are found in the municipalities, West Akim and New Juaben respectively. Generally, however, the least urbanized and deprived districts have higher TFR than the more urbanized districts. With the exception of West Akim, all the other municipalities have TFR of 2 or 3 compared to 3 and 4 in the least urbanized areas.

Table 8.1b: Total fertility by district

District	TFR
All Districts	3.3
Birim South	3.5
Birim Municipal	2.3
West Akim Municipal	5.0
Suhum-Kraboia Coaltar	3.5
Akwapem South Municipal	3.0
Akwapem North	4.1
New Juaben Municipal	2.0
Yilo Krobo	2.7
Lower Manya	2.7
Asuogyaman	2.9
Upper Manya	3.6
Fanteakwa	3.5
East Akim Municipal	3.0
Kwaebibirem	2.9
Akyem Manso	4.1
Birim North	3.7
Atiwa	4.1
Kwahu West Municipal	3.0
Kwahu South	3.7
Kwahu East	4.1
Kwahu North	4.2

Source: 2010 Population and Housing Census. Ghana Statistical Service

8.3 Mortality

The data utilized in measuring mortality rates were collected from the fertility and mortality sections of the 2010 PHC questionnaire. Data resulting from the responses to questions on “births and deaths in the last 12 months” and those obtained from responses relating to children ever born and children surviving are used in estimating mortality rates as proxy measures of social and economic development or as specific indicators of the health status of the population.

8.3.1 Method of Analysis

The Brass indirect estimation technique is employed to derive estimates of childhood mortality. This technique uses data on children ever born (CEB) and children surviving (CS) by age of mother to derive the proportion dead among children ever born. Information on CEB and CS provided by the 2010 PHC is, therefore, adequate for estimating childhood mortality using the Brass technique. The software used to construct the estimates is Q-FIVE.

8.3.2 Infant and under-five Mortality

The geographical location of mothers influences the mortality experiences of their children. This is because geographical differences with their attendant environmental and socio-cultural settings affect the survival chances of children under five. As shown in Table 8.2, during the five years preceding the 2010 PHC, infant mortality across the regions ranged between 48 deaths per 1000 live births in the Greater Accra Region to 81 deaths per 1000 live births in the Upper West Region. Children in the three Northern Regions are more exposed to the risk of dying in childhood than those in the middle and Southern Zones. This may be attributable, among other things, to the disparities in the distribution of health and medical facilities among the regions. Factors such as education of females and differential levels of social and economic development may also account for the differences.

Both infants and children in the Eastern Region come second after those in the Greater Accra Region who have the least risk of dying. The Eastern Region has relatively better access to health facilities and higher rate of maternal education than most of the remaining Regions. Moreover, the Eastern Region shares boundaries with the Greater Accra and Ashanti Regions, both of which have relative concentration of the nation’s health resources (facilities and health workers). The closeness of the Eastern region to these regions provides an advantage for the residents who might depend on facilities in the two neighbouring regions, thereby having their children exposed to lesser risk of dying.

Table 8.2: Infant and under-five mortality by region

Region	Infant Mortality	Under-five Mortality	Reference Period
Western	55	82	2003-2007
Central	61	94	2003-2007
Greater Accra	48	72	2003-2007
Volta	57	87	2002-2006
Eastern	50	75	2002-2006
Ashanti	53	80	2003-2007
Brong Ahafo	58	87	2003-2007
Northern	73	116	2002-2006
Upper East	74	117	2003-2007
Upper West	81	128	2003-2007

Source: 2010 Population and Housing Census. Ghana Statistical Service

8.3.3 Trends in under-five Mortality

The estimated q(5) (child mortality) values for the various regions are presented in Table 8.3. The under-five mortality has been declining in all the 10 regions since the 1990s (Table 8.3). In the Greater Accra Region, the under-five mortality dropped by 50 per cent during the period 1992 to 2007. This is not surprising since substantial percentage of the medical and health facilities are concentrated in the region. Eastern Region also experienced significant declines, exhibiting almost the same level of under-five mortality as in the Greater Accra Region during the mid-2000s. Both the 2008 GDHS and 2010 PHC data tend to yield virtually similar levels of childhood mortality in the Eastern Region, and two other regions whilst there are significant differences between the estimates derived from both types of data for the remaining regions.

Cultural attitudes and practices, improvements in social and economic conditions as well as inequities in the distribution of health and medical facilities may account for the differences in mortality and their trends across the regions. Negative cultural attitudes that are associated with mortality among children are eroded by urbanization and maternal education. These changes have been experienced in the Greater Accra Region and the Eastern Region and a few other regions.

Table 8.3: Under-five mortality rate by region and reference period

Region	q(5)*	Reference Period	q(5)**	Reference Period	q(5)***	Reference Period	q(5)****	Reference Period
Western	161	1992-1996	106	1995-1999	65	2001-2006	82	2002-2006
Central	163	1992-1996	102	1996-2000	106	2001-2006	94	2002-2006
G/Accra	152	1992-1996	113	1998-2000	56	2003-2007	72	2003-2007
Volta	174	1992-1996	129	1997-2001	57	2002-2006	87	2002-2006
Eastern	144	1992-1996	94	1996-2000	88	2001-2006	75	2002-2006
Ashanti	146	1992-1996	116	1996-2000	79	2002-2007	80	2003-2007
B/Ahafo	164	1992-1996	95	1994-2000	86	2003-2007	87	2003-2007
Northern	199	1992-1996	148	1994-1999	139	2002-2006	116	2002-2006
U/west	226	1992-1996	191	1995-2000	90	2001-2006	117	2003-2007
U/East	179	1992-1996	96	1997-2000	146	2001-2006	128	2003-2007

Sources: *2000 Census ** DHS 2003, ***2008 and ****2010 Census

8.3.4 Maternal Mortality Ratios and Rates

There are wide regional variations in maternal mortality, ranging from 355 to 802 maternal deaths per 100,000 births respectively in the Greater Accra Region and the Upper East Region, as can be seen from Table 8.4. Eastern Region and four others recorded ratios that are above the national average.

In terms of exposure to the risk of dying as a result of pregnancy related causes, five women die out of every 1,000 women on the average in the country. Regional variations indicate that two out of 1,000 women die during pregnancy and/or childbirth in Greater Accra Region as compared with 6 in the Volta and Upper East Regions which recorded the highest ratios. The Eastern Region has the same ratio (five out of every 1,000 women) as the national average.

The risk of dying from pregnancy related causes is relatively high in the Eastern Region, higher than in at least three regions.

Table 8.4: Maternal mortality ratios and rates by region

Total Country/Region	Maternal mortality ratio (per 100,000 births)	Maternal mortality rate (per 1,000 women)
Total Country	485	5
Western	435	4
Central	520	5
Greater Accra	355	2
Volta	706	6
Eastern	538	5
Ashanti	421	3
Brong Ahafo	421	4
Northern	531	5
Upper East	802	6
Upper West	466	4

Source: 2010 Population and Housing Census. Ghana Statistical Service

8.4 Migration

Migration is one of the components of population and its dynamics. Its measurement can be done in a number of ways. In this section, migration is measured with respect to nationality and birthplace.

8.4.1 Nationality and Birth place

The nationality of the population of Eastern Region is shown in (Table 8.5). Persons of Ghanaian parentage, as expected, constitute the largest percentage of the population (95.4%). Ghanaians with dual citizenship constitutes a very small percentage (2.2%). Less than 2.0 percent of the population in the Region is non-Ghanaians; and Ghanaians by naturalization constitute less than one percent (0.7%). Nationality within the district populations also depicts similar patterns. Persons with Ghanaian nationality constitute the largest proportion of the population in all the districts recording more than 90.0 percent for each district. There are, however, higher proportion of Ghanaians of dual nationality in Kwahu North (5.1%) and Asuogyaman (3.3%) compared to the other districts.

Table 8.5: Population by nationality and birth place

	Population	Ghanaian by birth	Dual nationality (Ghanaian & Other)	Ghanaian by naturalisa- tion	Non- Ghanaian	Total
All districts	2,633,154	95.4	1.4	0.7	17	100.0
Birim South	119,767	96.7	1.6	0.4	1.5	100.0
Birim Municipal	144,869	95.9	2.1	0.5	1.9	100.0
West Akim Municipal	195,349	95.6	1.8	0.6	1.7	100.0
Suhum-Kraboia Coaltar	167,551	96.0	2.1	0.7	1.6	100.0
Akwapem South Municipal	123,501	95.1		0.3	1.6	100.0
Akwapem North	136,483	97.5	1.2	0.8	2.1	100.0
New Juaben Municipal	183,727	93.8	1.6	0.5	0.98	100.0
Yilo Krobo	87,847	96.3		0.7	2.5	100.0
Lower Manya	89,246	95.9	2.3	1.0	1.6	100.0
Asuogyaman	98,046	96.1	3.3	0.6	1.8	100.0
Upper Manya	72,092	96.0	1.6	0.5	1.2	100.0
Fanteakwa	108,614	96.1	1.4	0.7	2.0	100.0
East Akim Municipal	167,896	96.0	1.8	0.6	1.5	100.0
Kwaebibirem	192,562	96.1	1.8	0.6	1.4	100.0
Akyem Manso	97,374	96.7	1.5	0.5	1.8	100.0
Birim North	78,907	96.0	1.7	0.5	1.6	100.0
Atiwa	110,622	96.2	1.6	0.5	2.5	100.0
Kwahu West Municipal	93,584	94.7	2.1	0.7	2.5	100.0
Kwahu South	69,757	95.7	1.7	0.6	2.0	100.0
Kwahu East	77,125	95.4	2.2	0.7	1.8	100.0
Kwahu North	18,235	91.4	5.1	1.6	1.9	100.0

Source: 2010 Population and Housing Census, Ghana Statistical Service

8.4.2 Birth Place

Data on place of birth and place of enumeration provides information on migratory movement of the population. The data compiled include those who were born in the region but were enumerated outside the region at the time of the census. Overall, the total population enumerated in the region was 2,633,154. Of this number, 65.4 percent were born at the same locality of enumeration while 17.9 percent were born in another locality in the region and the rest were born outside the region (15.9 percent), (Table 8.6). In all the districts, less than 1.0 percent of the population was born abroad. The proportion of the population who were enumerated at their place of birth is highest in Birim South (76.4%) followed closely by Akyem Manso (75.7%). The lowest proportion enumerated at their place of birth was reported in Asuogyaman (54.6%). Movement from birth place is lowest in Birim. It has 10.0 percent of residents enumerated at another locality compared to an average of 18 percent for the region. Two other districts recorded quite similar percentages - Akyem Manso (10.6%) and Kwahu North (11.5%). A relatively high proportion of persons born in another region characterize a number of Districts- Kwahu North (31%), Asuogyaman (27%), New Juaben (21%) and Akwapem South (21%) and enumerated in them. This is because of

relatively better economic opportunities that exist in these districts. For example, opportunities in the urban sector of New Juaben and farming on the agricultural lands and fishing in water resources such as the Volta Lake in Kwahu North attract migrants from other regions into these districts.

Table 8.6: Population by region, district and birthplace

	Total	Same locality	Per-cent	Different locality	Per-cent	Another region	Per-cent	Born abroad	Per-cent
All Districts	2,633,154	1,720,926	65.4	471,801	17.9	418,314	15.9	22,113	0.8
Birim South	119,767	91,529	76.4	12,020	10.0	15,571	13.0	647	0.5
Birim Municipal	144,869	98,555	68.0	21,427	14.8	23,909	16.5	978	0.7
West Akim Municipal	195,349	138,055	70.7	31,441	16.1	24,454	12.5	1,399	0.7
Suhum-Kraboia Coaltar	167,551	109,164	65.2	38,484	23.0	18,583	11.1	1,320	0.8
Akwapem South Municipal	123,501	72,729	58.9	23,196	18.8	25,953	21.0	1,623	1.3
Akwapem North	136,483	91,001	66.7	26,532	19.4	18,046	13.2	904	0.7
New Juaben Municipal	183,727	102,889	56.0	39,242	21.4	38,898	21.2	2,698	1.5
Yilo Krobo	87,847	60,373	68.7	19,045	21.7	7,820	8.9	609	0.7
Lower Manya	89,246	53,657	60.1	20,782	23.3	14,034	15.7	773	0.9
Asuogyaman	98,046	53,582	54.6	16,687	17.0	26,802	27.3	975	1.0
Upper Manya	72,092	53,048	73.6	13,152	18.2	5,459	7.6	433	0.6
Fanteakwa	108,614	78,642	72.4	20,704	19.1	8,787	8.1	481	0.4
East Akim Municipal	167,896	113,185	67.4	32,830	19.6	20,678	12.3	1,203	0.7
Kwaebibirem	192,562	132,403	68.8	34,183	17.8	24,947	13.0	1,029	0.5
Akyem Manso	97,374	73,689	75.7	10,311	10.6	12,873	13.2	501	0.5
Birim North	78,907	49,669	62.9	16,810	21.3	11,759	14.9	669	0.8
Atiwa	110,622	77,991	70.5	20,014	18.1	11,952	10.8	665	0.6
Kwahu West Municipal	93,584	55,859	59.7	21,858	23.4	14,919	15.9	948	1.0
Kwahu South	69,757	44,453	63.7	13,511	19.4	11,192	16.0	601	0.9
Kwahu East	77,125	48,550	62.9	14,497	18.8	13,429	17.4	649	0.8
Kwahu North	218,235	121,903	55.9	25,075	11.5	68,249	31.3	3,008	1.4

Source: 2010 Population and Housing Census, Ghana Statistical Service

8.5 Conclusion

Fertility levels in the region are lower than in several regions of Ghana. Differences exist between rural and urban women regarding the number of children they have ever born. Rural women of all ages have ever born more children than their rural counterparts. Mortality levels are relatively high in the region, even though the infant and under-five mortality rate in the region are relatively lower than those of the other regions except Greater Accra where children's risk of dying is lowest. The vast majority of the residents of the Eastern Region are Ghanaians. A third of them are enumerated in a locality (within the region or another region within Ghana) that is different from where they were born.

CHAPTER NINE

ECONOMIC CHARACTERISTICS

9.1 Introduction

The economic characteristics of any population are important for development planning and other purposes. They are also development indicators that are largely determined by how governments are able to manage their populations and resources in order to provide the needs of their populations and thereby achieve their human development goals.

The economic characteristics of a population also help in examining population and development interrelationship so that appropriate policies can be adopted. Population and development interrelationship has been a major area of research and policy concern in developing countries, including Ghana. Rapid population increase compound economic stagnation and associated unemployment problems. The various international conferences on population and development are indications of the importance of the subject to the international community. The 1994 International Conference on Population and Development (ICPD), organized by the United Nations and its agencies was a landmark in this regard and its official document titled “Programme of Action” continues to be a reference for population policies.

It is against this background that the economic characteristics of the population of the Eastern Region are examined in this chapter. The areas of focus include economic activity status, employment status and unemployment characteristics of the total population in the region and its constituent districts. All of the characteristics are examined with respect to age, sex and residential status which are background characteristics that determine the economic activity and employment status of individuals and population subgroups.

9.2 Economic 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.

On the average, a little less than 3 out of every 4 persons (73.0%) aged 15 years and older are economically active in the Eastern Region (Table 9.1). The activity rate in the region is relatively high but disparities exist among the districts, with a few recording far higher rates than the regional average.

9.2.1 Economic Activity Status by District

Generally, the economic activity rates of all the municipalities are lower than the regional average. As can be observed from Table 9.1, the economic activity rates for all the municipalities are below 70 percent, with the exception of Kwahu West Municipality which recorded a rate of 70.9 percent. New Juaben municipality, the most urbanized district where the Regional capital Koforidua is located recorded the lowest economic activity rate of 67.1

percent. The highest economic activity rates are recorded in the least urbanized districts in Upper Manya (83.0%) and Kwahu North (85.8%).

The patterns of economic activity rate suggest that predominantly rural populations report higher economic activity rates because greater employment opportunities exist in their agricultural sector compared to the declining economic opportunities in urban sectors of the more urbanized districts. It must be noted, however, that higher school enrollment rates in urban areas and the municipalities, than in the rural communities of the least urbanized districts, also account for economic inactivity among a larger proportion of young persons aged 18- 24 years in the Municipalities.

Table 9.1: Population 15 years and older by district and economic activity status

	Total		Economically active		Not active	
District	1,622,100	100.0	1,170,486	72.2	451,614	27.8
Birim South	71,750	100.0	52,798	73.6	18,952	26.4
Birim Municipal	88,354	100.0	60,905	68.9	27,449	31.1
West Akim	117,474	100.0	85,273	72.6	32,201	27.4
Suhum / Kraboa Coaltar	102,150	100.0	78,149	76.5	24,001	23.5
Akwapem South	79,913	100.0	53,503	67.0	26,410	33.0
Akwapem North	86,454	100.0	57,108	66.1	29,346	33.9
New Juaben Municipal	127,186	100.0	84,489	66.4	42,697	33.6
Yilo Krobo	55,307	100.0	39,899	72.1	15,408	27.9
Lower Manya-Krobo	57,930	100.0	40,017	69.1	17,913	30.9
Asuogyaman	61,425	100.0	42,283	68.8	19,142	31.2
Upper Manya-Krobo	43,100	100.0	35,663	82.7	7,437	17.3
Fanteakwa	66,152	100.0	48,941	74.0	17,211	26.0
East Akim	107,575	100.0	73,058	67.9	34,517	32.1
Kwaebibirem	116,540	100.0	81,446	69.9	35,094	30.1
Akyemansa	56,341	100.0	42,666	75.7	13,675	24.3
Birim North	47,456	100.0	35,824	75.5	11,632	24.5
Atiwa	66,511	100.0	48,583	73.0	17,928	27.0
Kwahu West	58,183	100.0	40,972	70.4	17,211	29.6
Kwahu South	42,262	100.0	30,105	71.2	12,157	28.8
Kwahu East	46,670	100.0	33,332	71.4	13,338	28.6
Kwahu North	123,367	100.0	105,472	85.5	17,895	14.5

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.2.2 Economic Activity Status by Sex

Differences exist between the sexes regarding their economic activity rate in all the districts, with the economic activity rates of the males higher than that of the females in almost all the districts (Table 9.2). With the exception of Lower Manya District where the economic activity rates are the same for males and females and in Akyem Manso District where they are about the same, females have higher economic activity rates than the males in the Akwapim South municipality.

Females in Ghana generally perform household chores even from early childhood. Consequently, some become housewives who may not engage in any economic activity probably because they may not be willing or available to do so. While housewives are not paid for performing household chores, domestic employees on the other hand are usually paid for performing similar tasks. They are, therefore, enumerated at censuses and surveys as economically inactive. As a result the economic activity rate is consistently lower among females than males in Ghana, and consequently, in the Eastern Region.

Table 9.2: Population 15 years and older by district, sex and economic activity status

District	Total			Male			Female		
	Total	Economically active	Not active	Total	Economically active	Not active	Total	Economically active	Not active
District	1,622,100	72.2	27.8	771,561	73.6	26.4	850,539	70.8	29.2
Birim South	71,750	73.6	26.4	33,326	74.5	25.5	38,424	72.8	27.2
Birim Municipal	88,354	68.9	31.1	40,719	70.6	29.4	47,635	67.5	32.5
West Akim	117,474	72.6	27.4	54,928	74.7	25.3	62,546	70.8	29.2
Suhum / Kraboa Coalta	102,150	76.5	23.5	48,644	77.6	22.4	53,506	75.5	24.5
Akwapem South	79,913	67	33	38,823	65.8	34.2	41,090	68	32
Akwapem North	86,454	66.1	33.9	38,560	67.7	32.3	47,894	64.7	35.3
New Juaben Municipal	127,186	66.4	33.6	60,459	66.2	33.8	66,727	66.6	33.4
Yilo Krobo	55,307	72.1	27.9	25,913	74	26	29,394	70.5	29.5
Lower Manya-Krobo	57,930	69.1	30.9	25,934	69.1	30.9	31,996	69.1	30.9
Asuogyaman	61,425	68.8	31.2	28,498	70.1	29.9	32,927	67.8	32.2
Upper Manya-Krobo	43,100	82.7	17.3	21,502	83.8	16.2	21,598	81.7	18.3
Fanteakwa	66,152	74	26	31,934	76	24	34,218	72.1	27.9
East Akim	107,575	67.9	32.1	50,813	69.3	30.7	56,762	66.7	33.3
Kwaebibirem	116,540	69.9	30.1	55,765	72.1	27.9	60,775	67.8	32.2
Akyemansa	56,341	75.7	24.3	26,839	75.6	24.4	29,502	75.8	24.2
Birim North	47,456	75.5	24.5	23,380	78.3	21.7	24,076	72.8	27.2
Atiwa	66,511	73	27	31,877	75.8	24.2	34,634	70.5	29.5
Kwahu West	58,183	70.4	29.6	26,930	71.3	28.7	31,253	69.7	30.3
Kwahu South	42,262	71.2	28.8	19,208	73.3	26.7	23,054	69.5	30.5
Kwahu East	46,670	71.4	28.6	21,780	73.5	26.5	24,890	69.6	30.4
Kwahu North	123,367	85.5	14.5	65,729	87.2	12.8	57,638	83.5	16.5

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.2.3 Economic Activity Status by Locality

In all the districts, the economic activity rates of rural areas are higher than those of urban areas (Table 9.3). There are no exceptions to this pattern. The economic activity rates for rural areas range from 60.1 percent in Akwapem North to 74.7 percent in Upper Manya while the range in urban areas is from 70.3 percent, also in Akwapem North to 88.8 percent in Kwahu North. Thus economic activity rates in rural areas in all the districts exceed 70 percent while those of urban areas are mostly below 70 percent.

Even though higher school attendance rate among young people in urban areas compared to their counterparts in rural areas may account for lower economic activity rates in urban areas, it is also possible that economic opportunities are lower in the urban areas even as reduced job opportunities have characterized the economic sectors of urban populations in Ghana in recent times.

Table 9.3: Population 15 years and older by district, type of locality and economic activity status

	Total			Urban			Rural		
	Total	Econo- mically active	Not active	Total	Econo- mically active	Not active	Total	Econo- mically active	Not active
Total	1,622,100	72.7	27.3	738,517	67.5	32.5	883,583	77.0	23.0
Birim South	71,750	74.0	26.0	34,756	71.7	28.3	36,994	76.1	23.9
Birim Municipal	88,354	69.6	30.4	61,599	67.5	32.5	26,755	74.3	25.7
West Akim Municipal	117,474	73.1	26.9	47,364	66.3	33.7	70,110	77.6	22.4
Suhum-Kraboia Coaltar	102,150	76.9	23.1	28,251	72.8	27.2	73,899	78.5	21.5
Akwapem South Municipal	79,913	67.8	32.2	41,394	63.3	36.7	38,519	72.5	27.5
Akwapem North	86,454	66.7	33.3	31,093	60.1	39.9	55,361	70.3	29.7
New Juaben Municipal	127,186	67.1	32.9	119,323	66.8	33.2	7,863	71.6	28.4
Yilo Krobo	55,307	72.6	27.4	17,820	67.6	32.4	37,487	74.9	25.1
Lower Manya	57,930	69.6	30.4	48,746	68.6	31.4	9,184	74.6	25.4
Asuogyaman	61,425	69.4	30.6	18,753	67.0	33.0	42,672	70.4	29.6
Upper Manya	43,100	83.0	17.0	5,865	74.7	25.3	37,235	84.3	15.7
Fanteakwa	66,152	74.9	25.1	19,136	67.3	32.7	47,016	78.0	22.0
East Akim Municipal	107,575	68.6	31.4	65,480	65.5	34.5	42,095	73.4	26.6
Kwaebibirem	116,540	70.3	29.7	58,301	68.0	32.0	58,239	72.7	27.3
Akyem Manso	56,341	76.2	23.8	20,175	73.5	26.5	36,166	7.7	22.3
Birim North	47,456	75.8	24.2	13,284	72.3	27.7	34,172	77.2	22.8
Atiwa	66,511	73.4	26.6	22,817	69.9	30.1	43,694	75.3	24.7
Kwahu West Municipal	58,183	70.9	29.1	30,952	68.6	31.4	27,231	73.4	26.6
Kwahu South	42,262	71.6	28.4	12,000	61.9	38.1	30,262	75.4	24.6
Kwahu East	46,670	71.9	28.1	16,119	60.4	39.6	30,551	78.0	22.0
Kwahu North	123,367	85.8	14.2	25,289	74.2	25.8	98,078	88.8	11.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.2.4 Economic Activity Status by Age

The economic activity rates of broad age groups are shown in Table 9.4. The lowest rates are recorded by the youngest age group (15- 24 years), followed by the oldest (60 years and older). Since school attendance is highest among those aged 15- 24 years, some persons within this age group are not yet economically active. Some of the aged may choose to be economically inactive. It must be noted that the economic activity rate among the aged (60+ years) is relatively high in all the districts. The age group 35- 59 years reported the highest economic activity status, exceeding 90 percent in all the districts, with the exception of Akwapem South municipality and Akwapem North. Almost all persons aged 35- 59 years are economically active in Suhum-Kraboia Coaltar (95.1%), Kwahu North (96.5%) and Upper Manya (97.1%).

Upper Manya recorded the highest economic activity rate for all the age groups. It reported as high as 61.3 percent for the 15-24 years age group while those for most districts are far below 50 percent.

Table 9.4: Population 15 years and older by district, age group and economic activity status

Total	Total		15-24		25-34		35-59		60+	
	Econo- mically active	Not active	Econo- mically active	Not active	Econo- mically active	Not active	Econo- mically active	Not active	Econo- mically active	Not active
Total	72.2	27.8	43.4	56.6	88.2	11.8	92.5	7.5	59.9	40.1
Birim South	73.6	26.4	43.9	56.1	90.1	9.9	93.7	6.3	65.7	34.3
Birim Municipal	68.9	31.1	38.0	62.0	86.2	13.8	90.3	9.7	60.4	39.6
West Akim	72.6	27.4	44.2	55.8	86.9	13.1	92.1	7.9	62.4	37.6
Suhum / Kraboa Coaltar	76.5	23.5	46.1	53.9	92.6	7.4	95.1	4.9	67.4	32.6
Akwapem South	67.0	33.0	39.6	60.4	81.3	18.7	86.1	13.9	48.9	51.1
Akwapem North	66.1	33.9	41.0	59.0	86.2	13.8	87.5	12.5	44.1	55.9
New Juaben Municipal	66.4	33.6	34.1	65.9	85.9	14.1	92.2	7.8	46.2	53.8
Yilo Krobo	72.1	27.9	43.9	56.1	88.2	11.8	92.6	7.4	59.3	40.7
Lower Manya-Krobo	69.1	30.9	41.6	58.4	89.1	10.9	91.8	8.2	47.0	53.0
Asuogyaman	68.8	31.2	35.9	64.1	87.7	12.3	92.4	7.6	53.7	46.3
Upper Manya-Krobo	82.7	17.3	60.7	39.3	94.1	5.9	97.1	2.9	78.0	22.0
Fanteakwa	74.0	26.0	45.1	54.9	89.5	10.5	94.1	5.9	64.4	35.6
East Akim	67.9	32.1	35.4	64.6	87.3	12.7	92.1	7.9	54.5	45.5
Kwaebibirem	69.9	30.1	35.4	64.6	87.0	13.0	92.4	7.6	60.9	39.1
Akyemansa	75.7	24.3	42.1	57.9	90.8	9.2	96.1	3.9	73.6	26.4
Birim North	75.5	24.5	47.9	52.1	88.6	11.4	93.1	6.9	68.5	31.5
Atiwa	73.0	27.0	45.0	55.0	86.2	13.8	91.5	8.5	64.6	35.4
Kwahu West	70.4	29.6	40.3	59.7	87.7	12.3	92.6	7.4	60.1	39.9
Kwahu South	71.2	28.8	45.3	54.7	88.5	11.5	91.7	8.3	55.8	44.2
Kwahu East	71.4	28.6	43.7	56.3	87.4	12.6	91.3	8.7	61.1	38.9
Kwahu North	85.5	14.5	69.0	31.0	93.5	6.5	96.5	3.5	78.3	21.7

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.3 Employment Status

The employment status of the population is an indication of the engagement of the population in economic activity, whether employed or unemployed. It is important for planning and monitoring of economic policies that seek to address unemployment in a population.

The results of the analysis of the census data show that a little more than two thirds (69%) of the population in the Eastern Region was employed while 4.1 percent were unemployed. The rest (27.3%) were not economically active as shown in Table 9.5.

9.3.1 Employment Status by District

Levels of employment and unemployment vary considerably among the districts in the region. As can be observed from Table 9.5, employment rates range from 60.7 percent in Akwapem North to 83.9 percent in Kwahu North. Upper Manya recorded the lowest rate of unemployment (1.2 percent), while Lower Manya had the highest rate of 6.4 percent. Nine out of the 22 districts recorded employment rates above the regional average. Upper Manya (and Kwahu North Districts recorded employment rates above 80 percent).

Generally, the rate of unemployment is higher in the less urbanized districts. They also recorded the highest employment rates. These are indications that unemployment is characteristic of urban populations. The New Juaben district where the capital of the district (Koforidua) is located recorded the third highest unemployment rate of 5.5 percent; and the rate exceeded 4.0 percent in all the municipalities, except in Kwahu West municipal where it was 3.8 percent.

Table 9.5: Population 15 years and older by district and economic activity status

	Total	Percent	Employed	Percent	Unemployed	Percent	Not active	Percent
	1,622,100	100.0	1,112,138	68.6	58,348	3.6	451,614	27.8
Birim South	71,750	100.0	50,149	69.9	2,649	3.7	18,952	26.4
Birim Municipal	88,354	100.0	57,858	65.5	3,047	3.4	27,449	31.1
West Akim Suhum / Kraboa Coaltar	117,474	100.0	81,813	69.6	3,460	2.9	32,201	27.4
Akwapem South	102,150	100.0	74,693	73.1	3,456	3.4	24,001	23.5
Akwapem North	79,913	100.0	49,748	62.3	3,755	4.7	26,410	33.0
New Juaben Municipal	86,454	100.0	52,480	60.7	4,628	5.4	29,346	33.9
Yilo Krobo	127,186	100.0	78,319	61.6	6,170	4.9	42,697	33.6
Lower Manya-Krobo	55,307	100.0	37,558	67.9	2,341	4.2	15,408	27.9
Asuogyaman	57,930	100.0	36,610	63.2	3,407	5.9	17,913	30.9
Upper Manya-Krobo	61,425	100.0	39,332	64.0	2,951	4.8	19,142	31.2
Fanteakwa	43,100	100.0	35,231	81.7	432	1.0	7,437	17.3
East Akim	66,152	100.0	46,359	70.1	2,582	3.9	17,211	26.0
Kwaebibirem	107,575	100.0	68,005	63.2	5,053	4.7	34,517	32.1
Akyemansa	116,540	100.0	77,442	66.5	4,004	3.4	35,094	30.1
Birim North	56,341	100.0	41,558	73.8	1,108	2.0	13,675	24.3
Atiwa	47,456	100.0	34,500	72.7	1,324	2.8	11,632	24.5
Kwahu West	66,511	100.0	47,295	71.1	1,288	1.9	17,928	27.0
Kwahu South	58,183	100.0	39,040	67.1	1,932	3.3	17,211	29.6
Kwahu East	42,262	100.0	28,523	67.5	1,582	3.7	12,157	28.8
Kwahu North	46,670	100.0	32,122	68.8	1,210	2.6	13,338	28.6
	123,367	100.0	103,503	83.9	1,969	1.6	17,895	14.5

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.3.2 Employment Status by Age

Employment rate is relatively high in the region, with an average of 94.3 percent for the Region. Differences exist among the age categories. The rate increases with age and ranges from 85.0 percent for the youth (15-24 years) to 98.0 percent for those aged 35- 59 years. The employment rate of the aged (60+ years) is higher than that of the youth. Youth unemployment and increasingly graduate unemployment has become a topical issue in Ghana.

Table 9.6: Population 15 years and older by district and activity status

Total	Total		15-24		25-34		35-59		60+	
	Em- ed	Un- employed	Em- ployed	Un- employed	Em- ployed	Un- employed	Em- ployed	Un- employed	Em- ployed	Un- employed
Birim South	95.0	5.0	87.5	12.5	94.2	5.8	97.9	2.1	98.4	1.6
Birim Municipal	95.0	5.0	85.7	14.3	93.5	6.5	98.5	1.5	99	1.0
West Akim	95.0	5.0	87.7	12.3	94.2	5.8	97.7	2.3	98.3	1.7
Suhum / Kraboa Coaltar	95.9	4.1	88.8	11.2	95.5	4.5	98.4	1.6	98.8	1.2
Akwapem South	95.6	4.4	86.4	13.6	95.2	4.8	98.6	1.4	98.6	1.4
Akwapem North	93.0	7.0	82.1	17.9	92.4	7.6	96.8	3.2	97.3	2.7
New Juaben Municipal	91.9	8.1	80.5	19.5	90.8	9.2	96	4.0	97.2	2.8
Yilo Krobo	92.7	7.3	82.8	17.2	91.5	8.5	96.7	3.3	96.6	3.4
Lower Manya- Krobo	94.1	5.9	83.8	16.2	93.4	6.6	98.1	1.9	98.3	1.7
Asuogyaman	91.5	8.5	80.3	19.7	90.4	9.6	96.3	3.7	97.4	2.6
Upper Manya- Krobo	93.0	7.0	80.7	19.3	91.2	8.8	97.3	2.7	98.1	1.9
Fanteakwa	98.8	1.2	97.3	2.7	98.6	1.4	99.6	0.4	99.4	0.6
East Akim	94.7	5.3	88.1	11.9	93.7	6.3	97.1	2.9	98.2	1.8
Kwaebibirem	93.1	6.9	80.7	19.3	91.7	8.3	97	3.0	98.1	1.9
Akyemansa	95.1	4.9	85.2	14.8	94.4	5.6	98	2.0	98.5	1.5
Birim North	97.4	2.6	91.2	8.8	97.2	2.8	99.2	0.8	99.1	0.9
Atiwa	96.3	3.7	90.3	9.7	96	4.0	98.6	1.4	98.4	1.6
Kwahu West	97.3	2.7	92.7	7.3	96.9	3.1	98.9	1.1	99.2	0.8
Kwahu South	95.3	4.7	86.8	13.2	95.3	4.7	98.1	1.9	98.7	1.3
Kwahu East	94.7	5.3	86.7	13.3	94.1	5.9	97.6	2.4	98.5	1.5
Kwahu North	96.4	3.6	91.0	9.0	96.0	4.0	98.1	1.9	98.3	1.7

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.4 Unemployment

To a very large extent, the unemployment rate of a population attracts the attention of policy makers more than other economic characteristics. This is because of the wellbeing issues that are associated with it. Usually, rates around 10 percent are considered to be very high. But in low income countries such as Ghana where standards of living are already low, unemployment rates between 5 and 10 percent are deemed high.

9.4.1 Unemployment by District

The average level of unemployment in the Eastern Region recorded at the census was 4.1 percent. The levels in the various districts however vary. The lowest level was 1.2 percent in Upper Manya while the highest, 6.4 percent, was recorded in Lower Manya. Apart from New Juaben, Akwapem South, Yilo Krobo, Lower Manya, Asuogyaman and Fanteakwa where the rates are 5 or 6 percent, the rest recorded rates that are 4 percent or lower.

9.4.2 Unemployment by Sex

Overall, the female population in all the districts reported higher rates of unemployment than their male (Table 9.7). As indicated in an earlier section, the generally lower educational status of females may account for their higher unemployment rate. There are only four districts in which males recorded a higher or the same unemployment rates as the females: Birim North (3.7%) for males and for females, Upper Manya Krobo (1.0%) for males and for females, Asuogyaman (5.0%) for males and 4.6 % for females) and New Juaben Municipality (5.1% for males and 4.6% for females).

Table 9.7: Population 15 years and older by district, activity status and sex

	pop 15 yrs+			Unemployed			Proportion unemployed		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	1,622,100	771,561	850,539	58,348	25,679	32,669	3.6	3.3	3.8
Birim South	71,750	33,326	38,424	2,649	1,237	1,412	3.7	3.7	3.7
Birim Municipal	88,354	40,719	47,635	3,047	1,320	1,727	3.4	3.2	3.6
West Akim	117,474	54,928	62,546	3,460	1,446	2,014	2.9	2.6	3.2
Suhum / Kraboa Coaltar	102,150	48,644	53,506	3,456	1,321	2,135	3.4	2.7	4.0
Akwapem South	79,913	38,823	41,090	3,755	1,772	1,983	4.7	4.6	4.8
Akwapem North	86,454	38,560	47,894	4,628	2,055	2,573	5.4	5.3	5.4
New Juaben Municipal	127,186	60,459	66,727	6,170	3,075	3,095	4.9	5.1	4.6
Yilo Krobo	55,307	25,913	29,394	2,341	997	1,344	4.2	3.8	4.6
Lower Manya-Krobo	57,930	25,934	31,996	3,407	1,463	1,944	5.9	5.6	6.1
Asuogyaman	61,425	28,498	32,927	2,951	1,423	1,528	4.8	5	4.6
Upper Manya-Krobo	43,100	21,502	21,598	432	214	218	1.0	1.0	1.0
Fanteakwa	66,152	31,934	34,218	2,582	1,154	1,428	3.9	3.6	4.2
East Akim	107,575	50,813	56,762	5,053	2,103	2,950	4.7	4.1	5.2
Kwaebibirem	116,540	55,765	60,775	4,004	1,681	2,323	3.4	3.0	3.8
Akyemansa	56,341	26,839	29,502	1,108	486	622	2.0	1.8	2.1
Birim North	47,456	23,380	24,076	1,324	540	784	2.8	2.3	3.3
Atiwa	66,511	31,877	34,634	1,288	557	731	1.9	1.7	2.1
Kwahu West	58,183	26,930	31,253	1,932	765	1,167	3.3	2.8	3.7
Kwahu South	42,262	19,208	23,054	1,582	616	966	3.7	3.2	4.2
Kwahu East	46,670	21,780	24,890	1,210	514	696	2.6	2.4	2.8
Kwahu North	123,367	65,729	57,638	1,969	940	1,029	1.6	1.4	1.8

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.4.3 Unemployment by Age

Differentials in unemployment rate exist among the age categories in all the districts (Table 9.8), the highest rates are recorded by the youth, aged 15 to 24 years. The rates are in excess of 5 percent in almost all the districts, except Atiwa (4.3%) and Kwahu North (2.9%). The rates are highest, (approximately 10 percent) among the youth in Akwapem South Municipal and Akwapem North. The levels of unemployment among the ages 25- 34 years are the next highest. The level of unemployment decreases with increasing age in all the districts. This shows that the youth face unemployment problems than older age groups.

Table 9.8: Unemployment by age

	Total	15-24	25-34	35-59	60+
Total	3.6	5.4	5.1	2.0	1.0
Birim South	3.7	6.3	5.9	1.4	0.7
Birim Municipal	3.4	4.7	5.0	2.1	1.0
West Akim	2.9	4.9	3.9	1.5	0.8
Suhum / Kraboa Coaltar	3.4	6.3	4.4	1.4	0.9
Akwapem South	4.7	7.1	6.2	2.7	1.3
Akwapem North	5.4	8.0	7.9	3.5	1.2
New Juaben Municipal	4.9	5.9	7.3	3.0	1.6
Yilo Krobo	4.2	7.1	5.8	1.8	1.0
Lower Manya-Krobo	5.9	8.2	8.6	3.4	1.2
Asuogyaman	4.8	6.9	7.7	2.5	1.0
Upper Manya-Krobo	1.0	1.7	1.4	0.4	0.5
Fanteakwa	3.9	5.4	5.6	2.7	1.2
East Akim	4.7	6.8	7.3	2.7	1.0
Kwaebibirem	3.4	5.2	4.9	1.8	0.9
Akyemansa	2.0	3.7	2.5	0.7	0.7
Birim North	2.8	4.6	3.6	1.3	1.1
Atiwa	1.9	3.3	2.7	1.0	0.5
Kwahu West	3.3	5.3	4.1	1.7	0.8
Kwahu South	3.7	6.0	5.2	2.2	0.8
Kwahu East	2.6	4.0	3.5	1.8	1.0
Kwahu North	1.6	2.2	2.0	0.9	1.0

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.4.4 Unemployment by Locality

Rural-urban differentials in unemployment rates are recorded in all the districts in the region. The level of unemployment is higher in the urban areas than in the rural areas in all the Districts as indicated in Table 9.9. The unemployment rates for the urban populations range from 2.5 percent (Upper Manya) to 8.1 percent (Akwapem North). Upper Manya District recorded the lowest rate of unemployment (1.1%) for rural areas while the highest rate of 5.4 percent was for East Akim Municipality.

Table 9.9: Population 15 years and older by district, activity status and locality of residence

	pop 15yrs+			unemployed			Proportion unemployed		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Total	1,622,100	738,517	883,583	58,348	33,182	25,166	3.6	4.5	2.8
Birim South	71,750	34,756	36,994	2,649	1,529	1,120	3.7	4.4	3
Birim Municipal	88,354	61,599	26,755	3,047	2,458	589	3.4	4	2.2
West Akim	117,474	47,364	70,110	3,460	1,823	1,637	2.9	3.8	2.3
Suhum / Kraboa Coaltar	102,150	28,251	73,899	3,456	1,138	2,318	3.4	4	3.1
Akwapem South	79,913	41,394	38,519	3,755	2,166	1,589	4.7	5.2	4.1
Akwapem North	86,454	31,093	55,361	4,628	2,282	2,346	5.4	7.3	4.2
New Juaben Municipal	127,186	119,323	7,863	6,170	5,964	206	4.9	5	2.6
Yilo Krobo	55,307	17,820	37,487	2,341	977	1,364	4.2	5.5	3.6
Lower Manya-Krobo	57,930	48,746	9,184	3,407	2,986	421	5.9	6.1	4.6
Asuogyaman	61,425	18,753	42,672	2,951	1,139	1,812	4.8	6.1	4.2
Upper Manya-Krobo	43,100	5,865	37,235	432	123	309	1	2.1	0.8
Fanteakwa	66,152	19,136	47,016	2,582	769	1,813	3.9	4	3.9
East Akim	107,575	65,480	42,095	5,053	3,078	1,975	4.7	4.7	4.7
Kwaebibirem	116,540	58,301	58,239	4,004	2,347	1,657	3.4	4	2.8
Akyemansa	56,341	20,175	36,166	1,108	543	565	2	2.7	1.6
Birim North	47,456	13,284	34,172	1,324	489	835	2.8	3.7	2.4
Atiwa	66,511	22,817	43,694	1,288	546	742	1.9	2.4	1.7
Kwahu West	58,183	30,952	27,231	1,932	1,060	872	3.3	3.4	3.2
Kwahu South	42,262	12,000	30,262	1,582	562	1,020	3.7	4.7	3.4
Kwahu East	46,670	16,119	30,551	1,210	617	593	2.6	3.8	1.9
Kwahu North	123,367	25,289	98,078	1,969	586	1,383	1.6	2.3	1.4

Source: 2010 Population and Housing Census, Ghana Statistical Service

9.5 Conclusion

Overall, economic activity rate is high in the Eastern Region. Employment rates are also relatively high, reaching 70 percent and higher in most of the districts. The levels of economic activity rate are lower for urban areas than their rural areas. The urban areas also recorded the highest rates of unemployment than the rural areas. The youth also recorded the lowest rates of economic activity as well as the highest rates of unemployment in all the districts. Sex differentials were observed with respect to the economic characteristic. Females generally recorded lower economic activity rates and higher unemployment rates than male.

CHAPTER TEN

DISABILITY

10.1 Introduction

Disability has generally been stigmatized in Ghana, especially in traditional settings. Parents of children with disability hide them from the eyes of the public. Persons With Disability (PWDs) would not usually be allowed to participate in some social activities. The wellbeing-physical, emotional, psychological and social- of the PWD is affected by disability. Disability, therefore, constrains the movement of the elderly and reduces their interaction with others, eventually resulting in social seclusion, including participation in schooling. There are few institutions that meet some of these needs of the PWD, such as, School for the Blind in Akropong, Eastern Region and School for the Deaf in Cape Coast, Central Region. There is also a home for mentally retarded children in Dzorwulu in Accra, Greater Accra Region. While these facilities have existed for decades and the University of Cape Coast and University of Education, Winneba offer programmes on Special Education, it was as recently as 2010 that a bill was passed in Parliament for adequate public attention to be paid to the conditions of PWDs and for Government to address their needs. The inclusion of questions on disability in the 2010 PHC is, therefore, timely. The areas discussed in this chapter are distribution of population with disability, types of disability and disability type by economic activity.

10.2 Distribution of the Population with Disability

The number of persons with disability in the Eastern Region constitutes 3.6 percent of the total regional population. (Table 10.1). There are vast differences in the prevalence of disability among the districts. While three districts- Birim municipal (3.5%), Suhum-Krabo-Coaltar (3.8%), Akwapem South (3.7%), East Akim (3.5%) - have about the same percentage as the regional average, the rest recorded percentages that are far below or above it. The percentages range from 1.8 percent in Kwahu North to 6 percent in Atiwa.

10.2.1 Distribution of the Population with Disability by Age

The age data show that the general pattern of distribution shows that the youngest (0- 14 years) and oldest (65+ years) reported the highest percentages of disabled persons in the various districts (Table 10.1). (Indeed disability increases with increasing age, or is more prevalent among older people. The exceptions are found in Akwapem North, where much lower percentage of 8.8 percent is recorded by the youngest but a far higher percentage of 39.3 percent, for the oldest. These are the lowest and highest for the respective ages among all the districts. Apart from Akwapem North, the following districts have far higher percentages reported among the oldest age group compared to those of the other districts- Lower Manya (32.3%), East Akim (31.8%) and Kwahu South (35.6%). Kwahu North recorded a far lower percentage of 16.5 percent for the oldest.

Table 10.1: Distribution of population with disability by district

		Population with disability		Distribution of population with Disability by Age							
		Num.	Prop. of Pop	All ages	0-14	15-24	25-34	35-44	45-54	55-64	65+
All	2,633,154	94,579	3.6	100.0	15.4	11.9	11.0	11.6	13.1	11.1	26.0
Birim South	119,767	5,541	4.6	100.0	20.1	11.7	9.9	11.2	13.4	10.3	23.5
Birim Municipal	144,869	5,041	3.5	100.0	15.3	14.6	12.7	13.5	12.4	10.5	21.0
West Akim Municipal	195,349	5,824	3.0	100.0	17.1	11.6	11.5	12.4	12.5	11.2	23.6
Suhum-Kraboia Coaltar	167,551	6,386	3.8	100.0	16.7	11.5	10.6	12.2	13.5	11.1	24.4
Akwapem South Municipal	123,501	4,514	3.7	100.0	17.7	12.1	12.8	13.0	12.4	10.1	22.0
Akwapem North	136,483	4,097	3.0	100.0	8.8	8.7	9.5	9.2	11.9	12.6	39.3
New Juaben Municipal	183,727	7,965	4.3	100.0	11.8	14.3	12.0	11.8	14.8	12.3	23.1
Yilo Krobo	87,847	5,114	5.8	100.0	12.7	11.3	11.3	12.2	14.4	11.9	26.3
Lower Manya	89,246	2,453	2.7	100.0	11.9	11.0	11.0	9.9	13.4	10.4	32.3
Asuogyaman	98,046	2,327	2.4	100.0	12.0	12.5	13.3	12.2	11.6	9.9	28.6
Upper Manya	72,092	2,359	3.3	100.0	13.7	10.4	10.3	12.6	13.8	11.0	28.1
Fanteakwa	108,614	5,362	4.9	100.0	22.3	9.7	9.5	10.3	12.2	10.8	25.1
East Akim Municipal	167,896	5,855	3.5	100.0	12.3	12.1	10.0	10.1	12.4	11.3	31.8
Kwaebibirem	192,562	4,708	2.4	100.0	15.0	14.1	11.5	12.6	12.9	10.5	23.5
Akyem Manso	97,374	2,339	2.4	100.0	15.3	10.9	9.8	12.1	13.6	10.0	28.1
Birim North	78,907	3,067	3.9	100.0	18.7	12.6	12.1	11.4	12.5	10.8	21.9
Atiwa	110,622	6,664	6.0	100.0	16.7	9.9	10.8	10.8	13.3	12.3	26.1
Kwahu West Municipal	93,584	2,861	3.1	100.0	16.7	12.9	11.7	11.4	13.1	9.5	24.7
Kwahu South	69,757	4,066	5.8	100.0	10.5	10.0	8.5	9.5	13.6	12.3	35.6
Kwahu East	77,125	4,073	5.3	100.0	15.0	12.6	9.8	10.5	11.8	11.1	29.2
Kwahu North	218,235	3,963	1.8	100.0	19.8	13.2	12.9	14.6	14.5	8.6	16.5

Source: 2010 Population and Housing Census, Ghana Statistical Service

10.2.2 Distribution of the Population with Disability by Sex

The sex composition of the population with disability in the Region is presented in Table 10.2. Females constitute a higher proportion of persons with disability in all the districts, with the exception of Birim North and Kwahu North districts. The proportion of the PWDs who are females is more than half in all the districts and ranges from 51.2 percent in Kwaebibirem to as high as 59.3 percent in Kwahu North.

There may be two possible explanations of the sex composition of the population with disability: either females constitute a higher proportion of the population in all the districts or they have higher risk of disability in all the districts except in Birim North and Kwahu North. The sex ratio of the districts ranges from 86.8 percent in Lower Manya to 114.8 in Kwahu North, and with a Regional average of 96.1 percent. The sex ratio of Birim North is the second highest (100.6%). (Refer to Section 3.7 in Chapter three on sex ratios). There are more females than males in all the districts of the Eastern Region, with the exception of Birim North and Kwahu North. More females than males have disability in all the districts. The exceptions are Birim North and Kwahu North where the sex ratios indicate that there are

more males than females and more males with disability than females. The sex structure of the population of the Eastern Region therefore contributes to the sex composition of the population with disability in the region. Other factors also probably account for the sex differentials in the distribution of the population with disability.

Table 10.2: Distribution of the population with disability by sex

	Number			Percent		
	Total	Male	Female	Total	Male	Female
All	94,579	44,034	50,545	100	46.6	53.4
Birim South	5,541	2,505	3,036	100	45.2	54.8
Birim Municipal	5,041	2,301	2,740	100	45.6	54.4
West Akim Municipal	5,824	2,782	3,042	100	47.8	52.2
Suhum-Kraboia Coaltar	6,386	3,114	3,272	100	48.8	51.2
Akwapem South Municipal	4,514	2,109	2,405	100	46.7	53.3
Akwapem North	4,097	1,745	2,352	100	42.6	57.4
New Juaben Municipal	7,965	3,461	4,504	100	43.5	56.5
Yilo Krobo	5,114	2,343	2,771	100	45.8	54.2
Lower Manya	2,453	1,060	1,393	100	43.2	56.8
Asuogyaman	2,327	1,069	1,258	100	45.9	54.1
Upper Manya	2,359	1,228	1,131	100	52.1	47.9
Fanteakwa	5,362	2,528	2,834	100	47.1	52.9
East Akim Municipal	5,855	2,623	3,232	100	44.8	55.2
Kwaebibirem	4,708	2,282	2,426	100	48.5	51.5
Akyem Manso	2,339	1,155	1,184	100	49.4	50.6
Birim North	3,067	1,564	1,503	100	51.0	49.0
Atiwa	6,664	3,079	3,585	100	46.2	53.8
Kwahu West Municipal	2,861	1,330	1,531	100	46.5	53.5
Kwahu South	4,066	1,656	2,410	100	40.7	59.3
Kwahu East	4,073	1,812	2,261	100	44.5	55.5
Kwahu North	3,963	2,288	1,675	100	57.7	42.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

10.2.3 Marital Status of the Population with Disability

On the whole, at least a fifth of the population with disability in all the districts has never married (Table 10.3). An average of 42 percent is in marital union (married or living together). They form a little under 40 percent the following in a few districts (Suhum-Kraboia-Coltar, Akwapem North, Yilo Krobo, Lower Manya, Asuogyaman,- and between 40 percent and 50 percent in the rest, with the exception of Kwahu North where 52.3 percent are married. The percentage divorced varies greatly, ranging from 5.4 percent in Lower Manya to 16.9 percent in Kwahu East while percent the average for the whole Region is 10.4 percent. Those who are widowed are more than 15 percent in all the districts, with the lowest and highest percentages recorded in Kwahu North (10.2%) and Lower Manya (24.8%), respectively. Those who separated from their spouse constitute the least proportion in all the districts- 4.0 percent, but the percentages in the various districts range from 2.6 percent in

Kwahu East to 6.8 percent in Lower Manya. Overall, marital status among the population with disability varies greatly among the districts.

Table 10.3: Marital status of the Disabled

	Total	Never married	Informal/ Consensual union/ Living together	Married	Separated	Divorced	Widowed
All	100	24.3	5.8	36.8	4.0	10.4	18.6
Birim South	100	23.9	4.7	39.5	2.7	11.9	17.2
Birim Municipal	100	26.7	6.4	36.8	3.1	10.8	16.2
West Akim Municipal	100	26.0	5.2	37.1	3.6	9.9	18.2
Suhum-Kraboia Coaltar	100	24.7	6.1	37.9	4.0	9.6	17.7
Akwapem South Municipal	100	24.0	4.4	40.7	4.9	9.3	16.7
Akwapem North	100	21.4	2.7	31.4	5.1	12.7	26.6
New Juaben Municipal	100	29.9	4.4	35.5	3.4	9.7	17.2
Yilo Krobo	100	21.6	15.6	29.3	6.0	7.0	20.4
Lower Manya	100	27.2	8.2	27.6	6.8	5.4	24.8
Asuogyaman	100	28.3	3.4	32.1	4.2	9.6	22.5
Upper Manya	100	22.8	5.6	38.5	6.1	6.6	20.5
Fanteakwa	100	19.8	5.6	42.4	4.1	8.9	19.2
East Akim Municipal	100	24.8	6.2	32.0	4.2	11.8	21.0
Kwaebibirem	100	26.5	6.0	38.5	3.5	9.8	15.6
Akyem Manso	100	25.4	3.5	37.2	3.7	12.4	17.7
Birim North	100	23.5	8.1	38.5	3.8	8.9	17.2
Atiwa	100	20.7	5.7	41.1	3.0	12.0	17.5
Kwahu West Municipal	100	27.4	3.8	37.3	3.8	11.4	16.4
Kwahu South	100	17.7	5.0	36.4	3.3	15.3	22.3
Kwahu East	100	23.2	5.6	32.1	2.6	16.9	19.6
Kwahu North	100	25.6	4.3	48.0	5.2	6.7	10.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

10.2.4 Educational Status and Literacy Rate among the Population with Disability

Educational status is generally low in the population with disability. Those who have never attended school constitute more than half in two districts – Kwahu North (52.2%) and Upper Manya (54.8%) (Table 10.4). In the remaining of the districts around 30 percent to a little less than percent 40 has never attended school, with the exception of New Juaben which has the lowest of 21.3 percent. Basic School attendants also form over 50 percent in most districts. Those who have secondary and higher education are less than 10 percent in some districts, just about the average 10.8 percent for the whole region.

Table 10.4: Disability by level of education and region

	Total	Never attended	Pre-primary	Basic sch.	Sec./SSS/SHS	Voc./Tech./Comm	Post-Sec.	Tertiary
All	92,015	34.5	3.0	51.8	5.0	1.9	2.9	1.0
Birim South	5,374	37.6	4.2	51.1	3.8	1.5	1.3	0.4
Birim Municipal	4,915	30.1	2.8	55.8	6.1	1.9	2.6	0.7
West Akim Municipal	5,669	40.7	3.2	48.2	4.2	1.3	2.1	0.3
Suhum-Kraboia Coaltar	6,174	33.7	3.0	55.5	4.0	1.1	2.1	0.6
Akwapem South Municipal	4,338	29.1	3.2	53.6	6.9	2.5	3.2	1.5
Akwapem North	4,055	38.5	1.8	47.7	4.9	2.3	3.3	1.4
New Juaben Municipal	7,830	21.3	2.3	52.8	9.8	3.5	6.7	3.6
Yilo Krobo	5,016	36.3	2.1	52.7	4.4	1.3	2.6	0.6
Lower Manya	2,422	41.5	2.4	43.9	5.0	2.5	4.0	0.8
Asuogyaman	2,283	38.8	1.8	48.3	5.2	2.0	2.3	1.5
Upper Manya	2,317	54.8	2.1	38.8	2.3	0.2	1.5	0.3
Fanteakwa	5,105	34.0	6.0	52.6	3.3	1.2	2.4	0.5
East Akim Municipal	5,713	29.2	2.7	54.8	5.6	2.6	3.8	1.2
Kwaebibirem	4,620	31.9	2.9	54.4	5.3	1.9	2.9	0.6
Akyem Manso	2,269	43.6	2.5	47.6	3.3	1.1	1.4	0.3
Birim North	2,942	30.1	4.2	56.6	4.9	1.4	2.2	0.4
Atiwa	6,436	29.0	3.9	58.9	3.1	1.9	2.7	0.5
Kwahu West Municipal	2,776	29.6	3.2	54.4	7.0	2.6	2.4	0.9
Kwahu South	3,985	38.4	2.1	48.1	4.6	2.3	3.2	1.3
Kwahu East	3,975	36.3	2.8	52.2	3.9	2.0	2.1	0.6
Kwahu North	3,801	52.2	2.8	39.5	3.3	0.6	1.3	0.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

Literacy rate is also low among the population with disability. Overall, a little more than a third (35.8%) in the region are illiterate in English, Ghanaian and French languages, Table 10.5. Disparities exist among the districts. Illiteracy rate ranges from 21.9 percent in New Juaben to 56.9 percent in Upper Manya. More than half (54.1%) of the population with disability in Kwahu North also is not literate in any of the languages. Literacy in English and a Ghanaian language ranges from 26.5 percent in Kwahu North to 54.2 percent in New Juaben while the average for the region is 41 percent. In the rest of the districts, a little over a fifth are literate in Ghanaian language and English. Differences exist among the districts with respect to literacy in English language only. The rates are ranging from under 10 percent in a five districts (Birim South, Akwapem North, Akyem Manso, Kwahu South and Kwahu East) to 20 percent in Yilo Krobo. The same pattern is observed regarding literacy in Ghanaian language. In most districts, more than a tenth are literate in a Ghanaian language only.

Table 10.5: Literacy status of persons with disability

	None (Not literate)	English only	Ghanaian language only	English and Ghanaian language	English and French	English French and Ghanaian Language	Total
All Districts	35.8	11.6	11.4	40.6	0.2	0.5	100.0
Birim South	40.4	6.5	11.0	41.6	0.1	0.4	100.0
Birim Municipal	31.1	10.2	11.7	46.3	0.2	0.6	100.0
West Akim Municipal	42.1	12.6	8.7	36.1	0.3	0.2	100.0
Suhum-Kraboia Coaltar	34.5	12.3	12.6	40.1	0.1	0.4	100.0
Akwapem South Municipal	30.2	14.0	11.1	43.7	0.3	0.6	100.0
Akwapem North	39.0	9.1	10.8	40.8	0.1	0.2	100.0
New Juaben Municipal	21.9	14.6	7.8	54.2	0.3	1.3	100.0
Yilo Krobo	37.7	20.4	6.0	35.3	0.2	0.5	100.0
Lower Manya	43.0	18.5	2.8	34.6	0.4	0.7	100.0
Asuogyaman	39.3	16.2	9.1	34.7	0.0	0.7	100.0
Upper Manya	56.9	13.0	4.9	25.0	0.0	0.1	100.0
Fanteakwa	37.1	13.1	11.3	38.2	0.1	0.2	100.0
East Akim Municipal	29.8	11.1	11.2	47.3	0.1	0.5	100.0
Kwaebibirem	33.1	9.5	12.9	43.6	0.1	0.7	100.0
Akyem Manso	44.1	7.5	12.1	36.0	0.1	0.0	100.0
Birim North	31.7	12.9	16.4	38.6	0.2	0.2	100.0
Atiwa	30.6	9.8	18.7	40.3	0.2	0.4	100.0
Kwahu West Municipal	30.6	5.7	17.6	45.2	0.4	0.4	100.0
Kwahu South	39.4	6.9	14.7	38.6	0.0	0.3	100.0
Kwahu East	37.7	8.8	16.5	36.4	0.1	0.5	100.0
Kwahu North	54.1	9.5	9.6	26.5	0.1	0.2	100.0

Source: 2010 Population and Housing Census, Ghana Statistical Service

10.2.5 Type of Disability by Locality

The percentage with disability varies considerably among the rural and urban populations of the districts. It varies from 1.2 percent to 7.7 percent, both in the urban populations of Kwahu South and Asuogyaman districts (Table 10.6). On the whole, the proportions with disability are higher in the rural populations of the districts than in the urban populations. Thirteen out of the 21 districts (61.9%) recorded higher percentages than their urban. In the rest of the districts, both the rural and urban populations of Akwapem North recorded the same percentage (3.0%) while the urban populations of the remaining seven districts have higher proportions with disability than their rural areas. These seven districts recorded the highest prevalence rates of disability. Furthermore, the rates of both rural and urban populations are higher than the regional average of 3.6 percent with the exception of those of Akyem Manso (both rural and urban) and Akwapem South and East Akim (rural only). These are shaded in Table 10.6.

Table 10.6: Population with disability by district by type of locality

Districts	Urban			Rural		
	Total	Disabled Population	Percentage disabled	Total	Disabled Population	Percentage disabled
All districts	1,143,918	40,109	3.5	1,489,236	54,470	3.7
Birim South	56,913	2,413	4.2	62,854	3,128	5.0
Birim Municipal	98,044	3,251	3.3	46,825	1,790	3.8
West Akim Municipal	75,260	1,888	2.5	120,089	3,936	3.3
Suhum-Kraboia Coaltar	44,072	1,483	3.4	123,479	4,903	4.0
Akwapem South Municipal	60,861	2,323	3.8	62,640	2,191	3.5
Akwapem North	46,562	1,387	3.0	89,921	2,710	3.0
New Juaben Municipal	171,376	7,284	4.3	12,351	681	5.5
Yilo Krobo	27,159	1,158	4.3	60,688	3,956	6.5
Lower Manya	74,733	2,034	2.7	14,513	419	2.9
Asuogyaman	28,788	356	1.2	69,258	1,971	2.8
Upper Manya	9,189	175	1.9	62,903	2,184	3.5
Fanteakwa	29,911	1,250	4.2	78,703	4,112	5.2
East Akim Municipal	100,068	3,783	3.8	67,828	2,072	3.1
Kwaebibirem	94,062	2,141	2.3	98,500	2,567	2.6
Akyem Manso	33,963	874	2.6	63,411	1,465	2.3
Birim North	21,166	952	4.5	57,741	2,115	3.7
Atiwa	36,897	2,542	6.9	73,725	4,122	5.6
Kwahu West Municipal	47,968	1,078	2.2	45,616	1,783	3.9
Kwahu South	18,874	1,448	7.7	50,883	2,618	5.1
Kwahu East	25,353	1,605	6.3	51,772	2,468	4.8
Kwahu North	42,699	684	1.6	175,536	3,279	1.9

Source: 2010 Population and Housing Census, Ghana Statistical Service

10.3 Types of Disability by District

The six major types of disability reported in the population with disability in Ghana at the 2010 PHC are all found in the Eastern Region. The region accounted for approximately 13 percent (94,579 out of 737,743) cases of disability in the country, (Table 10.7). The distributions of the various types of disability in the region are also quite similar to those of the total national population with disability, with the exception of the category classified as ‘other’.

Disability of sight and physical challenge are the most types of disability in the region, constituting more than two-fifths (42.3%) and more than a quarter (29.4%) respectively of all cases. The third most reported types in most of the districts are motional disability and hearing disability.

Table 10.7: Disability type by region and district

Country/Region/District	Total	Sight	Hearing	Speech	Physical	Intellectual	Emotional	Other	All
Ghana	737,743	40.1	15.0	13.7	25.4	15.2	18.6	10.4	100.0
Eastern	94,579	42.3	15.9	15.2	29.4	15.6	18.1	7.9	100.0
Birim South	5,541	45.2	24.5	26.7	32.7	24.1	28.8	5.5	100.0
Birim Municipal	5,041	36.9	13.0	13.2	24.8	18.9	24.9	6.9	100.0
West Akim Municipal	5,824	36.7	16.4	17.9	33.1	17.3	17.2	8.4	100.0
Suhum-Kraboia Coaltar Akwapem South Municipal	6,386	34.9	14.2	15.1	29.5	20.6	16.8	8.2	100.0
Akwapem North	4,514	48.3	21.7	20.7	39.3	20.5	24.1	8.3	100.0
Akwapem North	4,097	37.8	13.4	10.9	34.6	11.2	12.2	10.2	100.0
New Juaben Municipal	7,965	48.9	13.5	12.8	24.2	13.0	17.6	6.5	100.0
Yilo Krobo	5,114	50.9	12.4	9.1	28.1	7.5	13.9	9.4	100.0
Lower Manya	2,453	41.1	14.8	12.4	33.0	11.2	9.5	9.0	100.0
Asuogyaman	2,327	41.0	15.1	15.5	33.7	12.5	9.2	7.8	100.0
Upper Manya	2,359	45.6	17.3	15.0	31.2	10.7	10.6	8.7	100.0
Fanteakwa	5,362	41.7	12.3	12.3	25.2	20.9	27.5	5.7	100.0
East Akim Municipal	5,855	38.2	14.5	15.0	31.1	13.9	15.1	12.0	100.0
Kwaebibirem	4,708	46.7	15.0	16.6	27.6	11.6	11.4	7.7	100.0
Akyem Manso	2,339	37.8	16.0	17.3	33.8	13.4	14.4	7.2	100.0
Birim North	3,067	39.6	13.8	12.0	23.0	12.4	12.6	17.7	100.0
Atiwa	6,664	47.8	21.6	20.0	30.6	20.5	19.0	3.6	100.0
Kwahu West Municipal	2,861	36.1	15.8	15.7	30.9	16.3	19.6	7.2	100.0
Kwahu South	4,066	51.1	14.2	8.9	28.2	10.4	15.0	4.8	100.0
Kwahu East	4,073	34.3	14.2	11.5	26.5	12.2	27.3	7.4	100.0
Kwahu North	3,963	39.7	19.7	15.9	23.1	14.8	16.2	10.2	100.0

Source: 2010 Population and Housing Census, Ghana Statistical Service

10.4 Conclusion

Disability is quite prevalent in the region, even as it accounts for 13 percent of all the cases reported in the country at the Ghana 2010 PHC. Females constitute a higher proportion of all the persons with disability in the region. Disability affects the young and the aged more than any other age group in the region. All the major types of disability found in the country were reported in the Eastern Region at the 2010 PHC.

CHAPTER ELEVEN

AGRICULTURAL ACTIVITY

11.1 Introduction

Agriculture is a crucial sector for reducing poverty and achieving the Millennium Development Goals (MDGS) in Ghana where agriculture has been the mainstay of the economy. But the Food and Agricultural Organization (FAO) has noted that despite the unquestionable importance of agriculture, it is arguably the least known sector of many economies in terms of hard facts and statistics (FAO 2012). Any strategy geared towards reducing poverty and food insecurity must be based on timely and accurate information that can help to measure the impact of agricultural policies and programmes.

In the past, one of the major difficulties encountered when assessing men and women's contribution to agricultural development was the non-availability of gender disaggregated data with respect to the roles and responsibilities of women and men in agriculture production. The data from the 2010 PHC have been tabulated, where possible, according to sex and analyzed from a gender perspective. The sex-disaggregated data are provided in order to highlight existing gender disparities and inequities in the agricultural sector. The census data analyzed and discussed in this chapter on agricultural activity include households who are engaged in agricultural activities by district and locality (rural/urban), sex and age of household heads, types of crops cultivated, tree planting, rearing of livestock and breeding of fish for sale or for family consumption.

11.2 Households in Agriculture

An agricultural household is one that engages generally in agricultural activities or is said to be an agricultural household if at least one of its members engages in agricultural production even if not earning from agricultural activity alone. Table 11.1 is on the distribution of agricultural households in the Eastern Region by district and household size. Overall, 374,257 households that are engaged in agricultural activities were enumerated in the region. The average household size is approximately five members (4.6). Households with 1 to 6 members constitute the majority (77.6%) of agricultural households in the Region while those with seven and more members form less than a quarter (22.4%) of all the agricultural household sizes in the Region.

The patterns described for the whole region are reflected in all the districts, with slight variations. Household sizes of 1 to 6 members form the majority (not less than 70%) of agricultural households in all the 21 districts. The percentage of one-person households is relatively high in all the districts, ranging from 12 percent in Kwahu North to 15 percent in other districts. Kwahu North recorded the lowest percentage (9.8%) of two-member households. The percentages of households in Kwahu North with eight or more members are higher than the averages for the region (Table 11.1). The relatively larger percentage of agricultural households in Kwahu North reflects the characteristics of the district. It has predominantly rural agricultural (farming and fishing) communities. It has almost a tenth (9.1%, 34,428) of all the 374,257 agricultural households in the 21 districts of the Region. Its

location in the Afram Plains (a relatively recent frontier of agricultural production in Ghana) in the Volta Basin has provided the residents and migrants an opportunity for agricultural (farming and fishing) production and potentials. The district has been a major destination of rural migrant farmers.

Table 11.1: Distribution of agricultural households by district and household size

	Number	%	1	2	3	4	5	6	7	8	9	10+	Average
All Districts	374257	100	13.9	11.3	12.9	14.3	13.8	11.4	8.0	5.4	3.3	5.7	4.6
Birim South	22518	100	15.2	12.2	13.7	13.8	13.4	11.1	7.4	5.2	3.2	4.7	4.4
Birim Municipal	20331	100	14.6	11.7	12.7	14.4	13.8	12.1	8.1	5.1	2.9	4.5	4.5
West Akim Municipal	30252	100	13.5	11.6	13.2	14.4	14.0	11.2	8.0	5.1	3.4	5.5	4.6
Suhum-KraboCoaltar	27517	100	14.4	11.4	13.5	14.7	14.0	11.4	7.6	4.8	3.2	5.0	4.5
Akwapem South Municipal	11132	100	14.0	11.6	13.5	15.0	14.0	11.1	7.9	4.8	3.0	5.1	4.5
Akwapem North	15703	100	14.1	10.6	12.9	13.9	14.4	11	7.8	5.6	3.5	6.1	4.7
New Juaben Municipal	9771	100	15.2	12.0	13.5	15	14.1	11.1	7	4.5	2.3	5.3	4.4
YiloKrobo	11820	100	12.4	10.5	12.4	14.5	13.7	11.5	8.5	5.6	3.8	7.0	4.9
Lower Manya	7197	100	12.6	11.7	13	14.6	13.1	10.7	8.4	5.6	3.8	6.5	4.8
Asuogyaman	12071	100	13.4	11.7	12.9	14.2	13.7	11.3	8.1	5.4	3.3	5.9	4.7
Upper Manya	12686	100	12.2	11.0	11.6	14.1	13.9	11.4	8.3	6.3	3.7	7.5	4.9
Fanteakwa	18019	100	11.9	10.2	12.2	14.4	14	12.7	8.7	5.5	3.5	6.8	4.9
East Akim Municipal	23798	100	14.7	11.8	13.6	14.5	13.5	10.9	8.2	5.2	2.8	4.8	4.5
Kwaebibirem	30924	100	14.9	11.5	12.7	14.7	14.5	11.5	8.0	5.1	3.1	4.1	4.5
Akyem Manso	18626	100	13.3	11.3	11.8	13.5	13.8	11.5	8.4	6.0	3.9	6.7	4.8
Birim North	13771	100	14.4	10.6	13.2	14.3	13.1	11.6	8.1	6.0	3.2	5.7	4.7
Atiwa	20206	100	14.3	11.4	13.1	14.4	13.6	11.3	8.1	5.0	3.4	5.3	4.6
Kwahu West Municipal	10195	100	14.6	11.8	13.0	14.3	13.7	11.7	7.5	5.1	3.1	5.1	4.5
Kwahu South	10616	100	14.8	12.8	12.5	14.4	12.8	10.6	7.5	5.2	3.6	5.8	4.6
Kwahu East	12676	100	15.9	12.8	12.8	13.8	12.4	10.1	7.7	5.2	3.3	5.9	4.5
Kwahu North	34428	100	12.2	9.8	12.2	13.9	14.1	11.5	8.5	6.2	4.1	7.5	5.0

Source: 2010 Population and Housing Census. Ghana Statistical Service.

The household structure (size) of the Region and districts suggests that family labour for agricultural production may not be sufficient for most households, considering that schooling requires that children ought to be in school instead of working on family farms. If hired labour is not available, mechanization will be needed to realize the full agricultural potential of the agricultural sector of the Eastern Region.

11.2.1 Urban Agricultural Households

Agricultural activities are normally considered as a prerogative of rural communities. The availability of open spaces within built-up areas, land in peri-urban areas that fall within the corporate limits of urban centres coupled with readily available markets and storage facilities (particularly for vegetable farming) have created farming opportunities in urban centres. Limited employment opportunities have also brought about the need for some urban households to engage in agricultural production in urban areas. In Ghana, for example,

metropolitan areas and municipalities have become sites of vegetable and cereal farming (Yankson 1999).

A total of 116,605 agricultural households were recorded in urban areas in the Eastern Region in the 2010 PHC, constituting about a third (31.2%) of the 374,257 agricultural households in the region. The distribution of urban agricultural households by size is presented in Table 11.2. The pattern in urban areas also shows predominance households with 1 to 6 members. Overall, the proportion of one-member household is three times (14.5%) that of the Regional average (4.6%). The distribution of all the urban agricultural households shows that Kwaebibirem has the largest proportion, recording 11 percent (12,819) of all the 116,605 urban agricultural households. One-member urban agricultural households in the districts constitute 13 percent to 16 percent, (Table 11.2), with Birim South, Akwapem North, Yilo Krobo and Kwahu South reporting 16 percent. The urban agricultural households with seven and more household members constitute a relatively smaller percentage, (less than 20%) in most of the districts.

Table 11.2: Distribution of urban agricultural households by district and household size

	Number	%	1	2	3	4	5	6	7	8	9	10+	Ave- rage
Total	116,605	100.0	14.5	11.5	13.2	14.6	13.7	11.2	7.8	5.1	3.1	5.2	4.6
Birim South	10,117	100.0	16.1	12.1	14.6	13.4	13.6	11.1	7.0	5.0	2.6	4.6	4.4
Birim Municipal	11,401	100.0	14.3	11.6	12.8	14.9	13.7	12.2	8.0	5.2	2.8	4.5	4.5
West Akim Municipal	8,065	100.0	13.8	11.6	14.0	14.6	14.5	10.8	7.7	4.5	2.8	5.5	4.6
Suhum-KraboCoaltar	4,198	100.0	13.6	11.2	14.6	15.9	14.3	11.4	7.1	4.5	3.0	4.5	4.5
Akwapem South Municipal	2,719	100.0	15.1	11.3	13.5	15.6	13.7	10.6	8.1	4.9	2.8	4.4	4.5
Akwapem North	3,288	100.0	16.2	10.8	12.7	13.9	12.9	11.3	7.9	5.7	3.4	5.2	4.6
New Juaben Municipal	8,191	100.0	15.4	12.3	13.8	15.1	14.0	10.9	6.8	4.3	2.2	5.2	4.4
YiloKrobo	2,148	100.0	15.7	11.6	12.7	16.2	13.2	10.2	7.3	4.5	2.7	6.0	4.6
Lower Manya	5,090	100.0	12.5	11.7	12.8	14.3	13.7	10.6	8.4	5.5	3.9	6.4	4.8
Asuogyaman	1,859	100.0	13.3	10.7	12.7	15.8	13.3	11.8	7.6	4.8	3.6	6.4	4.8
Upper Manya	1,056	100.0	13.7	9.7	12.3	14.7	14.0	11.9	9.1	5.7	3.2	5.7	4.7
Fanteakwa	4,006	100.0	13.4	11.1	13.7	14.0	13.5	11.4	7.6	4.9	3.3	7.1	4.7
East Akim Municipal	12,049	100.0	14.9	11.7	14.0	14.8	13.5	10.9	8.0	4.8	2.9	4.6	4.5
Kwaebibirem	12,819	100.0	15.3	11.7	12.8	15.0	14.1	11.1	8.0	5.0	3.0	4.0	4.4
Akyem Manso	6,215	100.0	13.4	10.7	11.9	13.5	13.8	11.4	8.7	5.9	4.2	6.6	4.8
Birim North	3,099	100.0	14.1	9.7	13.7	14.7	12.6	12.0	7.6	5.8	3.4	6.3	4.7
Atiwa	5,949	100.0	14.2	12.0	12.7	14.7	13.3	11.6	8.1	4.8	3.4	5.2	4.6
Kwahu West Municipal	2,795	100.0	14.1	11.1	13.1	13.7	15.4	11.6	7.6	5.0	3.0	5.4	4.6
Kwahu South	2,251	100.0	15.9	13.7	12.8	13.3	12.4	10.6	7.6	5.0	3.0	5.8	4.5
Kwahu East	3,378	100.0	15.0	11.8	11.6	14.1	12.3	10.1	8.2	6.1	3.8	6.9	4.7
Kwahu North	5,912	100.0	12.7	10.8	11.2	14.6	14.6	11.9	8.3	6.5	3.3	6.1	4.8

Source: 2010 Population and Housing Census. Ghana Statistical Service

11.2.2 Rural Agricultural Households

Agricultural activities are predominantly rural-based in Ghana. The rural agricultural households in the Eastern Region constitute 68.8 percent of all agricultural households in the region (Table 11.3). Among the districts, Kwahu North has the highest proportion of rural agricultural households, (28,516 out the 257,652), representing 11.1 percent. The high proportion of rural agricultural households in Kwahu North (11.1%) is again attributable to its vast agricultural lands and fishing activities along the Volta Lake that have attracted migrants into the district.

The one-member households also constitute a large proportion of the rural agricultural households in the region. Kwahu East recorded the highest percentage (16.2%) followed by Birim South (16.1%). With the exception of six districts, the rest have 14 to 15 percent of their agricultural households made up of one-member households. Household sizes of 2 to 6 members are the most common among the rural agricultural households (Table 11.3). Very large households with seven or more members form more than 25 percent of the rural agricultural households in most of the districts.

Table 11.3: Distribution of rural agricultural households by district and household size

	Total	%	1	2	3	4	5	6	7	8	9	10+	Ave- rage
Total	257,652	100.0	13.7	11.2	12.7	14.2	13.8	11.4	8.1	5.5	3.5	5.9	4.7
Birim South	12,401	100.0	14.4	12.2	13.1	14.2	13.3	11.2	7.8	5.4	3.7	4.8	4.5
Birim Municipal	8,930	100.0	15.0	11.8	12.6	13.9	13.9	12.0	8.4	4.9	3.1	4.4	4.5
West Akim Municipal	22,187	100.0	13.4	11.6	12.9	14.3	13.8	11.3	8.2	5.2	3.6	5.5	4.7
Suhum-KraboCoaltar	23,319	100.0	14.6	11.4	13.3	14.5	14.0	11.4	7.7	4.9	3.2	5.1	4.6
Akwapem South Municipal	8,413	100.0	13.7	11.8	13.5	14.8	14.1	11.3	7.8	4.8	3.0	5.3	4.6
Akwapem North	12,415	100.0	13.5	10.6	13.0	13.9	14.8	11.0	7.8	5.5	3.5	6.4	4.7
New Juaben Municipal	1,580	100.0	14.2	10.8	11.9	14.7	14.6	12.0	8.0	5.3	2.8	5.9	4.7
YiloKrobo	9,672	100.0	11.7	10.2	12.4	14.2	13.8	11.8	8.8	5.8	4.1	7.2	5.0
Lower Manya	2,107	100.0	13.0	11.4	13.2	15.2	11.7	10.9	8.6	5.7	3.3	6.8	4.7
Asuogyaman	10,212	100.0	13.5	11.9	13.0	13.9	13.8	11.2	8.2	5.5	3.3	5.8	4.7
Upper Manya	11,630	100.0	12.0	11.1	11.5	14.1	13.9	11.3	8.3	6.4	3.7	7.6	4.9
Fanteakwa	14,013	100.0	11.5	9.9	11.8	14.6	14.2	13.0	9.0	5.7	3.6	6.7	4.9
East Akim Municipal	11,749	100.0	14.5	12.0	13.1	14.3	13.4	10.9	8.4	5.6	2.8	5.0	4.5
Kwaebibirem	18,105	100.0	14.6	11.3	12.7	14.4	14.7	11.8	8.0	5.1	3.1	4.3	4.5
Akyem Manso	12,411	100.0	13.2	11.7	11.7	13.5	13.8	11.5	8.2	6.1	3.7	6.7	4.8
Birim North	10,672	100.0	14.5	10.8	13.1	14.2	13.2	11.5	8.2	6.0	3.1	5.5	4.6
Atiwa	14,257	100.0	14.4	11.2	13.2	14.2	13.8	11.2	8.1	5.1	3.3	5.4	4.6
Kwahu West Municipal	7,400	100.0	14.8	12.1	13.0	14.5	13.1	11.7	7.5	5.2	3.1	4.9	4.5
Kwahu South	8,365	100.0	14.5	12.5	12.5	14.7	12.9	10.6	7.5	5.3	3.7	5.8	4.6
Kwahu East	9,298	100.0	16.2	13.2	13.3	13.7	12.5	10.1	7.6	4.9	3.1	5.6	4.4
Kwahu North	28,516	100.0	12.1	9.6	12.4	13.7	14.0	11.4	8.5	6.1	4.3	7.8	5.0

Source: 2010 Population and Housing Census. Ghana Statistical Service

11.3 Sex of Household Head and Locality of Agricultural Households by District

The characteristics of agricultural households and their activities are determined by the type of head (male or female) and the locality in which they reside. The information on these characteristics also inform policies that seek to improve production in the agricultural sector and the well being of the households and individuals engaged in agricultural production. This section is on the agricultural population in the region.

Of the 374,257 agricultural households recorded in the Eastern Region at the 2010 PHC, 69.3 percent one male and 30.7 percent are female-headed (Table 11.4). At the Regional level, the percentage of female-headed agricultural households was higher for the urban (34%) than for the rural (29.2%) areas.

Table 11.4: Households in agric by district, type of locality and sex of head

District	Total				Urban				Rural			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
Total	374,257	100.0	69.3	30.7	116,605	100.0	66.0	34.0	257,652	100.0	70.8	29.2
Birim South	22,518	100.0	64.5	35.5	10,117	100.0	61.1	38.9	12,401	100.0	67.3	32.7
Birim Municipal	20,331	100.0	66.6	33.4	11,401	100.0	65.6	34.4	8,930	100.0	67.9	32.1
West Akim Municipal	30,252	100.0	68.9	31.1	8,065	100.0	66.4	33.6	22,187	100.0	69.8	30.2
Suhum- KraboaCoaltar	27,517	100.0	69.0	31.0	4,198	100.0	66.8	33.2	23,319	100.0	69.3	30.7
Akwapem South Municipal	11,132	100.0	70.4	29.6	2,719	100.0	72.5	27.5	8,413	100.0	69.7	30.3
Akwapem North	15,703	100.0	65.5	34.5	3,288	100.0	61.9	38.1	12,415	100.0	66.4	33.6
New Juaben Municipal	9,771	100.0	72.9	27.1	8,191	100.0	72.7	27.3	1,580	100.0	73.5	26.5
YiloKrobo	11,820	100.0	74.0	26.0	2,148	100.0	68.9	31.1	9,672	100.0	75.1	24.9
Lower Manya	7,197	100.0	69.7	30.3	5,090	100.0	67.2	32.8	2,107	100.0	75.9	24.1
Asuogyaman	12,071	100.0	61.4	38.6	1,859	100.0	60.5	39.5	10,212	100.0	61.5	38.5
Upper Manya	12,686	100.0	78.1	21.9	1,056	100.0	76.6	23.4	11,630	100.0	78.3	21.7
Fanteakwa	18,019	100.0	73.7	26.3	4,006	100.0	64.1	35.9	14,013	100.0	76.4	23.6
East Akim Municipal	23,798	100.0	67.3	32.7	12,049	100.0	65.2	34.8	11,749	100.0	69.5	30.5
Kwaebibirem	30,924	100.0	71.9	28.1	12,819	100.0	70.0	30.0	18,105	100.0	73.2	26.8
Akyem Manso	18,626	100.0	66.8	33.2	6,215	100.0	62.2	37.8	12,411	100.0	69.0	31.0
Birim North	13,771	100.0	69.3	30.7	3,099	100.0	66.6	33.4	10,672	100.0	70.0	30.0
Atiwa	20,206	100.0	67.2	32.8	5,949	100.0	64.4	35.6	14,257	100.0	68.3	31.7
Kwahu West Municipal	10,195	100.0	65.1	34.9	2,795	100.0	64.7	35.3	7,400	100.0	65.3	34.7
Kwahu South	10,616	100.0	61.5	38.5	2,251	100.0	53.0	47.0	8,365	100.0	63.8	36.2
Kwahu East	12,676	100.0	61.9	38.1	3,378	100.0	52.3	47.7	9,298	100.0	65.3	34.7
Kwahu North	34,428	100.0	79.1	20.9	5,912	100.0	75.3	24.7	28,516	100.0	79.9	20.1

Source: 2010 Population and Housing Census. Ghana Statistical Service

The proportions of female-headed households in all the districts are also smaller than those for males in all the districts. Generally, the proportions of female-headed households are lower in the less urbanized districts such as Kwahu North (20.1%), Upper Manya (21.7%) and Fanteakwa (23.6%) compared to those of the more urbanized ones such as Akwapem South (72.5%), Kwahu West Municipal (34.9%), Birim South (35.5%), Kwahu South (38.5%) and Asuogyaman (38.6%). Almost two out of every five agricultural household is headed by a female in Kwahu South and Asuogyaman.

Rural-urban differentials in the sex of household head exist among the districts. The largest percentages of male heads among urban agricultural households were recorded in Akwapem South (72.5%), New Juaben (72.7%), Kwahu North (75.3%) and Upper Manya (76.6%). Akwapem North (38.1%), Birim South (38.9%), Kwahu South (47.0%) and Kwahu East (47.7%) reported the highest percentages of female heads at the district level. Almost half of all urban agricultural households are females.

Among the rural agricultural households, on the other hand, male-household heads are dominant in almost all the districts. Female heads formed less than a third in all the districts, with the exception of four out of the twenty-one districts in which female heads constitute more than a third- Akwapem North (33.6%), Kwahu Municipal (34.7%), Kwahu East (34.7%) and Kwahu South (36.2%). On the whole, female headship among the rural agricultural household heads is predominant in Kwahu districts, except Kwahu North. The matrilineal practices that accord social responsibilities to females among Akan ethnic groups (to which Kwahu belongs), probably accounts for the higher prevalence of female-headed households in both rural and urban areas in Kwahu. Kwahu North has large migrant communities made up of migrant Ewe and Mole-Dagbon ethnic groups that are of patrilineal background. This may account for their distinctive lower percentages of female-headed households in both rural and urban areas. Policies that seek to target female agricultural household heads will need to take such disparities in their distribution across districts into consideration.

11.4 Age Characteristics of Agricultural Household Heads

The 2010 PHC collected information on age of household heads. The age distribution of the agricultural population by district is shown in Table 11.5. Almost two-thirds (64.1%) of the agricultural household heads are in age group 35-59. Only approximately 10 percent of them are young adults aged 20- 29 years compared to a quarter (25.1%) who are aged 60+ years. The elderly constitute a large proportion of the agricultural household heads.

At the district level, about two thirds of agricultural household heads are in the 30- 59 years age bracket and the aged constitute more than 20 percent of the agricultural populations in all the districts. In several districts, including East Akim Municipal, Upper Manya, Akyem Manso, Atiwa and Birim North, less than 10 percent of the household heads are aged 20- 29. But the percentage is much higher than 10 percent in Kwahu North (13.8%) and slightly higher in Yilo Krobo (11.3%) and Upper Manya (10.5%). Therefore, the aged (60+ years) form a smaller proportion (than the Regional average of 25.1%) of agricultural household heads in these districts. For example, the lowest percentage (16.3%) of agricultural household heads aged 60+ years was recorded in Kwahu North.

Overall, the region has an aged agricultural household headship population, considering that at least close to 20 percent of them are 60+ years in all the districts. Ghanaian youth have not

been interested in agricultural activities although the National Youth Employment Programme (NYEP) has attempted to make agricultural production attractive to the youth over the past two decades.

Table 11.5: Households in agriculture by district, and age of household head

District/Sub-district	Age Group													
	Total	%	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70+
Total	374,257	100.0	0.8	3.0	6.9	9.3	11.2	11.9	11.6	11.7	8.4	7.6	4.8	12.7
Birim South	22,518	100.0	0.9	3.0	6.8	8.8	10.8	12.0	11.1	11.9	8.8	7.8	5.0	13.1
Birim Municipal	20,331	100.0	0.8	3.1	6.9	9.4	12.0	12.9	11.7	11.7	8.2	7.2	4.9	11.2
West Akim Municipal	30,252	100.0	0.9	3.5	7.3	9.2	11.4	11.7	11.8	11.7	8.7	7.8	4.6	11.5
Suhum-Krabo Coalta	27,517	100.0	0.9	3.3	7.3	9.3	11.5	11.2	11.3	11.2	8.3	8.0	5.0	12.5
Akwapem South Municipal	11,132	100.0	0.9	3.2	7.5	10.0	12.1	12.4	10.8	12.0	8.0	7.3	4.6	11.1
Akwapem North New Juaben Municipal	15,703	100.0	0.8	2.8	6.6	8.7	10.4	11.2	10.4	11.3	8.0	8.2	5.6	16.0
YiloKrobo	9,771	100.0	0.6	2.8	5.8	8.8	10.8	11.0	11.4	12.6	9.8	8.6	5.3	12.5
Lower Manya Asuogyaman	11,820	100.0	0.9	3.4	7.9	9.9	11.0	11.3	10.6	10.8	8.1	7.1	4.6	14.3
Upper Manya	7,197	100.0	1.5	3.2	6.2	9.2	10.6	11.5	11.2	12.3	8.7	7.7	5.1	12.9
Fanteakwa East Akim Municipal	12,071	100.0	0.8	3.3	6.3	9.5	10.5	11.8	11.0	12.3	8.4	8.3	4.7	13.1
Kwaebibirem	12,686	100.0	1.0	3.2	7.3	9.3	11.2	12.5	12.2	10.9	6.9	7.3	4.7	13.6
Akyem Manso	18,019	100.0	0.7	2.6	6.3	9.3	10.7	11.3	11.4	12.1	8.5	8.1	4.9	14.2
Birim North	23,798	100.0	0.6	2.3	5.6	7.4	10.1	10.5	11.0	12.5	10.0	8.9	6.0	15.2
Atiwa Kwahu West Municipal	30,924	100.0	0.5	2.4	6.0	9.5	11.9	13.2	13.2	12.3	9.1	7.0	4.4	10.6
Kwahu South	18,626	100.0	1.0	2.6	6.6	8.9	11.6	12.3	11.9	12.0	8.1	7.2	4.8	13.1
Kwahu East	13,771	100.0	0.6	2.5	7.1	10.0	10.5	12.3	12.0	12.0	8.6	7.6	4.4	12.5
Kwahu North	20,206	100.0	0.7	2.5	6.1	8.5	10.3	11.5	11.8	11.7	8.8	8.1	5.9	14.1
	10,195	100.0	1.2	3.2	6.5	8.0	10.0	10.6	12.1	12.0	9.1	8.3	4.8	14.3
	10,616	100.0	0.9	3.1	6.3	8.2	10.3	11.0	11.2	11.2	8.3	7.6	5.5	16.5
	12,676	100.0	1.0	2.8	6.3	7.5	10.0	10.7	10.5	11.0	8.9	8.2	5.9	17.2
	34,428	100.0	1.2	4.3	9.5	12.2	13.5	13.3	12.7	10.6	6.4	5.5	2.8	8.0

Source: 2010 Population and Housing Census. Ghana Statistical Service

11.5 Age Characteristics of Urban Agricultural Household Heads

As can be seen from Table 11.6, the age characteristics of the urban agricultural household heads show that on the average, the majority of them are in 30- 59 years age bracket. Less than 10 percent are aged 20-29 years and 26 percent are aged 60+ years. Among the Districts, vast differences exist. The aged constitute very large percentages of the urban agricultural household heads in some districts. The three highest are found in Kwahu East (39.4%), Kwahu South (39.0%) and Akwapem North (35.6%). The percentage of the elderly urban agricultural household heads is around 30 percent in several other districts.

Table 11.6: Age characteristics of urban agricultural households heads by district

District/Sub-district	Age													
	Total	%	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70+
Total	116,605	100.0	0.8	2.7	6.1	8.7	10.9	11.9	11.8	12.1	9.1	7.8	5.1	13.1
Birim South	10,117	100.0	0.7	2.7	6.5	8.6	10.4	11.7	11.2	12.2	9.2	8.0	5.1	13.8
Birim Municipal	11,401	100.0	0.7	2.7	6.4	9.3	11.8	13.1	12.4	11.7	8.4	7.4	4.7	11.4
West Akim Municipal	8,065	100.0	0.9	3.5	6.6	9.3	11.2	11.8	11.7	11.9	9.1	7.9	4.7	11.4
Suhum-KraboaCoaltar	4,198	100.0	0.9	3.1	7.1	9.3	12.0	12.2	12.0	11.4	9.1	7.8	4.3	10.7
Akwapem South Municipal	2,719	100.0	0.8	2.9	6.4	10.3	11.6	12.2	11.4	12.7	8.9	7.8	4.7	10.2
Akwapem North New Juaben Municipal	3,288	100.0	0.4	1.6	5.5	7.2	8.5	9.3	10.8	12.0	9.0	9.6	6.1	19.9
YiloKrobo	8,191	100.0	0.6	3.0	5.6	8.7	10.8	10.9	11.3	12.7	10.1	8.7	5.3	12.3
Lower Manya Asuogyaman	2,148	100.0	0.8	3.2	7.8	9.5	11.0	12.6	9.5	10.7	8.1	7.4	5.6	13.8
Upper Manya Fanteakwa	5,090	100.0	1.6	3.2	6.1	9.1	10.7	11.8	11.1	11.9	8.6	7.8	5.2	12.9
East Akim Municipal	1,859	100.0	0.8	2.2	4.4	6.4	10.5	12.0	12.5	14.8	9.7	7.7	5.8	13.3
Kwaebibirem	1,056	100.0	1.9	4.5	8.0	11.0	12.8	14.1	14.5	9.8	5.8	4.9	2.9	9.8
Akyem Manso	4,006	100.0	0.7	1.9	5.8	7.5	8.4	9.7	11.8	12.4	9.7	8.8	6.1	17.2
Birim North	12,049	100.0	0.6	1.9	5.2	7.1	10.1	10.1	11.0	12.2	10.7	8.8	6.2	16.1
Atiwa	12,819	100.0	0.5	2.1	5.8	9.1	12.4	14.0	13.4	12.7	9.2	7.0	3.9	9.9
Kwahu West Municipal	6,215	100.0	1.1	2.6	6.8	8.0	11.9	12.8	12.5	12.0	7.9	6.6	4.9	13.0
Kwahu South	3,099	100.0	0.5	1.9	6.0	10.4	10.0	13.2	13.2	12.6	8.8	7.5	4.4	11.4
Kwahu East	5,949	100.0	0.6	1.9	5.4	8.1	9.9	12.0	11.7	13.0	8.9	7.8	6.2	14.5
Kwahu North	2,795	100.0	1.6	3.6	6.3	8.3	9.0	10.3	12.3	11.9	10.4	8.4	5.2	12.7
	2,251	100.0	0.6	2.3	4.4	5.4	7.7	8.8	9.9	11.9	10.0	7.9	6.8	24.3
	3,378	100.0	1.0	2.6	4.9	5.6	8.0	8.7	8.7	11.0	10.1	9.8	7.0	22.6
	5,912	100.0	1.5	4.5	8.5	13.0	14.1	13.6	12.8	10.4	6.5	5.3	3.0	6.7

Source: 2010 Population and Housing Census. Ghana Statistical Service

Differences in the proportion of urban agricultural household heads who are young adults are also significant. While almost all districts recorded less than 10 percent of the urban agricultural household heads in the 20- 29 years age bracket, Kwahu North had the highest percentage (13%) in that category. Kwahu North, kwahu West municipal and Lower Manya Krobo recorded more than 1.0 percent of household head aged 15-19 years while 16 of the 21 districts in the Region recorded less than 1.0 percent of household heads in the 15-19 year – age group.

The Table also reveals that 76.5 percent of males are engaged in crop farming in the Kwahu North district. This proportion is higher than any district except New Juaben (73.7%)

Across the ages Kwahu North comparatively has the highest proportion engaged in agricultural activities with the highest proportion occurring among the ages 30-34 years through to 45-49 years (52.5%) Kwahu North has the lowest aged household heads in the region, registering 3.0 percent for age 65-69 years and 6.7 percent for age 70 years and older

while the highest proportions are in Kwahu East (7.0%) for age 65-69 years, and 22.6 percent for age 70 years and older.

11.6 Age Characteristics of Rural Agricultural Household Heads

There were 257,652 agricultural households in rural localities of the Eastern Region as recorded in the 2010 PHC. This represents 68.8 percent of all the agricultural households in the region.

On the average, young adults constitute a tenth (10.4%) of the rural agricultural household heads while the aged form a quarter (24.7%). The rest (64.9%) are in the 30- 59 years age category. There are differences among the districts. Kwahu North reported the lowest percentage of elderly rural agricultural household heads of 16.5 percent while close to 30 percent were recorded in Kwahu East (28.4%), Atiwa (27.9%) and Kwahu West (27.8%).

On the whole, the population of the rural agricultural household heads is not as aged as their urban counterparts. However the youth constitute about the same proportion of household heads in rural agricultural households as in urban areas in most districts.

11.7 Types of Agricultural Activity

The 2010 PHC collected information on the following types of agricultural activities in which any member of a household was engaged at the time of the census: crop farming, tree planting, fish farming or animal rearing. Overall, 354,296 households in the Region are engaged in these activities. The majority of the households, 354,296 representing 68.8 percent, are involved in crop farming. A little less than a third are rearing livestock (30.2%). Very negligible percentages engage in tree growing (0.6%) and fish farming (0.2%) in the Region.

The type of agricultural activity engaged in by the agricultural households at the District level and by sex is presented in Table 11.7. A larger proportion of male-headed households than their female counterparts engage in all the four different activities. On the average, female-headed households constitute at least 30 percent of all households engaged in crop farming, tree cropping and livestock rearing. Only a tenth (9.8%) of all households engaged in fish farming are female-headed households.

There are substantial disparities exist between the sexes among the districts. For example, almost 40 percent of households engaged in crop farming are female-headed households in Asuogyaman (38.3%), Kwahu South (38.1%) and Kwahu East (38.1%) compared to 20.9 percent and 21.4 percent respectively in Kwahu North and Upper Manya. Similar disparities are observed regarding tree planting and livestock rearing. More than 40 percent of households growing trees are female-headed households in Yilo Krobo (43.8%) and Lower Manya (41.9%) compared to 21.7 percent in Kwahu North and 22.9 percent in Birim North. The proportion of female-head households rearing ranges from 21 percent in Upper Manya to 39.5 percent in Asuogyaman.

Table 11.7: Type of agricultural activity by household headship

Districts	Crop farming				Tree growing				Livestock rearing				Fish farming			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
Total	354,296	100	70.0	30.0	2,894	100	66.6	33.4	155,384	100	71.0	29	1,198	100	90.2	9.8
Birim South	22,092	100	64.8	35.2	146	100	65.8	34.2	7,218	100	66.9	33.1	27	100	96.3	3.7
Birim Municipal	19,062	100	67.1	32.9	124	100	62.9	37.1	7,048	100	67.4	32.6	29	100	75.9	24.1
West Akim Municipal	29,121	100	69.8	30.2	185	100	64.9	35.1	11,247	100	70.4	29.6	23	100	87	13.0
Suhum-KraboCoaltar	26,089	100	70.2	29.8	157	100	72.6	27.4	14,256	100	68.7	31.3	11	100	90.9	9.1
Akwapem South Municipal	10,491	100	71.1	28.9	36	100	72.2	27.8	3,589	100	69.3	30.7	17	100	100	0
Akwapem North	14,686	100	66.6	33.4	260	100	57.7	42.3	5,434	100	66.9	33.1	13	100	76.9	23.1
New Juaben Municipal	8,559	100	73.9	26.1	119	100	69.7	30.3	2,632	100	72.5	27.5	28	100	89.3	10.7
YiloKrobo	11,103	100	75.4	24.6	260	100	56.2	43.8	6,148	100	75.0	25.0	20	100	95	5.0
Lower Manya	6,239	100	72.1	27.9	203	100	58.1	41.9	3,113	100	72.0	28.0	23	100	91.3	8.7
Asuogyaman	10,904	100	61.7	38.3	20	100	70.0	30.0	5,219	100	60.5	39.5	39	100	94.9	5.1
Upper Manya	12,218	100	78.6	21.4	53	100	75.5	24.5	7,694	100	79.0	21.0	14	100	100	0
Fanteakwa	17,285	100	74.5	25.5	167	100	68.3	31.7	9,921	100	76.3	23.7	55	100	83.6	16.4
East Akim Municipal	22,043	100	68.6	31.4	104	100	61.5	38.5	8,514	100	64.8	35.2	29	100	89.7	10.3
Kwaebibirem	29,912	100	72.4	27.6	127	100	71.7	28.3	9,332	100	72.7	27.3	25	100	84.0	16.0
Akyem Manso	18,288	100	67.2	32.8	170	100	61.2	38.8	9,305	100	69.5	30.5	19	100	89.5	10.5
Birim North	13,465	100	69.7	30.3	105	100	77.1	22.9	6,012	100	71.3	28.7	37	100	81.1	18.9
Atiwa	19,703	100	67.7	32.3	69	100	66.7	33.3	9,151	100	68.8	31.2	18	100	83.3	16.7
Kwahu West Municipal	9,789	100	65.3	34.7	66	100	63.6	36.4	2,476	100	64.9	35.1	11	100	90.9	9.1
Kwahu South	10,034	100	61.7	38.3	58	100	63.8	36.2	3,989	100	65.2	34.8	9	100	66.7	33.3
Kwahu East	11,810	100	61.9	38.1	78	100	76.9	23.1	6,071	100	64.9	35.1	10	100	60	40.0
Kwahu North	31,403	100	79.1	20.9	387	100	78.3	21.7	17,015	100	81.4	18.6	741	100	92.2	7.8

Source: 2010 Population and Housing Census. Ghana Statistical Service

Fish farming is dominated by male-headed households. All the households engaged in fish farming in Akwapem South Municipal and Upper Manya are male-headed. More than 90 percent of households engaged in this agricultural activity are male-headed in several districts- Birim South, Suhum-Kraboa-Coaltar, Lower Manya, Asuogyaman, Kwahu West Municipal and Kwahu North. In other districts, male-headed households constitute more than 80 percent of all the households engaged in fish farming- New Juaben, Fanteakwa, East Akim Municipal. However, relatively large proportions of households engaged in fish farming are in Akwapem North (23.1%), Birim Municipal (24.1%), Kwahu South (33.3%), and Kwahu East (40%).

Conclusion

Agricultural production in the Eastern Region is important in all the districts but a large percentage of the agricultural households are concentrated in a small number of the districts. Kwahu North district alone, for example, has a tenth of all the 374,257 agricultural households in the region. The average household size in the Region is 4.6. Households with 1 to 6 members are the commonest in all the districts, both rural and urban. The agricultural household head population is dominated by males and relatively aged, with more than a fifth of them aged 60+ years in most districts. Only 10 percent or lower of household heads are young adults aged 20- 29 years in all the districts. All the Kwahu districts, with the exception of Kwahu North, recorded higher percentage of female-headed agricultural household heads than all other districts in the region. The majority of the agricultural households are engaged in crop farming and almost a third is rearing livestock. Negligible percentages of households are planting trees or engaged in fish farming. Male-headed households dominate all the agricultural activities, particularly fish farming. In some districts no households are engaged in fish farming. But disparities exist among the districts relating to the sex differentials in household headship and type of agricultural activities that the households are engaged in.

CHAPTER TWELVE

HOUSING CONDITIONS

12.1 Introduction

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

This chapter presents the findings on housing and housing conditions that pertained in the Eastern region in 2010. It examines the housing stock, type of dwelling, room occupancy, holding and tenancy, lighting and cooking facilities, bathing and toilet facilities, waste disposal and source of water for domestic use among others.

12.2 Housing Stock

The total stock of houses in the Eastern Region recorded at the 2010 Ghana Population and Housing Census was 431,697 (see Table 12.1). The rural areas tend to have higher proportion of houses (64.1%) than the urban areas (35.9%). The proportion of the total regional population in urban areas from the census was 56.6 percent. This implies that a disproportionately higher percentage of the housing stock is in the rural areas. It must be noted, however, that the quality of housing in rural areas and the facilities and amenities therein are of lower quality than those of urban areas.

Further analysis of the data indicates that the stock of houses increased by 52.3 percent from the 2000 housing stock of 283,461. Since the percentage increase of the total regional population was 25 percent, the gap between demand and supply of housing in the region might have narrowed during the intercensal period. (Refer to chapters three and four for the information on the characteristics of the population mentioned here and those which will be mentioned in the remaining sections of this chapter.)

12.2.1 Housing Stock by District

The distribution of the housing stock by district as shown in Table 12.1 indicates that Kwahu North District has the highest proportion of housing stock (10.1%) in the region. The Kwahu North District also has highest proportion (8.3%) of the Regional population. The Kwaebibirem District ranks second in terms of housing stock (7.4%) followed by West Akim municipal (6.9%) and East Akim municipal (6.5%) respectively. The Yilo Krobo District which has the least share (3.3%) of the regional population also has the lowest proportion

(2.8%) of housing stock. The share of housing stock by district in the region closely follows that of the population distribution.

12.2.2 Housing Stock by Locality

There is a considerable variation in the proportion of housing stock in rural areas in the various districts, although the rural proportions are higher than those of urban areas in most districts, except for three municipalities (Birim, New Juaben and East Akim) and the Lower Manya District (Table 12.1). The highest proportion of housing stock in rural areas was recorded in Upper Manya (90.2%) and the least in the New Juaben Municipality (9.8%).

12.2.3 Households per House

As indicated in Table 2.1, New Juaben has the highest number (2.19) of households in a house compared with the lowest rate of 1.06 households per house in the Kwahu North district. The remaining districts have less than two households in a house. In the rest of the districts, the rates for the Municipalities (West Akim, Akwapem South, East Akim and Kwahu West) are higher and also approximately 2 households per house. Among the less urbanized districts, Yilo Krobo, Lower Manya and Kwaebibirem also have rates that are approximately 2 households per house.

12.2.4 Household Size

The population per house and household size also vary among the districts but not as much as the differentials in the other household stock characteristics. The difference in population per house is one or two, with the highest number being 8.12 in New Juaben and the lowest of 4.95 in Kwahu South (Table 12.1.).

The average household size is largest in Kwahu North (4.7) and lowest in New Juaben (3.5). The number of persons per house ranges from 4.95 in Kwahu South to a high of 8.1 in New Juaben, with an average of 6.1. This average is a reduction from the 2000 level of 7.4.

Table 12.1: Number of houses, households and household characteristics

	Total Population	Total Household Population	Number of houses	Number of households	Percentage distribution of houses	Rural share of housing stock	Households per house	Population per house	Average hhold size
All Districts	2,633,154	2,574,543	431,697	632,048	100.0	64.1	1.5	6.1	4.1
Birim South	119,767	117,985	21,031	28,800	4.9	56.7	1.4	5.7	4.1
Birim Municipal	144,869	141,800	21,044	36,354	4.9	38.6	1.7	6.9	3.9
West Akim Municipal	195,349	192,968	29,582	46,806	6.9	69.6	1.6	6.6	4.1
Suhum-Kraboia Coaltar	167,551	164,224	23,381	40,413	5.4	81.1	1.7	7.2	4.1
Akwapem South Municipal	123,501	116,334	15,582	30,519	3.6	66.4	2.0	7.9	3.8
Akwapem North	136,483	134,359	22,896	33,322	5.3	69.0	1.5	6.0	4.0
New Juaben Municipal	183,727	173,653	22,619	49,474	5.2	9.8	2.2	8.1	3.5
Yilo Krobo	87,847	86,567	12,161	20,613	2.8	75.6	1.7	7.2	4.2
Lower Manya	89,246	87,649	12,491	22,150	2.9	22.0	1.8	7.1	4.0
Asuogyaman	98,046	96,027	19,389	23,551	4.5	73.1	1.2	5.1	4.1
Upper Manya	72,092	71,227	13,111	15,379	3.0	90.1	1.2	5.5	4.6
Fanteakwa	108,614	106,155	21,803	24,026	5.1	78.6	1.1	5.0	4.2
East Akim Municipal	167,896	164,561	28,201	42,093	6.5	45.4	1.5	6.0	3.9
Kwaebibirem	192,562	189,238	32,058	47,954	7.4	58.0	1.5	6.0	4.0
Akyem Mansa	97,374	96,378	16,837	21,361	3.9	67.3	1.3	5.8	4.5
Birim North	78,907	77,572	15,462	18,511	3.6	76.0	1.2	5.1	4.2
Atiwa	110,622	109,352	19,362	26,342	4.5	69.8	1.4	5.7	4.1
Kwahu West Municipal	93,584	90,131	12,418	23,296	2.9	65.5	1.9	7.5	3.9
Kwahu South	69,757	68,182	14,087	16,725	3.3	75.5	1.2	5.0	4.1
Kwahu East	77,125	76,379	14,690	18,409	3.4	72.7	1.3	5.3	4.2
Kwahu North	218,235	213,802	43,492	45,950	10.1	83.3	1.1	5.0	4.7

Sources: 2010 Population and Housing Census, Ghana Statistical Service

12.3 Rooms in Occupied units

Table 12.2 shows the distribution of rooms in occupied housing units in the region. On the whole the single room constitutes the highest percentage (44.4%) of all the types of rooms occupied in housing units in the region. This shows a decline from the 2000 level of 48.8 percent. The higher percentage increase in household stock during the intercensal period was an increase in occupied houses with more than one room. But a substantial proportion of households with more than one person in the household sleep in single rooms. This is because when the proportion of one-person (19.9%) household is assumed to take the households with one sleeping room (44.4%), what is left is 24.5 percent and is occupied by households with two or more persons.

Table 12.2: Rooms occupied

	Total	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Eastern (Total)	632,045	44.4	27.7	12.4	6.7	3.4	2.2	1.2	0.7	1.0
Birim South	28,800	50.9	24.8	10.4	5.6	2.9	2.1	1.3	0.7	1.3
Birim Municipal	36,353	51.8	26.0	9.7	5.3	2.9	2.0	0.9	0.6	0.8
West Akim Municipal	46,805	49.3	28.3	10.7	5.4	2.6	1.6	0.9	0.5	0.7
Suhum-Kraboia Coaltar	40,413	45.7	29.4	11.7	6.0	3.1	1.8	1.1	0.5	0.7
Akwapem South Municipal	30,519	47.2	31.7	9.3	5.5	2.7	1.4	1.0	0.5	0.8
Akwapem North	33,322	44.4	26.8	12.7	6.9	3.4	2.5	1.3	0.8	1.3
New Juaben Municipal	49,474	41.0	33.2	11.2	6.2	3.6	2.4	1.3	0.6	0.7
Yilo Krobo	20,613	40.2	27.2	13.9	8.3	4.1	2.7	1.6	1.0	1.1
Lower Manya-Krobo	22,150	42.2	26.8	13.9	7.6	3.8	2.5	1.3	0.8	1.1
Asuogyaman	23,551	37.4	27.9	13.8	11.4	3.8	2.6	1.1	0.8	1.3
Upper Manya-Krobo	15,379	24.8	29.3	19.6	12.1	6.2	3.5	1.7	1.1	1.6
Fanteakwa	24,026	32.6	27.9	16.8	10.3	5.2	3.1	1.6	1.1	1.5
East Akim Municipal	42,092	45.6	26.9	11.3	6.6	3.8	2.4	1.4	0.8	1.2
Kwaebibirem	47,954	50.4	25.4	10.9	5.8	2.9	1.8	1.0	0.7	1.1
Akyemansa	21,361	46.5	23.7	12.8	7.2	4.2	2.4	1.2	1.0	1.1
Birim North	18,511	53.4	21.9	11.0	5.8	3.1	2.0	1.2	0.7	1.0
Atiwa	26,342	49.5	25.1	11.1	5.9	3.0	2.1	1.4	0.8	1.0
Kwahu West Municipal	23,296	49.6	28.0	10.0	5.2	2.8	1.8	1.2	0.6	0.9
Kwahu South	16,725	39.2	27.1	16.0	7.6	3.7	2.4	1.2	1.1	1.6
Kwahu East	18,409	41.4	26.5	14.1	6.9	3.4	2.6	1.7	1.3	2.1
Kwahu North	45,950	35.1	30.9	16.8	8.9	3.7	2.3	1.1	0.6	0.7

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.3.1 Number of Rooms in occupied units by District

The percentage distribution of rooms by size among the districts shows that the single and two rooms form the majority of rooms in occupied housing units. See Table 12.2. Between 60 and 75 percent of rooms in the occupied housing units in the districts are in this category.

Houses with three or four rooms constitute about 10 to 15 percent of room occupancy in the districts.

12.3.2 Number of Rooms in Occupied Households in Urban Areas

On the average, one and two rooms are the predominant types of rooms occupied by 76 percent urban households in the region (Table 12.3). An average of about 10 percent (10.3%) of urban households in all the districts occupies three rooms. About 6 percent (6.1%) of households occupy four rooms.

Table 12.3: Number of rooms household occupy by district by urban areas, percent

	Total	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
All districts	293,547	47.1	28.6	10.3	6.1	3.1	2	1.2	0.7	1
Birim South	14,288	53.5	24.1	9.6	5.3	2.7	2.1	1.2	0.7	0.9
Birim Municipal	25,316	50.2	26.9	9.7	5.5	3.2	2.1	1	0.6	0.7
West Akim Municipal	19,733	51.5	30.4	8.3	4.2	2.1	1.5	0.9	0.5	0.7
Suhum-Kraboia Coalta	11,885	43.6	37.1	9.5	4.1	2.4	1.5	0.9	0.4	0.5
Akwapem South Municipal	15,397	45	36.5	8.5	4.6	2.4	1.1	0.9	0.4	0.5
Akwapem North	12,146	42.8	27.1	12	7.3	3.6	2.7	1.6	1	1.8
New Juaben Municipal	46,505	40.6	33.7	11.1	6.2	3.5	2.3	1.2	0.6	0.7
Yilo Krobo	7,226	48.6	27.7	9.5	5.9	3	2	1.5	0.8	1.1
Lower Manya-Krobo	18,771	44.3	26.3	13.4	7.4	3.5	2.4	1.3	0.6	0.8
Asuogyaman	6,960	37.1	24.2	14.7	17	2.8	1.9	1	0.5	0.7
Upper Manya-Krobo	2,341	44.1	29.5	10.5	7.2	3.4	2.5	0.9	0.8	1.2
Fanteakwa	7,194	43.5	24.6	12.9	8	4.1	2.9	1.6	0.8	1.6
East Akim Municipal	25,865	44.9	27.9	10.6	6.7	3.8	2.5	1.5	0.9	1.2
Kwaebibirem	24,333	53.9	25.9	8.6	5.2	2.5	1.5	0.9	0.5	1
Akyemanso	7,683	50.1	22.2	12	6.2	4	2.2	1.1	0.9	1.2
Birim North	5,220	56.6	20.1	9	5.9	3.4	2	1.2	0.9	1
Atiwa	9,104	49.5	25.8	10.3	5.8	3.2	2	1.4	0.8	1.1
Kwahu West Municipal	12,503	54.1	29.1	7.3	4	2.1	1.3	1.1	0.4	0.6
Kwahu South	4,770	41.2	27.6	11.7	7.4	4	2.7	1.6	1.2	2.6
Kwahu East	6,215	45.7	25.2	11.3	6.4	3.1	2.6	1.7	1.5	2.4
Kwahu North	10,092	54.4	24.5	10.3	5.4	2.3	1.1	0.9	0.5	0.5

Source: 2010 Population and Housing Census, Ghana Statistical Service

Among the various districts, differences exist with regard to the number of rooms occupied by households. In the urban households, household's occupying single rooms constitutes over 50 percent and 40 to 49 percent one-room houses in 12 districts only Asuogyaman where it occupy one room (Table 12.3).

12.3.3 Number of Rooms in Occupied Households in Rural Areas

The number of rooms occupied in rural households is presented in Table 12.4. Just as in urban households, the rural households with one or two rooms constitute 42 percentages compared with households occupying two rooms (27.0%) the region. On the average, as can be seen from Table 12. 4, the percentage of households with three and more rooms is higher

for rural households than in urban areas just as the percentage with one room in rural areas (42%) is lower than that for urban areas (47%).

Differences exist among the districts regarding rooms available in households in rural areas too. The percentage of households with one room ranges from 21.3 percent in Upper Manya to 55.5 percent in Birim Municipality. Larger number of rooms for households is recorded in the less urbanized districts such as Fanteakwa, Akyem Manso and Kwahu North. The pattern suggests that higher proportion of households in less urbanized districts have larger number of rooms.

Table 12.4: Number of rooms in occupied household units in rural areas

	Total	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
All districts	338,498	42.0	27.0	14.1	7.6	3.8	2.4	1.2	0.8	1.1
Birim South	14,512	48.2	25.6	11.2	6.0	3.1	2.1	1.3	0.8	1.6
Birim Municipal	11,037	55.5	23.9	9.8	5.0	2.1	1.7	0.7	0.4	0.9
West Akim Municipal	27,072	47.7	26.9	12.4	6.2	2.9	1.7	0.9	0.6	0.7
Suhum-Kraboia Coaltar	28,528	46.5	26.1	12.6	6.8	3.4	2.0	1.2	0.6	0.8
Akwapem South Municipal	15,122	49.4	26.8	10.1	6.4	3.0	1.6	1.1	0.6	1.0
Akwapem North	21,176	45.3	26.6	13	6.7	3.3	2.4	1.1	0.7	0.9
New Juaben Municipal	2,969	46.6	24.1	12.2	6.0	4.2	2.9	2.1	0.6	1.2
Yilo Krobo	13,387	35.7	26.9	16.2	9.5	4.8	3.0	1.6	1.1	1.1
Lower Manya-Krobo	3,379	31	29.5	16.9	8.5	5.2	2.9	1.8	1.7	2.5
Asuogyaman	16,591	37.6	29.4	13.4	9.0	4.2	2.8	1.2	0.9	1.5
Upper Manya-Krobo	13,038	21.3	29.2	21.2	13	6.7	3.7	1.9	1.2	1.7
Fanteakwa	16,832	27.9	29.3	18.5	11.3	5.6	3.3	1.5	1.2	1.4
East Akim Municipal	16,227	46.7	25.3	12.5	6.6	3.9	2.3	1.1	0.6	1.1
Kwaebibirem	23,621	46.8	24.8	13.3	6.4	3.4	2.0	1.2	0.9	1.2
Akyemansa	13,678	44.4	24.5	13.3	7.7	4.2	2.6	1.2	1	1.1
Birim North	13,291	52.1	22.6	11.7	5.8	3.0	2.1	1.1	0.6	1.0
Atiwa	17,238	49.6	24.7	11.6	6	2.9	2.2	1.4	0.7	1.0
Kwahu West Municipal	10,793	44.2	26.6	13.1	6.6	3.6	2.4	1.2	0.9	1.3
Kwahu South	11,955	38.3	26.9	17.8	7.7	3.6	2.4	1.1	1.1	1.1
Kwahu East	12,194	39.2	27.1	15.5	7.2	3.5	2.6	1.7	1.2	2.0
Kwahu North	35,858	29.7	32.7	18.6	9.8	4.2	2.6	1.2	0.6	0.7

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.4 Number of Sleeping Rooms available to Households

The number of rooms available to households is an indication of sleeping arrangement of household members. There are health and consequent wellbeing implications of both for the household members. For example, some communicable diseases thrive in households where sleeping rooms are overcrowded. It is against this background that the number of sleeping rooms available to households in the Region is examined.

On the average, more than half (54.4%) of all households in the Region have one sleeping room. Refer to Table 12.5. Only a little more than a quarter (26.6%) of all households has

two sleeping rooms. A tenth also has three sleeping rooms. Those with four or more sleeping rooms constitute less than a tenth (8.7 %). Household sleeping room availability in the Region suggests that some level of overcrowding exist in the households as far as sleeping is concerned.

12.4.1 Number of Sleeping Rooms available to Households by District

More than half of the households in almost all the districts have one sleeping room, (Table 12.5). The lowest percentage of households with one sleeping room was recorded in Upper Manya (36.8%), followed by Fantekwa (42.1%) and Kwahu North (43.8%). These are among the less urbanized districts in the Region. The general pattern of sleeping rooms available in the households shows that higher proportions of households in the more urbanized districts have one or two sleeping rooms. For example, 84.3 percent and 84.1 percent respectively of the households in the more urbanized Birim and New Juaben Municipalities have one or two sleeping rooms compared to lower percentages in Fantekwa (72.9%) and Kwahu North (75%) which are some of the least urbanized districts in the region.

Table 12.5: Number of sleeping rooms in households by district

	Total	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Eastern (Total)	632,045	54.4	26.6	10.1	4.7	2.0	1.1	0.4	0.2	0.3
Birim South	28,800	59.9	22.7	8.7	4.3	2.1	1.0	0.5	0.4	0.4
Birim Municipal	36,353	60.3	24.0	8.1	4.0	1.7	1.0	0.4	0.2	0.3
West Akim Municipal	46,805	58.8	25.6	8.5	3.9	1.6	0.9	0.4	0.2	0.3
Suhum-Krabo Coalta	40,413	57.5	26.4	8.9	4.0	1.7	0.8	0.3	0.2	0.2
Akwapem South Municipal	30,519	59.5	26.7	7.2	3.6	1.4	0.8	0.3	0.2	0.3
Akwapem North	33,322	53.4	26.6	10.8	5.0	2.0	1.1	0.4	0.3	0.4
New Juaben Municipal	49,474	53.8	30.3	8.4	3.9	2.1	0.8	0.3	0.2	0.2
Yilo Krobo	20,613	50.1	26.9	12.2	5.5	2.6	1.3	0.6	0.4	0.4
Lower Manya-Krobo	22,150	50.9	27.4	11.1	5.7	2.3	1.4	0.5	0.3	0.5
Asuogyaman	23,551	50.2	27.4	13.0	5.3	2.0	1.2	0.4	0.3	0.3
Upper Manya-Krobo	15,379	36.8	32.7	16.2	8.2	3.3	1.4	0.6	0.4	0.4
Fantekwa	24,026	42.1	30.8	13.9	7.2	2.9	1.4	0.6	0.5	0.5
East Akim Municipal	42,092	55.8	25.3	9.7	4.8	2.2	1.1	0.4	0.3	0.4
Kwaebibirem	47,954	59.8	23.7	8.8	3.9	1.7	0.9	0.4	0.3	0.4
Akyemansa	21,361	54.6	24.2	10.7	5.6	2.4	1.2	0.4	0.5	0.3
Birim North	18,511	59.7	22.2	9.3	4.4	2.0	1.2	0.5	0.3	0.4
Atiwa	26,342	59.5	23.9	9.1	4.0	1.6	0.9	0.5	0.3	0.3
Kwahu West Municipal	23,296	58.9	25.9	8.2	3.4	1.7	1.0	0.4	0.2	0.3
Kwahu South	16,725	49.9	28.6	12.2	4.9	2.2	1.0	0.5	0.3	0.4
Kwahu East	18,409	51.5	27.0	11.6	5.0	2.2	1.1	0.8	0.4	0.5
Kwahu North	45,950	43.8	31.2	13.7	6.5	2.5	1.3	0.4	0.3	0.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.4.2 Number of Sleeping Rooms available to Households in Urban Areas

As can be observed from Table 12.6, the households in the urban areas have a higher proportion (57.6%) with one sleeping room than the regional average (54.4%). Moreover, less than a tenth of urban households, only four districts; Upper Manya Krobo (36.8%), Fanteakwa (42.1%) Kwahu South (49.9%) and Kwahu North (43.8%) have less than 500 percent of urban households with one sleeping room.

Table 12.6: Number of sleeping rooms households occupy in urban areas

	Total	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Eastern (Total)	293,547	57.6	25.9	8.5	7.2	1.8	0.9	0.4	0.2	0.3
Birim South	14,288	62.2	21.9	8.3	3.9	1.9	0.9	0.4	0.3	0.3
Birim Municipal	25,316	59.1	24.8	8.0	4.3	1.9	1.0	0.4	0.2	0.2
West Akim Municipal	19,733	62.5	25.3	6.2	3.0	1.4	0.8	0.4	0.1	0.3
Suhum-Kraboia Coaltar	11,885	59.7	29.0	6.1	2.8	1.3	0.6	0.3	0.1	0.2
Akwapem South Municipal	15,397	60.6	28.1	5.7	3.1	1.3	0.6	0.2	0.1	0.2
Akwapem North	12,146	52.4	26.2	10.9	5.4	2.2	1.3	0.6	0.5	0.5
New Juaben Municipal	46,505	53.7	30.6	8.3	3.9	2.0	0.9	0.2	0.2	0.2
Yilo Krobo	7,226	58.4	24.8	7.9	4.2	2.0	1.3	0.7	0.4	0.4
Lower Manya-Krobo	18,771	52.3	26.7	10.8	5.5	2.2	1.3	0.5	0.3	0.4
Asuogyaman	6,960	46.3	27.5	17.7	5.3	1.4	1.0	0.4	0.2	0.2
Upper Manya-Krobo	2,341	52.7	27.0	10.7	5.0	2.2	1.4	0.4	0.1	0.4
Fanteakwa	7,194	52.8	24.9	10.5	6.1	2.3	1.7	0.7	0.3	0.5
East Akim Municipal	25,865	56.2	25.3	9.0	4.9	2.2	1.0	0.5	0.3	0.4
Kwaebibirem	24,333	62.4	23.4	7.3	3.6	1.5	0.8	0.4	0.2	0.5
Akyemansa	7,683	57.9	21.9	10.2	5.1	2.4	1.1	0.4	0.6	0.4
Birim North	5,220	61.9	19.3	8.8	5.1	2.0	1.4	0.6	0.6	0.4
Atiwa	9,104	60.7	23.5	8.8	3.8	1.5	0.9	0.5	0.3	0.2
Kwahu West Municipal	12,503	62.3	25.8	6.4	2.7	1.2	0.8	0.4	0.2	0.2
Kwahu South	4,770	52.5	26.9	10.8	4.7	2.3	1.0	0.6	0.4	0.7
Kwahu East	6,215	53.3	24.7	11.0	4.9	2.3	1.3	1.1	0.7	0.8
Kwahu North	10,092	62.7	22.5	8.8	3.5	1.4	0.6	0.1	0.2	0.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

The pattern suggests that overcrowding in sleeping rooms is characteristics of the urban households.

12.4.3 Number of Sleeping Rooms available to Households in Rural Areas

A smaller percentage (51.6%) of the rural households in the region has single sleeping room, (Table 12.7). There a higher percentage (38.7%) of households also with two or three sleeping rooms which is slightly higher than 34.4 percent of urban households.

Rural areas depend on mud, wood and other less costly building materials and are more likely to afford housing facilities and more rooms than their urban areas, even though rural housing facilities are on the average of low quality.

Table 12.7: Number of sleeping Rooms households occupy in rural areas

N	Total	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Eastern (Total)	338,498	51.6	27.2	11.5	5.2	2.2	1.1	0.4	0.3	0.4
Birim South	14,512	57.6	23.6	9.1	4.6	2.2	1.2	0.6	0.6	0.6
Birim Municipal	11,037	62.9	22.2	8.2	3.4	1.3	1.0	0.3	0.3	0.5
West Akim Municipal	27,072	56.2	25.8	10.1	4.5	1.7	0.9	0.3	0.2	0.3
Suhum-Kraboia Coaltar	28,528	56.5	25.3	10.1	4.4	1.9	0.9	0.4	0.2	0.2
Akwapem South Municipal	15,122	58.3	25.2	8.8	4.1	1.5	0.9	0.4	0.3	0.5
Akwapem North	21,176	53.9	26.8	10.7	4.8	1.9	1.0	0.3	0.2	0.3
New Juaben Municipal	2,969	54.7	25.2	11.2	4.2	2.8	0.6	0.8	0.2	0.3
Yilo Krobo	13,387	45.7	28.0	14.5	6.3	3.0	1.4	0.6	0.4	0.3
Lower Manya-Krobo	3,379	42.7	31.4	12.8	6.7	2.5	1.7	0.9	0.5	0.8
Asuogyaman	16,591	51.8	27.3	11.0	5.3	2.3	1.3	0.3	0.3	0.3
Upper Manya-Krobo	13,038	33.9	33.7	17.1	8.8	3.5	1.4	0.6	0.5	0.5
Fanteakwa	16,832	37.5	33.3	15.4	7.7	3.2	1.3	0.6	0.6	0.5
East Akim Municipal	16,227	55.1	25.2	10.8	4.6	2.2	1.2	0.3	0.2	0.4
Kwaebibirem	23,621	57.2	24.0	10.4	4.2	2.0	1.1	0.4	0.4	0.3
Akyemansa	13,678	52.7	25.6	11.0	5.9	2.5	1.3	0.4	0.4	0.3
Birim North	13,291	58.8	23.3	9.6	4.1	1.9	1.2	0.5	0.2	0.4
Atiwa	17,238	58.9	24.2	9.2	4.1	1.7	0.9	0.5	0.3	0.3
Kwahu West Municipal	10,793	54.9	26.0	10.3	4.3	2.2	1.1	0.5	0.3	0.4
Kwahu South	11,955	48.9	29.3	12.7	5.0	2.2	1.0	0.4	0.3	0.2
Kwahu East	12,194	50.5	28.1	12.0	5.0	2.1	1.0	0.6	0.3	0.4
Kwahu North	35,858	38.5	33.7	15.1	7.3	2.8	1.5	0.5	0.3	0.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.5 Ownership of Occupied Dwelling Units

Ownership of dwelling units in the Region is largely by private individual household members (53.0%), relatives who are not household members (25.3%) and other private individual (17.1%), (Table 12.8). Other types of ownership constitute very small percentages. The contribution of private agencies which is increasing visible in the housing sector, especially in urban areas is relatively small. The prices of houses sold by the private agencies have been high. Consequently, affordability of housing facilities sold by private agencies remains a barrier to many Ghanains who desire to own a house. Provision of housing facilities by government which, on the other hand, has been a long tradition in the public sector of employment has also suffered decline in supply over the past few decades. Government has recently attempted to provide this basic need as a component of its efforts to improve social programmes in the country.

Table 12.8: Ownership of occupied dwelling units

	All districts	Owned by household member	Being purchased (e.g. mortgage)	Relative not a household member	Other private individual	Private employer	Other private agency	Public/Government ownership	Other
All	100.0	53.0	0.6	17.1	25.3	1.1	0.4	2.0	0.4
Birim South	100.0	59.2	0.2	20.6	17.3	0.7	0.1	1.5	0.4
Birim Municipal	100.0	52.1	1.2	16.0	27.2	1.3	0.2	1.3	0.7
West Akim Municipal	100.0	54.4	0.2	15.7	27.8	0.6	0.2	0.8	0.2
Suhum-Kraboia Coaltar Akwapem South Municipal	100.0	55.2	0.4	15.3	26.6	1.1	0.2	0.9	0.3
Akwapem North	100.0	50.7	1.1	15.9	27.7	1.6	0.3	2.4	0.3
New Juaben Municipal	100.0	46.2	0.8	29.0	20.2	0.7	0.6	2.0	0.6
Yilo Krobo	100.0	34.4	0.9	16.3	43.0	1.2	0.6	3.3	0.4
Lower ManyaKrobo	100.0	53.7	0.7	18.4	24.9	0.6	0.7	0.8	0.2
Asuogyaman	100.0	30.0	0.2	34.3	30.6	0.7	0.3	3.6	0.2
Upper Manya-Krobo	100.0	50.7	0.3	12.3	25.0	3.1	1.8	6.5	0.2
Fanteakwa	100.0	70.4	0.2	12.7	14.8	0.3	0.4	0.9	0.2
East Akim Municipal	100.0	66.3	1.0	11.5	18.5	0.7	0.4	1.0	0.6
Kwaebibirem	100.0	44.4	0.8	18.2	31.7	1.0	0.3	3.3	0.2
Akyemansa	100.0	57.9	1.0	13.0	21.5	2.3	0.5	3.4	0.4
Birim North	100.0	66.2	0.3	17.4	13.7	1.0	0.2	0.8	0.4
Atiwa	100.0	57.7	0.8	15.7	22.2	1.1	0.6	1.1	0.9
Kwahu West Municipal	100.0	54.8	0.5	19.5	23.2	0.7	0.3	0.8	0.3
Kwahu South	100.0	43.0	0.8	15.8	36.7	1.5	0.8	1.0	0.4
Kwahu East	100.0	47.2	0.6	24.7	24.7	0.8	0.3	1.4	0.3
Kwahu North	100.0	47.6	0.3	26.1	22.8	0.8	0.4	1.7	0.3
Kwahu North	100.0	75.6	0.4	7.1	14.0	0.4	0.5	1.7	0.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.5.1 Ownership of Occupied Dwelling Units by District

Among the Districts, even though the three types of ownership mentioned above are the predominant types, considerable differences are observed among them. The proportion of dwellings owned by a household member ranges from 30.0 percent in Lower Manya Krobo to 75.6 percent in Kwahu North (Table 12.8). The percentage of occupied dwellings owned by other private individuals (usually a landlord) is highest in New Juaben Municipality (43.0 percent) and lowest in the predominantly rural Kwahu North District (0.4%). Since New Juaben has a predominantly urban population, the residents are more likely to live in rented dwellings. Other Districts which have predominantly rural populations also have far lower percentages of dwellings owned by other private individuals - Akyemanso (13.7 %), Upper Manya (14.8%), Birim South (17.3%) and Fanteakwa (18.5%).

12.5.2 Ownership of Occupied Dwelling Units in Urban Areas

Just as in the total Regional population, the majority of urban dwellings in the Region are owned by private individual household members (39.5%), relatives who are not household members (18.8%) and other private individuals (35.5%) (Table 12.9). The far lesser percentage of occupied dwellings in urban areas owned by household members (39.5%) compared to the average (53%) for the Region is explained by the greater dependence of urban households on rented housing facility. Thus as high as 35.3 percent of urban dwellings are owned by other private individual compared with an average of 17 percent for the Region. This pattern is observed among the Districts also. Only three out of the twenty-one Districts have more than half of the urban populations owning their dwelling- Birim South (51.1%), Fanteakwa (52.3%) and Akyemanso (57.3%). Ownership of dwellings by other private individual on the other hand exceeds 20 percent in all the Districts and reaches 50 percent in two Districts- Upper Manya (50.0%) and Suhum-Krabo-Coaltar (49.6%). The percentage of dwellings owned by the public/government is substantial in the urban population of some Districts. The highest is found in Asuogyaman (19.1%) where public servants working for the Volta River Authority (VRA) and Akosombo Textile Factory for instance occupy such dwellings.

Table: 12.9: Ownership of occupied dwelling units, urban areas

	Total	Owned by household member	Being purchased (e.g. mortgage)	Relative not a household member	Other private individual	Private employer	Other private agency	Public/Government ownership	Other
All	100	39.5	0.8	18.8	35.3	1.2	0.6	3.2	0.5
Birim South	100	51.1	0.2	23.4	23.1	0.7	0.1	0.9	0.4
Birim Municipal	100	44.8	1.6	17.0	32.6	1.5	0.2	1.4	0.9
West Akim Municipal	100	39.7	0.2	17.4	40.2	0.8	0.3	1.3	0.2
Suhum-Krabo Coaltar	100	34.6	0.3	12.3	49.6	1	0.2	1.8	0.3
Akwapem South Municipal	100	39.3	1.7	15.5	37.1	1.5	0.3	4.2	0.2
Akwapem North	100	28.4	1.6	40.3	23.1	0.7	0.6	4.2	1.1
New Juaben Municipal	100	33.4	0.7	16.1	44.3	1.1	0.6	3.5	0.4
Yilo Krobo	100	42.7	0.2	18.7	35.2	0.4	1.3	1.2	0.2
Lower ManyaKrobo	100	25.1	0.2	36.0	33.6	0.5	0.3	4.1	0.2
Asuogyaman	100	33.4	0.3	8.0	25.3	8.4	5.4	19.1	0.1
Upper Manya-Krobo	100	40.3	0.3	6.1	50.0	0.5	0.6	1.8	0.5
Fanteakwa	100	52.3	1.0	13.7	28.9	0.8	0.3	1.6	1.4
East Akim Municipal	100	38.1	1.1	19.1	36.5	0.5	0.3	4.1	0.3
Kwaebibirem	100	49.5	1.0	13.8	27.9	1.4	0.4	5.7	0.3
Akyemansa	100	57.3	0.2	17.0	22.2	1.8	0.2	0.7	0.6
Birim North	100	46.3	0.5	15.0	33.4	0.9	0.6	1.9	1.4
Atiwa	100	44.4	0.8	19.4	31.9	0.8	0.7	1.3	0.6
Kwahu West Municipal	100	32.8	1.3	13.1	47.7	2.2	1.0	1.5	0.4
Kwahu South	100	32.6	0.5	32.3	31.2	1.1	0.2	1.5	0.6
Kwahu East	100	37.5	0.3	30.9	26.4	1.0	0.3	3.0	0.6
Kwahu North	100	48.3	0.4	9.7	35.6	0.6	1.8	2.9	0.6

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.5.3 Ownership of Occupied Dwelling Units in Rural Areas

The pattern of ownership of dwelling in terms of type of ownership in rural areas is also not different from that of the urban areas. The three main types of ownership observed in the total Regional population and in the urban population are what prevail here too but the percentages differ considerably between the two types of residential areas. The difference is highest for the percentage of dwellings owned by private individual household members: 64.7 percent in rural areas compared to 39.5 percent in urban areas. The differential regarding ownership by other private individuals is also relatively high (16.7 percent in rural areas compared to 35.5 percent in urban areas). The urban-rural differentials in the proportions owned by relatives who are not household members are not large (15.7 percent in rural areas and 18.8 percent in urban areas).

The rural-urban differentials in the distribution of ownership types indicate that occupation of dwellings owned by household members is more predominant among rural dwellers than in the urban areas while higher proportions of urban residents occupy dwellings owned by others who are not occupants of the dwellings. As can be observed from (Table 12.10), occupied dwellings in all the rural areas owned by a member constitute more than two-thirds of all types of ownership in most of the Districts.

Table: 12.10: Ownership of occupied dwelling units, rural areas

Rural	Total	Owned by household member	Being purchased (e.g. mortgage)	Relative not a household member	Other private individual	Private employer	Other private agency	Public/Government ownership	Other
All	100	64.7	0.5	15.7	16.6	1.0	0.3	1.0	0.3
Birim South	100	67.1	0.2	17.9	11.6	0.7	0.1	2.1	0.3
Birim Municipal	100	68.6	0.3	13.6	14.9	0.9	0.2	1.1	0.3
West Akim Municipal	100	65.2	0.2	14.5	18.8	0.6	0.2	0.5	0.1
Suhum-Kraboa Coaltar	100	63.8	0.5	16.6	17.0	1.1	0.2	0.5	0.3
Akwapem South Municipal	100	62.3	0.4	16.3	18.1	1.8	0.2	0.6	0.4
Akwapem North	100	56.4	0.3	22.5	18.6	0.7	0.5	0.7	0.3
New Juaben Municipal	100	49.5	3.2	19.8	23.4	2.0	0.3	1.3	0.4
Yilo Krobo	100	59.6	0.9	18.3	19.4	0.7	0.3	0.6	0.2
Lower Manya-Krobo	100	57.5	0.1	24.7	14.0	1.8	0.3	1.3	0.3
Asuogyaman	100	58.0	0.3	14.2	24.9	0.9	0.3	1.2	0.3
Upper Manya-Krobo	100	75.8	0.2	13.9	8.5	0.2	0.4	0.8	0.2
Fanteakwa	100	72.2	1.1	10.5	14.1	0.7	0.4	0.8	0.3
East Akim Municipal	100	54.5	0.4	16.8	24.1	1.7	0.3	2.0	0.2
Kwaebibirem	100	66.5	1.1	12.2	14.8	3.3	0.7	1.0	0.4
Akyemansa	100	71.2	0.4	17.6	9.0	0.5	0.3	0.8	0.3
Birim North	100	62.1	0.8	15.9	17.8	1.2	0.6	0.9	0.7
Atiwa	100	60.2	0.3	19.5	18.6	0.6	0.1	0.5	0.1
Kwahu West Municipal	100	54.7	0.3	19.0	24.0	0.7	0.5	0.5	0.4
Kwahu South	100	53.0	0.6	21.7	22.1	0.7	0.4	1.4	0.2
Kwahu East	100	52.8	0.3	23.7	21.0	0.6	0.4	1.0	0.2
Kwahu North	100	83.3	0.4	6.3	8.0	0.4	0.2	1.3	0.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.6 Tenure/ Holding Arrangement

Tenure arrangement of housing units is often used as a proxy indicator for the wellbeing of households occupying the units. For example, ownership is usually an indication of affordability of housing and, to some extent, other basic needs to the household members. Perching, on the other hand, may suggest inability to own and a possibility of poverty status of households that perch with others. Renting may also lead to lack of future housing security for households that depend on renting, without saving towards building or purchasing their own, especially in urban areas where landlords may charge exorbitant rent.

The housing tenancy in the Region as recorded at the 2010 census indicates that owner occupancy, renting and perching were the commonest types of tenancy in the Region. Overall, almost all the households occupy their own housing units (46.8 percent), live in rented premises (30.7%) or in rent-free (22.1%) units (Table 12.11.) A very small percentage of households are perching (0.3%), squatting (0.1%) or have other types of tenancy arrangement (0.1%).

Table 12.11: Tenacy/holding arrangements by district

	All	Owner occupied	Renting	Rent- free	Perching	Squatting	Other
All Districts	100.0	46.8	30.7	22.1	0.3	0.1	0.1
Birim South	100.0	54.0	20.1	25.4	0.3	0.0	0.1
Birim Municipal	100.0	41.6	34.6	23.4	0.2	0.1	0.1
West Akim Municipal	100.0	48.0	32.4	19.2	0.3	0.1	0.1
Suhum-Krabo Coalta	100.0	48.7	30.1	20.7	0.3	0.0	0.1
Akwapem South Municipal	100.0	39.6	38.3	21.5	0.3	0.1	0.2
Akwapem North	100.0	43.1	25.5	30.6	0.3	0.2	0.3
New Juaben Municipal	100.0	25.5	51.9	21.9	0.4	0.2	0.2
Yilo Krobo	100.0	53.5	30.1	15.8	0.5	0.1	0.1
Lower Manya-Krobo	100.0	25.3	35.6	38.9	0.1	0.0	0.0
Asuogyaman	100.0	47.7	34.8	17.1	0.3	0.1	0.1
Upper Manya-Krobo	100.0	70.1	15.0	14.4	0.4	0.0	0.1
Fanteakwa	100.0	60.1	23.5	15.7	0.3	0.1	0.3
East Akim Municipal	100.0	40.2	35.6	23.9	0.2	0.0	0.0
Kwaebibirem	100.0	46.0	31.4	22.2	0.2	0.1	0.1
Akyemansa	100.0	61.7	16.0	21.8	0.4	0.0	0.1
Birim North	100.0	50.5	27.6	21.5	0.2	0.0	0.1
Atiwa	100.0	49.7	25.7	24.2	0.3	0.0	0.1
Kwahu West Municipal	100.0	33.8	45.2	20.7	0.2	0.1	0.0
Kwahu South	100.0	44.5	23.9	31.1	0.3	0.1	0.1
Kwahu East	100.0	43.7	23.5	32.4	0.3	0.1	0.1
Kwahu North	100.0	70.9	17.4	11.2	0.3	0.1	0.0

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.6.1 Tenure/Holding Arrangement by District

The three types of tenure arrangements (owner occupancy, renting and perching) were the commonest types of tenancy in all the Districts too but with some variations with respect to

the proportions in the various categories. The proportion of households owning their occupied units ranges from as low as 25.3 percent in Lower Manya to 70.9 percent in Kwahu North. Refer to (Table 12.11). The proportion of owner occupied housing units is generally lower in all the Municipalities than in the Districts with low rate of urbanization. New Juaben has the second lowest percentage (25.5%) of owner occupied housing units. Less costly building materials in rural areas permit rural dwellers to build their own housing unit. On the contrary, costly building materials and land may prevent urban residents from building or purchasing their own housing. Urban residents who are migrants may also decide to invest in housing at their locality of origin while living in rented housing units at their destination. Consequently, as high as 51.9 percent of occupied units in New Juaben, the highest among the Districts, the most urbanized District in the Region is rented while 15.0 percent of this category, being the lowest, is recorded in Upper Manya, one of the least urbanized Districts. Differentials in the proportion of residents in rent-free housing facility are less than in other types of tenure arrangements.

12.6.2 Tenure/Holding Arrangement in Urban Areas

The pattern of tenancy arrangements observed exists in all the Districts but with differences in the percentages of occupied units having the different types of tenancy. It is only the urban population of Akyemanso that more than half (53.7%) are residing in owner occupied units, (Table 12.12). High proportions of the urban households have rented housing units; the highest being 62.4 percent in Kwahu West Municipality, followed by 57.8 percent in Upper Manya. Occupation of rent-free units also varies considerably among the urban population, with the proportion ranging from 7.4 percent in Upper Manya to 40.2 percent in Lower Manya and Kwahu South.

Table 12.12: Tenancy/holding arrangements in urban areas

	Total	Owner					
		occupied	Renting	Rentfree	Perching	Squatting	Other
All Districts	100.0	31.9	44.4	23.3	0.2	0.1	0.1
Birim South	100.0	47.5	25.9	26.3	0.1	0.0	0.1
Birim Municipal	100.0	33.5	42.3	23.7	0.2	0.1	0.1
West Akim Municipal	100.0	31.7	48.8	19.2	0.2	0.1	0.1
Suhum-Krabo Coalta	100.0	27.5	56.6	15.4	0.3	0.1	0.2
Akwapem South Municipal	100.0	25.7	52.3	21.4	0.3	0.1	0.2
Akwapem North	100.0	29.8	31.5	37.8	0.3	0.1	0.5
New Juaben Municipal	100.0	24.8	53.3	21.2	0.4	0.2	0.2
Yilo Krobo	100.0	37.0	46.3	16.2	0.4	0.0	0.1
Lower Manya-Krobo	100.0	21.0	38.6	40.2	0.1	0.0	0.0
Asuogyaman	100.0	30.7	52.9	15.7	0.5	0.2	0.0
Upper Manya-Krobo	100.0	34.5	57.8	7.4	0.1	0.0	0.1
Fanteakwa	100.0	43.5	37.6	18.1	0.2	0.1	0.5
East Akim Municipal	100.0	33.9	41.6	24.2	0.1	0.0	0.1
Kwaebibirem	100.0	35.4	41.8	22.5	0.1	0.1	0.1
Akyemansa	100.0	53.7	24.7	21.2	0.4	0.0	0.1
Birim North	100.0	37.4	44.5	17.7	0.2	0.0	0.2
Atiwa	100.0	39.8	36.2	23.5	0.3	0.0	0.1
Kwahu West Municipal	100.0	20.4	62.4	16.8	0.3	0.0	0.0
Kwahu South	100.0	29.5	30.0	40.2	0.2	0.1	0.0
Kwahu East	100.0	31.3	31.6	36.7	0.3	0.1	0.1
Kwahu North	100.0	38.5	48.1	13.2	0.1	0.1	0.0

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.6.3 Tenure/Holding Arrangement in Rural Areas

The rate of ownership of occupied units is far higher in the rural populations than urban areas of the Districts. In the predominantly rural Kwahu North District, for example, a little more than 1 out of every 4 (80.1 percent) of all the households are owner occupied, (Table 12.13). In several other Districts, over 60 percent are in this category. Again, ten other Districts have recorded between 50 and 60 percent of all units as owner occupied. The percentages of occupied units that are rent-free vary considerably in the rural areas also, with the lowest percentage of 10.6 percent in Kwahu North and 31.8 percent in Lower Manya.

Table 12.13: Tenancy/holding arrangements in rural areas

	Total	Owner occupied	Renting	Rent-free	Perching	Squatting	Other
All Districts	100.0	59.7	18.8	21.0	0.3	0.1	0.1
Birim South	100.0	60.4	14.4	24.6	0.5	0.0	0.1
Birim Municipal	100.0	60.2	16.8	22.7	0.3	0.0	0.1
West Akim Municipal	100.0	59.9	20.4	19.3	0.3	0.1	0.1
Suhum-Kraboia Coaltar	100.0	57.6	19.1	22.9	0.2	0.0	0.1
Akwapem South Municipal	100.0	53.7	24.1	21.6	0.3	0.2	0.1
Akwapem North	100.0	50.8	22	26.6	0.3	0.3	0.1
New Juaben Municipal	100.0	36.1	30.6	33.0	0.2	0.2	0.0
Yilo Krobo	100.0	62.4	21.3	15.6	0.5	0.1	0.1
Lower Manya-Krobo	100.0	49.1	19	31.8	0.1	0.0	0.0
Asuogyaman	100.0	54.9	27.2	17.6	0.2	0.0	0.1
Upper Manya-Krobo	100.0	76.4	7.3	15.7	0.4	0.0	0.1
Fanteakwa	100.0	67.3	17.5	14.7	0.3	0.1	0.2
East Akim Municipal	100.0	50.2	25.8	23.5	0.4	0.1	0.0
Kwaebibirem	100.0	57.1	20.7	21.8	0.3	0.1	0.1
Akyemansa	100.0	66.2	11.1	22.1	0.5	0.0	0.1
Birim North	100.0	55.7	20.9	23.0	0.3	0.0	0.1
Atiwa	100.0	54.9	20.2	24.6	0.2	0.1	0.0
Kwahu West Municipal	100.0	49.3	25.2	25.1	0.2	0.1	0.0
Kwahu South	100.0	50.5	21.5	27.4	0.4	0.1	0.1
Kwahu East	100.0	50.0	19.4	30.3	0.3	0.0	0.0
Kwahu North	100.0	80.1	8.7	10.6	0.4	0.2	0.0

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.7 Types of Dwelling

The various types of dwelling units in the region are presented on (Table 12.14). The commonest type of dwelling units occupied by households in the region is compound houses. On the average, the compound house accounts for more than half (52.4%) of all dwelling units in the Region, followed by separate houses which form a third (33.0%) of all occupied dwellings. Semi-detached houses form the third commonest type of occupied dwellings, constituting 6.6 percent. Dwellings in tents, kiosks, containers and shops constitute small proportions of occupied dwellings, approximately 2.0 percent in the entire Region.

Table 12.14: Types of dwelling by district

	Total	Separate house	Semi-detached house	Flat/Apartment	Compound house (rooms)	Huts/building (same compound)	Huts/build-ing (diff. compound)	Tent	Improvise d home (kiosk/container etc.)	Quarters attached to office/ shop	Un-completed building	Other	%
All district	687,470	33.0	6.6	2.7	52.4	2.8	0.5	0.1	0.6	0.3	0.7	0.2	100.0
Birim South	31,114	35.6	6.6	2.3	51.4	1.9	0.3	0.2	0.6	0.1	0.8	0.2	100.0
Birim Mun	38,709	25.5	5.8	3.7	60.0	1.8	0.4	0.1	1.3	0.3	0.8	0.3	100.0
West Akim Mun	49,007	28.7	5.9	1.4	59.5	2.7	0.4	0.2	0.4	0.2	0.4	0.1	100.0
Suhum-Kraboa Coaltar	42,019	29.0	5.9	1.3	59.3	2.6	0.6	0.1	0.4	0.3	0.4	0.1	100.0
Akwapem South Mun	32,358	22.5	5.9	4.8	61.0	1.6	0.5	0.1	1.1	0.4	1.9	0.2	100.0
Akwap. North	34,887	32.4	7.3	4.2	50.3	2.4	1.1	0.2	0.6	0.3	1.0	0.2	100.0
New Juaben Mun	52,220	17.1	5.6	6.7	67.3	0.5	0.1	0.1	0.9	0.4	1.1	0.1	100.0
Yilo Krobo	21,805	30.0	4.4	1.8	61.2	1.6	0.1	0.1	0.3	0.2	0.3	0.1	100.0
Lower Manya-Krobo	23,028	26.7	5.2	2.2	62.2	1.5	0.3	0.1	1.0	0.3	0.4	0.1	100.0
Asuogyaman	25,677	41.2	12.2	2.2	37.9	3.0	1.3	0.1	0.9	0.4	0.7	0.2	100.0
Upper Manya-Krobo	17,263	42.2	5.7	0.5	47.9	1.8	0.8	0.2	0.1	0.2	0.2	0.3	100.0
Fanteakwa	28,336	49.4	3.8	1.8	39.3	3.6	0.5	0.1	0.4	0.1	0.8	0.1	100.0
East Akim Mun	47,201	29.7	6.0	3.4	57.8	1.4	0.2	0.1	0.4	0.2	0.7	0.1	100.0
Kwaebibrim	50,913	30.9	10.9	3.1	50.2	2.1	0.3	0.2	1.0	0.3	0.8	0.3	100.0
Akyemansa	22,817	37.4	8.0	1.6	49.2	1.8	0.6	0.1	0.4	0.1	0.4	0.4	100.0
Birim North	22,682	39.9	9.4	1.7	45.5	2.1	0.2	0.2	0.4	0.2	0.4	0.1	100.0
Atiwa	27,819	39.9	5.3	1.2	48.8	1.8	0.5	0.3	1.1	0.2	0.6	0.3	100.0
Kwahu West Mun	24,215	25.2	6.5	4.0	61.1	0.6	0.3	0.1	0.8	0.6	0.6	0.1	100.0
Kwahu South	18,669	39.8	5.0	3.6	44.4	4.9	0.4	0.1	0.3	0.2	1.2	0.1	100.0
Kwahu East	20,083	34.7	4.6	2.3	49.3	7.0	0.7	0.1	0.3	0.2	0.6	0.1	100.0
Kwahu North	56,666	50.8	7.2	0.5	29.6	9.6	1.5	0.2	0.2	0.2	0.2	0.1	100.0

12.7.1 Types of Dwelling by District

Compound houses constitute the majority of dwelling types in most of the districts. The percentage of dwellings that are compound houses ranges from 29.6 percent in Kwahu North to 67.3 percent in New Juaben (Table 12.14). Just as in the entire region, separate houses and semi-detached houses respectively are second and third commonest types of dwelling in all the districts. More than half (50.8%) of dwellings in Kwahu North are separate houses and this is the largest percentage followed closely by 49.4 percent in Fantekwa. New Juaben recorded the lowest percentage of 17.1 percent (Table 12.14). Districts with predominately rural populations have separate houses while the more urbanized districts such as New Juaben have compound houses.

Fewer households live in flats in the region with New Juaben having the highest number of households living in flats or apartments (6.7%). The high flats and apartments occupancy rates in the New Juaben municipality could mainly be due to houses built by government and quasi government institutions. Huts or buildings on the same compound are fourth in importance. Overall, 2.8 percent of households occupy these huts or buildings on the same compound dwelling. There are variations in the distribution of huts or buildings on the same compound amongst the districts. It is most common in Kwahu North (9.6%) and least in importance in Kwahu West (0.6%) and New Juaben (0.5%). Households living in kiosks and containers constitute a small proportion of all dwelling units in the region with much smaller proportions in rural areas.

12.7.2 Types of Dwelling by Locality

Across the localities, differences are observed between the distribution of dwellings types occupied by urban and rural households. For the entire region, higher proportions of separate houses (71.2%), semi-detached houses (54.5%) are in rural areas. On the other hand, urban areas have higher proportion of flat/apartment (67.8%) and compound houses (55.6%). A very large percentage (88.6%) of huts is located in rural areas (Table 12.15).

Table 12.15: Type of dwelling by locality

	Total			Urban		Rural	
	Total	Percent Urban	Percent rural	Number	Percent	Number	Percent
Total	686,478	45.0	55.0	308,776	100.0	377,702	100.0
Separate	226,715	28.8	71.2	65,269	21.1	161,446	42.7
Semi-detached house	45,635	45.5	54.5	20,764	6.7	24,871	6.6
Flat/Apartment	18,631	67.8	32.2	12,634	4.1	5,997	1.6
Compound house (rooms)	359,644	55.6	44.4	200,079	64.8	159,565	42.2
Huts/Buildings (same compound)	19,041	11.4	88.6	2,175	0.7	16,866	4.5
Huts/Buildings (different compound)	3,693	14.4	85.6	530	0.2	3,163	0.8
Tent	1,024	43.3	56.7	443	0.1	581	0.2
Improvised home (kiosk/container, etc.)	4,441	70.0	39.1	2,709	0.9	1,732	0.5
Living quarters attached to office/shop	1,833	58.4	41.6	1,070	0.3	763	0.2
Uncompleted building	4,683	55.6	44.4	2,603	0.8	2,080	0.6
Other	1,138	44.0	56.0	500	0.2	638	0.2

For the urban and rural populations also most people live in separate houses, flats/apartments and semi-detached houses. The urban dwellers live mostly in compound houses and separate houses while as does the rural dwellers. But a higher proportion of urban dwellers (64.8%) compared to the rural dwellers (42.2%) live in compound houses. On the other hand, a higher proportion of rural dwellers (42.7%) reside in separate houses with only about 21 percent of households in urban areas residing in separate houses.

12.8 Main Construction Materials of Outer Walls in Occupied Dwellings

One important indicator of the living standard of households is the quality of the construction material of the house. Houses made from sub-standard materials are more prone to natural disasters.

The types of construction materials used for the dwellings in the region are presented on Table 12.16. Two main types of materials are used for the construction of outer walls of dwellings in the region. Cement blocks/concrete and mud brick/earth (Table 12.16) form more than half (54.0%) of the outer walls of buildings in the region. Approximately 39 (38.9%) percent of dwellings in the region are constructed with mud brick or earth. Wood and landcrete constitute a small percentage, 1.8 percent and 2.9 percent respectively.

12.8.1 Main Construction Materials of Outer Walls in Occupied Dwellings by District

The main material for outer wall in the region cement and concrete while in the majority the districts, the walls of two districts of the dwellings are also constructed with cement blocks/concrete. The percentage of dwellings with such walls exceeds 50 percent in most of the districts but it is far less than 50 percent in several districts, (Table 12.16). New Juaben, the most urbanized district with the Regional capital has the highest percentage of cement/concrete walls (90.3%). The lowest are recorded in Yilo Krobo (16.3%) and Kwahu North (17.1%). These two districts are the most deprived areas of the region. The residents may not be able to afford cement blocks for building their houses. As a result, as high as 50.2 percent and 78.4 percent of the walls of the dwellings in Yilo Krobo and Kwahu North respectively are constructed with mud brick/earth. The district with the highest percentage (80.4%) of walls constructed with mud brick/earth compared is Upper Manya which is also a deprived area in the Eastern Region. These high percentages contrast sharply with the lowest of 6.1 percent in New Juaben.

12.8.2 Main Construction Materials of Outer Walls in Occupied Dwellings by Locality

The patterns described above explain the observed differentials in the proportions of walls constructed with cement/concrete and mud brick/earth between urban and rural areas. On the average, more than three quarters (76.8%) of all the walls in urban areas compared to just a little more than a third (35.4%) of those in rural areas are constructed with cement/concrete (Table 12.16). The proportion of dwellings in rural areas (57.0%) made with mud brick/earth is more than three times that in urban areas (16.7%). Such differences exist between the urban and rural areas in all the Districts, (Table 12.16).

Table 12.16: Main construction material for outer wall

	Total	Percent	Birim South	Birim Municipal	West Akim Municipal	Suhum- Kraboa Coaltar	Akwapem South Municipal	Akwapem North	New Juaben Municipal	Yilo Krobo
All districts	31,114.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud brick/Earth	13,332.0	38.9	42.8	31.5	42.6	48.7	20.2	28.7	6.1	50.2
Wood	726.0	1.8	2.3	3.4	1.4	1.5	1.8	1.2	1.1	0.8
Metal sheet/Slate/Asbestos	205.0	0.6	0.7	0.6	0.5	0.6	1.2	1.2	0.6	0.5
Stone	21.0	0.2	0.1	0.2	0.1	0.2	0.3	0.8	0.2	0.1
Burnt bricks	450.0	0.9	1.4	1.8	0.5	0.8	0.8	0.7	0.4	0.5
Cement blocks/Concrete	15,645.0	54.0	50.3	58.6	52.5	44.4	73.3	63.6	90.3	45.5
Landcrete	515.0	2.9	1.7	3.3	2.0	3.3	0.9	1.0	0.6	2.0
Bamboo	31.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
Palm leaf/Thatch (grass)/Raffia	18.0	0.2	0.1	0.3	0.0	0.2	0.3	0.4	0.1	0.0
Other	171.0	0.4	0.5	0.3	0.3	0.2	1.1	2.3	0.5	0.4
Urban										
Total	15,040.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud brick/Earth	4,561.0	16.7	30.3	17.5	17.4	18.1	5.2	7.5	3.9	20.5
Wood	230.0	1.6	1.5	3.7	1.0	1.9	1.8	1.0	1.1	0.7
Metal sheet/Slate/Asbestos	85.0	0.8	0.6	0.6	0.8	0.8	1.4	1.7	0.6	0.7
Stone	11.0	0.2	0.1	0.2	0.1	0.4	0.3	1.8	0.2	0.0

Table 12.16: Main construction material for outer wall (cont'd)

	Total	Percent	Birim South	Birim Municipal	West Akim Municipal	Suhum- Kraboa Coaltar	Akwapem South Municipal	Akwapem North	New Juaben Municipal	Yilo Krobo
All districts										
Burnt bricks	265.0	0.9	1.8	1.1	0.3	0.6	0.8	0.4	0.4	0.9
Cement blocks/Concrete	9,697.0	76.8	64.5	72.6	78.8	77.2	89.0	85.6	92.5	75.4
Landcrete	139.0	2.5	0.9	3.6	0.9	0.8	0.2	0.1	0.6	1.5
Bamboo	13.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Palm leaf/Thatch (grass)/Raffia	2.0	0.1	0.0	0.2	0.0	0.0	0.1	0.1	0.1	-
Other	37.0	0.4	0.2	0.4	0.5	0.1	1.0	1.5	0.5	0.2
Rural										
Total	16,074.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud brick/Earth	8,771.0	57.0	54.6	62.0	60.2	61.1	34.6	40.6	38.9	65.3
Wood	496.0	1.9	3.1	2.6	1.7	1.4	1.7	1.3	1.4	0.9
Metal sheet/Slate/Asbestos	120.0	0.5	0.7	0.5	0.3	0.5	0.9	0.9	1.1	0.4
Stone	10.0	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.3	0.1
Burnt bricks	185.0	1.0	1.2	3.2	0.6	0.8	0.8	0.8	0.4	0.2
Cement blocks/Concrete	5,948.0	35.4	37.0	27.9	34.0	31.1	58.3	51.3	56.2	30.2
Landcrete	376.0	3.3	2.3	2.7	2.7	4.3	1.5	1.4	1.3	2.2
Bamboo	18.0	0.2	0.1	0.1	0.1	0.1	0.3	0.2	-	0.1
Palm leaf/Thatch (grass)/Raffia	16.0	0.2	0.1	0.7	0.0	0.3	0.4	0.6	0.1	0.0
Other	134.0	0.5	0.8	0.1	0.2	0.2	1.1	2.7	0.2	0.5

Table 12.16: Main construction material for outer wall (cont'd)

	Lower Manyakrobo	Asuogyaman	Upper Manyakrobo	Fanteakwa	East Akim Muni	Kwae- bibirem.	Akye- mansa	Birim North	Atiwa	Kwahu West Mun	Kwahu South	Kwahu East	Kwahu North
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud brick/Earth	25.9	32.9	80.4	51.6	24.9	33.5	54.7	44.7	37.3	23.1	32.4	42.7	78.4
Wood	1.2	1.0	0.9	2.4	1.1	2.6	2.6	2.5	3.0	1.6	1.4	1.5	1.3
Metal sheet/Slate/Asbestos	0.9	0.7	0.3	0.4	0.6	0.8	0.6	0.4	0.4	0.8	0.4	0.7	0.2
Stone	0.2	0.2	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1
Burnt bricks	0.3	1.5	0.1	0.4	3.8	1.1	1.2	1.2	0.8	0.4	0.3	0.3	0.3
Cement blocks/Concrete	69.7	59.2	16.3	41.8	65.7	53.3	38.9	44.3	52.5	68.8	61.4	51.5	17.1
Landcrete	1.5	4.2	1.2	3.1	3.5	7.8	1.3	6.0	5.1	3.9	3.6	2.8	1.7
Bamboo	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1
Palm leaf/Thatch (grass)/Raffia	0.1	0.0	0.1	0.1	0.0	0.2	0.0	0.2	0.1	0.4	0.1	0.1	0.5
Other	0.2	0.2	0.5	0.1	0.2	0.3	0.2	0.3	0.4	0.7	0.1	0.2	0.3
Urban													
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud brick/Earth	20.9	14.1	32.7	16.4	15.3	18.9	39.9	18.3	24.4	4.8	12.9	14.7	51.6
Wood	1.2	1.1	0.4	1.0	0.9	2.5	1.6	1.7	2.0	1.8	0.6	0.6	1.4
Metal sheet/Slate/Asbestos	0.7	0.8	0.9	0.6	0.7	0.9	0.5	0.3	0.7	1.1	0.2	0.7	0.4
Stone	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.1
Burnt bricks	0.4	0.9	0.2	0.8	2.2	1.1	2.2	1.1	0.8	0.3	0.4	0.3	0.5

Table 12.16: Main construction material for outer wall: (cont'd)

	Lower Many- Krobo	Asuogya.	Upper Many- Krobo	Fanteakwa	East Akim Muni	Kwaebi	Akyema.	Birim North	Atiwa	Kwahu West Mun	Kwahu South	Kwahu East	Kwahu North
Cement blocks/Concrete	75.2	78.3	61.4	76.2	77.6	68.3	55.3	67.4	65.4	88.6	83.7	82.7	41.0
Landcrete	1.2	4.4	2.0	4.6	2.9	7.6	0.2	10.4	6.1	1.9	1.7	0.4	4.3
Bamboo Palm leaf/Thatch (grass)/Raffia	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.2	0.2	0.2	0.1	0.1	0.1
Other	0.0	-	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.6	0.0	0.0	0.1
Other	0.2	0.2	2.0	0.1	0.3	0.2	0.1	0.3	0.3	0.5	0.1	0.4	0.5
Rural													
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud brick/Earth	52.6	40.7	88.3	64.3	39.1	47.9	62.8	54.5	44.1	43.2	39.8	56.6	86.0
Wood	1.5	1.0	1.0	2.9	1.5	2.6	3.1	2.9	3.5	1.4	1.7	2.0	1.2
Metal sheet/Slate/Asbestos	1.8	0.6	0.2	0.3	0.5	0.7	0.6	0.4	0.3	0.5	0.5	0.8	0.2
Stone	0.3	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1
Burnt bricks	0.2	1.7	0.0	0.2	6.1	1.1	0.6	1.3	0.7	0.6	0.2	0.3	0.2
Cement blocks/Concrete	40.2	51.4	8.8	29.4	48.1	38.5	30.0	35.7	45.8	46.9	53.0	36.1	10.3
Landcrete	2.8	4.2	1.1	2.6	4.5	8.0	2.0	4.4	4.7	6.2	4.3	3.9	1.0
Bamboo Palm leaf/Thatch (grass)/Raffia	0.2	0.1	0.1	0.0	0.1	0.5	0.4	0.1	0.2	0.1	0.1	0.1	0.2
Other	0.2	0.0	0.1	0.1	0.0	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.6
Other	0.2	0.2	0.2	0.1	0.2	0.4	0.2	0.3	0.4	0.9	0.1	0.1	0.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.9 Main Construction Material for Floor

Table 12.17 is on materials used for the floor in the region. Cement is the dominant material used for floors of occupied dwellings. Close to 1 out of every four (77.7%) households use cement for its floor. The second most common material used for floors is earth mud which accounts for 18.8 percent of all floors. The other types of materials used for floors include ceramic, porcelam and granite.

12.9.1 Main Construction Material for Floor by District

Across the districts, cement and mud/earth are the commonest types of material used for floors. The highest percentage of households using cement for the floor is recorded in New Juaben municipality (86.9%), followed by Lower manya Krobo (86.5%) while Upper Manya Krobo registers the least perentage (61.9%), (Table 12.15). Use of earth is more common in the districts that have predominantly rural population as it is cheaper and affordable to low income households. For example, in Kwahu North and Fanteakwa, some of the most deprived areas in the Region, 50.3 percent and 27.0 percent of households except Birim south use mud/earth for the floor while New Juaben, the district with the regional capital and with a high urbanization rate, has the lowest percentage (5.8 percent) of households with mud or earth as the floor material for dwelling units.

12.9.2 Main Construction Material for Floor by Locality

As can be seen from Table 12.16, on the average, higher proportions of the urban households than rural households use cement for their floor. More than 80 percent of most of the urban households use cement for the floor compared to between 30 and 40 percent in the rural areas. Mud or earth is the predominant floor material used in rural areas. A considerable percentage, up to 40 percent of rural households in the various districts use mud/earth for the floor compared with less than 10 percent in urban areas.

Table 12.17: Materials for floor

	Total	Per- cent	Birim South	Birim Municipal	West Akim Municipal	Suhum- Kraboa Coaltar	Akwapem South Municipal	Akwapem North	New Juaben Municipal	Yilo Krobo	Lower Manya- Krobo	Asuo- gyaman	Upper Manya- Krobo
All districts	632,045	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earth/Mud	118931	18.8	22.7	10.9	16.8	18.2	11.8	17.2	5.8	19.0	10.1	14.6	36.8
Cement/Concrete	491586	77.8	73.9	84.2	81.1	79.6	85.1	78.4	86.9	78.7	86.8	82.2	61.9
Stone	6076	1.0	1.3	1.6	0.9	0.6	0.5	1.1	0.5	0.7	0.3	0.4	0.4
Burnt brick	710	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0
Wood	1345	0.2	0.2	0.3	0.1	0.2	0.3	0.2	0.4	0.1	0.8	0.1	0.0
Vinyl tiles	2914	0.5	0.4	0.7	0.1	0.2	0.7	1.0	1.2	0.2	0.5	0.7	0.1
Ceramic/Porcelain/Granite/Marble tiles	5404	0.9	0.6	1.1	0.6	0.8	0.9	1.0	2.1	0.6	0.9	1.1	0.4
Terrazzo/Terrazzo tiles	3833	0.6	0.3	1.1	0.1	0.1	0.4	1.0	2.9	0.4	0.4	0.7	0.1
Other	1246	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2
Urban													
Total	293,547	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earth/Mud	24521	8.4	18.9	6.3	12.2	6.7	7.1	9.3	5.3	5.4	6.1	6.3	10.6
Cement/Concrete	255805	87.1	77.5	88.0	84.7	89.7	89.0	84.4	87.3	92.5	90.5	89.5	86.8
Stone	2917	1.0	1.5	1.5	1.4	0.8	0.6	1.3	0.4	0.5	0.3	0.4	1.1
Burnt brick	229	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Wood	967	0.3	0.1	0.4	0.2	0.4	0.5	0.2	0.4	0.2	0.9	0.1	0.1
Vinyl tiles	2211	0.8	0.5	1.0	0.2	0.5	0.9	1.6	1.3	0.2	0.5	1.0	0.3
Ceramic/Porcelain/Granite/Marble tiles	3320	1.1	0.7	1.2	0.6	1.0	1.1	1.4	2.1	0.5	0.9	1.7	0.7
Terrazzo/Terrazzo tiles	2988	1.0	0.3	1.5	0.3	0.3	0.6	1.3	3.0	0.6	0.4	0.8	0.1
Other	589	0.2	0.2	0.1	0.2	0.2	0.2	0.4	0.2	0.2	0.3	0.2	0.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

Table 12.17: Materials for floor (cont'd)

	Total	Per- cent	Birim South	Birim Municipal	West Akim Municipal	Suhum- Kraboa Coaltar	Akwapem South Municipal	Akwapem North	New Juaben Municipal	Yilo Krobo	Lower Manya- Krobo	Asuo- gyaman	Upper Manya- Krobo
Rural													
Total	338,498	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earth/Mud	94,410	27.9	26.4	21.4	20.1	22.9	16.7	21.7	13.2	26.4	32.0	18.1	41.5
Cement/Concrete	235,781	69.7	70.4	75.6	78.4	75.4	81.2	74.9	80.4	71.2	66.0	79.1	57.5
Stone	3,159	0.9	1.2	1.7	0.5	0.5	0.5	0.9	0.9	0.9	0.2	0.4	0.3
Burnt brick	481	0.1	0.5	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.0	0.1	0.0
Wood	378	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.0	0.0
Vinyl tiles	703	0.2	0.4	0.1	0.1	0.1	0.4	0.6	1.2	0.2	0.5	0.5	0.0
Ceramic/Porcelain/ Granite/Marble tiles	2,084	0.6	0.5	0.7	0.6	0.6	0.6	0.8	2.1	0.7	0.5	0.9	0.4
Terrazzo/Terrazzo tiles	845	0.2	0.3	0.2	0.0	0.1	0.2	0.8	1.0	0.2	0.4	0.7	0.1
Other	657	0.2	0.3	0.1	0.2	0.2	0.1	0.1	0.7	0.3	0.1	0.2	0.2

Table 12.17: Materials for floor (cont'd)

	Fanteakwa	East Akim Municipal	Kwaebibirem	Akyemansa	Birim North	Atiwa	Kwahu West Municipal	Kwahu South	Kwahu East	Kwahu North
All districts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earth/Mud	27.0	13.0	11.0	16.0	20.0	19.0	18.9	26.1	25.6	50.0
Cement/Concrete	70.6	83.8	85.2	81.4	77.9	76.4	77.9	70.1	71.7	48.1
Stone	0.8	0.8	1.5	1.1	0.7	2.8	1.1	1.3	0.5	0.9
Burnt brick	0.2	0.1	0.1	0.3	0.0	0.1	0.1	0.1	0.1	0.2
Wood	0.2	0.1	0.3	0.1	0.1	0.4	0.3	0.1	0.1	0.1
Vinyl tiles	0.2	0.8	0.4	0.1	0.2	0.2	0.3	0.5	0.4	0.0
Ceramic/Porcelain/Granite/Marble tiles	0.4	0.9	0.8	0.6	0.6	0.6	0.7	0.9	0.9	0.5
Terrazzo/Terrazzo tiles	0.2	0.4	0.4	0.1	0.2	0.3	0.5	0.8	0.5	0.1
Other	0.1	0.1	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.2
Urban										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earth/Mud	8.8	6.3	5.3	10.4	16.2	11.1	11.0	14.8	10.0	12.1
Cement/Concrete	88.4	89.7	89.8	87.5	80.4	85.5	85.2	80.2	85.5	86.4
Stone	0.8	0.8	2.3	1.2	1.1	0.9	1.0	1.5	0.8	0.4
Burnt brick	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.1
Wood	0.5	0.1	0.4	0.1	0.1	0.6	0.4	0.1	0.3	0.1
Vinyl tiles	0.3	1.2	0.6	0.1	0.5	0.2	0.4	0.9	0.9	0.1
Ceramic/Porcelain/Granite/Marble tiles	0.4	1.2	0.8	0.5	0.7	1.1	1.0	1.0	1.4	0.4
Terrazzo/Terrazzo tiles	0.4	0.6	0.7	0.1	0.6	0.4	0.7	1.1	0.7	0.1
Other	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.3
Rural										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earth/Mud	34.8	23.7	16.8	19.2	21.5	23.2	28.1	30.6	33.5	60.6
Cement/Concrete	63.0	74.4	80.6	78.0	76.9	71.5	69.4	66.1	64.7	37.4
Stone	0.8	0.9	0.7	1.1	0.5	3.8	1.2	1.2	0.3	1.0
Burnt brick	0.3	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.1	0.2
Wood	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.1
Vinyl tiles	0.2	0.1	0.2	0.0	0.1	0.2	0.2	0.3	0.2	0.0
Ceramic/Porcelain/Granite/Marble tiles	0.5	0.4	0.9	0.7	0.6	0.4	0.4	0.8	0.7	0.5
Terrazzo/Terrazzo tiles	0.2	0.2	0.2	0.1	0.0	0.2	0.3	0.7	0.4	0.1
Other	0.1	0.1	0.4	0.2	0.2	0.3	0.1	0.1	0.1	0.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.10 Main Roofing Materials

Type of material used for roofing is one of the key indicators of quality of housing and as such an indicator of welfare of occupants of dwellings. The data suggest that metal sheet (88.0%) is the most commonly used material for roofing in the Eastern Region, followed by thatch or palm leaf (7.6%) and slate or asbestors (1.2%) (Table 12.18).

12.10.1 Main Roofing Materials by District

There are differences in the proportions of the main roofing material used in the Districts. The proportion of dwellings roofed with metal sheets exceeds 90 percent in most of the Districts. It is more than 80 percent in the rest of the Districts, except in Kwahu North where it account for only 43 percent of roofing materials (Table 12.18). Since Kwahu North has many migrant agrarian communities, the occupants of most dwellings may not want to invest in housing as they may eventually return to their origin. More than half (53 percent) of the dwellings are roofed with the less costly materials- thatch, palm leaf or raffia. Higher levels of poverty in the District may also account for the use of inferior roofing materials.

12.10.2 Main Roofing Materials by Locality

Urban-rural differentials exist regarding roofing materials used. Metal sheet is still the most widely used roofing material in both places of residence though a higher percentage of dwellings in urban localities (94.1%) than those in rural areas (83%) have metal roofs (Table 12.18). Thatch, palm leaf or raffia is used for a far larger percentage of dwellings in rural areas (12.7%) than in the urban areas (1.4%). It is the second most commonly used material in the rural areas, with Asuogyaman (18.0%) having the highest percentage.

Table 12.18: Main materials used for the roof

	Total	Percent	Birim South	Birim Muni- cipal	West Akim Muni- cipal	Suhum- Kraboa Coaltar	Akwapem South Muni- cipal	Akwapem North	New Juaben Municipal	Yilo Krobo
All districts	686,478	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud/Mud										
bricks/Earth	3,693	0.5	0.5	0.3	0.5	0.6	0.3	0.4	0.1	0.5
Wood	3,527	0.5	0.5	0.6	0.5	0.6	0.7	0.5	0.6	0.5
Metal sheet	604,209	88.0	91.1	92.1	93.9	95.6	91.3	91.2	93.9	94.9
Slate/Asbestos	8,831	1.3	1.4	0.7	0.5	1.3	4.2	3.0	1.9	0.7
Cement/Concrete	5,561	0.8	0.6	0.8	0.7	0.5	1.2	1.6	1.7	1.0
Roofing tile	1,012	0.1	0.1	0.2	0.1	0.0	0.5	0.2	0.2	0.1
Bamboo	4,630	0.7	1.6	1.4	0.8	0.4	0.3	0.7	0.1	0.1
Thatch/Palm leaf or										
Raffia	52,372	7.6	3.9	3.5	2.6	0.7	1.3	1.7	1.0	1.6
Other	2,643	0.4	0.3	0.3	0.4	0.4	0.4	0.6	0.4	0.5
Urban										
Total	308,776	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud/Mud										
bricks/Earth	506	0.2	0.2	0.1	0.3	0.1	0.1	0.2	0.1	0.2
Wood	1,691	0.5	0.5	0.6	0.4	0.6	0.9	0.5	0.7	0.5
Metal sheet	290,652	94.1	95.9	95.9	96.4	96.3	90.5	89.8	93.7	95.0
Slate/Asbestos	5,732	1.9	1.2	0.9	0.8	1.6	5.7	5.6	2.0	1.3
Cement/Concrete	3,439	1.1	0.7	0.8	1.0	0.7	1.5	2.5	1.8	1.7
Roofing tile	547	0.2	0.2	0.2	0.1	0.0	0.4	0.4	0.2	0.1
Bamboo	701	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1
Thatch/Palm leaf or										
Raffia	4,373	1.4	0.6	0.9	0.4	0.3	0.4	0.4	1.1	0.6
Other	1,135	0.4	0.4	0.3	0.4	0.2	0.4	0.5	0.4	0.5

Table 12.18: Main materials used for the roof (Contd)

	Asuo- gyaman	Upper Manya -Krobo	Fante.	East Akim Mun	Kwae bibire	Akyema.	Birim North	Atiwa	Kwahu West Mun	Kwahu South	Kwahu East	Kwahu North
All districts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud/Mud bricks/Earth	0.6	1.1	0.7	0.2	0.4	0.4	0.5	0.9	0.3	0.6	0.8	1.5
Wood	0.4	0.5	0.5	0.5	0.6	0.6	0.3	0.7	0.5	0.4	0.5	0.4
Metal sheet	81.5	87.9	91.6	96.8	90.8	92.8	92.3	92.1	95.7	86.6	84.5	43.5
Slate/Asbestos	2.1	0.2	0.4	0.5	1.7	0.9	0.4	0.4	0.4	2.0	1.2	0.2
Cement/Concrete	0.7	0.4	0.7	0.6	0.6	0.5	0.4	0.5	0.9	1.1	1.1	0.3
Roofing tile	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2
Bamboo Thatch/Palm leaf or Raffia	0.1	0.0	0.2	0.4	1.4	1.8	1.4	1.4	0.3	0.2	0.1	0.5
Other	14.2	9.6	5.5	0.5	4.0	2.4	4.1	3.3	1.4	8.7	11.3	53.0
Other	0.3	0.3	0.4	0.2	0.4	0.3	0.5	0.5	0.4	0.4	0.2	0.4
Urban												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud/Mud bricks/Earth	0.2	0.3	0.2	0.1	0.1	0.3	0.1	0.2	0.1	0.2	0.1	0.7
Wood	0.4	0.3	0.5	0.5	0.6	0.4	0.3	1.1	0.5	0.3	0.7	0.3
Metal sheet	92.5	97.6	96.9	96.9	93.3	95.6	96.7	95.0	96.4	91.2	94.0	85.8
Slate/Asbestos	0.5	0.5	0.4	0.8	2.6	0.4	0.3	0.4	0.4	5.2	2.5	0.2
Cement/Concrete	0.8	0.4	0.8	0.7	0.7	1.0	0.7	0.6	1.2	1.8	1.7	0.6
Roofing tile	0.1	-	0.1	0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.0
Bamboo Thatch/Palm leaf or Raffia	0.1	0.1	0.1	0.1	0.7	0.8	0.3	0.7	0.1	0.1	0.0	0.4
Other	5.1	0.5	0.4	0.3	1.6	1.1	1.2	1.3	0.8	0.7	0.5	11.4

Table 12.18: Main materials used for the roof (Contd)

	Total	Percent	Birim South	Birim Municipal	West Akim Municipal	Suhum- Kraboa Coaltar	Akwapem South Municipal	Akwapem North	New Juaben Municipal	Yilo Krobo
All districts	377,702	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud/Mud bricks/Earth	3,187	0.8	0.7	0.8	0.6	0.8	0.5	0.6	0.5	0.7
Wood	1,836	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Metal sheet	313,557	83.0	86.7	84.0	92.2	95.3	92.0	92.0	96.8	94.8
Slate/Asbestos	3,099	0.8	1.5	0.3	0.2	1.2	2.8	1.5	0.0	0.4
Cement/Concrete	2,122	0.6	0.5	0.8	0.5	0.4	0.8	1.1	1.0	0.7
Roofing tile	465	0.1	0.1	0.1	0.1	0.0	0.5	0.2	0.1	0.1
Bamboo Thatch/Palm leaf or Raffia	3,929	1.0	2.8	3.9	1.3	0.5	0.4	1.1	0.3	0.1
Other	47,999	12.7	6.9	9.2	4.2	0.8	2.1	2.5	0.4	2.1
Other	1,508	0.4	0.3	0.4	0.4	0.4	0.4	0.6	0.3	0.5

Table 12.18: Main materials used for the roof (Contd)

	Asuo- gyaman	Upper Manya- Krobo	Fante.	East Akim Mun	Kwaebi.	Akyema.	Birim North	Atiwa	Kwahu West Mun	Kwahu South	Kwahu East	Kwahu North
Other	0.4	0.3	0.7	0.2	0.3	0.2	0.4	0.5	0.4	0.3	0.3	0.5
Rural												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud/Mud bricks/Earth	0.7	1.2	0.9	0.4	0.6	0.5	0.6	1.3	0.4	0.7	1.2	1.8
Wood	0.4	0.5	0.5	0.3	0.5	0.7	0.4	0.6	0.4	0.4	0.5	0.4
Metal sheet	77.0	86.3	89.6	96.7	88.3	91.3	90.6	90.6	95.0	84.9	79.8	31.5
Slate/Asbestos	2.7	0.2	0.4	0.1	0.8	1.2	0.4	0.4	0.5	0.8	0.6	0.2
Cement/Concrete	0.6	0.4	0.6	0.4	0.5	0.3	0.4	0.4	0.6	0.8	0.8	0.3
Roofing tile	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2
Bamboo Thatch/Palm leaf or Raffia	0.1	0.0	0.2	0.8	2.1	2.4	1.8	1.7	0.5	0.2	0.1	0.6
Other	18.0	11.1	7.4	0.8	6.3	3.1	5.2	4.3	2.0	11.7	16.6	64.7
Other	0.3	0.3	0.3	0.3	0.6	0.4	0.6	0.5	0.4	0.4	0.2	0.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.11 Toilet Facilities

The distribution of households by type of toilet facility according to place of residence and Districts is presented in this section. Overall, almost a third (32.2%) of the households in the Eastern Region use pit latrines. Another 31.0 percent use public toilets. Only 15.8 per cent use KVIP and 8.7 percent use water closets which are the improved toilet facilities.

12.11.1 Toilet Facilities by Locality

The least urbanized Districts depend largely on the unimproved types of toilet facility. For example, very high percentages of households in Upper Manya Krobo (71.4%), Fanteakwa (51.1%) use the pit latrine compared to 13.1 percent in New Juaben. In contrast while, New Juaben has the highest proportion of households (30.3%) using water closets in Upper Manya less than 1.0 percent, (0.8%) least proportion of households use this toilet facility (Table 12.19).

12.11.2 Types of Toilet Facilities by Locality

There are marked differences between the urban–rural places of residence regarding the proportions of households using the different types of toilet facility. Seventy three percent of urban households use improved toilet facilities (KVIP and W.C) compared to 15 percent in the rural areas. In rural areas, a large percentage of households use pit latrines (42.9%) while less than half that percentage of urban households (19.7%) use pit latrines (Table 12.19). A slightly higher percentage of the rural households (Nearly 3.0 percent of households have no toilet facilities with the highest proportion in the rural areas (16.4%). The proportion of households using the pit latrine is far higher among rural areas than in urban areas, with the highest proportion occurring among rural households in Upper Manya (80.1%) and Fanteakwa (55.9%).

Table 12.19: Toilet facility used by household district and locality

	Total	Birim South	Birim Municipal	West Akim Municipal	Suhum-Krabo Coalta	Akwapem South Municipal	Akwapem North	New Juaben Municipal	Yilo Krobo	Lower Manya-Krobo	Asuogyaman	Upper Manya-Krobo
All districts												
Total	632,045	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No facilities (bush/beach/field)	71,384	10.3	6.7	9.6	8.4	7.7	4.8	2.9	4.4	3.1	14.3	6.3
W.C.	55,161	4.4	12.7	4.0	3.6	11.7	12.8	30.3	6.4	10.7	16.1	0.8
Pit latrine	203,246	38.0	22.0	32.0	47.8	21.7	33.2	13.1	39.7	17.3	19.5	71.4
KVIP	100,193	16.1	20.4	13.7	14.0	15.1	17.6	16.9	13.6	12.6	13.0	6.5
Bucket/Pan	3,926	0.6	0.3	0.7	0.2	0.6	2.0	0.5	0.7	0.9	0.2	0.1
Public toilet (WCKVIP PitPan etc.)	195,950	30.0	37.5	39.7	25.6	42.9	29.2	35.9	35.0	55.1	36.6	14.8
Other	2,185	0.7	0.4	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.1
Urban												
Toilet facility used by household												
Total	293,547	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No facilities (bush/beach/field)	15,695	9.5	5.8	4.3	2.7	3.7	2.2	2.7	1.5	2.8	2.2	0.8
W.C.	45,084	5.1	17.4	8.1	9.5	17.2	22.1	31.5	10.4	11.6	39.9	2.0
Pit latrine	57,839	32.5	19.3	17.4	21.7	10.1	14.3	11.5	10.2	11.7	8.8	23.4
KVIP	61,658	20.8	24.7	23.6	28.5	17.9	21.7	17.3	19.6	13.3	9.3	16.6
Bucket/Pan	2,899	0.6	0.3	1.2	0.6	0.9	4.1	0.5	1.2	1.1	0.3	0.3
Public toilet (WCKVIP PitPan etc.)	109,210	30.4	32.1	45.1	36.6	50.1	35.2	36.2	56.6	59.3	39.4	56.8
Other	1,162	1.1	0.4	0.3	0.4	0.2	0.4	0.3	0.5	0.2	0.1	0.2
Rural												
Total	338,498	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No facilities (bush/beach/field)	55,689	11.0	8.8	13.6	10.8	11.9	6.3	5.8	6.0	4.9	19.4	7.2
W.C.	10,077	3.7	1.9	1.0	1.1	6.2	7.5	11.8	4.2	5.9	6.2	0.6
Pit latrine	145,407	43.3	28.2	42.7	58.7	33.6	44.0	38.9	55.6	48.4	24.0	80.1
KVIP	38,535	11.5	10.6	6.4	8.0	12.2	15.3	11.2	10.4	8.5	14.6	4.6
Bucket/Pan	1,027	0.7	0.3	0.4	0.1	0.2	0.8	0.4	0.3	0.0	0.2	0.1
Public toilet (WCKVIP PitPan etc.)	86,740	29.5	50.0	35.8	21.1	35.6	25.8	31.5	23.3	32.1	35.4	7.3
Other	1,023	0.2	0.3	0.2	0.3	0.3	0.2	0.5	0.2	0.2	0.3	0.1

Table 12.19: Toilet facility used by household district and locality (cont'd)

	Fanteakwa	East Akim Municipal	Kwaebibirem	Akyema nsa	Birim North	Atiwa	Kwahu West Municipal	Kwahu South	Kwahu East	Kwahu North
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No facilities (bush/beach/field)	9.0	6.1	10.3	16.4	15.8	9.1	5.9	12.1	21.6	45.3
W.C.	4.1	10.3	5.2	1.3	3.4	3.6	9.0	9.8	8.6	1.1
Pit latrine	51.1	33.3	40.8	39.5	40.2	39.6	29.4	23.8	21.0	24.7
KVIP	12.5	21.5	15.0	19.7	18.2	18.9	25.4	15.6	16.5	9.1
Bucket/Pan	0.6	2.0	0.3	0.1	0.1	0.4	0.5	0.7	1.0	0.0
Public toilet (WCKVIP PitPan etc.)	22.4	26.4	27.8	22.6	21.8	28.0	29.5	37.7	31.1	19.4
Other	0.3	0.4	0.5	0.5	0.6	0.5	0.3	0.2	0.3	0.4
Urban										
Toilet facility used by household										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No facilities (bush/beach/field)	8.2	5.4	6.5	14.9	9.1	6.9	2.7	6.0	6.7	19.1
W.C.	8.1	14.9	8.0	2.1	7.7	6.8	14.4	16.7	17.0	2.8
Pit latrine	39.8	23.6	33.3	34.2	31.8	31.2	25.1	13.2	13.6	7.4
KVIP	20.2	24.4	17.9	25.2	25.2	20.3	30.0	23.6	26.8	22.3
Bucket/Pan	0.6	3.1	0.3	0.2	0.1	0.3	0.8	1.0	2.0	0.1
Public toilet (WCKVIP PitPan etc.)	22.7	28.1	33.7	22.8	25.8	34.0	26.6	39.2	33.5	48.0
Other	0.5	0.5	0.4	0.7	0.4	0.7	0.4	0.3	0.3	0.3
Rural										
H13a: Toilet facility used by household										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No facilities (bush/beach/field)	9.3	7.3	14.3	17.2	18.5	10.3	9.6	14.6	29.3	52.7
W.C.	2.4	3.0	2.3	0.9	1.7	2.0	2.7	7.0	4.2	0.6
Pit latrine	55.9	48.7	48.6	42.4	43.5	44.0	34.4	28.0	24.8	29.5
KVIP	9.3	16.9	12.1	16.5	15.4	18.2	20.1	12.4	11.2	5.4
Bucket/Pan	0.5	0.4	0.4	0.1	0.1	0.4	0.1	0.6	0.4	0.0
Public toilet (WCKVIP PitPan etc.)	22.3	23.6	21.8	22.5	20.2	24.8	32.9	37.1	29.8	11.3
Other	0.2	0.2	0.5	0.4	0.7	0.4	0.2	0.2	0.2	0.5

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.12 Liquid Waste Disposal

The various methods by which liquid waste is disposed of by households is presented in Table 12.20. A little over one-half (50.1%) of all the households in the region throw their liquid waste onto the compounds of their houses. Almost 1 out of every 4 (24.3%) throw their liquid wastes on to the streets outside their homes while 16.9 percent of households throw their liquid waste into gutters. This observed pattern runs across all Districts and across localities.

In the rural areas except Birim South(48.9%) and Birim Municipal (46.3%) most households in the District throw their liquid waste onto their compounds, with the highest proportions in Akyemanso (70.0%)Asuogyaman (71.6%), Upper Manya Krobo (79.9%), and Kwahu North (82.2%). While this practice is generally common in rural areas, it is not so common among urban households, except Kwahu North (72.3%).

The use of soak away as a means of liquid waste disposal is popular by a small proportion of households in all the Districts and across the both rural and urban areas. Less than 4.0 percent of households practise this method. A higher proportion of urban households dispose of their liquid waste through the sewerage system (Table 12.21 and Table 12.22).

Table 12.20: Method of liquid waste disposal by household by districts (%)

	Total	Through the sewerage system	Through drainage system into a gutter	Through drainage into a pit (soak away)	Thrown onto the street/ outside	Thrown into gutter	Thrown onto compound	Other
All districts	632,045	8,228	33,511	11,428	147,245	106,945	319,580	5,108
Birim South	28,800	0.4	4.4	1.7	33.6	14.1	45.3	0.4
Birim Municipal	36,353	0.8	7.7	1.3	28.3	24.9	36.8	0.2
West Akim Municipal	46,805	0.5	3.8	1.3	27.8	15.6	50.5	0.4
Suhum-Kraboia Coaltar	40,413	0.8	4.1	1.0	24.3	12.3	56.3	1.2
Akwapem South Municipal	30,519	1.5	8.0	2.1	18.7	25.0	44.3	0.4
Akwapem North	33,322	2.0	5.7	3.9	24.4	18.1	45.1	0.8
New Juaben Municipal	49,474	2.8	13.7	3.6	15.3	39.0	25.1	0.5
Yilo Krobo	20,613	0.5	2.3	1.8	34.4	9.9	49.4	1.6
Lower Manya-Krobo	22,150	1.6	3.9	1.4	27.4	25.4	38.6	1.7
Asuogyaman	23,551	7.1	5.1	1.2	16.7	7.1	60.4	2.2
Upper Manya-Krobo	15,379	0.6	1.1	0.2	20.2	4.6	72.5	0.7
Fanteakwa	24,026	0.8	4.8	1.5	19.5	12.7	59.7	1.0
East Akim Municipal	42,092	0.9	7.7	1.8	24.3	19.1	45.4	0.8
Kwaebibirem	47,954	1.2	4.9	1.5	21.8	19.1	51.0	0.4
Akyemansa	21,361	0.8	2.5	0.5	20.7	9.2	65.4	0.8
Birim North	18,511	0.4	2.2	1.0	25.3	9.6	60.3	1.1
Atiwa	26,342	0.3	3.4	1.3	22.7	12.3	59.2	0.8
Kwahu West Municipal	23,296	1.8	7.6	2.6	27.1	20.2	39.8	1.0
Kwahu South	16,725	0.8	4.0	1.9	28.6	16.3	48.3	0.2
Kwahu East	18,409	0.6	3.9	1.8	32.3	12.6	48.4	0.5
Kwahu North	45,950	0.7	1.0	2.2	11.5	3.3	80.0	1.2

Source: 2010 Population and Housing Census, Ghana Statistical Service

Table 12.21: Method of liquid waste disposal by households by districts urban locality

	Total	Through the sewerage system	Through drainage system into a gutter	through drainage into a pit (soak away)	Thrown onto the street/ outside	Thrown into gutter	Thrown onto compound	Other
All districts	93,547	6,258	26,599	6,636	67,985	80,792	103,143	2,134
Birim South	14,288	0.4	6.2	1.3	31.6	18.5	41.7	0.3
Birim Municipal	25,316	1.0	9.7	1.4	26.8	28.2	32.7	0.2
West Akim Municipal	19,733	1.0	8.0	1.4	30.4	27.6	31.4	0.2
Suhum-Kraboia Coaltar	11,885	1.9	11.1	1.5	25.0	29.5	28.3	2.7
Akwapem South Municipal	15,397	1.1	12.6	2.9	14.9	39.8	28.3	0.3
Akwapem North	12,146	4.3	9.7	4.9	20.8	33.7	25.3	1.3
New Juaben Municipal	46,505	3.0	14.3	3.7	14.8	40.4	23.3	0.5
Yilo Krobo	7,226	0.6	4.8	3.0	39.9	16.2	35.1	0.4
Lower Manya-Krobo	18,771	1.9	4.3	1.4	28.3	28.5	34.1	1.5
Asuogyaman	6,960	22.9	14.1	1.2	14.7	13.0	33.8	0.4
Upper Manya-Krobo	2,341	0.3	2.6	1.0	43.0	21.4	31.4	0.3
Fanteakwa	7,194	1.1	9.7	2.2	21.8	21.9	41.9	1.4
East Akim Municipal	25,865	1.0	11.1	2.6	21.9	25.3	37.3	0.7
Kwaebibirem	24,333	1.9	7.0	2.5	17.7	26.3	44.1	0.5
Akyemansa	7,683	0.8	2.8	1.0	23.4	14.4	57.4	0.3
Birim North	5,220	0.3	4.0	0.8	31.6	11.2	51.7	0.5
Atiwa	9,104	0.6	3.3	1.1	24.0	19.1	51.1	0.9
Kwahu West Municipal	12,503	3.0	12.4	2.1	23.1	32.0	26.0	1.5
Kwahu South	4,770	0.4	6.2	1.9	32.1	27.6	31.4	0.4
Kwahu East	6,215	1.1	5.7	3.0	38.6	21.4	29.3	1.0
Kwahu North	10,092	0.6	2.3	0.6	17.9	5.4	72.3	0.8

Source: 2010 Population and Housing Census, Ghana Statistical Service

Table 12.22: Method of liquid waste disposal of households by districts and rural locality

	Total	Through the sewerage system	Through drainage system into a gutter	Through drainage into a pit (soak away)	Thrown onto the street/outside	Thrown into gutter	Thrown onto compound	Other
All districts	338,498	1,970	6,912	4,792	79,260	26,153	216,437	2,974
Birim South	14,512	0.4	2.6	2.1	35.6	9.8	48.9	0.5
Birim Municipal	11,037	0.4	3.2	1.0	31.7	17.2	46.3	0.1
West Akim Municipal	27,072	0.2	0.8	1.1	26.0	6.9	64.5	0.5
Suhum-Kraboia Coaltar	28,528	0.3	1.2	0.8	24.0	5.1	67.9	0.6
Akwapem South Municipal	15,122	1.9	3.3	1.3	22.5	10.0	60.6	0.4
Akwapem North	21,176	0.8	3.4	3.3	26.4	9.2	56.5	0.5
New Juaben Municipal	2,969	0.5	4.1	1.5	23.8	16.6	52.8	0.5
Yilo Krobo	13,387	0.5	0.9	1.2	31.5	6.6	57.0	2.2
Lower Manya-Krobo	3,379	0.2	1.5	1.5	22.8	8.0	63.1	3.0
Asuogyaman	16,591	0.5	1.4	1.2	17.6	4.7	71.6	2.9
Upper Manya-Krobo	13,038	0.7	0.8	0.1	16.1	1.6	79.9	0.8
Fanteakwa	16,832	0.7	2.6	1.3	18.5	8.8	67.2	0.9
East Akim Municipal	16,227	0.7	2.3	0.4	28.0	9.4	58.2	0.9
Kwaebibirem	23,621	0.5	2.8	0.4	26.1	11.7	58.2	0.4
Akyemansa	13,678	0.8	2.3	0.3	19.2	6.2	70.0	1.1
Birim North	13,291	0.5	1.5	1.1	22.9	9.0	63.7	1.4
Atiwa	17,238	0.2	3.5	1.4	22.0	8.8	63.4	0.8
Kwahu West Municipal	10,793	0.5	2.0	3.1	31.8	6.5	55.8	0.4
Kwahu South	11,955	0.9	3.1	1.9	27.2	11.7	55.0	0.1
Kwahu East	12,194	0.3	2.9	1.2	29.1	8.1	58.2	0.3
Kwahu North	35,858	0.7	0.7	2.7	9.7	2.7	82.2	1.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

12.13 Solid Waste Disposal

Table 12.23 presents different methods of solid waste disposal by households. The most common method of disposal of solid waste is dumping in a publicly site (40.0%), followed by dumping into containers (22.8%). Dumping solid waste indiscriminately is practised by as high as 10.0 percent of the households. Dependence on companies that collect waste is uncommon; only 4.1 percent of the households in the Region use this service. Burning is also used by some households (5.8%).

12.13.1 Solid Waste Disposal by District and Locality

Dumping of solid waste at public sites (open space) is the commonest method among households in all the Districts, being highest in Birim North (57.8%), Birim Municipal (56.4%), West Akim Municipal (52.3%), Kwahu East (52.1%), East Akim Municipal (50.2%) and Atiwa (50.2%) where more than one-half of households use this method. While rural households use the public open space (47.1%) mostly, those in the urban areas (41.5%)

use the public containers as their method of waste disposal. Indiscriminate dumping of refuse is more common among rural dwellers (16.0%) than in the urban areas (3.1%).

Table12.23: Method of solid waste disposal of households by district

	Total	Collected	Burned by household	Public dump (container)	Public dump (open space)	Dumped indis- criminately	Buried by household	Other
Eastern (Total)	632,045	26,049	102,501	143,820	252,886	63,321	37,144	6,324
Birim South	28,800	2.2	15.4	18.9	48.8	6.7	7.4	0.6
Birim Municipal	36,353	1.6	13	20.7	56.4	3.4	4.4	0.5
West Akim Municipal	46,805	2.5	9.7	21.4	52.3	8.3	5.2	0.5
Suhum-Krabo Coalta	40,413	2.3	14.2	22.9	38	17.4	4.6	0.7
Akwapem South Municipal	30,519	2.4	14.3	32.3	40.5	5.3	4.7	0.6
Akwapem North	33,322	3.4	21.5	11.9	49.3	5.8	7.6	0.5
New Juaben Municipal	49,474	8.8	12.8	61.3	10.5	1.8	4.4	0.5
Yilo Krobo	20,613	4	22.4	29.1	22.3	14.5	4.9	2.7
Lower Manya-Krobo	22,150	3.5	23.3	37.4	25.6	6.4	2.4	1.3
Asuogyaman	23,551	11.9	28.2	11.4	39.9	4.9	3.2	0.6
Upper Manya-Krobo	15,379	5.2	25.9	15.4	14.3	28.9	3.9	6.3
Fanteakwa	24,026	4.5	14.7	18.3	31.2	17	12.7	1.6
East Akim Municipal	42,092	1.8	23	9	50.2	6.3	8.9	0.8
Kwaebibirem	47,954	2.4	19.7	17.1	48.8	6.8	4.5	0.7
Akyemansa	21,361	4.3	9.9	20.4	47.4	12.3	4.3	1.4
Birim North	18,511	1.8	10.6	12.8	57.8	9.2	6.8	1.1
Atiwa	26,342	1.7	18.2	12	50.2	8.3	8.5	1.1
Kwahu West Municipal	23,296	4.1	12.9	38.1	31.6	5	7.4	0.9
Kwahu South	16,725	2.2	10	20.4	47.5	13	6.1	0.8
Kwahu East	18,409	1	7.7	15.4	52.7	16.1	6.4	0.7
Kwahu North	45,950	11.2	15.6	14.5	25.3	26.1	6.1	1.3

Table12.23: Method of solid waste disposal of households by district (cont'd)

	Total	Collected	Burned by household	Public dump (container)	Public dump (open space)	Dumped indiscriminately	Buried by household	Other
Eastern (Total)	293,547	12,924	41,194	121,961	93,465	9,085	13,306	1,612
Birim South	14,288	2	16	31	37.6	5	7.3	1
Birim Municipal	25,316	1.5	14	28	48.6	3.2	4.2	0.5
West Akim Municipal	19,733	2.2	7.7	48	35.9	2.7	3.2	0.3
Suhum-Kraboia Coaltar	11,885	1.3	5.3	64.9	23.2	2.4	2.3	0.6
Akwapem South Municipal	15,397	1.9	8.3	54.4	30.3	1.6	2.9	0.5
Akwapem North	12,146	6.2	10.9	13.7	61.9	1.5	5.3	0.6
New Juaben Municipal	46,505	9.2	11.8	64.1	8.8	1.6	4.3	0.2
Yilo Krobo	7,226	3.5	15.3	55.3	22.6	0.8	2.2	0.3
Lower Manya-Krobo	18,771	3.4	21.3	41.6	26.8	3.6	2.4	0.8
Asuogyaman	6,960	33.3	10.3	18.3	36	0.6	1.2	0.3
Upper Manya-Krobo	2,341	0.3	9.3	77.7	4.8	6.2	1	0.6
Fanteakwa	7,194	1.1	11	49.6	24	4.3	9.7	0.3
East Akim Municipal	25,865	2.3	24.9	11.4	50.4	3.4	7.2	0.5
Kwaebibirem	24,333	2.2	20.4	28.1	41.9	3.3	3.5	0.5
Akyemansa	7,683	4.4	14.6	46.8	21.2	8.2	4.1	0.7
Birim North	5,220	1.8	15.4	17.7	54.2	3.9	5.6	1.4
Atiwa	9,104	1.6	14.4	30.9	42.6	3.4	6.3	0.8
Kwahu West Municipal	12,503	6.5	11.2	67.6	6.9	2	5.3	0.6
Kwahu South	4,770	3.3	7.6	34.3	42.9	4.6	6	1.5
Kwahu East	6,215	1.7	8.2	29.7	49.5	3.4	7.1	0.3
Kwahu North	10,092	2.8	13.6	58.2	11	8.3	5.1	1

Table12.23: (Cont'd)

	Total	Collected	Burned by household	Public dump (container)	Public dump (open space)	Dumped indiscriminately	Buried by household	Other
Eastern (Total)	338,498	13,125	61,307	21,859	159,421	54,236	23,838	4,712
Birim South	14,512	2.3	14.7	7.0	59.7	8.4	7.5	0.3
Birim Municipal	11,037	1.8	10.8	3.9	74.3	4.1	4.9	0.4
West Akim Municipal	27,072	2.7	11.2	2.0	64.3	12.5	6.6	0.7
Suhum-Kraboia Coaltar	28,528	2.7	17.9	5.4	44.1	23.6	5.5	0.7
Akwapem South Municipal	15,122	2.8	20.3	9.8	50.9	8.9	6.5	0.7
Akwapem North	21,176	1.7	27.6	10.8	42.0	8.4	8.9	0.5
New Juaben Municipal	2,969	3.1	29.1	16.7	36.1	4.3	6.0	4.7
Yilo Krobo	13,387	4.2	26.2	15.0	22.2	21.9	6.4	4.1
Lower Manya-Krobo	3,379	4.1	34.4	14.1	18.8	22.1	2.8	3.8
Asuogyaman	16,591	3.0	35.7	8.5	41.5	6.6	4.0	0.8
Upper Manya-Krobo	13,038	6.1	28.9	4.3	16.0	33.0	4.4	7.3
Fanteakwa	16,832	5.9	16.3	4.9	34.3	22.4	14.0	2.1
East Akim Municipal	16,227	1.0	19.9	5.4	49.8	10.8	11.7	1.4
Kwaebibirem	23,621	2.6	19.0	5.7	55.8	10.4	5.6	0.8
Akyemansa	13,678	4.3	7.3	5.6	62.1	14.6	4.5	1.7
Birim North	13,291	1.8	8.7	10.9	59.2	11.2	7.3	1.0
Atiwa	17,238	1.8	20.1	2.0	54.2	10.9	9.7	1.3
Kwahu West Municipal	10,793	1.2	14.9	4.0	60.3	8.5	9.8	1.3
Kwahu South	11,955	1.8	11.0	14.8	49.3	16.4	6.1	0.5
Kwahu East	12,194	0.7	7.4	8.2	54.3	22.6	6.0	0.9
Kwahu North	35,858	13.5	16.1	2.2	29.4	31.1	6.4	1.3

Source: 2010 Population and housing census. Ghana Statistical Service

Main Source of Drinking Water

The purpose of good drinking water is to a large extent is to minimize the prevalence of water borne diseases among household members. The source of drinking water is important because water borne diseases are common in Ghana and members of households are better off if they have access to good drinking water. Table 12.24a shows the percentage distribution of main sources of drinking water in the Region. Overall, 51,123 representing 8.8 percent have access to pipe borne water in their dwellings. The table further reveals that boreholes, pump, tube well are the main source of drinking water in the Region with 177,097 households representing 28.1 percent having access to the facility, followed by pipe borne outside the dwelling (14.5%). Bottled water usage is not common among households, followed by tanker and vendor water supply (0.2%). More households (32.5%) use pipe borne water inside their dwellings while Kwahu North (0.7%) the District with lower percentage of households having pipe borne water in their dwellings. While fewer households are served with pipe borne water outside their dwelling, in North Kwahu (3.8%), Akyem Mansa (59.1%) is better served with bore holes than most of the Districts with Lower Manya Krobo having 3.2 percents of households having access to bore holes. Households in New Juaben Municipal use more sachet water (20.5%) than any other districts while fewer households use sachet water in Kwahu North (0.7%). (Table 12.10) further reveals that unprotected wells constitute the least water drinking source in all the Districts.

Urban Source of Drinking Water

Table 12.24b indicates that more urban residents (21.9%) have access to pipe-borne water located outside their dwellings with a lower percentage having pipe borne water inside their dwelling (10.3%) in the Region. Across Districts more households are served with pipe borne water in Asuogyaman (38.3%) and New Juaben (34.1%) with the least recorded households in Akyemanasa (1.1%). While pipe borne water outside the households is highest in Lower Manya Krobo (38.3%) and Akwapem South (34.8%) fewer households have the facility in Kwahu North (7.4%). Borehole accessibility is highest in Akyemansa (37.7%) and Kwahu North (23.9%). However, this facility is not accessible to many households in Upper Manya Krobo (0.1%). More households in the Districts use sachet water with a higher proportion in Kwahu West (26.1%) and Birim Municipal (23.1%) than the dugout, pond, dam, lake and unprotected wells. For instance less than 2.0 percent (1.4%) depend on dam, bore holes etc. compared to higher proportion for sachets water. Rain water harvesting is not important in all Districts.

Rural Drinking Water

The major source of drinking water for rural households is bore hole (43.3%) followed by the river or the stream. Close to one-fourth (23.9%) of households use the river or the stream as their main source of drinking water. Access to piped borne water in the Region is very low (16.8%) lower than 2000 (28.0%). Across the Districts, borehole is the main source of drinking water for most households. The proportions of households using the borehole as drinking water source range from a high of 74.3 percent in Atiwa to a low of 18.9 percent in New Juaben. On the other hand, the stream or the river is the major source of water for four Districts: Yilo Krobo (32%), Upper Manya Krobo (35.8%), Fanteakwa (40.2%) and East Akim Municipal (29.6%) (Table 12.24c).

Table 12.24a: Main source of drinking water by district (%)

	Total	Pipe-borne inside dwelling	Pipe-borne outside dwelling	Public tap/ Stand-pipe	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
All districts	32,045	51,123	91,863	71,616	177,097	8,167	7,948	2,570	1,232	53,638	1,562	9,712	1,751	94,883	8,624	259
Birim South	28,800	3.3	13.9	9.9	34.4	19.8	0.8	0.2	0.2	5.3	0.0	2.6	0.2	9.1	0.3	0.0
Birim Municipal	36,353	7.4	10.2	11.8	24.9	22.2	0.5	0.2	0.3	17.1	0.0	1.6	0.0	3.4	0.2	0.1
West Akim Municipal	46,805	3.2	13.8	6.1	24.1	14.5	2.2	0.8	0.1	9.0	0.0	3.3	0.2	22.1	0.5	0.1
Suhum-Kraboia Coalta	40,413	3.1	7.1	5.4	36.4	7.4	2.0	0.4	0.1	8.4	0.4	2.0	0.3	25.1	1.9	0.0
Akwapem South Municipal	30,519	12.1	23.2	7.4	24.6	3.9	1.6	0.3	0.2	14.4	0.6	1.4	0.5	9.2	0.5	0.1
Akwapem North	33,322	12.2	21.1	4.1	26.1	3.4	4.2	0.9	0.3	10.2	1.1	1.5	0.2	14.1	0.3	0.0
New Juaben Municipal	49,474	32.5	19.6	8.7	5.8	9.2	1.0	0.2	0.5	20.5	0.1	0.3	0.0	1.5	0.1	0.0
Yilo Krobo	20,613	9.5	18.9	18.3	17.4	2.8	0.6	0.2	0.1	5.3	0.1	2.8	1.5	22.1	0.5	0.0
Lower Manya-Krobo	22,150	15.4	36.5	36.3	3.2	1.6	0.1	0.2	0.2	1.7	2.2	0.6	0.4	1.6	0.1	0.0
Asuogyaman	23,551	15.9	23.2	23.8	18.4	1.0	2.3	0.1	0.2	2.4	0.3	1.7	0.3	9.1	1.4	0.0
Upper Manya-Krobo	15,379	0.8	2.1	13.5	37.7	4.2	0.4	0.0	0.1	1.7	0.0	3.8	0.3	30.4	4.7	0.1
Fanteakwa	24,026	2.1	8.5	3.7	24.8	7.6	1.1	1.5	0.1	7.7	0.0	2.2	1.2	38.2	1.4	0.0
East Akim Municipal	42,092	7.4	13.2	7.7	30.4	13.7	0.7	0.2	0.2	9.8	0.0	0.5	0.1	15.9	0.2	0.0
Kwaebibirem	47,954	6.5	17.2	20.6	30.0	12.7	0.3	0.3	0.2	6.0	0.2	1.1	0.1	4.7	0.2	0.0
Akyemansa	21,361	1.0	6.8	5.9	59.1	17.7	0.4	0.4	0.1	2.9	0.0	1.5	0.1	4.0	0.2	0.0
Birim North	18,511	3.2	22.5	22.8	41.4	1.5	0.2	0.2	0.5	2.5	0.0	1.3	0.0	3.9	0.1	0.0
Atiwa	26,342	2.4	12.5	10.7	54.1	4.4	0.2	0.2	0.1	5.5	0.0	0.4	0.1	9.4	0.0	0.0
Kwahu West Municipal	23,296	7.1	16.2	3.9	38.9	10.6	0.6	0.3	0.1	15.2	0.1	0.5	0.0	6.3	0.0	0.0
Kwahu South	16,725	5.8	9.6	9.6	24.7	8.8	3.7	0.8	0.2	8.9	0.1	4.0	0.8	20.9	2.0	0.0
Kwahu East	18,409	3.3	7.5	5.2	20.9	15.2	4.1	1.5	0.1	7.0	0.1	2.2	0.4	32.3	0.1	0.1
Kwahu North	45,950	0.7	3.8	13.6	30.4	0.6	0.3	0.1	0.1	0.7	0.0	0.3	0.3	38.0	11.0	0.2

Source: 2010 Population and Housing Census, Ghana Statistical Service.

Table 12.24b: Main source of drinking water in district by urban locality

	Total	Pipe-borne inside dwelling	Pipe-borne outside dwelling	Public tap/Stand-pipe	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	Duout/Pond/Lake/Dam/Canal	Other
Eastern (Total)	293,547	44,242	64,296	49,214	30,625	39,247	3,853	1,272	816	41,266	1,086	2,686	382	13,899	566	97
Birim South	14,288	4.7	22.5	13.7	19.2	26.8	0.7	0.2	0.2	6.8	0	1.9	0.2	2.8	0.1	-
Birim Municipal	25,316	10.2	11.7	15.3	12.3	25	0.7	0.2	0.3	23.1	0	0.3	0	0.8	0	0.1
West Akim Municipal	19,733	7	25.6	12.1	7.2	20	1.9	0.6	0.2	16.7	0	1.5	0.1	6.7	0	0.1
Suhum-Kraboia Coaltar	11,885	10.1	17.7	15.2	11.9	11.5	1.8	0.1	0.4	19.5	1.2	0.9	0	9.6	0.1	0
Akwapem South Municipal	15,397	21	31.7	11.4	9.7	2.3	1.2	0.2	0.3	19.1	0.6	0.3	0.1	2.1	0.1	0.1
Akwapem North	12,146	23.7	34.8	6	3.1	5	5.3	2	0.3	12.2	1.1	1.6	0.3	3.9	0.7	0
New Juaben Municipal	46,505	34.1	20	8.3	5	8.7	1	0.2	0.5	21.1	0.1	0.2	0	0.6	0.1	0
Yilo Krobo	7,226	18.8	26.8	31.2	9.6	2	0.4	0.2	0.1	5.5	0.1	0.5	1.1	3.7	0	0
Lower Manya-Krobo	18,771	16.6	38.3	39.3	0.1	0.8	0.1	0.2	0.1	1.7	2.6	0	0	0.1	0	0
Asuogyaman	6,960	38.3	29.9	28.8	0.1	0	0.5	0.1	0.2	1.1	0	0.1	-	0.8	0	0
Upper Manya-Krobo	2,341	4.1	5.3	85.9	1.4	0.2	0.3	-	0.2	2.3	-	-	-	0.3	0.1	-
Fanteakwa	7,194	5	12.7	3.9	2.8	14.8	2.2	3.9	0.2	17.2	0	3.1	0.5	33.5	0.3	-
East Akim Municipal	25,865	11.1	18.4	11.1	16.6	19.6	1	0.3	0.2	13.6	0	0.4	0	7.3	0.3	0
Kwaebibirem	24,333	9.4	23.1	25.6	12	16.6	0.3	0.2	0.2	9.3	0.4	1.1	0.1	1.3	0.3	0
Akyemansa	7,683	1.1	7	11.9	37.7	31.6	0.6	0.1	0.2	5.8	-	2.2	0	1.7	0	-
Birim North	5,220	8.4	34	44.9	5.3	1.5	0	0.3	1.1	3.6	0.1	0.2	-	0.4	0.2	-
Atiwa	9,104	6	28.9	20.9	15.8	8.8	0.3	0.2	0.3	11.3	0	0.5	0.1	6.8	-	0.1
Kwahu West Municipal	12,503	12.7	23.6	4.9	11.9	16.4	0.8	0.4	0.2	26.1	0.2	0.5	0	2.2	0	-
Kwahu South	4,770	8.1	13.4	3.2	9.3	15.1	8.8	2.1	0.3	14.7	0.2	6.9	2.1	15.7	0.3	0.1
Kwahu East	6,215	6.3	10.5	4.5	9.8	32.4	7.9	0.3	0.3	13.2	0.2	4.8	0.1	9.3	0.2	0.2
Kwahu North	10,092	2.2	7.4	35.7	23.9	2.2	0.3	0.2	0.2	2.4	-	0.1	0.1	23.9	1.4	0

Source: 2010 Population and Housing Census, Ghana Statistical Service

Table 12.24c: Main source of drinking water in district by rural locality

	Total	Pipe-borne inside dwelling	Pipe-borne outside dwelling	Public tap/ Stand pipe	Bore- hole/ Pump/ Tube well	Protect ed well	Rain water	Protec ted spring	Bottled water	sachet water	Tanker supply/ Vendor provided	Unprot ected well	Unprot ected spring	River/ Stream	Dugout/ Pond/ Lake/ Dam/ Canal	Other
All districts	338,498	6,881	27,567	22,402	146,472	18,920	4,095	1,298	416	12,372	476	7,026	1,369	80,984	8,058	162
Birim South	14,512	1.8	5.4	6.2	49.3	12.9	0.9	0.2	0.1	3.8	0.0	3.4	0.2	15.3	0.4	0.0
Birim Municipal	11,037	1.0	6.7	4.0	53.9	15.7	0.1	0.1	0.3	3.2	0.0	4.5	0.1	9.6	0.7	0.0
DisWest Akim Municipal	27,072	0.4	5.2	1.8	36.4	10.5	2.5	0.9	0.1	3.4	0.0	4.5	0.2	33.4	0.8	0.0
Suhum-Kraboia Coaltar	28,528	0.2	2.7	1.3	46.6	5.7	2.1	0.5	0.0	3.8	0.0	2.5	0.4	31.6	2.6	0.0
Akwapem South Municipal	15,122	3.0	14.5	3.4	39.8	5.6	2.1	0.4	0.2	9.6	0.7	2.4	0.8	16.5	0.9	0.0
Akwapem North	21,176	5.6	13.3	3.1	39.3	2.6	3.6	0.3	0.2	9.1	1.1	1.5	0.2	20.0	0.1	0.0
New Juaben Municipal	2,969	6.6	13.4	13.9	18.9	16.8	0.9	0.5	0.7	10.8	0.1	1.4	0.5	15.4	0.0	0.0
Yilo Krobo	13,387	4.5	14.6	11.3	21.5	3.2	0.7	0.2	0.1	5.2	0.1	4.1	1.7	32.0	0.7	0.0
Lower Manya-Krobo	3,379	8.6	26.0	19.6	20.1	5.9	0.4	0.2	0.7	1.5	0.0	3.8	2.2	10.2	0.7	0.0
Asuogyaman	16,591	6.5	20.4	21.7	26.0	1.4	3.0	0.1	0.3	2.9	0.4	2.5	0.4	12.5	2.0	0.0
Upper Manya-Krobo	13,038	0.3	1.5	0.5	44.3	5.0	0.5	0.0	0.0	1.6	0.0	4.5	0.4	35.8	5.5	0.1
Fanteakwa	16,832	0.8	6.8	3.6	34.2	4.5	0.6	0.4	0.1	3.7	0.0	1.8	1.5	40.2	1.8	0.0
East Akim Municipal	16,227	1.5	4.8	2.3	52.3	4.4	0.3	0.1	0.1	3.8	0.0	0.6	0.1	29.6	0.0	0.0
Kwaebibirem	23,621	3.4	11.2	15.4	48.6	8.6	0.2	0.4	0.1	2.6	0.0	1.1	0.1	8.2	0.1	0.0
Akyemansa	13,678	0.9	6.7	2.6	71.0	9.9	0.3	0.6	0.0	1.3	0.0	1.1	0.1	5.3	0.3	0.0
Birim North	13,291	1.1	17.9	14.0	55.5	1.5	0.3	0.2	0.2	2.0	0.0	1.8	0.0	5.2	0.1	0.0
Atiwa	17,238	0.5	3.9	5.3	74.3	2.1	0.2	0.2	0.1	2.4	0.0	0.3	0.1	10.7	0.0	0.0
Kwahu West Municipal	10,793	0.7	7.8	2.8	70.1	4.0	0.3	0.2	0.1	2.5	0.0	0.5	0.1	11.0	0.0	0.0
Kwahu South	11,955	4.8	8.1	12.1	30.9	6.4	1.7	0.3	0.2	6.6	0.0	2.8	0.4	23.0	2.7	0.0
Kwahu East	12,194	1.8	6.0	5.6	26.6	6.5	2.1	2.1	0.1	3.8	0.0	0.9	0.5	44.0	0.1	0.0
Kwahu North	35,858	0.3	2.7	7.3	32.2	0.1	0.3	0.1	0.0	0.3	0.0	0.3	0.4	41.9	13.7	0.3

Source: 2010 Population and Housing Census, Ghana Statistical Service

CHAPTER THIRTEEN

EXECUTIVE SUMMARY

13.1 Background

Historically, the Eastern Region was one of the three administrative areas of the then Gold Coast until independence. It is the sixth largest Region with a land area of 19,323 kilometres square, which is 8.1 percent of the land area of Ghana. It has diverse topography, with forest and savannah vegetation.

13.2 Political Administration

The Eastern Region is one of the ten administrative Regions of Ghana. With the capital is Koforidua located in the New Juaben Municipality. The Region has fifteen (15) Districts and six (6) Municipalities. In addition, the institution of chieftaincy has been an important component of the social organization of the Region as in the rest of the country.

13.3 Economy

The economy of the Eastern Region is predominantly agrarian, with both subsistent and commercial production of food and cash crops. Cocoa is a major traditional cash crop produced in the Region. Pineapple is the its major non-traditional export crop. Other economic activities include inland fishing, inland water transportation and a flourishing tourist industry, with ecotourism and festival tourism. Mining (bauxite and gold) is an important economic activity in the Region. Trade and service sectors have been vibrant in the Region. It comes third after the Greater Accra and Ashanti Regions in terms of infrastructural development.

13.4 Population Composition

The population increased from 1,094,196 in 1960 to 2,633,154 at the time of the 2010 PHC, made up of 1,290,539 (49%) males and 1,342,615 (51 percent) females. The population of the Eastern Region which constitutes 10.7 percent of the total national population is the third highest after Ashanti (19.4%) and Greater Accra (16.3%) regions.

Age-sex Structure

The sex ratio of the Region has declined from 102.2 percent at the 1960 census to 96.1 at the 2010 PHC. The age structure of the Region follows the national pattern, that of a youthful population. Between 35 and 40.0 percent of population of almost all the Districts are under 15 years. This reflects a declining fertility since the proportion of children exceeded 40 percent at previous censuses. The largest proportion of youthful population is in the Kwahu North district (53.4%), one of the least urbanized Districts with predominantly agricultural economic activity. Akwapem South has the highest percentage (8.18 percent) of population aged 65 years and older while New Juaben Municipality, the most urbanized area with the Regional capital, has the lowest percentage (31%) of the population aged below 15 years. The

dependency ratio which was in the excess of 100 at the 1970 census also decreased consistently and reached 79 at the 2010 PHC, indicating a decrease in the proportion of the population aged below 15 years as result of declining fertility in the country.

Ethnicity

The Akan (51.1percent) constitute the largest ethnic group in the region, followed by the Ewe (18.9%), the Ga-Adangbe (17%) and the Guan (5.3%). The Ga-Adangbe constitutes more than 90 percent in the three districts of lower Manya (73.8%), Upper Manya (85.3%) and Yilo Krobo (82.3%) while the Ewe form 53.1 percent of the population of Kwahu North.

Religion

The dominant religious group in the Eastern region is Christianity with more than four-fifth (84.5%) professing adherence to the Christian faith. Moslems form only 6.7 percent of the population.

13.5 Household Size, Structure and Composition

Information on households basically includes household structure, composition, and relationship to the head of household.

Household Headship

The households in the region are predominantly male-headed. They constitute about two-thirds (63.2%). This is a reflection of the national pattern which shows predominantly male household headship. But the proportion of households headed by females (41.3%) is higher in urban areas while that of male-headed households (67.1%) in rural areas are slightly higher than the regional average. The percentages of households that are male-headed are far higher in some districts also (the least urbanized specifically) than the regional average: Kwahu North (79.5%), Upper Manya (77.0%) and Fanteakwa (72.7%).

Household Size

Overall, and in all the districts, one-member household type constitute recorded the highest proportion (19.9%) followed by household sizes of three (13.9%) and four (13.9%). The districts with highest percentage of one-member household are New Juaben (24.9%), followed by Birim Municipal (21.8%), Kwahu West (21.2%) and Kwahu East (21.2%). These are the more urbanized districts with smaller family sizes than their rural counterparts. The majority of households in the region and the various districts are two to six-member household sizes.

13.6 Marital Characteristics

The 2010 PHC captured information on child spouses by reducing the eligible age for measurement of marital status from 15 years (which was usually used in previous censuses) to 12 years. Overall, marital status and types of marriage varies quite considerably among the age-sex localities and districts.

Sex ratio of the currently married

A higher proportion of females than males in the Eastern Region aged 12 years and over is married. This gives a low sex ratio of 88.6 percent for the population that is currently married. The sex ratio of the currently married was slightly higher, 87.9 percent at the 2000 census.

Marital Status by age, sex and type of residence

Approximately 2 out of every 5 (39.7%) persons aged 12 years and older in the region have never been married while slightly more than that (40.6%) are married. The proportion in consensual union is 7 percent. Those who were formerly in a marital union constituted more than a tenth (12.7%). They include those separated (2.4%), divorced (4.6%) and widowed (5.7%).

The highest percentages (8 to 15%) in consensual union were reported among those in age groups 20-44 years. The percentage married increases drastically from ages 25- 29 years and begins to decline from ages 55-59 years. Prevalence of divorce also increases with increasing age but from among those in their 30s.

A higher proportion (43.7%) of persons aged 12 years and over in urban areas than in the rural areas (36.3%) have never married. On the other hand, a higher proportion of rural residents are in a marital union (43.3% married and 7.7% in consensual union) compared to those in urban areas (37.4% married and 6.2% in consensual union).

Marital Status by District

Higher proportions of females than males are in consensual union in all the districts. Yilo Krobo has the highest proportion of females (18.6%) in consensual union followed by Lower Manya (12.3%) and Upper Manya (10.4%) compared to lower percentages reported in the rest of the districts such as Akwapem North (4.2%), Birim Municipal (5.1%) and Akyem Manso (5.1%).

13.7 Information Communication Technology

At the 2010 PHC, ownership and usage of information communication technology facilities and services were assessed by collecting data on both individuals/persons aged 12 years and older and households.

Distribution of mobile phone owners

At the 2010 PHC, a total of 806,291 persons aged 12 years and over in the Eastern Region reported that they had mobile phones, and more than half (53.1%) were males. Slightly more than half (50.4%) of all persons who own a mobile phone in the region are in seven (the most urbanized) out of the twenty one districts: New Juaben (11.8percent), Kwaebibiren (7.5%), East Akim Municipal (7.4%), West Akim Municipality (6.4%), Birim Municipality (5.9%) Akwapem South Municipality (5.7%), and Akwapem North (5.7%).

Mobile phone ownership by level of education and sex

Mobile phone ownership increases with increase in the level of education. While less than a quarter of persons with primary or no education own a mobile phone, two thirds and more of those with secondary education, whether male or female have it. However, slightly higher percentage of females than males with the highest levels of education own mobile phone. For example, 97.5 percent of the females compared with 96.2 percent of the males with tertiary education own mobile phones.

Distribution of Internet Facility Users

The districts with highest rate of urbanization have the highest percentages of internet users. New Juaben Municipality, with the regional capital has more than a quarter (27.3%) of all internet users in the region. Only a small fraction of internet users are in the least urbanized districts for instance Upper Manya (0.9%), Akyem Mansoh (1.0%) and Birim North (1.7%).

Household ownership of desktop/laptop

The rate of ownership of desktop/laptop by households is very low in the Eastern Region, with an average of 5.2 percent of all households having these facilities. It is only a few of the districts that have rates exceeding the average and, as should be expected, New Juaben has the highest percentage of 15.3 percent,

13.8 Education and Literacy

Literacy

A little more than a third (35.8%) of the population in the region is not literate in any language. The percentages that are literate in English only (11.6%) or a Ghanaian language only (11.6%) are the same but more than 40percent is literate in the combination of English and a Ghanaian language in more than half of the districts and up to 30percent in the rest.

Differentials in literacy rate by sex and residential status

The differences in literacy rate between the sexes are considerable. In the urban populations, less than a tenth (8.4%) of the males compared to almost a fifth (19.7%) of the females are illiterate while more than two-thirds (67.9%) of the males compared with a little more than half (53.5%) of the females are literate in English and Ghanaian language. In the rural population, almost twice (34%) the proportion of the females compared with males (19.2%) are illiterates; and 55 percent of the males compared with 38percent of the females are literate in English and Ghanaian language.

Educational Status by Districts

On the average, 20 percent of all persons aged 15 years and older have never attended school in the Eastern Region. The majority (60%) have primary or JSS/JHS/Middle school education while less than 10 percent has senior secondary/high education and negligent proportions have vocational technical, post-secondary and higher education.

Substantial inequalities in educational attainment are observed among various population subgroups in the region.

13.9 Fertility, Mortality and Migration

Children Ever Born

An average of 5.1 children have ever been born by women aged 12- 54 years in the region. Children aged below 15 years are bearing children almost as much as teenagers do. This justifies the inclusion of children in the census for interview on fertility issues. Such early childbearing has implications for the school attendance and career development of the child mothers. Generally, younger cohorts of women in rural areas reported about the same number of children ever born as their urban counterparts while older cohorts differed markedly from their urban counterparts.

Infant and Under-five Mortality

During the five years preceding the 2010 PHC, infant mortality across the ten regions of Ghana ranged between 48 deaths per 1000 live births in the Greater Accra Region to 81 deaths per 1000 live births in the Upper West Region. In the Eastern Region, the infant and child mortality rates were respectively 50 per 1,000 live births and 75 per 1,000 live births during that period, specifically 2002- 2006.

Maternal mortality ratios and rates

There are wide regional variations in Maternal Mortality Ratio among the ten regions of Ghana, ranging from 355 deaths per 100,000 live births in the Greater Accra Region to 802 maternal deaths per 100,000 live births in the Upper East Region. The Eastern Region and four others have ratios that are above the national average. But the Eastern Region has the same Maternal Mortality Rate (that is the exposure to the risk of dying as a result of pregnancy related causes) as the national average- five out of every 1,000 women.

Migration

Nationality and birth place

Persons of Ghanaian parentage, as expected, constitute the largest percentage (95.4%) of the population in the Eastern Region, followed by Ghanaians with dual citizenship (2.2percent). The rest are non-Ghanaians and Ghanaians by naturalization. The same pattern of nationality is found in every one of the 21 districts.

Birth place

Almost two-thirds (65.4%) of the 2,633,154 enumerated in the region was born at the same locality of enumeration while 17.9 percent were born in another locality in the region and the rest were born outside the region (15.9%). The regions with the highest proportion enumerated at their place of birth are Birim South (76.4%) followed closely by Akyem Manso (75.7%). Asuogyaman recorded the lowest- 54.6percent.

13.10 Economic Activity

Economic Activity Status

On the average, a little less than 3 out of every 4 persons (73%) aged 15 years and over are economically active in the region. Disparities exist among the districts and other subgroups of the population, with a few recording far higher rates than the regional average. The economic activity rates of all the municipalities are lower than the regional average. The rates for urban areas range from 60.1 percent in Akwapem North to 74.7 percent in Upper Manya while the range in rural areas is from 70.3 percent, also in Akwapem North to 88.8 percent in Kwahu North. Furthermore, the economic activity rates of males are higher than that of females in all the districts.

Economic Activity Status by Age

The youngest age group (15- 24 years) recorded the lowest economic activity rate in all the districts. The rates among the aged (60+ years) is relatively high, exceeding 60% in the majority of the districts. The age group 35- 59 years reported the highest economic activity rate, exceeding 90 percent in all the districts, with the exception of Akwapem South Municipality and Akwapem North. Almost all persons aged 35- 59 years are economically active in Suhum-Kraboia Coaltar (95.1%), Kwahu North (96.5%) and Upper Manya (97.1%).

Employment Status

A little more than two thirds (69%) of the population in the Eastern Region was employed while 4.1 percent were unemployed. The rest (27.3%) were not economically active. Though the rate of unemployment is higher in the less urbanized districts, unemployment is more characteristic of the urban populations than the rest. The New Juaben District where the capital of the district (Koforidua) is located recorded the third highest unemployment rate of 5.5 percent; and the rate exceeded 4 percent in all the municipalities, except in Kwahu West Municipal where it was 3.8 percent.

13.11 Disability

Overall, 3.6 percent of the total population of the Eastern Region has disability. But vast differences in the prevalence rate of disability are found among the districts, with some having far higher rates than the regional average. The percentage of the total regional population with disability ranges from 1.8percent in Kwahu North to 6percent in Atiwa.

Types of disability

The Six major types of disability reported in the population with disability in Ghana at the 2010 PHC are all found in the Eastern Region and it accounted for approximately 13percent (94,579 out 737,743) of all the disability cases reported in the country at the PHC. Disability of sight and physical disability are the most reported types in the region, constituting 42.3percent and 29.4 percent respectively of all the cases. The other reported types in most of the districts are emotional disability and disability of hearing.

Distribution of disability by age and sex

The youngest (0- 14 years) and oldest (65+ years) reported the highest prevalence rate of disability. The proportion of the population with disability who are females is more than half in all the districts and ranges from 51.2 percent in Kwaebibirem to as high as 59.3 percent in Kwahu North.

Educational Status and Literacy Rate among the Population with Disability

Educational status and literacy rate are generally low among the population with disability. Those who have never attended school constitute more than half in two districts – Kwahu North (52.2%) and Upper Manya (54.8%)- and around 30percent to a little less than 40percent in the rest of the districts. Overall, more than a third (35.8%) of the persons with disability in the whole region is illiterate in English, Ghanaian and French languages.

13.12 Agricultural Activity

Households in agriculture

A total of 374,257 households are engaged in agricultural activities in the region. Households with 1 to 6 members constitute the majority (77.6%) of agricultural households in the region while those with seven and more members form less than a quarter (22.4%). The structure (size) of agricultural households in the region suggests that family labour for agricultural production may not be sufficient for most households, even as children also have to be in school.

Urban Agricultural Households

Metropolitan areas and municipalities have become sites of farming, particularly vegetable and cereal farming. Overall, 116,605 agricultural households were recorded in all urban areas in the Eastern Region at the 2010 PHC, constituting about a third (31.2%) of the 374,257 agricultural households in the region.

Rural Agricultural Households

Agricultural activities are predominantly rural-based in Ghana. The rural agricultural households in the Eastern Region constitute 68.8 percent of all agricultural households in the region. Kwahu North has the highest proportion of rural agricultural households- 11.1percent.

Sex of agricultural household head and locality of agricultural households

More than two-thirds (69.3%) and 30.7 percent respectively are male- and female-headed agricultural households. Overall, the proportion of female-headed agricultural households is higher in urban areas (34%) than the rural (29.2%). The proportions of female-headed households are lower in the less urbanized districts.

Age Characteristics of Agricultural Household Heads

The heads of agricultural households are mostly old adults aged 35-59 years (64.1%) and the aged 60+ years (25.1%). Only about 10 percent of them are young adults aged 20- 29 years.

The region has an aged agricultural household headship population. The government has made various attempts to make agricultural production attractive to the youth over the past two decades.

Types of agricultural activity by sex

The majority (68.8%) of the agricultural households are involved in crop farming. Less than a third (30.2%) is rearing livestock while negligible percentages engage in tree growing (0.6%) and fish farming (0.2%). Even though female-headed households constitute at least 30 percent of all households engaged in crop farming, tree cropping and livestock rearing, only a tenth (9.8%) of all households engaged in fish farming are female-headed households.

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