



2010

POPULATION & HOUSING CENSUS

REGIONAL ANALYTICAL REPORT

UPPER WEST REGION



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PREFACE AND ACKNOWLEDGEMENT

There cannot be any meaningful developmental activity without taking into account the characteristics of the population for whom the activity is targeted. The size of the population and its spatial distribution, growth and change over time, and socio-economic characteristics are all important in development planning. The Kilimanjaro Programme of Action on Population adopted by African countries in 1984 stressed the need for population to be considered as a key factor in the formulation of development strategies and plans.

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

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

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

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

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

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

Dr. Philomena Nyarko
Government Statistician

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ACRONYMS

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

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

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Population plays a key role in the development planning of every country. This report examines the population of the Upper West Region in terms of its geographical location, composition and distribution characteristics across the districts as captured by the 2010 Population and Housing Census (PHC 2010).

Along with the Upper East Region, the Upper West Region was created in 1983 out of the then Upper Region, which had itself been created out of the Northern Region in July 1960. This decentralization policy was meant to improve regional administration.

1.2 Physical Features

The Upper West Region shares borders to the north with Burkina Faso, to the east with the Upper East Region, to the south with the Northern Region and with Côte d'Ivoire to the west. The region covers a geographical area of 18,476 square kilometres, which is about 12.7% of the total land area of Ghana. The region is located in the Guinea Savannah belt. Among the trees commonly found in this region are shea, baobab, *dawadawa* and neem, which are able to withstand drought. These trees provide fuel for domestic use as well as wood for the construction of houses.

The climate of the Upper West Region follows a general pattern identified with the three northern regions. It has a single rainy season from April to September, with average annual rainfall of about 115 cm. This is followed by harmattan, a prolonged dry season characterized by cold and hazy weather from early November to March, and an intense hot weather that ends only with the onset of early rainfall in April. The mean monthly temperature ranges between 21° and 32°. Temperatures rise to their maximum (40°) in March, just before the onset of the rainy season, and fall to their minimum (20°) in December during harmattan which is brought about by the north-east trade winds.

The region has an almost entirely flat topography, especially west of the capital Wa and around Lawra, better referred to as the Wa-Lawra plains. The height of the land is generally between 275m and 300m above sea level, except eastwards of Wa where the land rises over 300m above sea level. Further eastwards, the land falls to about 150m above sea level.

Many types of soil are found in the region. They include the Savannah ochrosols, tropical brown yeast, terrace soils found along the banks of rivers and streams, and groundwater laterites. These soil types favour the cultivation of a variety of grains, pulses and tubers and cotton. One crop commonly cultivated on the terrace soil type is tobacco.

1.3 Political and Administrative Structure

Since its creation in 1983, the Upper West Region has had Wa as its capital and seat of government and administration. The Local Government Act of 1993 establishes and regulates the local government system in accordance with the 1992 Constitution. The Act stipulates the maintenance of districts in existence immediately before the coming into force of the 1992 Constitution.

The main administrative structure is the Regional Coordination Council (RCC), headed by the Regional Minister. Other members of the RCC include representatives from each District Assembly, regional heads of decentralized ministries, and representatives of the Regional House of Chiefs. The region is divided into nine administrative districts, as follows: Wa West, Wa Municipal, Wa East, Sissala East, Nadowli, Jirapa, Sissala West, Lambussie/Karni and Lawra (Table 1). Wa West District was carved out of the Wa District and its capital is Wechiau. Wa East District has its capital at Finsi, and Sissala West district has Gwollu as the district capital (Figure 1).

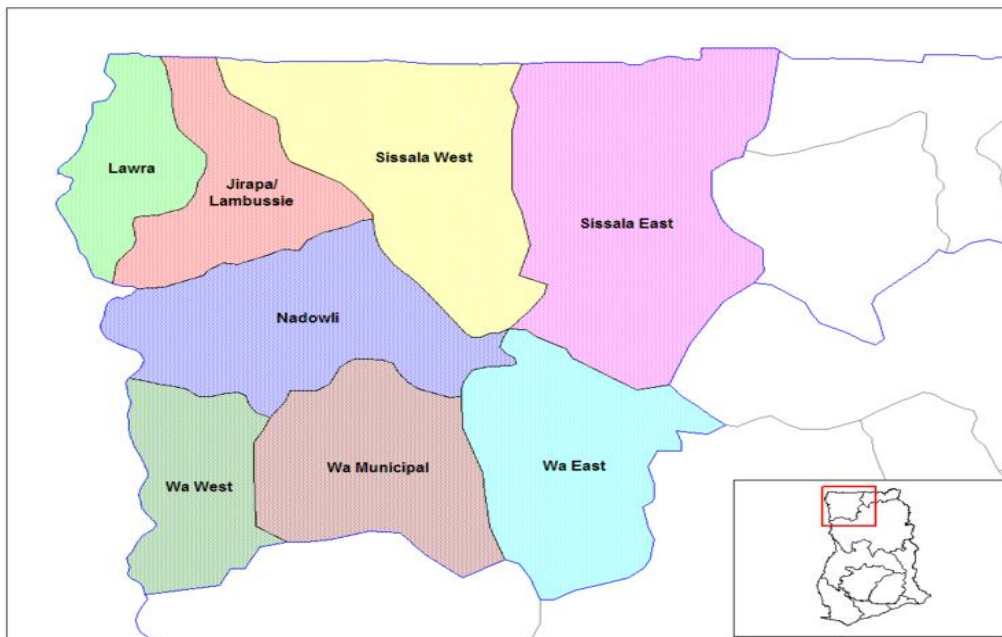
Table 1.1: Upper West Districts

Name of district	District capital	Number of electoral areas
Jirapa	Jirapa	37
Lambussie/Karni	Lambussie	25
Lawra	Lawra	54
Nadowli	Nadowli	51
Sissala East	Tumu	21
Sissala West	Gwollu	22
Wa East	Finsi	25
Wa West	Wechiau	27
Wa Municipality	Wa	31

Source: Ministry of Local Government and Rural Development

A Municipal or District Assembly administers each district. It is headed by a Chief Executive nominated by the President and approved by the Assembly Members. Two-thirds of the members of the Assembly are directly elected. The rest are appointed by the central government in consultation with local leaders. The districts are autonomous with regard to the planning, budgeting and implementation of projects. In addition, Area/Town Councils and Unit Committees assist in the performance of key roles. There are also traditional councils and various youth development associations to facilitate efficient and effective mobilization of local resources for development.

Figure 1.1: Map of the Upper West Region



Source: Upper West Regional Coordinating Council

1.4 Social Structure

The people of the Upper West Region are organized under chiefs at the lineage and settlement levels. Chieftaincy is a respected institution and is a major medium for community mobilization. In Sissala, the title Koro (e.g., Tumu Koro) is used for the chiefs while Na (e.g., Wa Na) is used in the other districts. There are 21 traditional paramountcies – Jirapa-Lambussie has two, Lawra three, Nadowli seven, Sissala five and Wa has four).

The major ethnic groups in the region fall under the broad generic categories of the Mole Dagbon and Grusi. The major languages of the region are Dagaare, Sissali, Wale and Lobi. Inheritance is patrilineal except among the Lobi who, like the Akan in southern Ghana, have a matrilineal inheritance system. Marriage is generally polygamous, with the extended family system sharing resources. Male dominance and a relatively low status for women are common in the region.

The predominant religions are Christianity, Islam and traditional African religion. Traditional life and beliefs, as elsewhere in the country, are more prominent in the rural areas. The notable festivals are the Damba festival in Wa, Dembenti among the Dagaabas, Kobine in Lawra and Kakube in Nandom.

The style of architecture is similar to that of the Upper East Region. Houses are constructed mainly with mud, with mostly rectangular rooms. The houses are built in the form of compounds with gates. The walls are plastered with mud and cement is used as the main material for floors. The rooms are mostly decked with mud, and in certain instances, houses are built up to one storey and roofed with iron sheets or thatch made of grass.

Festivals such as Kobine, Kakube, Zumbeti, Willa, Damba, Paragbiele, Bagre, Kala, Bongngo and Singma portray the way of life of the people of the region. For instance, the Damba, which is celebrated by the Walas, is meant to usher in the New Year. It is at this

festival that the Chief is assessed as to his physical fitness to continue to rule his people. Both the Kokube festival of the people of Nandom and the Kobine of the people of Lawra are celebrated to offer thanks to God through the ancestors for blessing them with a bumper harvest.

1.5 Economy and Living Conditions

The majority of the people of the Upper West Region are peasant farmers. The average farm size is 25 acres per farmer and farming is mostly done on family basis as a daily activity except for rest days. Farming is both on subsistence and commercial basis. The population depends largely on rainfall to cultivate crops like guinea corn, maize, millet, rice, soya beans, groundnuts, cotton, yam, cowpea, and sorghum. Cattle rearing is another agricultural activity undertaken in the region. While maize, guinea corn and groundnuts are cultivated for domestic consumption – with Guinea corn also used for the *pito* beverage – cotton and cowpea are mainly produced as cash crops.

The people are also engaged in spinning, weaving and smock designing. They produce musical instruments such as the xylophone and are involved in pottery, blacksmithing and carving. Tourist attractions in the region include the Wa Na's Palace and Dondoli Sudamic (Larabanga) Mosque, the Jirapa Na's Palace, the all-stone Gothic art church in Nandom and the hippopotamus sanctuary at Wechiau. Other attractions are the Gwollu Slave Defence Wall and slave site caves as well as George Ekem Ferguson's tomb.

1.6 Demographics

The population of the region as enumerated in the 2010 Population and Housing Census (PHC) is 702,110, with 48.6 percent (341,182) males and 51.4 percent (360,928) females. The population aged less than 15 years constituted 41.7 percent of the total, while those aged between 15 and 64 constituted 52.3 percent. The rest (6.0%) were persons 65 years and older. The proportion of the urban population was 16.3 percent in 2010. The regional population density was 38.0 persons per square kilometre, an increase from 31.2 persons per sq. km. in 2000.

Among the nine districts in the region, Wa Municipal had the highest share of 15.3 percent of the population, while Sissala West District had the lowest share of 7.1 percent.

1.7 Organization of the Report

Overall, the Report consists of twelve chapters. Chapter One provides background information on the physical features, political and administrative structure, social structure, economy and living conditions, as well as the demography of the Upper West Region.

Chapter Two is on methodology as well as definitions of concepts used for the 2010 PHC. Chapter Three focuses on population size, composition and age, sex, nationality, ethnicity as well as religion of the people. Chapter Four deals with household size, structure and composition. Chapter Five presents information on marital characteristics of the people while information on communication technology (ICT) is provided in Chapter Six. Chapter Seven presents data on education and literacy levels in the region. Chapter Eight discusses fertility, mortality and migration while Chapter Nine deals with economic characteristics. Chapter Ten is on disability. Data on agricultural activity and housing conditions in the region are presented in chapters Eleven and Twelve respectively.

CHAPTER TWO

CENSUS CONCEPTS, DEFINITIONS AND METHODOLOGY

2.1 Introduction

The primary objective of the 2010 PHC was to provide information on the size, 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 the population and housing stock 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 such 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 and 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 during the 2010 Population and Housing Census.

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 the 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 the 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 and 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, National Development Planning Commission (NDPC), United Nations Population Fund (UNFPA), Electoral Commission and the 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 Upper West 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 Geographic Information System Unit of the Survey and Mapping Division of the Lands Commission.

Updating of the 2000 PHC enumeration areas in the region was faced with a number of challenges including the problem of demarcating fast growing areas. One other major challenge for the mapping teams was the reconciliation of administrative boundaries following the creation of new districts. Field cartographic work in the region was completed in November, 2008.

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 the 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 the 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 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 supervisor 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 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 questions, 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 the trial census guided 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 and the 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 publicity for the trial census and was restricted to the six trial census districts. For this phase, the publicity was mostly through direct community interaction 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 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 the main census included jingles, posters, banners, car stickers, brochures, handbills, flyers and t-shirts. These materials were distributed freely

through the 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 the Information Service Department vans, 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
- 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 some criteria for selecting field personnel. Using the developed criteria, an online recruitment process was adopted for the selection of interested persons from all the ten regions of Ghana. 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 following which the names were posted to the districts for interview 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 officials from Ghana Education Service (GES) and the MDAs. In August 2010, a one-week training programme was conducted at the national level for all district level trainers. This was to ensure standardized training. After the training of the district level trainers, they in-turn organized training for field personnel in their respective districts.

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

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

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

2.3 Census Enumeration

2.3.1 Enumeration

In the 2010 PHC, people were enumerated at where they were on census night (de facto) as in all the four post-independence censuses (1960, 1970, 1984, and 2000) conducted in the country and not at where they usually resided (de jure). The de facto count was adopted because it is based on physical presence on a defined date and therefore it is simple, straightforward, and easy to interpret as well as minimizes the risks of under-enumeration and over enumeration. The reference period, the census night, was fixed for 26th 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 identified possible locations of out-door sleepers in the region. This was to assist the officials to plan on how to enumerate the floating population. 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 the census operations. Findings from the 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 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 the region. Systematic sampling with probability proportional to size (number of households) was applied in the selection of 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.
- Regional differentials were 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 were 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 Upper West 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 Upper West 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 faced by the Regional Census office was the late delivery of bags/satchels that were to be used for the 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 the 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 Upper West 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 the 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 unattended 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 the 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 have been 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 was 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 were 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 a job 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 reason of not being economically active. Economically not active persons included homemakers, students, retired persons, the disabled and persons who were unable to work due to their age or ill-health.

Occupation

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

before becoming unemployed. If a person was engaged in more than one occupation, only the main one was considered.

Industry

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

Employment Status

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

Employment Sector

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

Disability

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

Information Communication Technology (ICT)

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

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

Fertility

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

Mortality

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

Agriculture

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

Housing Conditions and Facilities

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

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

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

CHAPTER THREE

POPULATION SIZE, COMPOSITION AND AGE-SEX STRUCTURE

3.1 Introduction

Population composition is the description of a population according to characteristics such as age, sex, marital composition, ethnicity, education and occupation. Population size, composition and age-sex structures are critical in understanding the components of population variation and change, that is, fertility, mortality and migration dynamics of any country. The age-sex structures are useful for population projections. A country's population composition, for example, greatly influences its needs and wellbeing. The objective of this chapter is to analyse the size, composition, age-sex structure, and changes in the Upper West Region's population based on the 2010 Population and Housing Census. This chapter also discusses these characteristics in terms of size and distribution across districts, sex ratio, and nationality of persons enumerated during the census.

3.2 Population Size and Change

The 2010 Population and Housing Census (PHC) recorded a population size of 702,110 for the Upper West Region. The figure is the lowest among the 10 regions of Ghana.

Among the districts in the Upper West Region, Wa Municipal recorded the largest population size, 107,214 or 15.3 percent of the total population of the region. Sissala West reported the smallest population share (7.1%).

Table 3.1: Population by District

District	Population	Share of district population (%)
Total	702,110	100.0
Wa West	81,348	11.6
Wa Municipal	107,214	15.3
Wa East	72,074	10.3
Sissala East	56,528	8.1
Nadowli	94,388	13.4
Jirapa	88,402	12.6
Sissala West	49,573	7.1
Lambussie Karni	51,654	7.4
Lawra	100,929	14.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3 Urban and Rural Distribution

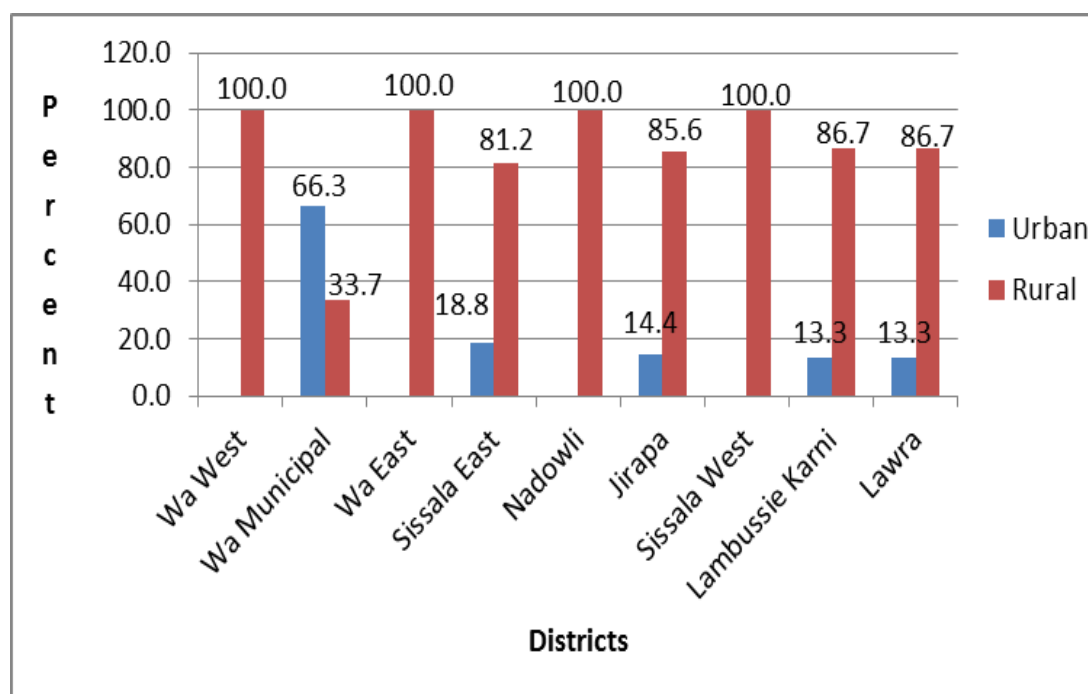
Table 3.2 shows the proportion of the population in Upper West Region living in urban and rural areas. The data reveal that only a small proportion of the population (16.3%) lived in the urban areas compared to the proportion of the population in rural areas (83.7%). Urban and rural population also varies across districts. Wa Municipal recorded the highest (66.3%) concentration of urban dwellers. Wa West, Wa East, Nadowli and Sissala West are completely rural communities (100.0%).

Table 3.2: Urban and rural population distribution by district

District	Total	Urban	Rural
Total	702,110	114,653	587,457
%	100.0	16.3	83.7
Wa West	81,348	-	100.0
Wa Municipal	107,214	66.3	33.7
Wa East	72,074	-	100.0
Sissala East	56,528	18.8	81.2
Nadowli	94,388	-	100.0
Jirapa	88,402	14.4	85.6
Sissala West	49,573	-	100.0
Lambussie Karni	51,654	13.3	86.7
Lawra	100,929	13.3	86.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 3.1: Urbanisation rates by district



Source: Ghana Statistical Service, 2010 Population and Housing Census

3.5 Age and Sex Structure

The age and sex structure of the population is influenced by birth and death rates, as well as internal and international migration. Table 3.3 and Figure 3.2 indicate the age structure for both male and female in the Upper West Region for the 2000 and 2010 Population and Housing Censuses (PHC). Both censuses showed that there were more females than males but there are variations within the various age groups. For example, there are more males than females in the age groups from 0 to 19 years. There are, however, more females than

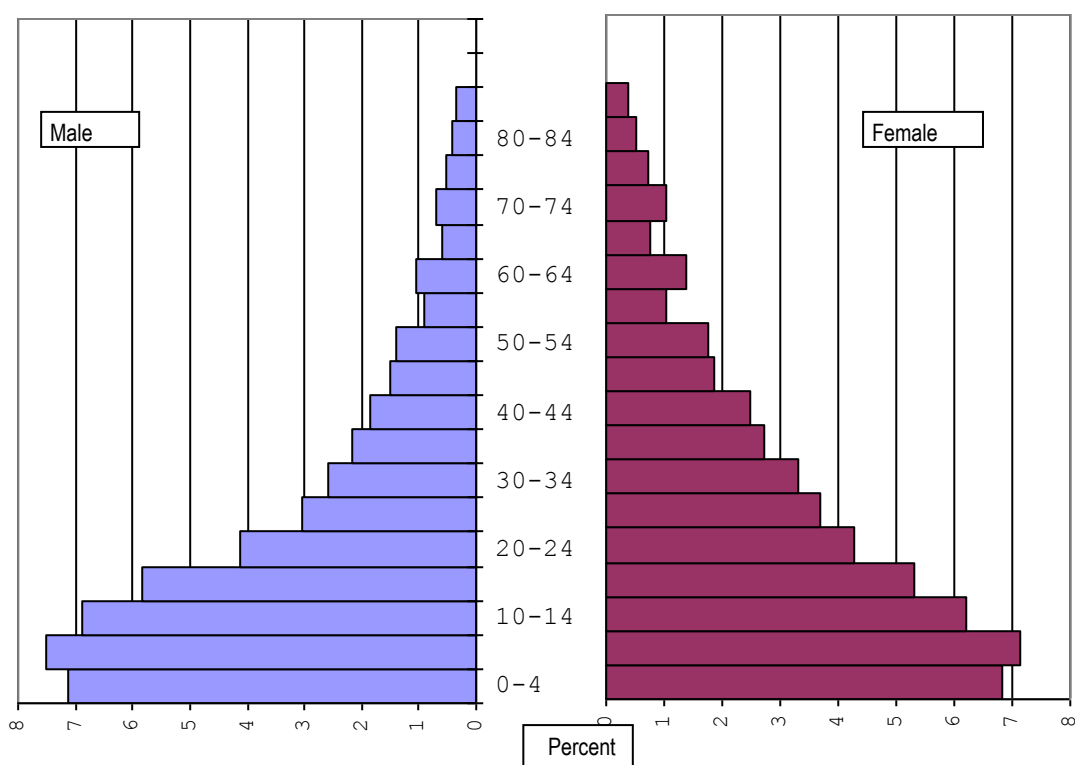
males for the age groups from 20-69 years. In 2000, male population for age 70-85 years and older was higher than for females. But in 2010, females were more numerous in this category.

Table 3.3: Age sex structure, 2000 and 2010

Age Group	2000			2010			Increase over 2000 (%)
	Male	Female	Total	Male	Female	Total	
Total	47.9	52.1	576,583	48.6	51.4	702,110	21.8
Under 5	49.5	50.5	85,576	51.0	49.0	97,943	14.4
5-9	51.0	49.0	96,350	51.4	48.6	102,842	6.7
10-14	52.9	47.1	68,346	52.7	47.3	91,913	34.5
15-19	52.3	47.7	56,232	52.4	47.6	78,336	39.3
20-24	45.4	54.6	39,185	49.2	50.8	58,949	50.4
25-29	42.0	58.0	38,546	45.2	54.8	47,184	22.4
30-34	40.9	59.1	33,870	43.7	56.3	41,413	22.3
35-39	42.4	57.6	28,188	44.1	55.9	34,372	21.9
40-44	44.3	55.7	26,512	43.0	57.0	30,509	15.1
45-49	46.4	53.6	21,666	44.2	55.8	23,640	9.1
50-54	42.5	57.5	18,745	44.2	55.8	22,250	18.7
55-59	44.7	55.3	12,288	47.2	52.8	13,552	10.3
60-64	42.7	57.3	15,699	43.1	56.9	16,860	7.4
65-69	44.8	55.2	10,021	44.6	55.4	9,602	(4.2)
70-74	50.2	49.8	8,077	40.6	59.4	12,299	(7.8)
75-79	51.8	48.2	4,428	41.9	58.1	8,641	(80.0)
80-84	51.0	49.0	5,647	44.1	55.9	6,651	(88.0)
85+	54.6	45.4	7,207	47.9	52.1	5,154	(28.0)

Source: Ghana Statistical Service, 2010 Population and Housing Census

Fig. 3.2: Population pyramid



Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6 Dependency Ratio

Table 3.4 shows that the dependency ratio for the Upper West Region was 91.0. This is far higher than the national figure of 44.3. The dependency ratio varied among the districts. Those that recorded the highest dependency ratios are Wa West (105.6) and Wa East (105.6), followed by Sissala West (101.6). The district with the lowest dependency ratio is Wa Municipal (64.6), which is below the regional level. It should be noted that the high dependency ratio observed for some of the districts are partly influenced by out-migration of certain segments of the population (e.g. those within age groups from 15-64 years old) to the south in search of jobs, leaving behind a large number of dependants. Large dependency ratios have negative economic implications such as low savings, reduction in government income from taxation and investment as well as increase in government expenditure.

Table 3.4: Dependency and working population by sex

District	Age group	Male	Female	Both sexes	Total dependency ratio
Upper West	<15	44.3	39.2	41.7	91.0
	15 - 64	50.3	54.1	52.3	
	65+	5.4	6.7	6.0	
Wa West	<15	48.5	42.7	45.5	105.6
	15 - 64	45.8	51.4	48.6	
	65+	5.7	5.9	5.8	
Wa Municipal	<15	35.2	34.7	34.9	64.6
	15 - 64	60.9	60.2	60.7	
	65+	3.8	5.1	4.5	
Wa East	<15	48.2	45.0	46.6	105.6
	15 - 64	46.9	50.4	48.6	
	65+	4.9	4.7	4.8	
Sissala East	<15	44.0	39.7	41.8	86.3
	15 - 64	51.3	55.4	53.4	
	65+	4.7	4.9	4.8	
Nadowli	<15	44.2	38.3	41.1	93.2
	15 - 64	49.7	53.5	51.7	
	65+	6.0	8.3	7.2	
Jirapa	<15	46.9	39.2	42.8	98.6
	15 - 64	47.1	53.0	50.2	
	65+	6.0	7.7	6.9	
Sissala West	<15	48.1	42.5	45.2	101.6
	15 - 64	47.2	51.5	49.4	
	65+	4.7	6.0	5.3	
Lambussie Karni	<15	47.3	38.8	42.9	98.0
	15 - 64	46.9	53.8	50.5	
	65+	5.7	7.4	6.6	
Lawra	<15	42.5	36.4	39.3	88.5
	15 - 64	51.1	54.9	53.0	
	65+	5.4	8.7	7.6	

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.7 Sex Ratio for the Districts

Sex ratio indicates the number of males per 100 females. Table 3.5 shows that the sex ratio for the Upper West Region is 94.5 and this indicates that there is a sharp drop of males over females. The sex ratios vary among districts. The sex ratio is highest for Wa East (102.0), with Wa West (97.8) and Wa Municipal (97.7) also recording relatively high ration. Jirapa reported the lowest sex ratio of 88.9.

Table 3.5: Population by sex and sex ratio (males to 100 females) by district

District	Population		Total Pop.	Sex Ratio
	Male	Female		
Upper West	341,182	360,928	702,110	94.5
Wa West	40,227	41,121	81,348	97.8
Wa Municipal	52,996	54,218	107,214	97.7
Wa East	36,396	35,678	72,074	102.0
Sissala East	27,503	29,025	56,528	94.8
Nadowli	44,724	49,664	94,388	90.1
Jirapa	41,592	46,810	88,402	88.9
Sissala West	24,151	25,422	49,573	95.0
Lambussie Karni	24,952	26,702	51,654	93.4
Lawra	48,641	52,288	100,929	93.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.8 Nationality

The 2010 PHC defines nationality as the country to which a person belongs. It draws a distinction between Ghanaians and other nationals. The definition grouped Ghanaian nationals into Ghanaian by birth, Ghanaian by naturalization and Ghanaian with dual nationality. Table 3.6 presents information on nationality in the Upper West Region. The data show that 93.6 percent of a total regional population of 702,110 are Ghanaians by birth while 0.9% are Ghanaians by naturalization and the rest are non-Ghanaians. There are variations by district. For example, Wa Municipal has the highest percentage of Ghanaians by birth (15.3%), second is Lawra (14.7%) followed by Nadowli (13.6%). The district with the lowest percentage of Ghanaians by birth is Sissala West. Wa Municipal again has the largest proportion of Ghanaians by naturalization (16.9%) followed by Nadowli (12.5%) and Lambussie Karni (12.1%). For non-Ghanaians, the percentage is highest for Lambussie Karni (20.7%), followed by Wa East (16.4%). The district with the lowest proportion of non-Ghanaians is Sissala West (6.9%).

Table 3.6: Population by nationality and district

District	Population	Ghanaian Nationality by		Non-Ghanaian
		Birth	Naturalization	
Upper West	702,110	100.0	100.0	100.0
Wa West	81,348	11.7	8.9	8.7
Wa Municipal	107,214	15.3	16.9	12.2
Wa East	72,074	9.8	10.8	16.4
Sissala East	56,528	7.8	9.6	10.6
Nadowli	94,388	13.6	12.5	9.0
Jirapa	88,402	12.8	9.9	7.5
Sissala West	49,573	7.0	8.2	6.9
Lambussie Karni	51,654	7.3	12.1	20.7
Lawra	100,929	14.7	11.0	7.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.9 Birthplace and Migratory Patterns

Birthplace and migratory patterns are analysed by comparing locality of birth with locality of enumeration to provide an indication of migratory movements. However, the comparison gives only a crude measure of migration. The reason is that a person may have migrated out for about a year to work and may return to his or her birthplace before or on census night. Overall, Table 3.7 shows that 98.6 percent of people in the Upper West Region were enumerated in the locality of enumeration in the region. There are however variations in districts. The percentage of those enumerated in same locality of enumeration ranges from a high 94.0 percent in Lawra to a low 72.4 percent in Sissala East.

Table 3.7: Population by birthplace and district

District	Total = N	Total = %	Same Locality	Different Locality (Same Region)	Other Region in Ghana	Outside Ghana
Upper West	702,110					
Wa West	81,348	99.9	90.5	4.7	3.5	1.2
Wa Municipal	107,214	100.0	76.8	8.2	14.5	0.5
Wa East	72,074	99.9	79.6	15.3	2.5	2.5
Sissala East	56,528	99.9	72.4	18.9	4.6	4.0
Nadowli	94,388	99.9	78.5	13.3	7.5	0.6
Jirapa	88,402	99.2	85.7	8.2	5.2	0.1
Sissala West	49,573	99.8	78.7	14.1	3.6	3.4
Lambussie Karni	51,654	100.0	85.0	7.0	6.6	1.4
Lawra	100,929	99.8	94.0	2.0	3.6	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.10 Ethnicity

Ethnicity refers to the ethnic group to which a person belongs. This information is collected only from Ghanaians by birth and Ghanaians with dual nationality. Tables 3.8 and 3.9 present data on Ghanaians by ethnic group and by district in the Upper West Region. The data show clearly that Mole-Dagbani is the predominant ethnic group in the region with 73.0% out of a Ghanaian population of 675,367. There are, however, district variations. The Mole-Dagbani form an overwhelming majority in almost all the districts – Jirapa (96.4%), Lawra (96.5%), Nadowli (88.3%), Wa Municipal (80.4%), Wa West (79.4%), Wa East (69.1%), Lambussie Karni (58.0%) – except Sissala East (4.3%) and Sissala West (23.1%) where the Grusi ethnic group forms the majority. Other indigenous ethnic groupings collectively constituted an additional 2.3 percent of the population in the region, while all Akan ethnic groups put together constitute 1.2 percent.

Table 3.8: Ghanaians by ethnic group and district

District	Akan	Ga- Dangbe	Ewe	Guan	Gurma	Mole- Dagbani	Grusi	Mande	Other	Total = N	Total = %
Upper West	1.2	0.1	0.3	0.7	0.9	66.1	27.8	0.3	2.3	675,367	100.0
Wa West	0.3	0.0	0.1	0.1	0.0	79.4	18.9	0.2	0.9	78,936	100.0
Wa Municipal	5.1	0.4	0.9	1.6	6.7	80.4	2.3	0.4	2.0	103,458	100.0
Wa East	0.4	0.0	0.0	1.0	0.0	69.1	24.7	0.1	4.6	67,657	100.0
Sissala East	0.9	0.1	0.2	0.2	0.0	4.3	92.1	0.0	2.1	52,712	100.0
Nadowli	0.6	0.1	1.2	1.6	1.1	88.3	5.0	0.4	1.7	91,597	100.0
Jirapa	0.4	0.0	0.1	1.4	0.3	96.4	0.5	0.3	0.7	86,010	100.0
Sissala West	0.6	0.0	0.0	0.1	0.0	23.1	72.9	0.2	3.0	47,385	100.0
Lambussie Karni	2.4	0.2	0.4	0.1	0.0	58.0	33.1	0.7	4.9	49,117	100.0
Lawra	0.5	0.0	0.2	0.1	0.2	96.5	1.0	0.5	1.0	98,495	100.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.11 Religion

There are three main religions in the region. Christianity (comprising Catholics, Protestants, Pentecostal/Charismatic, and other denominations) leads with 44.5 percent, followed by Islam (35.6%) and African traditional religions (13.9%). Christians constitute the largest religious group in five of the nine districts – Lawra (72.3%), Jirapa (65.9%), Nadowli (62.8%), Lambussie Karni (50.7%) and Wa West (38.5%). It can be seen that Christians have a very strong presence in Lawra. Islam, on the other hand, has its strongest presence in Sissala East (88.0%), Sissala West (70.3%), Wa Municipal (65.9%) and Wa East (57.9%). Adherents of traditional religion are largely in Wa West with 29.5% of the population and a fairly good presence in Lambussie Karni (19.2%), Jirapa (18.8%) and Lawra (16.9%). Catholics constitute the majority of Christians in all districts, ranging from a low 5.5 percent in Sissala East to a high 63.9 percent in Lawra. The Pentecostal/Charismatic group is the second largest denomination, after Catholics. Others include.

There is a slight variation between male and female adherents. Female Christians are more than their male counterparts in almost all the districts except in Wa Municipal where the percentage is lower for the female Christians than their male counterpart. On the other hand the percentage of female Islam adherents is higher for males than for females in almost all the districts except in Wa Municipal where more females than males profess the Islam religion.

Table 3.9: Distribution of population by religious affiliation and sex

	Wa West	Wa Muni- cipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam- bussie Karni	Lawra
Both sexes	81,348	107,214	72,074	56,528	94,388	88,402	49,573	51,654	100,929
No Religion	8.0	0.6	3.0	0.3	3.8	4.8	1.4	4.4	4.0
Catholic	21.1	19.0	16.0	5.5	52.0	62.2	11.8	45.9	63.9
Protestants	6.0	3.5	4.1	1.8	3.2	1.2	0.7	1.0	3.5
Pentecostal/Charismatic	9.8	5.0	3.7	2.1	5.6	2.3	1.0	2.6	3.9
Other Christian	1.7	1.5	2.5	0.6	2.0	0.2	0.1	1.2	1.0
Islam	23.5	65.9	57.9	88.0	23.9	10.4	70.3	25.5	6.6
Traditionalist	29.5	4.1	12.7	1.4	9.2	18.8	14.4	19.2	16.9
Other	0.4	0.4	0.1	0.2	0.4	0.1	0.3	0.2	0.2
Male	40,227	52,996	36,396	27,503	44,724	41,592	24,151	24,952	48,641
No Religion	8.3	0.6	2.9	0.3	3.9	5.1	1.3	4.3	4.2
Catholic	20.6	18.5	16.2	5.3	50.2	61.0	10.9	45.4	63.3
Protestants	6.0	3.9	4.1	1.8	3.0	1.1	0.7	1.1	3.4
Pentecostal/Charismatic	9.3	5.5	3.5	2.0	5.3	2.2	0.8	2.8	3.7
Other Christian	1.7	1.6	2.3	0.6	1.9	0.2	0.1	1.2	1.1
Islam	23.7	65.4	58.0	88.1	25.1	10.9	72.2	26.4	6.7
Traditionalist	30.1	4.1	12.9	1.7	10.3	19.5	13.6	18.7	17.5
Other	0.4	0.5	0.2	0.2	0.4	0.1	0.3	0.1	0.2
Female	41,121	54,218	35,678	29,025	49,664	46,810	25,422	26,702	52,288
No Religion	7.7	0.6	3.0	0.3	3.8	4.6	1.5	4.5	3.8
Catholic	21.6	19.5	15.8	5.7	53.6	63.4	12.6	46.5	64.5
Protestants	6.0	3.1	4.2	1.8	3.3	1.2	0.7	0.9	3.5
Pentecostal/Charismatic	10.3	4.5	3.8	2.3	5.9	2.4	1.1	2.5	4.1
Other Christian	1.8	1.4	2.7	0.6	2.1	0.2	0.2	1.2	1.0
Islam	23.4	66.4	57.8	87.9	22.8	10.0	68.6	24.6	6.6
Traditionalist	28.8	4.0	12.5	1.1	8.2	18.1	15.1	19.7	16.3
Other	0.4	0.4	0.1	0.2	0.4	0.1	0.3	0.2	0.2

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

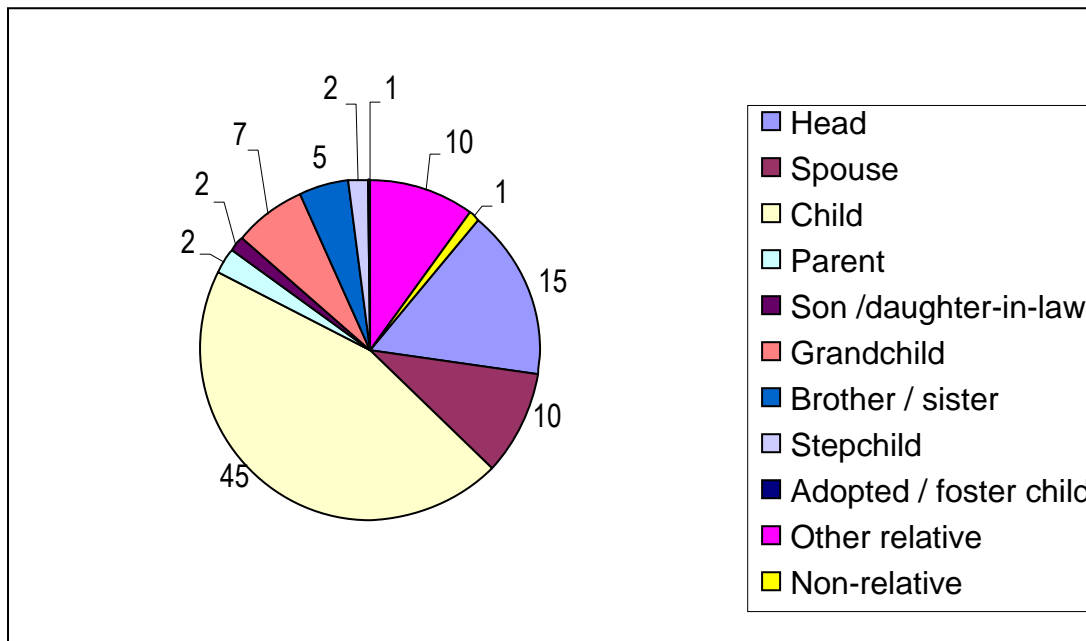
CHAPTER FOUR

HOUSEHOLD SIZE, STRUCTURE AND COMPOSITION

4.1 Introduction

The 2010 Population and Housing Census (PHC) defines household as a single or a group of persons who lived together in the same house or compound and shared the same house keeping arrangement and are catered for as one unit. A household has a head who may be a male or female member of the household and who is recognised as head by the other members of the household regardless of age or sex. The head of the household is the person who has economic and social responsibility for the well-being of household members

Figure 4.1: Household composition



Source: Ghana Statistical Service, 2010 Population and Housing Census

4.2 Household Composition and Structure

Household composition and structure in Ghana has a common feature in that the heads are predominantly male. Figure 4.1 portrays household composition in the Upper West Region. It shows that household heads constitute 15.0 percent of total household composition while spouses and children constituted 55.5 percent of all households. The rest (28.5%) were made up of parent/parent-in-law, son/daughter-in-law, grandchildren, brothers/sisters, step children, adopted/foster children, other relatives and non-relatives.

Table 4.1 shows that there are four major components of the household structure in Ghana, namely: household heads (15.0%), spouses (10.0%), children (45.5%) and other relatives (28.5%).

The fact that other relatives constitute a significant proportion of household members suggests that the extended family system persists in Ghana and is common in the Upper West Region where extended family members live with the nuclear family.

Table 4.1: Household composition by age

Household composition	Population	Percent	Age Group		
			0-14	15-64	65+
All relationships	688,333	100.0	42.0	52.0	6.0
Head	110,175	15.0	-	83.1	16.9
Spouse (wife/husband)	69,017	10.0	-	93.9	6.1
Child (son/daughter)	313,295	45.5	66.9	33.0	0.1
Parent/parent-in-law	16,108	2.3	-	36.1	63.9
Son/daughter-in-law	10,175	1.5	-	100.0	-
Grandchild	47,771	6.9	83.9	16.1	-
Brother/sister	32,855	4.8	24.2	72.1	3.7
Stepchild	10,806	1.6	67.3	32.7	-
Adopted/foster child	3,121	0.5	68.2	31.8	-
Other relative	69,906	10.2	30.1	60.4	9.5
Non-relative	5,104	0.7	13.5	79.2	7.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

More than four-fifths of household heads (83.1%) were between ages 15 and 64. Similarly, 93.9 per cent of spouses were between 15 and 64 years. Almost two-thirds (63.9%) of parents and parents-in-law were 65 years and over. The ages of children and grandchildren were between 0 and 14 years.

4.3 Household Headship

Table 4.2 shows that in the region, male-headed households constituted about three-fourths of all households, or about three times as many as female-headed households. Among the districts, the proportion of male-headed households ranged from a high of 87.1 percent in Wa East to a low of 72.3 percent in Lambussie Karni. Nadowli had the highest proportion of female-headed households (32.0%). Comparatively, male headed-households in urban areas were twice as many as female-headed households in the region and in the districts. For instance, in the Wa Municipality, the proportion of households headed by males in urban areas was higher (69.7%) than female-headed households (30.3%). In rural areas, the gap is even wider (78.1% to 21.1%). For the region as a whole, male-headed households are 77.4 percent while female-headed households are 22.6 percent of the total.

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

District/Type of locality	Population	Total	Sex	
			Male headship	Female headship
Upper West				
Total	110,175	100.0	75.3	24.7
Urban	22,628	100.0	67.0	33.0
Rural	87,547	100.0	77.4	22.6
Wa West				
Total	11,486	100.0	80.3	19.7
Urban	-	-	-	-
Rural	11,486	100.0	80.3	19.7
Wa Municipal				
Total	18,891	100.0	72.1	27.9
Urban	13,541	100.0	69.7	30.3
Rural	5,350	100.0	78.1	21.9
Wa East				
Total	10,768	100.0	87.1	12.9
Urban	-	-	-	-
Rural	10,768	100.0	87.1	12.9
Sissala East				
Total	8,652	100.0	78.8	21.2
Urban	2,294	100.0	63.4	36.6
Rural	6,358	100.0	84.3	15.7
Nadowli				
Total	15,210	100.0	68.0	32.0
Urban	-	-	-	-
Rural	15,210	100.0	68.0	32.0
Jirapa				
Total	13,911	100.0	70.6	29.4
Urban	2,928	100.0	60.3	39.7
Rural	10,983	100.0	73.3	26.7
Sissala West				
Total	7,116	100.0	79.3	20.7
Urban	-	-	-	-
Rural	7,116	100.0	79.3	20.7
Lambussie Karni				
Total	7,524	100.0	72.3	27.7
Urban	1,161	100.0	62.5	37.5
Rural	6,363	100.0	74.1	25.9
Lawra				
Total	16,617	100.0	76.1	23.9
Urban	2,704	100.0	66.0	34.0
Rural	13,913	100.0	78.1	21.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.4 Household Size

Table 4.3 provides data on the distribution of households according to size of household. For the region as a whole, single-person households formed a low of 7.3 percent of total households while household sizes of 10 or more persons constituted the highest proportion – 17.2 per cent – of total households. Wa West had the largest proportion of households of 10 or more (22.6%), followed by Sissala West (21.8%) and Lambussie Karni (20.9%). Wa Municipal reported the lowest proportion (14.3%) of households with 10 or more persons.

Table 4.3: Households by size and district

District	Household size										Total	Population
	1	2	3	4	5	6	7	8	9	10+		
Upper West	7.3	7.8	9.4	11.0	11.9	11.5	9.9	8.0	5.9	17.2	100.0	110,175
Wa West	4.0	5.8	8.2	10.1	11.4	11.9	10.5	9.0	6.5	22.6	100.0	11,486
Wa Municipal	12.3	12.7	11.6	12.0	10.5	9.7	7.0	5.9	4.1	14.3	100.0	18,891
Wa East	3.5	4.8	8.7	12.2	13.0	13.3	10.7	9.0	6.5	18.3	100.0	10,768
Sissala East	7.6	7.1	9.0	11.3	12.7	11.3	9.1	7.5	6.0	18.5	100.0	8,652
Nadowli	7.0	7.8	10.0	11.2	11.7	12.0	9.7	8.2	6.0	16.5	100.0	15,210
Jirapa	8.1	7.6	8.5	10.6	12.1	11.5	10.1	7.9	6.0	17.5	100.0	13,911
Sissala West	5.6	6.2	7.9	9.5	11.5	10.6	10.7	8.7	7.5	21.8	100.0	7,116
Lambussie Karni	6.3	6.8	8.0	9.2	12.0	11.2	10.6	8.4	6.8	20.9	100.0	7,524
Lawra	6.9	7.3	9.6	11.1	12.9	12.5	12.1	9.1	6.2	12.4	100.0	16,617

Source: Ghana Statistical Service, 2010 Population and Housing Census

Across districts, Wa Municipality recorded the highest percentage of single-person households (12.3%) while Wa East (3.5%) had the lowest. Wa Municipal also had the highest proportion of two-person (12.7%) and three-person (11.6%) households while also having the lowest proportions of larger sized households (ranging from 6 to 10+ persons).

CHAPTER FIVE

MARITAL CHARACTERISTICS

5.1 Introduction

Marital status is an important factor that influences population growth. Information on marital status is important for the planning of housing development as well as understanding the problems of dependency and the supply of labour. This chapter examines marital characteristics by type of locality, sex, age, level of education, religion and economic activities.

Marriage is a social event which includes formal unions that are legal, and/or traditional. It can be a religiously sanctioned or an informal cohabitation of partners. Across most cultures in Ghana, marriages are regulated, and in some areas, young girls are given out into marriage.

5.2 Marital Status by District

Table 5.1 shows that more than half (51.1%) of the population 15 years or older in the Upper West Region was married. Those who have never married formed 40.0 percent of the population aged 15 years and above. Widowhood stood at 6.6%, while divorced was 0.9 percent, separation 0.8 percent and those living together in informal consensual union 0.7 percent. There were variations in marital patterns across districts. For instance, in Wa Municipal about 49 percent were never married, which was the highest proportion among the districts. Wa East had the lowest proportion 32.6 percent of never married. For the rest of the districts, the proportions range from 36.8 in Lambussie Karni to 40.4 in Sissala East.

Table 5.1: Population 15 years and older by district and marital status

District	Never married	Informal consensual union living together	Married	Separated	Divorced	Widowed	Total	Population
Total (Number)	184,398	3,114	235,341	3,682	4,091	30,328		460,954
Total (%)	40.0	0.7	51.1	0.8	0.9	6.6	100.0	
Wa West	40.7	0.5	51.1	1.0	0.9	5.9	100.0	51,205
Wa Municipal	48.2	0.5	45.4	0.7	1.1	4.0	100.0	76,378
Wa East	32.6	0.4	60.6	0.6	1.1	4.7	100.0	43,505
Sissala East	40.4	0.5	52.7	0.8	1.0	4.7	100.0	36,712
Nadowli	40.1	0.5	48.9	1.0	0.9	8.5	100.0	62,918
Jirapa	37.5	0.9	52.1	0.6	0.6	8.2	100.0	57,346
Sissala West	38.9	0.5	52.7	1.2	0.6	6.2	100.0	30,808
Lambussie Karni	36.8	1.0	54.1	0.6	0.9	6.6	100.0	33,371
Lawra	38.8	1.2	49.3	0.7	0.8	9.1	100.0	68,711

Source: Ghana Statistical Service, 2010 Population and Housing Census

The majority in the Upper West Region – 51.1 percent of population 15 years and older – was married. Table 5.1 shows that the highest proportion of the population 15 years and older that was married was in Wa East (60.6%) and lowest in Wa Municipal (45.4%). Consensual union or informal type of marriage was not a common practice in the region. This is seen in the fact that apart from three districts – Lawra (1.2%), Lambussie Karni (1.0%) and Jirapa (0.9%) – the proportion in consensual unions in other districts was below the regional average of 0.7

percent. The proportion married increases with age and declines slowly from age 45-49. Divorce is relatively low but is highest from age 35-39 (11.7 %) to 55-59 (1.8%). Separation is equally low but is highest in the 30-34 bracket (1.3%) to 1.5 percent at age 45-49. Widowhood as expected, starts increasing from 13.3 percent at age 50-54 to 36.0 percent at age 70+. There were some reported cases of early marriages (12-14 years) and this constitutes almost one-tenth of those aged 12-14 years.

5.3 Marital Status by Locality and Sex

Table 5.2 shows that the proportion of the population who have never married was higher in the urban areas (47.7%) than in the rural areas (38.3%). The data also show that the proportion who never married was lower for females (31.9%) than for their male counterparts (49.1%), indicating clearly that women were more likely to marry than men. Marriage among urban dwellers was less likely (44.4%) than marriage among rural dwellers (52.5%). Among the sexes, women were more likely (54.2%) to marry than men (47.5%). The table shows that divorce was more common among the female population than their male counterparts. For the urban-rural population the data showed that divorce was higher among urban dwellers (1.2%) the rural dwellers (0.8%). The data show that 11.2 percent of the female population was widowed compared to 1.4 percent of the male population. At the same time the proportion widowed is 7.0 percent for the rural areas compared to 4.8 percent for urban dwellers. The high percentage of widowhood among the women may be due to women marrying older men. The percentage of the population in loose union is higher for urban dwellers (1.1%) compared to rural dwellers (0.6%). It is also higher for females (0.8%) than for males (0.6%) showing that it is more likely to find females living in informal or consensual union than men and that urban dwellers are more likely to practice informal or consensual union than their rural folks.

Table 5.2: Population 15 years and older by locality and marital status

Type of locality/ sex	Total	Percent	Never Married	Informal Consensual Union	Married	Separated	Divorced	Widow
Total	460,954	100.0	40.0	0.7	51.1	0.8	0.9	6.6
Urban	83,123	100.0	47.7	1.1	44.4	0.8	1.2	4.8
Rural	37,783	100.0	38.3	0.6	52.5	0.8	0.8	7.0
Male	217,296	100.0	49.1	0.6	47.5	0.6	0.8	1.4
Female	243,658	100.0	31.9	0.8	54.2	1.0	0.9	11.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.4 Marital Status by Age

Table 5.3 shows age distribution of marital status. The data shows that proportion never married was highest (92.5%) for age group 12-14 years, followed by age group 15-19 years (88.4%) and 20-24 years (64.7%). The proportion never married declined after age 20 to 24 years. On the other hand, the percentage of marriageable population increased after 15-19 years, peaking at 35-39 years (86.1%) before beginning to decline thereafter. It is interesting to note that early marriages – which can be called child marriages – amount to almost one-tenth (7.4%) of the married population. The data show that consensual or informal union was highest for age group 25-29 years (1.6%) followed by age group 30-34 years (1.1%). As

expected, the proportion widowed increased with age, rising from 0.2% for age group 15-19 years to 36.0 percent for age group 70 and above.

Table 5.3: Population 15 years and older by age and marital status

Age Group	Total	Percent	Never Married	Informal Consensual Union	Married	Separated	Divorced	Widowed
Total	460,954	100.0	40.0	0.7	51.1	0.8	0.9	6.6
12-14	51,542	100.0	92.5	0.1	7.4	0.0	0.0	0.0
15-19	78,336	100.0	88.4	0.4	10.8	0.1	0.1	0.2
20-24	58,949	100.0	64.7	1.3	32.8	0.5	0.3	0.4
25-29	47,184	100.0	33.5	1.6	62.3	1.0	0.8	0.8
30-34	41,413	100.0	14.0	1.1	80.5	1.3	1.2	1.9
35-39	34,372	100.0	6.7	0.7	86.1	1.5	1.7	3.2
40-44	30,509	100.0	4.5	0.5	85.4	1.4	1.8	6.5
45-49	23,640	100.0	3.9	0.4	83.1	1.5	1.7	9.4
50-54	22,250	100.0	2.9	0.3	80.6	1.3	1.7	13.3
55-59	13,552	100.0	2.8	0.3	77.9	1.1	1.8	16.1
60-64	16,850	100.0	3.0	0.3	70.7	1.1	1.3	23.6
65-69	9,602	100.0	3.6	0.2	66.7	1.1	1.5	26.8
70+	32,745	100.0	4.1	0.2	57.7	0.7	1.3	36.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.5 Marital Status by Level of Education

Table 5.4 provides information on marital characteristics by level of education. The data show that the proportion of the population 15 years or older who never married ranged from 16.7 percent for never attended, to 74.5 percent for those with a bachelor's degree, Divorce and separation were not common in the region, with regional averages of 0.9 percent and 0.8 percent respectively. Informal/consensual union was most common among the vocational/technical/commercial population (2.3%) followed by post-secondary diplomates (1.6%), middle/secondary (1.5%), post graduate certificate (1.5%). Proportion married was highest for those with middle school education (82.2 %) followed by the postgraduate certificate holders (74.3%) and never attended school (69.7%). Marriage was lowest for those with JSS/JHS (20.3%). Divorce was highest for those with middle school education (2.6%) followed by those with a post-graduate certificate (1.5%), secondary (1.3%) followed by vocational/technical/commercial, those who never attended school and post-middle/secondary certificate (all with 1.2% each). All these have percentages above the regional average. The proportion widowed is highest for never attended school (10.9%) followed by those with primary education (1.8%).

Table 5.4: Population 15 years and older by level of education and marital status

Level of education	Total	%	Never married	Informal consensual union				
				Married	Separated	Divorced	Widowed	
Total	460,954	100.0	40.0	0.7	51.1	0.8	0.9	6.6
Primary	76,672	100.0	72.0	0.5	24.9	0.4	0.4	1.8
JSS/JHS	62,373	100.0	77.9	0.7	20.3	0.3	0.4	0.4
Middle	8,282	100.0	54.4	0.7	82.2	1.8	2.6	7.4
SSS/SHS	28,375	100.0	71.7	1.1	25.6	0.6	0.5	0.4
Secondary	2,163	100.0	35.0	0.6	59.1	1.8	1.3	2.3
Vocational /tech /commercial	5,447	100.0	48.9	2.3	45.2	0.9	1.2	1.4
Post-middle/secondary certificate	5,954	100.0	39.9	1.5	52.9	1.2	1.2	3.3
Post-secondary diploma	8,392	100.0	54.0	1.6	41.7	0.6	0.7	1.4
Bachelor degree	9,438	100.0	74.5	1.1	23.4	0.4	0.3	0.4
Post-graduate certificate	712	100.0	18.8	1.5	74.3	2.1	1.5	1.7
Never attended	253,146	100.0	16.7	0.6	69.7	1.0	1.2	10.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.6 Marital Status by Religion

Table 5.5 provides data on marital status by religion. The data reported high marriage rates among the various groups, with adherents of traditional African religion having the highest rate of marriages. The data showed that the proportion never married ranged from 25.5 percent for traditionalist to 51.8 percent for charismatic. Of all the religious groups, only "no religion" (32.0%) and traditionalist (25.5%) had a proportion never married below the regional average of 40.0 percent.

Among marriageable population 15 years and older, the traditionalists lead with 62.7 percent, followed by "no religion" with 54.2 percent. Islam (52.5%) and Ahmadist (51.1%) have also higher percentage of marriage. The proportion married among the rest of the religious groups was below the regional average of 51.1 percent. It is interesting to observe (Table 5.5) that the proportion widowed is highest for those who profess no religion (10.4%) followed by the traditionalists (9.7%). The proportion of widowed is lowest for those who profess Islam (4.6%).

Table 5.5: Marital characteristics by religious affiliation

Religious affiliation	Total	Per-cent	Never married	Informal consensual union				
				Married	Separated	Divorced	Widowed	
Total	460,954	100.0	40.0	0.7	51.1	0.8	0.9	6.6
No Religion	14,507	100.0	32.0	0.7	54.2	1.2	1.3	10.4
Catholic	167,376	100.0	43.2	1.0	47.2	0.8	0.7	7.1
Protestants	14,015	100.0	48.2	1.0	42.9	1.0	1.0	6.0
Charismatic	19,925	100.0	51.8	0.8	39.0	0.8	0.9	6.7
Other Christians	5,757	100.0	47.4	0.9	44.1	0.8	1.0	5.9
Islam	160,496	100.0	40.7	0.4	52.5	0.8	1.0	4.6
Ahmadi	11,631	100.0	41.0	0.5	51.5	0.8	0.3	4.9
Traditionalist	65,909	100.0	25.5	0.4	62.7	0.8	0.9	9.7
Other	1,338	100.0	47.0	0.7	44.0	0.3	1.0	7.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.7 Marital Status by Economic Activity Status

Table 5.6 shows that among people who are 15 years and above, the proportion of employed persons married was 65.3 percent and 49.8 percent for those unemployed. The percentage of never married was highest for the inactive population (65.6%) followed by the unemployed. Informal/consensual union was most common among the unemployed (1.5%) followed by those who are employed (0.8%). Divorce and separation were highest for the unemployed (1.3% and 1.1% respectively). However, widowhood was highest for those not active (8.0%), lower for the employed (5.9 %) and lowest for the unemployed (3.7%).

Table 5.6: Population 15 years and older by economic activity and marital status

Activity status	Total	100.0	Informal					
			Never married	consensual union	Married	Separated	Divorced	Widowed
Employed	292,832	100.0	26.0	0.8	65.3	1.0	1.1	5.9
Unemployed	9,092	100.0	42.6	1.5	49.8	1.1	1.3	3.7
Not Active	159,030	100.0	65.6	0.5	24.9	0.5	0.6	8.0
Total	460,954	100.0	40.0	0.7	51.1	0.8	0.9	6.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SIX

INFORMATION COMMUNICATION TECHNOLOGY (ICT)

6.1 Introduction

Communication serves as an important tool in the economic and social lives of people. Business is transacted through communication, and the availability of effective and reliable communication channels can enhance economic activity and improve incomes. Recent developments in communication include the use of mobile phones and desktop or laptop computers and the internet.

6.2 Individual Ownership of Mobile Phones of Population 12 years and older

A little over one-fifth (21.7%) of the population aged 12 years and older in the Upper West Region owned a mobile phone (Table 6.1). The Wa Municipal district had nearly half (48.0%) of mobile phone ownership in the region while Wa West district had 9.7% of the population that owned a mobile phone.

The proportion of males (29.1%) in the region that owned a mobile phone was nearly twice that of females (15.1%). Among the male population, more than half (55.8%) of mobile phone owners resided in Wa Municipal. compared with 40.3% females mobile phone owners

Table 6.1: Population 12 years and older owning mobile phones by district and sex

District	Total		Male		Female	
	Number	%	Number	%	Number	%
All districts	99,946	21.7	63,214	29.1	36,732	15.1
Wa West	4,949	9.7	3,526	14.4	1,423	5.3
Wa Municipal	36,631	48.0	20,981	55.8	15,650	40.3
Wa East	4,498	10.3	3,456	16.0	1,042	4.8
Sissala East	7,723	21.0	4,858	28.0	2,865	14.8
Nadowli	12,318	19.6	7,884	27.4	4,434	13.0
Jirapa	9,090	15.9	6,024	23.5	3,066	9.7
Sissala West	4,449	14.4	3,236	22.3	1,213	7.4
Lambussie Karni	6,480	19.4	4,323	28.3	2,157	11.9
Lawra	13,808	20.1	8,926	27.9	4,882	13.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

About 47.9 percent of the population 12 years and older in Wa Municipal had mobile phones compared to 9.7 percent in the Wa West (Table 6.2).

Among males aged 12 years and older who owned a mobile phone, Wa Municipal (55.8%) reported the highest proportion followed by Lambussie Karni (28.3%). The proportion of females with mobile phones was low overall in relation to that of males but relatively high in Wa Municipal (6.4%).

Table 6.2: Percentage distribution of population 12 years and older owning mobile phones by sex

Sex	All districts	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
Population 12 years and older	460,954	51,205	76,378	43,505	36,712	62,918	57,346	30,808	33,371	68,711
Population 12 years and older owning mobile phones	99,946	4,949	36,631	4,498	7,723	12,318	9,090	4,449	6,480	13,808
Percentage 12+ owning mobile phones	21.7	9.7	47.9	10.3	21	19.6	15.8	14.4	19.4	20.1
Male										
Population 12 years and older	217,296	24,515	37,569	21,641	17,353	28,805	25,681	14,484	15,279	31,969
Population 12 years and older owning mobile phones	63,214	3,526	20,981	3,456	4,858	7,884	6,024	3,236	4,323	8,926
Percentage 12+ owning mobile phones	29.1	14.4	55.8	15.9	27.9	27.4	23.4	21.8	28.3	27.9
Female										
Population 12 years and older	243,658	26,690	38,809	21,864	19,359	34,113	31,665	16,324	18,092	36,742
Population 12 years and older owning mobile phone	36,732	1,423	15,650	1,042	2,865	4,434	3,066	1,213	2,157	4,882
Percentage 12+ owning mobile phone	15.1	5.3	40.3	4.8	14.8	13	9.7	7.4	11.9	13.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

More than half (50.3%) of the population 12 years and older who owned a mobile phone also lived in urban areas of the region, notably Wa Municipal (53.4%) and Sissala East (50.5%). Mobile phone ownership in rural areas is generally low (15.4%), with the exception of Wa Municipal that reported about 37 percent rural phone ownership (Table 6.3).

Table 6.3: Percentage of population 12 years and older owning mobile phones by district and type of locality

District	Total urban population 12+	Urban population 12+ owning mobile phone	Percentage 12+ urban owning mobile phone	Total rural population 12+	Rural population 12+ owning mobile phone	Percentage 12+ rural owning mobile phone
All districts	83,123	41,776	50.3	377,831	58,170	15.4
Wa West	-	-	-	51,205	4,949	9.7
Wa Municipal	51,791	27,667	53.4	24,587	8,964	36.5
Wa East	-	-	-	43,505	4,498	10.3
Sissala East	7,645	3,862	50.5	29,067	3,861	13.3
Nadowli	-	-	-	62,918	12,318	19.6
Jirapa	9,232	3,396	36.8	48,114	5,694	11.8
Sissala West	-	-	-	30,808	4,449	14.4
Lambussie Karni	4,652	2,065	44.4	28,719	4,415	15.4
Lawra	9,803	4,786	48.8	58,908	9,022	15.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Mobile phone ownership in the Upper West Region was higher among the 20-59 age groups. However, the proportion of the male population that owned mobile phones was more than twice the proportion of the female population except for certain age groups (e.g. 12-14, 15-19, 20-24 and 25-29).

Table 6.4: Percentage of population 12 years and older owning mobile phones by age and sex

Age group	Population 12+	Population 12+ owning mobile phone	Percentage 12+ owning mobile phone	Male population 12+	Male population 12+ owning mobile phone	Percentage 12+ males owning mobile phone	Female population 12+	Female population 12+ owning mobile phone	Percentage 12+ Females owning mobile phone
All ages	460,954	99,946	21.7	217,296	63,214	29.1	243,658	36,732	15.1
12-14	51,542	999	1.9	27,324	594	2.2	24,218	405	1.7
15-19	78,336	8,501	10.9	41,035	5,191	12.7	37,301	3,310	8.9
20-24	58,949	21,310	36.1	29,015	12,604	43.4	29,934	8,706	29.1
25-29	47,184	17,801	37.7	21,312	10,892	51.1	25,872	6,909	26.7
30-34	41,413	13,837	33.4	18,085	8,960	49.5	23,328	4,877	20.9
35-39	34,372	10,624	30.9	15,163	7,124	47.0	19,209	3,500	18.2
40-44	30,509	7,647	25.1	13,109	5,071	38.7	17,400	2,576	14.8
45-49	23,640	5,601	23.7	10,454	3,662	35.0	13,186	1,939	14.7
50-54	22,250	4,888	22.0	9,845	3,139	31.9	12,405	1,749	14.1
55-59	13,552	2,980	22.0	6,398	2,047	32.0	7,154	933	13.0
60-64	16,860	2,181	12.9	7,270	1,541	21.2	9,590	640	6.7
65-69	9,602	1,175	12.2	4,279	815	19.0	5,323	360	6.8
70+	32,745	2,402	7.3	14,007	1,574	11.2	18,738	828	4.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

The proportion of the population that owned mobile phones in the region increased with level of educational attainment. About 96% of the population 12 years and older with higher education owned a mobile phone and this was reflected among both males and females (Table 6.5). Among the population with higher education, the proportion of females (96.5%) who owned a mobile phone was slightly higher than that of males (95.4%).

The proportion of the unemployed population (27.9%) that owned a mobile phone was higher than that of those who were employed (23.3%). Among males, nearly equal proportions of the unemployed (32.6%) and employed (32.0%) owned mobile phones. However, among females, the proportion of unemployed owning mobile phones was much higher (23.9%) than that for employed females (15.2%). For the economically inactive population, a much higher proportion of males (22.9%) owned a mobile phone than females (14.1%) in the same category, a difference of about 9 percentage points.

According to Table 6.6, the proportion of the unemployed aged 12 years and older that owned a mobile phone was higher than that of those employed, among both males and females. However, the proportion of employed males (32.6%) that owned a mobile phone was twice that of females (15.2%).

Table 6.5: Population 12 years and older owning mobile phones by education level and sex

Education level	Population 12+	Population 12+ owning mobile phone	Percentage 12+ owning mobile phone	Male population 12+	Male population 12+ owning mobile phone	Percentage Males 12+ owning mobile phone	Female population 12+	Female population 12+ owning mobile phone	Percentage Females 12+ owning mobile phone
Total	460,954	99,946	21.7	217,296	63,214	29.1	243,658	36,732	15.1
Never attended	253,146	34,617	13.7	103,502	21,681	20.9	149,644	12,936	8.6
Primary	76,672	8,531	11.1	39,694	5,500	13.9	36,978	3,031	8.2
JHS/Middle	70,655	17,236	24.4	36,908	10,726	29.1	33,747	6,510	19.3
Secondary/SSS/SHS	30,538	14,479	47.4	18,343	9,181	50.1	12,195	5,298	43.4
Vocational/Technical/Commercial	5,447	3,265	59.9	2,587	1,652	63.9	2,860	1,613	56.4
Post middle/secondary certificate	5,954	4,781	80.3	3,395	2,650	78.1	2,559	2,131	83.3
Post-secondary diploma	8,392	7,319	87.2	5,581	4,871	87.3	2,811	2,448	87.1
Higher	10,150	9,718	95.7	7,286	6,953	95.4	2,864	2,765	96.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 6.6: Population aged 12 years and older owning mobile phones by economic activity status and sex

Economic activity status	Population 12+	Population 12+ owning mobile phone	Percentage 12+ owning mobile phone	Male population 12+	Male population 12+ owning mobile phone	Percentage Males 12+ owning mobile phone	Female population 12+	Female population 12+ owning mobile phone	Percentage Females 12+ owning mobile phone
Total	460,954	99,946	21.7	217,296	63,214	29.1	243,658	36,732	15.1
Employed	292,832	68,103	23.3	140,320	44,961	32.0	152,512	23,142	15.2
Unemployed	13,495	3,763	27.9	6,163	2,012	32.6	7,332	1,751	23.9
Not economically active	154,627	28,080	18.2	70,813	16,241	22.9	83,814	11,839	14.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.3 Use of Internet Facility of Population 12 years and older by Sex

Internet use in the Upper West Region is generally low (3.1%) but more than 70 percent of the population in Wa Municipal (72.6%) used an internet facility (Table 6.7). The proportion of females (73.5%) in Wa Municipal who used internet facility is about two percent higher than that of males. The Lawra and Nadowli districts reported 6.7 percent and 6.1 percent respectively of the population aged 12 years and older using an internet facility. The low level of usage of internet in the other districts could be attributed to the fact that they are rural communities.

Table 6.7: Distribution of population 12 years and older using internet facility by district and sex

District	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All districts	14,065	100.0	9,633	100.0	4,432	100.0
Wa West	288	2.0	197	2.0	91	2.1
Wa Municipal	10,207	72.6	6,951	72.2	3,256	73.5
Wa East	147	1.0	94	1.0	53	1.2
Sissala East	530	3.8	397	4.1	133	3.0
Nadowli	852	6.1	576	6.0	276	6.2
Jirapa	678	4.8	489	5.1	189	4.3
Sissala West	160	1.1	108	1.1	52	1.2
Lambussie						
Karni	254	1.8	186	1.9	68	1.5
Lawra	949	6.7	635	6.6	314	7.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

From Table 6.8, only about 3.1 percent of the population aged 12 years and older in the region use internet facility. The proportion of males (4.4%) who use internet is higher than the females proportion (1.8%). Within the districts, only Wa Municipal (13.4%) reported more than 10 percent of the population aged 12 years and older using an internet facility. All the other districts reported internet facility usage of less than two percent of the population. The proportion of the male population aged 12 years and older who use an internet facility was higher than that of females in all districts. In Wa Municipal, the proportion of males who used internet (18.5%) was more than twice the proportion of females (8.4%).

Table 6.8: Percentage of population 12 years and older using internet facility by district and sex

District	Popu- lation 12 years and older	Popu- lation 12 years and older using internet	Per- centage 12+ using internet	Male popu- lation 12 years and older	Male popu- lation 12 years and older using internet	Per- centage males 12+ using internet	Female popu- lation 12 years and older	Female populati on 12 years and older using internet	Percentage females 12+ using internet
All districts	460,954	14,065	3.1	217,296	9,633	4.4	243,658	4,432	1.8
Wa West	51,205	288	0.6	24,515	197	0.8	26,690	91	0.3
Wa Municipal	76,378	10,207	13.4	37,569	6,951	18.5	38,809	3,256	8.4
Wa East	43,505	147	0.3	21,641	94	0.4	21,864	53	0.2
Sissala East	36,712	530	1.4	17,353	397	2.3	19,359	133	0.7
Nadowli	62,918	852	1.4	28,805	576	2.0	34,113	276	0.8
Jirapa	57,346	678	1.2	25,681	489	1.9	31,665	189	0.6
Sissala West	30,808	160	0.5	14,484	108	0.7	16,324	52	0.3
Lambussie Karni	33,371	254	0.8	15,279	186	1.2	18,092	68	0.4
Lawra	68,711	949	1.4	31,969	635	2.0	36,742	314	0.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

One out of ten of the urban population compared to less than 2% of the rural population used internet (Table 6.9). In Wa Municipal, nearly the same proportion in urban areas (13.5%) as in rural areas (13.1%) use internet facility. However, in the Lawra district, the proportion of the urban population (4.7%) that used internet was far higher than the proportion in rural areas (0.8%).

Table 6.9: Percentage of population 12 years and older using internet facility by district and locality

District	Total urban Population 12+	Urban population 12+ using internet	Percentage of urban population 12+ using internet	Total rural population 12+	Rural population 12+ using internet	Percentage of rural population 12+ using internet
All districts	83,123	8,346	10.0	377,831	5,719	1.5
Wa West	-	-	-	51,205	288	0.6
Wa Municipal	51,791	6,986	13.5	24,587	3,221	13.1
Wa East	-	-	-	43,505	147	0.3
Sissala East	7,645	423	5.5	29,067	107	0.4
Nadowli	-	-	-	62,918	852	1.4
Jirapa	9,232	403	4.4	48,114	275	0.6
Sissala West	-	-	-	30,808	160	0.5
Lambussie Karni	4,652	69	1.5	28,719	185	0.6
Lawra	9,803	465	4.7	58,908	484	0.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 6.10 indicates that of the highest proportion of the population aged 12 years and older (9.7%) that used internet in the region was the 20-24 age group. The proportions of the younger population (12-19) and the older population 60+ who used internet was very low.

Nearly 13% of the males who used internet were within the age group 20-24 while for females the proportion was about 7 percent. In general, the proportion of the male population that used an internet facility was higher than females across all age groups in the region

Table 6.11 shows that about two-thirds of the population aged 12 years and older with higher education used an internet facility, and at about the same rate for both males and females. On the other hand, only 6.2 per cent of those with secondary school education used the internet, with a higher proportion for males than for females – 6.8 percent and 5.3 percent respectively. Also, there was low patronage of internet facilities by employed persons (Table 6.12) compared to the unemployed and the economically not active. While less than 2.0% of the employed used an internet facility, 4.8 percent of the unemployed and 5.3% of the economically not active used the facility. This rising trend was also true for females, but at a significantly lower level. Overall, internet use by females in the region was generally low compared with that of males.

Table 6.10: Percentage of population 12 years and older using internet facility 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	Percentage males 12+ using internet	Female population 12 years and older	Female population 12 years and older using internet	Percentage females 12+ using internet
All ages	460,954	14,065	3.1	217,296	9,633	4.4	243,658	4,432	1.8
12-14	51,542	209	0.4	27,324	126	0.5	24,218	83	0.3
15-19	78,336	1,557	2.0	41,035	896	2.2	37,301	661	1.8
20-24	58,949	5,706	9.7	29,015	3,674	12.7	29,934	2,032	6.8
25-29	47,184	2,600	5.5	21,312	1,914	9.0	25,872	686	2.7
30-34	41,413	1,435	3.5	18,085	1,102	6.1	23,328	333	1.4
35-39	34,372	801	2.3	15,163	629	4.1	19,209	172	0.9
40-44	30,509	525	1.7	13,109	389	3.0	17,400	136	0.8
45-49	23,640	356	1.5	10,454	266	2.5	13,186	90	0.7
50-54	22,250	398	1.8	9,845	285	2.9	12,405	113	0.9
55-59	13,552	194	1.4	6,398	149	2.3	7,154	45	0.6
60-64	16,860	124	0.7	7,270	97	1.3	9,590	27	0.3
65-69	9,602	47	0.5	4,279	33	0.8	5,323	14	0.3
70+	32,745	113	0.3	14,007	73	0.5	18,738	40	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 6.11: Percentage of population 12 years and older using internet by level of education and sex

Educational level	Population 12+ by education level	Population 12+ using internet	Percentage 12+ using internet	Male			Female		
				population 12 years and older	population 12 years and older using internet	Percentage males 12+ using internet	population 12 years and older	population 12 years and older using internet	Percentage females 12+ using internet
Total	460,954	14,065	3.1	217,296	9,633	4.4	243,658	4,432	1.8
Never attended	253,146	662	0.3	103,502	356	0.3	149,644	306	0.2
Primary	76,672	317	0.4	39,694	193	0.5	36,978	124	0.3
JHS/Middle	70,655	848	1.2	36,908	568	1.5	33,747	280	0.8
Secondary/SSS/SHS	30,538	1,904	6.2	18,343	1,252	6.8	12,195	652	5.3
Vocational/Technical/Commercial	5,447	256	4.7	2,587	149	5.8	2,860	107	3.7
Post-middle/ secondary certificate	5,954	895	15.0	3,395	552	16.3	2,559	343	13.4
Post-secondary diploma	8,392	2,517	30.0	5,581	1,786	32.0	2,811	731	26.0
Higher	10,150	6,666	65.7	7,286	4,777	65.6	2,864	1,889	66.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 6.12: Percentage of population 12 years and older by economic activity status and sex

Educational level	Population 12+ by economic activity status	Population 12+ using internet	Percentage 12+ using internet	Male			Female		
				population 12 years and older	population 12 years and older using internet	Percentage males 12+ using internet	population 12 years and older	population 12 years and older using internet	Percentage females 12+ using internet
Total	460,954	14,065	3.1	217,296	9,633	4.4	243,658	4,432	1.8
Employed	292,832	5,201	1.8	140,320	3,780	2.7	152,512	1,421	0.9
Unemployed	9,092	434	4.8	3,949	291	7.4	5,143	143	2.8
Not economically active	159,030	8,430	5.3	73,027	5,562	7.6	86,003	2,868	3.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.4 Household ownership of Fixed Telephone line

More than 60 percent of households owning a fixed telephone line in the region lived in Wa Municipal. However, Wa West, Wa East and Sissala West, which are predominantly rural, each recorded less than 2 percent of households owning a fixed telephone line (Table 6.13).

Overall, more male-headed households owned a fixed telephone line than female-headed households across districts except in Wa Municipal which reported a higher proportion of female-headed households (69.2%) than male-headed households (60.2 %) that owned a fixed telephone line.

Table 6.13: Households owning fixed-line telephone, by district and sex of household head

District	All households		Male-headed		Female-headed	
	Number	%	Number	%	Number	%
All districts	730	100.0	571	100.0	159	100.0
Wa West	8	1.1	8	1.4	0	-
Wa Municipal	454	62.2	344	60.2	110	69.2
Wa East	12	1.6	12	2.1	0	-
Sissala East	38	5.2	31	5.4	7	4.4
Nadowli	31	4.2	23	4.0	8	5.0
Jirapa	53	7.3	41	7.2	12	7.5
Sissala West	12	1.6	9	1.6	3	1.9
Lambussie						
Karni	29	4.0	21	3.7	8	5.0
Lawra	93	12.7	82	14.4	11	6.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.5 Household ownership of Desktop or Laptop Computer

Over 60.4 percent of households in the Upper West Region that owned a desktop or laptop computer resided in Wa Municipal (Table 6.14). The proportion of female-headed households (64.2%) that owned a desktop or laptop computer in Wa Municipal was higher than the proportion of male-headed households (59.4%) that owned a desktop or laptop computer.

Table 6.14: Households owning desktop or laptop by district and sex of household head

District	All households		Male-headed		Female-headed	
	Number	%	Number	%	Number	%
All districts	4,026	100.0	3,189	100.0	837	100.0
Wa West	62	1.5	47	1.5	15	1.8
Wa Municipal	2,431	60.4	1,894	59.4	537	64.2
Wa East	31	0.8	26	0.8	5	0.6
Sissala East	303	7.5	231	7.2	72	8.6
Nadowli	312	7.7	259	8.1	53	6.3
Jirapa	331	8.2	272	8.5	59	7.0
Sissala West	51	1.3	38	1.2	13	1.6
Lambussie Karni	184	4.6	163	5.1	21	2.5
Lawra	321	8.0	259	8.1	62	7.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

Nearly 4 percent of households in the Upper West Region owned a desktop or laptop computer (Table 6.15). While Wa Municipal (12.9%) reported by far the highest proportion of households that owned a computer, Wa East (0.3%) reported the lowest proportion of households that own a computer.

Table 6.15: Percentage of households owning desktop or laptop computers by district

District	Total number of households	Households owning desktop/laptop	Percentage owning desktop/laptop
All districts	110,175	4,026	3.7
Wa West	11,486	62	0.5
Wa Municipal	18,891	2,431	12.9
Wa East	10,768	31	0.3
Sissala East	8,652	303	3.5
Nadowli	15,210	312	2.1
Jirapa	13,911	331	2.4
Sissala West	7,116	51	0.7
Lambussie Karni	7,524	184	2.4
Lawra	16,617	321	1.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SEVEN

EDUCATION AND LITERACY

7.1 Introduction

Literacy is defined as the ability to read and write a simple statement in any language with understanding. The ability to read and write is essential for the population and for the nation as literacy not only enables people to access information on all spheres of life but also enhances their ability to use it to enhance socio-economic development.

Table 7.1 shows the percentage distribution of the population 15 years and older, by sex and literacy status. The table indicates that more than a half of the population (59.5%) in Upper West Region were not literate. This is more than twice as high as the national average of 25.9 percent. The data also indicate that less than one-fourth of the population were literate in English and a Ghanaian language while about 15 percent were literate in English language only. The level of literacy was higher for males (49.5%) than for females (33.5%). The data further showed that the proportion of males (51.5%) and females (66.5%) who are not literate is far higher than the national average of 19.8 percent males and 31.5 percent of females.

Literacy data at the district level showed that 74.8 percent of the population aged 15 years and older are illiterate, which is much higher than the regional average of 59.5 percent. In six out of the nine districts (Wa West 70.6%; Wa East 74.8%; Sissala East 63.4%; Jirapa 62.0%; Sissala West 67.6%; and Lambussie Karni 62.8%), the illiteracy levels are higher than the regional average of 59.5 percent. The district with the lowest proportion of illiteracy is Wa Municipal (38.0%). Illiteracy for the male and female population is highest in Wa East (69.6% of males and 79.9% of females) and lowest in Wa Municipal (28.1% of males and 47.6% of females).

Table 7.2 shows the age-specific literacy rate among household heads. The table shows that 14.2 percent of household heads (50-59 years) are literate. The least literate group are household heads in the age group 15-19 years (0.7%).

The highest proportion of literacy among male heads is 24.6 percent for those aged 50-59 years and 5.5 percent among female household heads aged 50-59 years. Overall literacy is low and is lower among females than males.

Table 7.1: Percentage distribution of population 15 years and older by literacy level and sex

District/Sex	Total population	Not literate	English only	Ghanaian language only	English and Ghanaian language	English and French	English, French and Ghanaian language	Other
All districts	409,412	59.5	15.5	1.4	23.1	0.1	0.4	0.0
Wa West	44,301	70.6	9.2	1.3	18.7	0.0	0.1	0.0
Wa Municipal	69,747	38.0	19.1	1.5	39.4	0.2	1.8	0.0
Wa East	38,476	74.8	12.1	0.6	12.4	0.1	0.0	0.0
Sissala East	32,892	63.4	26.2	0.4	9.8	0.1	0.1	0.0
Nadowli	55,603	58.2	11.4	1.9	28.2	0.1	0.2	0.0
Jirapa	50,530	62.0	9.6	1.7	26.6	0.0	0.2	0.0
Sissala West	27,143	67.6	24.4	0.8	7.0	0.1	0.0	0.0
Lambussie Karni	29,492	62.8	18.7	1.7	16.5	0.1	0.1	0.0
Lawra	61,228	58.2	15.5	1.6	24.4	0.1	0.2	0.0
Male								
All districts	189,972	51.5	17.3	1.6	29.0	0.1	0.6	0.0
Wa West	20,722	62.0	11.4	1.7	24.7	0.0	0.2	0.0
Wa Municipal	34,329	28.1	20.5	1.6	47.4	0.2	2.2	0.0
Wa East	18,841	69.6	13.0	0.8	16.4	0.1	0.0	0.0
Sissala East	15,402	60.5	27.0	0.5	11.7	0.1	0.2	0.0
Nadowli	24,940	49.6	12.8	2.2	35.0	0.1	0.2	0.0
Jirapa	22,087	53.8	10.7	1.9	33.2	0.0	0.3	0.0
Sissala West	12,530	60.5	28.6	1.0	9.8	0.1	0.0	0.0
Lambussie Karni	13,143	52.0	22.6	2.1	22.9	0.1	0.2	0.0
Lawra	27,978	50.7	16.9	1.8	30.2	0.1	0.3	0.0
Female								
All districts	219,440	66.5	14.0	1.2	18.0	0.1	0.3	0.0
Wa West	23,579	78.2	7.3	0.9	13.4	0.0	0.1	0.0
Wa Municipal	35,418	47.6	17.7	1.5	31.7	0.1	1.4	0.0
Wa East	19,635	79.9	11.1	0.4	8.6	0.0	0.0	0.0
Sissala East	17,490	66.0	25.5	0.3	8.1	0.0	0.1	0.0
Nadowli	30,663	65.2	10.3	1.7	22.6	0.0	0.1	0.0
Jirapa	28,443	68.3	8.7	1.5	21.4	0.0	0.1	0.0
Sissala West	14,613	73.7	20.8	0.7	4.6	0.1	0.0	0.0
Lambussie Karni	16,349	71.5	15.6	1.3	11.4	0.1	0.0	0.0
Lawra	33,250	64.6	14.4	1.3	19.5	0.0	0.1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 7.2: Household heads by literacy and age

Literacy status	Age group							
	All ages	10-19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 99
Population 11 years and older	476,574	145,498	106,133	75,785	54,149	35,802	26,462	32,745
Literate household heads 11 years and older	33,166	1,011	8,732	9,014	5,875	5,086	2,331	1,117
Percentage literate household heads 11 years and older	7	0.7	8.2	11.9	10.8	14.2	8.8	3.4
Male population 11 years and older	225,453	76,516	50,327	33,248	23,563	16,243	11,549	14,007
Literate male heads 11 years and older	25,916	656	6,232	7,447	4,653	4,001	1,986	941
Percentage literate male heads 11 years and older	11.5	0.9	12.4	22.4	19.7	24.6	17.2	6.7
Female population 11 years and older	251,121	68,982	55,806	42,537	30,586	19,559	14,913	18,738
Literate female heads 11 years and older	7,250	355	2,500	1,567	1,222	1,085	345	176
Percentage female literate heads 11 years and older	2.9	0.5	4.5	3.7	4	5.5	2.3	0.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

The 2010 Population and Housing Census (PHC) states that education refers to someone “who has had a full-time education in an educational institution”. The person should spend “at least four hours a day receiving general education in which the emphasis is not on vocational skill or trade training”. The 2010 PHC collected information on school attendance for those who are attending or have attended school before, the highest level attended and the highest grade completed. Question asked were from persons aged 6 years or older.

Table 7.3 shows that slightly more than a third (33.5%) of the population 6 years and older had primary school education, while almost one fifth had junior high school education. The proportion with senior high education was 12.9 percent, while 4.3 percent had vocational/technical education and 2.7 percent had a bachelor’s degree.

At the district level, a little over half (54.0%) in Wa East had primary school education, which was the highest in the region. Wa Municipal recorded the lowest percentage (22.2%) of those who had attained primary school level education. Sissala West recorded the highest percentage (22.3%) of those who had attained JSS/JHS education. Sissala East with 16.2 percent, closely followed by Wa Municipal at 16.1 percent, had the highest proportion of people at SSS/SHS level of education. Wa Municipal with 5.4 percent also had the highest proportion of those who had attained a bachelor’s degree, double the regional average of 2.7 percent.

Table 7.3: Past school attendance of population 6 years and older by district

Level of education	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
All	84,408	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Primary	28,315	33.5	47.3	22.2	54.0	30.3	32.1	37.5	44.8	40.5	32.2
JSS/JHS	16,828	19.9	21.0	18.7	19.1	21.4	22.1	19.6	22.3	18.5	19.5
Middle	9,925	11.8	7.6	12.0	8.1	8.8	12.0	12.1	7.6	14.2	15.0
SSS/SHS	10,872	12.9	11.2	16.1	8.3	16.2	13.9	12.2	11.6	9.7	10.1
Secondary Vocational/Tech./Commercial	2,921	3.5	2.7	4.3	2.6	4.3	3.4	2.8	2.8	3.6	3.0
Post-middle/secondary certificate	3,606	4.3	1.6	4.6	1.4	4.1	4.6	3.8	2.6	4.0	6.4
Post-secondary diploma	4,414	5.2	4.6	5.7	2.9	5.1	5.1	5.8	3.2	4.0	6.3
Bachelor degree	4,742	5.6	2.9	9.5	2.7	5.9	4.4	4.0	4.0	4.2	5.0
Postgraduate (Cert. Diploma; Masters; PhD, etc.)	2,241	2.7	1.1	5.4	0.8	3.2	1.9	1.8	1.2	1.0	1.9
	544	0.6	0.2	1.4	0.0	0.6	0.4	0.4	0.1	0.3	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

7.2 Level of Education and Employment Status

Table 7.4 shows that whereas 53.6 percent of the population 15 years and older were self-employed without employee(s), 33.9 percent were contributing family workers. The proportion of self-employed without employee(s) among the never attended school category was 60.2 percent, which was higher than the regional average of 53.6 percent. The proportion of self-employed without employee(s) was also high (44.3%) for those attaining the vocational/technical/commercial educational level.

The proportion of self-employed without employees was low for those with degree or higher education (6.6%) but large for those who never attended school (60.2%) and those with vocational/technical/commercial education (44.3%). In contrast, the proportion of employees was highest among those with a degree or higher (88.0%), post-secondary diploma (79.2%) and post-middle/secondary certificate (73.0%). Self-employed with employees was highest (4.9%) among those with vocational/technical/commercial education and lowest (1.3%) among those with post-middle/secondary certificate.

Table 7.4: Percentage distribution of population 15 years and older by education level and employment status

Employment status	Number	Percent	Never attended	Basic school	Secondary/ SHS	Vocational/ Technical/ Commercial	Post middle/ secondary certificate	Post-secondary diploma	Degree or higher
Total	275,606	100.0	192,804	55,111	13,297	3,189	3,890	4,449	2,866
Employee	20,663	7.5	2.2	6.8	21.9	27.7	73.0	79.2	88.0
Self-employed without employee(s)	147,693	53.6	60.2	43.2	38.2	44.3	16.9	11.1	6.6
Self-employed with employee(s)	5,402	2.0	1.6	2.8	3.5	4.9	1.3	1.8	1.7
Casual worker	3,243	1.2	1.0	1.6	2.2	2.9	1.2	1.2	1.1
Contributing family worker	93,397	33.9	33.5	42.4	32.0	17.5	6.6	5.8	2.0
Apprentice	3,385	1.2	0.9	2.6	1.5	1.6	0.4	0.4	0.2
Domestic employee (house help)	1,384	0.5	0.5	0.4	0.4	0.8	0.3	0.4	0.1
Other	439	0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 7.5 shows the percentage distribution of population 15+ by education, employment, status and sex. Overall, a higher percentage (70.7%) of males was self-employed without employee(s) among those who have never attended school compared to females (52.3%). Generally, the higher the level of education, the lower the proportion of self-employed without employees, an observation that is true for both males and females.

Table 7.5: Percentage distribution of population 15 years and older by education level employment status and sex

Employment status/Sex	Number	Percent	Never attended	Basic school	Secondary/ SHS	Vocational/ Technical/ Commercial	Post middle /secondary certificate	Post-secondary diploma	Degree or higher
Male	130,361	100.0	82,572	29,893	8,722	1,589	2,251	3,011	2,323
Employee	10.6	10.6	3.4	8.8	22.7	29.6	67.5	77.9	87.8
Self-employed without employee(s)	59.0	59.0	70.7	44.7	39.8	45.6	21.1	12.0	6.8
Self-employed with employee(s)	2.2	2.2	1.7	2.8	3.5	5.6	1.7	2.0	1.6
Casual worker	1.4	1.4	1.0	1.9	2.3	4.0	1.5	1.5	1.1
Contributing family worker	25.5	25.5	22.0	39.6	29.8	12.8	7.3	5.5	2.1
Apprentice	0.7	0.7	0.4	1.7	1.2	1.5	0.2	0.3	0.1
Domestic employee (House help)	0.5	0.5	0.5	0.4	0.5	0.8	0.3	0.5	0.1
Other	0.2	0.2	0.2	0.1	0.3	0.1	0.4	0.3	0.3

Table 7.5: Percentage distribution of population 15 years and older by education level, employment status and sex (cont'd)

Employment status/Sex	Number	Percent	Never attended	Basic school	Secondary/SHS	Vocational/Technical/Commercial	Post middle /secondary certificate	Post-secondary diploma	Degree or higher
Female	145,245	100.0	110,232	25,218	4,575	1,600	1,639	1,438	543
Employee	4.7	4.7	1.3	4.5	20.3	25.9	80.6	81.7	88.8
Self-employed without employee(s)	48.7	48.7	52.3	41.4	35.4	42.9	11.0	9.2	5.3
Self-employed with employee(s)	1.8	1.8	1.5	2.8	3.6	4.3	0.9	1.5	2.2
Casual worker	1.0	1.0	0.9	1.1	2.0	1.8	0.7	0.6	1.3
Contributing family worker	41.5	41.5	42.1	45.9	36.4	22.2	5.7	6.3	1.3
Apprentice	1.7	1.7	1.2	3.7	2.0	1.7	0.6	0.6	0.4
Domestic employee (House help)	0.5	0.5	0.5	0.5	0.3	0.7	0.2	0.1	0.2
Other	0.2	0.2	0.1	0.2	0.1	0.6	0.3	0.1	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

Among the various educational groups, the proportion of self-employed without employee(s) was high for those who had never attended school (70.7%). The proportion of females engaged as employees was higher than that of males across levels of education. For example, the proportion of females with degree or higher education (88.8%) engaged as employees was higher than for similarly qualified males (87.8%). This was also the case for those with post-secondary and diploma, and post middle/secondary education.

7.3 Education and Occupation

Table 7.6 shows that in the 15 year and older workforce, about 80.0 percent of those who had never been to school were skilled agricultural, forestry and fishery workers. They also constituted 67.4 percent and 50.0 percent of those with basic and secondary education. Skilled agricultural, forestry and fishery workers formed 72.8 percent of the workforce, by far the biggest segment, followed by workers in crafts and related trades (10.4%) and in service and sales (7.5%). Those with degrees or higher educational level were less likely to be employed in agricultural forestry and fishery (6.0%) whereas 15.3 percent of those in managerial positions and 55.9 percent of professionals had degrees or higher education.

Table 7.6: Percentage distribution of population 15 years and older by level of education and occupation

Occupation	Percent	Never attended	Basic school	Secondary /SHS	Vocational/ Technical/ Commercial	Post-middle/secondary certificate	Post-secondary diploma	Degree or higher
Total	275,606	192,804	55,111	13,297	3,189	3,890	4,449	2,866
Managers	0.9	0.4	1.0	2.1	2.5	2.8	6.3	15.3
Professionals	3.0	0.2	1.2	7.8	7.1	52.0	52.1	55.9
Technicians and associate professionals	0.8	0.2	0.7	3.0	2.6	12.6	6.4	7.0
Clerical support workers	0.6	0.0	0.4	1.9	5.4	3.8	11.8	10.0
Service and sales workers	7.5	6.1	10.2	16.2	13.4	6.0	6.3	2.9
Skilled agricultural forestry and fishery workers	72.8	80.1	67.4	50.0	29.9	17.5	10.9	6.0
Craft and related trades workers	10.4	9.6	13.2	11.8	31.7	3.5	3.5	1.3
Plant and machine operators and assemblers	1.4	1.0	2.5	3.2	2.2	0.7	1.0	0.3
Elementary occupations	2.5	2.2	3.4	3.8	4.9	1.1	1.6	1.1
Other	0.0	0.0	0.0	0.3	0.3	0.1	0.2	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 7.7 shows the percentage distribution of population 15 years and older by level of education, occupation and sex. Overall, skilled agricultural forestry and fishery workers formed the largest proportion of the male labour force (77.8%) and of the female labour force (68.3%). The proportion of skilled agricultural forestry and fishery workers that never attended school was 88.5 percent for males and 73.8 percent for females. The proportion was lower for both sexes the higher their level of education. Among male managers, 6.9 percent and 15.8 percent had post-secondary diplomas or degree and higher respectively, while among females the corresponding proportions were 4.9 percent and 13.1 percent. Interestingly, a higher proportion of women with post-secondary diplomas (55.1%) or degrees and higher (64.6%) were professionals than the proportion of men with the same qualifications (50.6% and 53.9% respectively).

Table 7.7: Percentage distribution of population 15 years and older by level of education, occupation and sex

Occupation	Percent	Never attended	Basic school	Secondary /SHS	Vocational/ Technical/ Commercial	Post-middle/secondary certificate	Post-secondary diploma	Degree or higher
Male	130,361	82,572	29,893	8,722	1,589	2,251	3,011	2,323
Managers	1.1	0.4	1.0	2.1	2.5	3.6	6.9	15.8
Professionals	4.0	0.2	1.3	7.5	6.5	48.6	50.6	53.9
Technicians and associate professionals	1.1	0.3	0.9	3.3	3.7	9.8	7.6	7.7
Clerical support workers	0.7	0.0	0.5	1.5	2.5	3.7	9.7	10.4
Service and sales workers	4.4	2.8	5.9	12.8	9.1	5.5	5.2	2.8
Skilled agricultural forestry and fishery workers	77.8	88.5	73.6	53.8	33.0	23.1	12.4	6.6
Craft and related trades workers	5.6	3.7	9.0	10.2	32.6	3.3	4.0	1.2
Plant and machine operators and assemblers	2.6	1.9	4.2	4.7	4.0	1.2	1.5	0.3
Elementary occupations	2.6	2.2	3.5	3.7	5.9	1.2	1.8	1.1
Other	0.0	0.0	0.0	0.3	0.4	0.1	0.3	0.2
Female	145,245	110,232	25,218	4,575	1,600	1,639	1,438	543
Managers	0.7	0.4	0.9	2.0	2.6	1.6	4.9	13.1
Professionals	2.2	0.2	1.2	8.3	7.8	56.7	55.1	64.6
Technicians and associate professionals	0.5	0.1	0.4	2.5	1.5	16.5	3.8	4.4
Clerical support workers	0.5	0.0	0.3	2.7	8.4	3.8	16.1	8.3
Service and sales workers	10.3	8.6	15.2	22.6	17.7	6.6	8.6	3.3
Skilled agricultural forestry and fishery workers	68.3	73.8	60.1	42.8	26.9	9.9	7.9	3.3
Craft and related trades workers	14.7	14.1	18.1	14.8	30.8	3.8	2.4	1.5
Plant and machine operators and assemblers	0.3	0.3	0.4	0.3	0.4	0.1	0.1	0.4
Elementary occupations	2.5	2.3	3.3	3.8	3.9	1.0	1.0	0.9
Other	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER EIGHT

FERTILITY, MORTALITY AND MIGRATION

8.1 Introduction

Data on fertility – that is, the frequency of births in a population – form an important basis for studying the prospects of population growth in a country, the probable development of its age structure and the possible effects on population growth of economic and social changes public health measures and other factors (UN, 1954). Data on mortality are needed for analysis of past and current population changes and are required for making projections of demographic change and its characteristics in order to facilitate better development planning. Migration is the third basic factor affecting change in population distribution, growth and decline of population and modifying the demographic characteristics of areas of origin and of destination. Its importance has long been recognised (Shryock and Siegel, 1976).

8.2 Fertility

The 2010 Population and Housing Census (PHC) collected both current and lifetime fertility data from females aged 12 years and older. Table 8.1 presents information on the total fertility rate (TFR) for women aged 15-49 years. The TFR is the average number of children that would be born to a woman by the time she completes childbearing at the prevailing age-specific fertility rate.

There are other fertility measures such as crude birth rate (CBR) and general fertility rate (GFR). The CBR is the simplest and most frequently used measure of fertility. It is easy to calculate because it requires only the total number of births and the total population and is expressed per 1,000 population. It is crude because it includes all ages and both sexes in the denominator. There is no attempt to relate the births to the women at risk of having those births. The GFR, on the other hand, expresses births relative to the number of women of reproductive age. More data are required to calculate the GFR than the CBR because one has to know the age and sex composition of the population. The GFR is affected by age structure since there may be substantial variations between populations within the reproductive age range.

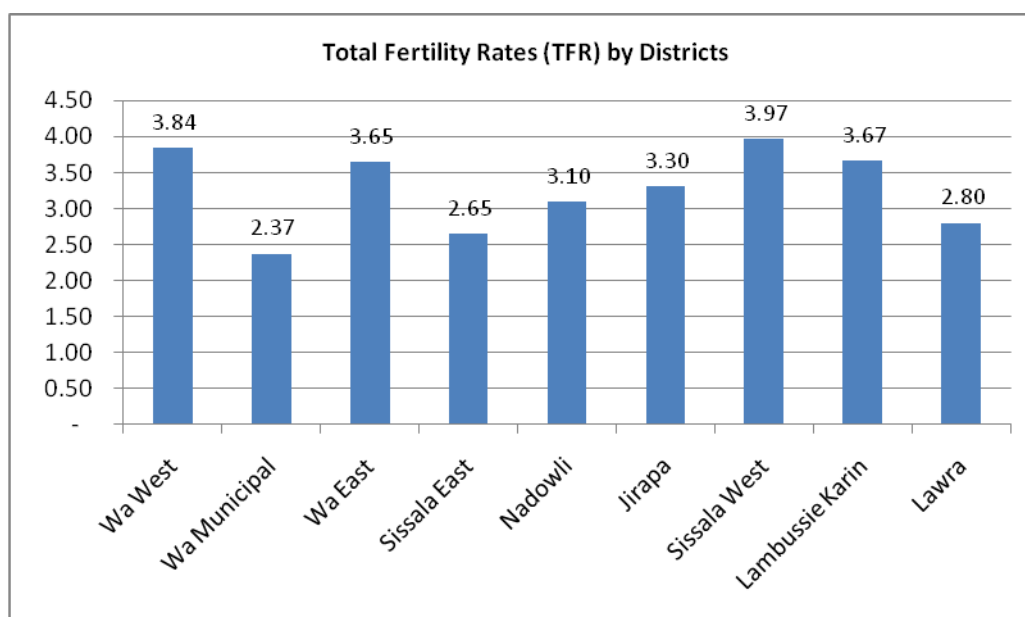
The TFR is the measure of fertility that is most widely used by demographers. It is calculated by adding up the age-specific fertility rates (ASFR) and is always expressed as births per one woman. It is a single-figure measure that is independent of age structure.

Table 8.1 shows that at district level, the TFR was lowest in Wa Municipal (2.4) and highest in Sissala West (3.9). Wa West, Wa East, Sissala West and Lambussie Karni were all districts with a TFR higher than the regional average of 3.45. Five districts (Wa Municipal, Sissala East, Nadowli, Jirapa and Lawra) had a TFR lower than the regional average. Differences in TFR by district may be explained largely by levels of education. Thus, in districts where women have low education, TFR is also high.

Table 8.1: Age-specific fertility rates and total fertility rates by district

Age Group	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
TFR	3.8391	2.3742	3.6546	2.6009	3.1171	3.3529	3.9671	3.6699	2.8012
All	0.7678	0.4748	0.7309	0.5202	0.6234	0.6706	0.7934	0.7340	0.5602
15 - 19	0.0673	0.0387	0.0627	0.0416	0.0496	0.0553	0.0704	0.0631	0.0442
20 – 24	0.1989	0.1314	0.1899	0.1411	0.1639	0.1753	0.2051	0.1907	0.1497
25 - 29	0.2202	0.1624	0.2143	0.1737	0.1972	0.2047	0.2243	0.2148	0.1836
30 - 34	0.1549	0.0906	0.1467	0.1004	0.1229	0.1333	0.1606	0.1474	0.1091
35 - 39	0.0896	0.0379	0.0828	0.0454	0.0630	0.0717	0.0943	0.0834	0.0521
40 - 44	0.0324	0.0124	0.0303	0.0161	0.0240	0.0268	0.0339	0.0304	0.0194
45 - 49	0.0046	0.0015	0.0041	0.0019	0.0029	0.0034	0.0049	0.0042	0.0023

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 8.1: Total fertility rates (TFR), by district

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3 Mortality

Mortality refers to deaths that occur within a population. The probability of dying depends on many factors, such as age, sex, race, occupation and social class. The incidence of death can reveal much about a population's standard of living and health care (Haupt and Kane, 1991). Like the crude birth rate, the crude death rate is simply the number of deaths that occur in a population within a given year. This is calculated by dividing the number of deaths by the total population. However, this measure does not take into account factors such as age and sex which could affect variations in death rates between region, districts and countries.

Infant mortality is seen as a good indicator of the health status of a district, region or country. The level of infant mortality is known to be higher in less developed areas with poor health

status. Table 8.2 presents data on deaths among infants and under-fives per 1,000 live births that occurred in the seven years preceding the census.

The results show that the infant mortality (IMR) rate is high in Wa East (84 per 1,000 live births) while Sissala West recorded the lowest infant mortality rate of 72 per 1,000 live births. Four districts (Wa Municipal, Nadowli, Wa West, and Wa East) have an IMR higher than the regional average of 81 per 1,000 live births. The IMR in Lawra is the same as for the entire region.

The regional average for under-five mortality (U5M) is 128 per 1,000 live births. Five of the nine regions (Wa West, Wa East, Wa Municipal, Nadowli, and Lawra) have U5M exceeding the regional average. It is interesting to observe that even though Sissala West recorded the lowest IMR (72), it also recorded a high U5M rate of 134 per 1,000 live births. Wa East reported the highest IMR (84) and U5M of 134 per 1,000 live births.

Table 8.2: Infant and under-five mortality rates by district and reference period

District	Infant Mortality	Under-Five Mortality	Reference Period*
All Districts	81	128	2003.1 - 2007.1
Wa West	83	134	2002.8 - 2007.1
Wa Municipal	82	131	2004.8 - 2007.5
Wa East	84	134	2002.1 - 2006.7
Sissala East	76	120	2002.9 - 2007.0
Nadowli	82	130	2003.0 - 2007.1
Jirapa	79	119	2002.3 - 2006.9
Sissala West	72	113	2001.3 - 2006.6
Lambussie Karni	75	118	2001.8 - 2006.7
Lawra	81	129	2003.5 - 2007.3

*For example, 2002.8-2007.1 refers to August 2002 – January 2007

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4 Migration

Migration is one of the three main components of population change and involves the movement of people from one specified place of residence to a new one. Table 8.3 presents the distribution of population by nationality, sex and district. The data show that more than nine out of every ten persons (93.6%) living in the Upper West Region were Ghanaians by birth. Non-Ghanaians constitute 3.0 percent, followed by Ghanaians with dual nationality (2.6%).

The district data show that Lawra (95.8%) and Jirapa (95.5%) recorded the highest percentage of Ghanaians by birth, which was above the regional average of 93.6 percent. The district with the lowest percentage of Ghanaians by birth is Wa East (88.9%).

Table 8.3: Percentage distribution of population by nationality, sex and district

Nationality	Total	All Districts	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
Both sexes	702,110	99.3	100.1	100.0	99.9	100.0	99.9	100.0	100.0	100.0	100.0
Ghanaian by birth	657,323	93.6	94.6	93.9	88.9	90.6	94.9	95.5	92.8	92.3	95.8
Dual nationality (Ghanaian and Other)	18,044	2.6	2.5	2.6	4.9	2.7	2.1	1.8	2.8	2.8	1.8
Ghanaian by naturalization	6,116	0.1	0.7	1.0	0.9	1.0	0.8	0.7	1.0	1.4	0.7
Non-Ghanaians	20,627	3.0	2.3	2.5	5.2	5.7	2.1	2.0	3.4	3.5	1.7
Male	341,182	100.0	100.0	99.9	99.9	100.1	100.0	100.0	99.9	99.9	100.1
Ghanaian by birth	319,233	93.6	94.6	93.9	88.7	90.5	95.1	95.4	92.8	92.3	95.7
Dual nationality (Ghanaian and other)	8,610	2.5	2.4	2.5	4.8	2.6	2.1	1.8	2.7	2.6	1.9
Ghanaian by naturalization	2,882	0.8	0.7	0.9	0.9	1.0	0.7	0.6	1.0	1.3	0.7
Non-Ghanaians	10,457	3.1	2.3	2.6	5.5	6.0	2.1	2.2	3.4	3.7	1.8
Female	360,928	100.0	.9	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0
Ghanaian by birth	338,090	93.7	94.5	93.9	89.1	90.6	94.8	95.6	92.7	92.3	95.9
Dual nationality (Ghanaian and other)	3,234	0.9	2.5	2.6	5.1	2.8	2.2	1.8	2.9	3.0	1.7
Ghanaian by naturalization	9,434	2.6	0.7	1.0	0.9	1.1	0.9	0.7	1.0	1.5	0.7
Non-Ghanaians	10,170	2.8	2.2	2.5	4.9	5.5	2.2	1.9	3.4	3.2	1.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

There were no significant sex differentials, with the percentage of females who are Ghanaian by birth at is 93.7 percent compared with male of 93.6 percent although this was not the same across all districts. In the districts, Wa East 5.2% and Sissala East 5.7 percent have the highest proportions of non-Ghanaian males and females

8.3.1 Non-Ghanaians

Table 8.4 presents the percentage distribution of non-Ghanaians by nationality and district. Among the non-Ghanaians living in the Upper West Region, more than half (53.9%) are from the ECOWAS region followed by 26.2 percent who from other African countries. Non-Africans constitute 19.9 percent of all non-Ghanaians living in the region. Among the districts, Sissala East recorded the highest proportion (80.1%) of non-Ghanaians from the ECOWAS region, significantly higher than the regional average of 53.9 percent.

Table 8.4: Percentage distribution of non-Ghanaians by nationality and district

Nationality	Total	All Districts	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
Both sexes	13,958	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ECOWAS African, other than	7,527	53.9	40.5	43.7	61.3	80.1	37.8	31.4	66.2	69.0	28.5
ECOWAS	3,657	26.2	33.4	34.7	22.9	11.0	35.3	36.5	19.7	19.2	37.3
Non-African	2,774	19.9	26.2	21.6	15.8	8.9	26.9	32.1	14.1	11.9	34.2
Male	7,165	100.0	100.0	100.0	100.0	99.8	100.0	100.0	100.1	100.0	100.0
ECOWAS African, other than	4,106	51.3	45.7	45.5	64.7	80.3	44.5	38.1	66.9	72.4	33.0
ECOWAS	1,730	24.1	29.3	33.9	19.9	11.0	31.5	.4	19.3	16.6	36.2
Non-African	1,329	18.5	25.0	20.6	15.4	8.5	24.0	29.5	13.9	11.0	30.8
Female	6,793	100.0	100.0	100.0	99.9	99.9	100.1	100.0	100.0	100.0	100.0
ECOWAS African, other than	3,421	50.0	34.9	41.9	57.2	79.8	31.8	23.8	65.5	65.0	23.9
ECOWAS	1,927	28.4	37.7	35.4	26.5	10.9	38.7	41.2	20.1	22.2	38.4
Non-African	1,445	21.3	27.4	22.7	16.2	9.2	29.6	35.0	14.4	12.8	37.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

The proportion of males from ECOWAS countries among non-Ghanaians resident in the Upper West Region was 51.3% compared with 50.0% for females. Of the non-Ghanaian females living in the region, 28.4% were non-ECOWAS Africans, higher than the proportion for males (24.1%). Similarly, the percentage of non-Africans living in Upper West Region was 21.3% for females compared with 18.5% of males.

CHAPTER NINE

ECONOMIC CHARACTERISTICS

9.1 Introduction

Economic activity aims to provide a secure and regular income. Inactivity can result in social vices, especially among the youth. Many conflicts have been linked to the idleness of youth in communities where these conflicts have taken place. Depending on the resources and opportunities in a given area, people may be self-employed or engaged by others for a regular income or other forms of reward for the services they provide.

9.2 Economic Activity Status of Population 15 years and Older

Information was collected on the economic activity status of the population aged 15 years and older during the seven days preceding the census. These were classified as employed, unemployed or not economically active. Out of the population of 409,412 aged 15 years and older in the region, 67.3 percent were employed and 2.9 percent unemployed, while 29.8 percent were not economically active.

9.3 Employed Population 15 years and older

A little over 86.0 percent of employed persons 15 years and older across districts were resident in rural areas. In contrast, Wa Municipal hosted 65.3 percent of all employed persons residing in urban areas in the region. (Table 9.1)

Table 9.1: Economic activity status of population of 15 years and older by locality and sex

District	Employed		Unemployed		Not economically active		Employed		Unemployed		Not economically active	
	Urban	Rural	Urban	Rural	Urban	Rural	Male	Female	Male	Female	Male	Female
All districts	13.8	86.2	1.0	1.2	27.0	73.0	31.8	35.5	1.0	1.2	13.6	16.9
Wa West	0.0	100.0	0.0	1.1	0.0	100.0	33.8	37.1	0.5	0.7	12.4	15.5
Wa Municipal	65.3	34.7	3.7	1.0	70.1	29.9	24.3	25.8	2.1	2.6	22.8	22.4
Wa East	0.0	100.0	0.0	1.7	0.0	100.0	38.0	36.3	0.7	1.0	10.3	13.8
Sissala East	16.0	84.0	0.9	0.5	32.8	67.2	35.7	37.2	0.6	0.8	10.5	15.2
Nadowli	0.0	100.0	0.0	1.6	0.0	100.0	30.8	36.5	0.7	0.9	13.3	17.7
Jirapa	11.8	88.2	0.9	1.5	25.8	74.2	31.2	38.2	1.0	1.5	11.6	16.6
Sissala West	0.0	100.0	0.0	1.3	0.0	100.0	34.1	39.3	0.6	0.6	11.4	13.9
Lambussie												
Karni	12.0	88.0	1.0	1.6	16.2	83.8	31.1	37.1	1.2	1.4	12.3	16.9
Lawra	10.8	89.2	0.7	0.8	23.2	76.8	33.9	38.2	0.7	0.9	11.2	15.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

The proportion of employed females was slightly higher than the proportion of employed males in all districts except Wa East (36.3% females and 38.0% males).

A large proportion (73.0%) of the economically not active population resided in rural areas. This was the case for all districts except Wa Municipal where 70.1 percent of the economically not active population were resident in urban areas. The proportion of the female population (16.9%) that was economically not active in the region was higher than that of males (13.6%) and this was true for all districts except Wa Municipal where a slightly higher proportion of males (22.8%) than females (22.4%) were economically not active.

9.4 The Economically Active Population

The economically active population is made up of the employed and unemployed aged 15 years and older. Table 9.2 indicates that the economically active population constituted 69.5 percent of the population aged 15 years and older. About 85 percent of the economically active population in the region resided in rural areas. In Wa East and Sissala West, for example, the economically active population constituted over three-fourths of the population 15 years and older (75.9% and 74.2% respectively). On the other hand, the economically active population in Wa Municipal constituted 54.8 percent of the population and about 66.4 percent resided in urban areas.

Table 9.2: Distribution of economically active population by district and locality

District	Population 15 years and older Number	Economically Active Population					
		Total		Urban		Rural	
		Percent	Number	Percent	Number	Percent	Number
Total	409,412	69.5	284,647	14.8	42,041	85.2	242,606
Wa West	44,301	72.1	31,930	0.0	0	100.0	31,930
Wa Municipal	69,747	54.8	38,239	66.4	25,396	33.6	12,843
Wa East	38,476	75.9	29,208	0.0	0	100.0	29,208
Sissala East	32,892	74.2	24,418	17.0	4,145	83.0	20,273
Nadowli	55,603	69.0	38,348	0.0	0	100.0	38,348
Jirapa	50,530	71.8	36,298	12.7	4,613	87.3	31,685
Sissala West	27,143	74.7	20,272	0.0	0	100.0	20,272
Lambussie							
Karni	29,492	70.8	20,877	13.0	2,711	87.0	18,166
Lawra	61,228	73.6	45,057	11.5	5,176	88.5	39,881

Source: Ghana Statistical Service, 2010 Population and Housing Census

9.5 Occupation

Table 9.3 shows that the majority of the population 15 years and older in the region were skilled agricultural, forestry and fishery workers (72.8%). It also shows that about 10 percent were craft and related trade workers. The proportion of the male population working as agricultural, forestry and fishery workers (77.8%) was higher than that of females (68.3%). On the other hand, the proportion of females (14.7%) engaged in craft and related work was more than double that of males (5.6%).

The table further shows that in Wa Municipal, 25.7 percent of employed people are service and sales workers, and 8.5 percent are professionals. More than 70 percent of the employed population were skilled agricultural, forestry and fishery workers in all districts except Wa Municipal where the proportion was 29.3 percent. In Wa East for example, 88.3 percent of the population were engaged as agricultural, forestry and fishery workers. The proportion of the female population engaged as service and sales workers was 10.3 percent compared with 4.4 percent of males in all districts of the region.

Table 9.3: Distribution of employed population 15 years and older by occupation and sex

Occupation	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
Both sexes	275,606	31,426	34,984	28,565	23,953	37,445	35,069	19,932	20,111	44,121
Managers	0.9	0.4	2.5	0.3	0.8	0.9	0.7	0.5	1.0	0.8
Professionals	3.0	1.5	8.5	1.0	3.0	2.9	2.7	1.6	1.8	2.5
Technicians and associate professionals	0.8	0.3	2.2	0.2	1.0	0.6	0.8	0.4	0.8	0.6
Clerical support workers	0.6	0.1	1.9	0.1	0.7	0.4	0.5	0.3	0.5	0.7
Service and sales workers	7.5	3.8	25.7	2.9	5.3	6.3	4.9	5.0	7.8	3.8
Skilled agricultural forestry and fishery workers	72.8	83.5	29.3	88.3	83.2	72.8	70.8	82.3	73.1	80.7
Craft and related trades workers	10.4	7.2	18.5	3.1	3.7	13.4	16.2	7.2	11.6	8.6
Plant and machine operators and assemblers	1.4	0.8	4.2	2.1	0.8	1.0	1.3	0.4	1.0	0.6
Elementary occupations	2.5	2.4	7.1	1.4	1.4	1.6	2.1	2.3	2.4	1.8
Other	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 9.3: Distribution of employed population 15 years and older by occupation and sex (cont'd)

Occupation	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
Male	130,361	14,994	16,963	14,614	11,730	17,148	15,746	9,262	9,163	20,741
Managers	1.1	0.4	3.4	0.3	1.0	0.9	0.9	0.8	1.2	0.9
Professionals	4.0	2.3	10.8	1.6	3.8	3.9	3.5	2.4	2.5	3.2
Technicians and associate professionals	1.1	0.4	3.3	0.3	1.4	1.0	0.8	0.6	1.3	0.8
Clerical support workers	0.7	0.1	2.0	0.2	0.8	0.5	0.7	0.4	0.8	0.9
Service and sales workers	4.4	1.8	14.2	1.4	3.3	4.2	3.1	2.6	4.9	2.5
Skilled agricultural forestry and fishery workers	77.8	90.3	32.3	90.3	82.9	81.2	81.8	86.1	78.4	84.1
Craft and related trades workers	5.6	2.3	18.5	1.7	3.8	4.4	4.6	2.7	5.9	4.4
Plant and machine operators and assemblers	2.6	1.2	8.0	3.1	1.6	2.1	2.3	0.7	2.1	1.3
Elementary occupations	2.6	1.2	7.3	1.2	1.4	1.8	2.2	3.6	2.8	1.8
Other	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Female	145,245	16,432	18,021	13,951	12,223	20,297	19,323	10,670	10,948	23,380
Managers	0.7	0.3	1.7	0.3	0.7	0.8	0.5	0.4	0.8	0.7
Professionals	2.2	0.8	6.4	0.4	2.3	2.2	2.1	0.8	1.2	1.9
Technicians and associate professionals	0.5	0.2	1.1	0.1	0.6	0.3	0.8	0.2	0.4	0.4
Clerical support workers	0.5	0.0	1.8	0.1	0.6	0.3	0.3	0.2	0.3	0.5
Service and sales workers	10.3	5.7	36.5	4.6	7.2	8.1	6.3	7.1	10.2	4.9
Skilled agricultural forestry and fishery workers	68.3	77.3	26.4	87.3	83.5	65.7	62.0	79.0	68.7	77.6
Craft and related trades workers	14.7	11.7	18.5	4.6	3.6	21.1	25.7	11.0	16.4	12.3
Plant and machine operators and assemblers	0.3	0.4	0.7	1.1	0.1	0.1	0.4	0.0	0.1	0.1
Elementary occupations	2.5	3.6	6.9	1.6	1.5	1.4	1.9	1.2	2.0	1.7
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

9.8 Employment Status of Employed Persons 15 Years and Older

Slightly over 50.0 percent of the employed population were self-employed without employees, with only 2 percent being self-employed with employees (Table 9.4). With the exception of Lawra, more than half of the employed population are self-employed without employees across all districts in the region. Among the male employed population, 59.0 percent are self-employed without employees while the proportion is 48.7 percent for females. Only about 2 percent of employed males and females were self-employed with employees.

A little more than one-third (33.9%) of the employed population were contributing family workers. The proportion of contributing family workers was high (more than 30%) across districts and municipalities except in Wa Municipal (12.4%). The proportion of females (41.5%) employed as contributing family workers was also significantly higher than that of males (25.5%).

Table 9.4: Distribution of employed population 15 years and older by employment status and sex

Employment status	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
Both sexes	275,606	31,426	34,984	28,565	23,953	37,445	35,069	19,932	20,111	44,121
Employee	7.5	3.2	22.1	2.7	8.3	6.4	6.4	4.1	5.8	5.7
Self-employed without employee(s)	53.6	56.8	53.1	57.9	52.3	58.4	55.8	55.8	51.4	43.8
Self-employed with employee(s)	2.0	0.9	5.0	1.6	1.5	1.6	2.0	1.1	2.1	1.5
Casual worker	1.2	0.5	2.1	1.2	0.6	1.2	1.0	1.1	1.5	1.1
Contributing family worker	33.9	37.1	12.4	35.6	36.1	30.9	32.9	36.6	37.6	46.8
Apprentice	1.2	0.6	4.7	0.4	0.7	0.9	1.2	0.7	0.9	0.5
Domestic employee (Househelp)	0.5	0.7	0.5	0.4	0.4	0.4	0.6	0.4	0.7	0.4
Other	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2
Male	130,361	14,994	16,963	14,614	11,730	17,148	15,746	9,262	9,163	20,741
Employee	10.6	4.8	30.1	3.9	11.4	9.4	8.5	6.9	9.3	7.7
Self-employed without employee(s)	59.0	64.2	48.0	67.7	58.2	61.8	60.3	63.5	54.5	55.6
Self-employed with employee(s)	2.2	0.9	5.7	1.9	1.4	1.5	2.1	1.0	2.2	1.8
Casual worker	1.4	0.6	2.9	1.3	0.6	1.4	1.2	1.6	1.9	1.0
Contributing family worker	25.5	28.6	9.1	24.5	27.4	24.9	26.8	26.1	30.5	33.1
Apprentice	0.7	0.2	3.5	0.1	0.5	0.4	0.4	0.3	0.6	0.3
Domestic employee (Househelp)	0.5	0.5	0.6	0.4	0.3	0.4	0.6	0.4	0.7	0.4
Other	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2

Table 9.4: Distribution of employed population 15 years and older by employment status and sex (cont'd)

Employment status	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
Female	145,245	16,432	18,021	13,951	12,223	20,297	19,323	10,670	10,948	23,380
Employee	4.7	1.8	14.6	1.4	5.3	3.9	4.7	1.7	2.8	4.0
Self-employed without employee(s)	48.7	50.0	57.9	47.6	46.6	55.5	52.1	49.1	48.8	33.4
Self-employed with employee(s)	1.8	1.0	4.3	1.2	1.5	1.6	1.9	1.2	1.9	1.2
Casual worker	1.0	0.5	1.4	1.2	0.5	1.1	0.9	0.7	1.2	1.2
Contributing family worker	41.5	44.8	15.4	47.2	44.4	36.0	37.8	45.7	43.5	59.0
Apprentice	1.7	1.0	5.8	0.8	1.0	1.3	1.8	1.1	1.1	0.6
Domestic employee (Househelp)	0.5	0.9	0.4	0.4	0.4	0.4	0.6	0.4	0.6	0.4
Other	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

9.9 Employed Population 15 Years and older by Industry

Table 9.5 shows industry of employed persons, 15 years and older by district. More than 70 percent of the employed population was engaged in the agriculture, forestry and fishery sector of the economy. About 9 percent was employed in the manufacturing sector while 6.1 percent was employed in the wholesale and retail and motor repairs sector.

Table 9.5: Industry of employed persons (15 years and older) by District

Industry	All districts	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All industry	275,606	31,426	34,984	28,565	23,953	37,445	35,069	19,932	20,111	44,121
Agriculture, forestry and fishing	72.2	84.0	30.2	87.0	83.1	72.6	67.1	82.4	72.5	80.8
Mining and quarrying	0.5	0.4	0.9	1.8	0.0	0.2	0.6	0.0	0.2	0.0
Manufacturing	8.9	6.9	12.5	2.8	2.4	12.2	15.2	6.1	10.0	7.7
Electricity, gas and water	0.2	0.0	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Construction	1.1	0.1	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.1
Wholesale and retail, repair of motor vehicles	6.1	0.2	4.5	0.2	0.8	0.7	0.8	0.7	0.9	0.8
Transportation and storage	0.8	2.9	20.6	3.2	4.1	4.7	3.5	4.3	7.0	3.4
Accommodation and food service	1.8	0.2	3.4	0.2	0.5	0.6	0.4	0.2	0.9	0.5
Public administration	1.1	1.3	5.3	0.9	1.3	1.6	1.1	1.5	1.9	1.0
Education	2.6	0.1	0.4	0.0	0.2	0.1	0.0	0.0	0.1	0.1
Human health and social work	0.9	0.0	0.6	0.0	0.2	0.1	0.1	0.1	0.1	0.2
Other service activities	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Activities of households as employers	1.3	0.1	1.2	0.1	0.2	0.4	0.1	0.3	0.3	0.2
Others	1.1	0.2	0.9	0.1	0.3	0.3	0.2	0.1	0.2	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

The proportion of the population employed in agriculture, forestry and fishing sector was very high in Wa West, Wa East and Sissala East districts (84.0%, 87.0% and 83.1% respectively). A little over 15.0 percent of the population in Jirapa district, along with 12.5 percent in Wa Municipal and Nadowli districts were employed in the manufacturing sector.

Although the dominant activity in the Wa East and Sissala East was agriculture, forestry and fishing, the proportion of the population engaged in manufacturing in these districts was very low, indicating that there was little agro-processing activity.

In the region as a whole, 77.0 percent of the male and 68.0 percent of the female population were employed in the agriculture, forestry and fishing sector (Table 9.6), the proportion of females (14.0%) employed in manufacturing was far higher than the proportion of males (3.2%). The proportion of females (7.3%) in the wholesale and retail sector was also higher than males (4.7%).

Table 9.6: Distribution of employed population (15 years and older) by industry and sex

Industry	Total		Male		Female	
	Percent	Number	Percent	Number	Percent	Number
All industries	100.0	275,606	100.0	130,361	100.0	145,245
Agriculture forestry and fishing	72.2	199,101	77.0	100,314	68.0	98,787
Mining and quarrying	0.5	1,304	0.7	880	0.3	424
Manufacturing	8.9	24,476	3.2	4,138	14.0	20,338
Electricity gas steam and air conditioning supply	0.1	173	0.1	157	0.0	16
Water supply; sewerage waste management and remediation activities	0.1	394	0.2	249	0.1	145
Construction	1.1	3,121	2.2	2,898	0.2	223
Wholesale and retail; repair of motor vehicles and motorcycles	6.1	16,770	4.7	6,115	7.3	10,655
Transportation and storage	0.8	2,243	1.6	2,128	0.1	115
Accommodation and food service activities	1.8	4,954	0.4	575	3.0	4,379
Information and communication	0.1	344	0.2	247	0.1	97
Financial and insurance activities	0.2	450	0.2	300	0.1	150
Real estate activities	0.0	5	0.0	5	-	-
Professional scientific and technical activities	0.3	941	0.4	468	0.3	473
Administrative and support service activities	0.3	828	0.4	586	0.2	242
Public administration and defence; compulsory social security	1.1	2,997	1.8	2,300	0.5	697
Education	2.6	7,264	3.5	4,627	1.8	2,637
Human health and social work activities	0.9	2,530	0.9	1,123	1.0	1,407
Arts entertainment and recreation	0.1	335	0.2	280	0.0	55
Other service activities	1.4	3,869	1.1	1,489	1.6	2,380
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	1.3	3,480	1.1	1,461	1.4	2,019
Activities of extraterritorial organizations and bodies	0.0	27	0.0	21	0.0	6

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER TEN

DISABILITY

10.1 Introduction

Persons with disability were defined as those who were unable to perform specific tasks/activities or were restricted in their performance 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 challenges or behavioural disorders and other physical challenges. Data on disabilities in the Upper West Region collected during the 2010 PHC are analysed below.

10.2 Distribution of Persons with Disability by District and Age

Table 10.1 shows that about 4 percent of the population in the region had some form of disability. Nadowli District reported the highest proportion (4.8%) of persons with disability, followed by Lambussie Karni and Lawra districts with 4 percent each.

Disability is generally high among young and older populations. The proportion among those aged 0-14 was 22.4 percent and 23.1 percent were between ages 45 to 64. The proportion of the disabled population in the region who are 65 and above is about 22 percent.

For the districts, Nadowli had the highest proportion of the disabled population (4.8%). Second were Lambussie Karni and Lawra with 4.0 each followed by Wa East (3.9%). The district with lowest percentage of disabled population was Wa Municipal (2.9%).

Table 10.1: Percentage distribution of disability by district and age

District	Total Population	Population with disability		All ages	Age group						
		Number	Percentage		0-14	15-24	25-34	35-44	45-54	55-64	65+
All districts	702,110	25,746	3.7	100.0	22.4	12.8	10.5	10.6	10.7	9.8	23.1
Wa West	81,348	2,453	3.0	100.0	24.5	11.6	9.4	10.9	10.9	11.9	20.8
Wa Municipal	107,214	2,788	2.6	100.0	26.4	20.5	14.3	11.5	8.4	6.7	12.2
Wa East	72,074	2,783	3.9	100.0	25.3	11.0	11.0	12.0	10.9	9.9	19.9
Sissala East	56,528	1,886	3.3	100.0	24.4	12.1	10.7	12.6	8.9	8.5	22.9
Nadowli	94,388	4,571	4.8	100.0	21.5	12.5	9.5	10.1	11.0	10.6	24.7
Jirapa	88,402	3,390	3.8	100.0	22.1	13.0	11.4	8.8	11.0	9.9	23.8
Sissala West	49,573	1,745	3.5	100.0	27.6	13.9	11.8	10.6	9.7	7.0	19.4
Lambussie Karni	51,654	2,046	4.0	100.0	17.0	11.3	10.6	10.6	13.2	9.5	27.9
Lawra	100,929	4,084	4.0	100.0	17.5	10.3	8.1	10.1	11.6	11.4	31.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

In the 0-14 age group, Sissala West had the highest proportion (27.6%) of disabled population followed by Wa Municipal (26.4%) and Wa East with 25.3 percent. The proportion of the disabled population in the age groups from 15 to 44 was comparatively lower, but rose substantially across the region in the older groups (45-54 years, 55-64 years and 65+ years) with the exception of Wa Municipal. About 31.0 percent of the population 60+ years in Lawra had a disability while in Lambussie Karni, the proportion was 27.9 percent.

10.3 Distribution of Disability by Type of Locality

About 3.1 percent of the urban population had disabilities compared to about 3.8 percent of the rural population (Table 10.2). Lambussie Karni was the district with the highest proportion of population with disabilities in urban areas (4.6%) as well as in rural areas (3.9%).

Table 10.2: Distribution of population with disability by district and locality

District	Total			Urban			Rural		
	Total	Disabled Population	Percentage disabled	Total	Disabled Population	Percentage disabled	Total	Disabled Population	Percentage disabled
All districts	702,110	25,746	3.7	114,653	3,590	3.1	587,457	22,156	3.8
Wa West	81,348	2,453	3.0	-	-	-	81,348	2,453	3.0
Wa Municipal	107,214	2,788	2.6	71,051	1,920	2.7	36,163	868	2.4
Wa East	72,074	2,783	3.9	-	-	-	72,074	2,783	3.9
Sissala East	56,528	1,886	3.3	10,627	453	4.3	45,901	1,433	3.1
Nadowli	94,388	4,571	4.8	-	-	-	94,388	4,571	4.8
Jirapa	88,402	3,390	3.8	12,716	536	4.2	75,686	2,854	3.8
Sissala West	49,573	1,745	3.5	-	-	-	49,573	1,745	3.5
Lambussie Karni	51,654	2,046	4.0	6,869	318	4.6	44,785	1,728	3.9
Lawra	100,929	4,084	4.0	13,390	363	2.7	87,539	3,721	4.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

10.4 Types of Disability

More than one-fifth of the population with sight problems in the region were found in Lawra while 18 percent were from Nadowli (Table 10.3). Lawra District also reported the highest proportion of persons with hearing and speech problems (21.1% and 19.1% respectively).

Table 10.3: Percentage distribution of population with disability by type of disability

District	Type of Disability															
	Total	%	Sight	%	Hearing	%	Speech	%	Physical	%	Intellectual	%	Emotional	%	Other	%
All districts	25,746	100.0	9,655	100.0	4,564	100.0	2,724	100.0	5,417	100.0	3,288	100.0	4,676	100.0	4,062	100.0
Wa West	2,453	9.5	823	8.5	389	8.5	260	9.5	615	11.4	383	11.6	331	7.1	313	7.7
Wa Municipal	2,788	10.8	703	7.3	379	8.3	290	10.6	505	9.3	481	14.6	883	18.9	627	15.4
Wa East	2,783	10.8	1,092	11.3	529	11.6	301	11.0	636	11.7	276	8.4	526	11.2	383	9.4
Sissala East	1,886	7.3	700	7.3	366	8.0	244	9.0	374	6.9	240	7.3	341	7.3	252	6.2
Nadowli	4,571	17.8	1,686	17.5	662	14.5	392	14.4	943	17.4	572	17.4	959	20.5	873	21.5
Jirapa	3,390	13.2	1,069	11.1	527	11.5	357	13.1	789	14.6	456	13.9	626	13.4	672	16.5
Sissala West	1,745	6.8	448	4.6	232	5.1	166	6.1	277	5.1	232	7.1	428	9.2	482	11.9
Lambussie Karni	2,046	7.9	1,070	11.1	517	11.3	193	7.1	356	6.6	199	6.1	165	3.5	177	4.4
Lawra	4,084	15.9	2,064	21.4	963	21.1	521	19.1	922	17.0	449	13.7	417	8.9	283	7.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

With regard to physical and intellectual disabilities, Nadowli had the highest proportion of disabled population with such disabilities (17.4% each). The district also reported the highest proportion of people with emotional disability (20.5%).

Table 10.4: Percentage distribution of type of disability by district and sex

Disability type/Sex	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
Both sexes	25,746	100.0	2,453	2,788	2,783	1,886	4,571	3,390	1,745	2,046	4,084
Sight	9,655	37.5	33.6	25.2	39.2	37.1	36.9	31.5	25.7	52.3	50.5
Hearing	4,564	17.7	15.9	13.6	19.0	19.4	14.5	15.5	13.3	25.3	23.6
Speech	2,724	10.6	10.6	10.4	10.8	12.9	8.6	10.5	9.5	9.4	12.8
Physical	5,417	21.0	25.1	18.1	22.9	19.8	20.6	23.3	15.9	17.4	22.6
Intellectual	3,288	12.8	15.6	17.3	9.9	12.7	12.5	13.5	13.3	9.7	11.0
Emotional	4,676	18.2	13.5	31.7	18.9	18.1	21.0	18.5	24.5	8.1	10.2
Other	4,062	15.8	12.8	22.5	13.8	13.4	19.1	19.8	27.6	8.7	6.9
Male	12,796	100.0	1,274	1,381	1,498	1,003	2,176	1,609	866	953	2,036
Sight	4,489	35.1	31.7	25.7	38.5	35.3	33.6	28.6	22.4	46.8	47.5
Hearing	2,044	16.0	15.9	12.2	17.0	17.7	13.1	13.7	12.1	22.7	20.3
Speech	1,531	12.0	12.1	9.8	11.8	15.0	9.6	12.1	11.0	12.5	14.6
Physical	2,692	21.0	22.8	18.0	22.2	18.0	20.8	24.4	17.0	17.7	23.5
Intellectual	1,774	13.9	15.5	17.2	10.2	13.1	14.2	16.3	14.9	12.2	11.6
Emotional	2,427	19.0	14.4	32.5	19.6	18.1	21.8	19.0	27.7	8.3	10.8
Other	2,046	16.0	14.1	21.7	13.7	15.0	18.6	20.3	27.1	10.1	7.4
Female	12,950	100.0	1,179	1,407	1,285	883	2,395	1,781	879	1,093	2,048
Sight	5,166	39.9	35.5	24.7	40.1	39.2	39.9	34.2	28.9	57.1	53.5
Hearing	2,520	19.5	15.8	15.0	21.3	21.3	15.8	17.2	14.4	27.5	26.8
Speech	1,193	9.2	9.0	11.0	9.6	10.6	7.6	9.2	8.1	6.8	10.9
Physical	2,725	21.0	27.6	18.2	23.7	21.9	20.5	22.2	14.8	17.1	21.7
Intellectual	1,514	11.7	15.7	17.3	9.6	12.3	10.9	10.9	11.7	7.6	10.4
Emotional	2,249	17.4	12.6	30.8	18.1	18.0	20.3	18.0	21.4	7.9	9.6
Other	2,016	15.6	11.3	23.2	13.9	11.6	19.6	19.4	28.1	7.4	6.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

10.5 Disability by Level of Education

Nearly two-thirds (65.7%) of persons with disability in the region had never attended school (Table 10.5). Only 24.2 percent had attended a basic school. For the districts, more than 70 percent of the population with disability in the Wa West (74.0%), Wa East (71.9%) and Lambussie Karni (71.2%) had never attended school. With the exception of Wa Municipal (3.8%), the proportion of disabled persons with tertiary education was less than 1percent.

Table 10.5: Percentage distribution of population with disability by level of education

District	Total	Never attended	Pre-Primary	Basic school	Secondary/SSS/SHS	Vocational/Technical/Commercial	Post-Secondary	Tertiary
All districts	24,889	65.7	3.7	24.2	3.0	0.9	1.8	0.6
Wa West	2,382	74.0	3.2	20.8	1.3	0.0	0.5	0.1
Wa Municipal	2,670	41.9	5.9	36.1	5.3	2.1	4.9	3.8
Wa East	2,683	71.9	4.2	21.0	1.8	0.3	0.8	0.1
Sissala East	1,806	67.8	3.6	21.6	4.1	0.9	1.5	0.6
Nadowli	4,412	66.3	3.3	24.4	3.2	1.0	1.6	0.2
Jirapa	3,268	65.7	3.9	24.1	3.5	0.5	2.0	0.3
Sissala West	1,655	68.2	4.3	23.0	3.1	0.6	0.8	0.0
Lambussie								
Karni	2,011	71.2	3.0	20.0	2.8	0.7	1.9	0.3
Lawra	4,002	67.4	2.7	24.1	2.2	1.4	1.8	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

10.6 Disability by Marital Status

A little over half (51.4%) of persons with disability were also married while 17.7 percent were widowed (Table 10.6). With the exception of Wa Municipal where 38.4 percent of the population with disability had never married, the proportion of disabled persons who had never married was below 30 percent for all other districts of the region.

Table 10.6: Percentage distribution of disabled population (12 years and older) by marital status

Marital status	Disabled population 12 years and older	Percent	Marital Status					
			Never married	Informal/Consensual union/Living together	Married	Separated	Divorced	Widowed
All districts	21,165	100.0	27.1	0.6	51.4	1.3	1.9	17.7
Wa West	1,987	100.0	28.4	0.3	50	2.1	2.5	16.6
Wa Municipal	2,212	100.0	38.4	0.6	47.6	1.2	2.3	9.9
Wa East	2,191	100.0	21.4	0.3	60.3	1.2	2.7	14.1
Sissala East	1,512	100.0	27.6	0.6	53.8	1.2	1.9	14.9
Nadowli	3,797	100.0	24.9	0.5	49.5	1.4	1.7	22
Jirapa	2,797	100.0	29.2	0.7	48.2	1	1.4	19.5
Sissala West	1,351	100.0	28.1	1	52.6	2	1.4	15
Lambussie								
Karni	1,777	100.0	22.3	0.8	57.6	1.2	1.4	16.7
Lawra	3,541	100.0	25.5	0.5	49	0.9	1.7	22.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

10.7 Disability and Economic Activity

More than half (54.8%) of the population with disability in the region was employed while only 1.6 percent was unemployed. More than half of the population with disability in the Sissala West district were employed compared with 47.8 percent in Wa Municipal. With the

exception of Sissala West (39.4%), about two out of every five not economically active persons with disability, can be found in all districts in the region (Table 10 4).

Table 10.7: Percentage distribution of population with disability by economic activity status

District	Economic Activity Status				Not economically active
	Number	Percent	Employed	Unemployed	
All districts	19,970	100.0	54.8	1.6	43.7
Wa West	1,852	100.0	53.1	1.2	45.6
Wa Municipal	2,051	100.0	47.8	3.2	49.0
Wa East	2,079	100.0	57.0	1.4	41.7
Sissala East	1,425	100.0	52.0	1.0	47.0
Nadowli	3,588	100.0	56.5	1.1	42.3
Jirapa	2,641	100.0	53.8	1.6	44.6
Sissala West	1,264	100.0	60.0	0.6	39.4
Lambussie Karni	1,699	100.0	52.1	2.5	45.4
Lawra	3,371	100.0	57.9	1.5	40.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER ELEVEN

AGRICULTURAL ACTIVITY

11.1 Introduction

Agriculture has for many decades dominated the economy of the country and contributed more than one-third of gross domestic product. The economy of the Upper West Region is mainly agrarian, with the people engaged in the cultivation of food crops (grains such as millet, sorghum and maize; roots and tubers, particularly yams and legumes, including groundnuts and beans. Households in the region are also actively engaged in rearing livestock, including cattle and ruminants.

11.2 Households in Agriculture

Table 11.1 shows that a total of 84,931 households were engaged in agricultural activities in the region. More than 90 percent (91.4%) of agricultural households in the region are in rural areas. The proportions were similar for districts with both urban and rural households except for Wa Municipal, where a little more than half (52.9%) of the agricultural households were in rural areas. About one-fifth (20.4%) of agricultural households in the region have household size of 10 persons or more. In Wa Municipal, 27.2 percent of households engaged in agriculture recorded household size of 10 persons or more. In general, households engaged in agriculture in the region have large sizes, averaging 6.9 persons.

Table 11.1: Distribution of households in agriculture by size and locality

District		Number of Households	Household size										Average
			1	2	3	4	5	6	7	8	9	10+	
All districts	Total	84,931	3.3	5.0	7.9	10.4	12.5	12.7	11.4	9.3	7.1	20.4	6.9
	Urban	7,329	6.5	6.8	10.1	12.5	12.8	12.0	9.6	7.0	5.6	17.1	6.4
	Rural	77,602	3.0	4.9	7.7	10.3	12.5	12.7	11.6	9.5	7.2	20.7	6.9
Wa West	Total	10,524	2.4	4.7	7.5	9.8	11.5	12.4	11.1	9.6	6.8	24.1	7.3
	Urban	-	-	-	-	-	-	-	-	-	-	-	-
	Rural	10,524	2.4	4.7	7.5	9.8	11.5	12.4	11.1	9.6	6.8	24.1	7.3
Wa Municipal	Total	5,841	3.4	4.3	6.8	9.7	10.6	11.8	10.7	8.4	7.2	27.2	7.6
	Urban	2,751	4.3	5.3	7.5	10.0	10.6	11.6	9.9	7.6	7.3	26.0	7.4
	Rural	3,090	2.5	3.4	6.1	9.4	10.5	12.1	11.4	9.2	7.2	28.2	7.7
Wa East	Total	10,167	2.6	4.1	8.3	12.0	13.2	13.7	11.1	9.4	6.7	18.9	6.7
	Urban	-	-	-	-	-	-	-	-	-	-	-	-
	Rural	10,167	2.6	4.1	8.3	12.0	13.2	13.7	11.1	9.4	6.7	18.9	6.7
Sissala East	Total	7,339	3.9	5.0	8.0	11.1	13.4	12.2	10.1	8.4	6.8	21.1	7.0
	Urban	1,305	9.4	9.0	12.6	14.5	14.8	11.8	9.6	5.8	3.1	9.3	5.3
	Rural	6,034	2.7	4.1	7.0	10.4	13.2	12.3	10.2	8.9	7.6	23.6	7.3

Table 11.1: Distribution of households in agriculture by size and locality (cont'd)

District		Number of Households	Household size										Average
			1	2	3	4	5	6	7	8	9	10+	
Nadowli	Total	12,683	3.6	5.5	8.7	11.0	12.5	13.0	10.9	9.2	6.9	18.8	6.6
	Urban	-	-	-	-	-	-	-	-	-	-	-	-
	Rural	12,683	3.6	5.5	8.7	11.0	12.5	13.0	10.9	9.2	6.9	18.8	6.6
Jirapa	Total	11,508	3.7	5.4	7.5	10.5	12.7	12.8	11.2	8.9	6.8	20.5	6.9
	Urban	1,384	8.4	7.3	12.1	16.3	13.2	13.5	9.3	5.5	4.5	9.8	5.3
	Rural	10,124	3.1	5.2	6.9	9.7	12.6	12.7	11.4	9.4	7.2	21.9	7.1
Sissala West	Total	6,535	3.9	5.2	7.3	9.3	11.8	10.8	11.2	9.1	8.0	23.3	7.2
	Urban	-	-	-	-	-	-	-	-	-	-	-	-
	Rural	6,535	3.9	5.2	7.3	9.3	11.8	10.8	11.2	9.1	8.0	23.3	7.2
Lambussie Karni	Total	6,325	2.9	4.9	6.9	8.3	12.7	11.7	11.8	9.4	7.7	23.6	7.3
	Urban	627	5.9	6.7	8.9	11.3	12.8	9.6	7.5	8.8	6.4	22.2	6.9
	Rural	5,698	2.6	4.7	6.7	8.0	12.7	12.0	12.3	9.5	7.9	23.7	7.4
Lawra	Total	14,009	3.3	5.4	8.6	10.8	13.4	13.5	13.4	10.3	7.1	14.2	6.4
	Urban	1,262	6.4	7.1	11.4	12.2	15.1	12.8	10.6	7.8	5.2	11.5	6.0
	Rural	12,747	3.0	5.2	8.3	10.6	13.3	13.6	13.7	10.6	7.3	14.4	6.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

11.3 Agricultural Households by Locality and Sex

About 77 percent of households engaged in agriculture in urban areas are male-headed households and 80.8 percent of these households are in rural areas, (Table 11.2). In all districts except Sissala East (69.3%), the proportion of male-headed households engaged in agricultural activities was more than three times that of female.

Table 11.2: Distribution of households in agriculture by locality and sex of household head

District	Number			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All districts	84,931	7,329	77,602	100.0	77.3	22.7	100.0	80.8	19.2
Wa West	10,524	-	10,524	100.0	-	-	100.0	83.3	16.7
Wa Municipal	5,841	2,751	3,090	100.0	83.1	16.9	100.0	87.4	12.6
Wa East	10,167	-	10,167	100.0	-	-	100.0	88.8	11.2
Sissala East	7,339	1,305	6,034	100.0	69.3	30.7	100.0	85.8	14.2
Nadowli	12,683	-	12,683	100.0	-	-	100.0	72.9	27.1
Jirapa	11,508	1,384	10,124	100.0	72.5	27.5	100.0	76.0	24.0
Sissala West	6,535	-	6,535	100.0	-	-	100.0	81.4	18.6
Lambussie Karni	6,325	627	5,698	100.0	72.4	27.6	100.0	76.8	23.2
Lawra	14,009	1,262	12,747	100.0	80.9	19.1	100.0	81.4	18.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

11.4 Agricultural Households by Age-Group of Household Head

Throughout the Upper West Region, an average 13.4 percent of households engaged in agriculture had a head who was 70 years and older (Table 11.3). The highest proportion of farmers aged 70 and older was found in Nadowli (16.1%) and Lambussie Karni (15.3%). The lowest proportions were found in Sissala East (10.5%) and Wa East (10.7%). The next most important age group was 40-44, which averaged 12.4 percent of all farmers in the region.

Table 11.3: Percentage distribution of households in agriculture by age of household head

District	Number of		Age group												
	Households	Percent	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+	
All districts	84,931	100.0	0.9	3.0	6.9	10.5	11.9	12.5	10.7	10.7	6.9	8.0	4.6	13.4	
Wa West	10,524	100.0	0.7	2.8	6.2	9.0	11.1	12.3	11.0	11.8	6.8	9.1	4.7	14.3	
Wa Municipal	5,841	100.0	0.9	3.2	7.5	10.6	13.0	12.3	11.1	10.3	7.1	7.8	4.8	11.6	
Wa East	10,167	100.0	1.1	3.5	8.6	12.5	14.1	13.2	10.6	9.5	5.7	6.9	3.5	10.7	
Sissala East	7,339	100.0	0.9	3.5	9.2	14.2	14.9	13.3	9.7	9.2	5.4	5.7	3.6	10.5	
Nadowli	12,683	100.0	0.6	2.1	5.2	9.2	10.4	11.8	11.0	11.1	7.4	9.7	5.4	16.1	
Jirapa	11,508	100.0	1.4	2.8	6.4	9.6	10.7	12.8	10.7	11.1	6.6	8.4	4.9	14.6	
Sissala West	6,535	100.0	1.4	4.7	8.9	12.8	13.9	12.4	9.6	9.2	5.9	6.8	3.1	11.3	
Lambussie Karni	6,325	100.0	1.3	3.7	7.0	10.1	10.5	11.7	10.0	11.0	7.6	7.7	4.1	15.3	
Lawra	14,009	100.0	0.6	2.2	5.5	9.4	11.0	12.6	11.8	11.2	8.1	8.1	5.5	13.9	

Source: Ghana Statistical Service, 2010 Population and Housing Census

11.5 Types of Agricultural Activity by Household

More than 95 percent of households engaged in agricultural activity were involved in crop farming while 63.7 percent were also engaged in livestock rearing (Table 11.4). Only a small proportion (1.9%) was engaged in tree growing.

Table 11.4: Distribution of households in agriculture by type of activity

District	All households		Type of agricultural activity							
	in agriculture		Crop farming		Tree growing		Livestock rearing		Fish farming	
	Total	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent
All districts	84,931	100.0	81,251	95.7	1,579	1.9	54,109	63.7	96	0.1
Wa West	10,524	100.0	10,229	97.2	129	1.2	7,316	69.5	8	0.1
Wa Municipal	5,841	100.0	4,844	82.9	217	3.7	2,835	48.5	8	0.1
Wa East	10,167	100.0	9,924	97.6	276	2.7	6,530	64.2	4	0.0
Sissala East	7,339	100.0	7,093	96.6	186	2.5	3,620	49.3	1	0.0
Nadowli	12,683	100.0	11,999	94.6	297	2.3	7,498	59.1	24	0.2
Jirapa	11,508	100.0	11,075	96.2	250	2.2	8,245	71.6	15	0.1
Sissala West	6,535	100.0	6,402	98.0	107	1.6	3,943	60.3	8	0.1
Lambussie Karni	6,325	100.0	6,075	96.0	82	1.3	4,911	77.6	14	0.2
Lawra	14,009	100.0	13,610	97.2	35	0.2	9,211	65.8	14	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

For Wa Municipality, nearly four percent of households were engaged in tree growing, substantially more than any other district. Lawra (0.2%) recorded the smallest proportion of households engaged in tree growing. Fish farming is not common in the region as very low proportions of households are engaged in this activity.

About 81 percent of male-headed households were engaged in crop farming compared to about 19 percent of female-headed households (Table 11.5). In the Wa East district, about 92 percent of male-headed households were engaged in tree growing. A relatively high proportion of female-headed households (38.0%) in the Nadowli district were involved in tree growing compared to the other districts. Fish farming in the region is mainly the preserve of male-headed households.

Table 11.5: Percentage distribution of households in agriculture by type of activity and sex

District	All activities			Crop farming		Tree growing		Livestock rearing		Fish farming	
	Number	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All districts	84,931	80.5	19.5	80.9	19.1	78.9	21.1	84.8	15.2	87.5	12.5
Wa West	10,524	83.3	16.7	83.8	16.2	83.7	16.3	87.0	13.0	100.0	0.0
Wa Municipal	5,841	85.4	14.6	87.0	13.0	85.3	14.7	86.1	13.9	87.5	12.5
Wa East	10,167	88.8	11.2	89.0	11.0	91.7	8.3	92.1	7.9	100.0	0.0
Sissala East	7,339	82.9	17.1	83.2	16.8	79.6	20.4	91.6	8.4	100.0	0.0
Nadowli	12,683	72.9	27.1	73.5	26.5	62.0	38.0	78.6	21.4	79.2	20.8
Jirapa	11,508	75.6	24.4	76.0	24.0	73.6	26.4	79.6	20.4	80.0	20.0
Sissala West	6,535	81.4	18.6	81.5	18.5	80.4	19.6	89.6	10.4	100.0	0.0
Lambussie Karni	6,325	76.4	23.6	76.5	23.5	82.9	17.1	80.2	19.8	78.6	21.4
Lawra	14,009	81.3	18.7	81.6	18.4	85.7	14.3	84.9	15.1	100.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 11.6 shows that 78.3 percent of male-headed households in urban areas are engaged in various agricultural activities compared to 21.7 percent of females. Fish farming in urban areas is carried out only in Wa Municipal and Sissala East districts. In the rural areas, except for tree growing, more than 80 percent of male-headed households are engaged in agricultural activities compared to nearly 20 percent of female-headed households. Compared to the proportion of female-headed households (7.1% and 8.3% respectively) involved in tree growing in rural Wa Municipal and Wa East, the proportion of men (92.9% and 91.7%) is far higher. One-fifth of female-headed households in the Nadowli and Jirapa districts are engaged in fish farming.

Table 11.6: Households in agriculture by type of activity, sex and locality

District	All activities			Crop farming		Tree growing		Livestock rearing		Fish farming	
	Number	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All districts	84,931	80.5	19.5	80.9	19.1	78.9	21.1	84.8	15.2	87.5	12.5
Urban	7,329	77.3	22.7	78.3	21.7	75.2	24.8	80.1	19.9	88.9	11.1
Wa West Municipal	2,751	83.1	16.9	85.0	15.0	80.5	19.5	84.1	15.9	87.5	12.5
Wa East	-	-	-	-	-	-	-	-	-	-	-
Sissala East	1,305	69.3	30.7	69.7	30.3	61.3	38.7	77.8	22.2	100.0	0.0
Nadowli	-	-	-	-	-	-	-	-	-	-	-
Jirapa	1,384	72.5	27.5	74.2	25.8	78.0	22.0	75.8	24.2	-	-
Sissala West Lambussie Karni	627	72.4	27.6	73.2	26.8	75.0	25.0	72.6	27.4	-	-
Lawra	1,262	80.9	19.1	81.5	18.5	100.0	0.0	83.8	16.2	-	-
Rural	77,602	80.8	19.2	81.1	18.9	79.6	20.4	85.2	14.8	87.4	12.6
Wa West Municipal	3,090	87.4	12.6	88.3	11.7	92.9	7.1	88.1	11.9	-	-
Wa East	10,167	88.8	11.2	89.0	11.0	91.7	8.3	92.1	7.9	100.0	0.0
Sissala East	6,034	85.8	14.2	85.8	14.2	88.7	11.3	93.6	6.4	-	-
Nadowli	12,683	72.9	27.1	73.5	26.5	62.0	38.0	78.6	21.4	79.2	20.8
Jirapa	10,124	76.0	24.0	76.3	23.7	72.5	27.5	80.1	19.9	80.0	20.0
Sissala West Lambussie Karni	5,698	76.8	23.2	76.8	23.2	83.3	16.7	80.9	19.1	78.6	21.4
Lawra	12,747	81.4	18.6	81.6	18.4	85.3	14.7	85.0	15.0	100.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

11.6 Types of Crops cultivated by Households

Crops cultivated by households in the Upper West Region are mainly cereals, roots and tubers and legumes. Households are either engaged in mono-cropping (single crop cultivated on farmland), mixed cropping (more than one crop on the same farmland) or crop rotation.

About 84 percent of households engaged in agro-forestry (tree growing) in the region were located in rural areas (Table 11.7a). In the case of legumes, the proportion of households in the rural areas who cultivated beans and groundnuts was 97.1 percent and 93.1 percent respectively. Only 15.0 percent of households engaged in cultivating carrots lived in urban areas.

Table 11.7a: Distribution of households engaged in agricultural activity by type of locality and crop cultivated

Type of Crop	Households				
	Total	Urban Number	Percent	Rural Number	Percent
All crops	226,047	12,572	5.6	213,475	94.4
Agro-forestry (tree growing)	1,579	250	15.8	1,329	84.2
Alligator pepper	137	16	11.7	121	88.3
Apples	131	13	9.9	118	90.1
Asian vegetables (e.g. tinda, cauliflower)	218	16	7.3	202	92.7
Avocado	42	2	4.8	40	95.2
Banana	527	15	2.8	512	97.2
Beans	22,245	646	2.9	21,599	97.1
Black pepper	78	2	2.6	76	97.4
Black berries	113	9	8.0	104	92.0
Cabbage	22	6	27.3	16	72.7
Carrot	5,446	816	15.0	4,630	85.0
Cashew	1,425	38	2.7	1,387	97.3
Cassava	2,672	293	11.0	2,379	89.0
Citronella	27	1	3.7	26	96.3
Citrus	20	4	20.0	16	80.0
Cloves	39	7	17.9	32	82.1
Cocoa	152	10	6.6	142	93.4
Coconut	30	6	20.0	24	80.0
Cocoyam	126	10	7.9	116	92.1
Cocoyam / Taro (<i>koko</i>)	47	4	8.5	43	91.5
Coffee	41	4	9.8	37	90.2
Cola	37	2	5.4	35	94.6
Cotton	1,143	21	1.8	1,122	98.2
Cucumber	416	30	7.2	386	92.8
Egg plant	36	3	8.3	33	91.7
Garlic	16	1	6.3	15	93.8
Garden eggs	396	28	7.1	368	92.9
Ginger	184	2	1.1	182	98.9
Groundnuts	44,686	3,072	6.9	41,614	93.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

Maize and millet, the two major cereal crops grown in the region, were cultivated by a high proportion of households in rural areas (93.3% and 96.2% respectively). The other crops involving the highest number of farmers were yam and rice, each cultivated by more than 95 percent of households living in rural areas (Table 11.7b).

Table 11.7b: Distribution of households engaged in agricultural activities by type of locality and crop cultivated

Type of Crop	Number of persons engaged in agriculture				
	Total	Urban		Rural	
		Number	Percent	Number	Percent
Guava	276	15	5.4	261	94.6
Kenaf	170	4	2.4	166	97.6
Lemon grass	70	10	14.3	60	85.7
Lettuce	253	7	2.8	246	97.2
Maize	53,213	3,561	6.7	49,652	93.3
Mango	1,294	68	5.3	1,226	94.7
Melon (<i>agusi</i>)	83	5	6.0	78	94.0
Millet	33,310	1,272	3.8	32,038	96.2
Mushroom	275	14	5.1	261	94.9
Nutmeg	318	26	8.2	292	91.8
Oil palm	49	4	8.2	45	91.8
Okro	2,280	108	4.7	2,172	95.3
Onion	58	1	1.7	57	98.3
Pawpaw	41	4	9.8	37	90.2
Peas	417	31	7.4	386	92.6
Pepper	961	85	8.8	876	91.2
Pineapple	15	0	0.0	15	100.0
Plantain	154	13	8.4	141	91.6
Potatoes	100	5	5.0	95	95.0
Rice	15,236	620	4.1	14,616	95.9
Rubber	14	6	42.9	8	57.1
Shallot	12	2	16.7	10	83.3
Shea tree	46	11	23.9	35	76.1
Sorghum	8,518	183	2.1	8,335	97.9
Soya beans	2,562	68	2.7	2,494	97.3
Spinach	35	4	11.4	31	88.6
Sugar cane	10	1	10.0	9	90.0
Sunflower	74	3	4.1	71	95.9
Sweet pepper	32	2	6.3	30	93.8
Sweet potatoes	202	3	1.5	199	98.5
Tiger nut	241	3	1.2	238	98.8
Tobacco	86	0	0.0	86	100.0
Tomatoes	972	21	2.2	951	97.8
Water melon	181	10	5.5	171	94.5
Yam	18,382	888	4.8	17,494	95.2
Others	4,076	187	4.6	3,889	95.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

11.7 Livestock Rearing by Household

According to Table 11.8, more than 93 percent of livestock holdings in the region were in rural areas. Most cattle (95.5%), goats (95.0%), chickens (93.0%) and pigs (92.2%) were in rural areas while 32.7 percent of rabbits were in urban areas. The picture was the same for the number of livestock in the region where more than 90% of most livestock were reared in rural areas.

Table 11.8: Distribution of livestock by type, total livestock and by locality

Type of livestock	No. of holdings					Total livestock				
	Total	Urban		Rural		Total	Urban		Rural	
		Number	Per-cent	Number	Per-cent		Number	Per-cent	Number	Per-cent
All	116,934	7,116	6.1	109,818	93.9	1,690,082	108,564	6.4	1,581,518	93.6
Beehives	222	6	2.7	216	97.3	5,328	177	3.3	5,151	96.7
Cattle	10,846	487	4.5	10,359	95.5	199,676	11,075	5.5	188,601	94.5
Chicken	32,065	2,235	7.0	29,830	93.0	568,329	37,990	6.7	530,339	93.3
Dove	277	30	10.8	247	89.2	7,112	1,655	23.3	5,457	76.7
Duck	1,147	135	11.8	1,012	88.2	18,282	1,904	10.4	16,378	89.6
Goat	38,481	1,941	5.0	36,540	95.0	463,002	23,294	5.0	439,708	95.0
Grass-cutter	255	19	7.5	236	92.5	4,970	392	7.9	4,578	92.1
Guinea fowl	7,475	397	5.3	7,078	94.7	131,746	6,996	5.3	124,750	94.7
Ostrich	274	10	3.6	264	96.4	3,501	103	2.9	3,398	97.1
Pig	10,890	854	7.8	10,036	92.2	94,824	10,760	11.3	84,064	88.7
Rabbit	263	86	32.7	177	67.3	4,238	983	23.2	3,255	76.8
Sheep	13,434	796	5.9	12,638	94.1	168,867	11,702	6.9	157,165	93.1
Silkworm	60	1	1.7	59	98.3	613	20	3.3	593	96.7
Snail	5	0	0.0	5	100.0	16	0	0.0	16	100.0
Turkey	355	43	12.1	312	87.9	4,276	348	8.1	3,928	91.9
Others	773	63	8.2	710	91.8	6,424	849	13.2	5,575	86.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER TWELVE

HOUSING CONDITIONS

12.1 Introduction

This chapter presents information about housing characteristics in the region. These include housing stock, type of dwelling materials used for building, number of sleeping rooms occupied by household members, ownership of houses, fuel for cooking, and solid and liquid waste disposal.

12.2 Housing Stock

The total number of houses recorded in the region was 82,293, meaning an average of 8.5 persons per house (Table 12.1). The total number of houses is an increase of 62.3% over the stock of houses in the region recorded by 2000 Population and Housing Census. The rural share was 85.4% of regional housing stock, higher than the national average of 57.7%. Wa Municipal recorded the largest number of persons per house (11.2) followed by Sissala East (10.1). The lowest number per house was in Wa West (7.79). This is expected since Wa Municipal is the capital and therefore migration rates from neighbouring towns and villages are high.

Table 12.1: Distribution of population and number of houses by district

District	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 household size
All districts	702,110	688,328	82,293	110,175	100.0	85.4	1.34	8.53	6.25
Wa West	81,348	80,382	10,444	11,486	12.7	100.0	1.10	7.79	7.00
Wa Municipal	107,214	102,264	9,592	18,891	11.7	39.6	1.97	11.18	5.41
Wa East	72,074	71,120	9,532	10,768	11.6	100.0	1.13	7.56	6.60
Sissala East	56,528	55,764	5,619	8,652	6.8	76.0	1.54	10.06	6.45
Nadowli	94,388	92,993	12,719	15,210	15.5	100.0	1.20	7.42	6.11
Jirapa	88,402	87,308	12,208	13,911	14.8	81.9	1.14	7.24	6.28
Sissala West	49,573	49,021	5,185	7,116	6.3	100.0	1.37	9.56	6.89
Lambussie Karni	51,654	50,896	5,798	7,524	7.0	83.5	1.30	8.91	6.76
Lawra	100,929	98,580	11,196	16,617	13.6	84.9	1.48	9.01	5.93

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.3 Type of Dwelling and Construction Material by District

Table 12.2 shows the various types of dwellings found in the Upper West. Rooms in compound houses are the most common type of dwelling unit occupied by households and constitute half of all dwellings in the region. Detached dwelling units are 33.2 percent of all dwellings. Rooms in compound houses are also popular although these vary by districts.

Table 12.2: Distribution of type of dwelling by district

Type of dwelling	All districts	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	118,292	12,713	19,597	11,667	9,095	16,565	15,285	7,625	8,155	17,590
Separate house	39,338	5,780	4,715	5,063	2,106	5,859	6,235	2,380	2,346	4,854
Semi-detached house	10,599	688	2,027	914	722	1,596	1,118	634	759	2,141
Flat/apartment	1,617	49	579	92	148	316	132	64	113	124
Compound house (rooms)	59,089	5,345	11,081	4,915	5,656	7,899	6,515	4,197	4,422	9,059
Huts/buildings (same compound)	3,826	510	359	432	269	532	586	151	269	718
Huts/buildings (different compound)	1,889	203	219	93	119	155	306	149	145	500
Tent	295	32	48	52	24	31	25	18	21	44
Improvised home (kiosk/container, etc.)	78	6	18	1	6	13	17	4	5	8
Living quarters attached to office/shop	270	19	92	16	12	24	49	11	9	38
Uncompleted building	1,072	75	373	81	31	121	226	15	62	88
Other	219	6	86	8	2	19	76	2	4	16

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.4 Main Materials Used for Outer Wall

Table 12.3 provides information on the type of materials used for construction of outer walls in the region. On the whole, mud brick/earth were the most commonly used materials for the outer wall – they constituted about 75.0 percent of all materials used for outer walls. The next most commonly used materials were cement blocks/concrete, which had a share of about 21.1 percent of all materials used.

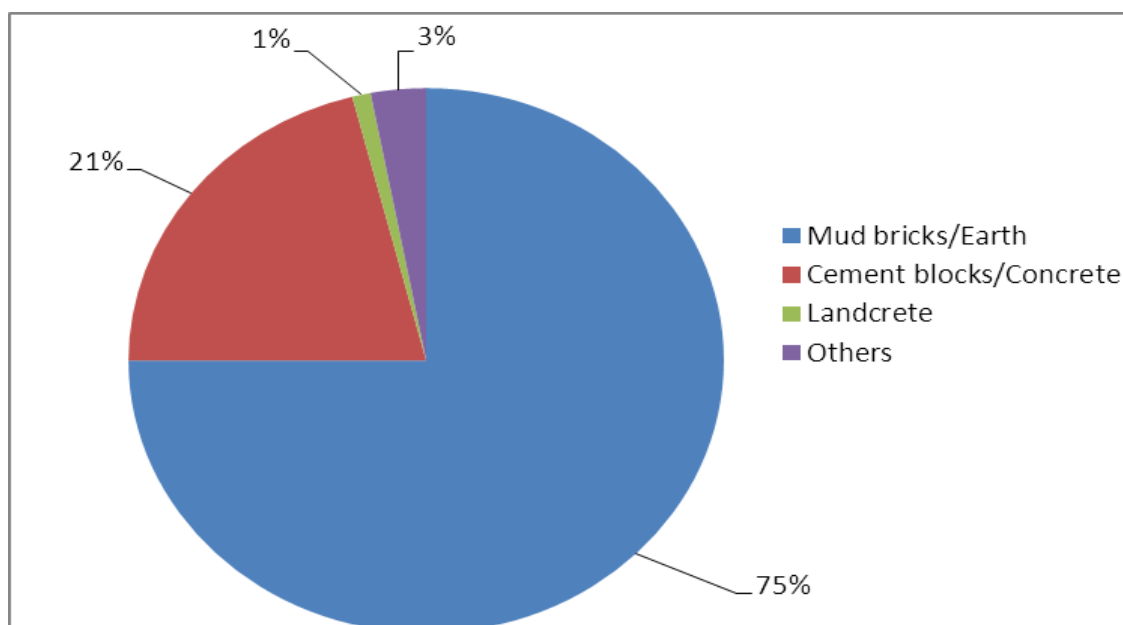
Among the districts, mud brick/earth is the most widely used material for outer walls. The highest usage is recorded in Wa East (92.6%) and Wa West (89.9%). Wa Municipal recorded the lowest percentage use of mud brick/earth (35.7%) and the highest percentage use of concrete (59.9%).

Table 12.3: Percentage distribution of dwellings by main material for outer wall, district and locality

Type of material	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	118,292	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud brick/earth	88,739	75.0	89.9	35.7	92.6	79.3	78.7	79.8	83.8	82.9	79.2
Wood	883	0.7	0.9	0.5	1.0	0.7	0.8	0.7	1.1	0.8	0.6
Metal sheet/slate/asbestos	568	0.5	0.4	0.8	0.4	0.3	0.6	0.2	0.3	0.3	0.5
Stone	230	0.2	0.1	0.2	0.1	0.1	0.3	0.1	0.2	0.3	0.3
Burnt bricks	408	0.3	0.1	0.4	0.1	0.9	0.7	0.1	0.4	0.1	0.4
Cement blocks/Concrete	24,924	21.1	7.3	59.9	3.3	14.3	17.6	17.4	9.7	14.5	17.4
Landcrete	1,159	1.0	0.6	2.1	0.2	0.5	0.7	1.0	2.1	0.2	1.0
Bamboo	87	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0.1
Palm leaf/thatch (grass)/raffia	888	0.8	0.4	0.1	1.6	3.5	0.3	0.3	2.1	0.5	0.1
Other	406	0.3	0.3	0.3	0.5	0.3	0.2	0.3	0.3	0.3	0.5
Urban	23,898	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Mud brick/earth	8,750	36.6	-	24.8	-	55.3	-	48.0	-	71.1	48.8
Wood	88	0.4	-	0.5	-	0.2	-	0.2	-	0.2	0.3
Metal sheet/slate/asbestos	184	0.8	-	1.0	-	0.3	-	0.5	-	0.2	0.8
Stone	49	0.2	-	0.2	-	0.1	-	0.1	-	0.2	0.4
Burnt bricks	103	0.4	-	0.5	-	0.4	-	0.2	-	0.2	0.5
cement blocks /concrete	14,222	59.5	-	70.1	-	41.7	-	50.5	-	27.8	48.4
Landcrete	410	1.7	-	2.5	-	1.2	-	0.3	-	0.2	0.5
Bamboo	17	0.1	-	0.1	-	0.0	-	0.1	-	0.0	0.0
Palm leaf/thatch (grass)/raffia	28	0.1	-	0.1	-	0.7	-	0.0	-	0.2	0.0
Other	47	0.2	-	0.2	-	0.1	-	0.2	-	0.0	0.2
Rural	94,394	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud brick/earth	79,989	84.7	89.9	62.4	92.6	88.1	78.7	88.5	83.8	85.2	85.1
Wood	795	0.8	0.9	0.6	1.0	0.9	0.8	0.8	1.1	0.9	0.7
Metal sheet/slate/asbestos	384	0.4	0.4	0.4	0.4	0.3	0.6	0.2	0.3	0.3	0.5
Stone	181	0.2	0.1	0.1	0.1	0.1	0.3	0.1	0.2	0.3	0.3
Burnt bricks	305	0.3	0.1	0.1	0.1	1.1	0.7	0.1	0.4	0.1	0.3
Cement blocks /concrete	10,702	11.3	7.3	34.8	3.3	4.2	17.6	8.3	9.7	12.0	11.3
Landcrete	749	0.8	0.6	0.9	0.2	0.3	0.7	1.2	2.1	0.2	1.1
Bamboo	70	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.1
Palm leaf/thatch (grass)/raffia	860	0.9	0.4	0.1	1.6	4.5	0.3	0.4	2.1	0.6	0.1
Other	359	0.4	0.3	0.4	0.5	0.4	0.2	0.4	0.3	0.4	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 12.1: Main material for outer wall



Source: Ghana Statistical Service, 2010 Population and Housing Census

12.5 Urban-Rural Locality

The urban use of mud brick/earth as material for outer wall was most common in Lambussie Karni (71.1%). In the rural areas, the use of mud brick/earth for outer walls amounted to 84.7 percent of all materials, compared with 36.6 percent in urban areas.

12.6 Material for Roof (Occupied and Unoccupied Buildings)

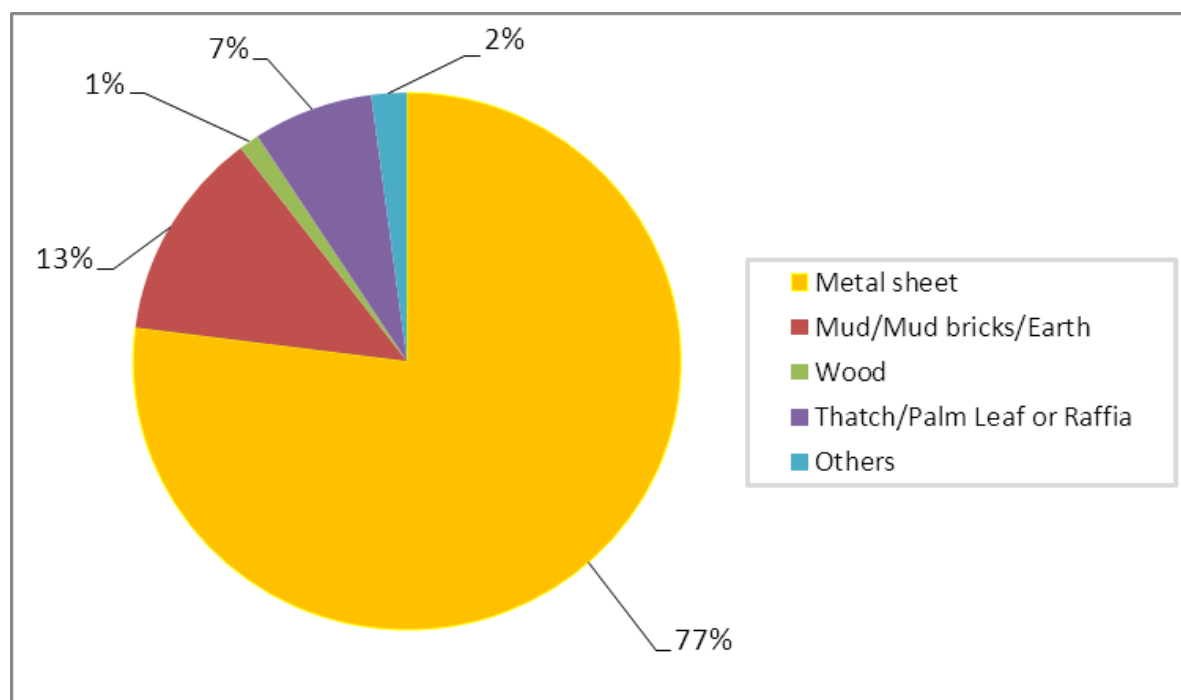
Corrugated metal sheet was the main roofing material in the region, accounting for 77.0 percent of all roofing materials (Table 12.4). Among districts, the proportion of households using corrugated metal sheet was above the regional average of 77.0%. Highest usage was in Wa Municipal (91.7%), Nadowli (84.5%) and Sissala East (84.3%). The district with the lowest percentage use of corrugated metal sheet for roofing was Wa East (62.7%). The next most common roofing materials used in the region were mud/mud bricks/earth (12.6%) and thatch/palm leaf or raffia (7.1%). The least used roofing materials were asbestos/slate and bamboo (0.2%, each). Across districts, use of mud/mud bricks/earth for roofing was relatively high in Wa West (28.6%) and Wa East (26.4%). The district with the lowest use of mud/mud bricks/earth was Sissala East (1.1%).

Table 12.4: Percentage distribution of dwellings by material used for roof, district and locality

Type of roofing material	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
All	118,292	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud/mud bricks/earth	14,910	12.6	28.6	2.2	26.4	1.1	7.4	9.0	14.0	23.3	12.1
Wood	1,399	1.2	1.5	0.7	2.1	0.7	0.8	0.7	2.3	2.0	1.0
Corrugated metal sheet	91,046	77.0	63.9	91.7	62.7	84.3	84.5	79.6	66.7	64.2	76.7
Slate/asbestos	245	0.2	0.1	0.5	0.1	0.2	0.1	0.1	0.1	0.2	0.2
Cement/concrete	717	0.6	0.4	1.3	0.3	0.3	0.5	0.5	0.3	1.1	0.6
Roofing tile	362	0.3	0.6	1.0	0.2	0.1	0.1	0.1	0.0	0.0	0.2
Bamboo	283	0.2	0.2	0.2	0.5	0.1	0.1	0.1	0.2	0.8	0.2
Thatch/palm leaf or raffia	8,394	7.1	4.2	1.8	6.7	12.5	5.8	9.0	15.3	7.4	8.4
Other	936	0.8	0.7	0.6	1.0	0.6	0.7	1.0	1.1	1.1	0.6
Urban	23,898	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Mud/mud bricks/earth	293	1.2	-	0.5	-	0.3	-	3.0	-	3.5	2.6
Wood	125	0.5	-	0.4	-	0.5	-	0.9	-	0.6	0.7
Corrugated metal sheet	22,350	93.5	-	93.1	-	95.1	-	93.4	-	94.1	93.9
Slate/asbestos	132	0.6	-	0.6	-	0.8	-	0.1	-	0.6	0.4
Cement/concrete	304	1.3	-	1.6	-	0.2	-	1.4	-	0.4	1.0
Roofing tile	193	0.8	-	1.3	-	0.1	-	0.1	-	0.0	0.2
Bamboo	38	0.2	-	0.2	-	0.0	-	0.2	-	0.0	0.1
Thatch/palm leaf or raffia	353	1.5	-	1.7	-	2.6	-	0.4	-	0.8	1.0
Other	110	0.5	-	0.6	-	0.3	-	0.5	-	0.1	0.2
Rural	94,394	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mud/mud bricks/earth	14,617	15.5	28.6	6.4	26.4	1.4	7.4	10.6	14.0	27.1	13.9
Wood	1,274	1.3	1.5	1.4	2.1	0.8	0.8	0.6	2.3	2.3	1.1
Metal sheet	68,696	72.8	63.9	88.1	62.7	80.3	84.5	75.8	66.7	58.4	73.3
Slate/asbestos	113	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2
Cement/concrete	413	0.4	0.4	0.5	0.3	0.3	0.5	0.2	0.3	1.2	0.5
Roofing tile	169	0.2	0.6	0.1	0.2	0.1	0.1	0.2	0.0	0.0	0.2
Bamboo	245	0.3	0.2	0.3	0.5	0.2	0.1	0.1	0.2	0.9	0.2
Thatch/palm leaf or raffia	8,041	8.5	4.2	2.2	6.7	16.1	5.8	11.4	15.3	8.7	9.8
Other	826	0.9	0.7	0.9	1.0	0.7	0.7	1.1	1.1	1.3	0.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 12.2: Main construction material for roof



Source: Ghana Statistical Service, 2010 Population and Housing Census

12.7 Material for Roofing by Locality

As expected, the percentage of use of corrugated metal sheet as main roofing material in urban localities was highest (77%), and very high in Wa Municipality, Sissala East and Nadowli. The district with the lowest use of corrugated metal sheet was Wa West (63.9%). For rural localities, corrugated metal sheet is still most common, with an average percentage use of 72.8%. The use of thatch/palm leaf or raffia (1.5%) and mud/mud bricks/earth (1.2%) is not very popular. Bamboo is the least popular in the region (0.2%).

12.8 Floor Materials

Among the materials used for floors, cement/concrete emerged as the most popular and was used by more than half of the people in the region (59.6%). Almost two-fifth (38.5%) of the people use earth/mud for their floor. The most infrequently used material for floors in the region was wood.

Among districts, cement/concrete was the most common floor material used in Wa municipality (89.7%), Sissala East (87.4%) and Wa East (63.6%), which was higher than the regional average of 59.6 percent. Lambussie Karni recorded the lowest use of cement as material for floor construction (33.3%).

12.9 Urban-Rural Locality

The percentage use of cement/concrete in urban areas is very high (89.2% of all materials used for floors). Earth/mud floor material was the other material most frequently used material for floors (7.6%). In urban localities, Sissala East (95.2%) and Wa Municipal (92.3%) recorded the highest percentage use of cement/concrete, which was higher than the regional average of 89.2 percent. Cement/concrete floor materials were least used in urban Lawra but still amounted to 80.5 percent.

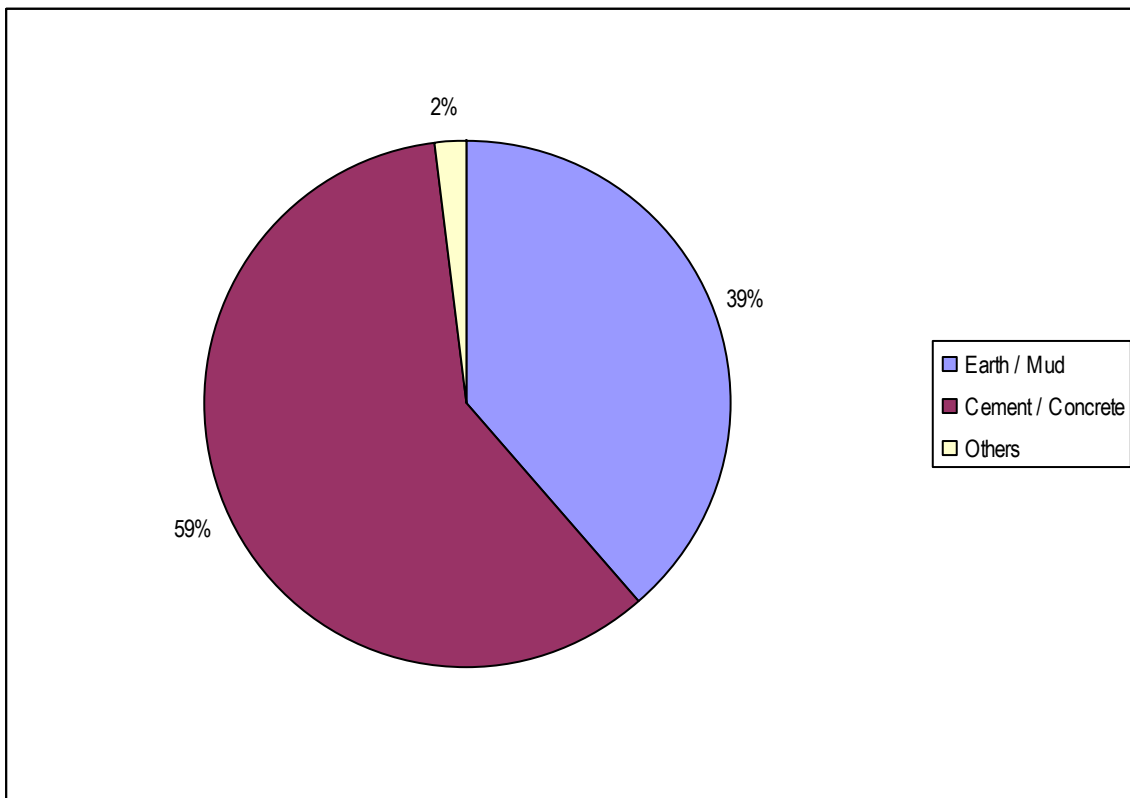
Table 12.5: Percentage distribution of households by main material for floor of dwelling, district and locality

Type of floor material	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earth/mud	42,447	38.5	52.7	6.8	35.1	10.9	38.1	57.6	34.1	65.7	55.5
Cement/concrete	65,714	59.6	45.3	89.7	63.6	87.4	60.6	41.3	63.5	33.3	43.2
Stone	310	0.3	0.2	0.3	0.2	0.6	0.3	0.2	0.3	0.1	0.3
Burnt brick	67	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1
Wood	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vinyl tiles	176	0.2	0.0	0.6	0.0	0.2	0.1	0.2	0.0	0.1	0.0
Ceramic/porcelain/ granite/marble tiles	700	0.6	0.6	1.3	0.6	0.4	0.5	0.4	0.5	0.3	0.5
Terrazzo/terrazzo tiles	238	0.2	0.0	1.0	0.0	0.2	0.1	0.0	0.1	0.0	0.0
Other	514	0.5	1.1	0.3	0.5	0.3	0.2	0.2	1.4	0.3	0.4
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Earth/mud	1,715	7.6	-	3.8	-	2.3	-	17.6	-	16.2	16.4
Cement/concrete	20,177	89.2	-	92.3	-	95.2	-	80.6	-	82.7	80.5
Stone	93	0.4	-	0.3	-	0.3	-	0.3	-	0.0	1.1
Burnt brick	20	0.1	-	0.1	-	0.0	-	0.1	-	0.0	0.1
Wood	1	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Vinyl tiles	126	0.6	-	0.7	-	0.6	-	0.2	-	0.2	0.1
Ceramic/porcelain/ granite/marble tiles	294	1.3	-	1.5	-	0.7	-	0.8	-	0.7	1.5
Terrazzo/terrazzo tiles	158	0.7	-	1.0	-	0.7	-	0.2	-	0.1	0.0
Other	44	0.2	-	0.2	-	0.1	-	0.2	-	0.2	0.1
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earth/mud	40,732	46.5	52.7	14.2	35.1	14.0	38.1	68.3	34.1	74.8	63.0
Cement/concrete	45,537	52.0	45.3	83.0	63.6	84.6	60.6	30.8	63.5	24.3	35.9
Stone	217	0.2	0.2	0.3	0.2	0.7	0.3	0.1	0.3	0.1	0.2
Burnt brick	47	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1
Wood	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vinyl tiles	50	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Ceramic/porcelain/ Granite/marble tiles	406	0.5	0.6	0.9	0.6	0.3	0.5	0.3	0.5	0.3	0.3
Terrazzo/terrazzo tiles	80	0.1	0.0	1.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
Other	470	0.5	1.1	0.4	0.5	0.3	0.2	0.2	1.4	0.3	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

In rural localities, average use of cement/concrete as floor material is 52.0 percent, with a range as high as 84.6 percent in rural Sissala East but very low (24.3%) in Lambussie Karni.

Figure 12.3: Main material for floors



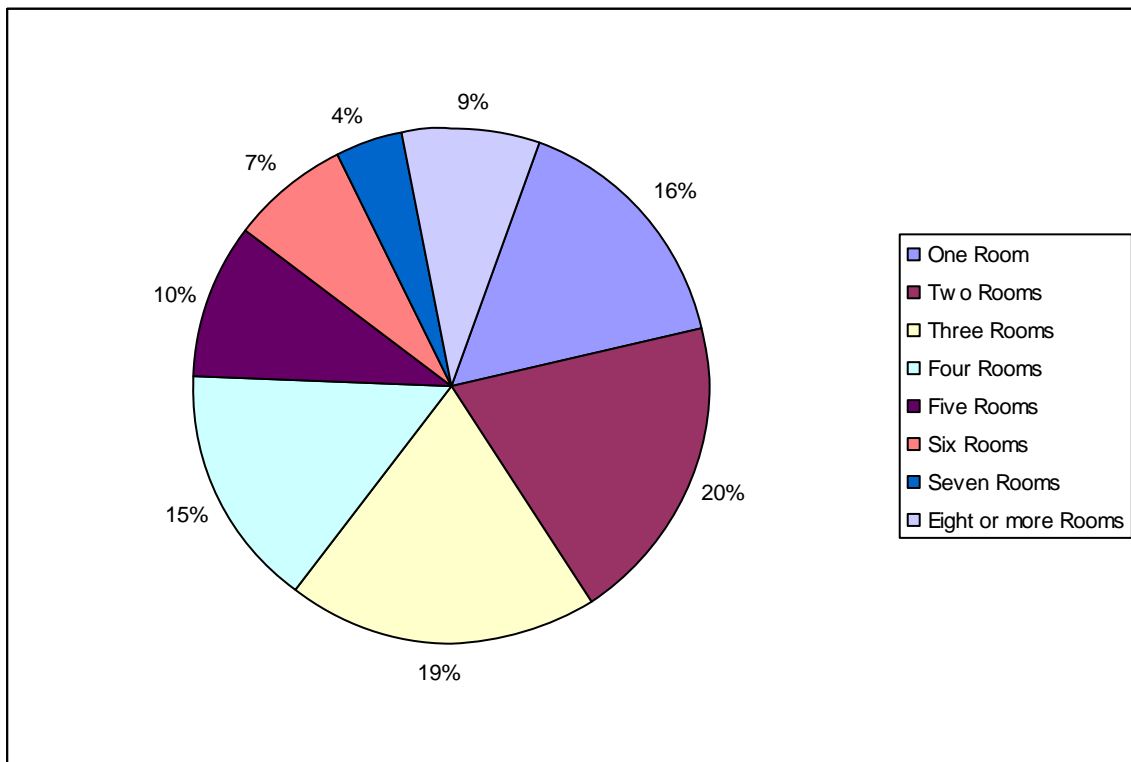
Source: Ghana Statistical Service, 2010 Population and Housing Census

12.10 Room Occupancy

There is a close association between good ventilation and good health. Table 12.4 shows the number of rooms occupied by households. The table shows that on average, two-room occupancy was the most common in the region. Almost 20 percent of households occupy two rooms. Occupancy of eight rooms was the least common and accounted for 3.1 percent.

Among districts, one-room occupancy was the most common in the Wa municipality (38.1%) highest among the districts. Single-room occupancy in Wa West was just 8.2 percent. Two-room occupancy was most common in Wa East and accounted for 27.9 percent, in contrast to Jirapa and Lawra (both 15.1%). Room occupancy by households of seven and more was not common, ranging from a high of 7.9 percent in Lambussie Karni to a low of 1.5 percent in Wa Municipality.

Figure 12.4: Number of rooms



Source: Ghana Statistical Service, 2010 Population and Housing Census

12.10.1 Urban–Rural Locality

Single-room occupancy by households in urban areas was highest in Wa municipality (43.5%) which is higher than the regional average of 38.0 percent. For urban dwellers, single room was also common in Sissala East with 38.1 percent. Overall, single-room occupancy averaged 37 percent in urban areas and 8.9 percent in rural areas while two-room occupancy averaged 22.3 percent and 9.8 percent in urban and rural areas respectively. While there was a 14.5 percent average of three-room occupancy in urban areas, the rural figure was 20.6 percent. The rural average for number of rooms was higher in all categories from three to nine rooms and more.

Table 12.6: Percentage distribution of households by number of rooms occupied, district and locality

Number of rooms	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
One room	17,325	15.7	8.2	38.1	11.4	18.3	10.2	11.7	10.0	11.7	9.7
Two rooms	21,640	19.6	20.8	22.7	27.9	24.2	17.7	15.1	19.6	15.7	15.1
Three rooms	21,363	19.4	23.4	14.4	22.6	20.3	19.8	18.1	19.9	20.1	20.1
Four rooms	16,870	15.3	18.2	9.2	15.9	13.6	16.6	15.8	17.3	16.1	18.0
Five rooms	10,758	9.8	10.5	5.2	9.0	7.6	11.1	12.3	10.6	10.6	12.0
Six rooms	7,989	7.3	7.9	3.6	5.2	5.6	8.2	9.5	8.4	8.7	9.3
Seven rooms	4,657	4.2	4.2	2.3	2.9	3.5	4.9	5.8	5.0	5.0	5.1
Eight rooms	3,444	3.1	2.8	1.5	2.0	2.4	3.8	4.2	3.2	4.1	4.2
Nine rooms or more	6,128	5.6	4.2	3.1	3.1	4.5	7.7	7.6	6.2	7.9	6.4
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
One room	8,754	38.7	-	43.5	-	38.1	-	31.8	-	23.9	29.1
Two rooms	5,054	22.3	-	22.2	-	24.8	-	22.2	-	21.2	21.7
Three rooms	3,290	14.5	-	13.0	-	14.7	-	17.4	-	16.4	17.9
Four rooms	2,026	9.0	-	8.0	-	7.3	-	9.8	-	12.8	12.3
Five rooms	1,139	5.0	-	4.5	-	4.3	-	5.9	-	6.2	6.9
Six rooms	807	3.6	-	3.1	-	3.2	-	4.8	-	5.1	4.1
Seven rooms	492	2.2	-	1.9	-	2.7	-	2.5	-	4.2	2.1
Eight rooms	352	1.6	-	1.2	-	1.5	-	1.8	-	3.7	2.1
Nine rooms or more	714	3.2	-	2.6	-	3.3	-	3.8	-	6.5	3.8
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
One room	8,571	9.8	8.2	24.5	11.4	11.1	10.2	6.3	10.0	9.4	6.0
Two rooms	16,586	18.9	20.8	23.9	27.9	23.9	17.7	13.3	19.6	14.8	13.9
Three rooms	18,073	20.6	23.4	17.7	22.6	22.3	19.8	18.2	19.9	20.8	20.5
Four rooms	14,844	17.0	18.2	12.0	15.9	15.9	16.6	17.3	17.3	16.8	19.1
Five rooms	9,619	11.0	10.5	6.9	9.0	8.7	11.1	14.1	10.6	11.4	13.0
Six rooms	7,182	8.2	7.9	4.9	5.2	6.4	8.2	10.7	8.4	9.3	10.3
Seven rooms	4,165	4.8	4.2	3.3	2.9	3.8	4.9	6.6	5.0	5.2	5.7
Eight rooms	3,092	3.5	2.8	2.3	2.0	2.8	3.8	4.8	3.2	4.2	4.6
Nine rooms or more	5,414	6.2	4.2	4.5	3.1	5.0	7.7	8.6	6.2	8.2	6.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.10.2 Sleeping Rooms

Table 12.7 gives the percentage distribution of households by number of sleeping rooms in the districts. The data show that on the average, two rooms predominated in the region and accounted for 29.5 percent of all types of sleeping rooms. At the district level, the percentage of household members occupying a single room was highest in Wa municipality (43.3%), followed by Sissala East (25.2%). Occupancy for two rooms at the district level was also high in Wa East (36.0%), and Wa West (31.5%). Households occupying dwellings with six rooms and above were less than 5 percent.

12.10.3 Sleeping Rooms in Urban and Rural Localities

Single sleeping rooms were predominant in urban localities. Almost half (48.5%) of households in Wa Municipal had one sleeping room, followed by Sissala East (47.4%), both higher than the regional average of 46.0 percent. For rural localities, two sleeping rooms was the most common, especially in Wa East (36.0%).

Table 12.7: Percentage distribution of households by number of sleeping rooms, district and locality

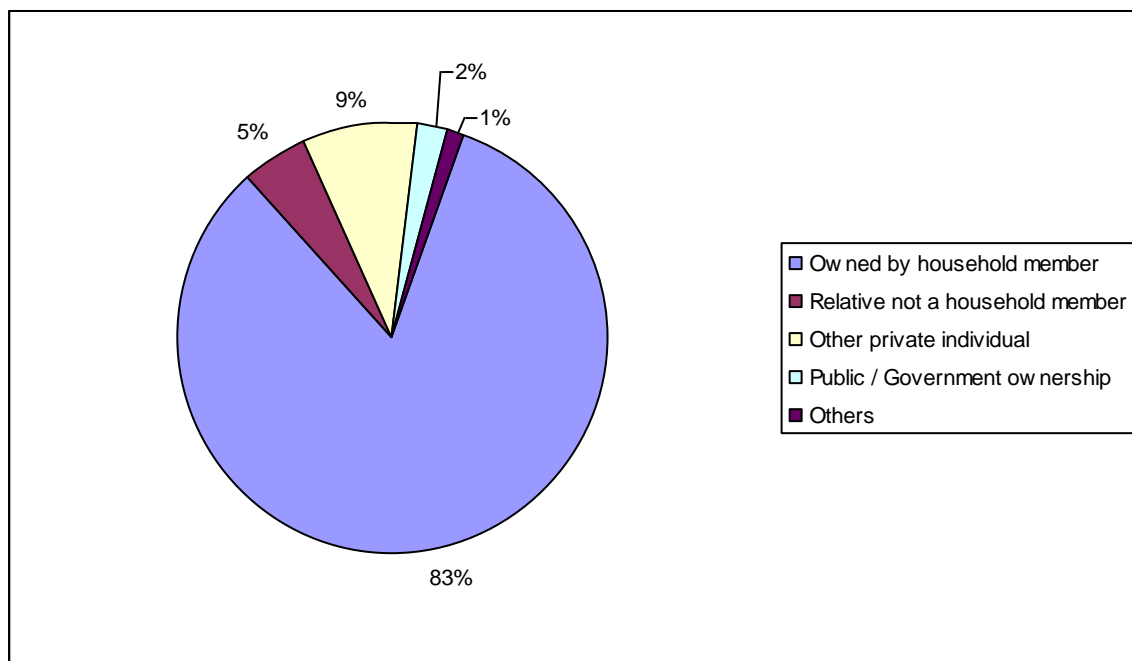
Number of rooms	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No sleeping rooms	-	-	-	-	-	-	-	-	-	-	-
One room	26,454	24.0	15.5	43.3	20.3	25.2	19.7	21.3	19.1	20.2	19.9
Two rooms	32,519	29.5	31.5	26.0	36.0	29.5	29.3	27.4	30.0	27.6	30.5
Three rooms	22,791	20.7	22.7	13.3	20.9	19.0	22.0	22.5	22.0	22.6	24.2
Four rooms	13,360	12.1	14.8	7.6	11.4	11.4	13.2	13.3	14.1	12.9	13.1
Five rooms	6,376	5.8	7.2	3.8	4.7	5.8	6.6	6.8	6.3	7.0	5.4
Six rooms	3,789	3.4	4.0	2.4	3.2	3.5	3.8	4.2	3.4	4.0	3.1
Seven rooms	1,806	1.6	1.8	1.2	1.3	1.9	1.8	1.8	2.0	2.3	1.4
Eight rooms	1,257	1.1	1.1	0.8	1.0	1.5	1.5	1.2	1.2	1.2	1.1
Nine rooms or more	1,822	1.7	1.4	1.6	1.2	2.1	2.1	1.5	2.0	2.3	1.2
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
No sleeping rooms	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
One room	10,414	46.0	-	48.5	-	47.4	-	43.9	-	32.6	40.6
Two rooms	5,828	25.8	-	25.0	-	26.6	-	27.8	-	27.0	26.3
Three rooms	2,788	12.3	-	11.4	-	10.7	-	14.5	-	15.6	14.8
Four rooms	1,562	6.9	-	6.7	-	5.2	-	6.7	-	10.1	8.4
Five rooms	779	3.4	-	3.2	-	3.6	-	3.8	-	5.2	3.4
Six rooms	490	2.2	-	2.2	-	2.4	-	1.7	-	2.8	2.2
Seven rooms	236	1.0	-	0.9	-	1.4	-	0.8	-	2.4	1.0
Eight rooms	187	0.8	-	0.7	-	0.8	-	0.2	-	2.2	1.5
Nine rooms or more	344	1.5	-	1.5	-	1.9	-	0.7	-	2.2	1.8
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No sleeping rooms	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
One room	16,040	18.3	15.5	30.1	20.3	17.1	19.7	15.2	19.1	18.0	15.9
Two rooms	26,691	30.5	31.5	28.5	36.0	30.5	29.3	27.3	30.0	27.7	31.4
Three rooms	20,003	22.8	22.7	18.4	20.9	22.0	22.0	24.6	22.0	23.8	26.1
Four rooms	11,798	13.5	14.8	10.0	11.4	13.6	13.2	15.1	14.1	13.4	14.0
Five rooms	5,597	6.4	7.2	5.2	4.7	6.6	6.6	7.6	6.3	7.3	5.8
Six rooms	3,299	3.8	4.0	3.1	3.2	4.0	3.8	4.9	3.4	4.2	3.3
Seven rooms	1,570	1.8	1.8	2.0	1.3	2.1	1.8	2.1	2.0	2.2	1.5
Eight rooms	1,070	1.2	1.1	1.0	1.0	1.7	1.5	1.5	1.2	1.0	1.0
Nine rooms or more	1,478	1.7	1.4	1.9	1.2	2.2	2.1	1.8	2.0	2.4	1.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.10.4 Ownership of Dwelling

Table 12.8 shows the distribution of type of ownership of occupied housing units in the region. The data show that most of dwelling units were occupied by private individuals who are household members (82.8%). Among the districts, Wa East recorded the highest percentage of ownership of dwelling units by private individuals who are household members (96.7%).

Figure 12.5: Ownership of dwelling



Source: Ghana Statistical Service, 2010 Population and Housing Census

12.10.5 Ownership of Dwelling by Urban and Rural localities

For urban areas, a little over half (50.9%) of occupants own the dwelling units. In rural areas on the other hand, 91.1 percent of household occupants own such dwellings.

Table 12.8: Percentage distribution of households by ownership of dwelling, district and locality

Type of Ownership	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Owned by household member	91,264	82.8	93.2	55.4	96.7	81.1	86.6	85.4	94.3	84.4	87.6
Being purchased (e.g. mortgage)	608	0.6	0.3	0.9	0.1	0.6	0.3	0.7	0.7	0.6	0.6
Relative not a household member	5,362	4.9	2.3	10.7	1.2	5.9	7.0	3.3	1.7	5.6	2.2
Other private individual	9,534	8.7	2.5	26.6	0.8	8.5	3.4	8.5	1.8	6.1	6.8
Private employer	353	0.3	0.1	0.8	0.1	0.4	0.3	0.1	0.1	0.2	0.2
Other private agency	273	0.2	0.1	0.8	0.2	0.2	0.2	0.1	0.0	0.1	0.2
Public/government ownership	2,410	2.2	1.3	3.6	0.8	3.3	2.0	1.8	1.1	2.9	2.1
Other	370	0.3	0.1	1.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Owned by household member	11,509	50.9	-	47.8	-	48.0	-	54.8	-	63.2	59.1
Being purchased (e.g. mortgage)	309	1.4	-	1.1	-	1.4	-	2.9	-	2.7	0.6
Relative not a household member	2,329	10.3	-	13.1	-	9.5	-	4.4	-	12.4	2.3
Other private individual	6,824	30.2	-	31.8	-	30.4	-	31.9	-	14.6	26.5
Private employer	193	0.9	-	1.0	-	1.0	-	0.2	-	0.5	0.8
Other private agency	97	0.4	-	0.4	-	0.4	-	0.3	-	0.1	1.0
Public/government ownership	1,209	5.3	-	4.0	-	9.2	-	5.2	-	6.0	8.9
Other	158	0.7	-	0.9	-	0.2	-	0.2	-	0.4	0.8
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Owned by household member	79,755	91.1	93.2	74.7	96.7	93.0	86.6	93.5	94.3	88.3	93.2
Being purchased (e.g. mortgage)	299	0.3	0.3	0.4	0.1	0.3	0.3	0.2	0.7	0.3	0.6
Relative not a household member	3,033	3.5	2.3	4.8	1.2	4.6	7.0	2.9	1.7	4.4	2.2
Other private individual	2,710	3.1	2.5	13.3	0.8	0.6	3.4	2.2	1.8	4.5	2.9
Private employer	160	0.2	0.1	0.4	0.1	0.2	0.3	0.1	0.1	0.2	0.1
Other private agency	176	0.2	0.1	1.8	0.2	0.2	0.2	0.0	0.0	0.0	0.0
Public/government ownership	1,201	1.4	1.3	2.6	0.8	1.1	2.0	0.9	1.1	2.3	0.8
Other	212	0.2	0.1	2.1	0.1	0.0	0.2	0.1	0.2	0.1	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.11 Tenure

Shelter is one of the basic needs of human beings. The acquisition of a dwelling place is therefore the ambition of every individual. Table 12.9 presents the percentage distribution of housing tenure of occupied housing units. Tenure may be in several forms including renting, owner occupied, rent free, perching and squatting. Overall, the majority of household members owned their dwelling unit. Almost four in five dwelling units in the districts were owned by household members while 11.5 percent of households lived in rented houses. About 5.6 percent do not pay rent. At the district level, owner-occupied dwelling units were more common in Wa East (96.0%) and Wa West (93.0%) than in other districts.

12.11.1 Urban-Rural

Almost half (49.8%) of dwelling units in urban areas were owned by household members, with a high of 63.3 percent in Lambussie Karni. This form of tenure was far more predominant in rural areas (90.9%).

Table 12.9: Percentage distribution of housing tenure arrangement by district and locality

Type of tenancy arrangement	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Owner occupied	90,882	82.5	93.0	55.4	96.0	80.6	86.6	84.5	92.1	84.2	87.9
Renting	12,657	11.5	2.7	33.6	0.9	11.4	6.1	11.0	3.6	8.7	9.3
Rent-free	6,220	5.6	3.9	10.5	2.7	7.8	7.0	4.1	4.0	6.1	2.7
Perching	209	0.2	0.3	0.1	0.2	0.1	0.1	0.2	0.3	0.8	0.1
Squatting	54	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Other	152	0.1	0.0	0.3	0.1	0.0	0.2	0.2	0.0	0.2	0.1
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Owner occupied	11,270	49.8	-	47.6	-	45.7	-	51.9	-	63.3	56.2
Renting	8,666	38.3	-	38.9	-	41.1	-	39.7	-	26.2	36.5
Rent-free	2,568	11.3	-	12.9	-	12.8	-	7.2	-	10.2	7.1
Perching	32	0.1	-	0.1	-	0.3	-	0.2	-	0.3	0.0
Squatting	8	0.0	-	0.0	-	0.0	-	0.1	-	0.0	0.0
Other	84	0.4	-	0.4	-	0.1	-	0.9	-	0.0	0.2
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Owner occupied	79,612	90.9	93.0	75.0	96.0	93.2	86.6	93.2	92.1	88.0	94.0
Renting	3,991	4.6	2.7	20.2	0.9	0.7	6.1	3.3	3.6	5.5	4.0
Rent-free	3,652	4.2	3.9	4.5	2.7	5.9	7.0	3.2	4.0	5.4	1.8
Perching	177	0.2	0.3	0.1	0.2	0.1	0.1	0.2	0.3	0.8	0.1
Squatting	46	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Other	68	0.1	0.0	0.1	0.1	0.0	0.2	0.0	0.0	0.2	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.12 Main Source of Lighting

Lighting as part of housing facility was captured by the 2010 Population and Housing Census. Households were asked about their main sources of domestic lighting. Table 12.10 shows that flashlight/torch was the most common source of lighting, accounting for 45.0 percent of the sources of light in households in the Upper West Region. Electricity (mains) constituted 30.9 percent of lighting source while kerosene lamps were used by 19.5 percent of households and was the third main source of lighting in households.

At the district level, the use of flashlight or torch light was prevalent in Wa East (71.9%), Wa West (61.6%) and Jirapa (57.4%). The district where flashlight or torch was used least was Wa Municipal (15.1%). Indeed with the exception of Wa Municipal and Lawra where the use

of torch or flashlight in households was below the regional average of 45.0 percent, in the rest of the districts, the proportion of households that use torch or flashlight as main source of lighting was above the regional average of 45.0 percent. Electricity (mains) was predominantly used in Wa Municipal (72.1%). The district with the lowest use of electricity for domestic lighting was Wa East (9.2%).

12.12.1 Urban-Rural

As expected, electricity (mains) was the most common source of lighting in urban areas and accounted for 77.4 percent of all sources of lighting. The proportion of households using electricity (mains) was highest in Sissala East (82.3%), followed by Wa Municipal (81.5%) and Lawra (79.9%). The use of electricity in the other districts was below the regional average of 77.4 percent.

Table 12.10: Percentage distribution of households by main source of lighting and locality

Source of lighting	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electricity (mains)	34,044	30.9	9.5	72.1	9.2	36.3	22.3	18.8	41.9	19.7	28.4
Electricity (private generator)	613	0.6	0.7	0.7	0.3	0.5	0.7	0.4	0.3	0.5	0.5
Kerosene lamp	21,455	19.5	25.0	10.9	16.0	7.9	24.1	16.6	5.9	25.4	35.1
Gas lamp	303	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.3	0.3
Solar energy	804	0.7	0.5	0.2	0.4	2.8	0.3	0.9	1.2	0.6	0.8
Candle	333	0.3	0.1	0.3	0.6	0.2	0.3	0.5	0.1	0.4	0.1
Flashlight/Torch	49,606	45.0	61.6	15.1	71.9	48.6	48.3	57.4	46.5	49.3	32.4
Firewood	1,332	1.2	1.9	0.1	0.9	1.5	0.5	1.9	1.8	2.2	1.4
Crop residue	361	0.3	0.2	0.1	0.2	0.2	0.5	0.4	0.2	0.8	0.5
Other	1,323	1.2	0.3	0.3	0.3	1.8	2.6	2.8	1.7	0.7	0.5
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Electricity (mains)	17,508	77.4	-	81.5	-	82.3	-	59.7	-	58.2	79.9
Electricity (private generator)	154	0.7	-	0.8	-	0.4	-	0.6	-	1.0	0.4
Kerosene lamp	2,405	10.6	-	7.9	-	5.8	-	16.5	-	29.9	14.0
Gas lamp	69	0.3	-	0.2	-	0.3	-	1.0	-	0.2	0.1
Solar energy	47	0.2	-	0.2	-	0.3	-	0.1	-	0.3	0.2
Candle	94	0.4	-	0.4	-	0.5	-	0.5	-	0.3	0.4
Flashlight/Torch	2,211	9.8	-	8.6	-	9.8	-	20.4	-	9.1	4.5
Firewood	45	0.2	-	0.1	-	0.1	-	0.3	-	0.8	0.4
Crop residue	13	0.1	-	0.1	-	0.1	-	0.0	-	0.0	0.0
Other	82	0.4	-	0.4	-	0.3	-	0.7	-	0.2	0.1

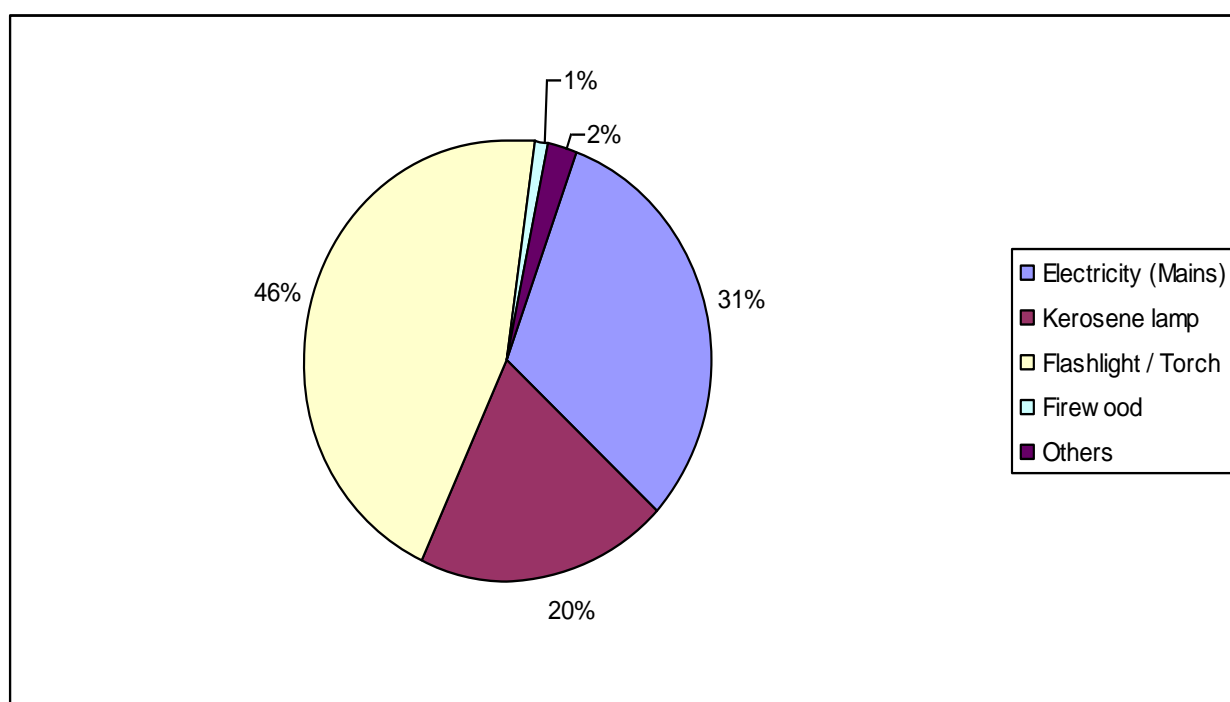
Table 12.10: Percentage distribution of households by main source of lighting and locality (Cont'd)

Source of lighting	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electricity (mains)	16,536	18.9	9.5	48.4	9.2	19.8	22.3	7.8	41.9	12.6	18.4
Electricity (private generator)	459	0.5	0.7	0.6	0.3	0.5	0.7	0.4	0.3	0.5	0.5
Kerosene lamp	19,050	21.8	25.0	18.4	16.0	8.7	24.1	16.6	5.9	24.6	39.2
Gas lamp	234	0.3	0.2	0.2	0.2	0.1	0.3	0.3	0.4	0.3	0.3
Solar energy	757	0.9	0.5	0.2	0.4	3.7	0.3	1.1	1.2	0.7	0.9
Candle	239	0.3	0.1	0.2	0.6	0.1	0.3	0.5	0.1	0.4	0.1
Flashlight/Torch	47,395	54.1	61.6	31.5	71.9	62.6	48.3	67.2	46.5	56.7	37.8
Firewood	1,287	1.5	1.9	0.2	0.9	2.0	0.5	2.3	1.8	2.5	1.6
Crop residue	348	0.4	0.2	0.2	0.2	0.2	0.5	0.4	0.2	0.9	0.6
Other	1,241	1.4	0.3	0.1	0.3	2.4	2.6	3.4	1.7	0.8	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

The main source of lighting in district rural areas was flashlight/torch (54.1%), particularly in Wa East, followed by kerosene lamp (21.8%), especially in Lawra (39.2%). On average, rural electricity usage was 18.9 percent, with Jirapa recording the lowest proportion (7.8%).

Figure 12.6: Main source of lighting



Source: Ghana Statistical Service, 2010 Population and Housing Census

12.13 Fuel Used for Cooking

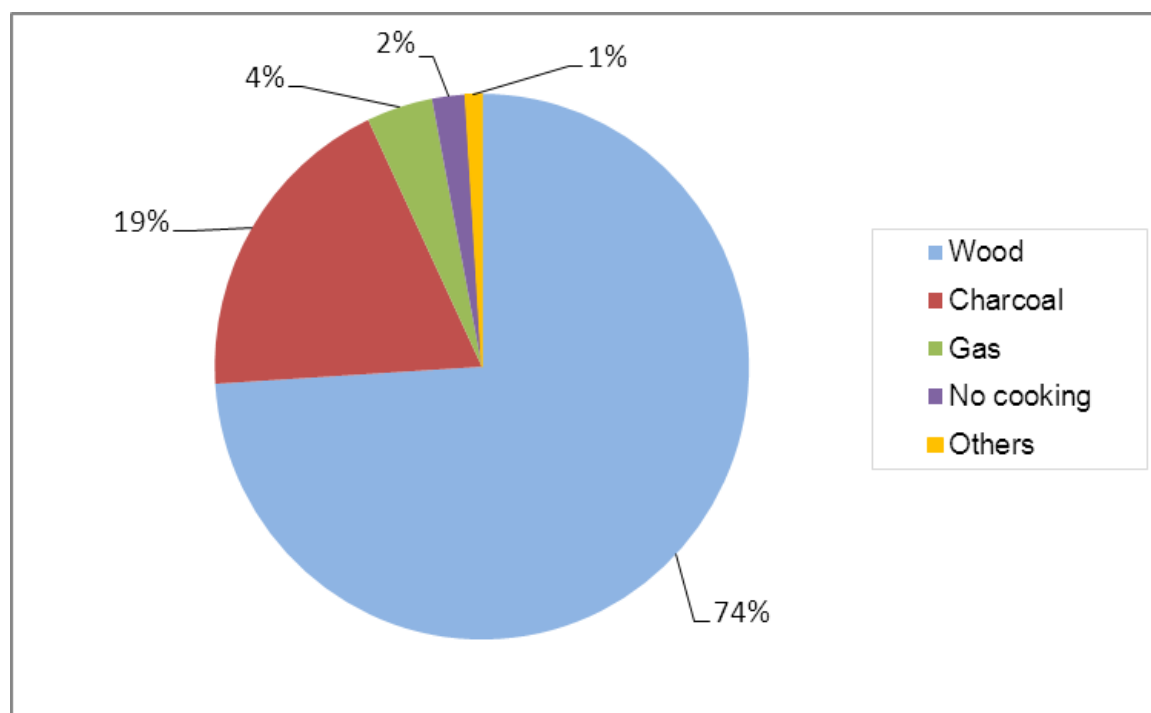
The 2010 Population and Housing Census collected information on the type of fuel used for cooking by region and district. Table 12.11 provides information on the types of fuel used for cooking in the Upper West Region. They include wood, coconut husk, gas, electricity, kerosene and charcoal. Overall, the main source of cooking fuel in the region was wood (73% of all fuel used for cooking in the region), followed by charcoal (19%). The least used fuel for cooking was sawdust (0.1%).

For the districts, Wa West recorded the highest percentage of wood usage (91.1%) compared to the regional average of 73.4 percent. The percentage use of wood as main source of cooking fuel for households was also high in Wa East (94.8%), Wa West (91.1%) and Sissala West (87.5%) but lowest for Wa Municipal (22.9%), which was far below the regional average.

12.13.1 Urban–Rural Locality

Charcoal was the most common cooking fuel in urban localities and constituted 63.5 percent of fuel used by households. Lawra District (68.1%) recorded the highest proportion of charcoal usage. Wood was the main cooking fuel in rural areas, and accounted for 88.0 percent. Apart from Wa Municipal, Sissala West and Nadowli districts, which reported usage below the average regional level, the remaining six districts reported use of wood for cooking higher than the regional average.

Figure 12.7: Fuel for cooking



Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 12.11: Percentage distribution of households by main source of cooking fuel and locality

Source of cooking fuel	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No cooking	2,269	2.1	1.2	3.4	1.5	2.8	1.6	1.6	4.2	1.8	1.1
Wood	80,916	73.4	91.1	22.9	94.8	74.9	84.3	81.2	87.5	79.6	78.8
Gas	4,553	4.1	1.0	16.3	0.4	2.1	1.6	2.1	0.9	3.2	1.8
Electricity	400	0.4	0.3	0.7	0.2	0.3	0.3	0.3	0.5	0.3	0.2
Kerosene	278	0.3	0.1	0.8	0.1	0.2	0.1	0.3	0.0	0.1	0.1
Charcoal	20,921	19.0	4.2	55.2	2.4	19.3	11.4	13.8	6.4	14.8	17.2
Crop residue	720	0.7	2.0	0.3	0.6	0.4	0.6	0.6	0.5	0.3	0.7
Sawdust	63	0.1	0.0	0.2	-	0.0	0.0	0.1	0.0	-	0.0
Animal waste	20	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	34	0.0	0.0	0.1	-	-	0.1	0.1	0.0	-	0.0
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
No cooking	821	3.6	-	3.8	-	5.4	-	2.5	-	2.8	2.6
Wood	3,853	17.0	-	9.8	-	21.8	-	38.5	-	29.5	20.5
Gas	3,142	13.9	-	18.4	-	7.0	-	7.9	-	4.5	7.4
Electricity	134	0.6	-	0.8	-	0.1	-	0.5	-	0.3	0.3
Kerosene	197	0.9	-	1.0	-	0.3	-	1.4	-	0.2	0.5
Charcoal	14,365	63.5	-	65.7	-	64.9	-	48.3	-	62.8	68.1
Crop residue	52	0.2	-	0.2	-	0.3	-	0.3	-	-	0.3
Sawdust	39	0.2	-	0.2	-	0.1	-	0.2	-	-	0.2
Animal waste	6	0.0	-	0.0	-	-	-	-	-	-	-
Other	19	0.1	-	0.1	-	-	-	0.3	-	-	0.0
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No cooking	1,448	1.7	1.2	2.3	1.5	1.8	1.6	1.3	4.2	1.6	0.8
Wood	77,063	88.0	91.1	56.2	94.8	94.1	84.3	92.6	87.5	88.8	90.1
Gas	1,411	1.6	1.0	11.0	0.4	0.4	1.6	0.5	0.9	2.9	0.7
Electricity	266	0.3	0.3	0.6	0.2	0.3	0.3	0.2	0.5	0.3	0.2
Kerosene	81	0.1	0.1	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.1
Charcoal	6,556	7.5	4.2	28.9	2.4	2.8	11.4	4.6	6.4	6.0	7.3
Crop residue	668	0.8	2.0	0.4	0.6	0.4	0.6	0.7	0.5	0.4	0.8
Sawdust	24	0.0	0.0	0.2	-	0.0	0.0	0.0	0.0	-	0.0
Animal waste	14	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Other	15	0.0	0.0	0.0	-	-	0.1	0.0	0.0	-	-

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.14 Cooking Space used by Household

The availability of cooking space sometimes presents problems for households. Table 12.12 shows the percentage distribution of cooking space in occupied housing units. Overall, about 42% of households had separate rooms used exclusively for cooking. Other commonly used cooking spaces mentioned were open space in compound (29.9%) and verandas (17.3%).

At the district level, more than half (55.9%) of households in Wa West had separate rooms exclusively used for cooking. The use of veranda as cooking space is common in Wa Municipal (43.1%) followed by Jirapa with 17.4 percent. Cooking in open spaces in compound was also common for many households. In Sissala West, 42.2 percent of households cooked in an open space in compound followed Lambussie Karni (33.6%).

12.14.1 Urban–Rural Locality

Most rural dwellers (47.6%) had separate rooms for cooking although a large proportion (31.3%) also cooked in an open space in compound. In urban areas, however, cooking on veranda was common (46.0%). In addition, 24.3 percent cooked in open space in compound. Only 19.4 percent had a separate room for exclusively use for cooking.

Table 12.12: Percentage distribution of households by type of cooking space and locality

Type of cooking space	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No cooking space	4,511	4.1	3.0	4.7	4.4	3.7	4.3	4.9	5.7	2.8	3.2
Separate room for exclusive use of household	46,063	41.8	55.9	22.3	46.2	26.7	47.8	45.6	40.7	44.4	49.9
Separate room shared with other household(s)	2,849	2.6	3.3	2.0	2.6	4.2	2.4	1.4	3.1	4.6	2.0
Enclosure without roof	1,967	1.8	3.0	1.1	1.6	0.9	3.6	1.4	0.9	0.9	1.8
Structure with roof but without walls	1,440	1.3	2.0	0.5	3.6	0.4	1.7	0.8	0.4	1.1	1.3
Bedroom/Hall/Living room)	1,190	1.1	2.0	3.1	0.8	0.5	0.3	0.3	0.6	0.5	0.4
Veranda	19,012	17.3	9.2	43.1	7.9	15.9	11.4	17.4	6.2	12.1	12.5
Open space in compound	32,914	29.9	21.4	23.0	32.2	47.4	28.5	28.2	42.2	33.6	28.7
Other	228	0.2	0.1	0.2	0.7	0.4	0.1	0.1	0.2	0.1	0.1
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
No cooking space	1,014	4.5	-	4.9	-	6.0	-	3.1	-	3.3	3.0
Separate room for exclusive use of household	4,393	19.4	-	15.8	-	21.1	-	27.3	-	23.3	25.7
Separate room shared with other household(s)	490	2.2	-	1.9	-	3.4	-	1.8	-	5.9	1.2
Enclosure without roof	117	0.5	-	0.6	-	0.2	-	0.2	-	0.4	0.7
Structure with roof but without walls	110	0.5	-	0.6	-	0.4	-	0.2	-	0.8	0.2
Bedroom/hall/living room)	552	2.4	-	3.5	-	0.9	-	0.7	-	0.1	1.3
Veranda	10,416	46.0	-	50.4	-	36.0	-	48.9	-	27.1	37.6
Open space in compound	5,500	24.3	-	22.0	-	31.9	-	17.7	-	38.8	30.3
Other	36	0.2	-	0.2	-	0.2	-	0.2	-	0.2	0.0

Table 12.12: Percentage distribution of households by type of cooking space and locality (Cont'd)

Type of cooking space	All districts	Per-cent	Wa West	Wa Muni-cipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No cooking space	3,497	4.0	3.0	4.0	4.4	2.9	4.3	5.4	5.7	2.8	3.3
Separate room for exclusive use of household	41,670	47.6	55.9	38.5	46.2	28.7	47.8	50.5	40.7	48.2	54.7
Separate room shared with other household(s)	2,359	2.7	3.3	2.3	2.6	4.5	2.4	1.2	3.1	4.3	2.1
Enclosure without roof	1,850	2.1	3.0	2.5	1.6	1.1	3.6	1.7	0.9	1.0	2.0
Structure with roof but without walls	1,330	1.5	2.0	0.5	3.6	0.3	1.7	1.0	0.4	1.1	1.5
Bedroom/hall/living room)	638	0.7	2.0	2.0	0.8	0.3	0.3	0.2	0.6	0.6	0.3
Veranda	8,596	9.8	9.2	24.5	7.9	8.6	11.4	9.0	6.2	9.4	7.6
Open space in compound	27,414	31.3	21.4	25.6	32.2	53.0	28.5	30.9	42.2	32.7	28.4
Other	192	0.2	0.1	0.2	0.7	0.5	0.1	0.1	0.2	0.1	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.15 Type of Bathing Facility

The 2010 PHC also collected data on the availability and type of bathing facility. Table 12.13 shows the percentage distribution of types of bathing facility available for households in the Upper West Region. The results show that an average of about 43 percent of households had their own bathroom for exclusive use while about 22 percent of households used a separate bathroom in the same house for bathing. The type of bathing facility that was least used was bathing at the side of river/pond /lake/dam (0.2%).

For the districts, exclusive use of bathroom was common in Jirapa (51.0%), Lawra (49.1%) and Nadowli (49.0%). Wa Municipal reported the lowest percentage (29.4%) of those who have their own bathrooms for exclusive use. Sharing a bathroom in the same house was common in Wa Municipal (42.7%) and Sissala East (27.9%).

12.15.1 Urban–Rural Locality

Overall, the percentage of households that share a bathroom in the same house was higher (41.4%) for urban localities than rural localities (16.3%). On the other hand, the exclusive use of own bathrooms by households was higher for rural areas (46.9%) than urban areas (27.0%).

Table 12.13: Percentage distribution of households by type of bathing facility and locality

Type of bathing facility	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
Total	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Own bathroom for exclusive use	47,176	42.8	45.3	29.4	42.8	33.7	49.0	51.0	42.9	41.5	49.1
Shared separate bathroom in the same house	23,638	21.5	16.0	42.7	18.8	27.9	14.0	13.4	19.2	21.5	13.9
Private open cubicle	11,927	10.8	13.6	5.3	9.7	7.8	13.5	12.7	7.3	10.5	15.2
Shared open cubicle	11,561	10.5	7.9	14.1	3.6	17.3	10.0	8.7	10.7	8.1	12.1
Public bath house	1,643	1.5	0.5	3.4	1.4	0.7	0.9	1.1	2.4	0.4	1.5
Bathroom in another house	898	0.8	0.9	0.5	0.9	0.9	0.8	0.9	1.3	0.8	0.7
Open space around house	12,856	11.7	15.5	4.4	22.3	11.5	11.6	11.8	14.0	16.7	7.1
River/pond/lake/dam	180	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Other	295	0.3	0.2	0.1	0.2	0.1	0.1	0.2	2.1	0.2	0.1
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Own bathroom for exclusive use	6,103	27.0	-	24.9	-	24.9	-	29.4	-	34.6	33.2
Shared separate bathroom in the same house	9,357	41.4	-	46.2	-	42.9	-	28.9	-	50.3	25.6
Private open cubicle	1,278	5.6	-	4.5	-	4.2	-	12.4	-	4.9	5.4
Shared open cubicle	3,927	17.4	-	16.2	-	20.5	-	18.4	-	2.8	25.6
Public bath house	657	2.9	-	4.5	-	0.1	-	1.4	-	0.2	0.2
Bathroom in another house	174	0.8	-	0.4	-	1.3	-	1.5	-	1.0	1.3
Open space around house	1,076	4.8	-	3.1	-	5.8	-	7.8	-	5.9	8.4
River/pond/lake/dam	21	0.1	-	0.1	-	0.1	-	0.1	-	0.0	0.2
Other	35	0.2	-	0.2	-	0.0	-	0.1	-	0.3	0.1
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Own bathroom for exclusive use	41,073	46.9	45.3	40.9	42.8	36.9	49.0	56.8	42.9	42.7	52.2
Shared separate bathroom in the same house	14,281	16.3	16.0	33.9	18.8	22.4	14.0	9.3	19.2	16.3	11.7
Private open cubicle	10,649	12.2	13.6	7.1	9.7	9.1	13.5	12.7	7.3	11.5	17.1
Shared open cubicle	7,634	8.7	7.9	8.7	3.6	16.1	10.0	6.1	10.7	9.0	9.5
Public bath house	986	1.1	0.5	0.7	1.4	0.9	0.9	1.0	2.4	0.5	1.7
Bathroom in another house	724	0.8	0.9	0.8	0.9	0.8	0.8	0.7	1.3	0.8	0.6
Open space around house	11,780	13.5	15.5	7.8	22.3	13.5	11.6	12.9	14.0	18.7	6.9
River/Pond/Lake/Dam	159	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.3	0.2
Other	260	0.3	0.2	0.0	0.2	0.2	0.1	0.2	2.1	0.2	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.16 Toilet Facility

Many district authorities have been grappling with the problem of sanitation, especially the disposal of solid waste. Table 12.14 presents the distribution of households by type of toilet facility. The data show the various types of toilet facilities available to households in the districts. Most households use bush/beach or field for toilet (72.9%). Use of public toilets including WC, KVIP/pit/pan constitutes about 13.0 percent. Other households used pit latrine (6.2%). Among districts, the use of bush, beach or open field as toilet facility is most common of toilet facility but relatively less common in Wa Municipal (41.8%), Public toilet is used by 37.0 percent of households in Wa Municipal

12.16.1 Urban–Rural

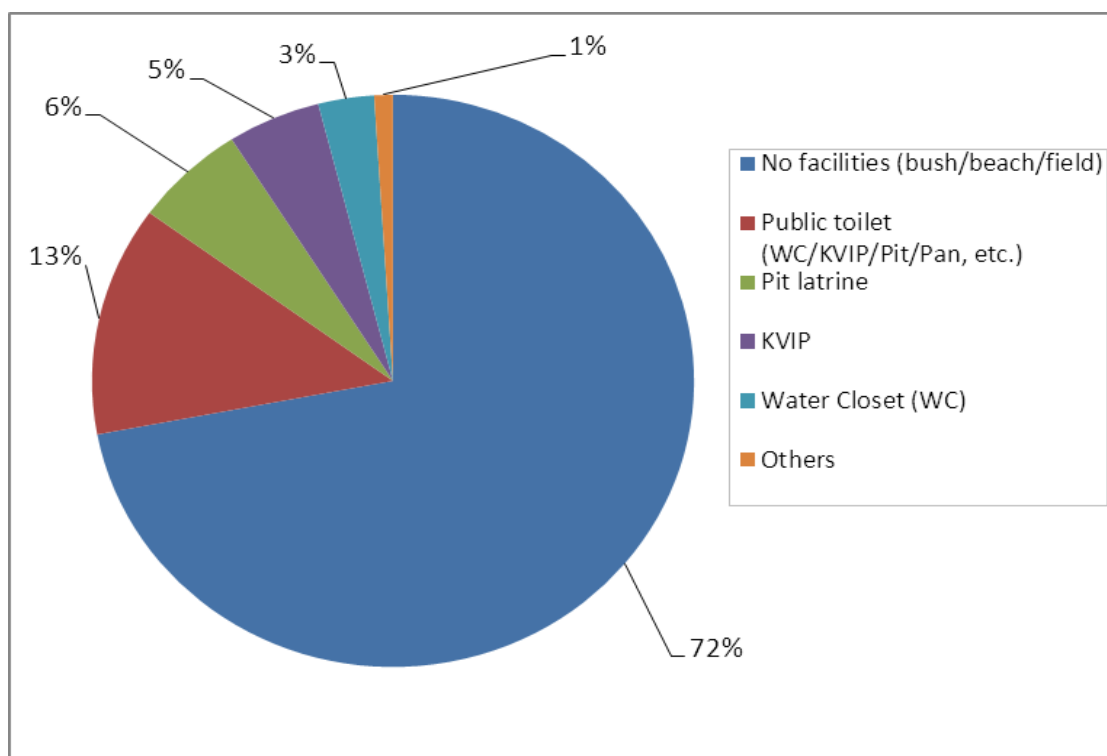
The use of bush, beach or field as toilet facility is more pronounced in rural areas than in urban areas. On average, 82.9 percent of households in rural areas use bush, beach or open field as toilet facility, compared with 34.3 percent in urban areas.

Table 12.14: Percentage distribution of households by type of toilet facility and locality

Type of toilet facility	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
All	110,174	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)	80,321	72.9	85.9	41.8	92.2	80.1	80.1	81.3	74.8	77.8	66.5
Water closet	3,440	3.1	0.9	10.1	0.2	2.9	1.1	2.2	0.8	3.4	2.2
Pit latrine	6,853	6.2	8.8	3.9	2.7	3.8	3.5	2.2	14.2	5.9	13.2
KVIP	4,929	4.5	1.2	6.8	2.5	4.5	5.7	3.2	5.2	2.8	5.8
Bucket/Pan	112	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.2
Public toilet (WC/KVIP/Pit/ Pan, etc.)	14,016	12.7	3.1	37.0	0.7	8.5	9.3	10.7	3.7	9.6	11.9
Other	503	0.5	0.1	0.3	1.7	0.2	0.2	0.4	1.2	0.2	0.3
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
No facilities (bush/beach/field)	7,751	34.3	-	30.4	-	52.6	-	41.0	-	44.5	26.4
Water closet	2,394	10.6	-	11.8	-	10.2	-	8.5	-	4.9	9.2
Pit latrine	1,241	5.5	-	4.6	-	4.2	-	4.2	-	10.9	9.9
KVIP	2,134	9.4	-	8.2	-	9.0	-	10.0	-	7.2	16.1
Bucket/Pan	32	0.1	-	0.2	-	0.1	-	0.0	-	0.3	0.1
Public toilet (WC/KVIP/Pit/Pan, etc.)	9,009	39.8	-	44.4	-	23.6	-	35.9	-	32.0	38.2
Other	67	0.3	-	0.4	-	0.3	-	0.3	-	0.1	0.1
Rural	87,546	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)	72,570	82.9	85.9	70.8	92.2	90.0	80.1	92.0	74.8	83.9	74.2
Water closet	1,046	1.2	0.9	5.7	0.2	0.2	1.1	0.5	0.8	3.2	0.8
Pit latrine	5,612	6.4	8.8	2.0	2.7	3.7	3.5	1.7	14.2	5.0	13.8
KVIP	2,795	3.2	1.2	3.2	2.5	2.8	5.7	1.4	5.2	2.0	3.8
Bucket/Pan	80	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.3
Public toilet (WC/KVIP/Pit, Pan, etc.)	5,007	5.7	3.1	18.1	0.7	3.1	9.3	4.0	3.7	5.6	6.8
Other	436	0.5	0.1	0.2	1.7	0.2	0.2	0.4	1.2	0.3	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 12.8: Type of toilet facility



Source: Ghana Statistical Service, 2010 Population and Housing Census

12.17 Liquid Waste Disposal

Liquid waste disposal has also been of public concern in the absence of adequate drainage system in towns and cities in Ghana. Table 12.15 shows that throwing liquid waste onto the street/outside was the most common means of waste disposal and accounted for 64.8 percent. Also, 23.0 percent of households threw liquid waste onto the compound.

Although methods of liquid waste disposal varied among districts, throwing liquid waste onto the street/outside was the most common method. This was true for Lawra (72.0%), Nadowli (70.2%), Jirapa (69.9%), Wa West (67.3%) and Sissala East (66.4%).

12.17.1 Urban–Rural Locality

Disposal of liquid waste onto the street or outside is still the most common method in urban areas, and this accounts for 57.7% of households. This method of disposal is also the commonest in rural areas and accounts for 66.6% of all liquid waste disposal methods.

Table 12.15: Percentage distribution of households by method of liquid waste disposal and locality

Method of disposal	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Through the sewerage system	1,746	1.6	0.7	3.9	0.4	1.6	1.3	0.5	3.0	0.4	1.3
Through drainage system into a gutter	3,573	3.2	2.5	10.4	2.8	1.7	1.7	0.8	1.1	1.3	2.0
Through drainage into a pit (soak away)	3,633	3.3	2.9	6.3	1.9	1.5	3.0	2.2	4.8	1.7	3.2
Thrown onto the street/outside	71,344	64.8	67.3	53.5	58.5	66.4	70.2	69.9	58.7	63.9	72.6
Thrown into gutter	3,958	3.6	3.2	7.7	2.1	3.1	2.0	2.0	5.2	6.4	1.3
Thrown onto compound	25,348	23.0	23.0	17.7	33.3	25.6	21.3	24.4	25.3	26.0	19.1
Other	572	0.5	0.3	0.5	0.9	0.2	0.4	0.2	1.9	0.3	0.5
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Through the sewerage system	557	2.5	-	3.5	-	1.1	-	0.9	-	0.5	1.0
Through drainage system into a gutter	1,919	8.5	-	11.8	-	3.4	-	2.2	-	3.8	4.9
Through drainage into a pit (soak away)	1,191	5.3	-	6.0	-	3.9	-	4.5	-	1.4	5.4
Thrown onto the street/outside	13,059	57.7	-	51.9	-	59.5	-	62.5	-	66.0	76.5
Thrown into gutter	1,608	7.1	-	9.4	-	6.3	-	2.5	-	4.1	2.4
Thrown onto compound	4,213	18.6	-	16.9	-	25.5	-	27.3	-	23.9	9.5
Other	81	0.4	-	0.5	-	0.2	-	0.1	-	0.3	0.2
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Through the sewerage system	1,189	1.4	0.7	5.1	0.4	1.8	1.3	0.4	3.0	0.4	1.4
Through drainage system into a gutter	1,654	1.9	2.5	6.7	2.8	1.0	1.7	0.4	1.1	0.8	1.5
Through drainage into a pit (soak away)	2,442	2.8	2.9	7.2	1.9	0.6	3.0	1.6	4.8	1.8	2.7
Thrown onto the street/outside	58,285	66.6	67.3	57.7	58.5	68.8	70.2	71.9	58.7	63.5	71.9
Thrown into gutter	2,350	2.7	3.2	3.3	2.1	1.9	2.0	1.9	5.2	6.8	1.0
Thrown onto compound	21,135	24.1	23.0	19.6	33.3	25.6	21.3	23.6	25.3	26.4	20.9
Other	491	0.6	0.3	0.4	0.9	0.2	0.4	0.2	1.9	0.3	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.18 Solid Waste Disposal

There has been a growing concern all over the country about the indiscriminate disposal of solid waste into places such as open drains and rivers. Table 12.16 shows that almost two out of every five households (37.0%) in the region disposed of solid waste in a public dump or open space. Others also threw their solid waste away indiscriminately (36.0%). Households that disposed of their solid waste into public containers constituted 12.7 percent while 5.9 percent and 3.2 percent respectively buried and burned their solid waste.

Disposal of solid waste across the districts followed a similar pattern. Almost all districts either disposed their solid waste in an open space or dumped it indiscriminately although there were variations in terms of magnitude. For instance, indiscriminate dumping of solid waste was most common for households in Lambussie Karni (54.7%), Wa West (45.8%) and Jirapa (44.8%). The district with the smallest proportion of households dumping their solid waste indiscriminately was Wa Municipality (17.6%). The proportion of households that dumped their solid waste in the open was highest in Sissala East (63.0%), Wa East (49.3%) and Sissala West (46.6%). Wa Municipal reported the lowest proportion of households who dump solid waste in the open (23.6%).

12.18.1 Urban–Rural Locality

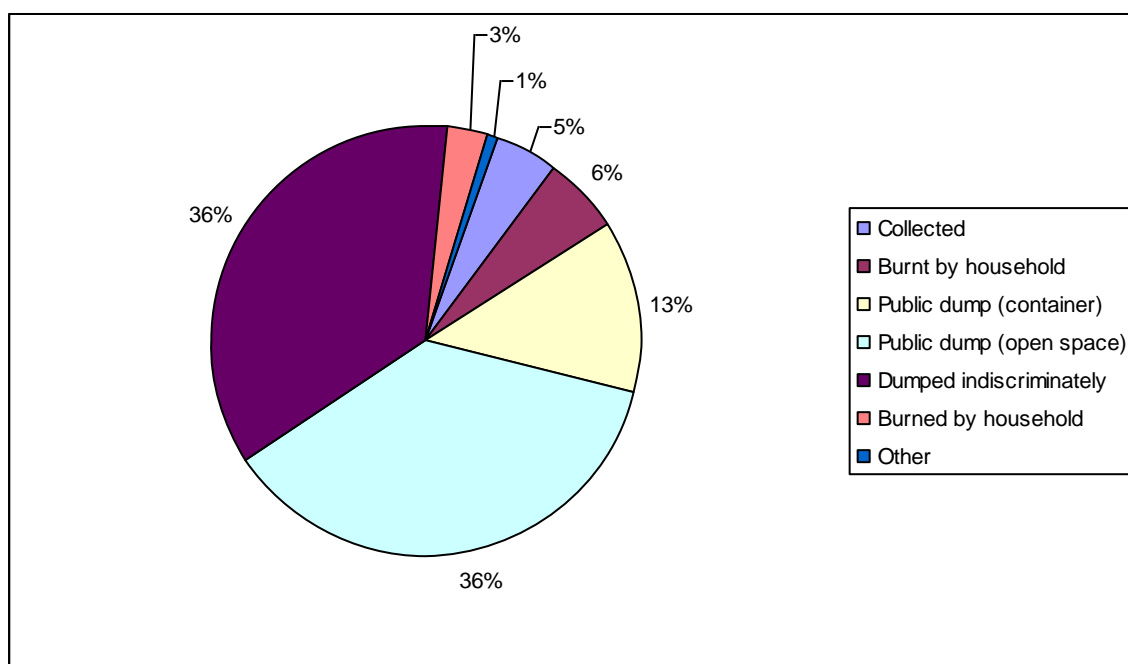
Overall, disposal of solid waste in urban areas was largely done either public dump or container (44%) or into an open space (25.4.0%) with indiscriminate disposal just 16.8 percent. Lambussie Karni (53.5%) and Sissala East (49.5%) recorded the highest percentage of those who threw solid waste into an open space. For rural areas about 40 percent disposed of their solid waste either in an open space or indiscriminately. Interestingly, garbage collection as a method of solid waste disposal was higher in rural areas (4.9%) than the regional average (4.6%) and in urban areas (3.7%).

Table 12.16: Percentage distribution of households by method of solid waste disposal and locality

Method of disposal	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Collected	5,123	4.6	8.4	4.3	2.7	3.4	3.1	3.5	1.1	5.6	7.8
Burned by household	6,518	5.9	4.9	7.9	4.6	4.5	7.0	6.4	4.7	2.6	6.6
Public dump (container)	13,969	12.7	3.2	44.6	5.5	7.1	5.1	6.4	8.9	6.9	7.0
Public dump (open space)	40,538	36.8	34.3	23.6	49.5	63.0	40.3	34.5	46.6	28.5	29.9
Dumped indiscriminately	39,635	36.0	45.8	17.6	34.6	20.9	41.4	44.8	35.2	54.7	38.3
Buried by household	3,515	3.2	1.8	1.6	2.7	1.0	2.5	3.6	2.3	1.4	9.0
Other	876	0.8	1.7	0.5	0.4	0.2	0.6	0.7	1.1	0.4	1.4
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Collected	827	3.7	-	4.4	-	1.7	-	1.7	-	5.3	2.9
Burned by household	1,843	8.1	-	7.0	-	13.4	-	8.4	-	4.0	10.9
Public dump (container)	9,951	44.0	-	55.9	-	25.0	-	24.5	-	14.2	34.1
Public dump (open space)	5,754	25.4	-	15.7	-	49.5	-	31.7	-	53.3	35.1
Dumped indiscriminately	3,792	16.8	-	15.3	-	9.0	-	28.8	-	22.0	15.3
Buried by household	367	1.6	-	1.1	-	1.2	-	4.6	-	1.2	1.3
Other	94	0.4	-	0.5	-	0.2	-	0.3	-	0.1	0.4
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Collected	4,296	4.9	8.4	4.1	2.7	4.0	3.1	4.0	1.1	5.6	8.8
Burned by household	4,675	5.3	4.9	10.1	4.6	1.3	7.0	5.9	4.7	2.3	5.7
Public dump (container)	4,018	4.6	3.2	15.9	5.5	0.6	5.1	1.5	8.9	5.5	1.8
Public dump (open space)	34,784	39.7	34.3	43.5	49.5	67.8	40.3	35.3	46.6	24.0	28.9
Dumped indiscriminately	35,843	40.9	45.8	23.4	34.6	25.2	41.4	49.1	35.2	60.6	42.8
Buried by household	3,148	3.6	1.8	2.6	2.7	0.9	2.5	3.4	2.3	1.4	10.4
Other	782	0.9	1.7	0.4	0.4	0.2	0.6	0.8	1.1	0.5	1.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 12.9: Solid waste disposal



Source: Ghana Statistical Service, 2010 Population and Housing Census

12.19 Main Source of Drinking Water

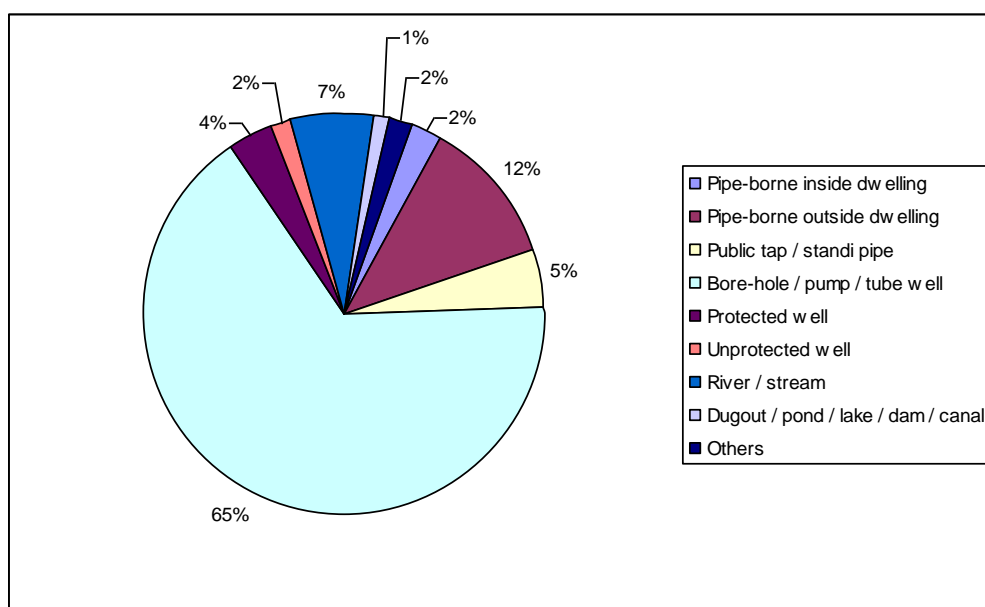
Source of drinking water is one of the indicators used to assess the standard of living of people. Table 12.17 provides information on various sources of drinking water for households. These can be categorised broadly into pipe-borne water, boreholes/wells, rain water and river/stream. Of these sources of drinking water, the use of borehole/pump/tube well was the most common, accounting for almost two-thirds (64.2%) households in the region. A small percentage (11.4%) of households also reported pipe-borne outside dwelling as source of drinking water.

In Wa municipality, pipe-borne water both inside and outside dwellings (39.8%) was the main source of drinking water. Borehole/pump/tube well was common in Wa West (79.3%), Jirapa (75.1%) and Nadowli (74.6%).

12.19.1 Urban – Rural Locality

For urban and rural localities, borehole/pump/well was the main source of drinking water. The urban average was 28.6 percent, with a high of 50.1 percent in Jirapa, while the rural average was 73.4 percent, with Sissala East highest at 87.6 percent.

Figure 12.10: Source of drinking water



Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 12.17: Percentage distribution of households by main source of drinking water and district

Source of drinking water	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
Total	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pipe-borne inside dwelling	5,933	5.4	0.2	12.0	0.1	10.0	2.0	5.5	1.0	6.4	6.8
Pipe-borne outside dwelling	12,542	11.4	3.4	27.8	6.6	10.9	6.4	7.7	9.4	12.8	9.3
Public tap/standpipe	4,807	4.4	0.9	8.4	9.1	2.7	4.3	1.9	4.3	2.1	3.2
Bore-hole/pump/tube well	70,759	64.2	79.3	36.1	55.6	71.6	74.6	75.1	72.6	56.1	69.0
Protected well	4,011	3.6	1.7	7.8	1.2	0.6	2.9	0.8	1.7	6.0	6.2
Rain water	172	0.2	0.2	0.0	0.2	0.0	0.5	0.1	0.0	0.1	0.1
Protected spring	368	0.3	0.3	0.4	0.1	0.3	0.4	0.3	0.4	0.4	0.3
Bottled water	50	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Sachet water	823	0.7	0.5	3.5	0.0	0.3	0.3	0.0	0.1	0.3	0.1
Tanker supply/vendor											
Provided	302	0.3	0.0	1.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Unprotected well	1,719	1.6	1.1	0.8	1.0	0.4	2.0	2.0	2.7	3.5	1.6
Unprotected spring	287	0.3	0.3	0.0	1.3	0.2	0.2	0.1	0.1	0.1	0.2
River/stream	7,037	6.4	8.8	1.2	22.5	2.7	5.0	5.3	7.6	9.0	2.6
Dugout/pond/lake/dam/											
Canal	1,344	1.2	3.3	0.3	2.3	0.1	1.2	1.0	0.1	3.2	0.6
Other	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 12.17: Percentage distribution of households by main source of drinking water and district (cont'd)

Source of drinking water	All districts	Per-cent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lambussie Karni	Lawra
Urban	22,628	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0
Pipe-borne inside dwelling	4,856	21.5	-	15.2	-	36.6	-	24.1	-	18.1	38.4
Pipe-borne outside dwelling	6,629	29.3	-	32.8	-	28.6	-	22.1	-	25.4	21.7
Public tap/standpipe	1,737	7.7	-	9.3	-	4.2	-	2.8	-	6.5	8.4
Bore-hole/pump/tube well	6,477	28.6	-	25.1	-	27.4	-	50.1	-	22.6	26.6
Protected well	1,511	6.7	-	8.7	-	0.7	-	0.2	-	17.4	3.7
Rain water	15	0.1	-	-	-	-	-	0.2	-	-	0.1
Protected spring	67	0.3	-	0.3	-	0.2	-	0.1	-	0.5	0.3
Bottled water	30	0.1	-	0.2	-	0.2	-	0.1	-	-	-
Sachet water	613	2.7	-	4.3	-	1.1	-	-	-	0.7	-
Tanker supply /vendor provided	240	1.1	-	1.8	-	0.1	-	-	-	-	-
Unprotected well	229	1.0	-	1.0	-	0.3	-	-	-	6.7	0.4
Unprotected spring	2	-	-	-	-	-	-	-	-	0.1	-
River/stream	166	0.7	-	1.0	-	0.5	-	0.1	-	0.4	0.3
Dugout /pond /lake / Dam /canal	52	0.2	-	0.2	-	-	-	-	-	1.6	-
Other	4	-	-	-	-	-	-	-	-	-	-
Rural	87,546	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pipe-borne inside dwelling	1,077	1.2	0.2	3.9	0.1	0.5	2.0	0.6	1.0	4.3	0.7
Pipe-borne outside dwelling	5,913	6.8	3.4	15.2	6.6	4.6	6.4	3.9	9.4	10.5	6.9
Public tap/standpipe	3,070	3.5	0.9	6.1	9.1	2.2	4.3	1.6	4.3	1.2	2.2
Bore-hole/pump/tube well	64,282	73.4	79.3	63.9	55.6	87.6	74.6	81.8	72.6	62.3	77.2
Protected well	2,500	2.9	1.7	5.5	1.2	0.5	2.9	1.0	1.7	3.9	6.7
Rain water	157	0.2	0.2	0.1	0.2	-	0.5	0.1	-	0.1	0.1
Protected spring	301	0.3	0.3	0.6	0.1	0.3	0.4	0.3	0.4	0.4	0.4
Bottled water	20	-	-	-	0.1	-	-	-	-	-	-
Sachet water	210	0.2	0.5	1.6	-	-	0.3	-	0.1	0.2	0.1
Tanker supply/vendor provided	62	0.1	-	0.8	-	-	0.1	-	-	-	-
Unprotected well	1,490	1.7	1.1	0.4	1.0	0.4	2.0	2.6	2.7	2.9	1.8
Unprotected spring	285	0.3	0.3	-	1.3	0.2	0.2	0.2	0.1	0.1	0.2
River/stream	6,871	7.8	8.8	1.5	22.5	3.5	5.0	6.7	7.6	10.6	3.0
Dugout/pond/lake/dam/canal	1,292	1.5	3.3	0.3	2.3	0.1	1.2	1.3	0.1	3.5	0.7
Other	16	-	-	-	-	-	-	-	-	-	-

Source: Ghana Statistical Service, 2010 Population and Housing Census

12.20 Main Source of Water for Other Domestic Use

Table 12.18 provides data on the main source of water for other domestic use. The main source was bore hole/pump/tube well (61.8%). Three districts recorded percentages that were lower than this regional average – Wa municipal (34.5%), Wa East (50.4%) and Lambussie Karni (54.8%). The remaining districts recorded percentages far higher than the average

regional level. Pipe-borne water outside is used by 11.0 percent of all households with 26.5 percent of households in Wa using this source.

Table 12.18: Percentage distribution of households by main source of water for other domestic use and district

Main source of water	All districts	Percent	Wa West	Wa Municipal	Wa East	Sissala East	Nadowli	Jirapa	Sissala West	Lam-bussie Karni	Lawra
All	110,174	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pipe-borne inside dwelling	5,864	5.3	0.3	11.6	0.3	9.9	2.1	5.3	1.0	6.4	6.9
Pipe-borne outside dwelling	12,144	11.0	3.4	26.5	6.5	10.8	6.3	7.4	9.1	12.7	9.2
Public tap/standpipe	4,314	3.9	0.9	8.0	6.5	2.8	4.0	1.7	4.0	1.9	3.0
Bore-hole/pump/tube well	68,035	61.8	73.0	34.5	50.4	70.9	72.8	73.0	71.8	54.8	66.9
Protected well	5,057	4.6	1.6	12.0	2.3	0.6	3.2	0.8	1.9	6.0	6.8
Rain water	360	0.3	0.7	0.1	0.3	-	0.1	0.1	0.4	0.7	0.6
Protected spring	301	0.3	0.3	0.3	0.1	0.2	0.3	0.2	0.4	0.3	0.3
Tanker supply/vendor provided	316	0.3	-	1.5	-	-	0.1	-	0.1	-	0.1
Unprotected well	1,897	1.7	1.2	1.5	0.5	0.4	2.3	2.0	3.0	3.1	1.9
Unprotected spring	330	0.3	0.5	0.2	1.0	0.2	0.3	0.1	0.1	0.2	0.2
River/stream	8,759	8.0	12.2	2.1	26.0	3.7	6.9	6.5	7.9	10.4	3.3
Dugout/pond/lake/dam/ canal	2,546	2.3	5.5	1.8	5.5	0.5	1.4	2.4	0.3	3.3	0.8
Other	251	0.2	0.4	-	0.7	-	0.1	0.6	-	0.1	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER THIRTEEN

SUMMARY OF FINDINGS, POLICY INTERVENTIONS AND RECOMMENDATIONS

13.1 Introduction

The Upper West Region covers an area of 18,476 square Kilometers which is about 7.7 percent of the total land area of Ghana and is the seventh largest Region of the country. The 2010 Population and Housing Census registered a total population of 702,110 for the Region representing 2.8 percent of Ghana's population. It is the least populated region. The population is made up of 48.6 percent males and 51.4 percent females with a sex ratio of 94.5 male per 100 females.

13.2 Political Administration

The Region has 9 administrative Districts with the Wa Municipality as the Regional capital. There are 8 parliamentary constituencies to elect residents in the Region to the National Legislative assembly or parliament. The political administration is decentralized into a system of District assemblies and the Regional Co-coordinating Council. The District Assemblies in turn are decentralized into local / area councils and unit committees.

13.3 Demographic Characteristics

Population Growth

The 2010 Population and Housing Census recorded a population size of 702,110 for the Region. A comparison with 2000 population census which was 596,583 shows an increase of 21.8 over 2000 figure. The intercensal growth rate is 1.9 percent. The population density of the Region increased from 31.2 persons per square kilometer in 2000 to 38.0 persons per square kilometer in 2010.

Age Structure

The age structure of the population in the Region and within the Districts show variations common however, their youthful nature typical of developing countries. The age and sex structure show a high percentage of males than females in the age groups from 0-19 years but a higher percentage of males than females than males for the group 20 -69 years. In 2000 the male proportion for age group 70-85 years and older was higher than for females. But for 2010 females continue their domination for the age group 70 -85 years and older. The dependency ratio is relatively high for all the Districts. The Regional over all dependency ratio is 91.0 percent. The highest dependency ratios are for the Wa West and Wa East, each with 105.6 which are all above the Regional average of 91.

Fertility

The Total Fertility Rate (TFR) analysis show that the TFR is low in the Wa Municipality (2.4) and high in Wa West (3.8). Wa West, Wa East, Sissala West and Lambussie Karni are all districts with TFR higher than the regional average of 3.45. Differences in the fertility levels by districts may be explained largely by levels of education. Thus, in districts where women have low education, the TFR is high.

Mortality

Infant Mortality Rate (IMR) is high in Wa East (84 deaths per 1,000 live births), while Sissala West recorded the lowest infant mortality rate 72 per 1,000. Four Districts (Wa Municipality, Nadowli, the Wa West, and Wa East) have are IMR higher than the regional average of 81 per 1,000. Wa East recorded the highest IMR (84) and under five mortality of 134 per 1,000 live births.

Urban-Rural Localities

The proportion of the population living in urban localities (population of 5,000 or more) in the Region is 16.3 percent compared with 83.7 percent for those living in rural localities. Level of urbanization in the Districts is low. For example, Wa West, Wa East, Nadowli and Sissala West are Districts fully rural.

Migration

More than nine out of every ten persons (93.6%) living in the Upper West Region are Ghanaians by birth, 93.7 percent are females and 93.6 percent males. Non-Ghanaians constitute 3.0 percent followed by Ghanaians with dual nationality (2.6%). In the Districts Wa East (5.2%) and Sissala East (5.7%) have the highest proportions of non-Ghanaians. The percentage of Male and female proportions of non-Ghanaians is equally high in the two Districts

13.4 Social Characteristics

Household Composition and Structure

There are 110,175 households and about 17,770 houses in the Region, with an average household size of 6.2. Within the household structure, 16.0 percent of the household members are heads 45.5 percent are children, 6.9 percent grandchildren with other relations. This is an indication that the traditional family structure of the nuclear family in addition to extended family is still common in the Region.

Headships of Households

Household Headships in the Region shows 75.3 percent male headship and 24.7 percent female headship. For urban-rural localities, 67.05 percent of household heads are male and 33.0 percent females in urban areas. In the rural areas, 77.4 percent of households heads are males and 22.6 percent are females. Within the Districts, the proportion of male headed households is highest in Wa East compared with the female headed household which is highest in Nadowli (32.0%).

Education and Literacy

The adult literacy rate in the Region is 40.5 percent. Made up, 48.5 percent for males, and 33.5 percent females. This is higher than the national average of 25.9 percent. In six out of nine Districts, literacy levels are higher than the regional average of 59.5 percent. Less than one-fourth of the population are literate in English and Ghanaian language, while about one in five is literate in English language only. The specific literacy rate among household heads show that only 14.2 percent of households between 50-59 years are literate.

Slightly more than a third (33.5%) of the population 6 years and older has primary school education while almost one-fifth has junior secondary school education. The proportion with

senior secondary education is 7.0 percent. Wa East District has the highest (54.0%) primary school enrolment, while Sissala West has the highest percentage (22.3%) of those who had attained JSS / JHS education.

The proportion of population 3years and older currently in school is 36.6 percent made up of 52.5 percent boys and 47.5 percent girls. It is interesting to note that the percentage of boys in nursery (10.7%), kindergarten (7.7%), Primary (50.0%), JSS / JHS (17.4) and SSS / SHS (7.5%) is lower than for the girls in nursery (11.8), kindergarten (8.0%), primary (52.5%), JSS / JHS (17.8%) and SSS / SHS (5.5%). But the percentage for boys increases thereafter. It is a significant modest achievement in the girl child education.

Ethnicity

The Region has two major ethnic groupings namely, Mole–Dagbani and Grusi. The Mole–Dagbani ethnic group predominates in 7 of the 9 Districts, with district variations ranging from 58.0 percent in Lambrussie Karni to 96.5 percent in Lawra.

Lawra and Jirapa Districts have the largest concentration of the Mole–Dagbani which constitutes 96.4 percent and 96.5 percent respectively in the two Districts. On the other hand, the Grusi ethnic group dominates in Sissala East (92.1%) and Sissala West (72.9%). There is however a small percentage (1.4%) of the Akan group which is non–indigenous (1.4%). There are other ethnic groups, such as the Ewe (0.4%), Guan (0.8%), Ga – Gurma (1.2%) among others.

Religious Affiliation

The three major Religious groups in the Region are Christianity, Islam and Traditional Religion. Christians form 44.2 percent of the population. Second is Moslems with 38.1 percent and those who profess traditional Religion are 13.9 percent, those who do not practice any Religion follow with 3.5 percent, and others (0.3%). The Christian religion is further broken down into catholic (35.7%), protestant (3.0%) and Pentecostal / charismatic (4.3%).

Marital Status of the Population 15 years and Older

Out of a population of 460,954 who are 15years and older, 51.8 percent are married including 0.7 in informal consensual union living together. The never married forms 40.0 percent and those who were once married but are now separated account for 0.8 percent and those divorced (0.9%). The widowed constitute 6.6 percent. In the Districts, the highest proportion of the population 15 years and older who are married is in Wa East (60.6%). The lowest is in the Wa Municipality (45.4%). The proportion married increases with age and declines slowly from age 45-49 years. Divorce is relatively low but is highest for the age 35-39 (1.7%) to 55-59 (1.8%). Separation is equally low but highest in the group 30-34 (1.3%) to 1.5 percent at age 45 -49. Widow-hood as expected starts increasing from 13.3 percent at age 50-54 to 36.0 percent at age 70 years and older. There are some reported cases of early marriage (12-14 years) which constitute almost one–tenth of those in aged 12-14 years. Marriage among rural drivellers is 52.5 percent higher than their urban counterpart (44.4 %). Marriages among females is more likely (54.2%) than among males (47.5%). Widowhood is 10 times higher (11.2%) for married women than married men (1.4%).

The phenomenon may be attributed to age differences between the spouses whereby women married elderly men far older than them.

Marriage is highest for those with middle school education (82.2%) but lowest (16.7%) for those who never attend school. It is worth noting that widowhood is highest (10.9%) for those who never attended school.

13.5 Economic Characteristics

Employment

Out of the population of 409,412 aged 15 years and older in the Region, 67.3 percent are employed, 2.9 percent are unemployed while 29.8 percent are not economically active. A little over 86.0 percent of employed persons 15 years and older across Districts are resident in rural areas except in Wa Municipality, where 65.3 percent of all employed persons live in urban areas.

The proportion of employed female population is slightly higher than the proportion of employed males in all Districts, except Wa East which has 36.3 percent females and 38.0 percent males employed.

Type of Industry

The vast majority of the population 15 years and older in the Region are skilled agricultural, forestry and fishery workers (72.8%). The proportion of the male population working as agricultural, forestry and fishery workers is higher (77.8 %) than that of females (68.3%). More than 70.0 percent of the population are skilled agricultural, forestry and fishery workers in all Districts except Wa Municipality where the proportion is 29.3 percent.

Employment Status

A little over 50.0 percent (53.6%) of the employed population are self-employed without employees. For the males, 59.0 percent are self-employed without employees compared to 48.7 percent females. The proportion of the population employed in agriculture, forestry and fishing sector is very high in Wa West, Wa East and Sissala East Districts (84.0%, 87.0% and 83.1%) respectively.

Although the dominant industry in the Wa East and Sissala East is agriculture, forestry and fishing, the proportion engaged in manufacturing in these Districts is very low indicating that there is little agro-processing activities.

Disability

One out of every twenty-five (4.0%) persons in the Region has a form of disability. At the district level, the percentage is highest (4.8%) in Nadowli. Among the age groups, it is generally high among young and older populations. In Urban-rural localities, a higher percentage of people with disability live in rural areas (3.8%) than in urban areas (3.1%).

Type of disability

Sight problem is the common type of disability in the Region accounting for 37.5 percent of the population of which the higher proportion (21.4%) lives in Lawra District. A higher percentage of females (39.9%) than males (35.1%) have sight problems.

Disability by Level of Education and Marital Status

About two-thirds (65.7%) of persons with disability in the region have never attended school. Within the Districts, Wa West has the largest proportion (74.0%) with disability. More than a quarter (27.4%) of persons with disability in the Region are married; the proportion married is highest in Wa East with 60.3 percent.

Disability by Economic Activity

More than half (54.8%) of persons with disability are employed. The District with the highest percentage (60.0%) of employed population with disability is Sissala West. More than 40.0 percent of the population with disability in all Districts except Sissala West and Lawra are not economically active.

Agriculture

The number of households engaged in agricultural activities in the Region is 84,931. Of this number, 91.4 percent are in rural areas. Similarly, male headed households engaged in agricultural activities is three times that of females, except Sissala East, where the percentage of female household heads in agriculture is higher than that of males. At the same time, the ages of household heads in agriculture ranges from a low 0.9 percent in age group 15-19 to a high of 12.5 percent in age group 40-44 years. For the districts, Sissala East has the highest proportion of household heads (14.2%) in agriculture.

Type of agricultural activity

Crop farming is the main stay of agricultural activity for over ninety-five percent of households in the region, Livestock rearing is 63.7%. In the Districts, crop farming is highest in Sissala West (98.0%). Livestock rearing is however common in Lambussie Karni, where 77.6 percent of households engage in this type of agricultural activity. Among the sexes, a higher percentage of males than females engage in both crop farming and livestock rearing.

Type of Crops Cultivated by Households

Cereals, roots, tubers and legumes are main crops cultivated by households in the Region. Households are either engaged in mono-cropping (single crop cultivated on farm land and mixed cropping (more than one crop rotation).

The proportion of households in rural areas who cultivate beans and groundnuts is 97.1 percent and 93.1 percent respectively. Yam, potatoes and rice are each cultivated by more than 95.0 percent of households living in rural areas. Similarly maize and millet are two major cereal crops grown in the Region cultivated by a high proportion of households in rural localities.

Live Stock Rearing by Households

More than ninety percentage of livestock holdings in the Region are in rural areas. Majority of cattle (95.5%) goat (95.0%) chicken (93.0%) and pig (92.2%) holdings are in rural areas. However about one-third (32.7%) of rabbits holdings are in urban areas.

Dwellings and their Conditions - Ownership

Vast majority of household members almost 4 in 5 (82.5%) own their dwellings At the District level owner occupied dwelling units are common in Wa East (96.0%). In the urban-

rural localities the proportion of dwelling units owned by households are is high in urban areas (49.8%) but higher in rural localities (90.9%).

Type of Dwellings

Compound, separate and semi-detached houses are the three common types of dwelling occupied by households in the Region. Of these, the commonest is the compound house occupied by 50.0 percent of households. Within the Districts, Wa Municipality has the highest proportion of households (56.5%), living in compound houses.

Construction Materials

Mud bricks / earth are the main construction materials used by three out of every four dwelling units (75.0%) in the Region. In the Districts, mud brick / earth is also most widely used material for outer walls of which Wa East records the highest percentage (92.6%). Usage is however lowest in Wa Municipality (35.7%); in the urban-rural localities, 84.7 percent of dwelling units use mud bricks / earth in rural areas compared to a low 36.6 percent in urban areas.

Roof

Corrugated metal sheet is most widely used by households in the region. More than three in every four households (77.0%) live in dwelling units roofed with corrugated metal sheets. Among the Districts, the use of corrugate metal roofing material features most prominently in Wa Municipality (91.7%), than in the rest of the Districts. The use of corrugated metal sheet as major roofing material in urban localities is high and very high in Sissala East (95.1%), Jirapa (93.4%) and the Wa Municipality (93.1%). For rural localities corrugated metal sheet is still most common accounting for 72.8 percent of all roofing materials used in rural areas.

Floor

Cement / concrete is the most common material used for floor by more than half (59.6%) of dwelling units in the Region. It is also the commonest type of floor material used in all Districts particularly in the Wa Municipality (89.7%) which is the highest. It is also more prevalent in urban localities (89.2%) compared to 52.0 percent in rural areas.

Rooms and Sleeping Rooms for Households

Two-bed rooms-households predominate in the Region. Almost one-third of households (29.5%) in the Region occupy two bedrooms. There are however District variations. For instance, percentages for two bed rooms-households ranges from a low 26.0 percent in the Wa Municipality to a high of 36.0 percent in Wa East. Next is the one bed room household which has a regional average of 24.0 percent. This type of dwelling is as high as 43.3 percentage in Wa Municipality and as low as 19.1 percent in Sissala West.

13.7 Household Facilities and Amenities

Drinking water

Borehole/pump/tube well as source of drinking water is used by 64.2 percent of households in the Region. It is also common within the Districts with highest percentage usage in Wa West (79.5%). The second main source of water in the Region is pipe-borne outside the dwelling; (11.4%) which is used by 27.8 percent of households in the Wa Municipality. The use of bore-hole/pump/tube well by households in rural communities is 73.4 percent,

compared to 28.6 percent for urban areas. On the other hand, pipe-borne outside dwelling as source of drinking water, is used by 29.3 percent of households in urban areas compared to 6.8 percent in rural localities

Lighting

Flash light/torch is the commonest source of lighting used by 45.0 percent of households in the Region. Within the Districts, the use of torch light is highest in Wa East (71.9%). The source of lighting is electricity (main) used by 30.9 percent of households in the Region. In the Districts, it is highest for Wa Municipality (72.1%). The use of electricity for lighting is higher in urban localities (77.4%) compared to 18.9 percent for rural areas.

Fuel and Space for Cooking

Wood is the main source of cooking fuel for 73.4 percent of households in the region. Within the Districts, Wa West leads with 91.1 percent which is far higher than the Regional average. Charcoal is second and it is used by 19.0 percent of households in the Region. In the Districts, Wa Municipality has the highest usage of 55.2 percent which is almost three times higher than the Regional average. Charcoal as main source of cooking fuel is more common in urban localities (63.5%) compared to 7.5 percent for rural localities.

Cooking Space

A little over two in five households (41.8%) have separate rooms exclusively set aside for cooking purposes. At the district levels, Wa West has highest percentage (55.9%) of households who have a separate room set aside exclusively for cooking. In urban areas cooking on verandah is common (46.0%) but majority of rural dwellers (47.6%) have separate rooms for exclusive use for cooking.

Bathing Facility

Majority (42.8%) of households in the Region own a bathroom for exclusive use particularly in Jirapa District (51.0%). In urban-rural localities, 46.9 percent of households in rural areas have own bathroom for exclusive use compared with 27.0 percent for urban dwellers.

Toilet Facility

Majority of households (72.9%) use the bush or the field for toilet and this is highest in the Wa West District (85.9%). Next to the bush or the field, is the use of the public toilet (WC/KVIP/pan etc), which accounts for 12.7 percent of type toilet facility in the Region. In the Districts, the use of bush or open field is the main toilet facility in Wa West (85.9%) but the use is relatively less common in Wa Municipal ((41.8%)

Liquid Waste Disposal

Only 1.6 percent of households in the Region dispose of their liquid waste through the sewerage system. The vast majority almost two in three (64.8%) of households dispose their liquid waste by throwing such waste onto the street or outside while 23.0 percent of households throw their waste onto the compound. Among the Districts, throwing of liquid waste onto the street / outside is highest in Nadowli with 70.2 percent. On the other hand, disposal of liquid waste through the sewerage system is common among households in the Wa Municipality (3.9%).

Solid waste disposal

The commonest method of solid waste disposal in the Region for 36.8 percent of households is by public dumping into open space. Almost two in five of every households in the Region dispose of solid waste in public dumps (open space). Those who throw their solid waste indiscriminately is 36.0 percent. The rest of the households burnt their solid waste (5.9%) dump in public container (12.7%) or bury the solid waste (3.2%). For the Districts, solid waste disposal varies. Solid waste disposal by method of (open space) dumping ranges from a low 23.6 percent in Wa Municipality to a high 63.0 percent in Sissala East.

13.8 Conclusion

Overall, the various indicators such as demographic, social, economics, agriculture, dwellings among others, show variations at the Regional, District as well as urban- rural localities levels. For instance, for age and sex structures, pertinent to note that in 2000 the male proportion for age 70-85 years and older was higher than for females. But for 2010 females predominated the age group 75-85 years and older. Sex ratio (number of males per 100 females) for Upper West Region is 94.5, an indication that there is a sharp drop of males over females. It is however, highest for Wa East (102.0) but lowest in Jirapa (88.9). This phenomenon is indicative of the presence of migratory movement in the Region.

Population distribution varies across the Districts with the Wa Municipality having the highest share of the District population (15.3%) Wa Municipality also has 66.3 percent in urban population which is higher than the Regional average of 16.3 percent.

Fertility (TFR) levels in the districts are higher than the regional average of 3.45 except in Wa Municipality where it is lower (2.4) Infant Mortality Rate (IMR) is lower (2.4) than the Regional average of 81 per 1,000 in four Districts (Wa Municipality, Nadowli, Wa West and Wa East), at the same time five of the nine Regions have under-five mortality exceeding the Regional average of 128 per 1,000.

More than half of the population (59.5%) in the region are not literate. This is twice as high as the national average of 25.9 percent. Less than one-fourths of the population is literate in English language only.

The percentages of males who are not literate is lower than the Regional average of 59.5 percent, on the other hand the percentage of females who are not literate is higher than the regional average. In six out of the nine Districts, the illiteracy levels are higher than the regional average 58.5 percent.

A little over two out of every three persons who are economically active are employed mostly (72.8%) in the agriculture, forestry and fishing sector and are largely self-employed without employees. Those in agriculture cultivate mainly cereals, roots tubers and legumes as single crop or mixed farming.

Most household members live in dwelling units owned by a household member. Dwellings are constructed largely with mud bricks or earth and roofed with corrugated metal sheets. Both at Regional and District levels the flash light or torch light are used as main source of lighting which Wa East District leads has the highest use of torch light, with 71.9 percent which is higher than Regional average of 45.0 percent. Upper West therefore is a Region which is lacking basic developmental needs, namely; manufacturing industries, infrastructures such as good drinking water, electricity and good access roads. The

combination of absence of these facilities and amenities have made the Region the most rural and deprived of all the Regions in Ghana.

13.8 Policy Interventions

One of the major objectives of National Population policy is to reduce the population growth rate from 3 percent in 1969 to 1.7 percent by the year 2000 (National population council, 1994). The relatively high fertility rates in the Region especially across the Districts ranging from 2.4 in Wa Municipality to 3.8 in Wa East show that population policy is yet to be achieved. There is therefore the need to step up family planning programme with free contraceptives in the Districts especially, in the Wa West which has the highest fertility rate among the Districts.

It is also the objectives of population policy to provide free and compulsory universal basic education and encourage girls to continue schooling up to at least the secondary school level (NPC, 1994p, 35) The 2010 Ghana Population and Housing Census analysis shows a modest improvement in education. But there need to pursue with more vigor, because there is still great disparity between the sexes; for example, literacy rate in the Region is very low. Between the sexes, the females are worse off with only 33.5 percent literate compared to 49.5 percent for males. For past school attendants (population 6 years and older) only about one-third (33.5%) attended primary school with sharp drops progressively.

The population for currently attending school in the region is 217,651. Of this, 52.9 percent are boys while 47.1 percent are girls. However, the proportion of girls in nursery (3.3%) kindergarten (3.6%), primary (60.1%) and JSS/JHS (21.2%) are higher than those for boys in nursery (3.0%), kindergarten (3.4%), primary (56.5%) and JSS/JHS (20.5%). Even though the percentages decrease for the girls in favor of the boys after the JSS/JHS, this is quite impressive for the girls. This shows that the policy intervention whereby emphasis is placed on the schooling of the girl child within the fee free universal basic education can yield good results if it is sustained.

Employment in the public sector in the Region is very minimal and it is made up of largely teachers. The proportion of economically active population 15 years and older employed in the private formal sector is even smaller. The bulk (92.9%) of the population 15 years and older who are economically active in the private informal sector of the economy are self-employed without employees. They work in agriculture, forestry and fishing. Majority (95.0%) of them, are into crop farming and 63.7 percent are engaged in livestock rearing. It is observed that a high percentage of females (95.1%) than males (90.5%) are in private informal sector. It is a recognized fact that the building of a strong and viable economy depends, to a large extent on the quality of its labor force (NPC, 195). It is therefore imperative to have a comprehensive man power and employment planning policy which takes account of the needs of both sexes, working in the public and private sectors. In this regard, the National Planning Commission (NPC), the various District Assemblies and other stakeholders should draw up comprehensive programmes which should include measures to include the capability of women to operate more in dependently and effectively in the formal and informal sectors by giving them easy access to credit facilities. Loan to private individuals who are household members to build better houses is very important because the quality of the dwellings owned is generally poor, so also are toilet facilities solid and liquid waste disposal facilities while create unsanitary conditions in the Districts. Sources of fuel for cooking and lighting are limited and restricted to the use of flashlight or torch light

(45.0%) and wood (73.0%) and charcoal (19.0%). This certainly will have effect on forestation. It is therefore important to review and promote the implementation of the existing national housing policy to cover all the Regions and Districts especially the upper west Region since it is one of the poorest Regions in the country. The Districts must be adequately resourced and mandated to support housing financing.

13.9 Recommendations

It is recommended that it will be useful to include in the district analysis data on the following:

1. District population density;
2. Current school analysis;
3. Availability of community facilities and amenities and access to them in the districts.

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