



# 2010

## **POPULATION & HOUSING CENSUS**

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### **REGIONAL ANALYTICAL REPORT**

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## **VOLTA REGION**



Ghana Statistical Service  
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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 Volta 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](http://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**  
**Acting Government Statistician**



5.4	Marital Status by Locality of Residence.....	51
<b>CHAPTER SIX: INFORMATION AND COMMUNICATIONS TECHNOLOGY....</b>		<b>55</b>
6.1	Introduction.....	55
6.2	Number and Characteristics of Mobile Phone Owners .....	55
6.2	Number and Characteristics of Internet Facility Users .....	61
6.3	Household Ownership of Desktop/Laptop Computer .....	67
<b>CHAPTER SEVEN: EDUCATION AND LITERACY.....</b>		<b>70</b>
7.1	Introduction.....	70
7.2	Literacy .....	70
7.3	Past School Attendance .....	72
7.4	Current School Attendance .....	73
7.5	Educational Attainment by Selected Economic Characteristics .....	75
<b>CHAPTER EIGHT: FERTILITY, MORTALITY AND MIGRATION.....</b>		<b>79</b>
8.1	Introduction.....	79
8.2	Fertility .....	79
8.3	Mortality .....	82
8.4	Migration and Urbanization.....	84
8.5	Urbanization.....	89
<b>CHAPTER NINE: ECONOMIC CHARACTERISTICS.....</b>		<b>92</b>
9.1	Introduction.....	92
9.2	The Activity Status of the Population .....	92
9.3	The Employed Population .....	95
9.4	The Unemployed .....	102
<b>CHAPTER TEN: DISABILITY .....</b>		<b>104</b>
10.1	Introduction.....	104
10.2	Disability by age.....	104
10.3	Type of Disability.....	105
10.4	Disability by Sex .....	105
10.5	Disability and Marital Status.....	106
10.5	Disability and Locality of Residence .....	108
10.6	Disability and Educational Attainment.....	108
10.7	Disability and Economic Activity Status.....	109
<b>CHAPTER ELEVEN: AGRICULTURAL ACTIVITY.....</b>		<b>111</b>
11.1	Introduction.....	111
11.2	Households in Agriculture .....	111
11.3	Type of Farming Activities.....	115
<b>CHAPTER TWELVE: HOUSING CONDITIONS.....</b>		<b>124</b>
12.1	Introduction.....	124
12.2	Housing Stock .....	124
12.3	Type of Dwelling.....	125
12.4	Rooms in Occupied Units .....	129
12.5	Households and Tenancy by District.....	131
12.6	Household Facilities .....	133
12.7	Bathing Facilities.....	139
12.8	Summary and Policy Implications .....	140
12.9	Demographic Characteristics .....	141
12.4	Fertility, Mortality, Migration.....	142
12.5	Social characteristics .....	143
12.6	Literacy and Education .....	143
12.7	Disability.....	144

12.8	Economic Characteristics .....	144
12.9	Information and Communications Technology .....	146
12.10	Housing Conditions .....	147
<b>CHAPTER THIRTEEN: SUMMARY FINDINGS AND POLICY</b>		
	<b>RECOMMENDATIONS .....</b>	<b>150</b>
13.1	Policy Recommendation .....	150
<b>REFERENCE.....</b>		<b>153</b>

## LIST OF TABLES

Table 1.1: Districts in the Volta Region and their capitals.....	3
Table 1.2: Number of schools, 2008/09 to 2010/11.....	5
Table 1.3: Top 10 morbidity indicators.....	5
Table 3.1: Trends in Volta Region Population Size and Growth Rate, 1960-2010.....	24
Table 3.2: Population Size, by District, 2010.....	25
Table 3.3: Regional population density trends, 1960-2010.....	25
Table 3.4: Population density by district.....	26
Table 3.5: Population by district and locality.....	27
Table 3.6: Population, by age and sex, 2000 and 2010.....	28
Table 3.7: Population by age, locality and sex.....	30
Table 3.8a: Regional age structure, 1960-2010.....	31
Table 3.8b: Age distribution of population, by district.....	31
Table 3.9: Population by broad age group, dependency ratios and district.....	32
Table 3.10: Regional distribution of population, by sex, 1960-2010.....	34
Table 3.11: Distribution of the population, by district and sex.....	35
Table 3.12: Population, by sex ratio and district.....	36
Table 3.13: Population by nationality and district.....	37
Table 3.14: Birthplace by district.....	38
Table 3.15: Ethnic group, by district.....	39
Table 3.16: Population, by religion and district.....	40
Table 4.1: Household size by district.....	42
Table 4.2: Household headship, by district, locality and sex of head.....	43
Table 4.3: Household headship, by sex, age and locality.....	43
Table 4.5: Household Composition, by Age.....	44
Table 4.6: Household composition, by sex and district.....	45
Table 4.7: Household composition, by locality.....	47
Table 4.8: Household structure, by locality.....	48
Table 5.1: Distribution of population 12 years and older, by marital status and age.....	50
Table 5.2: Distribution of persons 12 years and older, by marital status.....	51
Table 5.3: Distribution of persons 12 years and older, by marital status and locality of residence.....	51
Table 5.4: Distribution of persons 12 years and older, by marital status and level of education.....	52
Table 5.5: Distribution of persons 12 years and older, by marital status and religion.....	53
Table 5.6: Marital status of persons 12 years and older, by economic activity status.....	54
Table 6.1: Distribution of population 12 years and older with mobile phones, by..... district and sex.....	55
Table 6.2: Population 12 years and older with mobile phones, by district and sex.....	56
Table 6.3: Population 12 years and older with mobile phones, by age and sex.....	57
Table 6.4: Population 12 years and older with mobile phones, by age group and sex.....	58
Table 6.5: Distribution of the population 12 years and older with mobile phones, by district and locality of residence.....	59
Table 6.6: Distribution of population 12 years and older with mobile phones, by district and locality.....	60
Table 6.7: Percentage of population 12 years and older with mobile phones, by level of education and sex.....	61

Table 6.8:	Percentage of population 12 years and older with mobile phones, by economic activity and sex .....	61
Table 6.9:	Distribution of population 12 years and older using internet facilities, by district and sex .....	62
Table 6.10:	Population 12 years and older using internet, by district and sex .....	63
Table 6.11:	Population 12 years and older using internet by district and locality of residence .....	64
Table 6.12:	Percentage share of population 12 years and older using internet facility, by age and sex .....	65
Table 6.13:	Percentage of population 12 years and older using internet, by age and sex .....	66
Table 6.14:	Population 12 years and older using internet, by economic activity status and sex .....	67
Table 6.15:	Households owning desktop/laptop, by district and sex of household head .....	68
Table 6.16:	Percentage of households with desktop/laptop, by district .....	69
Table 7.1:	Literacy levels for persons 15 years and older, by district .....	71
Table 7.2:	Age-specific literacy rates among literate heads of households, by sex .....	72
Table 7.3:	Past school attendance ( 6 years and older), by highest level attained and district .....	73
Table 7.4:	Current school attendance (6 years and older), by highest level attained, sex and district .....	74
Table 7.5:	Educational attainment, by employment status of economically active population (15 years and older), by sex .....	76
Table 7.6:	Economically active population 15 years and older, by level of education, sex and occupation .....	77
Table 8.1:	Trends in total fertility rates, 1988-2010 .....	80
Table 8.2:	Total fertility rate, by district .....	80
Table 8.3:	Total fertility rates and age-specific fertility rates, by district .....	81
Table 8.4:	Children ever born and mean children ever born, by locality .....	82
Table 8.5:	Infant and under-five mortality (per 1,000 live births .....	83
Table 8.6:	Infant and under-five mortality rates*, by district and reference period .....	84
Table 8.7:	Internal migration by place of birth and sex .....	85
Table 8.9:	Non-Ghanaian population, by district and sex .....	87
Table 8.10:	Economically active foreign nationals 15 years and older, by sex, age group and employment status .....	88
Table 8.11:	Economically active foreign nationals 15 years and older, by sex, age group and sector of employment .....	89
Table 8.12:	Urbanization, in Ghana and Volta Region, 1970-2010 .....	90
Table 8.13:	Urban population, by sex and district .....	91
Table 9.1:	Population 15 years and older, by age group, economic activity status and sex .	93
Table 9.2:	Economic Activity Status of Children 5-17 Years, by Sex .....	93
Table 9.3.:	Population 15 years and older, by district, economic activity status and locality	94
Table 9.4:	Employed population 15 years and older, by age group and sex .....	95
Table 9.5:	Population 15 years and older, by economic activity status, district and locality .....	96
Table 9.6:	Employed population 15 years and older, by employment status, district and locality .....	97
Table 9.7:	Employed persons 15 years and older, by occupation and sex .....	99
Table 9.8:	Employed persons 15 years and older, by district and occupation .....	100
Table 9.9:	Sector of employed persons 15 years and older, by sex .....	101
Table 9.10:	Economically active population 15 years and older, by industry and sex .....	102



Table 9.11: Population 15 years and older, by age group and economic activity status .....	103
Table 9.12: Unemployed population 15 years and older, by district and sex .....	103
Table 10.1: Persons with disability, by age and district .....	104
Table 10.3: Persons with disability, by sex and district .....	106
Table 10.4: Persons with disability, by marital status, sex and district .....	107
Table 10.5: Persons with disability, by locality of residence .....	108
Table 10.6: Persons 3 years and older with disability, by level of education and district ...	109
Table 10.7: Persons 15 years and older with disability by economic activity status.....	110
Table 11.1: Number of household members engaged in agriculture, by district, locality of residence and sex .....	111
Table 11.2: Households engaged in agriculture, by district, locality and sex of head.....	112
Table 11.3: Households engaged in agriculture, by household size and district .....	113
Table 11.4: Households in agriculture, by district, locality and age of head .....	114
Table 11.5: Households in agriculture, by district, locality, agricultural activity and sex of head.....	116
Table 11.6: Type of crop, by number of farms and type of cropping .....	119
Table 11.7: Distribution of households, by locality and crop cultivated .....	121
Table 11.8: Distribution of livestock, by locality and number of holdings/livestock.....	123
Table 12.1: Stock of houses and households, by district.....	125
Table 12.2: Type of dwelling, by district .....	126
Table 12.3: Main construction material for outer wall, by district .....	127
Table 12.4: Materials used for floor construction, by district .....	128
Table 12.6: Sleeping rooms per household, by district .....	130
Table 12.7: Number of rooms occupied by households, by district .....	131
Table 12.8: Ownership of dwelling, by district .....	132
Table 12.10: Main source of drinking water for households, by district .....	134
Table 12.11: Main source of lighting, by district .....	135
Table 12.11: Main source of cooking fuel for household, by district .....	136
Table 12.12: Toilet facility, by district.....	137
Table 12.13: Solid waste disposal, by district .....	138
Table 12.14: Liquid waste disposal, by district .....	139
Table 12.15: Bathing facility used, by household and district .....	140

## **LIST OF FIGURES**

Figure 1.1: Relief Map .....	1
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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

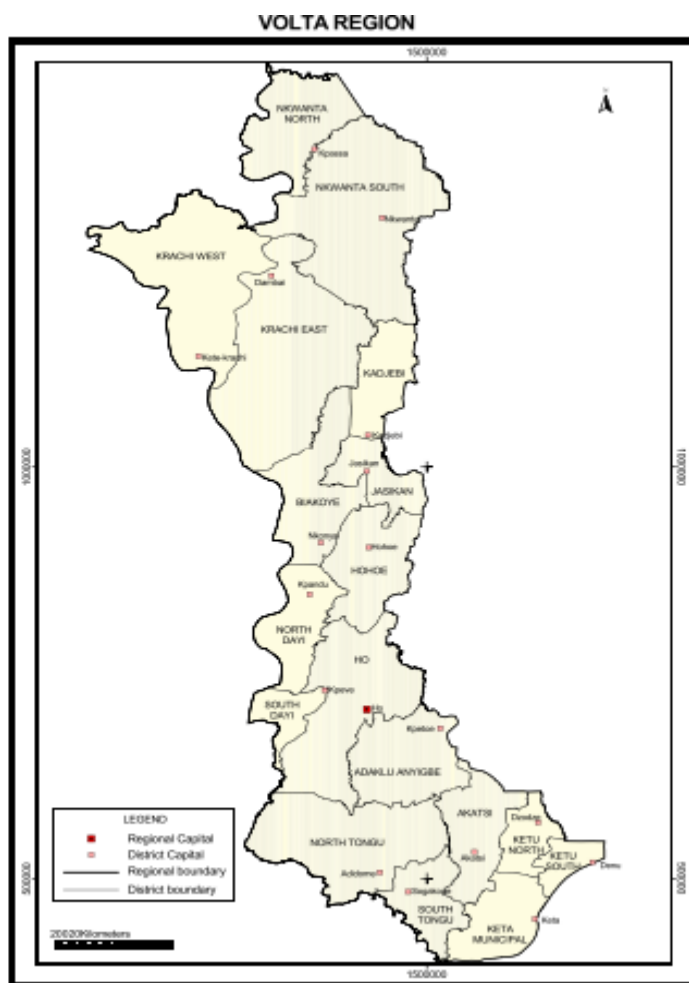
# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

This chapter provides information on the Volta Region and demographic analysis in the context of the 2010 Population and Housing Census (PHC). The topics discussed include historical background, physical features, political administration, social structure, economy, and demographics. The section also includes the organization of the report.

Figure 1.1: Relief Map



### 1.2 Historical Background

Volta Region is one of the ten regions in Ghana. It lies on the eastern side of the country. The region derived its name from the Volta River, which virtually separates it from the rest of the country. The region is unique in the sense that it is the longest of the regions and has all the ecological zones and ethnic groups found in Ghana living in it as indigenes. For this uniqueness, the region is described as a microcosm of the country.

Historically, the northern part of region, with the exception of the regional capital, Ho, was part of the German colony, while the southern part was administered as part of the Gold Coast colony. After Germany's defeat in World War I, its colony of Togoland was partitioned. One portion was placed under the protectorate of Britain as the British Togo. The other, under French protectorate, became the French Togo, now the Republic of Togo. The British protectorate of Togoland, later to be known as Trans-Volta Togoland (TVT), was administered by the Governor of the Gold Coast. After Ghana achieved independence in 1957, the Parliament adopted a resolution to merge and integrate the Trans-Volta Togoland with Ghana, under the name Volta Region.<sup>1</sup>

## **1.3 Physical features**

### **1.3.1 Location and Area**

The region is located between latitudes 5° 45'N and 8° 45'N along the southern half of the eastern border of Ghana, which it shares with the Republic of Togo. It shares boundaries to the west with Greater Accra, Eastern and Brong Ahafo regions, to the north with the Northern Region and has the Gulf of Guinea to the south. Its total land area is 20,570 square kilometres, representing 8.7 percent of the total land area of Ghana.

### **1.3.2 Climate**

Like the rest of Ghana, the Volta Region has a tropical climate, characterized by moderate temperatures of 21-32° Celsius (70-90° F) for most of the year. The region has two rainfall regimes, the first from March to July and the second from mid-August to October. Rainfall figures, which vary greatly throughout the region, are highest in the central highland area and the forest zone and lowest in the Sahel-savannah zone in the northern part of the region. The average annual rainfall is between a low of 1,168 mm and a high of 2,103 mm.

### **1.3.3 Vegetation**

The region is about 500 kilometres in length from south to north and spans all the vegetation zones of the country including coastal grassland, mangrove swamps, guinea savannah, semi-deciduous forests, Sahel-savannah and mountainous wooded savannah in the north. Thus the region has competitive advantage over other regions for the cultivation of many crops. The middle and northern belts are mainly mountainous, with Mount Afadzato (885 m) being the highest peak in the country. The south is flat with marshy and sandy portions. These coastal areas are estimated to be less than 15 metres above sea level.

### **1.3.4 Political and Administrative Structure**

As in the other regions in Ghana, the Volta Region has a decentralized political and administrative system. It is divided into 18 administrative Municipal/District Assemblies headed by Municipal/District Chief Executives. Each Municipal/District Assembly has responsibility for the overall development of the area under its jurisdiction. The Municipal/District Chief Executives are also responsible to the President through the Regional Minister who is the political head of the region. Administratively, the Municipal/District Assemblies are composed of zonal, urban, town and area councils. The

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<sup>1</sup>

lowest level sub-structures are the unit committees. The apex of the decentralized administrative system is the Regional Coordinating Council (RCC) and the District Assembly. The RCC comprises the Regional Minister, his Deputy, representatives of the Regional House of Chiefs, the District Chief Executives of the region, Presiding Members, and representatives of the various decentralized ministries, departments and agencies (MDAs). Table 1.1 provides a list of the districts in the region and their capitals.

**Table 1.1: Districts in the Volta Region and their capitals**

<b>District</b>	<b>Capital</b>
South Tongu	Sogakope
Keta Municipal	Keta
Ketu South	Denu
Ketu North	Dzodze
Akatsi	Akatsi
North Tongu	Adidome
Adaklu Anyigbe	Kpetoe
Ho Municipal	Ho
South Dayi	Kpeve
North Dayi	Kpando
Hohoe Municipal	Hohoe
Biakoye	Nkoya Ahenkro
Jasikan	Jasikan
Kadjebi	Kadjebi
Krachi East	Damai
Krachi West	Kete Krachi
Nkwanta South	Nkwanta
Nkwanta North	Kpassa

Source: Ministry of Education, 2010/11 Annual Report

## **1.4 Social Structure**

### **1.4.1 Ethnicity/Language Groups**

There are eight major ethnic groups in the region speaking different languages. There are also an estimated 62 sub-groups speaking 56 dialects. The major ethnic group is the Ewe, followed by the Guan, the Akan and Gurma. The Guan comprises over 18 sub-groups and the Akan over 19 sub-groups. The less prominent ethnic groups include the Ga-Dangme, Mole-Dagbon, Grusi, and the Mande-Busanga.

### **1.4.2 Traditional Structure**

The people of the Volta Region are organized under chiefs at the lineage and settlement levels. A lineage comprises extended families that trace their genealogy to the same ancestor. The extended families also have heads who are most often the oldest male. With the exception of Kadjebi District and a few areas in Jasikan District, ownership of property is passed on by patrilineal inheritance in all the other districts.

The Volta Regional House of Chiefs, like similar institutions in the other regions, was established by statute in 1958. The Legislative Instrument 991 of 1974 defined the

composition of the Volta Regional House of Chiefs to consist of 15 paramount chiefs (in charge of 15 Traditional Councils) and 17 rotating members (from 17 groupings) bringing the total membership to 32.

The Traditional Council is composed of several area councils. The traditional authorities administer stool lands, holding them in trust for the people, and arrange the celebration of traditional festivals. They are also the custodians of traditional beliefs and customs, passed on from one generation to another. The traditional authorities also have courts which adjudicate on matters relating to stool lands, lineage and family lands, chieftaincy disputes, violations of traditions and disputes between localities, lineages, families and individuals. In the Volta Region, no paramountcy owes allegiance to another paramountcy.

## **1.5 Economic Activity**

The majority of the people in the region are engaged in agriculture. The region has substantial agricultural resources, which include large expanses of land of which an estimated 1,028,500 hectares are suitable for the cultivation of crops and rearing of animals. Currently only 29.0 percent of the total arable land of the region is under cultivation. The major agricultural products include cocoa and staples such as maize, rice, sorghum, cassava, yam, cocoyam and plantain.

The region used to be one of the country's major cocoa growing areas, mainly in the northern districts of Hohoe, Jasikan, Kadjebi and Nkwanta. It was the cocoa industry that made Hohoe a very important commercial town and the capital of the Trans-Volta Togoland before Ho became the capital. It was also responsible for the considerable in-migration of various ethnic groups from northern Ghana to the northern districts of the region. The cocoa industry has however declined over the years as a result of agronomic and political problems. With the Volta River and the Volta Lake running almost the whole length of the region, there is a good potential for inland fishing as well as irrigation. The Volta River and Volta Lake are the largest sources of Ghana's fresh water fish but irrigated agriculture is yet to be exploited. Shallots, which are exported to many parts of West Africa, are cultivated on a large scale by irrigation, using ground water and boreholes. Animal rearing ranks next to food crop production in the region, with a large number of cattle, sheep and goats. The cultivation for export of non-traditional crops such as black pepper, cashew nuts, ginger, pineapple, pawpaw and mangoes is on the increase.

### **1.5.1 Major Activities**

Agriculture, fishing, hunting and forestry and related work are the dominant economic activities in the region and the major sources of employment for the economically active population. The exception is in the Keta and Krachi districts where fishing is the main and the second major economic activity respectively. Apart from these agriculture-related activities, there is manufacturing, mining and quarrying, construction, wholesale and retail trade, and tourism.

## **1.6 Social Infrastructure/Amenities**

### **1.6.1 Telecommunications Infrastructure**

Communication development in the region is progressing steadily, with improved public telephone links between Ho (the regional capital) and other district/municipal capitals. A new

post office building has also been built and provides expedited courier services to every part of the region. With the introduction of mobile phone services on the Ghanaian market; all districts and municipalities and most sub-districts in the region can now be contacted on telephone. Of 495,603 households in the Volta Region, 1.24% have fixed telephone lines, which is below the national average of 2.3%. The proportion of households with a desktop or a laptop computer is 3.04%. Of the 1,449,077 persons aged 12 years and older, 37.31% own mobile phones, also below the national average of 47.70%. Only 3.49% are using an internet facility (national average 7.80%).

## 1.6.2 Educational Infrastructure

The region has institutions providing education from kindergarten to tertiary level. Table 2.1 below shows the number of public and private basic schools in the Region from 2008/09 to 2010/11 academic years. The trend shows that the number of schools has increased consistently over the years. The region also has one polytechnic, one university, and various tertiary institutions such as teacher training colleges and nursing training schools.

**Table 1.2: Number of schools, 2008/09 to 2010/11**

All levels	2008/09			2009/10			2010/2011			Change over (%) 2009/10
	Total	Public	Private	Total	Public	Private	Total	Public	Private	
Kindergarten	1,691	1,358	333	1,708	1,394	314	311	1,740	311	1.9
Primary	1,744	1,490	254	1,767	1,471	296	1775	1,483	292	0.5
JHS	979	860	119	1,004	847	157	1030	866	164	2.6
SHS	83	72	11	90	72	18	92	72	20	2.2
Technical/ Vocational	42	23	19	36	16	20	31	18	13	13.9

Source: Ministry of Education, 2010/11 Annual Report

## 1.7 Health and Nutrition

### 1.7.1 Morbidity

Table 1.3 shows the top 10 morbidity indicators in 2010 in the Volta Region. Malaria accounts for the largest share of morbidity in the region (40.96%), followed by acute respiratory infections (ARI) with 9 percent share of morbidity.

**Table 1.3: Top 10 morbidity indicators**

No	Disease	No. of cases	% of Total
1	Malaria	617,191	40.96
2	Acute Respiratory Infections	136,558	9.06
3	Hypertension	74,898	4.97
4	Rheumatism and joint pains	63,550	4.22
5	Skin diseases and ulcers	60,065	3.99
6	Diarrhea diseases	55,286	3.67
7	Intestinal worms	54,348	3.61
8	Anemia	44,113	2.93
9	Gynecological conditions	15,529	1.03
10	Acute eye infection	14,830	0.98

Source: Ghana Health Service, 2010 Annual Report



### **1.7.2 Health Institutions**

The region has a total of 326 health institutions out of which 242 are administered by the Ghana Health Service (GHS), 18 are mission owned, one is quasi-government and 65 are privately owned. It is worth noting that many of the GHS-run health centres were community initiated. With the exception of Krachi East, Nkwanta North and Adaklu Anyigbe, every district now has a hospital, either government- or mission-owned. As in other parts of the country, the region has inadequate numbers of health professionals, especially doctors and nurses, in relation to the population size. For example, in 2009 the total number of doctors in the region was 53, which represented a ratio of one doctor to 35,871 people. With nurses, the ratio was one nurse per 1,327 people.

### **1.7.3 Water and Sanitation**

According to the 2011 Community Water and Sanitation Agency (CWSA) report, 2,318 (or 71.3%) out of the total number of 3,252 communities in the Volta Region obtain their drinking water from boreholes. This means that only a very small proportion of communities has access to piped water. With regard to sanitation, the two main facilities available to households in the region are public toilets (30.0%) and pit latrine in the house (18.7%). Some households have no toilet facility and therefore resort to the use of the bush and the beach, especially in the coastal districts (Keta and Ketu South).

## **1.8 Tourism**

The Volta Region has untapped tourism potential capable of transforming the region's economy and its overall contribution to national income when fully developed. The beautiful landscape, clean environment of the towns, numerous eco-tourism sites and the rich cultural heritage epitomized by *kente* weaving, make it one of the most important tourism areas in the country. Some of the tourist sites in the region include Amedzofe Mountain, Tagbo Falls near Hohoe, Tafi Atome Monkey Sanctuary and Xavi Bird Watching Sanctuary. Other areas marked for tourism development include the Wli Waterfalls in the Hohoe District, the Kpetoe *Kente* Village, Adaklu Mountain eco-tourism sites both in the Adaklu-Anyigbe District, Shari Hilltop Unique Village in the Nkwanta District and Bowiri Lacham Village in the Jasikan District.

## **1.9 Organization of the report**

Chapter One presents background information on Volta Region as context for the socio-economic and demographic analysis of the 2010 Population and Housing Census data in the region. The topics discussed include historical background, physical features, political administration, social structure, economy, and demographics. The rest of the chapters are devoted to the analysis of the demographic, social and economic characteristics, as well as housing and community facilities of the 18 districts in the region.

# **CHAPTER TWO**

## **CENSUS METHODOLOGY**

### **2.1 Introduction**

The primary objective of the 2010 PHC was to provide information on the number, distribution and social, economic and demographic characteristics of the population of Ghana necessary to facilitate the socio-economic development of the country. In conducting the 2010 PHC, the Ghana Statistical Service (GSS) was guided by the principle of international comparability and the need to obtain accurate information on population and housing Census in the country. Therefore, the 2010 PHC was conducted using all the essential features of a modern census as contained in the United Nations Principles and Recommendations for countries taking part in the 2010 Round of Population and Housing Censuses. The exercise was also informed by experience from previous post-independence censuses of Ghana (1960, 1970, 1984 and 2000). From the previous experiences, it was recognized that a large scale statistical operation as the 2010 Population and Housing Census required meticulous planning for its successful implementation. This chapter presents information on the pre-census planning, enumeration and post enumeration activities. It is organized into five sections namely, pre-enumeration activities, the census enumeration itself, post enumeration activities, challenges and lessons learnt, summary and recommendations.

### **2.2 Pre-enumeration activities**

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

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

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

#### **2.2.2 Census secretariat and committees**

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

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

The Census Secretariat was initially headed by an acting Census Coordinator engaged by the United Nations Population Fund (UNFPA) in 2008 to support GSS in planning the Census. In 2009, the Census Secretariat was re-organised with the Government Statistician as the National Chief Census Officer and overall Coordinator of the census. As part of the re-organization, a Census Management Team and a Census Coordinating Team were established to assist the National Chief Census Officer/Coordinator. The Census Management Team had oversight responsibility for the implementation of the Census took critical decisions on the census in consultation with other national committees. The Census Coordinating Team, on the other hand, was responsible for the day-to-day implementation of the Census programme. Census committees were set up at both national and sub-national levels to provide technical advice and assist with resource mobilization. At the national level, the committees were the National Census Steering Committee (NCSC), the National Census Technical Advisory Committee (NCTAC) and the National Census Publicity and Education Committee (NCPEC). At the regional and district levels, the committees were the Regional Census Implementation Committee (RCIC) and the District Census Implementation Committee (DCIC) respectively.

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

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

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

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

### **2.2.3 Census Mapping**

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

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

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

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

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

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

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

level, i.e., geographical and internal migration characteristics, international migration, household characteristics, demographic and social characteristics such as age, date of birth, sex, and marital status, fertility and mortality, educational and economic characteristics, issues relating to disability and housing conditions and amenities were adopted and included in the census.

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

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

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

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

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

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

In May 2010, GSS with the support of the United Nations Population Fund conducted a special test-census in the Awutu Senya District of the Central Region. The aim of the exercise was to test the hypothesis that questions on children ever born and children surviving could be asked in a census and secondly, if answered by respondents themselves or through proxy would generate useful and good quality data. The results from this test showed that it was possible to obtain lifetime fertility data in a census and that there were no significant differences between the responses given by proxy and the eligible women themselves. Based on this finding, lifetime fertility questions were re-introduced in the questionnaire.

A trial census was held in October/November 2009 as a dress rehearsal for all the activities and procedures which had been planned for the main census. These were recruitment and training, distribution of census materials, administration of questionnaires and other census forms, enumeration of the various categories of the population (household, institutional and floating population), and data processing. This trial census was held in six selected districts across the country in six regions excluding the Volta region. The selection of districts for the trial census districts was informed by factors such as administrative boundary issues, ecological zones, accessibility, and availability of outdoor-sleepers/floating and institutional populations, fast-growing areas and enumeration areas with scattered settlements.

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

#### **2.2.6 Distribution of census materials**

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

#### **2.2.7 Publicity and Education**

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

involved sensitization of civil society groups, religious leaders and community leaders; seminars; workshops; television and radio programmes; and use of public address systems. Materials used for the publicity of main census publicity included jingles, posters, banners, car stickers, brochures, handbills, flyers and t-shirts. These materials were distributed freely through Regional and District Offices of GSS, and Regional and District Census Implementation Committees.

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

Activities organised in communities included:

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

### **2.2.8 Recruitment and Training of census personnel**

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

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

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

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

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

## **2.3 Census Enumeration**

### **2.3.1 Enumeration**

In the 2010 PHC, people were enumerated at where they were on census night (de facto) as in all the four post-independence censuses (1960, 1970, 1984, and 2000) conducted in the country and not at where they usually resided (de jure). The de facto count was adopted because it is based on physical presence on a defined date and therefore it is simple, straightforward, and easy to interpret as well as minimizes the risks of under-enumeration and over enumeration. The reference period, the census night, was fixed for 20<sup>th</sup> September 2010. The field personnel used the week preceding the Census Night to identify EA boundaries, list houses and other structures in their enumeration areas and enumerated institutional populations (health facilities, boarding schools and prisons). Prior to the census enumeration, officials of the Regional Census office identify possible locations of out-door sleepers in the region. This was to assist the officials to plan on how to enumerate the floating. Field officers were deployed to enumerate the floating population on Census Night using the census questionnaire (PHC1C).

Following the census night on 26<sup>th</sup> September 2010, enumeration of household populations started on Monday, 27<sup>th</sup> 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 17<sup>th</sup> 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 especially 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 17<sup>th</sup> October, 2010, enumerators submitted their completed questionnaires, summary forms (PHC3 & PHC4) and other census materials to their supervisors who in turn forwarded them to the District Census Office. Materials received at the District Office were documented and the receipts which accompanied the census materials were used to reconcile the items given to an enumerator and those returned. The PHC3 forms were quickly dispatched to the Census Secretariat from which the provisional results were compiled. Vehicles were sent from Accra to collect the completed questionnaires and other documents from the districts to the Census Secretariat.

## **2.4 Post Enumeration Survey**

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

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

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

- 97.0 percent of all household residents who were in the country on Census Night (26<sup>th</sup> September, 2010) were enumerated in the 2010 PHC representing an omission rate of 3.0 percent.

- 1.3 percent of the population was erroneously included in the census.
- The PES count recorded a population of 24.0 million for Ghana on Census Night against 24.1 from the main 2010.
- The true population which is the population estimated from the PES multiplied by the population from the census after correcting for erroneous inclusions and divided by matched population between the census and the PES is 24.5 million.
- Regional differentials are observed. Upper East region recorded the highest coverage rate of 98.2 percent while the Volta region had the lowest coverage rate of 95.7 percent.
- Males (3.3%) were more likely than females (2.8%) to be omitted in the census. The coverage rate for males was 96.7 percent and the coverage rate for females was 97.2 percent. Also, the coverage rates (94.1%) for those within the 20-29 and 30-39 age groups are relatively lower compared to the coverage rates of the other age groups.
- There was a high rate of agreement between the 2010 PHC data and the PES data for sex (98.8%), marital status (94.6%), relationship to head of household (90.5%) and age (83.0%).

## **2.5 Lessons learnt and Challenges**

This section highlights some of the challenges and lessons learnt before, during and after the planning and implementation of the 2010 PHC in the Greater Accra 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 Volta Regional Coordinating Council had to intervene before the aggrieved communities accepted to be enumerated. The assurance given was that their population will be allocated to the district they claimed to belong to. Such disputes affected the timely completion of both exercises.

### **2.5.2 Large Enumeration Areas**

The usual practice is to assign one enumerator to one enumeration area. As such enumeration areas are usually created in such a way that the enumerator is able to complete enumeration within the stipulated time. Unfortunately some enumeration areas in the region were larger and therefore the enumerators of those enumeration areas were unable to complete enumeration within the given time. When this became known, additional enumerators were

deployed to assist them to enumerate the remaining areas. This situation led to late completion of work in such enumeration areas, which contributed to the overall delay in the fieldwork in the region.

### **2.5.3 Shortage of Census Questionnaires**

The initial shortage of questionnaires was one of the major setbacks in the 2010 PHC. As a result, some enumerators resorted to the use of exercise books to record information of households. Enumerators who did this were asked to transfer such information to the questionnaire when the situation improved. This was done with the guidance of supervisors.

### **2.5.4 Supervision**

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

### **2.5.5 Logistics**

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

## **2.6 Summary and recommendations**

### **2.6.1 Summary**

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

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

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

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

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

## **2.6.2 Recommendations**

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

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

The field operations group should collaborate with the cartography section in the creation of enumeration areas (EAs). This would help in minimizing cases where some EAs are exceptionally large. Field officers should also be requested to report cases of large EAs at the end of house listing to avoid the situation where some portions of EAs are left un-attended to. The Census Coordinator should ensure that all the census materials, especially the census questionnaires, are procured in good time and in sufficient quantities and sent to the regions ahead of training of field personnel. This will avoid delays in census activities and shortages of census materials.

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

## **2.7 Concepts and Definitions**

### **Introduction**

The 2010 Population and Housing Census of Ghana followed the essential concepts and definitions of a modern Population and Housing Census as recommended by the United Nations (UN). It is important that the concepts, definitions and recommendations are adhered to since they form the basis upon which Ghana could compare her data with those of other countries.

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

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

## **Region**

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

## **District**

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

## **Locality**

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

## **Population**

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

## **Household**

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

## **Head of Household**

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

## **Household and Non-household population**

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

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

## **Age**

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

## **Nationality**

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

## **Ethnicity**

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

## **Birthplace**

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

## **Duration of Residence**

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

## **Religion**

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

## **Marital Status**

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

## **Literacy**

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

## **Education**

### ***School Attendance***

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

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

### ***Level of Education***

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

## **Activity Status**

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

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

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

## **Occupation**

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

## **Industry**

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

## **Employment Status**

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

## **Employment Sector**

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



## **Disability**

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

## **Information and Communication Technology (ICT)**

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

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

## **Fertility**

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

## **Mortality**

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

## **Agriculture**

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

## **Housing Conditions and Facilities**

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

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

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

# CHAPTER THREE

## POPULATION SIZE, COMPOSITION AND AGE-SEX STRUCTURE

### 3.1 Introduction

Population size, composition and age-sex structure are important characteristics that have many social and economic implications. Population size and composition influence the region's potential human resource requirement and level of provision of social services such as schools, hospitals/clinics and housing. The population composition by age and sex influences mortality, nuptiality, fertility, migration and other demographic processes that underlie population growth and ultimately socio-economic development.

### 3.2 Population Size and Growth

The trends in regional population size and growth in table 3.1 shows that Volta Region's population has increased rapidly between 1960 and 2010. The population size has increased from 777,288 in 1960 to 2,118,252 by 2010, more than double in just over fifty years. Between the 2000 and 2010 censuses, the population increased by 29.5 percent, which translates into an intercensal annual growth rate of 2.5 percent.

**Table 3.1: Trends in population size and growth rate, 1960-2010**

Census Year	Population	Population increase	Percentage increase	Annual growth rate
1960	777,288	-	-	-
1970	947,268	169,980	21.9	2.0
1984	1,211,907	237,639	25.1	1.8
2000	1,635,421	423,514	34.9	1.9
2010	2,118,252	482,831	29.5	2.5

Source: Generated from census data, 1960,1970,1984,2000 and 2010.

Table 3.2 presents the distribution of the population by district. The data show that Ho and Hohoe Municipalities, together account for just over a quarter (of the total regional population). The least populated district is South Dayi with only 2 percent of the regional total population. Other districts with populations of less than four percent of the regional population are Biakoye (3.1%), Adaklu Anyigbe (3.0%), Nkwanta North (3.0%), Jasikan (2.8%), and Kadjebi (2.8%).

**Table 3.2: Population size by District, 2010**

District	Population	Percent share of regional population
South Tongu	87,950	4.2
Keta Municipal	147,618	7.0
Ketu South	160,756	7.6
Ketu North	99,913	4.7
Akatsi	128,461	6.1
North Tongu	149,188	7.0
Adaklu Anyigbe	64,404	3.0
Ho Municipal	271,881	12.8
South Dayi	46,661	2.2
North Dayi	93,649	4.4
Hohoe Municipal	262,046	12.4
Biakoye	65,901	3.1
Jasikan	59,181	2.8
Kadjebi	59,303	2.8
Krachi East	116,804	5.5
Krachi West	122,105	5.8
Nkwanta South	117,878	5.6
Nkwanta North	64,553	3.0
All districts	2,118,252	100.0

Source: 2010 Population and Housing Census

### 3.2 Population Density

The regional population density has been increasing over the years, from 46 inhabitants per square kilometre (km<sup>2</sup>) in 1970 to 59 (1984), 79.5 in 2000, and 103 in 2010 (Table 3.3). This trend reflects increase in the population as discussed earlier in the chapter.

**Table 3.3: Regional population density trends, 1960-2010**

Census Year	Population density (per square kilometre)
1960	-
1970	46.0
1984	59.0
2000	79.5
2010	103.0

Source: 1960, 1970, 1984, 2000 and 2010 census data

The distribution of population density by district is examined in Table 3.4. The most densely populated district is Keta Municipal with 358 persons per kilometre, followed by Ketu South with 206 persons per square kilometre, and South Tongu (196 persons per square kilometre). On the other hand, the most sparsely populated districts are Krachi West (29 persons per square kilometre) and Nkwanta South (26.02 persons per kilometre).

**Table 3.4: Population density by district**

Districts	Population	Land area (km2)	Density
All districts	2,118,252	20,572	102.98
South Tongu	87,950	448	196.32
Keta Municipal	147,618	412	358.30
Ketu South	160,756	779	206.36
Ketu North	99,913	754	132.51
Akatsi	128,461	1,077	119.28
North Tongu	149,188	1,460	102.18
Adaklu Anyigbe	64,404	1,060	60.76
Ho Municipal	271,881	2,361	115.16
South Dayi	46,661	1,000	46.66
North Dayi	93,649	632	148.18
Hohoe Municipal	262,046	1,403	186.78
Biakoye	65,901	1,000	65.90
Jasikan	59,181	1,355	43.68
Kadjebi	59,303	1,092	54.31
Krachi East	116,804	2,528	46.20
Krachi West	122,105	4,169	29.29
Nkwanta South	117,878	4,530	26.02
Nkwanta North	64,553	1,151	56.08

Source: 2010 Population and Housing Census

### 3.3 Population Distribution (Urban/Rural)

Table 3.5 shows the distribution of the population by locality. The table indicates that majority of the people in the region live in the rural areas (66.3%). However, about three out of ten persons live in urban areas. The most urbanized district is Keta Municipal, with more than half (53.3%) of the district's population living in urban areas, followed by Ketu South (46.6%), and Ho Municipal (44.3%). The districts with very low levels of urbanization include Adaklu Anyigbe (10.6%), South Tongu (12.9%), and Krachi West (19.6%).

**Table 3.5: Population by District and locality**

Districts	Total Population	Percentage	Urban	Rural
All districts	2,118,252	100.0	33.7	66.3
South Tongu	87,950	100 .0	12.9	87.1
Keta Municipal	147,618	100 .0	53.3	46.7
Ketu South	160,756	100 .0	46.6	53.4
Ketu North	99,913	100 .0	34.2	65.8
Akatsi	128,461	100 .0	24.8	75.2
North Tongu	149,188	100 .0	29.1	70.9
Adaklu Anyigbe	64,404	100 .0	10.6	89.4
Ho Municipal	271,881	100 .0	44.3	55.7
South Dayi	46,661	100 .0	38.8	61.2
North Dayi	93,649	100 .0	31.6	68.4
Hohoe Municipal	262,046	100 .0	40.3	59.7
Biakoye	65,901	100 .0	33.9	66.1
Jasikan	59,181	100 .0	27.6	72.4
Kadjebi	59,303	100 .0	26.4	73.6
Krachi East	116,804	100 .0	27.7	72.3
Krachi West	122,105	100 .0	19.6	80.4
Nkwanta South	117,878	100 .0	25.6	74.4
Nkwanta North	64,553	100 .0	28.1	71.9

Source: 2010 Population and Housing Census.

### 3.4 Age-Sex Structure

The overall age structure of Ghana's population consists of a broad base made up of a large number of children and a small number of elderly persons at the top. Table 3.6 examines the age-sex distribution of the population in Volta Region in the 2000 and 2010 Population and Housing censuses. Overall, the regional age-sex structure has remained largely unchanged over the ten year intercensal period. Similar proportional shares of male and female populations are observed across the age groups from 0-4 years to 95 and over years in the two censuses.

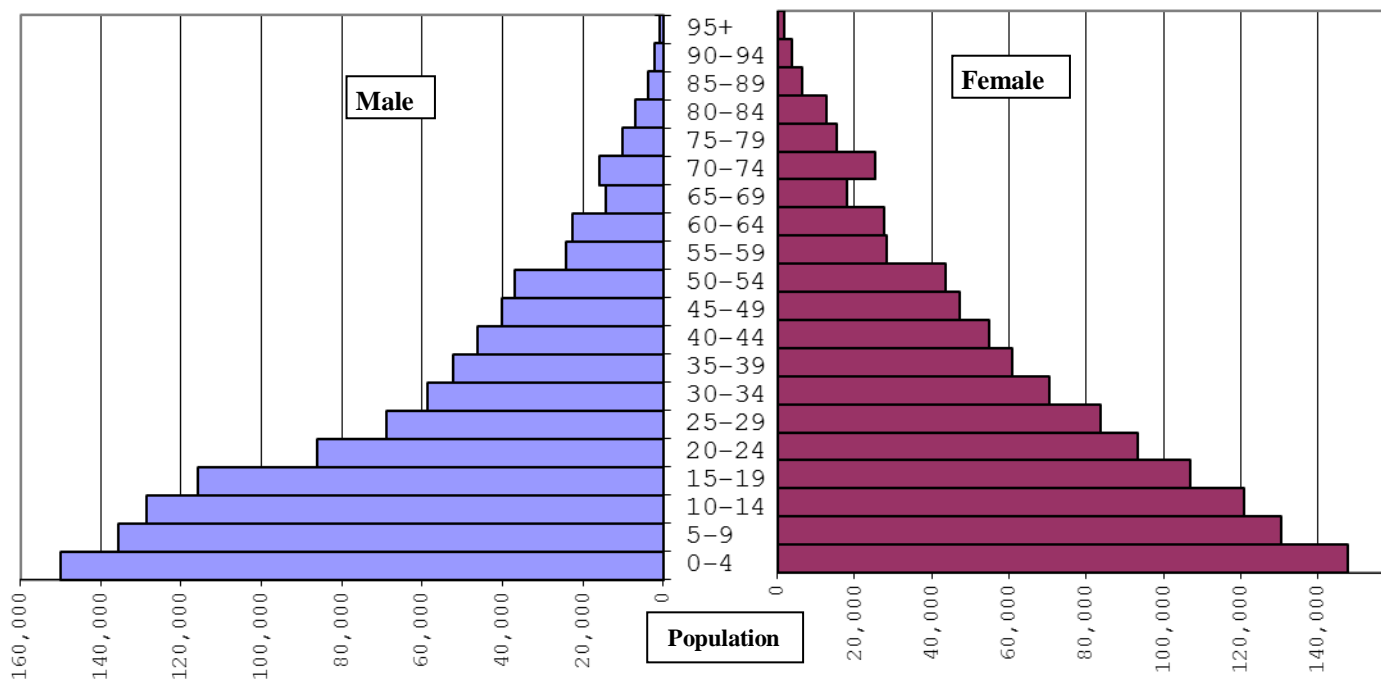
**Table 3.6: Population by age and sex, 2000 and 2010**

	2000			2010		
	Both sexes	Male	Female	Both sexes	Male	Female
Total population	1,635,421	790,886	844,535	2,118,252	1,019,398	1,098,854
All ages	100	100	100	100	100	100
0 - 4	13.9	14.2	13.6	14.0	14.7	13.4
5-9	14.9	15.4	14.5	12.6	13.3	11.9
10 – 14	12.3	13.1	11.5	11.8	12.6	11.0
15 - 19	10.3	11.2	9.5	10.5	11.3	9.7
20 - 24	7.7	7.6	7.8	8.5	8.4	8.5
25 - 29	7.0	6.6	7.4	7.2	6.8	7.6
30 - 34	6.0	5.6	6.4	6.1	5.7	6.4
35 - 39	5.3	5.0	5.6	5.3	5.1	5.5
40 - 44	4.5	4.4	4.6	4.8	4.5	5.0
45 - 49	3.9	3.8	3.9	4.1	3.9	4.3
50 - 54	3.3	3.2	3.4	3.8	3.6	4.0
55 - 59	2.1	2.1	2.2	2.5	2.4	2.6
60 - 64	2.3	2.1	2.5	2.4	2.2	2.5
65 - 69	1.7	1.6	1.9	1.5	1.4	1.6
70 - 74	1.6	1.4	1.8	1.9	1.6	2.3
75 - 79	1.1	1.0	1.2	1.2	1.0	1.4
80 - 84	0.9	0.8	1.0	0.9	0.7	1.1
85 - 89	0.6	0.5	0.6	0.5	0.4	0.6
90 - 94	0.3	0.3	0.4	0.3	0.2	0.4
95+	0.3	0.3	0.4	0.1	0.1	0.2

Source: 2010 Population and Housing Census

Figure 1 depicts the age-sex structure of the population of Volta Region. This age structure is the results of past fertility, mortality and migration in the region. It is in the form of a pyramid, with broad base of the younger population and a narrow apex of the older population. With increasing age, the age-sex structure looks slightly thinner for the males than for the females, indicating that at older ages, the proportion of males is lower than that of females. For the age groups 10-14 years and 15-19 years there are more males than females. The high proportion of the populations aged 0-4 and 5-9 years indicates that the population in the region has the potential to grow for a considerable number of years. This has implications for the economic development of the region. This type of age structure is typical of most developing countries.

**Figure 3.1: Population pyramid, by age and sex, 2010**



Source: 2010 Population and Housing Census

The population by age, locality of residence, and sex is shown in Table 3.7. The table reveals urban-rural differences in the age structure of the region. There are more children at the very young ages (0-9 years) of both sexes in the rural areas than the urban areas, while the opposite is the case for the population at ages 15-49 years. It is also observed that older people aged 60 years and over of both sexes are more likely to be found in the rural areas than urban areas. This observation sends important signals about the migration trends of what are generally the most economically active segments of the population, and the ageing of the rural population, among other things. Thus the burden of age dependency, both young and old, is felt more in rural areas than urban areas.



**Table 3.7: Population by age, locality and sex**

Age group	All localities			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Population	2,118,252	1,019,398	1,098,854	713,735	336,560	377,175	1,404,517	682,838	721,679
All ages	100	100	100	100	100	100	100	100	100
0 – 4	14.0	14.7	13.4	12.8	13.7	12.1	14.7	15.2	14.1
5 – 9	12.6	13.3	11.9	11.4	12.1	10.7	13.2	13.9	12.5
10 – 14	11.8	12.6	11.0	11.6	11.9	11.3	11.9	13.0	10.8
15 – 19	10.5	11.3	9.7	11.3	11.9	10.8	10.1	11.1	9.2
20 – 24	8.5	8.4	8.5	9.7	9.7	9.6	7.9	7.8	7.9
25 – 29	7.2	6.8	7.6	8.2	7.8	8.6	6.7	6.2	7.1
30 – 34	6.1	5.7	6.4	6.7	6.5	6.8	5.8	5.4	6.2
35 – 39	5.3	5.1	5.5	5.7	5.6	5.8	5.2	4.9	5.4
40 – 44	4.8	4.5	5.0	4.8	4.6	5.0	4.8	4.5	5.0
45 – 49	4.1	3.9	4.3	4.1	3.9	4.3	4.1	4.0	4.3
50 – 54	3.8	3.6	4.0	3.7	3.6	3.8	3.8	3.6	4.0
55 – 59	2.5	2.4	2.6	2.5	2.4	2.6	2.5	2.3	2.5
60 – 64	2.4	2.2	2.5	2.1	2.0	2.3	2.5	2.3	2.7
65 – 69	1.5	1.4	1.6	1.4	1.3	1.5	1.6	1.5	1.7
70 – 74	1.9	1.6	2.3	1.6	1.3	1.9	2.1	1.7	2.5
75 – 79	1.2	1.0	1.4	1.0	0.8	1.2	1.3	1.1	1.5
80 – 84	0.9	0.7	1.1	0.7	0.5	0.9	1.0	0.8	1.3
85 – 89	0.5	0.4	0.6	0.4	0.3	0.5	0.5	0.4	0.6
90 – 94	0.3	0.2	0.4	0.2	0.2	0.3	0.3	0.2	0.4
95+	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2

Source: 2010 Population and Housing Census

Table 3.8a presents the trends in the regional age structure by broad age groups over the past four decades. Overall, the age structure of the region mirrors that of the country over the four decades. For both country and region, the proportion of the population aged less than 15 years has been declining since 1970. The proportion of the population less than 15 years in the region decreased from 41.1 percent in 2000 to 38.4 percent in 2010, representing a 2.7 percentage point decrease.

The variations in the proportion of population aged 15-59 years in the region can largely be attributed to in-migration. The table shows that the proportion of these persons has increased overall over the four decades, particularly since 2000, indicating that the region is becoming more and more a receiving region.

The data further show that the aging of the Ghanaian population may be slowing down, as indicated by the decrease in the proportion of the population aged 60 years and over from 7.2 percent in 2000 to 6.7 percent in 2010. A similar population aging pattern is observed for the Volta Region, barring age misreporting.

**Table 3.8a: Regional age structure, 1960-2010**

	Year	Age groups		
		0-14 yrs	15-59 yrs	60+ yrs
Ghana	1960	44.5	51.0	4.5
	1970	46.9	47.7	5.4
	1984	45.0	49.1	5.9
	2000	41.3	51.5	7.2
	2010	38.3	55.0	6.7
Volta Region	1960	45.6	48.8	6.0
	1970	47.6	45.7	6.7
	1984	44.2	47.9	7.9
	2000	41.1	50.0	8.9
	2010	38.4	55.1	6.5

Source: 1960, 1970, 1984, 2000, and 2010 census data

Table 3.8b presents the distribution of the population by age and district. In the analysis, age is categorized into 0-14 years representing the young dependent population, 15-64 years representing the non-dependent population, and 65 and older representing the old age dependent population. For the region as a whole, the population aged 0-14 is 38.4 percent, those in the non-dependent category are 55.1 percent, and the population aged 65 years and over is 6.5 percent. Generally, the districts with the most dependent young population are found in the northern districts (Krachi West, Krachi East, Nkwanta South, Nkwanta North), while those with the most dependent old age population are in the southern districts (Keta, Ketu North, Akatsi). Nkwanta North has the highest proportion of dependent children (0-14 years) of 46 percent, followed by Nkwanta South (45.0%) , Krachi East (44.7%) and Krachi West (44.3%). Keta Municipal has the largest proportion of old age dependents (9.1%). Other districts with relatively larger proportions of persons aged 65 and over are Akatsi (8.2%) and Ketu North (8.0%).

**Table 3.8b: Age distribution of population by District**

District	Population	Age group		
		0-14	15-64	65+
All districts	2,118,252	38.4	55.1	6.5
South Tongu	87,950	39.9	52.4	7.8
Keta Municipal	147,618	34.6	56.3	9.1
Ketu South	160,756	37.8	56.2	6.0
Ketu North	99,913	37.2	54.9	8.0
Akatsi	128,461	37.7	54.1	8.2
North Tongu	149,188	38.3	55.0	6.7
Adaklu Anyigbe	64,404	36.9	57.1	6.0
Ho Municipal	271,881	32.9	60.2	7.0
South Dayi	46,661	39.0	53.6	7.4
North Dayi	93,649	36.2	55.9	7.9
Hohoe Municipal	262,046	36.8	56.4	6.8
Biakoye	65,901	40.2	54.2	5.6
Jasikan	59,181	37.8	55.5	6.7
Kadjebi	59,303	39.1	54.9	6.0
Krachi East	116,804	44.7	51.7	3.6
Krachi West	122,105	44.3	51.4	4.3
Nkwanta South	117,878	45.0	51.1	3.9
Nkwanta North	64,553	46.7	49.7	3.6

Source: 2010 Population and Housing Census

### 3.5 Dependency Ratios

The dependency ratio is one of the key indicators of socio-economic development. Generally, the ratio is higher in developing regions of the world than in developed regions. Table 3.9 presents the dependency ratios for each of the 18 districts in the Volta Region. The regional dependency ratio is quite high at about 81 dependents (child and old age) for every 100 people working. It is also evident in the table that the ratio is high across all the districts, ranging from 66.2 per 100 working population for Ho Municipality to a high of 101.2 for 100 working population for Nkwanta North District. A large part of the total dependency ratios in the districts are child dependency ratios as indicated by the age distribution of the district populations in the table.

**Table 3.9: Population by broad age group, dependency ratios and district**

District	Age group	Total	Male	Female	Total dependency ratio
All districts	<15	38.4	40.6	36.3	81.3
	15-64	55.1	54.8	56.6	
	65+	6.5	4.6	7.1	
South Tongu	<15	40.5	43.0	37.0	90.9
	15-64	52.0	5.0	53.0	
	65+	8.0	5.0	10.0	
Keta Municipal	<15	35.0	38.0	32.0	77.6
	15-64	55.0	56.0	57.0	
	65+	9.0	6.0	11.0	
Ketu South	<15	38.0	41.0	35.0	77.8
	15-64	56.0	55.0	58.0	
	65+	6.0	5.0	7.0	
Ketu North	<15	37.0	41.0	34.0	82.3
	15-64	55.0	53.0	56.0	
	65+	8.0	6.0	10.0	
Akatsi	<15	38.0	42.0	34.0	84.8
	15-64	54.0	52.0	56.0	
	65+	8.0	6.0	10.0	
North Tongu	<15	38.0	41.0	36.0	81.7
	15-64	55.0	54.0	56.0	
	65+	7.0	5.0	8.0	
Adaklu Anyigbe	<15	37.0	38.0	36.0	75.2
	15-64	57.0	56.0	58.0	
	65+	6.0	5.0	7.0	
Ho Municipal	<15	33.0	35.0	31.0	66.2
	15-64	60.0	59.0	61.0	
	65+	7.0	6.0	8.0	
South Dayi	<15	39.0	41.0	37.0	86.5
	15-64	54.0	53.0	54.0	
	65+	7.0	6.0	9.0	
North Dayi	<15	36.0	39.0	34.0	78.8
	15-64	56.0	55.0	57.0	
	65+	8.0	6.0	9.0	

Source: 2010 Population and Housing Census

**Table 3.9: Population, by broad age group and dependency ratios and district (Cont.)**

District	Age group	Total	Male	Female	Total dependency ratio
Hohoe Municipal	<15	37.0	39.0	35.0	77.3
	15-64	56.0	55.0	57.0	
	65+	7.0	6.0	8.0	
Biakoye	<15	40.0	42.0	39.0	84.5
	15-64	54.0	54.0	55.0	
	65+	6.0	5.0	6.0	
Jasikan	<15	38.0	39.0	36.0	80.2
	15-64	55.0	55.0	56.0	
	65+	7.0	6.0	8.0	
Kadjebi	<15	39.0	40.0	39.0	82.2
	15-64	55.0	54.0	55.0	
	65+	6.0	6.0	6.0	
Krachi East	<15	45.0	45.0	44.0	93.4
	15-64	52.0	51.0	52.0	
	65+	4.0	4.0	3.0	
Krachi West	<15	44.0	46.0	43.0	94.6
	15-64	51.0	51.0	52.0	
	65+	4.0	4.0	5.0	
Nkwanta South	<15	45.0	46.0	44.0	95.9
	15-64	51.0	50.0	52.0	
	65+	4.0	4.0	4.0	
Nkwanta North	<15	47.0	48.0	45.0	101.2
	15-64	50.0	48.0	51.0	
	65+	4.0	4.0	4.0	

Source: 2010 Population and Housing Census

### 3.6 Sex Structure

The sex composition of a population is influenced largely by the sex ratio at birth (ratio of male births to female births) as well as sex differences in death rates and migration. In most populations, there is slight excess of males over females at birth but females become the majority at older ages because of the higher death rates for males at all ages. Table 3.10 presents the regional distribution of the population by sex in the past five decades. The proportion of females in the region's population has consistently remained just over 50 percent from 1960-2010. This pattern generally reflects the sex structure of Ghana as a whole. However, compared to the other censuses, there were proportionally slightly more males in the population in the 1960 census than in the 2010 census.

**Table 3.10: Regional distribution of population, by sex, 1960-2010**

	All Regions	Percent	Volta Region	Percent
1960				
Total	6,726,815	100.0	777,285	100.0
Male	3,400,270	50.5	379,093	48.8
Female	3,326,545	49.5	398,192	51.2
1970				
Total	8,559,313	100.0	947,268	100.0
Male	4,247,809	49.6	455,095	48.0
Female	4,311,504	50.4	492,173	52.0
1984				
Total	12,296,081	100.0	1,211,907	100.0
Male	6,063,848	49.3	586,940	48.4
Female	6,232,233	50.7	624,967	51.6
2000				
Total	18,912,079	100.0	1,635,421	100.0
Male	9,357,382	49.5	790,886	48.4
Female	9,554,697	50.5	844,535	51.6
2010				
Total	24,658,823	100.0	2,118,252	100.0
Male	12,024,845	48.8	1,019,398	48.1
Female	12,633,978	51.2	1,098,854	51.9

Source: 2010 Population and Housing Census

Table 3.11 shows the shares of the population by sex and district. Ho has the largest total population (12.8%), followed closely by Hohoe Municipality (12.4%). Nkwanta North has the lowest share of the population of both sexes (3.0%). In addition, the table shows wide variations in percent shares of males and females across the district. Generally, there are more males than females in the northern districts such as Krachi East, Krachi West and Nkwanta North, while the opposite is the case for the southern districts such as Ho, South Tongu, and Keta Municipal. Three districts with the same proportion of males and females are South Dayi District, and Hohoe Municipal.

**Table 3.11: Distribution of the population by District and sex**

District	Population			Percent share		
	Total	Male	Female	Total	Male	Female
All districts	2,118,252	1,019,398	1,098,854	100	100	100
South Tongu	87,950	40,019	47,931	4.2	3.9	4.4
Keta Municipal	147,618	68,556	79,062	7.0	6.7	7.2
Ketu South	160,756	75,648	85,108	7.6	7.4	7.7
Ketu North	99,913	46,551	53,362	4.7	4.6	4.9
Akatsi	128,461	59,165	69,296	6.1	5.8	6.3
North Tongu	149,188	70,282	78,906	7.0	6.9	7.2
Adaklu Anyigbe	64,404	31,298	33,106	3.0	3.1	3.0
Ho Municipal	271,881	129,180	142,701	12.8	12.7	13
South Dayi	46,661	22,132	24,529	2.2	2.2	2.2
North Dayi	93,649	44,553	49,096	4.4	4.4	4.5
Hohoe Municipal	262,046	126,239	135,807	12.4	12.4	12.4
Biakoye	65,901	33,057	32,844	3.1	3.2	3.0
Jasikan	59,181	29,142	30,039	2.8	2.9	2.7
Kadjebi	59,303	29,951	29,352	2.8	2.9	2.7
Krachi East	116,804	60,730	56,074	5.5	6.0	5.1
Krachi West	122,105	62,019	60,086	5.8	6.1	5.5
Nkwanta South	117,878	58,482	59,396	5.6	5.7	5.4
Nkwanta North	64,553	32,394	32,159	3.0	3.2	2.9

Source: 2010 Population and Housing Census

### 3.7 Sex Ratios

The sex ratio measures the number of males to females in the population, the balance of the sexes being 100. In most populations the sex ratio favours males at birth. The average sex ratio at birth in most populations is about 105 to 106. The sex ratio at birth in African populations is reported to be 103. The sex ratio decreases with age as a result of differences in death rates at all ages which favour females. The sex ratio is also influenced by migration patterns.

Sex ratios for Volta Region districts are presented in Table 3.12. The observed sex ratio of 92.8 indicates an excess of females over males in the region – quite simply, about 92 males to 100 females. In the districts, the sex ratio ranges from 83.5 in South Tongu to a high of 108.3 for Krachi East. The data further suggest three patterns of sex ratio for the districts. The first pattern – districts with low sex ratios – is observed for South Tongu, Keta, Ketu, Akatsi, and North Tongu, where the ratios are as low as 83 to 89 males per 100 females. The second pattern – districts with moderate sex ratios – involves Ho, Hohoe, North Dayi, South Dayi, where there are 90 to 94 males per 100 females. The third pattern – high sex ratios of 97 to 108 males to 100 females – is observed for Jasikan, Kadjebi, Nkwanta North, Nkwanta South, Krachi West, Krachi East and Biakoye. The differences in sex ratios across the region may be a reflection of age-sex pattern of mortality as well as migration in and out of the districts.

**Table 3.12: Population, by sex ratio and district**

District	Population		Sex Ratio
	Male	Female	
All districts	1,019,398	1,098,854	92.8
South Tongu	40,019	47,931	83.5
Keta Municipal	68,556	79,062	86.7
Ketu South	75,648	85,108	88.9
Ketu North	46,551	53,362	87.2
Akatsi	59,165	69,296	85.4
North Tongu	70,282	78,906	89.1
Adaklu Anyigbe	31,298	33,106	94.5
Ho Municipal	129,180	142,701	90.5
South Dayi	22,132	24,529	90.2
North Dayi	44,553	49,096	90.7
Hohoe Municipal	126,239	135,807	93
Biakoye	33,057	32,844	100.6
Jasikan	29,142	30,039	97
Kadjebi	29,951	29,352	102
Krachi East	60,730	56,074	108.3
Krachi West	62,019	60,086	103.2
Nkwanta South	58,482	59,396	98.5
Nkwanta North	32,394	32,159	100.7

Source: 2010 Population and Housing Census

### 3.8 Nationality

Table 3.13 indicates that most people counted in the region (85.9%) during the census are Ghanaians by birth. With the exception of Nkwanta South, all the other districts recorded more than 80 percent of their populations as Ghanaians by birth.

For the region as a whole, 8.9 percent of the population is classified as having dual nationality. At district level, the district with the largest proportion of persons of dual nationality is Nkwanta South District (16.7%). Seven of the 18 districts also have more than one in ten of their population with dual nationality. These are Nkwanta South, Keta , Ketu North, Ketu South, Adaklu Anyigbe, North Tongu and SouthTongu.

About 2.7 percent of the population are Ghanaians by naturalization .The districts with the largest number of naturalized Ghanaians are Keta Municipal (4.8%), Ketu North (4.5%), North Tongu (4.4%), and Adaklu Anyigbe (4.1%). Nkwanta North has the lowest proportion of the population with dual nationality (2.9%).

The table further shows that non-Ghanaians constitute the smallest proportion of persons enumerated in the region (2.4%). Nkwanta South has the highest proportion of non-Ghanaian population (11.3%), while Keta has the lowest .proportion (0.4%). Other districts with less than 1 percent non-Ghanaian population were South Tongu, Ketu South, Ketu North, Akatsi, North Tongu, South Dayi and Keta Municipal.

**Table 3.13: Population by nationality and district**

District	Population	Ghanaian by birth	Dual nationality (Ghanaian and other)	Ghanaian by naturalisation	Non- Ghanaian
All districts	2,118,252	85.9	8.9	2.7	2.4
South Tongu	87,950	84.8	11.1	3.6	0.5
Keta Municipal	147,618	80.2	14.6	4.8	0.4
Ketu South	160,756	83.0	10.7	3.4	3.0
Ketu North	99,913	81.4	13.6	4.5	0.6
Akatsi	128,461	89.4	7.4	2.4	0.8
North Tongu	149,188	81.9	13.1	4.4	0.6
Adaklu Anyigbe	64,404	81.4	12.7	4.1	1.8
Ho Municipal	271,881	88.7	7.6	2.4	1.3
South Dayi	46,661	89.9	7.2	2.3	0.7
North Dayi	93,649	90.8	6.1	2.0	1.1
Hohoe Municipal	262,046	89.2	6.6	2.1	2.1
Biakoye	65,901	92.7	3.5	1.0	2.7
Jasikan	59,181	91.1	3.2	1.0	4.8
Kadjebi	59,303	88.2	6.0	1.5	4.3
Krachi East	116,804	87.6	6.7	2.1	3.7
Krachi West	122,105	90.2	4.1	1.5	4.2
Nkwanta South	117,878	69.5	16.7	2.6	11.3
Nkwanta North	64,553	93.1	2.9	0.9	3.1

Source: 2010 Population and Housing Census

### 3.9 Birthplace

Regional and district birthplace statistics provide an indication of the extent of internal migration. Internal migration may be defined as the movement of people within national borders, and more specifically, inter- or intra-regional migration. Intra-regional migration refers to population movement between localities within a region, while inter-regional migration is the movement of people between regions. In terms of birthplace by district, 73.1 percent were born in the locality of enumeration (Table 3.14). In addition, 17.8 percent were born in another locality in the region, indicating intra-regional movement of people. The table also shows that there is migration of people from other regions in Ghana to the Volta Region. Most of the Ghanaian migrants to the region are from the Greater Accra Region (1.9%), followed by the Northern Region (1.6%), and Eastern Region (1.5%). Another origin of migrants to the region is the Economic Community of West African States (ECOWAS). Because of the Region shares a border with Togo and because of common cultural heritage, most of the migrants from ECOWAS states are Togolese.



**Table 3.14: Birthplace by District**

Birth place	Total	South Tongu	Keta Municipal	Ketu South	Ketu North	Akatsi	North Tongu	Adaklu Anyigbe	Ho Muni- cipal	South Dayi
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same locality	73.1	67.6	81.8	79.8	86.6	73.9	76.8	80.9	64.4	68.0
Different locality in this region	17.8	19.5	9.9	11.6	8.8	18.8	15.1	13.3	26.0	22.1
Western	0.3	1.1	0.6	0.3	0.2	0.4	0.3	0.3	0.4	0.5
Central	0.4	0.9	0.5	0.3	0.2	0.4	0.4	0.2	0.4	0.4
Greater Accra	1.9	3.0	2.4	1.4	1.0	1.7	1.6	0.8	2.7	2.7
Eastern	1.5	3.5	1.0	0.9	0.9	1.8	2.9	0.8	1.8	3.4
Ashanti	0.7	1.7	0.5	0.8	0.6	1.0	0.4	0.5	0.8	0.7
Brong Ahafo	0.4	1.1	0.2	0.2	0.1	0.3	0.7	0.2	0.3	0.4
Northern	1.6	0.6	0.2	0.2	0.1	0.2	1.0	0.2	0.6	0.6
Upper East	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0
Upper West	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1
Nigeria	0.2	0.2	0.6	0.5	0.1	0.2	0.1	0.4	0.3	0.1
Liberia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Leone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gambia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togo	1.5	0.4	0.6	3.0	0.9	0.9	0.3	1.8	1.7	0.7
Burkina Faso	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0
Côte d'Ivoire	0.2	0.1	1.4	0.4	0.1	0.1	0.1	0.0	0.1	0.1
Other ECOWAS states	0.2	0.2	0.2	0.5	0.0	0.3	0.1	0.1	0.2	0.1
African other than ECOWAS	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Americas (North South/Caribbean)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Asia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oceania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	North Dayi	Hohoe Municipal	Biakoye	Jasikan	Kadjebi	Krachi East	Krachi West	Nkwanta South	Nkwanta North
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same locality	70.7	68.0	68.6	76.1	74.0	62.4	79.6	71.9	80.5
Different locality in this region	20.3	24.3	21.8	16.3	19.2	22.9	10.1	16.1	7.4
Western	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.0
Central	0.6	0.3	0.8	0.3	0.3	0.7	0.9	0.2	0.1
Greater Accra	2.0	1.5	2.7	1.0	0.9	3.4	2.4	0.5	0.3
Eastern	2.4	1.1	1.4	0.9	1.1	1.0	0.7	0.6	0.4
Ashanti	0.7	0.6	0.4	0.5	0.5	0.7	0.5	0.6	0.3
Brong Ahafo	0.2	0.2	0.3	0.2	0.2	0.7	0.9	0.3	0.3
Northern	0.9	1.1	1.6	0.8	0.7	5.5	3.1	7.2	8.6
Upper East	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
Upper West	0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0
Nigeria	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.0
Liberia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Leone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gambia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togo	1.1	2.1	0.8	3.1	2.4	1.4	0.9	2.0	1.6
Burkina Faso	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.0	0.1
Côte d'Ivoire	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other ECOWAS states	0.1	0.1	0.6	0.2	0.2	0.3	0.2	0.2	0.1
African other than ECOWAS	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Americas (North South/Caribbean)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Asia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oceania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: 2010 Population and Housing Census

### 3.10 Ethnicity

The Volta Region has residents from just about every ethnic group in Ghana. Based on classifications by the Bureau of Ghana Languages, there are eight major ethnic groups in the region and about 62 sub-groups, speaking 56 different dialects. Table 3.15 shows the distribution of ethnic groups by districts. The main ethnic group is the Ewe (73.8%), followed by Gurma (11.3%) and the Guan (8.1%). Each of the other ethnic groups has less than 3 percent of the population. Across the district the distribution of the major ethnic group, the Ewe, follows two patterns. The first pattern consists of 11 districts where the overwhelming majority of the population is Ewe. These districts are South Tongu, Keta, Ketu South, Ketu North, Akatsi, North Tongu, Adaklu Anyigbe, Ho, South Dayi, North Dayi and Hohoe. The second pattern is made up districts where the Ewe group is in the minority. The districts are Biakoye, Jasikan, Kadjebi, Krachi East, Krachi West, Nkwanta South, and Nkwanta North.

**Table 3.15: Ethnic group by District**

District	Akan	Ga-Dangme	Ewe	Guan	Gurma	Mole-Dagbon	Grusi	Mande	Other ethnic groups
All districts	2.8	1.5	73.8	8.1	11.3	0.5	0.1	0.1	1.8
South Tongu	1.1	1.7	96.1	0.1	0.0	0.1	0.0	0.0	0.8
Keta Municipal	0.6	0.3	98.7	0.0	0.1	0.0	0.0	0.0	0.1
Ketu South	1.4	0.5	96.9	0.1	0.1	0.2	0.0	0.1	0.8
Ketu North	1.0	0.2	98.2	0.1	0.1	0.1	0.0	0.0	0.2
Akatsi	0.5	0.2	98.6	0.1	0.0	0.0	0.0	0.0	0.5
North Tongu	1.0	1.0	96.0	0.3	0.2	0.4	0.0	0.0	0.9
Adaklu Anyigbe	1.4	1.4	88.5	0.8	6.3	0.1	0.1	0.1	1.2
Ho Municipal	2.0	0.8	91.1	3.6	0.8	0.4	0.1	0.0	1.0
South Dayi	1.2	2.1	93.9	0.7	1.4	0.3	0.0	0.0	0.4
North Dayi	1.5	1.9	93.1	0.9	1.2	0.5	0.1	0.1	0.7
Hohoe Municipal	1.3	0.6	74.8	17.5	3.7	0.6	0.1	0.1	1.2
Biakoye	13.8	4.2	44.3	29.1	5.9	1.0	0.1	0.2	1.4
Jasikan	2.1	0.4	45.4	36.7	13.4	0.8	0.1	0.1	1.1
Kadjebi	14.6	1.4	45.3	3.8	30.5	1.1	0.1	0.1	3.1
Krachi East	9.6	7.9	37.1	13.6	26.0	0.9	0.3	0.3	4.2
Krachi West	4.1	5.5	14.0	29.4	40.9	1.1	0.4	0.2	4.3
Nkwanta South	2.9	0.6	18.0	16.1	50.7	0.7	0.1	0.1	10.6
Nkwanta North	1.8	0.2	7.0	1.2	87.0	0.4	0.0	0.2	2.1

Source: 2010 Population and Housing Census

### 3.11 Religious Affiliation

The people of the region originally practiced traditional religion. However, with the arrival of Christian missionaries in the 19<sup>th</sup> century, many people converted to Christianity. While the Ewe, Guan, and the Akan are mostly Christian, a substantial number of the other ethnic groups such as the Hausa, Kokomba, Nanumba and Gurma are Muslim. Table 3.16 shows the distribution of the population in the region by religion.

**Table 3.16: Population by religion and district**

District	No religion	Catholic	Protestants	Pentecostal / Charismatic	Other Christian	Islam	Traditionalist	Other
All Districts	6.6	17.6	21.5	26.6	7.1	5.7	14.1	0.8
South Tongu	9.4	11.5	24.0	27.8	12.4	2.0	12.0	0.9
Keta Municipal	12.9	15.2	21.1	19.6	4.0	1.0	25.4	0.8
Ketu South	9.1	15.3	12.7	27.0	4.0	3.5	27.9	0.5
Ketu North	8.9	12.3	11.7	21.9	9.7	0.9	33.5	1.1
Akatsi	8.5	17.3	11.8	25.2	6.3	2.1	27.9	1.0
North Tongu	7.4	11.5	27.0	31.3	10.7	3.2	8.3	0.7
Adaklu Anyigbe	3.0	14.3	28.3	26.6	10.5	1.3	7.9	0.9
Ho Municipal	2.5	15.8	35.6	30.9	9.2	2.8	2.7	0.5
South Dayi	4.0	7.1	37.0	34.2	9.9	3.3	3.8	0.6
North Dayi	1.7	31.4	27.1	27.3	6.3	3.4	2.1	0.7
Hohoe Municipal	1.3	28.7	30.1	25.5	6.2	5.7	1.5	1.0
Biakoye	4.5	19.3	23.4	31.2	7.4	8.5	4.2	1.5
Jasikan	4.3	27.8	19.6	22.7	5.7	12.7	6.6	0.5
Kadjebi	2.1	22.7	18.5	19.7	5.4	29.6	1.4	0.7
Krachi East	10.4	13.3	12.7	32.5	6.9	8.2	15.0	1.0
Krachi West	10.2	17.5	8.0	27.1	6.7	10.2	19.5	0.6
Nkwanta South	10.0	18.7	10.8	21.5	5.6	10.2	22.2	0.9
Nkwanta North	12.6	3.2	6	21.9	2.1	10.3	43.3	0.6

Source: 2010 Population and Housing Census

The table reveals that majority of the population are Christians, 14.1 practice traditional religion and 5.7 percent are Muslims. Among the Christians just a little over one in five are either Protestants or Pentecostal/Charismatic. Most of the people practicing the Islamic religion are found in Kadjebi, Krachi West, Nkwanta South and Nkwanta North, while four districts have substantial proportions of their population practicing traditional religion: Nkwanta North (43.3%), Ketu North (33.5%), Ketu South (27.9%) and Akatsi (27.9%).

## **CHAPTER FOUR**

### **HOUSEHOLD SIZE, STRUCTURE AND COMPOSITION**

#### **4.1 Introduction**

Ghanaian households are reflections of the social structure, in that living arrangements are largely influenced by such socio-cultural factors as marriage, and the types of family and kinship systems existing in a particular society. The structure, composition, and size differ among the various ethnic groups in Ghana based on the prevailing kinship and the two broad descent and inheritance systems, namely, the patrilineal and matrilineal systems. In the patrilineal system, inheritance and descent are traced from the father's line and household heads are mostly men. In the matrilineal systems, which trace descent from the mother's line, a relatively large proportion of household heads are women. This chapter focuses on analysis of data on household structure, size and composition in the Volta Region from the 2010 Population and Housing Census.

#### **4.2 Definition of Concept**

The 2010 PHC defined a household as “a person or group of persons who lived together in the same house or compound and shared the same housekeeping arrangements. In general, a household consists of a man, wife, children and other relatives or a house help who may be living with them”.

#### **4.3 Household Size**

Household size provides important information to policy makers and planners with regard to allocating resources for social services such as shelter, health and education. The 2010 census found that there are 495,603 households in the Volta Region. Table 4.1 shows the distribution of household size among districts in the region. It indicates that single-person households are predominantly in the three municipalities with high populations, namely Ho (22.8%), Keta (20.3%) and Hohoe (20.2%). Nkwanta North has a substantially lower proportion of single-person households (5.1%). The proportion of households consisting of two people is also higher in Keta (16.1%) and Ho (16.6%) districts. Larger households of 10 or more persons are found in districts like Nkwanta North (18.5%), Krachi West (11.9%), Adaklu Anyigbe (10.4%) and Krachi East (10.2%) in the northern part of the region. The factors that could have influenced the average size of households in a particular district are the levels of fertility, and the socio-economic situation of each household in terms of livelihood and sufficiency of internal distribution.

**Table 4.1: Household size by district**

District	Total	1	2	3	4	5	6	7	8	9	10	11+
All districts	495,603	18.0	14.1	14.6	14.2	12.0	9.1	6.1	4.2	2.7	3.3	2.0
South Tongu	20,509	17.7	14.4	14.5	13.9	11.6	9.4	6.1	4.8	2.8	2.9	2.1
Keta Municipal	37,705	20.3	16.1	15.6	14.3	11.3	8.2	5.4	3.4	2.0	2.0	1.3
Ketu South	39,119	17.0	15.2	16.5	15.4	12.0	8.9	5.2	3.4	2.3	3.0	1.1
Ketu North	26,437	21.2	15.7	15.8	14.3	12.0	8.3	5.1	3.1	1.8	1.6	1.0
Akatsi	33,762	20.4	15.7	15.9	14.9	11.5	8.6	5.3	3.4	1.8	1.6	0.9
North Tongu	31,573	14.5	12.9	13.5	13.5	12.4	9.7	7.1	5.3	3.4	4.9	2.8
Adaklu Anyigbe	13,109	14.9	11.8	12.8	13.6	11.3	9.5	6.8	5.5	3.3	7.8	2.7
Ho Municipal	73,703	22.8	16.6	16.1	14.6	11.0	7.3	4.7	2.8	1.7	1.4	1.1
South Dayi	10,761	17.4	13.6	14.4	14.4	12.4	9.2	6.1	4.5	2.8	3.2	2.0
Kpando	23,669	20.0	15.0	15.5	14.3	11.8	8.7	5.5	3.4	2.1	2.5	1.1
Hohoe	65,858	20.2	15.1	15.1	14.1	11.8	8.6	5.6	3.5	2.2	2.3	1.4
Biakoye	15,226	17.7	13.3	13.3	14.4	12.1	9.2	7.3	4.7	2.9	3.3	1.9
Jasikan	14,034	17.5	13.4	14.8	15.0	12.4	9.9	6.2	3.9	2.5	2.8	1.7
Kadjebi	13,303	17.7	12.6	12.9	14.4	12.5	9.9	6.8	4.7	2.6	3.3	2.5
Krachi East	22,289	12.3	10.4	11.6	12.8	12.3	11.1	8.2	6.2	4.9	6.4	3.8
Krachi West	21,824	10.2	8.4	10.8	12.3	13.3	11.7	9.0	7.1	5.3	7.5	4.4
Nkwanta South	22,733	10.9	9.6	12.2	13.8	13.9	11.5	8.7	6.2	4.2	5.3	3.6
Nkwanta North	9,989	5.1	5.9	9.7	12.0	12.6	11.2	10.1	8.8	5.9	10.5	8.1

Source: 2010 Population and Housing Census

#### 4.4 Household Headship

Heads of household are assumed to be responsible for the daily welfare of all members of the household, including access to food, clothing, and housing. The characteristics of the household head such as sex, age, education, occupation are, therefore, important for understanding household dynamics.

Table 4.2 shows that the majority of household heads are male (61.6%) while 38.4 % are female. This trend is observed throughout the districts, with more than 7 out of 10 households headed by males in the four northern (Nkwanta North, Nkwanta South, Krachi West and Krachi East). In the same vein, the proportion of females who are household heads is higher in the southern districts of South Tongu, Keta Municipal, Ketu North, and Ketu South. With regard to locality of residence and headship rates by sex, in both urban and rural areas, the proportion of males who are heads of household is higher than that of females. This pattern is reflected in all the districts.

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

District	Total			Urban			Rural		
	Total	Male head	Female head	Total	Male head	Female head	Total	Male head	Female head
All districts	495,603	61.6	38.4	178,817	58.9	41.1	316,786	63.1	36.9
South Tongu	20,509	51.4	48.6	3004	55.7	44.3	17,505	50.7	49.3
Keta Municipal	37,705	51.3	48.7	20,472	50.7	49.3	17,233	52.1	47.9
Ketu South	39,119	58.4	41.6	17,965	59.4	40.6	21,154	57.5	42.5
Ketu North	26,437	54.8	45.2	9,666	53.2	46.8	16,771	55.8	44.2
Akatsi	33,762	53.7	46.3	8,628	55.2	44.8	25,134	53.2	46.8
North Tongu	31,573	57.7	42.3	9,536	53.5	46.5	22,037	59.5	40.5
Adaklu Anyigbe	13,109	66.2	33.8	1,782	60.2	39.8	11,327	67.1	32.9
Ho Municipal	73,703	59.1	40.9	33,956	58.7	41.3	39,747	59.5	40.5
South Dayi	10,761	56.0	44.0	4,170	54.2	45.8	6,591	57.1	42.9
North Dayi	23,669	56.2	43.8	7,411	58.8	41.2	16,258	55.1	44.9
Hohoe Municipal	65,858	62.0	38.0	27,343	60.2	39.8	38,515	63.4	36.6
Biakoye	15,226	66.8	33.2	5,146	64.0	36.0	10,080	68.3	31.7
Jasikan	14,034	67.1	32.9	3,930	63.7	36.3	10,104	68.4	31.6
Kadjebi	13,303	73.8	26.2	3,869	65.0	35.0	9,434	77.4	22.6
Krachi East	22,289	76.8	23.2	7,196	68.0	32.0	15,093	81.1	18.9
Krachi West	21,824	77.3	22.7	4,743	70.4	29.6	17,081	79.2	20.8
Nkwanta South	22,733	76.2	23.8	6,886	66.7	33.3	15,847	80.3	19.7
Nkwanta North	9,989	84.7	15.3	3,114	75.2	24.8	6,875	89.0	11.0

Source: 2010 Population and Housing Census

Table 4.3 presents information on headship rate by sex, age and locality of residence. The proportion of males who are heads of household increases with age up to age 65-69 years, and then declines thereafter. On the other hand, female headship rates are higher at the older ages (70 years and over). The same pattern is observed in both rural and urban areas.

**Table 4.3: Household headship, by sex, age and locality**

Age group	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	495,603	61.6	38.4	178,817	58.9	41.1	316,786	63.1	36.9
15 - 19	7,387	61.9	38.1	3,373	58.4	41.6	4,014	64.9	35.1
20 - 24	26,133	63.1	36.9	12,159	57.9	42.1	13,974	67.6	32.4
25 - 29	46,119	67.8	32.2	20,128	62.3	37.7	25,991	72.0	28.0
30 - 34	53,024	70.2	29.8	21,621	66.1	33.9	31,403	73.0	27.0
35 - 39	54,363	69.5	30.5	20,904	65.8	34.2	33,459	71.9	28.1
40 - 44	53,888	65.5	34.5	19,260	61.7	38.3	34,628	67.7	32.3
45 - 49	50,548	63.2	36.8	17,597	59.1	40.9	32,951	65.3	34.7
50 - 54	49,679	59.8	40.2	16,873	57.0	43.0	32,806	61.2	38.8
55 - 59	34,292	58.7	41.3	12,175	56.6	43.4	22,117	59.9	40.1
60 - 64	32,963	55.6	44.4	10,211	53.1	46.9	22,752	56.7	43.3
65 - 69	21,490	53.9	46.1	6,608	51.5	48.5	14,882	54.9	45.1
70 - 74	27,415	47.2	52.8	7,493	46.1	53.9	19,922	47.6	52.4
75 - 79	16,584	49.0	51.0	4,724	45.8	54.2	11,860	50.3	49.7
80 - 84	11,654	44.1	55.9	3,027	41.1	58.9	8,627	45.1	54.9
85 - 89	5,507	45.7	54.3	1,538	42.6	57.4	3,969	46.9	53.1
90 - 94	3,238	48.0	52.0	776	46.6	53.4	2,462	48.5	51.5
95+	1,319	47.5	52.5	350	42.0	58.0	969	49.5	50.5

Source: 2010 Population and Housing Census

Table 4.4 shows that about three in ten children in the region live in households headed by a person aged 60 and older across all the old age group categories, while close to one in four of the very old (85 years and older) also live in households headed by persons who are themselves very old. As children and the aged are among the most vulnerable groups, these observations have implications for their welfare.

**Table 4.4: Households headed by persons aged 60 years and older and age group of members**

Age group	Total	60-64	65-69	70-74	75-79	80-84	85+
<15	31.1	32.1	31.5	31.3	30.5	29.7	29.3
15-59	39.4	41.9	40.5	38.1	38.3	37.1	36.8
60-74	20.2	24.7	26.7	29.1	5.6	5.5	5.5
75-84	6.7	0.8	0.7	0.9	25.2	27.1	2.8
85+	2.6	0.6	0.7	0.5	0.5	0.5	25.5
Total	100	100	100	100	100	100	100
N	147,712	94,389	113,998	69,862	47,068	41,484	219,089

Source: 2010 Population and Housing Census

## 4.5 Household Composition

The household normally consists of a head, with or without spouse, children, in-laws, parents, grandchildren, and other relatives. Table 4.5 shows that a total of 2,086,567 live in households and that there are four major components of the household, namely household heads (23.8%), spouses (10.1%), children (40.5%) and other relatives (24.2%). Grandchildren (9.3%) and other relatives (7.7%) constitute a significant proportion of household composition. This pattern of household composition supports the view that the traditional household structure remains pervasive in the region and Ghana as a whole. The proportions of non-relatives, step-children, and adopted/foster children are significantly low (1.5%, 1.0% and 0.4% respectively).

**Table 4.5: Household composition by age**

Relationship to head	Total	Total %	0-14	15-64	65+
All relationships	2,086,567	100	38.4	55.1	6.5
Head	495,603	23.8	-	19.6	4.2
Spouse (wife/husband)	211,238	10.1	-	9.6	0.5
Child (son/daughter)	844,934	40.5	25.9	14.5	0.0
Parent/Parent in-law	22,947	1.1	-	0.3	0.8
Son/Daughter in-law	13,065	0.6	-	0.6	-
Grandchild	193,688	9.3	7.4	1.9	-
Brother/Sister	84,630	4.1	0.7	3.0	0.3
Step child	20,000	1.0	0.6	0.4	-
Adopted/Foster child	8,553	0.4	0.3	0.2	-
Other relative	161,468	7.7	3.2	4.0	0.5
Non-relative	30,441	1.5	0.4	1.0	0.1

Source: 2010 Population and Housing Census

Table 4.6 shows that the district pattern does not deviate much from the regional pattern. The proportion of male heads of households is higher than the proportion of female heads in all the districts. In fact, the headship rate for males is twice that of females in Jasikan, Kadjebi, Krachi East, Krachi West, Nkwanta North, Nkwanta South districts. It is also observed that children constitute the largest proportion of household members, followed by heads of household across all the districts. The head, the spouse, the children and other relatives constitute about 80 percent of all household members in the districts.

**Table 4.6: Household composition by sex and district**

	Head	Spouse (wife/ husband)	Child (son/ daughter)	Parent / Parent in-law	Son/ Dau- ghter in-law	Grand- child	Brother/ Sister	Step child	Adopted/ Foster child	Other relative	Non- relative
<b>All districts</b>	23.6	10.0	39.9	1.1	0.6	9.1	4.0	0.9	0.4	7.6	1.4
Male	29.9	1.3	42.7	0.3	0.3	9.5	4.4	1.0	0.4	7.0	1.6
Female	17.3	18.0	37.3	1.8	0.9	8.8	3.6	0.9	0.4	8.2	1.3
<b>South Tongu</b>											
Total	23.3	7.6	35.9	1.1	0.6	13.9	4.1	1.0	0.3	9.0	1.5
Male	26.4	1.4	38.9	0.4	0.3	14.6	4.3	1.2	0.3	8.9	1.8
Female	20.8	12.8	33.4	1.7	0.8	13.3	3.9	0.9	0.3	9.1	1.3
<b>Keta Municipal</b>											
Total	25.5	7.9	32.6	1.3	0.8	14.0	3.9	0.9	0.3	9.7	1.1
Male	28.2	1.7	35.7	0.4	0.5	15.2	4.3	1.0	0.3	9.6	1.3
Female	23.2	13.3	30.0	2.0	1.1	12.9	3.6	0.8	0.3	9.8	0.9
<b>Ketu South</b>											
Total	24.3	10.1	39.3	1.0	0.7	9.0	3.6	0.9	0.4	7.6	1.0
Male	30.2	1.9	42.2	0.3	0.3	9.5	3.9	0.9	0.4	7.1	1.1
Female	19.1	17.4	36.6	1.5	1.0	8.7	3.3	0.8	0.4	8.1	0.9
<b>Ketu North</b>											
Total	26.5	9.8	39.6	1.1	0.7	10.4	2.7	0.9	0.3	5.8	0.9
Male	31.1	1.2	43.5	0.4	0.3	11.2	3.0	1.0	0.3	5.5	1.1
Female	22.4	17.2	36.2	1.7	1.0	9.7	2.5	0.8	0.3	6.1	0.7
<b>Akatsi</b>											
Total	26.3	9.4	39.3	1.2	0.6	10.1	3.4	0.8	0.3	6.6	1.0
Male	30.7	1.7	42.7	0.3	0.3	10.7	3.7	0.8	0.3	6.4	1.2
Female	22.5	16.0	36.3	2.0	0.9	9.6	3.1	0.7	0.3	6.7	0.8
<b>North Tongu</b>											
Total	21.2	8.3	39.3	1.0	0.5	11.9	5.2	0.8	0.3	9.4	1.1
Male	25.9	1.3	41.8	0.3	0.3	12.4	5.5	0.8	0.4	9.0	1.3
Female	16.9	14.6	37.1	1.5	0.7	11.5	5.0	0.7	0.3	9.8	1.0
<b>Adaklu Anyigbe</b>											
Total	20.4	9.3	42.6	0.9	0.6	8.8	6.1	1.0	0.6	7.6	1.1
Male	27.7	0.9	44.1	0.2	0.4	8.9	6.5	1.1	0.5	7.2	1.3
Female	13.4	17.3	41.2	1.6	0.8	8.7	5.6	0.9	0.6	8.0	0.8
<b>Ho Municipal</b>											
Total	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	0.4	8.2	1.9
Male	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	0.4	7.8	1.9
Female	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	0.4	8.6	1.8
<b>South Dayi</b>											
Total	23.1	8.8	38.4	1.1	0.8	10.8	4.4	0.8	0.4	8.1	1.5
Male	27.2	2.2	41.3	0.4	0.3	11.4	4.6	0.9	0.4	7.9	1.6
Female	19.3	14.8	35.9	1.8	1.2	10.3	4.1	0.8	0.4	8.3	1.3



**Table 4.6: Household composition by sex and district (Cont'd)**

	Head	Spouse (wife/ husband)	Child (son/ daughter)	Parent / Parent in-law	Son/ Dau- ghter in-law	Grand -child	Brother / Sister	Step child	Adopted/ Foster child	Other relative	Non- relative
<b>North Dayi</b>											
Total	25.5	9.0	35.3	0.9	0.6	11.9	4.1	1.1	0.5	7.7	2.0
Male	29.9	2.0	37.4	0.4	0.4	12.5	4.4	1.2	0.4	7.6	2.2
Female	21.1	16.0	33.2	1.4	0.9	11.3	3.9	1.0	0.5	7.7	1.9
<b>Hohoe Municipal</b>											
Total	25.1	10.5	37.5	1.1	0.7	9.1	3.7	1.1	0.5	7.1	2.0
Male	32.4	1.4	39.8	0.4	0.4	9.6	4.0	1.1	0.5	6.8	2.2
Female	18.4	19.0	35.3	1.9	1.0	8.6	3.4	1.1	0.5	7.4	1.9
<b>Biakoye</b>											
Total	23.1	10.5	42.3	0.9	0.6	8.3	4.4	0.9	0.5	6.6	1.2
Male	30.8	0.8	44.8	0.3	0.4	8.2	5.0	1.0	0.5	6.2	1.3
Female	15.4	20.3	39.9	1.5	0.8	8.4	3.8	0.9	0.4	6.9	1.0
<b>Jasikan</b>											
Total	23.7	11.3	39.1	1.2	0.6	8.9	3.3	1.1	0.5	7.8	1.7
Male	32.3	1.4	41.1	0.4	0.2	9.4	3.8	1.2	0.5	6.9	1.8
Female	15.4	21.0	37.0	2.0	1.0	8.4	2.8	1.0	0.6	8.5	1.7
<b>Kadjebi</b>											
Total	22.4	11.5	40.7	0.9	0.7	8.5	3.4	1.0	0.5	7.2	1.4
Male	32.8	0.7	42.8	0.2	0.3	8.7	4.1	0.9	0.5	5.8	1.7
Female	11.9	22.6	38.6	1.7	1.1	8.2	2.8	1.1	0.6	8.6	1.1
<b>Krachi East</b>											
Total	19.1	11.1	48.0	0.7	0.5	5.0	4.4	1.0	0.4	6.7	
Male	28.2	0.6	50.1	0.2	0.2	5.0	5.3	1.1	0.4	5.7	
Female	9.2	22.6	45.8	1.3	0.8	5.1	3.4	1.0	0.5	7.8	
<b>Krachi West</b>											
Total	17.9	11.0	49.5	1.1	0.5	5.3	4.4	1.0	0.5	6.8	
Male	27.2	0.5	53.0	0.2	0.2	5.0	5.2	1.1	0.4	4.9	
Female	8.2	21.9	45.8	2.0	0.8	5.6	3.7	0.9	0.5	8.7	
<b>Nkwanta South</b>											
Total	19.3	11.7	48.7	1.2	0.4	4.5	3.6	0.7	0.3	6.8	
Male	29.6	0.4	51.8	0.3	0.1	4.4	4.2	0.7	0.3	5.3	
Female	9.1	22.8	45.6	2.0	0.6	4.6	3.0	0.6	0.4	8.4	
<b>Nkwanta North</b>											
Total	15.5	11.4	53.9	1.4	0.4	1.9	5.4	0.8	0.3	7.1	
Male	26.1	0.5	57.9	0.3	0.2	1.8	6.2	0.8	0.3	4.0	
Female	4.7	22.5	49.9	2.5	0.7	2.0	4.7	0.8	0.3	10.3	

Source: 2010 Population and Housing Census

The distribution of household composition by locality shown in Table 4.7 indicates that a high proportion of households in all localities in the region consists of head of households, spouses and biological/adopted children only (22.2%), followed by households with head only (18.0%). Households with head only are more prevalent in urban areas than in rural areas (20.3% against 16.7%), whereas the households with head, spouse and biological/adopted children and relatives of the head only are more common in rural areas than in urban areas (14.3% against 11.1%). It is also observed that less than 1 percent of all households has both relatives and non-relatives (0.6%) and are more likely to be found in urban areas (0.8%) than in rural areas (0.5%).

**Table 4.7: Household composition by locality**

Household composition	Total	Percent	Urban	Percent	Rural	Percent
Total	495,603	100	178,817	100	316,786	100
Head and spouse only	16,549	3.3	6,368	3.6	10,181	3.2
Head with spouse and biological/adopted children only	109,865	22.2	35,272	19.7	74,593	23.5
Head with spouse(s) and biological/adopted children and relatives of the head only	65,114	13.1	19,766	11.1	45,348	14.3
Head with spouse(s) and biological/adopted children relatives/ nonrelatives of the head	3,846	0.8	1,692	0.9	2,154	0.7
Head with spouse(s) and other composition	15,864	3.2	5,940	3.3	9,924	3.1
Head only	89,163	18.0	36,367	20.3	52,796	16.7
Head with biological/adopted children only	68,003	13.7	25,467	14.2	42,536	13.4
Head with biological/adopted children and relatives of the head only	62,343	12.6	22,117	12.4	40,226	12.7
Head with biological/adopted children, relatives and nonrelatives of the head	3,211	0.6	1,471	0.8	1,740	0.5
Head and other composition but no spouse	61,645	12.4	24,357	13.6	37,288	11.8

Source: 2010 Population and Housing Census

## 4.6 Household Structure

The distribution of household structure by locality is shown in Table 4.8. Head with spouse(s) and biological/adopted children constitutes the highest proportion of households (22.2%), while head with biological/adopted children, relatives of the head and non-relatives constitute the lowest proportion of households (0.6%). In urban areas, single-person household has the largest share of all households (20.3%), followed by households consisting of the head, spouse and children (19.7%). The opposite is the case in rural areas, where the highest proportion of households is those with head, spouse and children only, followed by single-person households. Household structure consisting of the head, spouse(s), biological/adopted children, and relatives of the head only is more common in rural areas (14.3%) than urban areas (11.1%), indicating a more traditional composition of rural households than of urban households. It is also observed that head with other household members but without spouse is more prevalent in urban areas (13.6%) than in rural areas (11.8%).

**Table 4.8: Household structure by locality**

Household structure	Total	Urban	Rural	Total %	Urban %	Rural %
Total	495,603	178,817	316,786	100.0	100.0	100.0
Head only	89,163	36,367	52,796	18.0	20.3	16.7
Head and a spouse only	16,549	6,368	10,181	3.3	3.6	3.2
Head with spouse(s) and biological/adopted children only	109,865	35,272	74,593	22.2	19.7	23.5
Head, spouse(s) biological/adopted children, relatives of the head only	65,114	19,766	45,348	13.1	11.1	14.3
Head, spouse(s) biological/adopted children relatives and non-relatives of the head	3,846	1,692	2,154	0.8	0.9	0.7
Head spouse(s) and other composition	15,864	5,940	9,924	3.2	3.3	3.1
Head and biological/adopted children only	68,003	25,467	42,536	13.7	14.2	13.4
Head biological/adopted children and relatives of the head only	62,343	22,117	40,226	12.6	12.4	12.7
Head biological/adopted children relatives and non-relatives of the head	3,211	1,471	1,740	0.6	0.8	0.5
Head and other household members but no spouse	61,645	24,357	37,288	12.4	13.6	11.8

Source: 2010 Population and Housing Census

## **CHAPTER FIVE**

### **MARITAL CHARACTERISTICS**

#### **5.1 Introduction**

Marriage in Ghana includes both formal and informal unions. Formal unions are those sanctioned by law under the ordinance, by tradition/customary law, and by religion. Informal unions are cohabiting unions recognized in Ghana but not sanctioned by law, tradition or religion. Available data have documented that marriage is universal and early in many parts of the country (GDHS, 1998; Gaisie, 1976; Aryee, 1975). There is also a close relationship between proportion married and fertility. This chapter presents marital characteristics in the region in terms of age, sex, locality of residence, level of education and religion.

#### **5.2 Marital Status by Age**

Early marriage is prevalent in populations where marriage is universal. Early marriage and early child birth are known to be implicated in poor pregnancy outcomes for the mother and child and are also likely to result in dissolution due to the inexperience of the couple. Table 5.1 shows the distribution of marital status by age. The data reveal that across all ages, 49.2 percent of the population 12 years and older is in some form of union, consisting of 46.6 percent who are married and 4.6 percent who are in consensual union. In addition, 13 percent have once been married but are now divorced, separated, or widowed. As expected, higher proportions of the widowed are in the older age groups, 60-64, 65-69 and 70 and over (21.1%, 27.1% and 45.8% respectively). The rate of divorce also increases with increasing age: persons over 50 years, but excluding those 70 years and over, are more likely to divorce than persons in the younger age groups.

**Table 5.1: Distribution of population 12 years and older by marital status and age**

Age group	Total	%	Never married	%	Informal/ Consensual union	%	Married	%	Separated	%	Divorced	%	Widowed	%
All ages	1,449,077	100.0	547,725	37.8	66,263	4.6	646,657	44.6	40,474	2.8	49,983	3.4	97,975	6.8
12-14	143,650	100.0	135,061	94.0	843	0.6	7,746	5.4	0	0.0	0	0.0	0	0.0
15-19	222,553	100.0	198,217	89.1	4,235	1.9	18,609	8.4	849	0.4	342	0.2	301	0.1
20-24	179,449	100.0	112,538	62.7	11,628	6.5	50,857	28.3	2,432	1.4	1,351	0.8	643	0.4
25-29	152,521	100.0	51,870	34.0	13,264	8.7	80,779	53.0	3,389	2.2	2,339	1.5	880	0.6
30-34	128,752	100.0	20,521	15.9	10,132	7.9	88,467	68.7	4,181	3.2	3,770	2.9	1,681	1.3
35-39	113,090	100.0	9,816	8.7	7,879	7.0	84,110	74.4	4,350	3.8	4,603	4.1	2,332	2.1
40-44	101,280	100.0	5,673	5.6	5,729	5.7	75,499	74.5	4,763	4.7	5,608	5.5	4,008	4.0
45-49	87,382	100.0	3,920	4.5	4,466	5.1	63,195	72.3	4,495	5.1	5,987	6.9	5,319	6.1
50-54	80,340	100.0	2,863	3.6	3,042	3.8	54,946	68.4	4,577	5.7	6,614	8.2	8,298	10.3
55-59	52,416	100.0	1,524	2.9	1,714	3.3	34,003	64.9	3,144	6.0	4,784	9.1	7,247	13.8
60-64	50,287	100.0	1,538	3.1	1,247	2.5	29,426	58.5	2,875	5.7	4,607	9.2	10,594	21.1
65-69	32,362	100.0	973	3.0	650	2.0	17,357	53.6	1,603	5.0	3,003	9.3	8,776	27.1
70+	104,995	100.0	3,211	3.1	1,434	1.4	41,663	39.7	3,816	3.6	6,975	6.6	47,896	45.6

Source: 2010 Population and Housing Census

### 5.3 Marital Status by Sex

In many traditional societies in Ghana, males are more likely to delay marriage than females. However, more widespread education has extended the age at marriage for females. Table 5.2 shows the percentage distribution of marital status by sex. It is observed that a higher proportion of females are married (46.5%) than their male counterparts (42.5%). There are also substantially more females who are widowed (11.0%), divorced (4.1%) and separated (3.3%) than males (2.0%, 2.7% and 2.2% respectively).

**Table 5.2: Distribution of persons 12 years and older by marital status**

Sex	Total	%	Never married		Informal/ Consensual union		Married		Separated		Divorced		Widowed	
				%		%		%		%		%		%
Total	1,449,077	100.0	547,725	37.8	66,263	4.6	646,657	44.6	40,474	2.8	49,983	3.4	97,975	6.8
Male	679,615	100.0	315,919	46.5	27,752	4.1	288,939	42.5	14,995	2.2	18,651	2.7	13,359	2.0
Female	769,462	100.0	231,806	30.1	38,511	5.0	357,718	46.5	25,479	3.3	31,332	4.1	84,616	11.0

Source: 2010 Population and Housing Census

### 5.4 Marital Status by Locality of Residence

Table 5.3 shows the distribution of marital status by locality of residence. Persons living in rural areas are more likely to be married (45.9%) than persons in urban areas (42.3%). The proportion never married is in turn higher in urban areas than rural areas. It is noteworthy that there are little variations in proportions in consensual unions, separated and divorced between the localities of residence. However, female widowhood is more prevalent in rural areas (7.2%) than in urban areas (5.9%).

**Table 5.3: Distribution of persons 12 years and older by marital status and locality of residence**

Locality	Total	%	Never married		Informal / Consensual union		Married		Separated		Divorced		Widowed	
				%		%		%		%		%		%
Total	1,449,077	100.0	547,725	37.8	66,263	4.6	646,657	44.6	40,474	2.8	49,983	3.4	97,975	6.8
Urban	507,111	100.0	211,586	41.7	20,763	4.1	214,478	42.3	13,372	2.6	16,765	3.3	30,147	5.9
Rural	941,966	100.0	336,139	35.7	45,500	4.8	432,179	45.9	27,102	2.9	33,218	3.5	67,828	7.2

Source: 2010 Population and Housing Census

#### 5.4.1 Marital Status by Education

In general, education delays marriage for both men and women. Because of the likely role conflict between education and raising a family, people now postpone marriage until they have completed their education. Table 5.4 presents the distribution of the population by marital status and education. The table shows that people with post-graduate education have the highest proportion of married people (76.0%), followed by those who have completed middle school (65.9%), and those with vocational/technical/commercial education (62.7%).

**Table 5.4: Distribution of persons 12 years and older  
by marital status and level of education**

Level of education	Total	%	Never married	%	Informal/ Consensual union	%	Married	%	Separated	%	Divorced	%	Widowed	%
All levels	1,449,077	100.0	547,725	37.8	66,263	4.6	646,657	44.6	40,474	2.8	49,983	3.4	97,975	6.8
Primary	289,332	100.0	156,916	54.2	11,497	4.0	96,095	33.2	5,951	2.1	7,508	2.6	11,365	3.9
JSS/JHS	349,348	100.0	201,582	57.7	21,569	6.2	113,679	32.5	5,915	1.7	4,682	1.3	1,921	0.5
Middle	178,980	100.0	8,417	4.7	10,288	5.7	117,865	65.9	11,090	6.2	15,081	8.4	16,239	9.1
SSS/SHS	128,040	100.0	86,494	67.6	5,739	4.5	32,207	25.2	1,729	1.4	1,217	1.0	654	0.5
Secondary	15,555	100.0	2,733	17.6	754	4.8	9,756	62.7	688	4.4	868	5.6	756	4.9
Vocational/Technical/Commercial	26,408	100.0	7,563	28.6	1,554	5.9	13,869	52.5	1,085	4.1	1,246	4.7	1,091	4.1
Post middle/secondary certificate	24,644	100.0	7,364	29.9	840	3.4	13,194	53.5	886	3.6	933	3.8	1,427	5.8
Post-secondary diploma	29,928	100.0	13,208	44.1	1,148	3.8	13,901	46.4	548	1.8	558	1.9	565	1.9
Bachelor degree	11,813	100.0	3,678	31.1	410	3.5	7,217	61.1	186	1.6	144	1.2	178	1.5
Post graduate	2,509	100.0	364	14.5	41	1.6	1,908	76.0	71	2.8	49	2.0	76	3.0
Never attended	392,520	100.0	59,406	15.1	12,423	3.2	226,966	57.8	12,325	3.1	17,697	4.5	63,703	16.2

Source: 2010 Population and Housing Census

It is also noted that about three out of ten of people who have attained only primary or junior high school education are married and over one half of those who have never been to school are also married. The proportion of individuals who have never married ranges from a low of 15.1 percent of those who have never been to school to a high of 67.6 percent of those who have secondary school education.

Separation and divorce are more common among people with middle school education than those in the other educational attainment categories, while widowhood is common among those with no education.

### 5.4.2 Marital Status by Religion

Most religions lay strong emphasis on procreation within marriage. There is, therefore, the need to examine people's marital status by their religious affiliation. Table 5.5 presents data on the distribution of the population by religion and marital status. The table indicates that the proportion married is above 40 percent across all the religious groups. Substantial proportions of the never married are also found in all the religious categories. Interestingly, divorce and separation, which are not approved in most religions, is lowest among Muslims compared to the other religious groups. People who profess traditional religion have the highest proportion of the widowed (11.5%), followed by those with no religion (8.0%) and those who adhere to the Protestant religion (7.1%).

**Table 5.5: Distribution of persons 12 years and older by marital status and religion**

	Total	%	Never married	%	Informal/ Consensual union	%	Married	%	Separated	%	Divorced	%	Widowed	%
All regions	1,449,077	100	547,725	37.8	66,263	4.6	646,657	44.6	40,474	2.8	49,983	3.4	97,975	6.8
No religion	94,060	100	30,077	32	3,681	3.9	46,376	49.3	2,788	3	3,593	3.8	7,545	8
Catholic	262,246	100	105,060	40.1	14,421	5.5	107,244	40.9	8,271	3.2	10,280	3.9	16,970	6.5
Protestant	321,825	100	126,034	39.2	16,868	5.2	132,998	41.3	10,653	3.3	12,393	3.9	22,879	7.1
Pentecostal/ Charismatic Other	369,225	100	157,727	42.7	18,633	5	155,838	42.2	9,391	2.5	10,893	3	16,743	4.5
Christian	100,236	100	41,044	40.9	5,700	5.7	42,421	42.3	2,736	2.7	3,178	3.2	5,157	5.1
Muslim	79,395	100	30,803	38.8	1,518	1.9	40,631	51.2	1,188	1.5	1,449	1.8	3,806	4.8
Traditionalist	210,560	100	52,652	25	4,925	2.3	115,789	55	5,221	2.5	7,748	3.7	24,225	12
Other	11,530	100	4,328	37.5	517	4.5	5,360	46.5	226	2	449	3.9	650	5.6

Source: 2010 Population and Housing Census

### 5.4.3 Marital Status and Economic Activity

Table 5.6 looks at the distribution of marital status by type of economic activity. As expected, about six out of ten people married are employed compared to three out of ten for the unemployed and one out of five for the not economically active, which includes students and retirees. Similarly, 67.1 percent of the not economically active have never been married against 20.6 percent for the employed. The table further shows that the proportion of persons in informal/consensual unions is higher in the unemployed category (7.6%) than the employed category (5.8%). The proportion widowed is largest for the not economically active (8.6%), followed by the employed (5.9%), while the unemployed has the lowest proportion of the widowed (2.8%).



**Table 5.6: Marital status of persons 12 years and older by economic activity status**

	Total	%	Never married	%	Informal/ Consensual union	%	Married	%	Separated	%	Divorced	%	Widowed	%
All activities	1,449,077	100	547,725	37.8	66,263	4.6	646,657	44.6	40,474	2.8	49,983	3.4	97,975	6.8
Employed	897,474	100	184,780	20.6	52,157	5.8	538,251	60.0	31,312	3.5	38,461	4.3	52,513	5.9
Unemployed	33,700	100	15,358	45.6	2,576	7.6	12,637	37.5	1,132	3.4	1,041	3.1	956	2.8
Not active	517,903	100	347,587	67.1	11,530	2.2	95,769	18.5	8,030	1.6	10,481	2.0	44,506	8.6

Source: 2010 Population and Housing Census

# CHAPTER SIX

## INFORMATION AND COMMUNICATIONS TECHNOLOGY

### 6.1 Introduction

Information and communications technology (ICT) is recognized as an important component of socioeconomic development. The government has been implementing policies and programmes to expand access of the population to ICT infrastructure and technology. This chapter presents information on access of individuals and households to ICT in the Volta Region.

### 6.2 Number and Characteristics of Mobile Phone Owners

The use of mobile phones has been an important mode of communication for social and business activities for the majority of Ghanaians since as far back as 2003 (Ayensu, 2003). Table 6.1 provides information on mobile phone ownership by district and sex. For the region as a whole, there are 540,623 persons 12 years and older with mobile phones, representing 37.3 percent of the population. Ho Municipal has the largest share of mobile phone owners (18.9%) in the region, followed by Hohoe Municipal (14.7%). Seven out of the 18 districts reported very low proportions of mobile phone ownership – Nkwanta South (2.9%), Adaklu Anyigbe (2.7%), Jasikan (2.7%), Biakoye (2.6%), South Dayi (2.4%), Kadjebi (2.0%) and Nkwanta North (1.1%). A similar pattern of mobile phone ownership can be observed for the sexes.

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

District	All localities		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All districts	540,623	100.0	291,006	100.0	249,617	100.0
South Tongu	23,263	4.3	12,194	4.2	11,069	4.4
Keta Municipal	44,334	8.2	21,881	7.5	22,453	9.0
Ketu South	50,341	9.3	25,799	8.9	24,542	9.8
Ketu North	25,564	4.7	13,690	4.7	11,874	4.8
Akatsi	30,808	5.7	16,714	5.7	14,094	5.6
North Tongu	37,519	6.9	20,474	7.0	17,045	6.8
Adaklu Anyigbe	14,786	2.7	8,457	2.9	6,329	2.5
Ho Municipal	102,114	18.9	52,305	18.0	49,809	20.0
South Dayi	13,135	2.4	6,752	2.3	6,383	2.6
North Dayi	26,037	4.8	13,433	4.6	12,604	5.0
Hohoe Municipal	79,252	14.7	41,647	14.3	37,605	15.1
Biakoye	13,930	2.6	7,896	2.7	6,034	2.4
Jasikan	14,779	2.7	8,266	2.8	6,513	2.6
Kadjebi	10,720	2.0	6,485	2.2	4,235	1.7
Krachi East	16,009	3.0	10,441	3.6	5,568	2.2
Krachi West	16,711	3.1	10,809	3.7	5,902	2.4
Nkwanta South	15,544	2.9	9,789	3.4	5,755	2.3
Nkwanta North	5,777	1.1	3,974	1.4	1,803	0.7

Source: 2010 Population and Housing Census

Table 6.2 presents analysis of intra-district ownership of mobile phones. The highest proportion of population 12 years and older with mobile phones is in Ho Municipal (51.2%), followed by Ketu South (45.8%), and Hohoe Municipal (43.2%). Krachi East, Krachi West, and Nkwanta South all have relatively low proportions of their population with mobile phones (22.0%, 21.7%, and 21.3% respectively). At the regional level, the proportion of males with mobile phones was 42.8 percent as against 32.4 percent for females. This pattern of males outnumbering females in mobile phone ownership is reflected in all the districts.

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

District	Both sexes			Male			Female		
	Total population 12 years and older	Population 12 years and older with mobile phones	Percentage 12 years and older with mobile phones	Population 12 years and older	Population 12 years and older with mobile phones	Percentage 12 years and older with mobile phones	Population 12 years and older	Population 12 years and older with mobile phones	Percentage 12 years and older with mobile phones
All districts	1,449,077	540,623	37.3	679,615	291,006	42.8	769,462	249,617	32.4
South Tongu Keta Municipal	59,055	23,263	39.4	25,695	12,194	47.5	33,360	11,069	33.2
Ketu South	105,884	44,334	41.9	47,403	21,881	46.2	58,481	22,453	38.4
Ketu North	110,005	50,341	45.8	49,932	25,799	51.7	60,073	24,542	40.9
Akatsi	69,370	25,564	36.9	30,979	13,690	44.2	38,391	11,874	30.9
North Tongu Adaklu	89,046	30,808	34.6	39,239	16,714	42.6	49,807	14,094	28.3
Anyigbe	102,798	37,519	36.5	47,141	20,474	43.4	55,657	17,045	30.6
Ho Municipal	45,124	14,786	32.8	21,680	8,457	39.0	23,444	6,329	27.0
South Dayi	199,619	102,114	51.2	92,680	52,305	56.4	106,939	49,809	46.6
North Dayi	31,779	13,135	41.3	14,642	6,752	46.1	17,137	6,383	37.2
Hohoe Municipal	66,193	26,037	39.3	30,538	13,433	44.0	35,655	12,604	35.3
Biakoye	183,261	79,252	43.2	86,366	41,647	48.2	96,895	37,605	38.8
Jasikan	44,212	13,930	31.5	21,862	7,896	36.1	22,350	6,034	27.0
Kadjebi	40,641	14,779	36.4	19,662	8,266	42.0	20,979	6,513	31.0
Krachi East	40,311	10,720	26.6	20,279	6,485	32.0	20,032	4,235	21.1
Krachi West	72,858	16,009	22.0	37,839	10,441	27.6	35,019	5,568	15.9
Nkwanta South	76,999	16,711	21.7	38,602	10,809	28.0	38,397	5,902	15.4
	73,140	15,544	21.3	35,840	9,789	27.3	37,300	5,755	15.4

Source: 2010 Population and Housing Census

Table 6.3 presents the distribution of the population 12 years and older with mobile phones, by age and sex. It shows that ownership of mobile phone by age tends to increase from the very young ages, peaks at ages 20-24 and then declines with increasing age. A similar age pattern of ownership is reflected by the sexes.

**Table 6.3: Population 12 years and older with mobile phones by age and sex**

Age Group	Total Region		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
All ages	540,623	100	291,006	100	249,617	100
12-14	4,183	0.8	2,268	0.8	1,915	0.8
15-19	40,496	7.5	23,766	8.2	16,730	6.7
20-24	82,879	15.3	45,085	15.5	37,794	15.1
25-29	82,365	15.2	43,405	14.9	38,960	15.6
30-34	68,802	12.7	36,839	12.7	31,963	12.8
35-39	59,978	11.1	32,528	11.2	27,450	11
40-44	49,934	9.2	26,596	9.1	23,338	9.3
45-49	42,427	7.8	22,038	7.6	20,389	8.2
50-54	36,134	6.7	18,794	6.5	17,340	6.9
55-59	23,973	4.4	12,554	4.3	11,419	4.6
60-64	18,319	3.4	9,944	3.4	8,375	3.4
65-69	10,617	2	5,849	2	4,768	1.9
70+	20,516	3.8	11,340	3.9	9,176	3.7

Source: 2010 Population and Housing Census

Table 6.4 shows the distribution of mobile phone ownership by age group. It shows that over half the population of three age groups (25-29, 30-34, 35-39) have mobile phones (54.0%, 53.4% and 53.0% respectively). Persons least likely to have mobile phones are in the very youngest age group (12-14 years). For the sexes, mobile phone ownership is more prevalent among the male population across all the age groups. For example, about six out of ten males have mobile phones in the 25-29 and 30-34 age groups compared to about four out of ten for females in the same age groups.

**Table 6.4: Population 12 years and older with mobile phones by age group and sex**

Age group	Population 12+ by age group	Population 12+ with mobile phones	Percentage 12+ with mobile phones	Male population 12+	Male population 12+ with mobile phones	Males 12+ percentage with mobile phones	Female population 12+	Female population 12+ with mobile phones	Female 12+ percentage with mobile phones
All ages	1,449,077	540,623	37.3	679,615	291,006	42.8	769,462	249,617	32.4
12-14	143,650	4,183	2.9	74,176	2,268	3.1	69,474	1,915	2.8
15-19	222,553	40,496	18.2	115,697	23,766	20.5	106,856	16,730	15.7
20-24	179,449	82,879	46.2	86,049	45,085	52.4	93,400	37,794	40.5
25-29	152,521	82,365	54.0	68,834	43,405	63.1	83,687	38,960	46.6
30-34	128,752	68,802	53.4	58,483	36,839	63.0	70,269	31,963	45.5
35-39	113,090	59,978	53.0	52,204	32,528	62.3	60,886	27,450	45.1
40-44	101,280	49,934	49.3	46,289	26,596	57.5	54,991	23,338	42.4
45-49	87,382	42,427	48.6	40,158	22,038	54.9	47,224	20,389	43.2
50-54	80,340	36,134	45.0	36,811	18,794	51.1	43,529	17,340	39.8
55-59	52,416	23,973	45.7	24,254	12,554	51.8	28,162	11,419	40.5
60-64	50,287	18,319	36.4	22,584	9,944	44.0	27,703	8,375	30.2
65-69	32,362	10,617	32.8	14,273	5,849	41.0	18,089	4,768	26.4
70+	104,995	20,516	19.5	39,803	11,340	28.5	65,192	9,176	14.1

Source: 2010 Population and Housing Census

Table 6.5 indicates that the highest proportion of the urban population with mobile phones reside in Ho Municipal (23.1%), followed by Hohoe Municipal (16.0%). Besides these two districts, Keta Municipal and Ketu South have about 10 percent shares of mobile phone ownership in the region. All the other districts have figures below 10 percent, while Nkwanta North reported just 1.2 percent.

**Table 6.5: Distribution of the population 12 years and older with mobile phones by District and locality of residence**

District	All localities		Urban		Rural	
	Number	Percent	Number	Percent	Number	Percent
All districts	540,623	100.0	264,443	100.0	276,180	100.0
South Tongu	23,263	4.3	5,230	2.0	18,033	6.5
Keta Municipal	44,334	8.2	27,512	10.4	16,822	6.1
Ketu South	50,341	9.3	28,871	10.9	21,470	7.8
Ketu North	25,564	4.7	11,256	4.3	14,308	5.2
Akatsi	30,808	5.7	12,937	4.9	17,871	6.5
North Tongu	37,519	6.9	16,135	6.1	21,384	7.7
Adaklu Anyigbe	14,786	2.7	2,462	0.9	12,324	4.5
Ho Municipal	102,114	18.9	61,121	23.1	40,993	14.8
South Dayi	13,135	2.4	5,228	2.0	7,907	2.9
North Dayi	26,037	4.8	10,874	4.1	15,163	5.5
Hohoe Municipal	79,252	14.7	42,410	16	36,842	13.3
Biakoye	13,930	2.6	6,076	2.3	7,854	2.8
Jasikan	14,779	2.7	5,278	2.0	9,501	3.4
Kadjebi	10,720	2.0	4,396	1.7	6,324	2.3
Krachi East	16,009	3.0	7,109	2.7	8,900	3.2
Krachi West	16,711	3.1	5,550	2.1	11,161	4.0
Nkwanta South	15,544	2.9	8,835	3.3	6,709	2.4
Nkwanta North	5,777	1.1	3,163	1.2	2,614	0.9

Source: 2010 Population and Housing Census

Table 6.6 presents intra-district distribution of mobile phone ownership by locality of residence. It shows that 52.1 percent of the urban population in the region own mobile phones compared to only 29.3 percent of the rural population. At district level, over half of the urban population 12 years and older in seven districts have mobile phones (Ho, South Tongu, Ketu South, Akatsi, North Tongu, North Dayi, Hohoe). The proportion is highest in the rural areas in South Dayi district (40.9%), followed by Ho (38.1%) and Ketu South (36.3%), while Nkwanta North has the lowest proportion of mobile phone ownership in both urban and rural areas.

**Table 6.6: Distribution of population 12 years and older with mobile phones by district and locality**

District	Total urban population 12+	Urban population 12+ with mobile phones	Percentage	Total Rural Population 12+	Rural population 12+ with mobile phones	Percentage
			12+ urban population with mobile phones			12+ rural population with mobile phones
All districts	507,111	264,443	52.1	941,966	276,180	29.3
South Tongu	8,113	5,230	64.5	50,942	18,033	35.4
Keta Municipal	57,182	27,512	48.1	48,702	16,822	34.5
Ketu South	50,842	28,871	56.8	59,163	21,470	36.3
Ketu North	24,633	11,256	45.7	44,737	14,308	32
Akatsi	22,771	12,937	56.8	66,275	17,871	27
North Tongu	31,036	16,135	52	71,762	21,384	29.8
Adaklu Anyigbe	4,969	2,462	49.5	40,155	12,324	30.7
Ho Municipal	91,907	61,121	66.5	107,712	40,993	38.1
South Dayi	12,431	5,228	42.1	19,348	7,907	40.9
North Dayi	21,241	10,874	51.2	44,952	15,163	33.7
Hohoe Municipal	75,258	42,410	56.4	108,003	36,842	34.1
Biakoye	15,118	6,076	40.2	29,094	7,854	27
Jasikan	11,470	5,278	46	29,171	9,501	32.6
Kadjebi	10,780	4,396	40.8	29,531	6,324	21.4
Krachi East	21,611	7,109	32.9	51,247	8,900	17.4
Krachi West	15,818	5,550	35.1	61,181	11,161	18.2
Nkwanta South	20,353	8,835	43.4	52,787	6,709	12.7
Nkwanta North	11,578	3,163	27.3	27,204	2,614	9.6

Source: 2010 Population and Housing Census

Table 6.7 examines mobile phone ownership by level of educational attainment and sex. It indicates that the proportion of persons with mobile phones rises steadily with an increasing level of education. The proportion of mobile phone ownership ranges from a low of 19.5 percent of individuals with no education to a high of 95.3 percent for those with tertiary education. A similar pattern of ownership can be observed for the sexes. The table further shows that females with vocational/technical/commercial, post-middle/secondary and post-secondary diplomas are more likely to have mobile phones than their male counterparts with the same levels of educational attainment.

**Table 6.7: Percentage of population 12 years and older with mobile phones by level of education and sex**

Economic activity status	Population 12+	Population 12+ with mobile phone	Percentage 12+ with mobile phones	Male population 12+	Male population 12+ with mobile phones	Males 12+ percentage with mobile phones	Female population 12+	Female population 12+ with mobile phones	Female 12+ percentage with mobile phones
All levels of education	1,449,077	540,623	37.3	679,615	291,006	42.8	769,462	249,617	32.4
No education	392,520	76,488	19.5	130,356	30,652	23.5	262,164	45,836	17.5
Primary	289,332	61,531	21.3	134,389	28,843	21.5	154,943	32,688	21.1
JHS/Middle	528,328	232,268	44.0	270,007	125,804	46.6	258,321	106,464	41.2
Secondary/SSS/SHS	143,595	88,461	61.6	84,834	54,127	63.8	58,761	34,334	58.4
Vocational/Technical/Commercial	26,408	19,848	75.2	14,794	11,053	74.7	11,614	8,795	75.7
Post-middle/secondary certificate	24,644	20,764	84.3	14,006	11,472	81.9	10,638	9,292	87.3
Post-secondary diploma	29,928	27,621	92.3	20,053	18,401	91.8	9,875	9,220	93.4
Tertiary	14,322	13,642	95.3	11,176	10,654	95.3	3,146	2,988	95.0

Source: 2010 Population and Housing Census

Mobile phone ownership by type of economic activity is shown in Table 6.8. There is not much difference in the proportions of employed persons (45.3%) and unemployed persons (47.9%) 12 years and older with mobile phones. The table also indicates that about one in four of the economically not active population (which includes students) have mobile phones

**Table 6.8: Percentage of population 12 years and older with mobile phones by economic activity and sex**

Economic Activity status	Population 12+	Population 12+ with mobile phones	Percentage 12+ with mobile phones	Male population 12+	Male population 12+ with mobile phones	Males 12+ percentage with mobile phones	Female population 12+	Female population 12+ with mobile phone	Female 12+ percentage with mobile phone
Total	1,449,077	540,623	37.3	679,615	291,006	42.8	769,462	249,617	32.4
Employed	897,474	406,984	45.3	425,346	222,931	52.4	472,128	184,053	39.0
Unemployed	33,700	16,151	47.9	14,974	7,938	53.0	21,361	8,539	40.0
Not active	517,903	117,488	22.7	239,295	60,137	25.1	275,973	57,025	20.7

Source: 2010 Population and Housing Census

## 6.2 Number and Characteristics of Internet Facility Users

The internet has become a vital communication facility for people, businesses and organizations. This section examines access to internet facilities in the region.

According to the 2010 Population and Housing Census, internet users amount to 50,644 or 3.5 percent of the region's total population of 1,449,077 persons 12 years and older. The figure is far below the national average of 7.8 percent. Table 6.9 indicates a wide variation in internet use by district. The share of internet facility users in the region ranges from a low of 0.9 percent for Krachi East and Kadjebi to a high of 39.4 percent in Ho Municipality. With



the exception of Ho Municipality, all the other districts have higher proportions of males than females using the internet. This observation may be a reflection of gender differences in educational attainment and/or employment in the formal sector, both of which may be associated with Internet use.

**Table 6.9: Distribution of population 12 years and older using internet facilities  
by District and sex**

District	Both sexes		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
All districts	50,644	100	33,918	100	16,726	100
South Tongu	1,571	3.1	1,095	3.2	476	2.8
Keta Municipal	4,039	8.0	2,830	8.3	1,209	7.2
Ketu South	4,303	8.5	3,012	8.9	1,291	7.7
Ketu North	1,149	2.3	849	2.5	300	1.8
Akatsi	1,624	3.2	1,204	3.5	420	2.5
North Tongu	2,119	4.2	1,511	4.5	608	3.6
Adaklu Anyigbe	770	1.5	535	1.6	235	1.4
Ho Municipal	19,954	39.4	12,649	37.3	7,305	43.7
South Dayi	1,082	2.1	678	2.0	404	2.4
North Dayi	2,253	4.4	1,526	4.5	727	4.3
Hohoe Municipal	7,332	14.5	4,899	14.4	2,433	14.5
Biakoye	699	1.4	449	1.3	250	1.5
Jasikan	1,161	2.3	787	2.3	374	2.2
Kadjebi	438	0.9	321	0.9	117	0.7
Krachi East	471	0.9	361	1.1	110	0.7
Krachi West	626	1.2	452	1.3	174	1.0
Nkwanta South	861	1.7	619	1.8	242	1.4

Source: 2010 Population and Housing Census

Table 6.10 shows that the district with the largest proportion of internet facility users is Ho (10.0%), followed by Hohoe (4.0%). Two other districts with figures higher than the regional average of 3.5 percent of internet users are Keta Municipal and Ketu South (3.8% and 3.9%, respectively). All the other districts have rates below 3 percent. Krachi East and Nkwanta North have figures less than 1 percent (0.6% and 0.5%, respectively). With regard to the sexes, the table shows that about twice as many males as females use internet facilities in the region. Across all the districts, males are more likely than females to use internet facilities.

**Table 6.10: Population 12 years and older using internet by District and sex**

District	Population 12+ years	Population 12+ years using internet	Percentage 12+ using internet	Male population 12+	Male population 12+ years using internet	Males 12+ percentage using internet	Female population 12+	Female population 12+ using internet	Female 12+ percentage using internet
All districts	1,449,077	50,644	3.5	679,615	33,918	5.0	769,462	16,726	2.2
South Tongu	59,055	1,571	2.7	25,695	1,095	4.3	33,360	476	1.4
Keta Municipal	105,884	4,039	3.8	47,403	2,830	6.0	58,481	1,209	2.1
Ketu South	110,005	4,303	3.9	49,932	3,012	6.0	60,073	1,291	2.1
Ketu North	69,370	1,149	1.7	30,979	849	2.7	38,391	300	0.8
Akatsi	89,046	1,624	1.8	39,239	1,204	3.1	49,807	420	0.8
North Tongu	102,798	2,119	2.1	47,141	1,511	3.2	55,657	608	1.1
Adaklu Anyigbe	45,124	770	1.7	21,680	535	2.5	23,444	235	1.0
Ho Municipal	199,619	19,954	10.0	92,680	12,649	13.6	106,939	7,305	6.8
South Dayi	31,779	1,082	3.4	14,642	678	4.6	17,137	404	2.4
North Dayi	66,193	2,253	3.4	30,538	1,526	5.0	35,655	727	2.0
Hohoe Municipal	183,261	7,332	4.0	86,366	4,899	5.7	96,895	2,433	2.5
Biakoye	44,212	699	1.6	21,862	449	2.1	22,350	250	1.1
Jasikan	40,641	1,161	2.9	19,662	787	4.0	20,979	374	1.8
Kadjebi	40,311	438	1.1	20,279	321	1.6	20,032	117	0.6
Krachi East	72,858	471	0.6	37,839	361	1.0	35,019	110	0.3
Krachi West	76,999	626	0.8	38,602	452	1.2	38,397	174	0.5
Nkwanta South	73,140	861	1.2	35,840	619	1.7	37,300	242	0.6
Nkwanta North	38,782	192	0.5	19,236	141	0.7	19,546	51	0.3

Source: 2010 Population and Housing Census

Access to internet facility by district and locality is presented in Table 6.11. The data indicate that there is a wide urban-rural differential in internet use: 7.0 percent of urban dwellers in the region have access to internet facilities compared to only about 2.0 percent of rural dwellers. The table shows that Ho District has the highest proportion of internet users in urban areas (18.3%), followed by South Tongu District (8.4%). On the whole, access to internet facilities in the rural areas is quite poor across all districts – the proportion of internet users in rural areas is less than 2.0 percent in 14 out of the 18 districts.

**Table 6.11: Population 12 years and older using internet by district and locality of residence**

District	Total urban population 12+	Urban population 12+ using internet	Percentage		Total rural population 12+	Rural population 12+ using internet	Percentage	
			12+ urban population using internet	12+ rural population using internet			12+ urban population using internet	12+ rural population using internet
All districts	507,111	36,501	7.2		941,966	14,143	1.5	
South Tongu	8,113	682	8.4		50,942	889	1.7	
Keta Municipal	57,182	3,133	5.5		48,702	906	1.9	
Ketu South	50,842	2,859	5.6		59,163	1,444	2.4	
Ketu North	24,633	648	2.6		44,737	501	1.1	
Akatsi	22,771	1,000	4.4		66,275	624	0.9	
North Tongu	31,036	1,305	4.2		71,762	814	1.1	
Adaklu Anyigbe	4,969	204	4.1		40,155	566	1.4	
Ho Municipal	91,907	16,825	18.3		107,712	3,129	2.9	
South Dayi	12,431	551	4.4		19,348	531	2.7	
North Dayi	21,241	1,278	6.0		44,952	975	2.2	
Hohoe Municipal	75,258	5,376	7.1		108,003	1,956	1.8	
Biakoye	15,118	413	2.7		29,094	286	1.0	
Jasikan	11,470	633	5.5		29,171	528	1.8	
Kadjebi	10,780	247	2.3		29,531	191	0.6	
Krachi East	21,611	294	1.4		51,247	177	0.3	
Krachi West	15,818	269	1.7		61,181	357	0.6	
Nkwanta South	20,353	661	3.2		52,787	200	0.4	
Nkwanta North	11,578	123	1.1		27,204	69	0.3	

Source: 2010 Population and Housing Census

Table 6.12 shows the distribution of internet use, by age and sex. Generally, internet use tends to rise with age, from 12-14 years up to 20-29 years and then declines steadily thereafter. Thus, internet users in the region are more likely to be in their twenties. With regard to the sexes, the data show females in the region are more likely than males to use the internet from the teenage years (12-14 years) to age 25-29 years but males have the advantage after this age.

**Table 6.12: Percentage share of population 12 years and older using internet facility by age and sex**

Age Group	Both sexes		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
All ages	50,644	100	33,918	100	16,726	100
12-14	1,464	2.9	891	2.6	573	3.4
15-19	7,665	15.1	4,853	14.3	2,812	16.8
20-24	12,985	25.6	8,243	24.3	4,742	28.4
25-29	10,150	20.0	6,617	19.5	3,533	21.1
30-34	5,848	11.5	4,186	12.3	1,662	9.9
35-39	3,698	7.3	2,766	8.2	932	5.6
40-44	2,469	4.9	1,812	5.3	657	3.9
45-49	2,036	4.0	1,500	4.4	536	3.2
50-54	1,728	3.4	1,216	3.6	512	3.1
55-59	1,131	2.2	842	2.5	289	1.7
60-64	657	1.3	491	1.4	166	1.0
65-69	293	0.6	208	0.6	85	0.5
70+	520	1.0	293	0.9	227	1.4

Source: 2010 Population and Housing Census

Table 6.13 presents access to internet in each of the age categories. At the regional level, the table shows that a larger proportion of males (5.0%) than of females (2.2%) use the internet across all the age groups. In addition, the table reveals that the age group with the highest proportion of internet use is 20-24 years (7.2%), followed by 25-29 years (6.7%). The very young population (12-14 years) and very old population (70+ years) have less than 1 percent of individuals using the internet.

**Table 6.13: Percentage of population 12 years and older using internet by age and sex**

Age group	Population 12+ by age group	Population 12+ using internet	Percentage 12+ using internet	Male population 12 +	Male population 12+ using internet	Male 12+ percentage using internet	Female population 12+	Female population 12+ using internet	Female 12+ percentage using internet
All ages	1,449,077	50,644	3.5	679,615	33,918	5.0	769,462	16,726	2.2
12-14	143,650	1,464	1.0	74,176	891	1.2	69,474	573	0.8
15-19	222,553	7,665	3.4	115,697	4,853	4.2	106,856	2,812	2.6
20-24	179,449	12,985	7.2	86,049	8,243	9.6	93,400	4,742	5.1
25-29	152,521	10,150	6.7	68,834	6,617	9.6	83,687	3,533	4.2
30-34	128,752	5,848	4.5	58,483	4,186	7.2	70,269	1,662	2.4
35-39	113,090	3,698	3.3	52,204	2,766	5.3	60,886	932	1.5
40-44	101,280	2,469	2.4	46,289	1,812	3.9	54,991	657	1.2
45-49	87,382	2,036	2.3	40,158	1,500	3.7	47,224	536	1.1
50-54	80,340	1,728	2.2	36,811	1,216	3.3	43,529	512	1.2
55-59	52,416	1,131	2.2	24,254	842	3.5	28,162	289	1.0
60-64	50,287	657	1.3	22,584	491	2.2	27,703	166	0.6
65-69	32,362	293	0.9	14,273	208	1.5	18,089	85	0.5
70+	104,995	520	0.5	39,803	293	0.7	65,192	227	0.3

Source: 2010 Population and Housing Census

Table 6.14 presents information on internet use by economic activity status and sex. Contrary to expectation, the employed have the lowest proportion of its population (3.1%) using the internet compared to the unemployed (7.3%) and the not economically active (4.0%). A possible explanation for this observation may be that the unemployed and economically not active, which include educated individuals and students respectively, may be using the internet for job searches and social networking more than the employed.

**Table 6.14: Population 12 years and older using internet by economic activity status and sex**

Economic	Population 12+ by age group	Population 12+ using internet	Population 12+ using internet (%)	Male population 12+ using internet	Male population 12+ using internet (%)	Female population 12+ using internet	Female population 12+ using internet (%)
All activities	1,449,077	50,644	3.5	679,615	33,918	769,462	16,726
Employed	897,474	27,423	3.1	425,346	19,187	472,128	8,236
Unemployed	33,700	2,460	7.3	14,974	1,698	18,726	762
Not active	517,903	20,761	4.0	239,295	13,033	278,608	7,728

Source: 2010 Population and Housing Census

### 6.3 Household Ownership of Desktop/Laptop Computer

Ownership of desktop and laptop computers is essential for easy access to the internet, electronic mail (e-mail), and other services. The 2010 census results show that only about 3 percent of all households own desktop/laptop computers in the Volta Region, compared to 7.2 percent of all households in Ghana.

Table 6.15 shows the distribution of households with desktop/laptop computers by district and sex of household head. Ho Municipality stands out as the district with the highest share of households with the facility in the region (36.1%), followed by Hohoe (15.9%). Nkwanta North has the lowest share of households with desktop/laptop computers with less than 1 percent having the facility (0.5%). With regard to the sexes, ownership of desktop/laptop computers is higher for female household heads compared to male household heads in South Tongu, Keta Municipal, Ketu North, Ho, and South Dayi districts.

**Table 6.15: Households owning desktop/laptop by district and sex of household head**

District	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All districts	15,054	100.0	11,313	100.0	3,741	100.0
South Tongu	549	3.6	409	3.6	140	3.7
Keta Municipal	1,109	7.4	773	6.8	336	9.0
Ketu South	946	6.3	716	6.3	230	6.1
Ketu North	375	2.5	275	2.4	100	2.7
Akatsi	572	3.8	441	3.9	131	3.5
North Tongu	646	4.3	492	4.3	154	4.1
Adaklu Anyigbe	234	1.6	192	1.7	42	1.1
Ho Municipal	5,439	36.1	3,981	35.2	1,458	39.0
South Dayi	407	2.7	281	2.5	126	3.4
North Dayi	732	4.9	564	5.0	168	4.5
Hohoe Municipal	2,392	15.9	1,821	16.1	571	15.3
Biakoye	191	1.3	160	1.4	31	0.8
Jasikan	274	1.8	200	1.8	74	2.0
Kadjebi	240	1.6	198	1.8	42	1.1
Krachi East	296	2.0	270	2.4	26	0.7
Krachi West	243	1.6	195	1.7	48	1.3
Nkwanta South	336	2.2	287	2.5	49	1.3
Nkwanta North	73	0.5	58	0.5	15	0.4

Source: 2010 Population and Housing Census

Table 6.16 presents household ownership of desktop/laptop computers within the individual districts. It indicates that Ho Municipality has the highest proportion of households with desktop/laptop computers (7.4%). The other districts with proportions higher than the regional average are South Dayi (3.8%), North Dayi (3.1%) and Hohoe Municipal (3.6%). The lowest proportion is in the Nkwanta North District, which has less than 1 percent of its households with access to the facility (0.7%).

**Table 6.16: Percentage of households with desktop/laptop by district**

District	Total Households	Households with desktop/laptop	% with desktop/laptop
All districts	495,603	15,054	3.0
South Tongu	20,509	549	2.7
Keta Municipal	37,705	1,109	2.9
Ketu South	39,119	946	2.4
Ketu North	26,437	375	1.4
Akatsi	33,762	572	1.7
North Tongu	31,573	646	2.0
Adaklu Anyigbe	13,109	234	1.8
Ho Municipal	73,703	5,439	7.4
South Dayi	10,761	407	3.8
North Dayi	23,669	732	3.1
Hohoe Municipal	65,858	2,392	3.6
Biakoye	15,226	191	1.3
Jasikan	14,034	274	2.0
Kadjebi	13,303	240	1.8
Krachi East	22,289	296	1.3
Krachi West	21,824	243	1.1
Nkwanta South	22,733	336	1.5
Nkwanta North	9,989	73	0.7

Source: 2010 Population and Housing Census



# CHAPTER SEVEN

## EDUCATION AND LITERACY

### 7.1 Introduction

The acquisition of knowledge and skills through education is essential for the development of the requisite human resources needed for accelerated socio-economic development. The government and development partners over the years have made significant efforts to improve equitable access to quality education at all levels.

This chapter presents information on the current levels of educational attainment in the Volta Region. The chapter is divided into three sections: literacy, school attendance (current and past), and educational attainment by economic activity status, occupation, and employment status.

### 7.2 Literacy

Literacy is defined as the ability to read and write in any language with understanding. It is an indicator of the extent to which societal knowledge can be transmitted from generation to generation in written form. Thus, literacy is important for the development of the individual and society. The 2010 Population and Housing Census collected information from persons aged 15 years and older on literacy in three languages; Ghanaian languages, English (the official language), and French.

Table 7.1 presents the distribution of literacy levels for persons 15 years and older by sex and district. For the region as a whole, 29.3 percent of the population are illiterate, 9.0 percent are literate in English, and 11.7 percent are literate in a Ghanaian language, while 48.7 percent are literate in both English and a Ghanaian language. It is also observed that less than 1 percent of the population are literate in English and French, as well as all the three languages (English, French and a Ghanaian language). A higher proportion of females are illiterate (19.7%) than males (9.6%) but only a slightly higher proportion of males (26.9%) than females (26.8%) is literate in both English and a Ghanaian language.

At the district level, the table indicates that Ho Municipality has the lowest illiteracy rate (12.4%), followed by Hohoe (13.6%) and South Dayi (19.0%). The highest illiteracy levels are found in Nkwanta North (74.2%), Krachi West (58.8%), Nkwanta South (52.8%) and Krachi East (50.9%). For the sexes, Ho, North Dayi, South Dayi, and Hohoe have relatively low illiteracy levels for males (ranging from 3.2% to 4.7%) and females (from 9.1% to 13.5%), while the two Krachi districts and the two Nkwanta districts have very high male and female illiteracy rates (ranging from 21.1% to 32.5% and from 28.1% to 41.7% respectively).

**Table 7.1: Literacy levels for persons 15 years and older by district**

	Total			Not literate			English only			Ghanaian language only		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All districts	1,305,427	46.4	53.6	29.3	9.6	19.7	9.0	4.6	4.5	11.7	4.7	7.1
South Tongu	52,893	42.8	57.2	29.5	6.8	22.7	7.9	3.4	4.4	12.2	4.8	7.4
Keta Municipal	96,558	44.0	56.0	27.7	6.4	21.3	4.1	1.8	2.4	13.8	6.0	7.8
Ketu South	100,044	44.9	55.1	31.0	8.0	23.0	7.7	3.8	3.9	9.3	4.0	5.3
Ketu North	62,790	43.8	56.2	34.0	8.0	26.1	4.7	2.0	2.6	12.4	5.8	6.6
Akatsi	80,059	43.2	56.8	34.1	8.3	25.8	3.0	1.4	1.7	12.6	5.7	6.9
North Tongu	92,036	45.4	54.6	29.8	8.5	21.2	8.0	3.8	4.2	11.8	5.0	6.8
Adaklu Anyigbe	40,635	47.6	52.4	23.8	7.6	16.2	4.8	2.5	2.4	17.1	7.4	9.7
Ho Municipal	182,444	46.1	53.9	12.4	3.2	9.1	6.8	3.2	3.6	16.1	5.7	10.4
South Dayi	28,483	45.6	54.4	19.0	5.5	13.5	7.9	3.6	4.3	14.2	5.1	9.1
North Dayi	59,736	45.6	54.4	16.2	4.7	11.5	8.3	3.9	4.4	15.4	5.2	10.2
Hohoe Municipal	165,542	46.7	53.3	13.6	4.1	9.5	7.5	3.5	3.9	16.4	5.7	10.7
Biakoye	39,417	48.9	51.1	26.2	9.4	16.7	15.1	7.7	7.4	10.2	4.3	5.9
Jasikan	36,802	48.1	51.9	25.5	8.4	17.1	16.2	8.2	8.0	10.4	4.0	6.4
Kadjebi	36,125	50.0	50.0	29.4	10.2	19.2	14.2	7.9	6.3	8.3	3.6	4.7
Krachi East	64,589	51.6	48.4	50.9	22.8	28.1	18.6	10.1	8.4	4.8	2.5	2.3
Krachi West	68,038	49.6	50.4	58.8	25.3	33.5	17.1	9.5	7.6	2.7	1.4	1.3
Nkwanta South	64,832	48.7	51.3	52.8	21.1	31.7	14.7	8.0	6.6	3.5	1.6	1.9
Nkwanta North	34,404	48.9	51.1	74.2	32.5	41.7	15.9	9.9	6.0	1.5	0.8	0.7

	English and Ghanaian language			English and French			English French and Ghanaian Language			Other		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All districts	48.7	26.8	21.9	0.4	0.2	0.1	0.9	0.6	0.3	0.0	0.0	0.0
South Tongu	49.7	27.4	22.3	0.2	0.1	0.1	0.5	0.3	0.3	0.0	0.0	0.0
Keta Municipal	53.5	29.3	24.2	0.2	0.1	0.1	0.8	0.5	0.3	0.0	0.0	0.0
Ketu South	49.3	27.4	21.9	1.0	0.6	0.4	1.7	1.1	0.6	0.0	0.0	0.0
Ketu North	48.2	27.5	20.7	0.2	0.1	0.0	0.5	0.4	0.2	0.0	0.0	0.0
Akatsi	49.6	27.4	22.2	0.2	0.1	0.1	0.5	0.3	0.2	0.0	0.0	0.0
North Tongu	49.9	27.8	22.1	0.1	0.1	0.1	0.4	0.2	0.2	0.0	0.0	0.0
Adaklu Anyigbe	52.6	28.9	23.6	0.5	0.3	0.2	1.3	0.9	0.3	0.0	0.0	0.0
Ho Municipal	62.9	32.8	30.1	0.4	0.2	0.2	1.5	1.0	0.5	0.0	0.0	0.0
South Dayi	58.1	30.9	27.2	0.2	0.1	0.1	0.6	0.4	0.2	0.0	0.0	0.0
North Dayi	59.0	31.1	27.9	0.3	0.2	0.2	0.8	0.5	0.3	0.0	0.0	0.0
Hohoe Municipal	60.8	32.2	28.6	0.4	0.3	0.2	1.3	0.9	0.4	0.0	0.0	0.0
Biakoye	47.7	26.9	20.8	0.4	0.2	0.1	0.5	0.3	0.2	0.0	0.0	0.0
Jasikan	46.2	26.3	19.9	0.8	0.5	0.2	0.9	0.7	0.2	0.0	0.0	0.0
Kadjebi	46.1	27.0	19.2	0.9	0.6	0.3	1.1	0.8	0.3	0.0	0.0	0.0
Krachi East	25.1	15.6	9.5	0.4	0.3	0.1	0.3	0.3	0.1	0.0	0.0	0.0
Krachi West	21.1	13.2	7.9	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Nkwanta South	28.3	17.4	10.9	0.3	0.2	0.1	0.4	0.3	0.1	0.0	0.0	0.0
Nkwanta North	7.9	5.4	2.5	0.2	0.2	0.0	0.3	0.2	0.1	0.0	0.0	0.0

Source: 2010 Population and Housing Census

Literacy allows people to gain access to information which enhances their understanding of issues pertaining to their lives and society at large. A literate household head therefore has the capacity to make informed decision concerning his or her family as well as contribute to overall development of his/her community. Table 7.2 shows age-sex specific literacy rates among heads of household in the region. Generally, the table shows a curvilinear relationship

between age of household head and literacy rate. Literacy rates increase from age 11-19 years up to age 50-59 years and then decline. With regard to the sexes, the overall literacy rate for male household heads (32.5%) is substantially higher than that of the female household heads (13.4%). In fact, the literacy rates for female household heads are lower across all the age groups.

**Table 7.2: Age-specific literacy rates among literate heads of households, by sex**

Age group	Population 11 years +			Literate heads			Age-specific literacy rates		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	1,492,538	702,162	790,376	333,820	227,927	105,893	22.4	32.5	13.4
11-19	409,664	212,420	197,244	6,526	4,085	2,441	1.6	1.9	1.2
20 - 29	331,970	154,883	177,087	59,166	39,269	19,897	17.8	25.4	11.2
30 - 39	241,842	110,687	131,155	80,053	58,018	22,035	33.1	52.4	16.8
40 - 49	188,662	86,447	102,215	72,949	50,283	22,666	38.7	58.2	22.2
50 - 59	132,756	61,065	71,691	58,165	37,816	20,349	43.8	61.9	28.4
60 - 69	82,649	36,857	45,792	32,768	21,644	11,124	39.6	58.7	24.3
70 - 99	104,995	39,803	65,192	24,193	16,812	7,381	23	42.2	11.3

Source: 2010 Population and Housing Census

### 7.3 Past School Attendance

Information on past school attendance provides an indication of formal schooling in society. In a society where few people have attended formal school in the past, there will be few people with the requisite knowledge and skills needed for social and economic development. Table 7.3 shows the distribution of past school attendance for persons aged 6 years and older classified by highest level of schooling and district. For the region as a whole, the majority of people who have attended school previously (55.2%) have attained at least the basic level that is, middle/JSS/JHS. In fact, more than one-fifth of the population in all the districts attained at least the primary level, except Hohoe, South Dayi, North Dayi and Ho. Three districts with substantially high proportions of their population reaching primary level are Krachi East (34.2%), Nkwanta North (45.4%) and Ketu North (30.4%). In Nkwanta South and Nkwanta North the level reached by the highest proportion (26.5% and 45.4% respectively) is primary.

In three out of the 18 districts (Nkwanta North, Nkwanta South, and Ho Municipality) about one out of 10 of their population 6 years and older attained secondary/high school as the highest level. The proportion of the population attaining higher levels of education beyond the basic is low for the region and all the districts. For example, only 1.3 percent and 0.3 percent of the population in the region have had undergraduate university education and post-graduate education respectively.

**Table 7.3: Past school attendance ( 6 years and older) by highest level attained and district**

	Total	Primary	JSS / JHS	Middle	SSS / SHS	Secun- dary	Voc/ Tech/ Comm	Post- middle / secondary certificate	Post-sec diploma	Bachelor's degree	Post- graduate (Cert. / Diploma / Masters / PhD etc.)
All districts	100	22.9	26.9	28.3	8.3	3.0	3.2	2.8	3.0	1.3	0.3
South Tongu	100	27.0	31.8	22.1	7.9	2.2	2.4	2.4	2.7	1.2	0.3
Keta											
Municipal	100	27.5	24.6	27.8	6.8	3.0	3.5	2.8	2.7	1.2	0.2
Ketu South	100	29.9	27.8	22.4	9.2	3.3	1.9	2.0	2.4	1.0	0.2
Ketu North	100	30.4	30.0	22.5	7.3	2.7	1.9	2.0	2.2	0.8	0.2
Akatsi	100	29.6	30.5	21.8	7.8	1.9	2.1	2.5	2.4	1.1	0.2
North Tongu	100	25.8	30.1	25.1	8.3	2.6	2.2	2.5	2.3	0.9	0.2
Adaklu											
Anyigbe	100	25.5	31.0	26.2	7.9	2.8	2.0	2.0	1.9	0.7	0.1
Ho											
Municipality	100	15.4	23.9	31.5	10.0	3.2	4.8	3.5	4.9	2.3	0.6
South Dayi	100	19.4	26.6	32.7	6.8	3.2	3.5	3.0	3.0	1.4	0.3
North Dayi	100	17.9	25.0	34.6	7.0	3.0	4.6	3.3	3.0	1.4	0.3
Hohoe											
Municipality	100	16.6	25.7	33.5	8.4	3.5	4.3	3.2	3.2	1.3	0.3
Biakoye	100	22.4	27.4	34.5	5.8	3.2	2.2	2.6	1.4	0.5	0.1
Jasikan	100	21.5	26.3	33.0	7.5	3.6	2.6	2.3	2.1	0.9	0.2
Kadjebi	100	24.1	28.4	29.4	6.7	3.3	2.1	2.3	2.5	0.9	0.2
Krachi East	100	34.2	27.1	21.9	7.4	2.5	1.5	2.7	1.7	0.9	0.2
Krachi West	100	29.8	27.5	22.1	9.2	3.7	1.8	2.5	2.5	0.7	0.3
Nkwanta South	100	26.5	28.5	22.6	10.4	3.0	1.9	3.1	2.9	0.9	0.2
Nkwanta North	100	45.4	21.6	11.7	12.3	2.7	0.9	2.2	2.4	0.8	0.1

Source: 2010 Population and Housing Census

## 7.4 Current School Attendance

Current school attendance represents the human resource potential of the country. For this reason, data on the population currently attending educational institutions is important for human resource planning to sustain improvements to socio-economic conditions in the country. Table 7.4 presents information on persons 6 years and older currently in school in the Volta Region. Of the 1,764,993 people currently attending school, 47.7 percent are males and 52.3 percent are females. About 62.3 percent are enrolled in basic school (kindergarten, primary, JSS/JHS/middle), 8.1 percent in secondary/senior high school, 1.5 percent in vocational/technical/commercial school, and 4.1 percent in tertiary institutions. The table also shows that at all levels of education, there are more males than females enrolled in the various educational institutions. In addition, the proportion of females who have never attended school (30.1%) is much higher than that of their male counterparts (17.6%).

An examination of current school attendance at district level shows variations in the proportion of persons six years and older currently enrolled in educational institutions. Whereas over 60 percent of the population in most districts are currently attending basic school (kindergarten, primary, JHS), there are some districts, particularly in the northern sector (Krachi East, Krachi West, Nkwanta North, Nkwanta South), where relatively low proportions (ranging from 45.0 percent to 50.6 percent) are currently attending basic school.

**Table 7.4: Current school attendance (6 years and older)  
by highest level attained , sex and district**

	Total			Never attended			Basic			Secondary			Vocational/ Technical/ Commercial			Tertiary		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All districts	1,764,993	841,205	923,788	24.1	17.6	30.1	62.3	65.2	59.7	8.1	10.1	6.4	1.5	1.8	1.3	4.1	5.4	2.6
South Tongu	72,434	32,359	40,075	23.2	13.2	31.3	65.7	71.1	61.3	6.7	9.1	4.8	1.2	1.7	0.9	3.4	4.9	1.8
Keta Municipal	125,648	57,551	68,097	22.4	12.0	31.1	64.4	70.4	59.2	7.9	10.2	6.0	1.9	2.4	1.4	4.1	5.0	2.2
Ketu South	132,647	61,498	71,149	25.4	15.1	34.3	62.5	68.8	57.0	8.5	11.0	6.4	0.8	1.0	0.7	2.7	4.1	1.7
Ketu North	83,620	38,317	45,303	27.5	15.2	37.8	62.5	70.4	55.8	6.7	9.3	4.5	0.8	1.1	0.5	2.6	4.0	1.4
Akatsi	108,124	48,994	59,130	26.8	15.4	36.2	63.0	70.5	56.7	6.5	8.5	4.8	1.0	1.3	0.7	3.0	4.4	1.5
North Tongu	125,756	58,548	67,208	24.0	16.2	30.8	64.4	68.3	61.1	7.9	10.1	6.0	0.9	1.2	0.7	2.9	4.3	1.5
Adaklu Anyigbe	54,559	26,411	28,148	19.5	13.8	25.0	67.2	69.6	64.9	9.1	11.1	7.2	2.4	1.4	1.0	3.2	4.1	1.9
Ho Municipal	234,131	110,047	124,084	10.2	6.0	14.0	65.6	65.5	65.8	12.0	13.7	10.5	6.0	3.1	2.9	8.5	11.7	6.8
South Dayi	38,885	18,213	20,672	15.2	10.1	19.7	70.4	71.7	69.3	8.0	9.6	6.7	3.8	2.3	1.5	4.8	6.3	2.8
North Dayi	79,639	37,477	42,162	13.1	8.7	17.0	70.5	70.5	70.4	8.8	10.4	7.3	5.7	3.6	2.1	6.0	6.8	3.1
Hohoe Municipal	220,415	105,313	115,102	11.0	7.3	14.3	70.5	70.1	70.8	10.7	12.7	8.8	5.1	3.0	2.2	5.9	7.0	3.8
Biakoye	54,529	27,284	27,245	21.0	15.9	26.1	69.0	70.8	67.3	6.5	8.4	4.6	2.2	1.4	0.8	2.8	3.4	1.3
Jasikan	49,217	24,194	25,023	20.7	14.6	26.6	66.3	68.2	64.5	8.6	11.2	6.1	2.6	1.5	1.1	3.5	4.4	1.7
Kadjebi	49,418	24,898	24,520	22.5	15.7	29.4	66.7	70.2	63.2	7.0	9.0	5.0	1.8	1.1	0.8	3.0	4.0	1.6
Krachi East	93,351	48,600	44,751	42.2	37.8	47.0	50.6	52.6	48.5	4.8	6.3	3.3	0.7	0.5	0.3	1.9	2.9	0.9
Krachi West	98,027	49,749	48,278	47.8	42.2	53.7	45.0	48.2	41.7	5.3	6.9	3.6	0.9	0.6	0.3	1.6	2.2	0.6
Nkwanta South	93,979	46,460	47,519	41.5	34.4	48.5	50.1	54.2	46.2	5.9	8.0	3.9	1.0	0.6	0.3	1.9	2.9	1.1
Nkwanta North	50,614	25,292	25,322	63.7	57.6	69.7	32.4	36.4	28.4	3.2	4.7	1.6	0.2	0.1	0.1	0.7	1.1	0.2

Source: 2010 Population and Housing Census

## 7.5 Educational Attainment by Selected Economic Characteristics

Information on educational attainment by background characteristics indicates, among other things, the extent to which persons have been trained to work in the various employment sectors and occupations. Table 7.5 presents information on the economically active population 15 years and older by employment status and level of educational attainment. The overwhelming majority (72.5%) work in the informal sector as self-employed without employees, followed by employees (11.2%) mainly in the formal sector (private and public). As expected, the majority of informal sector workers have never attended school (81.8%) or attained basic education (74.8%), while the majority of employees have attained tertiary education (post-middle/secondary and above).

The proportion of formal sector employees is higher among males (16.0%) than females (6.8%), while the reverse is case in the informal sector (68.1% males against 76.4% females). At higher levels of education, the proportion of females working in the formal sector is high and low in the informal sector.

Home-based activities (unpaid family work, apprenticeship, domestic work) provide employment for 12.1 percent of the total workforce, with a relatively higher proportion for females than males. It is noteworthy that the proportion does not change much at the secondary/SSS level, which may be an indication of unemployment among persons even with this level of educational attainment. This suggests the need to improve vocational and technical education and training for the youth in the region.

Table 7.6 presents data on educational attainment by occupation of the economically active population 15 years and older, by sex. It shows that 50.1 percent of persons at all levels of education are in agriculture and related work, followed by craft and related work (17.6%) and services and sales work (16.6%). These three occupational categories account for 84.3 percent of workers in the region. This is a clear indication of the low levels of education and technical skills of the working population in the region.

Agricultural workers constitute a major proportion of individuals with no education (67.7%) or only basic education (46.4%), while professional/technical and managerial workers feature more prominently among persons with post-secondary and tertiary education. With the exception of post-secondary and tertiary education, services and sales workers as well as crafts and related trades workers feature in all the other levels of education. With regard to the sexes, more males are found in agriculture and related occupations (56.9%) than females (44.1%). On the other hand, more females are in services and sales (26.2%) than males (6.0%) across all levels of education. The data also show that while a higher proportion of managerial workers are males (14.5% against 11.2% female), a higher proportion of professional/technical workers are females (68.2% female against 62.6% males). Interestingly, a higher proportion of males are in clerical support work (1.2%) compared to female (0.7%).

**Table 7.5: Educational attainment, by employment status of economically active population (15 years and older) by sex**

Employment Status	Total population	All levels	Never attended	Basic school	Secondary/ SHS	Vocational/ Technical/ Commercial	Post- middle/ secondary certificate	Post- secondary diploma	Degree or higher
<b>Both sexes</b>									
All sectors	875,003	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employee	97,719	11.2	2.3	4.9	25.6	26.2	72.9	79.3	88.5
Self-employed without employee(s)	634,261	72.5	81.8	74.8	56.1	62.5	22.3	14.7	7.2
Self-employed with employee(s)	24,700	2.8	2.1	2.3	3.9	5.2	2.0	3.1	2.9
Casual worker	12,724	1.5	1.1	1.8	2.0	1.6	0.5	0.8	0.4
Contributing family worker	86,003	9.8	11.3	13.2	10.6	3.5	1.9	1.6	0.7
Apprentice	13,606	1.6	0.7	2.2	1.1	0.6	0.1	0.1	0.0
Domestic employee (House help)	4,890	0.6	0.6	0.6	0.5	0.3	0.3	0.2	0.2
Other	1,100	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
<b>Male</b>									
All sectors	412,747	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employee	66,232	16.0	3.9	8.1	27.3	26.4	68.8	76.6	87.6
Self-employed without employee(s)	281,070	68.1	81.1	70.1	55.3	61.7	26.0	16.8	7.8
Self-employed with employee(s)	13,946	3.4	2.7	2.7	4.1	5.9	2.2	3.6	3.3
Casual worker	8,397	2.0	1.5	2.8	2.4	2.1	0.6	1.0	0.4
Contributing family worker	34,757	8.4	9.5	13.3	9.5	2.9	1.9	1.5	0.5
Apprentice	5,611	1.4	0.6	2.3	0.9	0.5	0.1	0.1	0.0
Domestic employee (House help)	2,138	0.5	0.5	0.6	0.4	0.3	0.3	0.3	0.2
Other	596	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
<b>Female</b>									
All sectors	462,256	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employee	31,487	6.8	1.4	2.6	22.6	25.9	78.7	85.0	91.8
Self-employed without employee(s)	353,191	76.4	82.2	78.3	57.5	63.5	17.1	10.3	5.0
Self-employed with employee(s)	10,754	2.3	1.8	2.0	3.7	4.3	1.6	2.1	1.2
Casual worker	4,327	0.9	0.9	1.1	1.4	0.9	0.3	0.4	0.4
Contributing family worker	51,246	11.1	12.2	13.0	12.6	4.2	1.8	1.6	1.1
Apprentice	7,995	1.7	0.8	2.2	1.6	0.9	0.2	0.1	0.0
Domestic employee (House help)	2,752	0.6	0.6	0.7	0.5	0.3	0.2	0.2	0.1
Other	504	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.3

Source: 2010 Population and Housing Census

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

Occupation Sex	Level of Education							
	All levels	Never attended	Basic school	Secondary/SSS	Vocational/Technical/Commercial	Post- middle/secondary certificate	Post -secondary diploma	Degree or higher
<b>Total</b>								
All occupations	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers	1.7	0.9	1.5	2.3	3.1	3.8	6.2	13.8
Professionals	4.7	0.2	1.2	9.3	7.3	58.5	57.1	63.8
Technicians and associate professionals	1.2	0.3	0.8	3.7	3.3	7.2	7.3	6.0
Clerical support	0.9	0.1	0.5	3.0	6.0	2.3	7.0	6.0
Service and sales	16.6	12.9	19.1	22.7	20.6	6.8	7.4	3.2
Skilled agricultural forestry and fishery	50.1	67.7	46.4	32.2	26.7	15.8	8.2	5.1
Craft and related trades	17.6	13.4	21.5	16.4	24.5	3.4	4.4	1.1
Plant and machine operators and assemblers	3.2	1.1	4.4	5.4	4.3	1.1	1.2	0.4
Elementary occupations	3.9	3.4	4.5	4.6	3.9	1.0	0.8	0.3
Other	0.0	0.0	0.0	0.3	0.3	0.1	0.2	0.2
Number	875,003	289,976	128,454	328,013	64,455	18,464	15,956	18,888



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

Occupation Sex	All levels	Never attended	Basic school	Secondary/SSS	Vocational/Technical/Commercial	Post-middle/secondary certificate	Post-secondary diploma	Degree or higher
<b>Male</b>								
All occupations	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers	1.4	0.3	0.7	2.0	2.6	4.7	6.9	14.5
Professionals	6.1	0.2	1.3	9.3	7.4	54.8	54.0	62.6
Technicians and associate professionals	1.9	0.5	1.3	4.3	4.2	5.8	8.6	6.2
Clerical support	1.2	0.2	0.9	2.7	3.1	2.0	5.6	5.6
Service and sales	6.0	3.7	5.8	12.7	9.0	4.7	6.1	2.9
Skilled agricultural forestry and fishery	56.9	81.6	55.8	39.6	35.8	21.5	10.7	6.0
Craft and related trades	17.1	8.2	22.5	17.0	27.6	3.8	5.2	1.1
Plant and machine operators and assemblers	6.5	2.6	8.5	8.3	7.2	1.7	1.8	0.5
Elementary occupations	2.9	2.6	3.2	3.7	2.8	0.9	0.8	0.3
Other	0.1	0.0	0.0	0.4	0.4	0.1	0.2	0.2
Number	412,747	103,241	54,769	171,924	41,478	10,650	9,307	12,830
<b>Female</b>								
All occupations	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managers	2.0	1.3	2.3	3.0	3.8	2.6	4.7	11.2
Professionals	3.4	0.3	1.2	9.4	7.2	63.7	63.7	68.2
Technicians and associate professionals	0.7	0.2	0.4	2.6	2.1	9.2	4.5	5.5
Clerical support	0.7	0.0	0.2	3.3	10.0	2.7	10.0	7.5
Service and sales	26.2	17.9	32.2	40.6	36.5	9.6	10.2	4.5
Skilled agricultural forestry and fishery	44.1	60.0	37.2	18.7	14.4	7.8	3.0	1.6
Craft and related trades	18.0	16.3	20.6	15.5	20.3	2.8	2.8	1.2
Plant and machine operators and assemblers	0.2	0.2	0.3	0.4	0.3	0.2	0.1	0.0
Elementary occupations	4.8	3.9	5.7	6.2	5.3	1.3	0.8	0.3
Other	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1
Number	462,256	186,735	73,685	156,089	22,977	7,814	6,649	6,058

Source: 2010 Population and Housing Census

# **CHAPTER EIGHT**

## **FERTILITY, MORTALITY AND MIGRATION**

### **8.1 Introduction**

Fertility, mortality and migration are the three components of population change that determine the size, age-sex composition and distribution of the population at a particular point in time. Data on these three components are critical for planning the overall socio-economic development of the region.

This chapter provides analysis of the fertility, mortality and migration patterns in the region using data from the 2010 Population and Housing Census. However, since census data alone cannot provide a complete picture of the demographic history of the region, other data sources such as the Ghana Demographic and Health Survey (GDHS) are used in the analysis.

### **8.2 Fertility**

Measures of fertility are important in determining the size and structure of the population. Information on fertility in the region is, therefore, critical for the management of the population for social and economic development. This section reports on fertility, levels, patterns and trends.

#### **8.2.1 Levels and patterns of fertility**

Two types of fertility measures are used to examine levels and patterns of fertility. These are current fertility measures and cumulative fertility measures. Current fertility measures such as total fertility rate (TFR) are based on data covering a short period of time such as a year (in the case of population censuses) or five years (in surveys), while cumulative measures such as mean children ever born are based on retrospective fertility data covering women's reproductive performance over their lifetime.

#### **8.2.2 Current fertility measures**

The most commonly used measures of current fertility are the total fertility rate (TFR) and its component age-specific fertility rates (ASFR). The TFR is defined as the number of children a woman would have by the end of her childbearing years if she were to experience the currently observed age-specific fertility rates.

Table 8.1 shows a total fertility rate for the Volta Region of 3.2 children per woman age 15-49, which is slightly lower than the national average. This means that a woman living in the region would have, on average, 3.2 children by the end of her reproductive period if the current age-specific fertility rates continue to prevail.

Table 8.1 presents trends in TFR in the region derived from demographic surveys conducted in Ghana over past decades, together with data from the 2010 census. The results indicate that the region is experiencing a slow demographic transition, along with the rest of Ghana. This is seen in the dramatic decline of the total fertility rate from 6.7 children per woman in the 1988 GDHS to 3.2 children in the 2010 census.

**Table 8.1: Trends in total fertility rates, 1988-2010**

Year	Source	TFR
<b>Ghana</b>		
1988	GDHS	6.3
1993	GDHS	5.5
1998	GDHS	4.6
2000	Census	4.0
2003	GDHS	4.4
2008	GDHS	4.0
2010	Census	3.3
<b>Volta Region</b>		
1988	GDHS	6.7
1993	GDHS	5.4
1998	GDHS	4.8
2000	Census	3.5
2003	GDHS	4.4
2008	GDHS	3.8
2010	Census	3.2

Sources: 1988,1993,1998,2000 and 2008 Ghana Demographic and Health Survey;  
2000 and 2010 Population and Housing Census data

Table 8.2 shows marked variations in district fertility, ranging from a high of 3.93 children per woman in Krachi East to a low of 2.65 children per woman in Ho Municipal. It is further observed that four districts beside Ho Municipal have fertility rates below the regional average. These districts are Keta Municipal (2.98), Ketu South (2.86), North Tongu (2.83), and Adaklu Anyigbe (2.75).

**Table 8.2: Total fertility rate, by district**

District	TFR
All districts	3.18
South Tongu	3.38
Keta Municipal	2.98
Ketu South	2.86
Ketu North	3.26
Akatsi	3.36
North Tongu	2.83
Adaklu Anyigbe	2.75
Ho Municipal	2.65
South Dayi	3.14
North Dayi	3.04
Hohoe Municipal	3.30
Biakoye	3.21
Jasikan	3.38
Kadjebi	3.41
Krachi East	3.93
Krachi West	3.43
Nkwanta South	3.73
Nkwanta North	3.21

Source: 2010 Population and Housing Census

Table 8.3 presents the age-specific fertility rates for the region and districts. The data show that age-specific fertility rates generally decline with age across all the districts. The prime reproductive years of the women in the region are 25-29 years. This observation is true across all the districts. Teenage childbearing occurs in all the districts and is lower than the regional average in only seven out of the 18 districts. They are Keta, Ketu South, North Tongu, Ho, Adaklu Anyigbe and North Dayi.

**Table 8.3: Total fertility rates and age-specific fertility rates by district**

Age group	15-19	20-24	25-29	30-34	35-39	40-44	45-49	TFR
All districts	0.051	0.167	0.199	0.126	0.065	0.025	0.003	3.18
South Tongu	0.056	0.177	0.206	0.135	0.135	0.027	0.004	3.38
Keta	0.046	0.157	0.192	0.117	0.112	0.022	0.003	2.98
Ketu North	0.053	0.171	0.202	0.129	0.068	0.026	0.003	3.26
Ketu South	0.045	0.152	0.186	0.112	0.054	0.020	0.002	2.86
Akatsi	0.056	0.176	0.205	0.134	0.072	0.027	0.004	3.36
North Tongu	0.045	0.151	0.185	0.110	0.053	0.019	0.000	2.83
Ho	0.042	0.143	0.176	0.103	0.047	0.017	0.002	2.65
Adaklu Anyigbe	0.043	0.146	0.179	0.105	0.049	0.018	0.002	2.75
Hohoe	0.054	0.173	0.203	0.131	0.069	0.026	0.003	3.30
Jasikan	0.056	0.177	0.206	0.135	0.073	0.027	0.004	3.38
Kadjebi	0.057	0.178	0.207	0.136	0.074	0.028	0.004	3.41
Nkwanta North	0.074	0.212	0.229	0.170	0.104	0.039	0.006	3.21
Nkwanta South	0.065	0.194	0.217	0.150	0.086	0.031	0.004	3.73
Biakoye	0.052	0.169	0.200	0.127	0.067	0.025	0.003	3.21
Krachi East	0.069	0.203	0.223	0.159	0.093	0.034	0.005	3.93
Krachi West	0.057	0.179	0.207	0.137	0.075	0.028	0.004	3.43
North Dayi	0.048	0.160	0.195	0.119	0.060	0.023	0.003	3.04
South Dayi	0.050	0.165	0.195	0.124	0.064	0.024	0.003	3.14

Sources: 2010 Population and Housing Census

### 8.2.2 Lifetime Fertility (Mean Number of Children Ever Born)

The mean number of children ever born per woman measures the lifetime or cumulative fertility performance of female respondents in the reproductive age group 15-49 years. Table 8.4 shows the children ever born and the mean number of children ever born by locality. Overall, the table indicates that the regional average of completed family size for women aged 12-54 years was 5.1 children per woman. It is also observed that the figure is higher for women living in rural areas (5.4) than their counterparts in urban areas (4.5). As expected, the mean number of children ever-born increases consistently with age of mother in both urban and rural areas, with the fertility performance of women relatively higher in rural areas than in urban areas at every age. Examination of the data further shows little difference in teenage fertility between women in urban and rural areas. However, the reported lifetime fertility of older women (45-54 years) is higher in rural areas than in urban areas.

**Table 8.4: Children ever born and mean children ever born by locality**

Age group	Total		Urban		Rural	
	Children ever born	Mean	Children ever born	Mean	Children ever born	Mean
All ages	1,338,642	5.1	395,754	4.5	942,888	5.4
12 - 14	403	1.2	105	1.3	298	1.2
15 - 19	14,173	1.4	4,187	1.4	9,986	1.5
20 - 24	76,569	2.2	21,828	2.1	54,741	2.3
25 - 29	148,777	3.2	45,149	2.8	103,628	3.3
30 - 34	199,124	4.3	59,877	3.7	139,247	4.5
35 - 39	219,859	5.0	66,487	4.4	153,372	5.3
40 - 44	236,421	5.9	68,959	5.2	167,462	6.1
45 - 49	221,474	6.2	65,002	5.5	156,472	6.6
50 - 54	221,842	6.7	64,160	6.0	157,682	7.0

Source: 2010 Population and Housing Census

### 8.3 Mortality

Data on mortality provide an indication of the health status of the population as well as a measure of the living conditions of the people. It also provides information on the potential growth of the population in the future.

To reduce the prevailing high levels of mortality in Ghana, successive governments and development agencies have made various interventions over the years, including enhancing access to quality health care services, improving food security and improving environmental conditions, among others. These initiatives have contributed to reducing mortality rates. Nevertheless, factors that underlie high mortality levels in the country persist, such as the prevalence of infectious and parasitic diseases, poor environmental sanitation and poor access to good drinking water. There is, therefore, still room for further reductions of mortality. This section examines levels and trends in infant and child mortality in the Volta Region.

#### 8.3.1 Mortality Levels and Patterns: Infant and child mortality

The infant mortality rate is the probability of dying before the first birthday and under-five mortality rate is the probability of dying before the fifth birthday. One of the Millennium Development Goals (MDGs) is to reduce infant and under-five mortality. The specific objective is to reduce under-five mortality by two-thirds between 1990 and 2015. Consequently, the government and development agencies have been monitoring progress towards the achievement of this goal.

Table 8.5 presents data on levels of infant and child mortality from the various rounds of the Ghana Demographic and Health Survey (GDHS) and the 2006 Multiple Indicator Cluster Survey (MICS). The data show high but declining infant and under-five mortality rates for the country and Volta Region in the 2003 and 2008 GDHS. It is also observed that the reported infant and under-five mortality rates for the region were sometimes better than the national average.

**Table 8.5: Infant and under-five mortality (per 1,000 live births)**

Survey Year	Source	Infant mortality	Under-five mortality
<u>Ghana</u>			
1988	GDHS	77.0	155.0
1993	GDHS	66.0	119.0
1998	GDHS	57.0	108.0
2003	GDHS	64.0	111.0
2006	MIC	71.0	111.0
2008	GDHS	50.0	80.0
<u>Volta Region</u>			
1988	GDHS	73.8	132.7
1993	GDHS	77.8	116.4
1998	GDHS	52.0	123.0
2003	GDHS	75.0	113.0
2006	MIC	57.0	86.0
2008	GDHS	37.0	50.0

Sources: 1998,1993,1998,2004, and 2008 Ghana Demographic and Health Surveys; 2006 Multiple Indicator Cluster Survey

Table 8.6 provides information on infant and child mortality rates by district, using data from the 2010 census on children ever born (CEB) and children surviving. The table shows that the incidence of death among children under five years ranges from 73 per 1,000 live births in Kadjebi and Biakoye districts to 119 per 1,000 live births in Nkwanta North District. Keta Municipal has an under-five mortality rate of 101 per 1,000 live births, while Ketu North has a rate of 100 per 1,000 live births. With respect to infant mortality, children in South Dayi (45 per 1,000 live births), Biakoye and Kadjebi (both 49 per 1,000 live births) have the lowest risk of infant mortality. The risk of infant death is highest for children in Nkwanta North (76 per 1,000 live births), Keta Municipal and Ketu North (both 65 per 1,000 live births).

**Table 8.6: Infant and under-five mortality rates\* by district and reference period**

District	Infant mortality	Under-five mortality	Reference period
All Districts	57	87	2002.2-2006.7
South Tongu	53	80	2002.1-2006.6
Keta Municipal	65	101	2002.6-2006.7
Ketu South	62	96	2002.3-2006.7
Ketu North	65	100	2002.4-2006.7
Akatsi	62	96	2002.2-2006.8
North Tongu	53	80	2002.1-2006.6
Adaklu Anyigbe	52	77	2002.6-2006.8
Ho Municipal	58	89	2002.6-2006.7
South Dayi	45	66	2002.4-2006.7
North Dayi	50	74	2001.8-2006.6
Hohoe	51	76	2002.1-2006.6
Biakoye	49	73	2002.2-2006.7
Jasikan	53	78	2001.9-2006.5
Kadjebi	49	73	2002.3-2006.7
Krachi East	53	79	2002.0-2006.6
Krachi West	55	83	2001.9-2006.7
Nkwanta South	62	95	2001.9-2006.7
Nkwanta North	76	119	2002.2-2006.6

\*Per 1,000 live births

Source: 2010 Population and Housing Census

## 8.4 Migration and Urbanization

### 8.4.1 Concepts and measures

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

Migration is difficult to measure due to its repetitiveness and difficulty in establishing direction and permanency of the event. Nevertheless census information on usual place of residence five years before the census and current residence is used to discuss migration patterns in the region.

### 8.4.2. Internal migration

Internal migration is defined as the movement of people between geographical boundaries within national boundaries. At the regional level, migration may involve the movement of people within localities in the region (intra-regional migration) or the movement of people between the region and other regions (inter-regional migration). Four main types of migration may be distinguished in the region and Ghana as a whole: rural-rural, rural-urban, urban-rural and urban-urban.

Table 8.7 shows that about seven out of 10 of the people of the region were born in the place of enumeration, while 17.8 percent were born in another locality in the region. Only 9.1 percent of people enumerated in the region during the 2010 census migrated to the region. The table further shows that a higher proportion of migrants (those born elsewhere in other regions and outside Ghana) to the region live in urban areas (11.2%) than in rural areas (8.0%). For the sexes, the table indicates that more females than males were born elsewhere in the region (19.1% against 16.4%), while the same proportion of females and males (6.9%) was born in other regions. The proportion of both urban migrants and rural migrants to the region is also higher for males (11.4% and 8.2% respectively) than female (10.9% and 7.9% respectively).

**Table 8.7: Internal migration by place of birth and sex**

Place of birth	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	2,118,252	1,019,398	1,098,854	713,735	336,560	377,175	1,404,517	682,838	721,679
Born in place of enumeration	1,548,926	758,157	790,769	466,395	223,629	242,766	1,082,531	534,528	548,003
Born elsewhere in the region of enumeration	376,357	166,845	209,512	167,691	74,369	93,322	208,666	92,476	116,190
Elsewhere in other regions	146,162	70,814	75,348	59,831	28,645	31,186	86,331	42,169	44,162
Others (outside Ghana)	46,807	23,582	23,225	19,818	9,917	9,901	26,989	13,665	13,324
Total (%)	100	100	100	100	100	100	100	100	100
Born in place of enumeration	73.1	74.4	72	65.3	66.4	64.4	77.1	78.3	75.9
Born elsewhere in the region of enumeration	17.8	16.4	19.1	23.5	22.1	24.7	14.9	13.5	16.1
Elsewhere in other regions	6.9	6.9	6.9	8.4	8.5	8.3	6.1	6.2	6.1
Others (outside Ghana)	2.2	2.3	2.1	2.8	2.9	2.6	1.9	2	1.8

Source: 2010 Population and Housing Census

Table 8.8 presents net migration, which is the sum of in-migration and out-migration to and from the region from the other regions in Ghana. The data indicate that a net total of 535,671 people have migrated from the region to other regions. The region lost population to seven out of the 10 regions, with the exception of the Northern Region, Upper East Region and Upper



West Region. The popular destinations of migrants from the region are to the Greater Accra and Eastern regions.

The out-migration flow and its volume and direction give some indication of the state of social and economic development in the region. Indeed, compared to most other regions, the Volta, Upper East and Upper West regions are at a considerable disadvantage in terms of access to modern infrastructure such as good roads, educational institutions and hospital facilities. For a sending region such as the Volta Region, some of the negative consequences of out-migration include loss of many of its educated and productive workers. This loss of the more educated and youthful population leaves behind the uneducated and less educated and the aged population.

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

Region of birth	In-migration	Out-migration	Net migration
All regions	146,162	681,833	-535,671
Western	6,864	50,104	-43,240
Central	9,354	47,044	-37,690
Greater Accra	39,441	345,729	-306,288
Eastern	30,897	128,163	-97,266
Volta	0	0	0
Ashanti	14,173	57,384	-43,211
Brong Ahafo	7,796	33,423	-25,627
Northern	34,637	16,560	18,077
Upper East	1,795	1,786	9
Upper West	1,205	1,640	-435

Source: 2010 Population and Housing Census

### 8.4.3 Distribution of Non-Ghanaian Population

According to the 2010 census, there are 30,329 non-Ghanaians in the Volta Region, representing 1.4 percent of its total population. The majority of non-Ghanaians who reside in the region (85.8%) come from other ECOWAS countries, 9.5 percent come from non-ECOWAS African countries and less than 1 percent from outside Africa (Table 8.9). There are more male non-Ghanaians from ECOWAS countries (46.9%) than females (39.1%). Similar male migrant selectivity is also observed among other-ECOWAS and non-ECOWAS nationals

At district level, Ketu South, Adaklu Anyigbe, Akatsi, Ho, Hohoe, and Ketu North have more than 90 percent of their non-Ghanaian populations coming from ECOWAS countries, while Nkwanta North has a relatively lower proportion of ECOWAS nationals (59.5%). On the other hand, Nkwanta North has the highest proportion of non-ECOWAS (24.8%) and non-African nationals (15.7%) enumerated in the region.

**Table 8.9: Non-Ghanaian population by district and sex**

	All Non-Ghanaians			ECOWAS (%)			African other than ECOWAS (%)			Non-African (%)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All districts	30,329	16,423	13,906	85.8	46.7	39.1	9.5	5.0	4.5	4.7	2.4	2.3
South Tongu	372	211	161	78.0	44.9	33.1	18.5	9.9	8.6	3.5	1.9	1.6
Keta Municipal	398	208	190	84.9	42.7	42.2	14.1	8.8	5.3	1.0	0.8	0.3
Ketu South	3,883	1,911	1,972	96.9	47.7	49.2	1.8	0.7	1.1	1.3	0.7	0.6
Ketu North	513	334	179	91.4	58.3	33.1	2.5	1.6	1.0	6.0	5.3	0.8
Akatsi	606	350	256	94.1	54.0	40.1	5.3	3.3	2.0	0.7	0.5	0.2
North Tongu	724	400	324	93.5	51.7	41.9	3.9	2.2	1.7	2.6	1.4	1.2
Adaklu Anyigbe	1,026	595	431	95.2	55.1	40.2	2.8	1.9	0.9	1.9	1.0	1.0
Ho Municipal	3,041	1,655	1,386	93.9	50.5	43.3	3.0	2.0	0.9	3.2	1.9	1.3
South Dayi	225	125	100	78.7	43.6	35.1	19.1	10.7	8.4	2.2	1.3	0.9
North Dayi	656	387	269	88.6	51.8	36.7	7.3	4.9	2.4	4.1	2.3	1.8
Hohoe Municipal	4,316	2,311	2,005	90.7	49.4	41.4	5.1	2.4	2.7	4.2	1.8	2.4
Biakoye	900	508	392	69.0	41.3	27.7	22.0	11.6	10.4	9.0	3.6	5.4
Jasikan	2,410	1,311	1,099	92.0	49.9	42.2	5.3	2.9	2.4	2.7	1.7	1.0
Kadjebi	1,812	997	815	88.4	49.2	39.2	8.9	4.6	4.4	2.6	1.3	1.4
Krachi East	2,467	1,421	1,046	80.0	46.2	33.8	13.9	8.3	5.7	6.0	3.2	2.9
Krachi West	3,459	1,836	1,623	75.9	41.3	34.7	16.5	8.4	8.1	7.6	3.4	4.1
Nkwanta South	2,265	1,229	1,036	72.1	39.7	32.4	20.6	10.4	10.2	7.3	4.1	3.2
Nkwanta North	1,256	634	622	59.5	30.8	28.7	24.8	11.4	13.5	15.7	8.3	7.4

Source: 2010 Population and Housing Census

The 2010 census data indicate that a total of 23,920 economically active non-Ghanaian nationals 15 years and older are working in the Volta Region. From Table 8.10, it can be observed that across all age groups, 74.1 percent of the economically active foreign nationals enumerated in the region are self-employed without employees, 10.0 percent are contributing family workers and 9.2 percent are employees. Less than 1 percent are domestic employees (0.6%) and even fewer are in the other employment status category (0.2%). A similar pattern is observed for the sexes in all age groups. However, there are more male foreign nationals in the employee category (12.4%) than females (4.5%) whereas there are more females who are contributing family workers (14.3%) than males (7.0%).

**Table 8.10: Economically active foreign nationals 15 years and older by sex, age group and employment status**

Age Group/Sex	Total	Employee	Self-employed without employee(s)	Self-employed with employee(s)	Casual worker	Contributing family worker	Apprentice	Domestic employee (House help)	Other
<b>Both sexes</b>									
All ages	23,920	9.2	74.1	2.7	1.6	10.0	1.7	0.6	0.2
15-29	8,547	8.7	62.9	2.2	2.3	18.5	4.6	0.6	0.2
30-49	10,682	9.7	79.7	3.1	1.2	5.3	0.2	0.7	0.1
50-64	3,258	10.2	80.6	2.7	0.8	5.1	0.0	0.4	0.2
65+	1,433	5.4	84.4	2.4	1.5	5.4	0.2	0.6	0.1
<b>Male</b>									
All ages	14,133	12.4	73.2	3.2	2.1	7.0	1.5	0.6	0.1
15-29	4,656	11.4	60.7	2.3	3.5	17.4	4.0	0.7	0.2
30-49	6,564	13.2	78.6	3.7	1.5	2.0	0.3	0.6	0.1
50-64	1,981	14.1	79.3	3.3	1.0	1.6	0.1	0.4	0.3
65+	932	7.4	84.9	3.2	1.5	2.0	0.3	0.6	0.0
<b>Female</b>									
All ages	9,787	4.5	75.4	2.0	0.8	14.3	2.2	0.7	0.2
15-29	3,891	5.4	65.5	2.1	1.0	19.9	5.3	0.5	0.3
30-49	4,118	4.2	81.5	2.0	0.6	10.5	0.1	0.9	0.1
50-64	1,277	4.2	82.6	1.7	0.6	10.4	0.0	0.4	0.1
65+	501	1.6	83.6	1.0	1.4	11.6	0.0	0.6	0.2

Source: 2010 Population and Housing Census

Table 8.11 presents the distribution of the economically active foreign population by age group and sector of employment. It indicates that an overwhelming majority (93.6%) of the non-Ghanaian labour force across all age groups and for both sexes work in the informal private sector. Very few foreign nationals are employed in the public sector (3.3%) and the private formal sector (2.6%). Less than 1 percent of non-Ghanaian males and females of all ages work in semi-public/parastatal organizations, non-governmental organizations (NGOs) and international organizations.

**Table 8.11: Economically active foreign nationals 15 years and older  
by sex, age group and sector of employment**

Age group	Total	Public (Government)	Private Formal	Private Informal	Semi- Public/ Parastatal	NGOs (Local and International)	Other International Organisations
<b>Both sexes</b>							
All ages	23,920	3.3	2.6	93.6	0.1	0.4	0.1
15 - 29	8,547	2.6	2.7	94.2	0.0	0.3	0.1
30 - 49	10,682	3.4	2.8	93.0	0.1	0.5	0.2
50 - 64	3,258	5.6	1.9	91.9	0.2	0.4	0.0
65+	1,433	1.2	1.1	97.4	-	0.3	-
<b>Male</b>							
All ages	14,133	4.2	3.4	91.6	0.1	0.5	0.2
15 - 29	4,656	3.2	3.3	93.1	0.0	0.2	0.2
30 - 49	6,564	4.3	3.9	90.7	0.1	0.7	0.3
50 - 64	1,981	7.6	2.9	88.6	0.3	0.6	0.1
65+	932	1.8	1.6	96.2	-	0.3	-
<b>Female</b>							
All ages	9,787	1.9	1.3	96.4	0.1	0.3	-
15 - 29	3,891	1.9	2.0	95.6	-	0.5	0.1
30 - 49	4,118	1.9	1.2	96.6	0.1	0.1	-
50 - 64	1,277	2.5	0.2	97.0	-	0.2	-
65+	501	0.0	0.2	99.6	-	0.2	-

Source: 2010 Population and Housing Census

## 8.5 Urbanization

Urbanization refers to the positive change in the proportion of the total population living in urban areas. Urbanization occurs as a result of natural increase and net migration. In Ghana, as in many other developing countries, rural-urban migration constitutes a significant force in the growth of urban places. Economic and income disparities and the perception of availability of jobs and better living conditions in the urban areas are the major factors driving rural-urban migration.

While urbanization has its advantages, there are also serious disadvantages, especially if the pace of urbanization outstrips the ability of city and town planners to meet the requirements for infrastructure such as housing, and services such as water, electricity, roads and schools. Negative effects of the movement of large numbers of people to cities in Ghana include the growth of slums and rising crime and vice.

Table 8.12 shows the levels and trends in urbanization in the Volta Region and in Ghana for the period 1970 to 2010. It shows substantial increases in urbanization in the region and the country as a whole across the censuses. Specifically for the region, the urban proportion has increased from 16 percent in 1970 to about 34 percent in 2010, even as the level of urbanization is lower in the region compared to that in the country as a whole.

**Table 8.12: Urbanization in Ghana and Volta Region, 1970-2010**

Census Year	Proportion urban
<b>Ghana</b>	
1970	28.9
1984	32.0
2000	43.8
2010	50.9
<b>Volta</b>	
1970	16.0
1984	20.5
2000	27.0
2010	33.7

Source: 1970, 1984, 2000, 2010 censuses

As shown in Table 8.13 below, the level of urbanization varies from one district to another. In 2010, Keta Municipal was the most urbanized district with more than half of its population living in urban areas (53.3%). Districts which are also relatively urbanized include Ketu South (46.6%), Ho (44.3%) and Hohoe (40.3%). The least urbanized districts are Krachi East (19.6%), South Tongu (12.9%) and Adaklu Anyigbe (10.6%). The table also shows that for most urban areas across the districts, females almost always outnumber males. It is only in North Tongu and North Dayi that the male population and female population are about the same, and in Biakoye, Kadjebi, Krachi West, Krachi East and Nkwanta North that males outnumber females. It is worth noting that the excess of females over males is characteristic of most urban and rural localities in the region. There is also the availability of modern services and facilities such as clinics/hospitals, schools, electricity, good drinking water and telecommunication.

**Table 8.13: Urban population by sex and district**

District	Total			Urban			Percent Urban			Percent Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All districts	2,118,252	1,019,398	1,098,854	713,735	336,560	377,175	33.7	33.0	34.3	1,404,517	682,838	721,679
South Tongu	87,950	40,019	47,931	11,310	5,169	6,141	12.9	12.9	12.8	76,640	34,850	41,790
Keta Municipal	147,618	68,556	79,062	78,699	36,477	42,222	53.3	53.2	53.4	68,919	32,079	36,840
Ketu South	160,756	75,648	85,108	74,834	34,853	39,981	46.6	46.1	47.0	85,922	40,795	45,127
Ketu North	99,913	46,551	53,362	34,196	15,616	18,580	34.2	33.5	34.8	65,717	30,935	34,782
Akatsi	128,461	59,165	69,296	31,884	14,530	17,354	24.8	24.6	25.0	96,577	44,635	51,942
North Tongu	149,188	70,282	78,906	43,410	19,974	23,436	29.1	28.4	29.7	105,778	50,308	55,470
Adaklu Anyigbe	64,404	31,298	33,106	6,797	3,165	3,632	10.6	10.1	11.0	57,607	28,133	29,474
Ho Municipal	271,881	129,180	142,701	120,349	56,852	63,497	44.3	44.0	44.5	151,532	72,328	79,204
South Dayi	46,661	22,132	24,529	18,122	8,397	9,725	38.8	37.9	39.6	28,539	13,735	14,804
North Dayi	93,649	44,553	49,096	29,558	14,086	15,472	31.6	31.6	31.5	64,091	30,467	33,624
Hohoe Municipal	262,046	126,239	135,807	105,612	49,750	55,862	40.3	39.4	41.1	156,434	76,489	79,945
Biakoye	65,901	33,057	32,844	22,373	10,862	11,511	33.9	32.9	35.0	43,528	22,195	21,333
Jasikan	59,181	29,142	30,039	16,342	7,896	8,446	27.6	27.1	28.1	42,839	21,246	21,593
Kadjebi	59,303	29,951	29,352	15,682	7,485	8,197	26.4	25.0	27.9	43,621	22,466	21,155
Krachi West	116,804	60,730	56,074	32,400	16,153	16,247	27.7	26.6	29.0	84,404	44,577	39,827
Krachi East	122,105	62,019	60,086	23,894	11,643	12,251	19.6	18.8	20.4	98,211	50,376	47,835
Nkwanta South	117,878	58,482	59,396	30,146	14,632	15,514	25.6	25.0	26.1	87,732	43,850	43,882
Nkwanta North	64,553	32,394	32,159	18,127	9,020	9,107	28.1	27.8	28.3	46,426	23,374	23,052

Source: 2010 Population and Housing Census

# **CHAPTER NINE**

## **ECONOMIC CHARACTERISTICS**

### **9.1 Introduction**

The economic and social development of any country is contingent upon the quality and quantity of its productive resources, of which labour is vitally important. In fact, the other productive resources, namely physical capital and land, are dependent upon labour. Consequently, labour constitutes a critical agent of production. As a result of the very important position of labour in the productive process, knowledge of the current size and characteristics of the labour force and its variation over time is vital for possible policy interventions for maximum development and utilization of these human resources. This chapter analyses data on the economic activity status of the population, age and sex structure of the employed population, employment status and sector, and age and sex composition of the unemployed population.

### **9.2 The Activity Status of the Population**

The economically active population consists of those persons who either worked for pay or profit or family gain for at least one hour within the seven days preceding Census Night. This includes persons who were in paid employment or self-employed or contributing family workers; persons who did not work but had jobs to return to; and persons who were unemployed.

The not economically active were persons who did not work and were not seeking work within the seven days preceding Census Night. This includes homemakers, students, retired persons, the disabled and persons who were unable to work due to their age or ill-health.

#### **9.2.1 Economic Activity Status by Age and Sex**

The 2010 PHC reported a total population of 2,118,252 for the Volta Region out of which 1,305,427 are persons 15 years and older, representing 61.6 percent of the total population.

Table 9.1 presents the distribution of persons 15 years and older by age, sex and economic activity status. For both sexes, the table indicates that 69.9 of persons 15 years and older are economically active, while the economically inactive population constitutes 30.4%. It further shows that the proportion of persons who are economically active is higher in total for females (53.6%) than males (46.4%) and in all age groups.

The data also show that the proportion of the economically active population increases with age from 15-24 years to 35-44 years and subsequently declines with advancing age. For females, the peak of economically active population is the 25-34 years age group, while for males; the peak is the 15-24 year age group. As expected, a higher proportion of persons who are economically not active are in the younger age group (15-24 years) and older age group (65 years and older), while the lowest proportion is in the age group 35-44 years. It is worth noting the 60.2 percent proportion of females not economically active in the 25-34 segment, in general terms perhaps the most dynamic age group.

**Table 9.1: Population 15 years and older by age group, economic activity status and sex**

Age group	Total			Economically active			Not active		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	1,305,427	46.4	53.6	69.6	47.1	52.9	30.4	44.8	55.2
15-24	402,002	50.2	49.8	41.5	48.3	51.7	58.5	51.6	48.4
25-34	281,273	45.3	54.7	85.3	46.2	53.8	14.7	39.8	60.2
35-44	214,370	45.9	54.1	91.8	47.2	52.8	8.2	31.5	68.5
45-54	167,722	45.9	54.1	91.1	47.2	52.8	8.9	32.2	67.8
55-64	102,703	45.6	54.4	81.6	47.7	52.3	18.4	36.4	63.6
65+	137,357	39.4	60.6	49.8	45.7	54.3	50.2	33.1	66.9

Source: 2010 Population and Housing Census

According to International Labour Organisation (ILO) standards, the minimum age for entry into the labour force is 15 years. This is affirmed in the Children's Act of 1998 which prohibits the engagement of children in work. However, it is common knowledge that many children in Ghana and other parts of Africa engage in work for pay, profit, or family gain. Table 9.2 shows the economic activity status of children aged 5-17 years. The data indicate that 13.2 percent of children are employed, 0.3 percent are unemployed, while 86.5 percent are economically not active in the region. It is also observed that the proportion of male children working is higher (14.2%) than that of female children (12.2%).

**Table 9.2: Economic activity status of children 5-17 years by sex**

Activity Status	Both sexes	Male	Female
Total	100.0	100.0	100.0
Employed	13.2	14.2	12.2
Unemployed	0.3	0.2	0.3
Not active	86.5	85.6	87.5
Number	650,166	334,352	315,814

Source: 2010 Population and Housing Census

Table 9.3 shows the percentage distribution of persons 15 years and older by economic activity status, locality and district. It indicates that relatively higher proportions of the males were employed as compared with the females. The data also show that persons residing in rural areas are more likely than those in urban areas to be employed and that urban dwellers are more likely than rural dwellers to become unemployed.

The general activity rate is 64.9 percent in rural areas as against 35.1 percent in urban areas. However, at district level, general activity rates are higher in urban areas than in rural areas in Keta Municipal, Ketu South, Ho Municipal and Hohoe Municipal. In the other districts, however, the rural general activity rates were higher than that of the urban. Ho, North Tongu and Akatsi districts had the highest rural general activity rates respectively. In the case of urban areas, the highest general activity rates were recorded for the Ho, Hohoe and Ketu South districts.



**Table 9.3.: Population 15 years and older by district, economic activity status and locality**

District	Total				Urban				Rural			
	Total	Economically Active		Not Active	Total	Economically Active		Not Active	Total	Economically Active		Not Active
		Employed	Unemployed			Employed	Unemployed			Employed	Unemployed	
All districts	1,305,427	67.0	2.6	30.4	35.1	61.0	3.4	35.6	64.9	70.3	2.1	27.6
South Tongu	4.1	2.8	0.1	1.2	0.6	0.4	0.0	0.2	3.5	2.4	0.1	1.0
Keta Municipal	7.4	4.4	0.3	2.7	4.0	2.3	0.2	1.5	3.4	2.1	0.1	1.1
Ketu South	7.7	5.2	0.2	2.2	3.5	2.3	0.1	1.1	4.1	2.8	0.1	1.2
Ketu North	4.8	3.3	0.1	1.4	1.7	1.1	0.1	0.6	3.1	2.2	0.0	0.8
Akatsi	6.1	4.4	0.1	1.6	1.6	1.0	0.0	0.5	4.6	3.4	0.1	1.1
North Tongu	7.1	4.7	0.2	2.2	2.1	1.2	0.1	0.9	4.9	3.6	0.1	1.3
Adaklu Anyigbe	3.1	2.1	0.1	1.0	0.3	0.2	0.0	0.1	2.8	1.9	0.1	0.8
Ho Municipal	14.0	8.7	0.5	4.7	6.5	3.7	0.3	2.5	7.5	5.0	0.2	2.3
South Dayi	2.2	1.4	0.1	0.7	0.8	0.5	0.0	0.3	1.3	0.9	0.0	0.4
North Dayi	4.6	2.8	0.2	1.6	1.5	0.9	0.1	0.5	3.1	2.0	0.1	1.0
Hohoe Municipal	12.7	8.0	0.3	4.4	5.2	3.1	0.2	1.9	7.5	4.8	0.2	2.5
Biakoye	3.0	2.3	0.1	0.7	1.0	0.7	0.0	0.3	2.0	1.5	0.0	0.4
Jasikan	2.8	2.0	0.1	0.8	0.8	0.5	0.0	0.3	2.0	1.5	0.0	0.5
Kadjebi	2.8	2.0	0.1	0.8	0.7	0.5	0.0	0.2	2.0	1.5	0.0	0.5
Krachi East	4.9	3.8	0.1	1.1	1.5	0.9	0.0	0.5	3.5	2.8	0.0	0.6
Krachi West	5.2	3.8	0.1	1.4	1.1	0.7	0.0	0.4	4.1	3.1	0.0	1.0
Nkwanta South	5.0	3.5	0.1	1.4	1.4	0.8	0.0	0.5	3.6	2.7	0.0	0.9
Nkwanta North	2.6	2.0	0.0	0.6	0.8	0.5	0.0	0.2	1.8	1.5	0.0	0.3

Source: 2010 Population and Housing Census

## 9.3 The Employed Population

The employed population comprises all persons aged 15 years and above who, during the reference period, were in the following categories:

- At work – persons who performed some work for wage or salary either in cash or in kind or worked without pay:
- With a job but not at work – persons who having already worked in their present job were temporarily not at work but had a formal attachment to their job.

### 9.3.1 Employed Population by Age and Sex

Table 9.4 presents information on the employed by age and sex. It shows that the age group 35-44 years has the highest proportion of employed person (90.1%), followed by the 45-54 years age group (89.9%). It is also observed that only 49.3% of persons aged 65 years and above is employed. The lowest proportion of the employed is among the 15-24 year age group. This is expected because they are supposed to be in school or learning trades. In all age groups except 15-24, the proportion of females employed is higher than that of males and higher proportions of economically active females are employed than males in all the age groups.

**Table 9.4: Employed population 15 years and older by age group and sex**

Age group	Total			Employed			Unemployed			Not active		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	1,305,427											
All ages	7	46.4	53.6	67.0	47.2	52.8	2.6	44.5	55.5	30.4	44.8	55.2
15-24	402,002	50.2	49.8	37.9	48.8	51.2	3.6	42.7	57.3	58.5	51.6	48.4
25-34	281,273	45.3	54.7	81.4	46.2	53.8	3.9	46.3	53.7	14.7	39.8	60.2
35-44	214,370	45.9	54.1	90.1	47.3	52.7	1.7	45.1	54.9	8.2	31.5	68.5
45-54	167,722	45.9	54.1	89.9	47.3	52.7	1.3	44.3	55.7	8.9	32.2	67.8
55-64	102,703	45.6	54.4	79.9	47.7	52.3	1.7	47.0	53.0	18.4	36.4	63.6
65+	137,357	39.4	60.6	49.3	45.7	54.3	0.5	42.8	57.2	50.2	33.1	66.9

Source: 2010 Population and Housing Census

The distribution of persons 15 years and older by employment status, locality and district is shown in Table 9.5. For the region as a whole, 67.0 percent of persons 15 years and older are employed, 2.6 percent are unemployed, and 30.4 percent are not economically active. There are urban-rural differences in the proportion employed (61.0% urban against 70.3% rural).

At district level, the majority of the economically active population is employed in all districts. However, there are variations in the proportion employed among the districts. The proportion employed ranges from 59.7 percent in Keta Municipal to 77.0 percent in Nkwanta North. The proportion of employed persons in urban areas is highest in Biakoye District (70.7%) and lowest in highly urbanized Keta (57.5%) and Ho (57.5%) municipalities. In the rural areas, Krachi East (81.4%) has the highest proportion of employed persons, while Keta Municipal has the lowest proportion (62.4%).

The table also reveals that the percentage of persons unemployed is highest in Keta Municipality (4.2%), followed by North Dayi District (3.9%) and Ho Municipality (3.7%). Districts with substantially low proportions of unemployed persons are Nkwanta North

(0.7%), Krachi West (1.1%), Nkwanta South (1.2%), Krachi East (1.4%) and Akatsi (1.7%). The data further indicate that relatively higher proportions of the economically not active population reside in the urban compared with rural areas across all the districts.

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

District	Total				Urban				Rural			
	Total	Em- ployed	Un- employed	Not active	Total	Em- ployed	Un- employed	Not active	Total	Em- ployed	Ur employe	Not active
All districts	1,305,427	67.0	2.6	30.4	458,504	61.0	3.4	35.6	846,923	70.3	2.1	27.6
South Tongu	52,893	68.0	2.9	29.1	7,287	64.5	3.1	32.4	45,606	68.6	2.9	28.6
Keta Municipal	96,558	59.7	4.2	36.1	52,314	57.5	4.3	38.2	44,244	62.4	4.0	33.6
Ketu South	100,044	67.7	3.2	29.1	46,317	66.1	3.8	30.1	53,727	69.1	2.7	28.1
Ketu North	62,790	68.1	2.1	29.8	22,562	62.0	3.0	35.0	40,228	71.5	1.6	27.0
Akatsi	80,059	71.8	1.7	26.5	20,654	65.3	2.5	32.1	59,405	74.1	1.4	24.5
North Tongu	92,036	66.8	2.4	30.8	27,739	54.6	3.8	41.6	64,297	72.1	1.7	26.2
Adaklu Anyigbe	40,635	66.9	2.5	30.6	4,492	64.7	2.1	33.2	36,143	67.2	2.5	30.3
Ho Municipal	182,444	62.4	3.7	33.9	84,424	57.5	4.5	38.0	98,020	66.6	3.0	30.4
South Dayi	28,483	62.8	2.9	34.2	11,083	58.9	3.0	38.1	17,400	65.3	2.9	31.8
North Dayi	59,736	61.6	3.9	34.5	19,095	59.2	4.5	36.3	40,641	62.7	3.6	33.7
Hohoe Municipal	165,542	63.0	2.6	34.5	67,760	60.6	3.3	36.1	97,782	64.6	2.1	33.3
Biakoye	39,417	75.3	1.8	22.9	13,383	70.7	1.6	27.8	26,034	77.6	2.0	20.4
Jasikan	36,802	70.6	1.9	27.5	10,303	64.2	2.5	33.3	26,499	73.1	1.7	25.2
Kadjebi	36,125	70.9	1.9	27.2	9,630	64.6	2.0	33.4	26,495	73.2	1.9	24.9
Krachi East	64,589	76.5	1.4	22.1	19,074	64.7	1.7	33.6	45,515	81.4	1.3	17.3
Krachi West	68,038	72.0	1.1	26.9	13,936	64.1	1.9	34.0	54,102	74.1	0.8	25.1
Nkwanta South	64,832	70.5	1.2	28.3	18,151	59.1	2.3	38.6	46,681	74.9	0.8	24.3
Nkwanta North	34,404	77.0	0.7	22.3	10,300	68.3	1.4	30.3	24,104	80.7	0.4	18.8

Source: 2010 Population and Housing Census

### 9.3.2 Employment Status of Employed Persons

Employment status refers to the status of a person in the establishment where he/she currently works or previously worked. The 2010 census provided seven employment status categories: 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”. It can be observed in Table 9.6 that in all districts, over two-thirds of the employed population is self-employed without employees. The proportion of the self-employed without employees ranges from 65.2 percent in Ho a high of 78.5 percent in Adaklu Anyigbe to a low of. The rural/urban distribution shows that the proportion of self-employed with employees is higher in rural (76.1%) than in urban areas (64.8%). On the other hand, the proportion of the self-employed with employees is less than 5.0 % generally. This is observed in all the districts. Together, the two self-employed categories account for 75.3 percent of the working population. In seven districts, the proportion recorded as employees (from 11.6% to 21.4%) is higher than the regional figure (11.2%).

**Table 9.6: Employed population 15 years and older by employment status, district and locality**

Districts/Type of Locality	Total	Employee	Self-employed without employee(s)	Self-employed with employee(s)	Casual worker	Contributing family worker	Apprentice	Domestic employee (House help)	Other
<b>Total</b>									
All districts	875,003	11.2	72.5	2.8	1.5	9.8	1.6	0.6	0.1
South Tongu	35,973	11.6	67.6	2.5	2.1	14.2	1.3	0.5	0.2
Keta Municipal	57,674	12.4	70.9	3.8	3.4	6.9	2.1	0.5	0.1
Ketu South	67,762	12.6	72.9	3.5	3.2	4.6	2.5	0.7	0.1
Ketu North	42,741	8.7	77.3	2.0	1.9	8.0	1.5	0.5	0.2
Akatsi	57,511	7.6	77.3	2.2	0.6	10.1	1.6	0.5	0.1
North Tongu	61,507	8.9	72.3	2.1	1.6	13.2	1.0	0.6	0.2
Adaklu Anyigbe	27,195	8.1	78.5	1.7	0.8	8.7	1.1	0.8	0.2
Ho Municipal	113,874	21.4	65.2	3.8	1.3	5.6	2.1	0.4	0.1
South Dayi	17,894	13.5	74.1	2.2	1.2	7.0	1.4	0.4	0.1
North Dayi	36,783	14.4	74.8	3.3	1.0	4.5	1.4	0.5	0.1
Hohoe Municipal	104,235	13.9	73.4	2.8	1.5	5.8	1.8	0.7	0.1
Biakoye	29,663	6.7	77.4	2.2	0.5	11.3	1.1	0.6	0.1
Jasikan	25,980	10.4	74.3	1.9	0.9	10.3	1.5	0.5	0.2
Kadjebi	25,613	9.3	70.1	2.6	0.8	15.0	1.3	0.8	0.1
Krachi East	49,389	5.5	71.4	3.7	1.0	16.7	1.0	0.5	0.1
Krachi West	49,004	4.4	71.6	2.5	0.6	19.2	0.9	0.6	0.2
Nkwanta South	45,718	6.6	76.3	2.4	0.7	12.6	0.9	0.4	0.1
Nkwanta North	26,487	2.2	73.4	1.8	0.3	20.6	0.9	0.7	0.1
<b>Urban</b>									
All districts	279,734	20.6	64.8	4.2	1.9	5.2	2.7	0.5	0.2
South Tongu	4,703	31.7	53.3	8.0	2.2	1.7	2.4	0.6	0.1
Keta Municipal	30,067	15.6	65.4	4.2	4.1	7.1	3.0	0.5	0.1
Ketu South	30,614	15.9	71.0	3.8	2.8	2.8	2.8	0.7	0.1
Ketu North	13,998	14.9	74.6	2.7	1.9	3.1	2.2	0.4	0.1
Akatsi	13,493	18.0	66.8	3.8	1.2	5.9	3.8	0.4	0.1
North Tongu	15,144	19.6	67.0	3.6	2.3	4.7	2.1	0.4	0.4
Adaklu Anyigbe	2,905	18.6	70.8	2.5	1.5	3.7	1.8	0.5	0.6
Ho Municipal	48,570	35.3	51.0	5.8	1.6	2.8	3.0	0.4	0.1
South Dayi	6,531	15.3	73.1	2.4	1.4	5.6	1.7	0.4	0.0
North Dayi	11,303	24.7	65.1	4.6	1.1	1.8	2.3	0.3	0.1
Hohoe Municipal	41,070	22.8	65.3	4.1	1.6	2.8	2.8	0.6	0.2
Biakoye	9,457	9.5	73.2	2.6	0.6	11.5	1.9	0.6	0.2
Jasikan	6,613	18.7	68.9	2.0	1.3	5.6	2.4	0.7	0.3
Kadjebi	6,221	17.8	66.5	4.0	1.5	6.3	3.1	0.5	0.2
Krachi East	12,343	11.8	63.4	5.6	1.5	13.9	3.1	0.5	0.2
Krachi West	8,935	12.0	67.7	3.4	1.0	13.1	2.1	0.5	0.2
Nkwanta South	10,735	20.2	69.7	3.1	1.5	2.9	2.2	0.3	0.1
Nkwanta North	7,032	4.7	72.4	2.4	0.4	17.7	1.8	0.6	0.1

## Rural

District	Total	Employee	Self-employed without employee(s)	Self-employed with employee(s)	Casual worker	Contributing family worker	Apprentice	Domestic employee (House - help)	Other
<b>Rural</b>	595,26								
All districts	9	6.7	76.1	2.2	1.2	12.0	1.0	0.6	0.1
South Tongu	31,270	8.5	69.8	1.7	2.0	16.1	1.1	0.5	0.2
Keta Municipal	27,607	8.8	76.8	3.4	2.5	6.7	1.1	0.5	0.1
Ketu South	37,148	9.8	74.5	3.2	3.6	6.0	2.2	0.6	0.1
Ketu North	28,743	5.7	78.6	1.6	1.9	10.4	1.2	0.5	0.2
Akatsi	44,018	4.5	80.5	1.7	0.4	11.4	1.0	0.5	0.1
North Tongu	46,363	5.4	74.1	1.6	1.4	16.0	0.7	0.7	0.1
Adaklu Anyigbe	24,290	6.8	79.4	1.6	0.8	9.3	1.1	0.8	0.1
Ho Municipal	65,304	11.0	75.7	2.4	1.1	7.8	1.4	0.4	0.1
South Dayi	11,363	12.5	74.7	2.1	1.1	7.8	1.3	0.4	0.1
North Dayi	25,480	9.9	79.1	2.7	0.9	5.7	1.1	0.6	0.2
Hohoe Municipal	63,165	8.1	78.6	2.0	1.5	7.7	1.2	0.7	0.1
Biakoye	20,206	5.3	79.3	2.0	0.5	11.3	0.8	0.6	0.1
Jasikan	19,367	7.5	76.1	1.9	0.8	11.9	1.2	0.4	0.1
Kadjebi	19,392	6.6	71.3	2.1	0.6	17.7	0.7	0.9	0.1
Krachi East	37,046	3.4	74.1	3.1	0.8	17.6	0.4	0.5	0.1
Krachi West	40,069	2.7	72.4	2.3	0.6	20.5	0.6	0.7	0.2
Nkwanta South	34,983	2.5	78.3	2.1	0.5	15.6	0.5	0.5	0.1
Nkwanta North	19,455	1.3	73.8	1.5	0.2	21.6	0.6	0.8	0.1

Source: 2010 Population and Housing Census

### 9.3.3 Occupation of Employed Persons

Occupation refers to the type of work a person was engaged in during the seven days preceding Census Night, and those did not work but had a job to return to, as well as those unemployed who had worked before. The emphasis was on the work the person did during the reference period but not what he/she was trained to do.

Table 9.7 provides data on employed persons 15 years and older by occupation and sex. It shows that workers in skilled agriculture, forestry, and fishing constitute the largest occupational group (50.1%), followed by those in craft and related trades (17.6%), and in services and sales (16.6%). On the other hand, only a small proportion of employed persons are in the technical and associated professionals (1.2%) and managerial categories (1.7%).

For both sexes, skilled agricultural, forestry, and fishery work is the dominant occupation. There are more males in managerial and professional occupations (7.5%) than females (5.4%). On the other hand, the proportion of females engaged in services and sales as workers (26.2%) is higher than that of men (6.0%).

**Table 9.7: Employed persons 15 years and older by occupation and sex**

Occupation	Both sexes	Percent	Male	Percent	Female	Percent
All occupations	875,003	100.0	412,747	100.0	462,256	100.0
Managers	14,954	1.7	5,656	1.4	9,298	2.0
Professionals	40,798	4.7	25,238	6.1	15,560	3.4
Technicians and associated professionals	10,797	1.2	7,734	1.9	3,063	0.7
Clerical support	8,059	0.9	5,049	1.2	3,010	0.7
Service and sales	145,587	16.6	24,659	6.0	120,928	26.2
Skilled agricultural, forestry and fishery	438,522	50.1	234,888	56.9	203,634	44.1
Crafts and related trades	153,830	17.6	70,662	17.1	83,168	18.0
Plants and machine operators and assemblers	27,763	3.2	26,641	6.5	1,122	0.2
Elementary occupations	34,265	3.9	11,851	2.9	22,414	4.8
Other occupations	428	0.0	369	0.1	59	0.0

Source: 2010 Population and Housing Census

As shown in Table 9.8, the same occupational pattern occurs in most districts, with Nkwanta North (84.4%), Krachi West (75.3%), Nkwanta South (71.2%), and Krachi East (70.1%) having relatively high proportions of employed persons engaged as skilled agricultural, forestry, and fishery workers, followed by North Tongu (62.0%). However, in Ketu South a higher proportion of the employed are engaged in craft and related trades (31.0%), followed by services and sales (28.2%) and 17.3 percent are employed in skilled agricultural, forestry and fishery.

**Table 9.8: Employed persons 15 years and older by district and occupation**

District	Number	Total	Managers	Professionals	Technicians and associate professionals	Clerical support workers	Service and sales workers	Skilled agricultural forestry and fishery workers	Craft and related trades workers	Plant and machine operators and assemblers	Elementary occupations	Other occupations
All regions	875,003	100.0	1.7	4.7	1.2	0.9	16.6	50.1	17.6	3.2	3.9	0.0
South Tongu	35,973	100.0	1.7	4.6	1.1	0.7	15.9	46.4	20.5	3.3	5.6	0.0
Keta Municipal	57,674	100.0	2.3	4.6	1.2	1.0	21.8	34.8	25.4	3.1	5.9	0.0
Ketu South	67,762	100.0	2.0	4.1	2.2	1.6	28.2	17.3	31.0	5.2	8.3	0.1
Ketu North	42,741	100.0	1.8	3.6	1.1	0.6	16.7	47.1	19.8	4.6	4.7	0.0
Akatsi	57,511	100.0	1.1	3.7	0.7	0.7	13.5	60.7	13.7	3.2	2.7	0.0
North Tongu	61,507	100.0	1.1	3.9	0.9	0.5	12.7	62.0	12.8	2.8	3.3	0.0
Adaklu Anyigbe	27,195	100.0	1.1	3.7	1.0	0.5	13.6	58.0	17.3	2.4	2.4	0.0
Ho Municipal	113,874	100.0	2.7	8.1	2.1	2.1	21.9	34.4	20.3	4.2	4.1	0.2
South Dayi	17,894	100.0	1.8	6.3	1.5	1.0	19.8	43.5	18.6	3.1	4.4	0.0
North Dayi	36,783	100.0	3.2	6.3	1.5	1.0	21.5	38.1	19.4	3.8	5.1	0.0
Hohoe Municipal	104,235	100.0	2.0	6.6	1.5	1.1	19.3	43.5	18.0	3.8	4.2	0.0
Biakoye	29,663	100.0	1.2	3.8	1.0	0.4	13.5	60.4	14.9	2.2	2.6	0.0
Jasikan	25,980	100.0	1.3	4.5	1.1	0.7	14.3	57.3	14.1	3.3	3.3	0.0
Kadjebi	25,613	100.0	1.5	4.0	1.4	0.7	13.9	60.3	12.1	2.9	3.2	0.0
Krachi East	49,389	100.0	0.9	2.2	0.5	0.3	8.5	70.1	13.9	1.3	2.4	0.0
Krachi West	49,004	100.0	0.6	2.0	0.4	0.3	8.8	75.3	10.0	0.9	1.7	0.0
Nkwanta South	45,718	100.0	1.2	3.3	0.8	0.4	8.7	71.2	11.2	1.8	1.4	0.0
Nkwanta North	26,487	100.0	0.5	1.1	0.3	0.2	6.1	84.4	6.0	0.7	0.8	0.0

Source: 2010 Population and Housing Census

### 9.3.4 Employment Sector

This refers to the sector in which a person works. The employment sectors covered in the 2010 census were public, private formal, private informal, semi-public/parasatal, NGOs and international organizations. Table 9.9 shows the distribution of persons 15 years and older by sector of employment and sex. It indicates that the informal private sector is by far the largest employer of economically active persons in the region (90.6%), followed by public (government) sector (6.1%). Less than 1 percent of employees are in semi-public/parasatal (0.1%), NGOs (0.4%) or other international organization (0.0). A similar pattern is observed for the sexes, with more males than females employed across all the sectors.

**Table 9.9: Sector of employed persons 15 years and older, by sex**

Sector of employment	Sex of Employed Persons					
	Both sexes	Percent	Male	Percent	Female	Percent
All sectors	875,003	100.0	412,747	100.00	462,256	100.00
Public (government)	52,894	6.1	33,802	8.2	19,092	4.1
Private formal	24,982	2.9	17,016	4.1	7,966	1.7
Private informal	792,893	90.6	359,159	87.0	433,734	93.8
Semi-public/parastatal	766	0.1	520	0.1	246	0.1
NGOs (local and international)	3,317	0.4	2,119	0.5	1,198	0.2
Other international Organisations	151	0.0	131	0.0	20	0.0

Source: 2010 Population and Housing Census

### 9.3.5 Industry of Employed Persons

Table 9.10 shows the industrial activities of employed persons 15 years and older by sex. It indicates that agriculture, forestry and fishing is the largest industrial sector, employing more than 50.3 percent of the economically active population 15 years and older. The other two major industries are manufacturing (14.1%), and wholesale and retail trade, repair of motor vehicles and motorcycles (14.0%). For both sexes, these industries remain the major employers. However, the proportion of males in skilled agricultural, forestry, and fishing (57.3%) is higher than that of females (44.0%), while the opposite is the case for wholesale and retail trade (20.8% of females and 6.4% of males) and manufacturing (17.2% for females and 10.6% of males).



**Table 9.10: Economically active population 15 years and older by industry and sex**

Type of Industry	Both sexes	Male	Female
All industries	100.0	100.0	100.0
Agriculture, forestry and fishing	50.3	57.3	44.0
Mining and quarrying	0.2	0.2	0.1
Manufacturing	14.1	10.6	17.2
Electricity gas steam and air conditioning supply	0.1	0.2	0.0
Water supply; waste management and remediation activities	0.3	0.3	0.2
Construction	2.6	5.4	0.1
Wholesale and retail; repair of motor vehicles and motorcycles	14.0	6.4	20.8
Transportation and storage	2.6	5.4	0.2
Accommodation and food service activities	4.2	0.8	7.2
Information and communication	0.1	0.2	0.1
Financial and insurance activities	0.3	0.5	0.1
Real estate activities	0.0	0.0	0.0
Professional scientific and technical activities	0.4	0.6	0.3
Administrative and support service activities	0.3	0.5	0.2
Public administration and defence; compulsory social security	1.2	1.9	0.6
Education	3.8	5.0	2.8
Human health and social work activities	1.1	1.0	1.1
Arts, entertainment and recreation	0.4	0.8	0.1
Other service activities	3.5	2.5	4.3
Activities of households as employers; undifferentiated goods and services, producing activities of households for own use	0.4	0.4	0.5
Activities of extraterritorial organizations and bodies	0.0	0.0	0.0
Number	875,003	412,747	462,256

Source: 2010 Population and Housing Census

## 9.4 The Unemployed

The unemployed category comprises all persons aged 15 years and above who, during the reference period, were without work and had no fixed jobs; currently available for work; seeking work by taking specific steps to look for work (e.g. writing applications, visiting job sites, visiting employment agencies and seeking help from friends and relatives).

### 9.4.1 Unemployed Population by Age and Sex

Table 9.11 presents information on population 15 years and older by economic activity status and age group. The data show that unemployment is highest among the younger age group (15-34 years) and lowest among the 45-54 age group. For the sexes, the proportion of females that is unemployed is higher than that of males for all age groups. This observation may reflect socio-cultural factors that do not encourage girls to enrol and remain in school to the same extent as boys and this translates into fewer opportunities in the modern labour market for females than for males.

**Table 9.11: Population 15 years and older by age group and economic activity status**

Age group	Total			Employed			Unemployed			Not active		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	1,305,427	46.4	53.6	67.0	47.2	52.8	2.6	44.5	55.5	30.4	44.8	55.2
15-24	402,002	50.2	49.8	37.9	48.8	51.2	3.6	42.7	57.3	58.5	51.6	48.4
25-34	281,273	45.3	54.7	81.4	46.2	53.8	3.9	46.3	53.7	14.7	39.8	60.2
35-44	214,370	45.9	54.1	90.1	47.3	52.7	1.7	45.1	54.9	8.2	31.5	68.5
45-54	167,722	45.9	54.1	89.9	47.3	52.7	1.3	44.3	55.7	8.9	32.2	67.8
55-64	102,703	45.6	54.4	79.9	47.7	52.3	1.7	47.0	53.0	18.4	36.4	63.6
65+	137,357	39.4	60.6	49.3	45.7	54.3	0.5	42.8	57.2	50.2	33.1	66.9

Source: 2010 Population and Housing Census

### 9.4.2 Unemployed Population by District and Sex

Table 9.12 presents the distribution of unemployed persons by district and sex. The table indicates that more females (55.5%) than males (45.5%) are unemployed in the region. Among the districts, the proportion of the economically active male population that is unemployed is higher in Jasikan (51.4%), followed by Kadjebi (48.7%) and by Nkwanta North (46.1%), while Keta Municipal recorded the lowest proportion (37.8%). For females, the proportion of the economically active population unemployed is above 50 percent in all districts, with the exception of Jasikan (48.6%). Keta Municipal has a relatively high proportion of unemployed females (62.2%) compared to the other districts.

**Table 9.12: Unemployed population 15 years and older by district and sex**

District	Number	Both sexes	Male	Female
All Districts	33,557	100.0	44.5	55.5
South Tongu	1,528	100.0	42.4	57.6
Keta Municipal	4,008	100.0	37.8	62.2
Ketu South	3,204	100.0	44.2	55.8
Ketu North	1,313	100.0	42.0	58.0
Akatsi	1,370	100.0	45.4	54.6
North Tongu	2,167	100.0	47.3	52.7
Adaklu Anyigbe	1,001	100.0	47.3	52.7
Ho Municipal	6,768	100.0	46.5	53.5
South Dayi	834	100.0	42.1	57.9
North Dayi	2,321	100.0	43.8	56.2
Hohoe Municipal	4,259	100.0	46.1	53.9
Biakoye	723	100.0	44.7	55.3
Jasikan	703	100.0	51.4	48.6
Kadjebi	696	100.0	48.7	51.3
Krachi East	919	100.0	45.5	54.5
Krachi West	717	100.0	42.8	57.2
Nkwanta South	772	100.0	42.5	57.5
Nkwanta North	254	100.0	46.1	53.9

Source: 2010 Population and Housing Census

# CHAPTER TEN

## DISABILITY

### 10.1 Introduction

The prevention of disability and ensuring care for people with disability (PWDs) and helping them to become productive citizens is an important aspect of national development. The government has enacted the Disability Act to address issues of high poverty among PWDs due to low levels of education and lack of employable skills; inaccessible public transport; and unfriendly environmental facilities such as the widespread absence of ramps for PWDs and uncovered drains and gutters. This chapter aims at updating knowledge on prevalence and selected characteristics of persons with disability in the region.

### 10.2 Disability by age

The 2010 Population and Housing Census recorded a total of 91,767 persons with disability in the Volta Region, representing 4.3 percent of the total regional population (Table 10.1). The table shows that the proportion of persons with disability ranges from a low of 2.0 percent in Nkwanta North District to a high 11.3 percent in South Tongu District. The latter and seven other districts have rates of disability higher than the regional average – Keta (7.2%), Jasikan (7.2%), Biakoye (5.5%), South Dayi (5.4%), North Tongu (5.2%), Ho Municipal (4.9%) and North Dayi (4.7%). In addition, Table 10.1 presents the age pattern of disability. Across all the districts, the highest proportion of persons with disability are aged 65 years and over (26.1%), followed by children under 15 years (14.8%). It is worth noting that more than 10% of persons in all the other age groups are disabled. With the exception of Krachi West and Nkwanta North, all other districts have more than one in five people aged 65 years and older with some form disability. Nkwanta North recorded the largest proportion of children with disability (22.9%), while Keta has the lowest proportion (11.2%).

**Table 10.1: Persons with disability by age and district**

	Population	Prop.	All	0-14	15-24	25-34	35-44	45-54	55-64	65+	
	N.	of pop.	ages								
All districts	2,118,252	91,767	4.3	100.0	14.8	12.0	11.2	11.8	13.1	10.9	26.1
South Tongu	87,950	9,980	11.3	100.0	15.5	12.7	11.5	11.5	12.7	10.3	25.8
Keta Municipal	147,618	10,632	7.2	100.0	11.2	11.3	9.6	11.6	14.3	12.0	29.9
Ketu South	160,756	5,820	3.6	100.0	19.2	13.1	13.6	11.2	11.7	9.4	21.8
Ketu North	99,913	3,956	4.0	100.0	12.2	11.5	10.3	11.9	12.4	10.7	31.1
Akatsi	128,461	5,090	4.0	100.0	15.0	12.6	11.0	12.0	11.1	9.8	28.5
North Tongu	149,188	7,767	5.2	100.0	17.6	13.5	11.7	11.6	11.6	9.4	24.8
Adaklu Anyigbe	64,404	2,200	3.4	100.0	14.7	12.5	11.8	9.9	12.9	10.4	27.8
Ho Municipal	271,881	13,320	4.9	100.0	11.9	11.4	12.1	11.9	14.0	12.2	26.6
South Dayi	46,661	2,528	5.4	100.0	12.3	10.7	9.7	11.1	13.8	11.7	30.9
North Dayi	93,649	4,390	4.7	100.0	12.9	10.6	9.5	11.9	13.9	11.9	29.3
Hohoe Municipal	262,046	6,335	2.4	100.0	14.3	12.3	10.4	12.2	13.2	11.6	25.9
Biakoye	65,901	3,616	5.5	100.0	13.3	10.0	10.0	12.1	16.3	12.6	25.8
Jasikan	59,181	4,236	7.2	100.0	13.4	9.9	9.4	12.4	15.2	13.4	26.4
Kadjebi	59,303	1,335	2.3	100.0	14.7	9.8	11.0	11.8	12.4	11.5	28.8
Krachi East	116,804	2,769	2.4	100.0	21.3	14.2	13.3	13.0	12.4	9.1	16.6
Krachi West	122,105	4,083	3.3	100.0	20.5	13.8	12.7	13.0	12.3	7.7	20.0
Nkwanta South	117,878	2,428	2.1	100.0	19.4	13.5	12.6	11.2	12.8	8.7	21.8
Nkwanta North	64,553	1,282	2.0	100.0	22.9	12.3	14.3	12.4	10.3	9.2	18.6

Source: 2010 Population and Housing Census

### 10.3 Type of Disability

Table 10.2 shows the distribution of PWDs by type of disability at the district level. The data indicates that sight is the highest form of disability in the region (44.3%) followed by physical (26.6%) and emotional disability (21.1%). The other type of disability recorded the lowest (7.6%) in the region. Sight continues to be the most common type of disability in all the districts with Biakoye district recording the highest (60.9%) and Hohoe Municipal (26.0%) being the lowest. Hearing disability is highest in North Tongu and Ketu South (23.2%), followed by Nkwanta North (22.8%) with South Tongu recording the lowest (10.5%). Speech disability is highest in North Tongu and Ketu South (20.9%) followed by Hohoe Municipal (17.3%) with South Tongu recording the lowest (7.6%). Physical disability is highest in Kadjebi (35.1%) followed by Hohoe Municipal (34.6%) and Nkwanta North (32.7%). The district with the lowest rate of physical disability is South Tongu. Intellectual and Emotional disabilities are high in Ketu South. The other form of disability is the lowest among the types of disability in all the districts.

**Table 10.2: Persons with of disability by type and district**

District	Population	Persons with Disability							
		Number	Sight	Hearing	Speech	Physical	Intellectual	Emotional	Other
All District	2,118,252	91,767	44.3	15.6	13.5	26.6	16.8	21.1	7.6
South Tongu	87,950	9,980	47.0	10.5	7.6	15.3	18.2	28.1	4.7
Keta Municipal	147,618	10,632	43.1	13.7	9.2	23.1	15.6	26.7	7.6
Ketu South	160,756	5,820	48.0	23.2	20.9	31.9	27.2	25.9	12.3
Ketu North	99,913	3,956	49.7	14.3	11.1	30.8	11.5	12.5	5.8
Akatsi	128,461	5,090	36.9	15.3	16.2	27.6	15.8	16.7	8.1
North Tongu	149,188	7,767	57.0	23.2	20.9	30.6	21.4	27.8	8.3
Adaklu									
Anyigbe	64,404	2,200	44.0	15.9	14.5	32.3	14.7	12.1	13.7
Ho Municipal	271,881	13,320	42.1	15.2	14.7	29.5	16.0	25.6	7.0
South Dayi	46,661	2,528	50.0	14.1	9.6	24.4	12.9	15.7	7.0
North Dayi	93,649	4,390	37.9	11.4	11.5	29.6	13.8	20.7	5.3
Hohoe Municipal	262,046	6,335	26.0	14.7	17.3	34.6	23.7	17.2	10.5
Biakoye	65,901	3,616	60.9	12.1	11.1	20.4	11.2	7.6	7.5
Jasikan	59,181	4,236	54.4	14.1	9.8	19.4	11.1	20.5	5.5
Kadjebi	59,303	1,335	32.7	13.7	14.1	35.1	19.2	18.7	9.8
Krachi East	116,804	2,769	40.1	17.2	14.5	26.9	9.4	13.9	8.6
Krachi West	122,105	4,083	45.6	18.2	11.2	22.0	17.4	10.5	6.9
Nkwanta South	117,878	2,428	34.4	18.1	15.1	29.9	10.7	10.5	8.0
Nkwanta North	64,553	1,282	33.4	22.8	14.5	32.7	11.3	13.0	6.6

Source: 2010 Population and Housing Census

### 10.4 Disability by Sex

Table 10.2 provides the distribution of persons with disability, by sex and district. Generally, the proportion of persons with disability is higher among females (2.4%) than among males

(1.9%) across all the districts. South Tongu has the highest proportion of both males and females with disability (4.5% and 6.9% respectively). Krachi West and Hohoe Municipality reported equal proportions of persons with disability, while the proportions of both sexes with disability are substantially low in Nkwanta North and Nkwanta South.

**Table 10.3: Persons with disability by sex and district**

	Population	Total	No disability (%)			With a disability (%)			
			Total	Male	Female	Total	Total	Male	Female
All districts	2,118,252	2,026,485	95.7	46.2	49.5	91,767	4.3	1.9	2.4
South Tongu	87,950	77,970	88.7	41.0	47.6	9,980	11.3	4.5	6.9
Keta Municipal	147,618	136,986	92.8	43.5	49.3	10,632	7.2	2.9	4.3
Ketu South	160,756	154,936	96.4	45.4	51.0	5,820	3.6	1.6	2.0
Ketu North	99,913	95,957	96.0	44.9	51.1	3,956	4.0	1.7	2.3
Akatsi	128,461	123,371	96.0	44.3	51.7	5,090	4.0	1.7	2.2
North Tongu	149,188	141,421	94.8	44.8	50.0	7,767	5.2	2.3	2.9
Adaklu Anyigbe	64,404	62,204	96.6	47.0	49.6	2,200	3.4	1.6	1.9
Ho Municipal	271,881	258,561	95.1	45.3	49.8	13,320	4.9	2.2	2.7
South Dayi	46,661	44,133	94.6	45.2	49.4	2,528	5.4	2.3	3.2
North Dayi	93,649	89,259	95.3	45.4	49.9	4,390	4.7	2.1	2.5
Hohoe Municipal	262,046	255,711	97.6	47.0	50.6	6,335	2.4	1.2	1.2
Biakoye	65,901	62,285	94.5	47.5	47.1	3,616	5.5	2.7	2.8
Jasikan	59,181	54,945	92.8	46.0	46.9	4,236	7.2	3.3	3.9
Kadjebi	59,303	57,968	97.7	49.3	48.4	1,335	2.3	1.2	1.0
Krachi East	116,804	114,035	97.6	50.7	46.9	2,769	2.4	1.3	1.1
Krachi West	122,105	118,022	96.7	49.1	47.6	4,083	3.3	1.7	1.7
Nkwanta South	117,878	115,450	97.9	48.5	49.4	2,428	2.1	1.1	1.0
Nkwanta North	64,553	63,271	98.0	49.1	48.9	1,282	2.0	1.1	0.9

Source: 2010 Population and Housing Census

## 10.5 Disability and Marital Status

Although marriage is not the only avenue for social support, it is important for creating and maintaining expanded social networks for many people in many cultures. In Ghana, as elsewhere, marriage creates new ties with other kin groups, expanding the range of people from whom potential resources can be accessed by the disabled person in times of need.

Table 10.3 shows the distribution of persons with disability by marital status, sex and district. For the region as a whole, about one in five persons with disability have never married, 4.5 percent are in some form of union, 20 percent have once been married but are now separated (4.7%), divorced (7.4%) or widowed (20.4%).

**Table 10.4: Persons with disability by marital status, sex and district**

District	Never married (%)			Informal / Consensual union / Living together (%)			Married (%)			Separated (%)			Divorced (%)			Widowed (%)			
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
All districts	81,068	22.9	13.9	9.0	4.5	1.9	2.6	40.1	20.1	20.0	4.7	1.9	2.8	7.4	3.2	4.2	20.4	3.0	17.4
South Tongu	8,769	20.2	11.5	8.7	4.6	1.7	3.0	40.1	17.9	22.2	4.7	1.8	3.0	7.8	2.7	5.2	22.5	2.2	20.3
Keta Municipal	9,705	19.0	11.2	7.8	1.4	0.4	1.0	43.3	19.6	23.7	4.4	1.8	2.6	6.4	3.2	3.2	25.4	3.2	22.2
Ketu South	4,915	23.3	12.8	10.5	3.9	1.7	2.1	44.0	21.6	22.5	3.1	1.2	1.9	6.2	3.2	3.1	19.5	3.3	16.2
Ketu North	3,566	20.5	12.9	7.5	3.4	1.3	2.1	39.7	18.7	20.9	4.2	1.7	2.4	6.5	3.0	3.5	25.8	3.7	22.1
Akatsi	4,523	24.3	15.2	9.2	2.1	0.7	1.4	40.7	18.6	22.0	3.3	1.1	2.2	7.3	4.2	3.2	22.4	3.1	19.3
North Tongu	6,685	24.2	13.8	10.4	3.6	1.4	2.2	42.3	20.9	21.4	4.3	1.4	2.9	6.1	2.1	4.0	19.5	2.8	16.7
Adaklu Anyigbe	1,960	23.9	14.2	9.7	4.9	2.2	2.7	37.6	20.8	16.8	6.3	2.4	3.8	7.1	2.9	4.2	20.2	2.9	17.3
Ho Municipal	12,089	24.5	14.6	9.9	8.8	4.0	4.8	35.0	17.8	17.2	6.9	2.8	4.1	6.6	2.5	4.1	18.3	2.8	15.5
South Dayi	2,299	21.1	12.9	8.1	3.5	1.6	1.9	38.2	18.5	19.7	5.1	1.7	3.4	9.3	3.3	6.0	22.9	2.9	20.0
North Dayi	3,946	23.2	14.0	9.1	9.5	3.9	5.5	29.4	15.7	13.7	6.5	3.1	3.4	11.5	4.6	6.8	20.0	3.2	16.8
Hohoe Municipal	5,641	29.7	19.3	10.4	4.0	1.6	2.4	32.3	17.8	14.4	5.8	2.5	3.3	9.1	3.7	5.4	19.1	3.7	15.5
Biakoye	3,226	18.4	12.0	6.4	4.5	2.0	2.5	45.3	24.1	21.2	3.3	1.9	1.3	11.3	5.3	6.0	17.3	2.9	14.4
Jasikan	3,790	19.9	12.2	7.7	5.8	2.7	3.1	42.7	21.6	21.1	3.5	1.3	2.2	8.4	4.2	4.2	19.6	2.6	17.0
Kadjebi	1,170	25.6	16.4	9.1	2.0	1.1	0.9	41.2	24.3	16.9	6.8	3.4	3.4	6.7	4.4	2.3	17.8	4.1	13.7
Krachi East	2,300	28.4	18.1	10.3	6.5	2.8	3.7	43.0	25.3	17.7	2.4	1.1	1.3	7.3	3.7	3.6	12.3	2.7	9.7
Krachi West	3,404	24.5	16.0	8.5	1.5	1.0	0.6	48.8	27.5	21.3	2.4	1.2	1.2	6.0	2.4	3.6	16.8	2.1	14.7
Nkwanta South	2,046	25.2	16.5	8.7	1.9	1.1	0.8	45.6	26.3	19.3	3.9	1.3	2.6	5.4	2.6	2.8	18.0	3.8	14.2
Nkwanta North	1,034	23.0	16.2	6.9	1.2	0.4	0.8	56.0	32.4	23.6	2.6	1.4	1.3	3.8	1.9	1.8	13.4	1.9	11.5

Source: 2010 Population and Housing Census

## 10.5 Disability and Locality of Residence

The locality of residence of persons with disability has an impact on their ability to access social services. This is particularly critical in Ghana where most social service agencies are concentrated in urban areas. Table 10.5 shows the distribution of persons with disability by locality of residence and district. Overall, the table indicates that there are more persons with disability in the rural areas (4.7%) than in urban areas (3.6%). At district level, Jasikan has the highest percentage of persons with disability living in urban localities (6.9%), followed closely by Keta (6.8%), Adaklu Anyigbe (6.6%) and South Tongu (6.5%). The district with the lowest share of persons with disability in urban areas is Nkwanta North (1.4%). South Tongu has the highest proportion of all persons with disability in the region living in rural areas (12.1%), while Nkwanta South has the lowest proportion (2.1%).

**Table 10.5: Persons with disability by locality of residence**

District	Total			Urban			Rural		
	Total	Population	Percentage	Total	Population	Percentage	Total	Population	Percentage
All districts	2,118,252	91,767	4.3	713,735	25,797	3.6	1,404,517	65,970	4.7
South Tongu	87,950	9,980	11.3	11,310	740	6.5	76,640	9,240	12.1
Keta Municipal	147,618	10,632	7.2	78,699	5,338	6.8	68,919	5,294	7.7
Ketu South	160,756	5,820	3.6	74,834	2,428	3.2	85,922	3,392	3.9
Ketu North	99,913	3,956	4.0	34,196	832	2.4	65,717	3,124	4.8
Akatsi	128,461	5,090	4.0	31,884	841	2.6	96,577	4,249	4.4
North Tongu	149,188	7,767	5.2	43,410	1,794	4.1	105,778	5,973	5.6
Adaklu Anyigbe	64,404	2,200	3.4	6,797	447	6.6	57,607	1,753	3.0
Ho Municipal	271,881	13,320	4.9	120,349	4,439	3.7	151,532	8,881	5.9
South Dayi	46,661	2,528	5.4	18,122	759	4.2	28,539	1,769	6.2
North Dayi	93,649	4,390	4.7	29,558	930	3.1	64,091	3,460	5.4
Hohoe Municipal	262,046	6,335	2.4	105,612	1,997	1.9	156,434	4,338	2.8
Biakoye	65,901	3,616	5.5	22,373	1,090	4.9	43,528	2,526	5.8
Jasikan	59,181	4,236	7.2	16,342	1,125	6.9	42,839	3,111	7.3
Kadjebi	59,303	1,335	2.3	15,682	229	1.5	43,621	1,106	2.5
Krachi East	116,804	2,769	2.4	32,400	597	1.8	84,404	2,172	2.6
Krachi West	122,105	4,083	3.3	23,894	1,342	5.6	98,211	2,741	2.8
Nkwanta South	117,878	2,428	2.1	30,146	617	2.0	87,732	1,811	2.1
Nkwanta North	64,553	1,282	2.0	18,127	252	1.4	46,426	1,030	2.2

Source: 2010 Population and Housing Census

## 10.6 Disability and Educational Attainment

Generally, education enhances the employment opportunities of all persons in Ghana, including persons with disability. Consequently the government and various social welfare agencies have been implementing policies to improve access of persons with disability to education at all levels. Table 10.6 shows that 40.7 percent of persons with disability in the region have never attended school, while those who have been to school reached only the basic education level (46.9%). Far lower proportions have had vocational /technical/ commercial education (1.7%), post-secondary education (2.7%) and tertiary education (0.5%). The table shows wide differences in educational attainment across the districts. For instance, Nkwanta North has as high as seven out of 10 of persons with disability in the district with no education, compared to one out of four in Ho municipality and three out 10 in Hohoe municipality.

**Table 10.6: Persons 3 years and older with disability by level of education and district**

District	Total	Never attended	Pre-primary	Basic school	Secondary/SSS/SHS	Vocational/Technical/Commercial	Post-Secondary	Tertiary
All districts	89,448	40.7	2.8	46.9	4.7	1.7	2.7	0.5
South Tongu	9,718	44.7	2.9	46.0	3.0	0.9	2.1	0.4
Keta Municipal	10,409	42.7	2.2	45.0	4.8	2.0	2.8	0.5
Ketu South	5,627	39.1	3.8	46.9	6.0	1.0	2.4	0.8
Ketu North	3,874	53.6	2.2	38.3	3.1	1.1	1.5	0.2
Akatsi	4,953	52.6	2.4	39.1	3.0	0.9	1.7	0.2
North Tongu	7,514	42.9	3.8	45.2	4.9	0.9	2.0	0.3
Adaklu Anyigbe	2,136	43.5	2.9	46.3	5.0	0.8	1.0	0.5
Ho Municipal	13,082	24.6	2.3	57.5	6.8	3.2	4.6	1.2
South Dayi	2,474	32.9	2.7	54.0	4.5	1.9	3.2	0.8
North Dayi	4,326	31.5	2.8	55.4	4.2	2.1	3.5	0.5
Hohoe Municipal	6,176	29.1	2.3	54.6	5.6	3.2	4.5	0.7
Biakoye	3,522	32.6	2.9	55.5	4.6	1.3	2.6	0.4
Jasikan	4,148	33.2	2.4	52.8	5.3	2.6	3.1	0.6
Kadjebi	1,275	50.1	2.3	40.7	3.3	1.5	1.8	0.3
Krachi East	2,691	52.5	4.4	37.2	4.1	0.6	1.2	0.1
Krachi West	3,935	63.4	3.5	28.1	3.3	0.3	1.2	0.1
Nkwanta South	2,355	57.8	3.2	31.5	3.7	0.8	2.3	0.7
Nkwanta North	1,233	75.6	3.4	17.7	2.5	0.1	0.7	-

Source: 2010 Population and Housing Census

## 10.7 Disability and Economic Activity Status

Table 10.7 presents the economic activity status of persons with disability, by district. At regional level, the majority (54.1%) of persons with disability are employed, while 1.8 percent are unemployed and 43.8 percent are not economically active. With the exception of Keta, Ho, North Dayi, Hohoe and Kadjebi districts, more than 50 percent of persons with disabilities in all the other districts are employed. It is observed that Keta Municipal and Ketu South districts have the highest proportion of unemployed persons with disability (2.9% and 2.6% respectively), while Krachi West, Nkwanta North and Nkwanta South have all less than 1 percent of their populations with disability unemployed. The proportion that is not economically active ranges from 33 percent in Biakoye District 57.9 percent in Hohoe Municipality.



**Table 10.7: Persons 15 years and older with disability by economic activity status**

District	Economic Activity Status				
	N	%	Employed	Unemployed	Not active
All districts	78,171	100.0	54.1	1.8	44.0
South Tongu	8,436	100.0	60.8	2.1	37.1
Keta Municipal	9,436	100.0	48.9	2.9	48.2
Ketu South	4,702	100.0	57.5	2.6	39.9
Ketu North	3,474	100.0	53.8	1.3	44.9
Akatsi	4,327	100.0	56.6	1.3	42.1
North Tongu	6,403	100.0	60.0	1.9	38.0
Adaklu Anyigbe	1,876	100.0	55.6	1.0	43.4
Ho Municipal	11,735	100.0	49.8	2.2	48.0
South Dayi	2,217	100.0	52.1	1.5	46.4
North Dayi	3,825	100.0	43.4	2.3	54.3
Hohoe Municipal	5,428	100.0	40.0	1.7	58.4
Biakoye	3,134	100.0	65.5	1.2	33.3
Jasikan	3,670	100.0	64.3	1.0	34.7
Kadjebi	1,139	100.0	45.5	0.8	53.7
Krachi East	2,178	100.0	61.8	1.0	37.2
Krachi West	3,246	100.0	60.3	0.8	38.8
Nkwanta South	1,957	100.0	53.2	0.9	45.9
Nkwanta North	988	100.0	58.2	0.5	41.3

Source: 2010 Population and Housing Census

# CHAPTER ELEVEN

## AGRICULTURAL ACTIVITY

### 11.1 Introduction

Agriculture plays a vital role in the socio-economic development of the Volta Region. The region's economy is mainly rural and dominated by the agriculture sector, which employs about 74 percent of the economically active population. The key agricultural sub-sectors include crops, livestock, fisheries, agroforestry and non-traditional commodities. The average agricultural land holding is about 0.46 hectares. The farming practices in the region include mono-cropping, mixed cropping and mixed farming. This chapter presents analysis of data on the agricultural activities in the region, with a main focus on households in agriculture and types of farming.

### 11.2 Households in Agriculture

#### 11.2.1 Number of household members engaged in agriculture

The 2010 Population and Housing Census reported a total of 599,276 household members in agriculture in the Volta Region, out of which 116,507 are in the urban areas and 482,789 in the rural areas. At regional level, the majority of the population in agriculture is male (50.8%), while 49.2 percent are females (Table 11.1). The table further shows that there are more males in agriculture in urban localities (53.9%) than females (46.1%). On the other hand, there are equal proportions of males and females in agriculture in the rural areas (50.0% respectively). At district level, more males than females are in agriculture in urban areas across all districts, with the exception of Akatsi (49.2%) and North Tongu (48.4%). However, in the rural areas, females predominate in agriculture in 9 out of the 18 districts.

**Table 11.1: Number of household members engaged in agriculture by district, locality of residence and sex**

District	Total				Urban				Rural			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
All districts	599,276	100.0	50.8	49.2	116,507	100.0	53.9	46.1	482,769	100.0	50.0	50.0
South Tongu	24,900	100.0	46.3	53.7	992	100.0	50.7	49.3	23,908	100.0	46.1	53.9
Keta Municipal	25,033	100.0	49.0	51.0	11,048	100.0	52.4	47.6	13,985	100.0	46.3	53.7
Ketu South	18,240	100.0	52.7	47.3	3,476	100.0	55.6	44.4	14,764	100.0	52.0	48.0
Ketu North	27,781	100.0	49.5	50.5	5,726	100.0	53.7	46.3	22,055	100.0	48.5	51.5
Akatsi	43,235	100.0	43.5	56.5	4,569	100.0	49.2	50.8	38,666	100.0	42.9	57.1
North Tongu	54,980	100.0	46.9	53.1	8,896	100.0	48.4	51.6	46,084	100.0	46.6	53.4
Adaklu Anyigbe	21,857	100.0	49.9	50.1	1,285	100.0	54.2	45.8	20,572	100.0	49.6	50.4
Ho Municipal	62,200	100.0	50.5	49.5	12,531	100.0	54.5	45.5	49,669	100.0	49.5	50.5
South Dayi	13,104	100.0	49.9	50.1	3,257	100.0	51.2	48.8	9,847	100.0	49.5	50.5
North Dayi	24,476	100.0	50.3	49.7	4,321	100.0	54.7	45.3	20,155	100.0	49.3	50.7
Hohoe Municipal	80,547	100.0	52.0	48.0	21,430	100.0	54.4	45.6	59,117	100.0	51.1	48.9
Biakoye	23,519	100.0	52.6	47.4	6,028	100.0	54.2	45.8	17,491	100.0	52.1	47.9
Jasikan	19,488	100.0	53.0	47.0	3,619	100.0	54.7	45.3	15,869	100.0	52.6	47.4
Kadjebi	23,558	100.0	56.0	44.0	4,741	100.0	55.2	44.8	18,817	100.0	56.2	43.8
Krachi East	36,548	100.0	54.9	45.1	8,328	100.0	56.7	43.3	28,220	100.0	54.3	45.7
Krachi West	37,176	100.0	55.1	44.9	5,332	100.0	58.8	41.2	31,844	100.0	54.5	45.5
Nkwanta South	40,398	100.0	52.3	47.7	6,175	100.0	54.9	45.1	34,223	100.0	51.9	48.1
Nkwanta North	22,236	100.0	53.1	46.9	4,753	100.0	56.2	43.8	17,483	100.0	52.2	47.8

Source: 2010 Population and Housing Census

## 11.2.2 Households Engaged in Agriculture, Household Size and Household Heads

The total number of households engaged in agriculture in the region is 291,224, out of which 59,487 are in urban localities and 231,737 are in rural communities (Table 11.2). There are more males who are heads in agricultural households (68.2%) than females (31.8%) in the region. A similar pattern is observed in both the urban areas and rural areas across all the districts. However, among female household heads, relatively higher proportions of them are found in the southern districts compared to the northern districts. For example, fewer than one in five females are heads of their households in Krachi East, Krachi West, Nkwanta South and Nkwanta North, whereas the ratio is relatively higher in southern districts such as South Tongu, Keta Municipal, and Akatsi.

**Table 11.2: Households engaged in agriculture by district, locality and sex of head**

District	Total				Urban				Rural			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
All districts	291,224	100	68.2	31.8	59,487	100	69.7	30.3	231,737	100	67.8	32.2
South Tongu	11,546	100	56.1	43.9	424	100	68.6	31.4	11,122	100	55.6	44.4
Keta Municipal	12,961	100	58.7	41.3	5,523	100	61.3	38.7	7,438	100	56.8	43.2
Ketu South	8,353	100	67.8	32.2	1,386	100	70.6	29.4	6,967	100	67.3	32.7
Ketu North	16,304	100	60.9	39.1	3,598	100	63.1	36.9	12,706	100	60.3	39.7
Akatsi	23,878	100	55.4	44.6	2,680	100	61.5	38.5	21,198	100	54.6	45.4
North Tongu	22,250	100	60.8	39.2	3,870	100	59.8	40.2	18,380	100	61.0	39.0
Adaklu Anyigbe	10,052	100	69.2	30.8	781	100	67.2	32.8	9,271	100	69.3	30.7
Ho Municipal	35,195	100	64.9	35.1	7,108	100	68.9	31.1	28,087	100	63.9	36.1
South Dayi	6,242	100	61.9	38.1	1,686	100	62.7	37.3	4,556	100	61.7	38.3
North Dayi	13,606	100	61.8	38.2	2,336	100	69.0	31.0	11,270	100	60.3	39.7
Hohoe Municipal	41,263	100	69.2	30.8	11,028	100	71.4	28.6	30,235	100	68.4	31.6
Biakoye	11,122	100	71.0	29.0	3,012	100	71.0	29.0	8,110	100	71.1	28.9
Jasikan	9,933	100	72.6	27.4	1,953	100	70.9	29.1	7,980	100	73.0	27.0
Kadjebi	10,581	100	79.3	20.7	2,320	100	74.6	25.4	8,261	100	80.7	19.3
Krachi East	15,523	100	81.4	18.6	3,848	100	78.1	21.9	11,675	100	82.5	17.5
Krachi West	16,428	100	82.6	17.4	2,646	100	81.1	18.9	13,782	100	82.9	17.1
Nkwanta South	17,475	100	81.7	18.3	3,074	100	76.7	23.3	14,401	100	82.8	17.2
Nkwanta North	8,512	100	88.9	11.1	2,214	100	83.6	16.4	6,298	100	90.8	9.2

Source: 2010 Population and Housing Census

Table 11.3 shows that the average agricultural household size for the region is 4.8 persons. Among the districts, the average household size ranges from a low of 4.1 in Akatsi District to a high of 6.7 in Nkwanta North District. Generally the northern districts have relatively larger household sizes than the southern districts. For example, household sizes of 10 or more are common in Krachi East, Krachi West, Nkwanta North and Nkwanta South in the northern part of the region, whereas household sizes between one and three are more prevalent in southern districts such as Ho Municipality, Akatsi and Ketu North.

**Table 11.3: Households engaged in agriculture by household size and district**

District	Number of persons in household												Average
	Total	%	1	2	3	4	5	6	7	8	9	10+	
All districts	291,224	100.0	12.4	11.4	13.6	14.7	13.5	10.9	7.7	5.4	3.5	7.0	4.8
South Tongu	11,546	100.0	11.6	11.7	13.3	14.7	13.2	11.0	7.6	6.3	3.7	6.8	4.8
Keta Municipal	12,961	100.0	11.4	11.7	14.6	15.3	14.0	11.2	8.1	5.1	3.1	5.4	4.7
Ketu South	8,353	100.0	12.0	12.7	13.8	15.1	14.2	11.8	7.3	4.7	3.1	5.3	4.6
Ketu North	16,304	100.0	15.5	13.8	15.2	15.5	13.9	10.1	6.4	4.1	2.2	3.3	4.2
Akatsi	23,878	100.0	15.9	14.4	16.1	15.6	12.7	9.7	6.2	4.2	2.1	3.0	4.1
North Tongu	22,250	100.0	10.8	10.9	13.0	13.9	13.3	11.0	8.2	6.1	3.9	8.9	5.0
Adaklu Anyigbe	10,052	100.0	11.1	10.3	12.2	14.1	12.2	10.4	7.8	6.2	3.8	11.9	5.2
Ho Municipal	35,195	100.0	15.5	13.6	15.4	15.8	13.4	9.8	6.3	4.2	2.4	3.6	4.2
South Dayi	6,242	100.0	12.1	11.4	13.3	14.6	14.0	11.2	7.8	5.6	3.7	6.1	4.7
North Dayi	13,606	100.0	14.7	12.4	15.0	14.9	13.6	10.6	6.9	4.4	2.7	4.9	4.4
Hohoe Municipal	41,263	100.0	14.4	12.8	14.3	15.2	13.5	10.5	7.0	4.5	2.9	4.9	4.4
Biakoye	11,122	100.0	14.4	11.8	13.3	14.9	13.2	10.1	8.2	5.2	3.2	5.7	4.6
Jasikan	9,933	100.0	13.3	11.9	14.3	15.5	13.9	11.3	7.3	4.6	2.9	4.9	4.5
Kadjebi	10,581	100.0	13.6	11.0	12.4	15.0	13.7	11.2	7.9	5.5	3.0	6.8	4.7
Krachi East	15,523	100.0	7.9	8.0	11.0	13.1	13.4	12.3	9.3	7.1	5.7	12.0	5.7
Krachi West	16,428	100.0	6.9	6.4	10.0	12.2	13.9	12.6	10.1	7.9	6.1	13.9	6.0
Nkwanta South	17,475	100.0	7.2	7.4	11.1	13.9	14.9	12.9	9.9	7.3	5.0	10.6	5.6
Nkwanta North	8,512	100.0	3.1	4.3	8.9	11.9	12.7	11.7	10.9	9.6	6.5	20.3	6.7

Source: 2010 Population and Housing Census

Table 11.4 indicates that Volta Region has an aged population of agricultural household heads. The largest proportion of agricultural household heads are aged 70 years and older (13.2%), followed by those aged between 40 and 44 years (11.8%). Household heads in the southern districts tend to be older than those in the northern districts. For example, while less than 10 percent of agricultural household heads who are 70 years and older are found in Krachi East (9.2%), Nkwanta South (8.0%), and Nkwanta North (8.7%), the figure is higher in southern districts such as Keta (16.3%), South Tongu (17.3%) and Akatsi (17.8%).

As expected, very few agricultural household heads are young. Indeed, less than 1 percent (0.8%) of agricultural household heads are found in the youngest age group (15- 19 years). A similar picture of the age distribution of agricultural household heads is observed in the districts and in both rural and urban areas.

**Table 11.4: Households in agriculture by district, locality and age of head**

District	Total	%	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	291,224	100	0.8	3.3	7.1	9.9	11.2	11.8	11.4	11.4	7.7	7.5	4.8	13.2
South Tongu	11,546	100	0.8	3.2	7.3	9.3	10.2	10.8	10.4	10.6	7.1	8.1	4.8	17.3
Keta Municipal	12,961	100	0.6	2.1	4.5	7.5	9.7	10.5	12.1	12.8	8.8	8.6	6.5	16.3
Ketu South	8,353	100	0.7	2.6	5.5	8.9	11.0	12.1	12.8	11.5	7.8	7.9	5.8	13.2
Ketu North	16,304	100	0.9	3.3	6.4	8.3	10.8	11.1	11.5	12.1	7.3	7.9	4.9	15.4
Akatsi	23,878	100	1.1	3.7	6.8	8.7	9.9	10.7	11.1	10.8	7.5	7.1	4.9	17.8
North Tongu	22,250	100	1.2	4.1	7.6	9.8	10.8	11.1	10.5	10.6	6.9	7.2	4.4	15.8
Adaklu Anyigbe	10,052	100	0.9	4.0	8.2	9.8	11.2	11.3	10.4	11.0	7.3	7.6	4.4	14.0
Ho Municipal	35,195	100	0.5	2.6	6.1	8.2	10.2	11.2	12.1	12.6	9.2	8.7	5.7	13.0
South Dayi	6,242	100	1.1	3.4	6.6	8.9	10.5	10.6	11.2	11.6	7.9	8.1	5.6	14.6
North Dayi	13,606	100	0.5	2.3	5.4	8.6	10.6	11.0	11.1	12.0	8.9	9.1	5.8	14.6
Hohoe Municipal	41,263	100	0.6	2.9	6.7	9.0	10.7	12.0	11.8	11.8	8.6	8.0	5.4	12.5
Biakoye	11,122	100	0.8	3.2	7.1	9.9	11.8	11.8	12.4	11.9	7.8	7.7	4.6	11.0
Jasikan	9,933	100	0.8	2.9	6.9	9.6	11.8	11.6	11.6	11.1	8.7	7.5	5.3	12.2
Kadjebi	10,581	100	0.8	2.6	6.5	10.2	11.3	12.4	11.7	11.3	8.1	8.0	4.3	12.7
Krachi East	15,523	100	0.8	4.2	8.9	13.0	13.6	12.9	11.6	10.0	6.6	5.7	3.5	9.2
Krachi West	16,428	100	0.8	4.1	8.3	13.1	12.8	13.8	11.2	10.4	6.0	6.0	3.4	10.2
Nkwanta South	17,475	100	0.7	3.7	9.3	13.9	13.9	13.8	11.2	10.7	6.3	5.4	3.2	8.0
Nkwanta North	8,512	100	1.0	4.6	11.7	15.7	13.3	13.6	9.1	9.4	4.3	6.2	2.4	8.7
<b>Urban</b>														
All districts	59,487	100	0.9	3.3	7.1	10.4	11.6	12.1	11.6	11.8	8.4	7.2	4.6	10.9
South Tongu	424	100	0.2	5.0	8.3	13.2	12.7	12.7	13.2	8.0	7.8	4.0	5.7	9.2
Keta Municipal	5,523	100	0.7	2.1	4.7	7.9	9.6	10.3	11.6	12.9	9.4	8.9	6.5	15.4
Ketu South	1,386	100	1.2	3.0	5.8	9.5	12.1	12.8	12.7	10.8	8.4	6.9	5.3	11.5
Ketu North	3,598	100	0.6	2.8	5.8	7.5	11.2	10.6	10.5	13.3	7.8	9.7	5.4	14.9
Akatsi	2,680	100	1.5	3.6	8.4	10.1	11.5	12.5	12.0	11.7	8.2	6.0	3.9	10.6
North Tongu	3,870	100	1.1	4.3	7.0	9.5	9.9	11.1	11.2	11.7	8.5	7.7	4.7	13.4
Adaklu Anyigbe	781	100	1.0	4.2	8.6	11.9	8.3	11.0	10.5	10.4	9.6	6.4	4.7	13.3
Ho Municipal	7,108	100	0.6	2.9	6.5	9.6	11.0	11.5	11.8	13.0	10.1	7.8	5.4	9.8
South Dayi	1,686	100	1.4	2.8	5.3	6.8	9.7	11.4	11.2	12.3	8.8	8.5	6.1	15.8
North Dayi	2,336	100	0.5	2.3	6.1	10.2	12.0	10.7	12.4	12.7	10.3	8.3	4.2	10.3
Hohoe Municipal	11,028	100	0.7	3.3	7.8	10.8	12.2	12.6	12.3	11.8	8.2	7.1	4.3	8.7
Biakoye	3,012	100	1.3	4.0	7.6	11.2	13.1	12.2	11.4	12.3	8.1	7.0	4.1	7.7
Jasikan	1,953	100	0.9	3.1	7.6	9.8	11.8	10.6	10.7	11.3	10.8	7.2	5.1	11.1
Kadjebi	2,320	100	1.0	3.3	7.5	12.2	11.5	12.4	11.1	10.9	6.8	8.2	4.2	11.0
Krachi East	3,848	100	1.6	5.1	8.1	13.0	13.1	12.0	11.1	9.5	7.7	4.8	3.8	10.2
Krachi North	2,646	100	0.8	3.6	6.7	12.2	12.5	14.0	10.1	12.2	6.5	5.1	3.9	12.4
Nkwanta South	3,074	100	0.7	3.1	8.4	12.8	13.4	15.1	12.5	11.2	7.9	5.4	2.6	6.9
Nkwanta North	2,214	100	1.6	3.7	10.2	15.0	13.5	15.2	10.2	9.6	3.6	5.4	2.7	9.4

Source: 2010 Population and Housing Census

**Table 11.4: Households in agriculture by district, locality and age of head**

Rural														
District	Rural Pop	%	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	231,737	100	0.7	3.2	7.1	9.8	11.1	11.7	11.4	11.2	7.5	7.6	4.8	13.8
South Tongu	11,122	100	0.8	3.1	7.2	9.2	10.1	10.7	10.3	10.7	7.1	8.3	4.8	17.6
Keta Municipal	7,438	100	0.6	2.1	4.4	7.1	9.9	10.6	12.4	12.8	8.4	8.3	6.4	17.0
Ketu South	6,967	100	0.6	2.5	5.5	8.8	10.8	12.0	12.8	11.7	7.7	8.1	5.9	13.5
Ketu North	12,706	100	1.0	3.5	6.6	8.6	10.7	11.2	11.8	11.8	7.1	7.4	4.8	15.6
Akatsi	21,198	100	1.0	3.7	6.6	8.6	9.7	10.5	11.0	10.7	7.4	7.2	5.0	18.7
North Tongu	18,380	100	1.2	4.1	7.8	9.9	11.0	11.1	10.3	10.4	6.5	7.1	4.3	16.3
Adaklu Anyigbe	9,271	100	0.9	4.0	8.2	9.6	11.4	11.3	10.4	11.1	7.1	7.6	4.4	14.0
Ho Municipal	28,087	100	0.4	2.6	6.0	7.9	10.0	11.1	12.2	12.4	9.0	8.9	5.8	13.7
South Dayi	4,556	100	1.0	3.7	7.1	9.7	10.8	10.3	11.2	11.4	7.5	7.9	5.4	14.2
North Dayi	11,270	100	0.5	2.4	5.2	8.3	10.3	11.1	10.9	11.8	8.6	9.3	6.1	15.5
Hohoe Municipal	30,235	100	0.6	2.7	6.3	8.4	10.2	11.7	11.6	11.8	8.7	8.3	5.8	13.9
Biakoye	8,110	100	0.7	2.9	6.9	9.3	11.2	11.7	12.8	11.8	7.7	8.0	4.7	12.3
Jasikan	7,980	100	0.8	2.9	6.7	9.5	11.8	11.9	11.8	11.1	8.2	7.6	5.3	12.4
Kadjebi	8,261	100	0.8	2.4	6.2	9.7	11.3	12.4	11.9	11.4	8.5	8.0	4.3	13.2
Krachi East	11,675	100	0.6	3.9	9.2	12.9	13.8	13.2	11.8	10.1	6.2	6.0	3.3	8.9
Krachi North	13,782	100	0.9	4.2	8.6	13.3	12.9	13.7	11.4	10.0	6.0	6.2	3.3	9.7
Nkwanta South	14,401	100	0.6	3.8	9.5	14.1	14.0	13.5	10.9	10.7	5.9	5.4	3.3	8.2
Nkwanta North	6,298	100	0.8	4.9	12.2	16.0	13.2	13.1	8.7	9.4	4.6	6.5	2.3	8.4

Source: 2010 Population and Housing Census

### 11.3 Type of Farming Activities

Like other regions in Ghana, the majority of people in the Volta Region are engaged in agriculture. The region has substantial agricultural resources, which include large expanses of land suitable for general agriculture (i.e. cultivation of crops and animal rearing). With the Volta River and Volta Lake running the whole length of the region, there is also potential for fish farming. This section of the report examines types of crops cultivated, tree growing, livestock farming, and fish farming.

Table 11.5 presents data on the distribution of agricultural households by district and types of agricultural activities undertaken. The data show that out of the 291,224 agricultural households, 271,071 are engaged in crop farming, 1,850 are engaged in tree growing, 11,270 are engaged in livestock rearing, and 557 are engaged in fish farming. Thus the major agricultural activity in the region by far is crop farming, followed by livestock rearing. More male household heads are engaged in all the agricultural activities than females across all the districts. For both urban and rural areas, crop production ranks first in farming activities, followed by animal rearing in all the districts. The least widespread farming activity in the region is fish farming.

**Table 11.5: Households in agriculture, by district, locality, agricultural activity and sex of head**

District	All households in agriculture				Crop farming				Tree growing				Livestock rearing				Fish farming			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
All districts	291,224	100	68.2	31.8	271,017	100	69.4	30.6	1,850	100	77.2	22.8	114,270	100	69.4	30.6	557	100	84.2	15.8
South Tongu	11,546	100	56.1	43.9	10,419	100	57.2	42.8	70	100	65.7	34.3	4,387	100	57.5	42.5	80	100	87.5	12.5
Keta																				
Municipal	12,961	100	58.7	41.3	8,776	100	66.8	33.2	71	100	77.5	22.5	6,621	100	49.9	50.1	45	100	77.8	22.2
Ketu South	8,353	100	67.8	32.2	7,405	100	69.9	30.1	31	100	74.2	25.8	2,218	100	61.3	38.7	9	100	100.0	0.0
Ketu North	16,304	100	60.9	39.1	15,987	100	61.4	38.6	45	100	64.4	35.6	3,482	100	59.8	40.2	6	100	83.3	16.7
Akatsi	23,878	100	55.4	44.6	23,304	100	55.6	44.4	225	100	70.2	29.8	7,256	100	59.2	40.8	14	100	85.7	14.3
North Tongu	22,250	100	60.8	39.2	21,247	100	60.7	39.3	172	100	70.9	29.1	7,617	100	66.6	33.4	80	100	77.5	22.5
Adaklu																				
Anyigbe	10,052	100	69.2	30.8	9,694	100	69.7	30.3	151	100	71.5	28.5	4,088	100	72.9	27.1	8	100	100.0	0.0
Ho Municipal	35,195	100	64.9	35.1	32,641	100	66.0	34.0	225	100	78.7	21.3	12,769	100	65.3	34.7	51	100	78.4	21.6
South Dayi	6,242	100	61.9	38.1	5,820	100	62.8	37.2	56	100	73.2	26.8	2,799	100	62.8	37.2	13	100	92.3	7.7
North Dayi	13,606	100	61.8	38.2	12,352	100	63.2	36.8	64	100	79.7	20.3	6,149	100	61.8	38.2	7	100	85.7	14.3
Hohoe																				
Municipal	41,263	100	69.2	30.8	38,209	100	70.6	29.4	182	100	78.6	21.4	19,527	100	68.0	32.0	24	100	91.7	8.3
Biakoye	11,122	100	71.0	29.0	10,513	100	71.8	28.2	49	100	79.6	20.4	4,826	100	72.0	28.0	33	100	69.7	30.3
Jasikan	9,933	100	72.6	27.4	9,595	100	73.5	26.5	93	100	76.3	23.7	4,514	100	74.8	25.2	11	100	90.9	9.1
Kadjebi	10,581	100	79.3	20.7	10,057	100	81.0	19.0	43	100	81.4	18.6	6,492	100	79.8	20.2	11	100	100.0	0.0
Krachi East	15,523	100	81.4	18.6	14,399	100	82.0	18.0	145	100	87.6	12.4	6,473	100	82.9	17.1	85	100	90.6	9.4
Krachi West	16,428	100	82.6	17.4	15,178	100	83.2	16.8	98	100	90.8	9.2	7,667	100	85.4	14.6	19	100	78.9	21.1
Nkwanta																				
South	17,475	100	81.7	18.3	17,120	100	82.1	17.9	85	100	96.5	3.5	4,019	100	85.8	14.2	54	100	83.3	16.7
Nkwanta																				
North	8,512	100	88.9	11.1	8,301	100	89.3	10.7	45	100	73.3	26.7	3,366	100	92.3	7.7	7	100	100.0	0.0

Source: 2010 Population and Housing Census

**Table 11.5: Households in agriculture by district, locality, agricultural activity and sex of head**  
**Urban**

District	Urban households in agriculture				Crop farming				Tree growing				Livestock rearing				Fish farming			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
All districts	59,487	100	69.7	30.3	51,305	100	72.3	27.7	335	100	77.3	22.7	21,051	100	66.7	33.3	145	100	84.8	15.2
South Tongu Keta Municipal	424	100	68.6	31.4	312	100	71.2	28.8	1	100	100.0	0.0	194	100	68.0	32.0	11	100	81.8	18.2
Ketu South	5,523	100	61.3	38.7	3,913	100	69.4	30.6	39	100	76.9	23.1	2,730	100	51.0	49.0	25	100	76.0	24.0
Ketu North	1,386	100	70.6	29.4	1,061	100	75.3	24.7	2	100	100.0	0.0	399	100	57.4	42.6	6	100	100.0	0.0
Akatsi North	3,598	100	63.1	36.9	3,480	100	64.0	36.0	4	100	100.0	0.0	443	100	60.7	39.3	2	100	100.0	0.0
Tongu Adaklu Anyigbe Ho Municipal	2,680	100	61.5	38.5	2,464	100	62.3	37.7	12	100	58.3	41.7	564	100	62.2	37.8	4	100	50.0	50.0
South Dayi North Dayi Ho Municipal	3,870	100	59.8	40.2	3,335	100	60.0	40.0	41	100	68.3	31.7	1,321	100	64.1	35.9	38	100	78.9	21.1
Biakoye	781	100	67.2	32.8	721	100	68.5	31.5	4	100	100.0	0.0	234	100	66.7	33.3	0	-	-	-
Jasikan	7,108	100	68.9	31.1	5,498	100	73.1	26.9	57	100	84.2	15.8	2,739	100	63.6	36.4	24	100	87.5	12.5
Kadjebi	1,686	100	62.7	37.3	1,513	100	64.5	35.5	5	100	80.0	20.0	638	100	64.3	35.7	5	100	100.0	0.0
Krachi East	2,336	100	69.0	31.0	1,961	100	71.0	29.0	10	100	100.0	0.0	844	100	69.9	30.1	5	100	80.0	20.0
Krachi West Nkwanta South Nkwanta North	11,028	100	71.4	28.6	9,498	100	73.4	26.6	26	100	76.9	23.1	4,574	100	67.9	32.1	12	100	100.0	0.0
	3,012	100	71.0	29.0	2,798	100	72.2	27.8	6	100	66.7	33.3	893	100	69.2	30.8	0	-	-	-
	1,953	100	70.9	29.1	1,795	100	73.1	26.9	49	100	61.2	38.8	878	100	69.2	30.8	2	100	100.0	0.0
	2,320	100	74.6	25.4	2,080	100	78.3	21.7	12	100	58.3	41.7	1,047	100	71.9	28.1	1	100	100.0	0.0
	3,848	100	78.1	21.9	3,486	100	79.6	20.4	47	100	91.5	8.5	1,433	100	77.3	22.7	8	100	100.0	0.0
	2,646	100	81.1	18.9	2,352	100	82.7	17.3	6	100	66.7	33.3	901	100	80.5	19.5	0	-	-	-
	3,074	100	76.7	23.3	2,895	100	78.1	21.9	5	100	100.0	0.0	488	100	73.0	27.0	2	100	100.0	0.0
	2,214	100	83.6	16.4	2,143	100	84.3	15.7	9	100	88.9	11.1	731	100	87.4	12.6	0	-	-	-

Source: 2010 Population and Housing Census



**Table 11.5: Households in agriculture by district, locality, agricultural activity and sex of head  
Rural**

District	Rural households in agriculture				Crop farming				Tree growing				Livestock rearing				Fish farming			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
All districts	231,737	100	67.8	32.2	219,712	100	68.7	31.3	1,515	100	77.2	22.8	93,219	100	70.0	30.0	412	100	84.0	16.0
South Tongu Keta Municipal	11,122	100	55.6	44.4	10,107	100	56.8	43.2	69	100	65.2	34.8	4,193	100	57.0	43.0	69	100	88.4	11.6
Ketu South	7,438	100	56.8	43.2	4,863	100	64.7	35.3	32	100	78.1	21.9	3,891	100	49.2	50.8	20	100	80.0	20.0
Ketu North	6,967	100	67.3	32.7	6,344	100	69.0	31.0	29	100	72.4	27.6	1,819	100	62.2	37.8	3	100	100.0	0.0
Akatsi	12,706	100	60.3	39.7	12,507	100	60.7	39.3	41	100	61.0	39.0	3,039	100	59.7	40.3	4	100	75.0	25.0
North Tongu Adaklu Anyigbe	21,198	100	54.6	45.4	20,840	100	54.8	45.2	213	100	70.9	29.1	6,692	100	59.0	41.0	10	100	100.0	0.0
Ho Municipal	18,380	100	61.0	39.0	17,912	100	60.8	39.2	131	100	71.8	28.2	6,296	100	67.1	32.9	42	100	76.2	23.8
South Dayi	9,271	100	69.3	30.7	8,973	100	69.8	30.2	147	100	70.7	29.3	3,854	100	73.3	26.7	8	100	100.0	0.0
North Day Hohoe Municipal	28,087	100	63.9	36.1	27,143	100	64.6	35.4	168	100	76.8	23.2	10,030	100	65.8	34.2	27	100	70.4	29.6
Biakoye	4,556	100	61.7	38.3	4,307	100	62.2	37.8	51	100	72.5	27.5	2,161	100	62.4	37.6	8	100	87.5	12.5
Jasikan	11,270	100	60.3	39.7	10,391	100	61.7	38.3	54	100	75.9	24.1	5,305	100	60.5	39.5	2	100	100.0	0.0
Kadjebi	30,235	100	68.4	31.6	28,711	100	69.6	30.4	156	100	78.8	21.2	14,953	100	68.0	32.0	12	100	83.3	16.7
Krachi East	8,110	100	71.1	28.9	7,715	100	71.7	28.3	43	100	81.4	18.6	3,933	100	72.6	27.4	33	100	69.7	30.3
Krachi West Nkwanta	7,980	100	73.0	27.0	7,800	100	73.6	26.4	44	100	93.2	6.8	3,636	100	76.1	23.9	9	100	88.9	11.1
South Nkwanta	8,261	100	80.7	19.3	7,977	100	81.7	18.3	31	100	90.3	9.7	5,445	100	81.3	18.7	10	100	100.0	0.0
North	11,675	100	82.5	17.5	10,913	100	82.7	17.3	98	100	85.7	14.3	5,040	100	84.4	15.6	77	100	89.6	10.4
	13,782	100	82.9	17.1	12,826	100	83.2	16.8	92	100	92.4	7.6	6,766	100	86.1	13.9	19	100	78.9	21.1
	14,401	100	82.8	17.2	14,225	100	83.0	17.0	80	100	96.3	3.8	3,531	100	87.6	12.4	52	100	82.7	17.3
	6,298	100	90.8	9.2	6,158	100	91.0	9.0	36	100	69.4	30.6	2,635	100	93.7	6.3	7	100	100.0	0.0

Source: 2010 Population and Housing Census

### 11.3.1 Crop Farming

As indicated earlier, crop production is the dominant type of farming activity in the region. Crop farming practices include mixed cropping, inter-cropping, and mono-cropping. Table 11.6 shows that the most common farming practice is inter-cropping (39.5%), while mixed cropping is relatively less popular (24.8%). However, as can be seen from the table, the type of farming practice adopted depends on the type of crop. For example, cocoyam farming tends to utilize mixed farming, while the farming practice adopted for ginger, tree planting and coffee production tends to be mono-cropping.

The table further indicates that a wide variety of crops are produced in the region, including staples such as yam, cocoyam, millet, sorghum, cassava, garden eggs, and plantain. Non-traditional crops meant for export include cocoa, apples, black pepper, cashew, nuts, ginger, pineapple, pawpaw, and mangoes. The highest proportion of farms produce maize (30.9%), followed by cassava (30.6%), and yam (8.7%).

**Table 11.6: Type of crop by number of farms and type of cropping**

Type of Crop	Total farms	Mixed cropping	Inter-cropping	Mono-cropping	Mixed cropping %	Inter-cropping %	Mono-cropping %
All farms	697,859	172,875	275,450	249,534	24.8	39.5	35.8
Agro-forestry (tree planting)	2,186	234	365	1,587	10.7	16.7	72.6
Alligator pepper	636	268	150	218	42.1	23.6	34.3
Apples	375	102	123	150	27.2	32.8	40.0
Asian vegetables (e.g. tinda, cauliflower)	483	186	155	142	38.5	32.1	29.4
Avocado	227	91	53	83	40.1	23.3	36.6
Banana	3,746	1,673	1,185	888	44.7	31.6	23.7
Beans	10,796	4,814	2,567	3,415	44.6	23.8	31.6
Black pepper	496	105	125	266	21.2	25.2	53.6
Blackberries	67	42	20	5	62.7	29.9	7.5
Cabbage	198	67	63	68	33.8	31.8	34.3
Carrot	809	222	225	362	27.4	27.8	44.7
Cashew	940	208	345	387	22.1	36.7	41.2
Cassava	213,207	42,471	105,027	65,709	19.9	49.3	30.8
Citronella	375	86	177	112	22.9	47.2	29.9
Citrus	644	150	212	282	23.3	32.9	43.8
Cocoa	19,759	4,458	4,663	10,638	22.6	23.6	53.8
Coconut	1,142	240	420	482	21.0	36.8	42.2
Cocoyam / Taro ( <i>kooko</i> )	477	214	139	124	44.9	29.1	26.0
Coffee	751	159	136	456	21.2	18.1	60.7
Cola	395	200	106	89	50.6	26.8	22.5
Cotton	127	35	68	24	27.6	53.5	18.9
Cucumber	1,124	239	471	414	21.3	41.9	36.8
Eggplant	197	59	70	68	29.9	35.5	34.5
Garlic	47	15	17	15	31.9	36.2	31.9
Garden eggs	3,052	1,070	850	1,132	35.1	27.9	37.1
Ginger	1,184	155	135	894	13.1	11.4	75.5
Groundnut	22,644	6,223	7,188	9,233	27.5	31.7	40.8
Guava	289	74	86	129	25.6	29.8	44.6
Kenaf	146	29	60	57	19.9	41.1	39.0
Lemon grass	92	26	30	36	28.3	32.6	39.1
Lettuce	113	30	46	37	26.5	40.7	32.7

**Table 11.6: Type of crop, by number of farms and type of cropping (contd)**

Type of Crop	Total farms	Mixed cropping	Inter-cropping	Mono-cropping	Mixed cropping %	Inter-cropping %	Mono-cropping %
Maize	215,423	42,848	97,105	75,470	19.9	45.1	35.0
Mango	786	171	172	443	21.8	21.9	56.4
Melon ( <i>agusi</i> )	420	210	134	76	50.0	31.9	18.1
Millet	2,148	1,025	523	600	47.7	24.3	27.9
Nutmeg	202	40	64	98	19.8	31.7	48.5
Oil palm	12,497	2,063	1,975	8,459	16.5	15.8	67.7
Okro	16,138	7,502	4,413	4,223	46.5	27.3	26.2
Onions	1,204	436	225	543	36.2	18.7	45.1
Pawpaw	471	130	201	140	27.6	42.7	29.7
Peas	353	163	90	100	46.2	25.5	28.3
Pepper	37,678	13,569	9,427	14,682	36.0	25.0	39.0
Pineapple	732	176	208	348	24.0	28.4	47.5
Plantain	14,731	5,841	4,802	4,088	39.7	32.6	27.8
Potatoes	1,591	708	247	636	44.5	15.5	40.0
Rice	13,704	2,582	1,819	9,303	18.8	13.3	67.9
Rubber	28	13	4	11	46.4	14.3	39.3
Shallots	3,082	1,113	1,000	969	36.1	32.4	31.4
Sorghum	116	46	25	45	39.7	21.6	38.8
Soya beans	416	105	125	186	25.2	30.0	44.7
Spinach	193	63	57	73	32.6	29.5	37.8
Sunflower	36	9	17	10	25.0	47.2	27.8
Sweet pepper	110	50	12	48	45.5	10.9	43.6
Sweet potatoes	875	227	211	437	25.9	24.1	49.9
Tiger nuts	323	146	102	75	45.2	31.6	23.2
Tobacco	722	280	193	249	38.8	26.7	34.5
Tomatoes	13,868	5,130	3,574	5,164	37.0	25.8	37.2
Watermelon	312	78	97	137	25.0	31.1	43.9
Yam	60,525	20,555	20,863	19,107	34.0	34.5	31.6
Other	2,817	631	414	1,772	22.4	14.7	62.9

Source: 2010 Population and Housing Census

Table 11.7 shows the distribution of households by locality of residence and crops cultivated. Overall, 83.1 percent of all crops are cultivated by households in rural areas compared to only 16.9 percent in urban areas. For example 9 out of 10 rural households cultivate such crops as banana, blackberries, coffee, cola, garlic, millet, sugarcane, sweet pepper and tobacco. Crops which are produced more by urban households than rural households are shallots (55.7% urban and 44.3% rural) and onions (54.1% urban and 45.9% rural).

### 11.3.2 Livestock Farming

The distribution of the livestock by locality is provided in Table 11.8. The 2010 census counted a total of 183,476 agricultural holdings in the Volta Region, of which 82.7 percent are in the rural areas compared to 17.4 percent in urban areas. The census also reports a total of 3,045,352 livestock of different species. An overwhelming proportion (81.2%) of livestock rearing occurs in the rural areas, with the exception of fish farming. Poultry takes the largest share of livestock production (54.2%), followed by goat rearing (18.4%) and sheep rearing (7.0%). Marine fishing is the least prevalent agricultural activity, at 0.12% of livestock production in the region.

**Table 11.7: Distribution of households by locality and crop cultivated**

Type of Crop	Households			Percentage	
	Total	Urban	Rural	Urban	Rural
All crops	614,691	104,179	510,512	16.9	83.1
Agroforestry	1,850	335	1,515	18.1	81.9
Alligator pepper	552	108	444	19.6	80.4
Apples	320	32	288	10.0	90.0
Asian vegetables	456	68	388	14.9	85.1
Avocado	215	27	188	12.6	87.4
Banana	3,591	265	3,326	7.4	92.6
Beans	9,980	1,404	8,576	14.1	85.9
Black pepper	464	57	407	12.3	87.7
Blackberries	62	5	57	8.1	91.9
Cashew	902	156	746	17.3	82.7
Cassava	183,324	28,852	154,472	15.7	84.3
Citronella	349	115	234	33.0	67.0
Citrus	604	147	457	24.3	75.7
Cloves	95	16	79	16.8	83.2
Cocoa	18,437	2,399	16,038	13.0	87.0
Coconut	1,103	251	852	22.8	77.2
Cocoyam	4,616	782	3,834	16.9	83.1
Cocoyam / Taro ( <i>kooko</i> )	452	77	375	17.0	83.0
Coffee	713	19	694	2.7	97.3
Cola	379	26	353	6.9	93.1
Cotton	122	23	99	18.9	81.1
Cucumber	1,093	157	936	14.4	85.6
Eggplant	165	24	141	14.5	85.5
Garlic	46	4	42	8.7	91.3
Garden eggs	2,941	546	2,395	18.6	81.4
Ginger	1,134	131	1,003	11.6	88.4
Groundnuts	20,290	3,027	17,263	14.9	85.1
Guava	277	56	221	20.2	79.8
Kenaf	137	23	114	16.8	83.2
Mango	734	217	517	29.6	70.4
Melon ( <i>agusi</i> )	396	63	333	15.9	84.1
Millet	2,024	198	1,826	9.8	90.2
Mushroom	60	17	43	28.3	71.7
Nutmeg	177	31	146	17.5	82.5
Oil palm	11,940	1,835	10,105	15.4	84.6
Okro	14,805	2,510	12,295	17.0	83.0
Onions	1,118	605	513	54.1	45.9
Pawpaw	454	83	371	18.3	81.7
Peas	324	73	251	22.5	77.5
Pepper	33,862	4,380	29,482	12.9	87.1
Pineapple	700	171	529	24.4	75.6
Plantain	13,901	2,236	11,665	16.1	83.9
Potatoes	1,503	181	1,322	12.0	88.0
Shallots	2,830	1,576	1,254	55.7	44.3
Shea tree	44	16	28	36.4	63.6
Sorghum	112	28	84	25.0	75.0
Soya beans	393	73	320	18.6	81.4
Spinach	188	42	146	22.3	77.7
Sugarcane	3,811	244	3,567	6.4	93.6
Sunflower	36	8	28	22.2	77.8
Sweet pepper	88	8	80	9.1	90.9
Sweet potatoes	831	145	686	17.4	82.6

**Table 11.7: Distribution of households, by locality and crop cultivated (contd)**

Type of Crop	Households			Percentage	
	Total	Urban	Rural	Urban	Rural
Tiger nuts	303	18	285	5.9	94.1
Tobacco	652	61	591	9.4	90.6
Tomatoes	12,865	3,401	9,464	26.4	73.6
Watermelon	296	81	215	27.4	72.6
Yam	54,523	10,533	43,990	19.3	80.7
Other crops	2,615	540	2,075	20.7	79.3

Source: 2010 Population and Housing Census

**Table 11.8: Distribution of livestock by locality and number of holdings/livestock**

	Number. of holdings					Total livestock				
	Total	Urban	Rural	% Urban	% Rural	Total	Urban	Rural	% Urban	% Rural
Total	183,476	31,862	151,614	17.4	82.6	3,045,352	571,689	2,473,663	18.8	81.2
Beehives	296	28	268	9.5	90.5	10,664	375	10,289	3.5	96.5
Cattle	6,197	873	5,324	14.1	85.9	257,583	37,539	220,044	14.6	85.4
Chickens	80,818	14,175	66,643	17.5	82.5	1,650,123	294,309	1,355,814	17.8	82.2
Dove	587	148	439	25.2	74.8	15,451	3,894	11,557	25.2	74.8
Duck	6,841	2,223	4,618	32.5	67.5	75,571	25,691	49,880	34.0	66.0
Goat	56,644	9,573	47,071	16.9	83.1	561,397	105,024	456,373	18.7	81.3
Grasscutter	486	160	326	32.9	67.1	9,263	1,884	7,379	20.3	79.7
Guinea fowl	3,297	459	2,838	13.9	86.1	62,234	8,433	53,801	13.6	86.4
Ostrich	302	57	245	18.9	81.1	4,340	693	3,647	16.0	84.0
Pig	4,211	791	3,420	18.8	81.2	62,971	13,706	49,265	21.8	78.2
Rabbit	281	137	144	48.8	51.2	5,369	2,109	3,260	39.3	60.7
Sheep	20,266	2,470	17,796	12.2	87.8	212,518	32,519	179,999	15.3	84.7
Silkworm	279	53	226	19.0	81.0	4,714	749	3,965	15.9	84.1
Snail	125	19	106	15.2	84.8	8,247	2,809	5,438	34.1	65.9
Turkey	671	185	486	27.6	72.4	7,969	3,467	4,502	43.5	56.5
Other	1,559	349	1,210	22.4	77.6	13,703	3,019	10,684	22.0	78.0
Fish farming	326	106	220	32.5	67.5	58,146	31,839	26,307	54.8	45.2
Inland fishing	231	34	197	14.7	85.3	21,503	2,942	18,561	13.7	86.3
Marine fishing	59	22	37	37.3	62.7	3,586	688	2,898	19.2	80.8

Source: 2010 Population and Housing Census

# **CHAPTER TWELVE**

## **HOUSING CONDITIONS**

### **12.1 Introduction**

The concept of household is used to identify and group persons in a unit of enumeration. The adopted working definition used in the 2010 Population and Housing Census defines a household as consisting of “a person or group of persons living together in the same house or compound, sharing the same housekeeping arrangements and being catered for as one unit”. It covers those persons joined together in an arrangement to provide food, shelter, and other basic residential necessities. Each household has a head, recognised as such by members, who may or may not be the chief breadwinner. People in households have varied living arrangements, along and cultural and ethnic lines and according to housing conditions. This chapter provides information on types of housing and housing facilities in the Volta Region.

### **12.2 Housing Stock**

The distribution of housing stock and households in the region is presented in Table 12.1. The table indicates that the total stock of houses in the region is 399,953, of which the highest proportion is located in the rural areas (72.2%) compared with urban areas (27.8%). The district distribution shows that Ho Municipality (13.5%) has the highest proportion of houses, followed by Hohoe Municipality (11.5%) and Akatsi District (7.6%). Together these three districts share about 32.6 percent of all houses in the region. Meanwhile, North Tongu (6.8%), Ketu South (6.3%), Ketu North (5.9%) and Krachi West (5.5%) together have only 24.5 percent of houses and less than 20.0 percent of households in the region.

The data further show that the average population per house in the region of 5.3 is lower than the national average of 7.3. There are wide variations in population per house by district, ranging from a low of 3.8 in Akatsi District to a high of 8.4 in Nkwanta North District. Overall, districts with the largest share of the region’s housing stock also account for the largest share of households. In essence, districts with a larger than average regional share of houses also have a larger than average size of household. Also worth noting is that the average household size in the region does not vary much among the districts. For the region as a whole, the average household size is 4.2 with variation from 3.6 in Ho Municipality to 6.4 in Nkwanta North.

**Table 12.1: Stock of houses and households by District**

	Total 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
	2,118,25							
All districts	2	399,953	495,603	100	72.2	1.2	5.3	4.2
South Tongu	87,950	18,001	20,509	4.5	90.4	1.1	4.9	4.2
Keta Municipal	147,618	30,309	37,705	7.6	50.0	1.2	4.9	3.8
Ketu South	160,756	25,180	39,119	6.3	61.8	1.6	6.4	4
Ketu North	99,913	23,701	26,437	5.9	71.2	1.1	4.2	3.7
Akatsi	128,461	33,440	33,762	8.4	82.5	1.0	3.8	3.8
North Tongu	149,188	27,302	31,573	6.8	77.7	1.2	5.5	4.7
Adaklu Anyigbe	64,404	12,067	13,109	3.0	90.6	1.1	5.3	4.9
Ho Municipal	271,881	54,178	73,703	13.5	67.2	1.4	5.0	3.6
South Dayi	46,661	8,716	10,761	2.2	61.8	1.2	5.4	4.3
North Dayi	93,649	18,541	23,669	4.6	74.9	1.3	5.1	3.9
Hohoe Municipal	262,046	46,065	65,858	11.5	70.1	1.4	5.7	3.9
Biakoye	65,901	12,517	15,226	3.1	72.3	1.2	5.3	4.3
Jasikan	59,181	11,644	14,034	2.9	75.2	1.2	5.1	4.2
Kadjebi	59,303	10,623	13,303	2.7	76.4	1.3	5.6	4.4
Krachi East	116,804	19,724	22,289	4.9	72.9	1.1	5.9	5.2
Krachi West	122,105	22,152	21,824	5.5	81.0	1.0	5.5	5.5
Nkwanta South	117,878	18,114	22,733	4.5	74.6	1.3	6.5	5.1
Nkwanta North	64,553	7,679	9,989	1.9	68.9	1.3	8.4	6.4

Source: 2010 Population and Housing Census

## 12.3 Type of Dwelling

### 12.3.1 Type of dwelling by district

According to Table 12.2, a total of 550,006 dwelling units were identified in the Volta Region during the 2010 census, both occupied and unoccupied. The main type of dwelling is the separate house (45.8%). A room in a compound house is the second most common type of dwelling (41%), followed by the semi-detached unit (6.5%). Flats/apartments are not common (1.5%). Makeshift dwelling units such as tents (0.2%), kiosks and containers (0.4%), attachments to shops or offices (0.4%) together constitute 1.0 percent of dwelling units.



**Table 12.2: Type of dwelling by district**

District	Total dwelling units	Separate house	Semi-detached house	Flat/apartment	Compound house (rooms)	Huts/buildings (same compound)	Huts/buildings (different compound)	Tent	Improvise d home (kiosk/container)	Uncompleted building	Other
All districts	550,006	45.8	6.5	1.5	41.0	3.1	0.6	0.2	0.4	0.6	0.1
South Tongu	23,525	44.0	4.0	0.7	47.4	2.0	0.3	0.3	0.4	0.5	0.1
Keta Municipal	41,090	41.8	6.8	2.0	44.6	2.8	0.6	0.3	0.2	0.6	0.1
Ketu South	41,527	29.3	6.1	1.4	58.4	2.5	0.8	0.6	0.2	0.4	0.1
Ketu North	30,398	42.8	5.6	1.0	42.2	6.5	0.9	0.1	0.1	0.3	0.1
Akatsi	40,175	59.4	2.6	0.6	33.7	1.7	0.9	0.2	0.2	0.6	0.1
North Tongu	35,719	55.6	7.1	1.4	29.0	4.2	0.8	0.2	0.3	0.7	0.7
Adaklu Anyigbe	14,765	58.3	3.4	1.2	28.1	6.2	1.4	0.2	0.2	0.7	0.1
Ho Municipal	80,868	42.0	5.8	2.7	44.3	2.6	0.6	0.1	0.6	0.8	0.2
South Dayi	11,888	52.6	4.5	2.0	36.8	2.2	0.1	0.1	0.9	0.5	0.1
North Dayi	25,429	43.6	6.6	1.2	43.1	3.3	0.5	0.1	0.4	0.8	0.0
Hohoe Municipal	72,064	39.6	8.1	1.3	47.1	1.9	0.3	0.2	0.4	0.8	0.1
Biakoye	16,495	55.8	8.5	1.0	30.3	3.2	0.2	0.2	0.3	0.4	0.0
Jasikan	16,848	48.0	5.5	1.6	41.0	1.7	0.4	0.1	1.1	0.3	0.1
Kadjebi	14,468	44.9	7.7	1.5	42.2	2.4	0.4	0.2	0.2	0.4	0.0
Krachi East	24,198	52.7	6.9	2.5	28.4	7.2	1.2	0.2	0.4	0.2	0.1
Krachi West	25,474	56.5	1.6	1.1	21.0	4.0	0.3	0.2	0.4	0.3	0.1
Nkwanta South	24,382	49.9	4.8	0.8	40.0	2.5	0.8	0.1	0.1	0.6	0.1
Nkwanta North	10,693	34.3	7.3	2.1	52.3	1.6	1.5	0.3	0.2	0.4	0.0

Source: 2010 Population and Housing Census

### 12.3.2 Material of Outer Walls

Table 12.3 shows that in the Volta Region, walls of dwelling units are made of two main construction materials: mud brick/earth (48.1%) and cement block/concrete (45.6%). Walls made of thatch/palm leaf, (2.1%), sandcrete/landcrete (1.4%) and wood (0.9%) are not common. The use of mud brick/earth for walls accounts for over 50 percent of dwelling units in two thirds of the 18 districts in the region, but only 14.7 percent in Ketu South and 10.1 percent in Keta Municipality. At district level, the use of mud brick/earth for walls ranges from 41.6 percent of dwelling units in South Tongu to 87.9 percent in Nkwanta North.

Cement/block/concrete, the second most widely used material in the region (45.6%), accounts for 74.7 percent of walls of dwelling units in Ketu South and 72.4 percent in Keta Municipality and falls to 14.1 percent in Kadjebi and to 9.2 percent in Nkwanta North. Palm leaf/thatch walls are not common in the region (2.1%) but are found in small but significant/proportions in the coastal districts of Keta (12.9%) and Ketu South (7.6%). Wood is also rarely used for walls – the highest use is in South Dayi District (1.4 %).

**Table 12.3: Main construction material for outer wall by district**

District	Total dwelling units	Mud brick/earth	Wood	Metal sheet /slate/ asbestos	Stone	Burnt bricks	Cement blocks/concrete	Land crete	Bamboo	Palr leaf Thatch (grass). Raffia	Other
All districts	550,006	48.1	0.9	0.6	0.2	0.6	45.6	1.4	0.1	2.1	0.4
South Tongu	23,525	41.6	0.6	0.6	0.4	0.3	55.4	0.2	0.1	0.4	0.4
Keta Municipal	41,090	10.1	0.9	0.8	0.7	0.3	72.4	0.3	0.3	12.9	1.4
Ketu South	41,527	14.7	0.6	0.5	0.3	0.1	74.7	0.1	0.2	7.6	1.1
Ketu North	30,398	44.1	0.4	0.4	0.1	1.3	52.3	0.2	0.1	0.4	0.7
Akatsi	40,175	52.3	0.5	0.4	0.1	0.2	45.2	0.8	0.1	0.2	0.3
North Tongu Adaklu	35,719	53.4	1.0	0.6	0.1	0.5	41.9	1.9	0.1	0.2	0.3
Anyigbe	14,765	53.6	0.9	0.5	0.1	0.9	42.0	0.7	0.2	0.8	0.3
Ho Municipal	80,868	30.3	1.2	0.8	0.1	1.4	62.6	2.0	0.2	1.1	0.3
South Dayi	11,888	55.1	1.4	0.4	0.3	0.7	41.1	0.5	0.1	0.1	0.2
North Dayi Hohoe Municipal	25,429	43.7	0.9	0.6	0.2	0.7	51.2	1.2	0.3	1.1	0.2
Biakoye	72,064	57.7	0.9	0.7	0.2	0.7	38.2	1.1	0.2	0.2	0.2
Jasikan	16,495	61.5	1.1	0.3	0.1	0.3	29.8	4.1	0.2	2.3	0.3
Kadjebi	16,848	58.9	1.0	0.2	0.1	0.3	28.1	8.1	0.1	2.8	0.3
Krachi East	14,468	83.1	1.1	0.4	0.1	0.1	14.1	0.6	0.2	0.0	0.2
Krachi West	24,198	74.4	1.2	0.5	0.1	0.2	20.3	2.7	0.0	0.4	0.3
Nkwanta South	25,474	71.4	1.0	0.8	0.2	0.4	22.7	2.4	0.1	0.7	0.3
Nkwanta North	24,382	88.2	0.8	0.3	0.1	0.1	9.6	0.6	0.0	0.1	0.2
	10,693	87.9	1.3	0.3	0.3	0.1	9.2	0.4	0.0	0.3	0.3

Source: 2010 Population and Housing Census

### 12.3.3 Floor Material

Materials for floors of dwelling units are mainly cement/concrete and earth/mud bricks. According to Table 12.4, four out of every five (80.2%) households use cement/concrete while about one fifth (18%) of households use earth/mud for the floor. 0.4 percent of households in the districts use other materials such as stone, wood, terrazzo, burnt brick, vinyl/tiles and ceramic/marble tiles. With the exception of Krachi East (64.5%), over 70 percent of households in all other districts in the region use cement/concrete for the floor. There are 10 districts in which floors are made with earth or mud bricks in proportions higher than the regional average (18%) while Ho Municipality has the lowest proportion (9.7%).

**Table 12.4: Materials used for floor construction by District**

District	Total house-holds	Mud brick / earth	Cement/ concrete	Stone	Burnt brick	Wood	Ceramic/ porcelain /granite/ marble tiles	Vinyl tiles	Terrazzo/ terrazzo tiles	Other
All districts	495,600	18.0	80.2	0.4	0.1	0.1	0.8	0.2	0.3	0.3
South Tongu	20,509	19.0	79.3	0.3	0.0	0.1	0.5	0.3	0.1	0.3
Keta Municipal	37,705	27.0	71.0	0.2	0.1	0.0	0.9	0.2	0.2	0.4
Ketu South	39,119	15.0	82.8	0.3	0.1	0.0	0.9	0.2	0.2	0.7
Ketu North	26,437	13.0	85.5	0.4	0.1	0.0	0.6	0.1	0.1	0.1
Akatsi	33,761	21.0	77.1	0.2	0.1	0.0	0.7	0.2	0.1	0.2
North Tongu	31,573	24.0	74.8	0.2	0.1	0.0	0.6	0.1	0.1	0.3
Adaklu Anyigbe	13,109	22.0	76.3	0.2	0.2	0.0	0.9	0.1	0.1	0.3
Ho Municipal	73,701	9.7	87.0	0.4	0.1	0.0	1.1	0.5	0.9	0.2
South Dayi	10,761	16.0	81.6	1.0	0.1	0.1	0.6	0.4	0.4	0.1
North Dayi	23,669	11.0	86.9	0.5	0.0	0.1	0.7	0.5	0.2	0.2
Hohoe Municipal	65,858	11.0	87.0	0.3	0.0	0.0	0.8	0.4	0.3	0.2
Biakoye	15,226	20.0	78.5	0.6	0.0	0.0	0.5	0.1	0.0	0.2
Jasikan	14,034	18.0	81.0	0.4	0.1	0.0	0.5	0.1	0.1	0.1
Kadjebi	13,303	20.0	78.0	0.3	0.0	0.0	1.1	0.1	0.1	0.2
Krachi East	22,289	34.0	64.5	0.2	0.0	0.0	0.5	0.0	0.1	0.3
Krachi West	21,824	27.0	70.7	1.2	0.3	0.0	0.6	0.1	0.1	0.2
Nkwanta South	22,733	15.0	83.6	0.2	0.2	0.0	0.6	0.1	0.0	0.1
Nkwanta North	9,989	33.0	65.5	1.0	0.0	0.0	0.6	0.0	0.0	0.3

Source: 2010 Population and Housing Census

### 12.3.4 Roofing Materials

Table 12.5 shows that in the region as a whole, 70.7 percent of dwelling units are roofed with corrugated metal sheets while 18.7 percent are roofed with thatch/palm leaves. Between 40 percent and 92.2 percent of dwelling units in the 18 districts are roofed with corrugated metal sheets. The data further show that Krachi East (38.1%) has the highest proportion of dwellings roofed with thatch or palm leaves, followed by Akatsi (37.3%), Krachi West (32.5%) and North Tongu (32.4%). The use of slate or asbestos for roofing is relatively high in the coastal districts of Keta and Ketu South, probably because of its resistance to sea corrosion.

**Table 12.5: Main Material Used for Roofing, by District (%)**

Districts	Total	Mud/ mud bricks /earth	Wood	Metal sheet	Slate/ asbestos	Cement / concrete	Roofin g tile	Bamboo	Thatch/ palm leaf or raffia	Other
All districts	550,006	0.7	0.5	70.7	7.5	0.9	0.3	0.2	18.7	0.6
South Tongu	23,525	0.7	0.3	67.5	8.8	0.7	0.3	0.1	21.2	0.4
Keta Municipal	41,090	0.3	0.4	40.0	34.0	1.4	0.7	0.2	21.4	1.8
Ketu South	41,527	0.2	0.4	48.8	30.5	1.7	0.2	0.2	16.8	1.2
Ketu North	30,398	0.4	0.5	68.9	4.2	0.7	0.3	0.1	24.6	0.3
Akatsi	40,175	0.6	0.4	52.8	7.6	0.6	0.3	0.1	37.3	0.4
North Tongu	35,719	0.8	0.4	61.2	3.4	0.9	0.6	0.1	32.2	0.5
Adaklu Anyigbe	14,765	0.6	0.5	66.8	0.8	0.7	0.1	0.5	29.5	0.5
Ho Municipal	80,868	0.3	0.6	83.2	5.0	1.5	0.3	0.1	8.7	0.3
South Dayi	11,888	0.7	0.4	82.5	2.1	0.7	0.2	0.1	12.9	0.3
North Dayi	25,429	0.5	0.5	85.5	1.5	0.9	0.5	0.1	10.2	0.4
Hohoe Municipal	72,064	0.5	0.8	89.6	1.0	0.7	0.2	0.1	6.8	0.4
Biakoye	16,495	1.0	0.6	82.1	0.3	0.4	0.0	0.5	14.5	0.4
Jasikan	16,848	0.6	0.6	86.6	4.8	0.5	0.3	1.2	5.0	0.4
Kadjebi	14,468	0.8	0.6	92.2	1.8	0.5	0.0	1.8	1.8	0.4
Krachi East	24,198	1.3	0.7	58.5	0.2	0.3	0.1	0.2	38.1	0.7
Krachi West	25,474	2.4	0.7	62.8	0.2	0.6	0.1	0.1	32.5	0.6
Nkwanta South	24,382	0.6	0.6	81.2	0.1	0.2	0.2	0.2	16.3	0.5
Nkwanta North	10,693	1.4	1.1	70.1	0.2	0.4	0.3	0.2	25.3	0.9

Source: 2010 Population and Housing Census

## 12.4 Rooms in Occupied Units

### 12.4.1 Household room occupancy

In examining the housing conditions of the region, the census gathered data that could be used to determine the extent of overcrowding of households occupying dwelling units. As is internationally accepted, the ideal occupancy level is two persons per room, and any figure above this threshold is regarded as evidence of overcrowding, which has both health and social implications. Table 12.6 shows that the region does not as yet face a critical overcrowding situation, but the potential exists if housing policy measures and regulations do not take into account sleeping room occupancy as an important factor in the planning and provision of housing. The number of households in one sleeping room and not sharing is smaller in rural (41.6%) than in urban localities (52.2 %). The proportion of households occupying more than one sleeping room is more than 50 % throughout the districts and in the rural areas. The proportion is highest in Nkwanta North (77.8 %) and lowest in Ho Municipal (45.9%).

**Table 12.6: Sleeping rooms per household by district**

Districts	Total				Urban				Rural			
	Total	One sleeping room and sharing	One sleeping room but not sharing	More than one sleeping room	Total	One sleeping room and sharing	One sleeping room but not sharing	More than one sleeping room	Total	One sleeping room and sharing	One sleeping room but not sharing	More than one sleeping room
<b>All districts</b>	495,600	0.7	45.4	53.9	36.1	0.7	52.2	47.1	63.9	0.8	41.6	57.7
South Tongu	20,509	0.9	44.9	54.2	14.6	0.7	57.7	41.5	85.4	0.9	42.7	56.4
Keta Municipal	7,705	0.9	40.8	58.4	54.3	0.8	44.7	54.5	45.7	0.9	36.1	62.9
Ketu South	39,119	0.7	49.6	49.7	45.9	0.5	57.1	42.4	54.1	0.9	43.1	56.0
Ketu North	26,437	0.8	50.5	48.8	36.6	0.8	57.1	42.1	63.4	0.7	46.7	52.6
Akatsi	33,761	0.5	44.9	54.6	25.6	0.5	51.7	47.8	74.4	0.5	42.6	57.0
North Tongu	31,573	0.9	39.0	60.1	30.2	0.8	47.7	51.5	69.8	1.0	35.2	63.9
Adaklu Anyigbe	13,109	0.5	45.5	54.1	13.6	0.5	57.6	41.9	86.4	0.5	43.5	56.0
Ho Municipal	73,701	0.9	53.2	45.9	46.1	1.1	58.1	40.9	53.9	0.8	49.0	50.2
South Dayi	10,761	0.6	49.3	50.1	38.8	0.2	48.1	51.7	61.2	0.8	50.1	49.1
North Dayi	23,669	0.7	48.3	51.0	31.3	0.4	50.5	49.2	68.7	0.8	47.4	51.8
Hohoe Municipal	65,858	0.7	50.2	49.1	41.5	0.5	54.4	45.1	58.5	0.9	47.3	51.9
Biakoye	15,226	0.6	45.4	54.0	33.8	0.4	51.7	47.9	66.2	0.7	42.2	57.1
Jasikan	14,034	0.8	50.8	48.4	28.0	0.4	55.5	44.1	72.0	0.9	49.0	50.1
Kadjebi	13,303	0.7	43.4	55.9	29.1	0.9	51.2	47.9	70.9	0.7	40.2	59.1
Krachi East	22,289	0.8	38.3	60.9	32.3	1.2	48.7	50.1	67.7	0.6	33.3	66.1
Krachi West	21,824	0.7	28.8	70.5	21.7	0.5	35.5	64.0	78.3	0.7	27.0	72.3
Nkwanta South	22,733	0.7	37.0	62.3	30.3	0.7	50.9	48.5	69.7	0.7	31.0	68.3
Nkwanta North	9,989	0.5	21.7	77.8	31.2	0.4	26.1	73.5	68.8	0.5	19.7	79.8

Source: 2010 Population and Housing Census

### 12.4.2 Rooms Household Occupy

According to Table 12.7, the number of sleeping rooms in the region appears to follow the same pattern as the room occupancy rates but with some notable deviations. Single rooms constitute 29.6 % of the total. Two rooms constitute 32.9 percent, followed by three rooms (16.1%) and four rooms (9.0 %). The remaining households are in five rooms (4.4%), six rooms (3.2%), seven rooms (1.8%), eight rooms (1.2%), and nine or more rooms (1.9%). This means, 87.6 percent of households in the region live in 1-4 room dwelling units beyond which the proportion decreases. The highest proportion of households in all districts occupies two-room dwellings, varying from 22.0 percent in Nkwanta North to 39.9 percent in Akatsi. In Ketu in the south, and Ho and Kadjebi in the north, the single-room dwelling is the second commonest dwelling unit, ranging from 13.8 percent of households in Nkwanta North to 36.6 percent in Ketu South. The three-room unit is the third commonest dwelling unit for households and is highest in the two northern districts, Krachi East (21.5%) and Nkwanta North (20.4%). In all districts, the proportion of households occupying five rooms or more is 12.5 percent.

**Table 12.7: Number of rooms occupied by households by District**

District	Total	Number of rooms								
		1	2	3	4	5	6	7	8	9+
All districts	495,600	29.6	32.9	16.1	9	4.4	3.2	1.8	1.2	1.9
South Tongu	20,509	27.6	31.9	16.6	8.6	4.9	4	2.3	1.6	2.6
Keta Municipal	37,705	23.5	31.7	17.1	10.8	6	4.3	2.3	1.7	2.6
Ketu South	39,119	36.6	33.1	12.8	7.5	3.2	2.6	1.7	1	1.5
Ketu North	26,437	33.4	35.8	14.8	7.5	3.4	2.1	1.1	0.8	1.1
Akatsi	33,761	27.6	39.9	16	7.5	3.3	2.6	1.4	0.8	1
North Tongu	31,573	25	32.6	18.4	9.9	4.6	3.9	2.1	1.4	2.1
Adaklu Anyigbe	13,109	32.9	35.9	14	7.8	3.6	2.4	1.5	0.8	1.2
Ho Municipal	73,701	34.9	34.1	13.6	7.9	3.7	2.5	1.3	0.8	1.1
South Dayi	10,761	35	28.2	15.2	9.2	4.8	2.9	2	0.9	1.7
North Dayi	23,669	26.8	36.5	14.9	9.8	4.3	3.2	1.6	1.3	1.6
Hohoe Municipal	65,858	27.6	35.2	16.3	8.9	4.3	3.1	1.8	1.1	1.7
Biakoye	15,226	33.9	29.5	16.6	8.2	4.4	2.6	1.5	1.1	2.2
Jasikan	14,034	35.3	31.9	15.1	8.3	3.7	2.5	1.3	1	0.9
Kadjebi	13,303	32.5	29.4	17.1	8.8	4.6	2.8	1.8	1	2.1
Krachi East	22,289	30.3	28.9	18.1	9.7	4.5	3.6	1.9	1.4	1.6
Krachi West	21,824	19.6	26.5	21.5	12.1	6.1	5.2	2.4	2.2	4.3
Nkwanta South	22,733	28.6	27.5	18.6	10.6	5.4	3.7	2.1	1.4	2
Nkwanta North	9,989	13.8	22	20.4	15.4	8.8	6.6	3.8	2.3	6.9

Source: 2010 Population and Housing Census

## 12.5 Households and Tenancy by District

### 12.5.1 Ownership of Dwelling Units

Table 12.8 indicates that nearly two thirds of households in the region own the dwelling units they occupy. Relatives who are not household members own 18.6 percent of available housing units, while other private individuals own 16.4 percent of the housing units in the region. Keta is the only district in the region with a larger than average ownership by relatives who are not household members (27.6%) compared to the regional average (18.6%). Kadjebi has the largest proportion of other private individual owners (23.9%) as well as ownership by private employers (2%) compared to the regional average (0.7%).

Ho has a private employer ownership rate that is less than half the rate for Kadjebi. Provision of dwelling units by private employers is low in the region as a whole (0.7%). In fact, in all districts, the proportion of private employer-owned dwellings is almost the same as the regional average.

**Table 12.8: Ownership of dwelling by district**

	Total number	Total (%)	Owned by household member	Being purchased (e.g. mortgage)	Relative not a household member	Other private individual	Private employer	Other private agency	Public/government ownership	Other
All districts	495,600	100.0	61.4	0.6	18.6	16.4	0.7	0.3	1.6	0.4
South Tongu	20,509	100.0	60.0	0.5	22.6	13.1	0.8	0.5	1.7	0.8
Keta Municipal	37,705	100.0	60.3	0.4	27.6	9.2	0.7	0.1	1.1	0.5
Ketu South	39,119	100.0	58.6	0.5	20.9	17.9	0.6	0.2	0.9	0.3
Ketu North	26,437	100.0	61.4	1.0	25.1	10.9	0.4	0.1	0.8	0.3
Akatsi	33,761	100.0	63.3	0.2	20.8	14.3	0.5	0.0	0.7	0.2
North Tongu	31,573	100.0	69.2	0.6	17.4	10.7	0.6	0.1	0.8	0.5
Adaklu Anyigbe	13,109	100.0	67.4	0.4	18.3	11.8	0.5	0.2	1.1	0.4
Ho Municipal	73,701	100.0	50.8	0.7	19.7	23.5	0.9	0.3	3.9	0.4
South Dayi	10,761	100.0	60.5	0.8	17.5	17.2	0.5	0.4	3.0	0.3
North Dayi	23,669	100.0	54.1	1.0	22.6	19.3	0.6	0.4	1.6	0.4
Hohoe Municipal	65,858	100.0	58.6	0.4	16.2	21.3	0.9	0.6	1.3	0.7
Biakoye	15,226	100.0	64.8	1.1	15.3	16.5	0.9	0.2	1.1	0.1
Jasikan	14,034	100.0	58.8	0.4	17.8	20.3	0.7	0.3	1.5	0.2
Kadjebi	13,303	100.0	51.4	1.0	18.4	23.9	2.0	0.2	2.7	0.5
Krachi East	22,289	100.0	74.5	1.0	6.7	15.6	0.6	0.4	1.0	0.3
Krachi West	21,824	100.0	80.9	1.3	8.3	7.4	0.4	0.2	1.3	0.3
Nkwanta South	22,733	100.0	66.3	0.3	15.5	15.1	0.6	0.2	1.6	0.3
Nkwanta North	9,989	100.0	86.2	0.4	6.9	5.8	0.3	0.1	0.3	0.0

Source: 2010 Population and Housing Census

### 12.5.2 Tenure/holding arrangements

Table 12.9 presents the distribution of present holdings/tenancy arrangement by district. Around 59.0 percent of housing units in the region are owner occupied. The rates in the districts appear to conform to the regional pattern except for Nkwanta North (83.7%), Krachi West (77.0%), and Krachi East (70.6%), where the rates are far in excess of the regional average and in Kadjebi, where the proportion is as low as 47.3 percent. The other types of tenure in the region include rent free (19.4%) and living in rental units (20.8%). The rent-free tenure system is less common in Nkwanta North (5.9%) and Krachi East (9.0%) than in any other district in the region. Districts with higher-than-average rent-free tenures are South Tongu (22.6%), Kadjebi (24.3%), Ketu North (25.7%), Keta (24.1%) and North Dayi (23.4%). Ho Municipality has the highest rental unit tenure in the region (29.0%) compared to the regional average (20.8%). Three other districts with higher than average renting are Kadjebi (27.7%), Hohoe Municipality (27.6%) and Jasikan (24.1%).

**Table 12.9: Present holding/tenancy arrangement by district**

District	Total	Owner occupied	Renting	Rent-Free	Perching	Squatting	Other
All districts	495,600	59.0	20.8	19.4	0.5	0.1	0.2
South Tongu	20,509	59.6	16.2	22.6	1.1	0.1	0.4
Keta Municipal	37,705	63.5	11.0	24.1	0.9	0.1	0.4
Ketu South	39,119	56.6	24.0	18.6	0.6	0.1	0.1
Ketu North	26,437	58.9	14.8	25.7	0.5	0.1	0.1
Akatsi	33,761	62.1	16.4	21	0.3	0.0	0.2
North Tongu	31,573	64.8	15.5	18.8	0.7	0.1	0.2
Adaklu Anyigbe	13,109	66.1	15.4	17.4	0.8	0.1	0.2
Ho Municipal	73,701	49.0	29.0	21.2	0.5	0.1	0.1
South Dayi	10,761	59.6	21.3	18.7	0.4	0.0	0.1
North Dayi	23,669	52.1	23.8	23.4	0.4	0.1	0.2
Hohoe Municipal	65,858	53.4	27.6	18.3	0.4	0.1	0.2
Biakoye	15,226	60.1	22.7	16.5	0.5	0.0	0.2
Jasikan	14,034	56.2	24.1	18.6	0.3	0.0	0.7
Kadjebi	13,303	47.3	27.7	24.3	0.5	0.1	0.1
Krachi East	22,289	70.6	19.7	9.0	0.6	0.0	0.1
Krachi West	21,824	77.0	11.5	11.0	0.5	0.0	0.1
Nkwanta South	22,733	61.5	18.1	19.7	0.5	0.0	0.2
Nkwanta North	9,989	83.7	9.6	5.9	0.8	0.1	0.1

Source: 2010 Population and Housing Census

## 12.6 Household Facilities

### 12.6.1 Main source of drinking water

Households in the region derive their drinking water from diverse sources but the five main sources are river/stream, well, standpipes, dugout and borehole, which together constitute the main sources for 91.2 percent of households. Rainwater is more the common source of drinking water for households in Ketu North and Adaklu Anyigbe than in any other district. Meanwhile, dugouts are common in households in Akatsi, North Tongu and Krachi East. Boreholes are similarly common in households in North Dayi, Biakoye and Nkwanta South (47%), suggesting a distribution pattern that follows the rainfall pattern in the region. Water piped into homes constitutes just 7.4 percent of all the water sources in households in the region and is shared largely by households in Ho (19.1%), South Dayi (11.1%), Hohoe (10.9%) and Keta (9.0 %). Households in Krachi East (0.6 %) and Nkwanta North (0.9%) have the two lowest proportions in the region in terms of water piped into homes.



**Table 12.10: Main source of drinking water for households by district**

Districts	Total households	Pipe-borne inside dwelling	Pipe-borne outside dwelling	Public tap/standpipe	Bore-hole/pump/tube well	Protected well	Rain water	Protected spring	Bottled water	Sachet water	Tanker supply/vendor provided	Unprotected well	Unprotected spring	River/stream	Dugout/pond/lake/dam/canal
All districts	495,600	7.4	18.8	19.2	16.4	4.6	3.2	0.3	0.2	3.3	0.4	4.8	0.6	20.4	5.5
South Tongu	20,509	6.9	13.4	46.4	0.4	0.4	1.3	0.1	0.3	0.7	1.3	0.7	1.7	25.3	6.7
Keta Municipal	37,705	9.0	40.5	22.4	1.6	7.7	2.3	0.2	0.2	4.1	2.6	5.3	0.3	4.7	0.8
Ketu South	39,119	3.7	7.6	5.1	11.9	17.8	1.9	0.2	0.1	16.8	0.1	34.0	0.6	1.0	0.3
Ketu North	26,437	1.2	14.1	18.0	12.6	8.7	25.4	0.1	0.2	2.9	0.6	5.9	0.1	7.5	8.0
Akatsi	33,761	1.7	11.5	10.3	23.2	9.0	8.6	0.2	0.1	5.4	0.3	5.2	0.4	14.8	15.9
North Tongu	31,573	7.9	14.0	24.8	5.6	3.3	1.0	0.2	0.1	1.4	0.1	2.7	1.6	28.2	13.8
Adaklu Anyigbe	13,109	1.7	8.0	20.9	22.7	0.7	4.6	0.1	0.2	1.5	0.1	5.2	1.0	20.2	18.4
Ho Municipal	73,701	19.1	27.6	19.6	13.7	2.5	1.0	0.4	0.2	1.9	0.3	1.7	0.6	13.3	0.8
South Dayi	10,761	11.1	19.6	25.4	4.3	0.9	2.5	0.2	0.0	1.4	0.9	0.5	0.3	28.8	8.0
North Dayi	23,669	9.8	24.9	16.7	24.0	1.5	2.9	0.2	0.1	3.1	0.1	0.6	0.6	21.2	3.8
Hohoe Municipal	65,858	10.9	25.6	20.4	10.8	2.0	0.8	1.0	0.1	1.8	0.3	0.6	0.9	27.7	1.1
Biakoye	15,226	3.1	20.9	23.2	28.2	0.5	1.0	0.3	0.2	0.6	0.1	0.3	0.1	22.4	7.7
Jasikan	14,034	1.2	6.1	29.6	19.9	7.5	1.6	0.2	0.1	3.5	0.0	6.1	0.3	29.0	0.1
Kadjebi	13,303	2.3	18.2	20.0	33.3	0.4	0.8	0.2	0.1	0.9	0.0	0.9	0.4	25.9	0.3
Krachi East	22,289	0.6	5.5	11.4	29.5	0.2	0.9	0.3	0.3	1.5	0.0	0.4	0.0	42.8	18.6
Krachi West	21,824	1.8	10.1	24.5	28.1	1.2	0.3	0.2	0.2	0.3	0.0	1.4	0.2	25.1	9.7
Nkwanta South	22,733	1.1	12.7	14.6	47.1	0.4	0.5	0.2	0.1	0.5	0.0	0.4	0.3	31.0	1.6
Nkwanta North	9,989	0.9	9.6	2.9	17.6	9.1	1.4	0.2	0.0	0.3	0.0	3.4	0.1	58.8	1.7

Source: 2010 Population and Housing Census

## 2.6.2 Main Source of Household Lighting

As Table 12.11 indicates, the main sources of lighting for households in the region are electricity (49.6%) and kerosene lamps (40.4%). There are marked differences in the use of these two sources for lighting across districts. While the majority of households in Ketu North (63.7%), Akatsi (60.9%), Keta (53.1%) and Ketu South (50.9%) use kerosene lamps as the main source for lighting, relatively low proportions of households use this source in Hohoe (29.7%), Krachi East (28.5%) and Ho (24.5%).

Ho Municipality the highest proportion of households using electricity (mains) for lighting (68.4%), followed by Hohoe Municipality (63.7%) and North Dayi (62.4%). The use of mains electricity is also higher than the regional average in South Dayi (55.6%) and Jasikan (50.1%). Districts with low-to-medium use of electricity include Ketu South (45.5%), Akatsi (33.7%), and North Tongu (36.7%). It is pertinent to note that the districts most affected by the damming of the Volta River have low proportions of households with access to electricity. These districts are North Tongu (36.7%), South Tongu (39.1%), Nkwanta South (37.3%), Ketu North (33.2%) and Akatsi (33.7%).

**Table 12.11: Main source of lighting by district**

Districts	Total	Electri- city (mains)	Electri- city (private generator)	Kero- sene lamp	Gas lamp	Solar energy	Candle	Flash- light/ Torch	Fire- wood	Crop residue	Other
All districts	495,600	49.6	0.8	40.4	0.2	0.2	0.5	8.0	0.3	0.1	0.1
South Tongu	20,509	39.1	0.5	49.6	0.1	0.1	0.7	9.3	0.2	0.0	0.2
Keta Municipal	37,705	41.8	1.0	53.1	0.1	0.2	0.3	2.9	0.4	0.1	0.1
Ketu South	39,119	45.5	0.5	50.9	0.2	0.1	0.7	1.6	0.4	0.1	0.0
Ketu North	26,437	33.2	0.9	63.7	0.1	0.1	0.2	1.4	0.3	0.1	0.0
Akatsi	33,761	33.7	0.8	60.9	0.1	0.0	0.3	3.6	0.5	0.1	0.1
North Tongu	31,573	36.7	0.9	49.0	0.2	0.1	0.3	12.1	0.4	0.1	0.1
Adaklu Anyigbe	13,109	43.8	0.5	48.2	0.2	0.1	0.2	6.3	0.5	0.1	0.0
Ho Municipal	73,701	68.4	0.7	24.5	0.2	0.1	0.8	5.0	0.2	0.0	0.1
South Dayi	10,761	55.6	0.8	35.3	0.1	0.0	0.4	7.4	0.2	0.0	0.1
North Dayi	23,669	62.4	0.7	28.5	0.2	0.1	0.5	7.3	0.2	0.0	0.1
Hohoe Municipal	65,858	63.7	0.9	29.1	0.1	0.1	0.7	5.0	0.3	0.1	0.1
Biakoye	15,226	47.3	1.0	37.8	0.2	0.1	0.2	13.1	0.2	0.0	0.1
Jasikan	14,034	50.1	0.6	41.6	0.1	0.1	0.5	6.5	0.2	0.2	0.2
Kadjebi	13,303	48.7	1.3	39.1	0.2	0.1	0.3	9.9	0.3	0.1	0.1
Krachi East	22,289	47.1	0.7	28.5	0.2	0.2	0.1	22.7	0.3	0.1	0.0
Krachi West	21,824	41.2	0.8	37.7	0.2	1.4	0.1	18.1	0.3	0.1	0.0
Nkwanta South	22,733	37.3	0.7	35.8	0.2	0.2	0.1	25.1	0.2	0.2	0.3
Nkwanta North	9,989	47.0	0.7	35.1	0.3	0.5	0.2	16.1	0.2	0.1	0.0

Source: 2010 Population and Housing Census

## 12.6.3 Main Source of Cooking Fuel

Table 12.12 shows the main sources of cooking fuel for households in the region. The highest proportion of households uses wood as main source of cooking fuel (57.1%), followed by charcoal (29.6%), and gas (9.3%). The use of the other sources such as kerosene, sawdust and electricity is negligible, at less than 1 percent for each source. A similar pattern of main source of cooking fuel is observed across districts. However, there are very high percentages of households using wood as main source of cooking fuel in Nkwanta North (85.2%), Krachi West (79.5%), Nkwanta South (72.8%), Krachi East (71.2%), Kadjebi (71.1%) and Adaklu

Anyigbe (70.8%). Charcoal use is also substantial in the region, averaging 29.6% of households and reaching 48.1 percent in Ketu South and 40.9 percent in Keta Municipal. The table further shows that the proportion of households using gas for cooking is relatively high in the more urbanized districts such as Ho Municipality (22.9%), Ketu South (12.5%), Keta Municipality (12.0%) and Hohoe Municipality (10.4%). On the other hand, Nkwanta North has the lowest proportion (0.9%) of households using gas.

**Table 12.11: Main source of cooking fuel for household by district**

	Total	No cooking	Wood	Gas	Electricity	Kerosene	Charcoal	Crop residue	Sawdust	Other
All districts	495,600	2.6	57.1	9.3	0.2	0.5	29.6	0.5	0.1	0.1
South Tongu	20,509	2.6	59.9	7.8	0.1	0.3	28.5	0.5	0.0	0.2
Keta Municipal	37,705	2.5	42.2	12.0	0.1	1.2	40.9	0.7	0.1	0.3
Ketu South	39,119	1.2	35.8	12.5	0.3	0.9	48.1	0.9	0.1	0.1
Ketu North	26,437	1.6	63.0	5.7	0.2	0.4	28.7	0.3	0.0	0.0
Akatsi	33,761	2.7	64.6	6.1	0.2	0.3	25.4	0.5	0.0	0.2
North Tongu	31,573	2.6	63.8	3.9	0.2	0.4	28.4	0.6	0.0	0.1
Adaklu Anyigbe	13,109	2.2	70.8	4.8	0.1	0.5	20.9	0.7	0.1	0.1
Ho Municipal	73,701	3.0	43.1	22.9	0.3	0.6	29.7	0.2	0.1	0.0
South Dayi	10,761	2.4	55.0	7.6	0.1	0.3	34.2	0.3	0.0	0.1
North Dayi	23,669	3.0	53.6	7.7	0.2	0.5	34.4	0.5	0.0	0.1
Hohoe Municipal	65,858	3.0	53.9	10.4	0.2	0.4	31.5	0.4	0.1	0.1
Biakoye	15,226	3.1	66.6	2.8	0.3	0.4	26.5	0.3	0.0	0.0
Jasikan	14,034	3.7	65.6	5.5	0.2	0.4	23.8	0.4	0.0	0.4
Kadjebi	13,303	4.6	71.1	4.5	0.1	0.4	18.3	0.8	0.1	0.0
Krachi East	22,289	3.0	71.2	1.8	0.2	0.4	22.9	0.3	0.0	0.0
Krachi West	21,824	2.2	79.5	1.4	0.3	0.5	15.6	0.5	0.1	0.0
Nkwanta South	22,733	2.4	72.8	2.9	0.2	0.1	21.1	0.5	0.0	0.0
Nkwanta North	9,989	0.9	85.2	0.9	0.1	0.2	11.6	1.0	0.0	0.0

Source: 2010 Population and Housing Census

### 12.6.5 Toilet Facilities

Table 12.12 shows that the three main toilet facilities available to households in the districts are public toilets (30.0%), pit latrine in the house (22.6%) and KVIP (12.8%). In addition, about a quarter (27.7%) of households have no facilities and therefore resort to the use of the bush and the beach. Very low proportions (4.9%) of households in Keta use the pit latrine while 43.4% of its households use the bush or the beach. That fact that households in Keta, one of the most urbanized districts in the region, should use the beach and bushes as a toilet facility is a serious health challenge to the people. This situation is more serious in Nkwanta North where a small proportion of households (5.6%) use pit latrines in comparison to 78.8 percent of households using the bush. Most other districts in which high proportions of households use pit latrines also have relatively low proportions of households using the bush. There are also wide differences in the use of water closet (WC) among the districts. As shown in the Table, the use of the facility ranges from a high of 18.9 percent in Ho Municipality to a low of 0.3 percent in Nkwanta North.

**Table 12.12: Toilet facility by district**

	Total households	No facilities (bush/beach/field)	WC	Pit latrine	KVIP	Bucket/Pan	Public toilet (WC/KVIP/pit/pan, etc.)	Other
All districts	495,600	27.7	6.0	22.6	12.8	0.5	30.0	0.3
South Tongu	20,509	30.9	3.7	29.4	10.6	0.6	24.3	0.5
Keta Municipal	37,705	43.4	6.3	4.9	14.1	1.9	29.1	0.3
Ketu South	39,119	36.2	6.5	17.0	12.8	0.3	27.0	0.2
Ketu North	26,437	22.8	1.9	39.2	11.5	0.1	24.2	0.3
Akatsi	33,761	19.5	1.8	33.5	14.6	0.1	30.2	0.3
North Tongu	31,573	30.5	3.1	30.8	12.2	0.2	22.7	0.5
Adaklu Anyigbe	13,109	26.0	2.1	32.6	9.9	0.9	28.3	0.2
Ho Municipal	73,701	17.5	18.9	16.8	11.9	0.4	34.0	0.5
South Dayi	10,761	16.8	5.6	28.4	15.1	0.3	33.5	0.3
North Dayi	23,669	16.1	5.4	14.7	17.7	0.2	45.4	0.6
Hohoe Municipal	65,858	11.7	6.6	23.7	18.4	0.6	38.6	0.4
Biakoye	15,226	19.8	1.3	31.4	11.5	0.3	35.3	0.4
Jasikan	14,034	17.3	2.3	28.3	14.4	0.5	37.0	0.3
Kadjebi	13,303	15.2	1.7	36.0	15.4	1.0	30.4	0.3
Krachi East	22,289	45.8	0.8	19.5	6.2	0.1	27.5	0.2
Krachi West	21,824	57.2	1.2	16.7	7.1	0.5	17.1	0.2
Nkwanta South	22,733	47.7	1.6	23.7	7.7	0.1	19.0	0.2
Nkwanta North	9,989	78.8	0.3	5.6	4.0	0.1	11.2	0.1

Source: 2010 Population and Housing Census

### 12.6.6 Solid Waste Disposal

According to Table 12.13, about 41.3 percent of households in the region dispose of solid waste at public dumps (open space), 16.6 percent at public dumps (container), 15.9 percent of households burn their solid waste, while 13.7 percent dump their solid waste indiscriminately. A similar pattern of solid waste disposal is observed in all the districts. On the other hand, just 6.1 percent of households have their solid waste collected. The proportion of households with access to solid waste collection is relatively high in Akatsi (10.8%), North Tongu (10.2%) and Krachi West (10.0%). In view of poor maintenance of public dump sites, this pattern of solid waste disposal poses health hazards. The burning of solid waste by households is highest in South Tongu (39.9%) and lowest in Nkwanta South (4.3 %). The other districts where relatively high proportions of households burn their solid waste are North Tongu (27.3%), Akatsi (25.5%) and South Dayi (23.8%).

**Tables 12.13: Solid waste disposal by district**

Districts	Total	Collected	Burned by household	Public dump (container)	Public dump (open space)	Dumped indiscriminately	Buried by household	Other
All Districts	495,600	6.1	15.9	16.6	41.3	13.7	5.2	1.2
South Tongu	20,509	8.3	39.9	8.3	23.7	13.6	4.3	2.0
Keta Municipal	37,705	2.8	18.7	7.6	48.0	8.4	13.5	1.0
Ketu South	39,119	6.9	7.5	19.5	37.9	20.8	5.8	1.5
Ketu North	26,437	7.4	20.1	14.2	34.8	17.0	5.9	0.6
Akatsi	33,761	10.8	25.5	9.3	33.7	14.1	4.8	1.8
North Tongu	31,573	10.2	27.3	6.3	36.0	15.5	3.6	1.1
Adaklu Anyigbe	13,109	3.3	13.3	12.9	43.2	19.0	6.8	1.5
Ho Municipal	73,701	5.7	17.3	26.2	37.9	6.5	5.3	1.2
South Dayi	10,761	3.6	23.8	23.2	37.3	7.4	4.2	0.6
North Dayi	23,669	3.4	14.6	23.0	46.5	7.0	4.2	1.3
Hohoe Municipal	65,858	5.2	14.5	19.9	47.6	6.4	5.2	1.2
Biakoye	15,226	5.8	8.9	14.1	52.6	13.2	4.1	1.3
Jasikan	14,034	3.5	8.6	21.6	44.7	16.1	3.6	1.9
Kadjebi	13,303	2.2	4.9	23.7	46.0	16.8	4.6	1.8
Krachi East	22,289	4.8	6.7	16.5	36.6	32.3	2.4	0.6
Krachi West	21,824	10.0	6.7	9.5	49.4	21.0	3.0	0.4
Nkwanta South	22,733	6.1	4.3	16.7	49.2	20.1	3.2	0.4
Nkwanta North	9,989	5.8	6.8	13.8	44.2	27.7	1.6	0.3

Source: 2010 Population and Housing Census

### 12.6.7 Liquid Waste Disposal

The pattern of household liquid waste disposal is nearly uniform throughout the 18 districts. Most households dispose of liquid waste on the compound (52.2%) or on to the street (31.1%, but 49% in urbanized Keta). The use of a gutter in front of the house is minimal in households in South Tongu, Keta, Ketu and Akatsi but is relatively higher than the regional average in Ho, South Dayi, North Dayi, Hohoe, Biakoye and Kadjebi. In effect, North Tongu, Ho and Krachi East are the districts where few households dispose of liquid waste onto the street or somewhere outside the house.

**Table 12.14: Liquid waste disposal by district**

Districts	Total households	Through the sewerage system	Through drainage system into a gutter	Through drainage into a pit (soak away)	Thrown onto the street/outside	Thrown into gutter	Thrown onto compound	Other
All Districts	495,600	1.0	2.5	2.3	31.1	9.3	52.2	1.5
South Tongu	20,509	0.9	0.8	1.4	26.1	2.2	66.6	2.0
Keta Municipal	37,705	0.5	0.5	4.1	49.0	1.1	42.9	1.9
Ketu South	39,119	0.4	0.5	2.0	38.6	0.9	57.0	0.7
Ketu North	26,437	0.4	0.6	1.2	32.6	5.2	58.7	1.2
Akatsi	33,761	0.2	0.5	0.5	33.9	2.7	60.6	1.6
North Tongu	31,573	1.3	1.4	2.3	25.1	3.8	64.3	1.8
Adaklu Anyigbe	13,109	0.3	1.8	1.4	32.3	8.0	53.3	2.7
Ho Municipal	73,701	2.1	5.7	3.8	26.3	19.2	41.0	2.0
South Dayi	10,761	0.8	3.9	3.2	30.6	9.5	51.4	0.6
North Dayi	23,669	1.6	4.1	1.2	30.4	12.8	48.4	1.4
Hohoe Municipal	65,858	0.8	4.2	2.6	32.1	16.7	40.7	2.8
Biakoye	15,226	0.4	3.6	1.6	30.0	11.0	52.4	1.0
Jasikan	14,034	0.5	0.9	1.1	29.7	13.1	53.6	1.0
Kadjebi	13,303	0.3	4.6	0.8	26.5	12.4	55.0	0.3
Krachi East	22,289	0.6	1.1	0.9	18.5	6.9	70.9	1.1
Krachi West	21,824	2.6	2.6	4.4	24.0	7.2	59.0	0.2
Nkwanta South	22,733	1.3	1.9	0.9	29.6	8.8	57.1	0.4
Nkwanta North	9,989	0.4	1.3	4.2	34.6	8.6	50.7	0.2

## 12.7 Bathing Facilities

There are four main sources of household bathing facilities in the region: bathroom for exclusive use, shared bathrooms, open cubicle for private use and shared open cubicles (Table 12.15). Together these constitute about 86.5 percent of bathing facilities of households. The table further shows that 34.0 percent of households have their own bathroom for exclusive use and about one-quarter (22.5%) share a separate bathroom in the same house, while close to one in five households (19.9%) share an open cubicle. The percentage of households using other bathing facilities such as river/pond/lake/dam is negligible (0.3%). Across districts, most households either have their own bathrooms for exclusive or share bathing facilities in the same house. However, a substantial proportions of households share an open cubicle in districts such as Jasikan (26.9%), Hohoe (25.0%), Ho (23.5%), Ketu South (25.0%).

**Table 12.15: Bathing facility used by household and district**

District	Total	Own bath-room for exclusive use	Shared separate bath-room in the same house	Private open cubicle	Shared open cubicle	Public bath house	Bath-room in another house	Open space around house	River /pond/ lake/ dam	Other
All districts	495,600	34.0	22.5	10.1	19.9	0.7	4.0	8.0	0.3	0.5
South Tongu	20,509	31.8	23.0	10.3	19.8	1.0	4.2	8.5	0.4	1.0
Keta Municipal	37,705	43.3	16.1	13.8	15.7	0.6	1.2	8.8	0.2	0.3
Ketu South	39,119	32.2	23.1	10.0	25.0	0.6	0.5	7.5	0.2	0.9
Ketu North	26,437	32.8	20.2	16.4	20.7	0.8	2.2	6.5	0.2	0.2
Akatsi	33,761	35.1	14.2	16.7	19.7	0.7	4.8	7.6	0.1	1.0
North Tongu	31,573	33.7	20.6	8.7	18.9	0.5	5.5	10.9	0.5	0.7
Adaklu Anyigbe	13,109	29.1	19.9	9.2	19.7	0.3	5.6	13.7	0.1	2.5
Ho Municipal	73,701	30.2	27.2	9.9	23.5	0.7	2.8	5.2	0.1	0.4
South Dayi	10,761	35.3	26.0	9.5	15.8	0.3	4.1	8.5	0.3	0.2
North Dayi	23,669	32.6	27.0	7.6	21.7	1.1	3.7	5.7	0.2	0.7
Hohoe Municipal	65,858	27.8	25.9	9.6	25.0	0.4	4.3	6.5	0.1	0.5
Biakoye	15,226	35.6	26.4	8.5	13.7	1.0	6.7	7.3	0.4	0.5
Jasikan	14,034	24.7	24.4	11.2	26.9	0.3	3.7	8.4	0.1	0.3
Kadjebi	13,303	32.6	27.7	7.6	19.8	1.2	3.1	7.7	0	0.2
Krachi East	22,289	42.0	15.0	5.5	12.6	0.8	9.2	13.6	1.0	0.3
Krachi West	21,824	48.0	17.9	5.3	6.9	1.0	7.8	11.8	1.1	0.3
Nkwanta South	22,733	31.9	24.5	7.5	19.1	0.9	6.8	9.1	0.1	0.2
Nkwanta North	9,989	59.4	21.2	3.3	6.2	0.7	2.8	6.2	0.2	0.1

Source; 2010 Population and Housing Census

## 12.8 Summary and Policy Implications

The population census is the primary source of information about the population and its characteristics. The 2010 Population and Housing Census collected data on the demographic, social and economic characteristics, and housing conditions of the entire population of Ghana. Geographically, the census covered regional, district, and sub-district levels such as localities, villages and settlements, residential areas and municipal areas.

This report on Volta Region provides detailed analysis of the 2010 census data at the regional and district levels. Data from previous censuses and demographic surveys are used to show trends when appropriate. The aim is to provide useful data and analysis for planners and policy makers in designing and implementing evidence-based strategies for development in the districts of the region.

## **12.9 Demographic Characteristics**

### **12.9.1 Population size and structure**

The Volta Region's population has increased rapidly since 1960. The population size, which was only 777,288 in 1960 increased to 2,118,252 in 2010; thus the population has more than doubled in just over 50 years. Ho and Hohoe municipalities, together account for just over a quarter of the total regional population. The least populated district is South Dayi with only 2 percent of the regional total. Other districts with populations of less than 4 percent of the regional total are Biakoye (3.1%), Adaklu Anyigbe (3.0%), Nkwanta North (3.0%), Jasikan (2.8%), and Kadjebi (2.8%). The sex ratio for the region is 92.8, or nearly 93 males to 100 females).

The age structure of the population shows that all the districts have a relatively young population, typical of developing countries. However, the proportion of the population less than 15 years in the region as a whole has been declining since 1970. The proportion decreased from 41.1 percent in 2000 to 38.4 percent in 2010. In the same vein, the proportion of the population aged 60 years and over decreased from 8.9 percent in 2000 to 6.5 percent in 2010 after decades of increase.

### **12.9.2 Population density**

In consonance with an increase in the population, the region's population density increased from 75.9 inhabitants per square kilometre in 2000 to 103 per square kilometre in 2010. The most densely populated district is Keta Municipal with 358 persons per square kilometre, followed by Ketu South with 206 persons per square kilometre, and South Tongu (196 persons per square kilometre). The most sparsely populated districts are Krachi West (29 persons per square kilometre) and Nkwanta South (26.02 persons per square kilometre).

### **12.9.3 Urbanization**

Data from the various rounds of censuses indicate that urbanization has been increasing in the region as in the country. The proportion of the population living in urban areas has increased from 16 percent in 1970 to about 34 percent in 2010. Among the districts, the most urbanized district is Keta Municipal with more than half (53.3%) its population living in urban areas, followed by Ketu South (46.6%) and Ho Municipal (44.3%). The districts with very low levels of urbanization include Adaklu Anyigbe (10.6%), South Tongu (12.9%) and Krachi West (19.6%).

### **12.3.4 Nationality**

About 89.9 percent of the residents in the region are Ghanaians, including 2.7 percent naturalized Ghanaians. The non-Ghanaian population constitutes 2.4 percent of the region's population. Nkwanta South has the highest proportion of non-Ghanaian population (11.3%), while Keta has the lowest proportion (0.4%). Other districts with less than 1 percent of non-Ghanaian populations include South Tongu, Ketu South, Ketu North, Akatsi, North Tongu, South Dayi and Keta Municipal.



## **12.4 Fertility, Mortality, Migration**

### **12.4.1 Fertility**

The trend in total fertility rate (TFR) in the region derived from previous demographic surveys and censuses indicates that the region is experiencing a slow demographic transition like the rest of the country. This is seen in the dramatic decline of the TFR from 6.7 children per woman in the 1988 GDHS to a low of 3.2 children in the 2010 census, slightly lower than the national average of 3.3. At district level, the TFR ranges from a high of 3.93 children per woman in Krachi East to a low of 2.65 children per woman in Ho Municipality. Other districts with relatively low fertility below the regional average include Keta Municipal (2.98), Ketu South (2.86), North Tongu (2.83), and Adaklu Anyigbe (2.75).

### **12.4.2 Mortality**

One of the Millennium Development Goals (MDGs) is to reduce infant and under-five mortality. The specific objective is to reduce under-five mortality by two-thirds by 2015. Data from the 2010 census show that both infant and child mortality rates are high in the region at 57 per 1,000 live births and 87 per 1,000 live births respectively. There are also marked district variations. The incidence of deaths among children under five years ranges from 73 per 1,000 live births in Kadjebi and Biakoye districts to 119 per 1,000 live births in Nkwanta North District. With respect to infant mortality, children in South Dayi (45 per 1,000 live births), Biakoye and Kadjebi (49 per 1,000 live births) have the lowest risk of infant mortality. On the other hand, the risk of infant death is highest for children in Nkwanta North (76 per 1,000 live births), Keta Municipal (65 per 1,000 live births) and Ketu North (65 per 1,000 live births).

### **12.4.3 Migration**

The importance of measuring migration lies in its impact on the population size, structure and distribution in the region. Migration out of the region reduces the size of the population, while migration into the region increases it. In addition, the selectivity of the migration process in terms of age, sex, education and other socio-demographic characteristics can have a significant impact on the overall social and economic development of the region. Analysis of regional and birthplace statistics show that an overwhelming majority of the population in the region (90.9%) Most Ghanaian migrants to the region are from the Greater Accra Region (1.9%), followed by the Northern Region (1.6%) and Eastern Region (1.5%). A number of migrants to the region come from ECOWAS states. Because of the region's proximity to Togo and because of common cultural heritage, most of the migrants from ECOWAS states are Togolese

Figures for net migration, which is the net effect of in-migration and out-migration to the region from the other regions in Ghana, indicate that a total of 535,671 people have migrated from the region to other regions. The region lost population to seven out of the 10 regions, the exceptions being the Northern, Upper East and Upper West regions. The popular destinations of migrants from the region are to the Greater Accra and Eastern regions. The volume and direction of migration from the region provides some indication of social and economic conditions. Compared to the other regions, Volta Region, like the Upper East and Upper West, is at considerable disadvantage in terms of modern infrastructure such as good roads, educational institutions and hospital facilities. For a sending region like the Volta Region, some of the negative consequences of migration include loss of many of its youthful,

educated and productive workers, leaving behind the uneducated and less educated and the aged population.

## **12.5 Social characteristics**

### **12.5.1 Household Size, Structure and Composition**

There are 495,603 households in the region. A higher proportion of households are headed by males (61.6%) than females (38.4%). A similar pattern is observed in urban and rural areas. Single-person households are predominantly in the three municipalities with high populations, namely Ho (22.8%), Keta (20.3%) and Hohoe (20.2%). Large households of 10 or more persons are found in districts like Nkwanta North (18.5%), Krachi West (11.9%), Adaklu Anyigbe (10.4%) and Krachi East (10.2%) in the Northern Volta.

Of the 2,086,567 people living in households, 23.8 percent are household heads, 10.1 percent are spouses, 40.5 percent are children and 24.2 percent are other relatives. Grandchildren (9.3%) and other relatives (7.7%) constitute a significant proportion of household composition.

### **12.5.2 Marital status**

Data on marital status indicate that 44.6 percent of the population 12 years and older are currently married, 4.6 percent are in consensual union, 13.0 percent were once married, 2.8% are separated, 3.4% are divorced, 6.8% are widowed and 37.8 percent have never married.

### **12.5.3 Ethnicity**

The predominant ethnic group in the region is Ewe (73.8%), followed by Gurma (11.3%) and Guan (8.1%). The Ewe are the overwhelming majority of the population in 11 of the region's 18 districts.

### **12.5.4 Religion**

The majority (71.4%) of the population is Christian, while 14.1 percent practice traditional religion and 5.7 percent are Muslim. Most Muslims are found in Kadjebi (29.6%), Jasikan (12.7%), Krachi West (10.2%), Nkwanta South (10.2%) and Nkwanta North (10.3%). The four districts with substantial proportions of their population practicing traditional religion are Nkwanta North (43.3%), Ketu North (33.5%), Ketu South (27.9%) and Akatsi (27.9%).

## **12.6 Literacy and Education**

For the region as a whole, 29.3 percent of the population are illiterate, 9.0 percent are literate in English, 11.7 percent are literate in a Ghanaian language, while 48.7 percent are literate in both English and a Ghanaian language. Less than 1 percent of the population is literate in both English and French, or in English, French and a Ghanaian language. A higher proportion of females are illiterate (19.7%) than males (9.6%).

The distribution of past school attendance for persons aged 6 years and over indicates that the majority of people who have attended school previously (55.2%) have attained at least the basic level, that is middle/JSS/JHS. More than one in five of the population in all districts

have attained at least primary level, except in Hohoe, South Dayi, North Dayi and Ho. Three districts with substantially high proportions of their populations reaching the primary level are Krachi East (34.2%), Nkwanta North (45.4%) and Ketu North (30.4). In three out of the 18 districts (Nkwanta North, Nkwanta South, and Ho Municipality) about one out of 10 of their population 6 years and older attained secondary/senior high school as the highest level. The proportion of the population attaining higher levels of education is low for the region and all the districts. For example, only 3 percent and less than 1 percent of the population in the region have had undergraduate university education and post-graduate education respectively.

Of the 1,764,993 population 6 years and older currently attending school, 47.7 percent are males and 52.3 percent are females. About 62.3 percent are enrolled in basic school (kindergarten, primary, JSS/JHS/middle), 8.1 percent in secondary/senior high school, 1.5 percent in vocational/ technical/commercial school, and 4.1 percent in tertiary institutions.

There are more males than females enrolled at all levels of education. In addition, the proportion of females who have never attended school (30.1%) is much higher than that of their male counterparts (17.6%). Whereas over 60 percent of the population in most of the districts in the region are currently attending basic school (Kindergarten, primary, JHS), there are some districts, particularly in the northern sector (Krachi East, Krachi West, Nkwanta North, Nkwanta South), where relatively low proportions (between 45.0 percent and 50.6 percent) are currently attending basic school.

## **12.7 Disability**

The prevention of disability and enabling people with disability (PWDs) to be productive citizens is an important aspect of national development. There is a total of 91,767 persons with disability in the region, representing 4.3 percent of its total population. The proportion of persons with disability ranges from a low of 2.0 percent in Nkwanta North District to a high of 11.3 percent in South Tongu District and is higher among females (2.4%) than males (1.9%) in all districts. In addition, the highest proportion of persons with disability is aged 65 years and over (26.1%), followed by children under 15 years (14.8%). The disability statistics also show that about one in five persons with disability have never married, 44.6 percent are in some form of union, and 20 percent have once been married but are now separated (4.7%), divorced (7.4%) or widowed (20.4%).

## **12.8 Economic Characteristics**

### **12.8.1 Economic activity**

Information on the activity status of the population indicates that 69.9 percent of the population 15 years and older are economically active. The proportion of persons who are economically active is higher for females (52.9%) than males (47.1%). The general activity rate of 64.9% in the rural areas is much higher than that of urban areas (35.1%). However, across districts, general activity rates in urban areas are higher than those in rural areas in Keta, Ketu South, Ho and Hohoe municipalities.

Of the economically active population, 67.0 percent are employed, 2.9 percent are unemployed, and 30.1 percent are not economically active. There are urban-rural differences in the proportion employed (61.0% urban against 73.1% rural). Of the 37,222 unemployed

persons recorded in the region, 54.9 percent are females and 45.1 percent are males. Among the districts, the unemployment rate is highest in Jasikan (50.9%), followed by Kadjebi (48.7%) and by Nkwanta North (48.4%), while Keta Municipality recorded the lowest proportion (38.2%).

Most of the economically active population in the region are self-employed without employee(s) (72.5%), followed by those who are employees (11.2%), contributing family workers (9.8%) and self-employed with employee(s) (2.8%). People in apprenticeship, domestic work and others together constitute 2.3 percent of workers. The informal private sector is the largest employer in the region (90.6%), followed by public (government) sector (6.1%).

### **12.8.2 Occupation**

Workers in skilled agriculture and related occupations are in the majority in all the districts except Keta Municipal (34.8%), Ketu South (17.3%), Ketu North (47.1%), Ho Municipality (34.4%), South Dayi (43.5%), North Dayi (38.1%), and Hohoe Municipality (43.5%). Males predominate in managerial and professional occupations (7.5% against 5.4%), while females predominate in services and sales (26.6% against 6.0%).

### **12.8.3 Industry**

Agriculture/forestry/fishing is the largest industrial sector, employing more than 50 percent of the economically active population. The other two major industries are wholesale and retail trade (14.0%) and manufacturing (14.1%). The proportion of males in skilled agricultural, forestry, and fishing (57.3%) is higher than that of females (44.0%), whereas the opposite is the case for wholesale and retail trade (20.8% female and 14.0% males) and manufacturing (17.2% females and 10.6% males).

### **12.8.4 Agriculture activity**

The 2010 Population and Housing Census reported a total of 599,276 household members in agriculture in the Volta Region, of which 116,507 are in the urban areas and 482,789 are in the rural areas. The majority of the population in agriculture is male (50.8%). There are also more males who are heads in agricultural households than females in all districts and localities. The average agricultural household size for the region is 4.8 persons. Among the districts, the average household size ranges from a low of 4.1 in Akatsi District to a high of 6.7 in Nkwanta North District. The major agricultural activity in the region is crop farming, followed by livestock rearing.

Crop farming practices in the region include mixed cropping, inter-cropping, and mono-cropping. The most common farming practice is inter-cropping (39.5%), while mixed cropping is relatively less popular (24.8%). A wide variety of crops are produced in the region, including staples such as yam, cocoyam, millet, sorghum, cassava, garden eggs, and plantain. Non-traditional crops meant for export are also produced and include cocoa, apples, black pepper, cashew nuts, ginger, pineapple, pawpaw, and mangoes. The highest proportion of farms produce maize (30.9%), followed by cassava (30.6%), and yam (8.7%). Overall, 83.1 percent of all crops are cultivated by households that live in rural areas compared to 16.9 percent in urban areas. Crops which are produced more by urban households compared to rural households are shallots (55.7% urban and 44.3% rural) and onions (54.1% urban and 45.9% rural).

An overwhelming proportion (81.2%) of livestock rearing occurs in the rural areas. Poultry constitutes the largest share of livestock production (54.2%), followed by goat rearing (18.4%) and sheep rearing (7.0%). Marine fishing is the least prevalent agricultural activity with just a 0.12% share of livestock production in the region. Livestock production is largely a rural activity.

## **12.9 Information and Communications Technology**

Information and communications technology (ICT) is recognized as an important component of socio-economic development. In order to ensure rapid deployment of ICT infrastructure, the government has been implementing policies and programmes to expand access for the population.

### **12.9.1 Mobile phone ownership**

The region has 540,623 persons 12 years and older with mobile phones, representing 37.3 percent of the population. Among the districts, Ho Municipality reported the highest proportion of its population 12 years and older with mobile phones (51.2%), followed by Ketu South (45.8%), and Hohoe Municipal (43.2%). Krachi East, Krachi West, and Nkwanta South all have relatively low proportions of their population with mobile phones (22.0%, 21.7%, and 21.3%, respectively).

With respect to the distribution of mobile phones by locality, 52.1 percent of the urban population in the region own mobile phones compared to only 29.3 percent of the rural population. Seven districts have over half of their urban populations 12 years and older with mobile phones (Ho Municipality, South Tongu, Ketu South, Akatsi, North Tongu, North Dayi, Hohoe). The proportion is highest in the rural areas in South Dayi (40.9%), followed by Ho (38.1%) and Ketu South (36.3%), while Nkwanta North has the lowest proportion of mobile phone ownership in both urban and rural areas. There are more males owning mobile phones (42.8%) than females (32.4%) in the region.

The proportion of persons with mobile phones increases steadily with increasing level of education. The percentage of mobile phone ownership ranges from a low of 19.5 percent of individuals with no education to a high of 95.3 percent for those with tertiary education.

### **12.9.2 Access to internet facility**

Data on access to internet facility indicate that there are 50,644 or 3.5 percent of internet users in the region out of a total population of 1,449,077 persons 12 years and older. The figure is far below the national average of 7.8 percent. The largest proportion of internet facility users in the region live in Ho (10.0%), followed by Hohoe (4.0%). Two other districts with figures higher than the regional average of 3.5 percent are Keta Municipal and Ketu South (3.8% and 3.9%, respectively). All other districts have rates below 3 percent. Use of internet is negligible in Krachi East and Nkwanta North (0.6% and 0.5% respectively). Males are more likely than females to use internet facilities in all the districts.

There is a wide urban-rural differential in internet use: 7.0 percent of urban dwellers in the region have access to internet facilities compared to only about 2.0 percent of rural dwellers. Ho District has the highest proportion of internet users in urban areas (18.3%), followed by

South Tongu District (8.4%). On the whole, access to internet facilities in the rural areas is quite poor across all districts. The proportion of internet users in rural areas is less than 2.0 percent in 14 out of the 18 districts.

### **12.9.3 Household ownership of desktop/laptop computer**

The 2010 census results show that only about 3 percent of all households in the region own desktop/laptop computers, compared to 7.2 percent of all households in Ghana. Ho Municipality has the highest proportion of its households with desktop/laptop computers (7.4%). The other districts with proportions higher than the regional average are South Dayi (3.8%), North Dayi (3.1%) and Hohoe Municipal (3.6%). The most disadvantaged district is Nkwanta North, which has less than 1 percent of its households with access to the facility (0.7%). Ownership of desktop/laptop computers is higher for female household heads than male household heads in South Tongu, Keta Municipal, Ketu North, Ho and South Dayi districts.

## **12.10 Housing Conditions**

### **12.10.1 Housing stock**

The total stock of houses in the region is 399,953. Of this total, 72.2 percent are located in rural areas and 27.8 percent in urban areas. Ho Municipality has the highest proportion of houses (13.5%), followed by Hohoe Municipality (11.5%) and Akatsi District (7.6%). Together these three districts share about 32.6 percent of all houses in the region. In contrast, North Tongu (6.8%), Ketu South (6.3%), Ketu North (5.9%) and Krachi West (5.5%) together have only 24.5 percent of houses. The population per house in the region is 5.3, which is lower than the national average of 7.3. Among the districts, the population per house ranges from a high of 8.4 in Nkwanta North to a low of 3.8 in Akatsi.

### **12.10.2 Dwelling units**

A total of 550,006 dwelling units were identified in the region, both occupied and unoccupied. The main type of dwelling most people use is the separate house (45.8%), followed by a room in a compound (41%), and semi-detached unit (6.5%). Flats/apartments are not common (1.5%). Makeshift dwelling units such as tents (0.2%), kiosks containers (0.4%), attachments to shops or offices (0.4%) together constitute about only 1.0 percent of all dwelling units.

### **12.10.3 Construction materials**

Mud brick/earth are the main materials used to in constructing walls of dwelling units (48.1%), followed by cement block/concrete (45.6%), leaf/thatch (2.1%), sandcrete/landcrete (1.4%) and wood (0.9%). Materials for floors of dwelling units are made mainly of cement/concrete (80.2%) and earth/mud (18.0%).

Most (70.7 %) households live in dwelling units roofed with corrugated metal sheets while 18.7% of households live in units roofed with thatch/palm leaves. The proportion of dwellings roofed with corrugated metal sheets is high in Hohoe Municipality (89.6%), North Dayi (85.5%), Biakoye (82.1%), Ho Municipality (83.2%), Jasikan (86.6%) and Kadjebi (92.2%), while Krachi East (38.1%) has the highest proportion of dwellings roofed with

thatch or palm leaves, followed by Krachi East (38.1%), Akatsi (37.3%), Krachi West (32.5%) and North Tongu (32.4%). The use of slates or asbestos as roofing material is relatively high in the coastal districts of Keta Municipality and Ketu South, probably because of its resistance to sea corrosion

#### **12.10.4 Tenure and holding arrangements**

The 2010 census data indicated that 61.4 percent of dwelling units are occupied by their owners, 18.6 percent by relatives who are not household members, and 16.4 percent by other private individuals. Only 1.6 percent of dwellings are owned by the government or public agency. The other types of tenure in the region include rent free (19.4%) and living in rental units (20.8%). The same pattern of tenure and holding arrangement pertains in all the districts.

#### **12.10.5 Household facilities and amenities**

Data on room occupancy indicate that 45.5 percent of households occupy only one room and 53.9 percent more than one room. Less than 1 percent of households occupy a single room shared with other households (0.7%). About three out of 10 household members sleep in single rooms, 32.9 percent in two sleeping rooms, 16.1 percent in three sleeping rooms and 9.0 percent in four sleeping rooms. The proportion of households occupying single rooms varies from a high of 36.6 percent in Ketu South district to a low of 13.8 percent in Nkwanta North district. These results show that the region does not as yet face a critical overcrowding situation, but the potential exists, and can occur, if housing policy measures and regulations do not take into account sleeping room occupancy as an important factor in the planning and provision of housing.

The main sources of drinking water for 26.6 percent of households is pipe-borne water, while 21.0 percent use boreholes or protected wells, and 19.2 percent use public tap/standpipe. In addition, 3.5 percent use sachet or bottled water. However, it is worrying that about three out of 10 households depend on surface water such as river/stream, canal and ponds. Three districts with relatively higher proportions of households that depend on rivers and streams as the main source of drinking water are Nkwanta North (58.8%), Krachi East (42.8%) and Nkwanta South (31.0%).

The three main toilet facilities available to households in the region are public toilets (30.0%), pit latrine in the house (22.6%) and KVIP (12.8%). In addition, 27.7 percent of households are without a toilet facility and use the bush and the beach. This situation is most prevalent in Nkwanta North (78.8%), Krachi West (57.2%), Nkwanta South (47.7%), Krachi East (45.8%) and Keta Municipal (43.4%).

Electricity (46.9%) and kerosene lamp (40.4%) are the main sources of lighting for households in the region and in all the districts. There are marked differences in the use of these two sources of light across districts. Ho Municipality the highest proportion of households using electricity (mains) for lighting (68.4%), followed by Hohoe Municipality (63.4%) and North Dayi (62.4%). While the majority of households in Ketu North (63.7%), Akatsi (60.9%), Keta (53.1%) and Ketu South (50.9%) use kerosene lamps as the main source of lighting, a relatively low proportion of households use this source in Hohoe (29.7%), Krachi East (28.5%) and Ho (24.5%).

Most households (87.5%) in the region use wood or charcoal as the main source of cooking fuel (57.1%), followed by charcoal (29.6%) and gas (9.3%). The use of the other sources such as kerosene, sawdust and electricity is negligible (under 1 percent for each). The proportion of households using gas for cooking is relatively high in the more urbanized districts like Ho Municipality (22.9%), Ketu South (12.5%), Keta Municipality (12.0%) and Hohoe Municipality (10.4%).

On waste disposal, 41.3 percent of households in the region dispose of solid waste at public dumps (open space), 16.6 percent at public dumps (container), 15.9 percent of households burn their solid waste, while 13.7 percent dump their solid waste indiscriminately. With regard to liquid waste, most households (50.2%) throw their liquid waste onto the compounds of their homes. Another 31.3 percent throw their liquid waste on the streets or outside their homes, while 9.3 percent of households throw their liquid waste into gutters. A similar pattern of solid waste disposal is observed in all the districts.

Concerning access to bathing facilities, 34.0 percent of households have their own bathroom for exclusive use and about one-quarter (22.5%) share a separate bathroom in the same house, while close to one in five households (19.9%) share an open cubicle. The percentage of households using other bathing facilities like river/pond/lake is quite low. There is little variation among districts in this pattern of household bathing facilities.



# **CHAPTER THIRTEEN**

## **SUMMARY FINDINGS AND POLICY RECOMMENDATIONS**

### **13.1 Policy Recommendation**

The formulation and implementation of development policies are often driven by data. The regional specific demographic and socioeconomic information from the 2010 Population and Housing Census could inform the goals and objectives of policies, targets to be achieved, and strategies adopted for achieving such targets.

The following recommendations are made based on the findings of the report:

#### **Population size, growth and structure**

Analysis of the trends in regional population size and growth shows that Volta region's population has increased rapidly since 1960. As a result, the age and structure of the population shows a relatively young population, which has the potential for further growth. The results have implications for the planning of social services, particularly education and health. It is therefore recommended that the integration of population variables into regional development planning should be considered a priority.

#### **Urbanization**

Urbanization in the region has been increased substantially from 16 per cent in 1970 to 34 per cent in 2010. The phenomenon is relatively more pronounced in Keta Municipal with more than half of its population living in urban areas. The rapid rate of urbanization in the region presents both development opportunities and serious challenges for socioeconomic progress. The opportunities offered by urbanization include sustained decrease in fertility and mortality rates; cities serving as engines of growth; cost-effectiveness in the provision of infrastructure and social services such as health and education; and more efficient environmental management. The challenges on the other hand include development of slums and squatter settlements, growth of urban poverty, deterioration of urban environment, inadequate provision of social infrastructure and services, and urban governance. These observations suggest the need for the adoption and implementation of a comprehensive regional urban policy.

#### **Fertility**

The trend in the Total Fertility Rate (TFR) in the region indicates that the region is experiencing a slow demographic transition like the rest of the country. To sustain the transition, there is the need to continue with, and intensify, fertility education and family planning programmes.

## **Mortality**

The results of this report show that both infant and child mortality rates are high in the region at 57 per 1000 live births and 87 per 1000 live births respectively with marked district variations. The strengthening of initiatives aimed at improving family planning, girl child education and maternal health services in the region could go a long way to reduce childhood mortality.

## **Education**

The report shows that illiteracy and lack of formal education (particularly at higher levels of education) are still high in the region. These compromise the quality of labour force in the region. The policy of free and compulsory should be vigorously enforced and opportunities offered by educational initiatives such as the School Feeding Programme, Capitation Grant and provision of free uniform should be utilized to enroll more children in school.

Gender parity in access to education remains a matter of concern in the region. Gender specific educational initiative need to be put in place to ensure that both boys and girls enroll and remain in school.

District Assemblies should establish educational fund to assist needy students, especially girls, to pursue senior high school and tertiary education.

## **Occupation and Industry**

Workers in skilled agriculture and related occupations are in the majority in all the districts and Agriculture/Forestry/ Fishing is the largest industrial sector employing more than 50 per cent of the economically active population. On the basis of these results, the following are suggested:

- Efforts to modernize agriculture using appropriate technologies to increase productivity in the sector need to be intensified.
- Farmers in agriculture need to be supported to acquire implements and small-to medium scale irrigation equipment that will facilitate farming activities throughout the year.
- The linkage between agriculture related activities and local industries need to be strengthened to create employment and ensure efficiency in both sectors.

## **Community facilities and amenities**

The quality of life of the people in the communities in the region depends in large part on access to good drinking, electricity, and adequate sanitary facilities among others. The report shows, however, that access to these facilities tends to be poor and non-existent in some homes. It is therefore recommended that:

- District Assemblies in collaboration with Non-governmental organizations operating in the water sector need to target underserved communities to construct more of bore-holes. This will ensure access to portable water for those communities.
- Accessible and easily recoverable soft loans should be provided to households to construct adequate toilet facilities in their dwellings.

- District Assemblies should be supported to enforce by-laws regarding the disposal of solid and liquid wastes.
- An important concern is the use of wood as the main source of fuel for domestic consumption with its attendant impact on deforestation in the region. District planners need to devise strategies for households to cut down on use of wood for cooking and encourage the use of gas as replacement.

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