



# GHANA LIVING STANDARDS SURVEY ROUND 6 (GLSS 6)

# MAIN REPORT



GHANA STATISTICAL SERVICE  
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## **PREFACE AND ACKNOWLEDGEMENT**

This report presents the main results of the sixth round of the Ghana Living Standards Survey (GLSS6), a nationwide household survey designed to generate information on living conditions in the country. Compared to previous rounds, GLSS6 had two unique features. First, it included a Labour Force Survey module with additional sections on Child Labour, Second, the survey methodology was reviewed to account for the inclusion of additional indicators pertaining to the northern savannah ecological zone, where a major Government initiative, the Savannah Accelerated Development project (SADA) had just been initiated. Other modules administered as part of the survey were the Non-farm Household Enterprises, Household Access to Financial Services and Governance, Peace and Security modules. The survey covered a period of twelve (12) months from 18<sup>th</sup> October 2012 to 17<sup>th</sup> October 2013. The data collection instruments and methodology were based on the fifth round with slight modifications.

The GLSS6 collected detailed information from households, including their demographic characteristics, education, health, employment and time use, migration and tourism, housing conditions, household agriculture, and access to financial services and asset ownership. The survey also collected information on households' perception of governance, peace and security in the country.

The data collected has been used to prepare a Poverty Analysis Report. A separate report on the Labour Force Module and a Child Labour Report have also been prepared. Researchers interested in the further analysis of the data are encouraged to apply to the Ghana Statistical Service (GSS) for the use of the data.

The methodology of the survey is such that it required substantial human, material and financial resources to successfully implement it. The effort of the GSS was complemented by the substantial support and cooperation received from various stakeholders to make this report possible. The GSS would, therefore, like to acknowledge the varied stakeholder contributions that led to the successful completion of the survey. First, we would like to thank the selected households for their patience and cooperation and for devoting time to the field personnel during the numerous visits and questioning. Our appreciation also goes to the field personnel and data entry officers for the meticulous manner in which they discharged their duties. Many thanks go to the regional and district administrators as well as the traditional rulers and community leaders for the diverse ways in which they provided assistance to the field teams to ensure the success of the fieldwork.

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**DR. PHILOMENA NYARKO  
(GOVERNMENT STATISTICIAN AND  
NATIONAL PROJECT DIRECTOR)**

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

AIDS	Acquired Immunodeficiency Syndrome
BECE	Basic Education Certificate Examination
COICOP	Classification of Individual Consumption According to Purpose
CWIQ	Core Welfare Indicators Questionnaire
DFID	Department for International Development
EFA	Education for All
GAMA	Greater Accra Metropolitan Area
GDHS	Ghana Demographic and Health Survey
GLSS	Ghana Living Standards Survey
HIV	Human Immunodeficiency Virus
ILO	International Labour Office
LSMS	Living Standards Measurement Survey
MDGs	Millennium Development Goals
MSLC	Middle School Leaving Certificate
PIT	Project Implementation Team
PSU	Primary Sampling Unit
SADA	Savannah Accelerated Development Authority
SHS	Senior High School
SSS	Senior Secondary School
SSU	Secondary Sampling Unit
TAC	Technical Advisory Committee
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Science and Cultural Organization
UNICEF	United Nations Children's Fund
WHO	World Health Organization

## **EXECUTIVE SUMMARY**

The Ghana Living Standards Survey Round Six (GLSS6) like previous rounds focuses on the household as the key socio-economic unit and provides valuable information on the living conditions and well-being of households in Ghana. This report summarizes the main findings of the sixth round of the GLSS which was conducted by the Ghana Statistical Service (GSS) from 18<sup>th</sup> October 2012 to 17<sup>th</sup> October 2013.

The survey covered a nationally representative sample of 18,000 households in 1,200 enumeration areas. Of the 18,000 households, 16,772 were successfully enumerated leading to a response rate of 93.2 percent. Detailed information was collected on the Demographic characteristics of households, Education, Health, Employment, Migration and Tourism, Housing conditions, Household Agriculture, Household Expenditure, Income and their components and Access to Financial Services, Credit and Assets. A summary of the main findings from the survey are presented below.

### **Demographic Characteristics**

The report provides information on household population, size, headship and age at first marriage, among others. The estimated household population from the survey is 26.3 million. Upper West region (0.8 million) has the lowest population followed by Upper East (1.1 million). The distribution of the population by locality shows that more people live in rural forest (6.9 million) than in rural savannah (4.7 million) and rural coastal (1.5 million).

The estimated number of households in the country is 6.6 million with a mean household size of 4.0 compared to 4.4 obtained from the 2010 Population and Housing Census. Average household sizes are higher than the national average in the three northern regions (5.5 for Upper West, 5.4 for Northern and 4.5 for Upper East). Household sizes are generally higher in rural (4.5) than urban (3.6) areas.

The proportion of male headed households (69.5%) is higher than that of females (30.5%); the proportion being much higher in rural savannah (83.6%) compared to rural coastal (61.9%). The proportion of female-headed households is higher in rural coastal (38.1%) than all other localities, with the lowest (16.4%) in rural savannah. The average age of a household head is 45.1 years with female household heads being older (48.0 years), their male (43.8 years) counterparts.

The results also show that the mean age at first marriage is 22.6 years, with females marrying about four years earlier than their male counterparts. In rural areas, the mean age at first marriage is 21.9 years compared to 23.3 years in the urban areas.

### **Education**

Information collected on the levels of educational attainment of the adult population, current school enrolment, educational expenditure by households, adult literacy rates, and apprenticeship training show that about 20 percent of the adult population (15 years and older) have never attended school. A higher proportion of females (24.3%) have never been to school compared to males (14.6%). Of those currently attending school, a higher proportion (71.9%) are in public schools compared with those enrolled in the private schools (28.1%). In the rural areas, about ninety percent of the population 15 years and older are currently enrolled in public schools.

In terms of educational expenses, households spent on average GH¢458.90 annually per household member attending school with about 51 percent of most educational expenses of household members being paid by the father of the enrolled individual and 17.5 percent by the mother.

More than half (56.3%) of the adult population is literate in English with a higher rate for males (67.3%) than for females (46.9%).

With regard to apprenticeship training, 31.7 percent of the apprentices are into the making of textile, apparel and furnishing, 21.9 percent in personal/grounds services, 13.8 percent in building and 10.0 percent in automotive trade. Building (28.1%), automotive (20.9%) and transportation are male dominated learning trades whereas textiles, apparel and furnishing (52.0%) and personal/grounds services (41.2%) are female dominated. On average, it takes about three years (35 months) to complete apprenticeship training. Males are more likely to engage in apprenticeship training and take a longer period (35.6 months) to complete their training than females (34.3 months).

## **Health**

Household members were asked about their general health condition in the two weeks preceding the interview. The results show that about 14 percent of the population suffered from an illness or injury in the previous two weeks. More than three out of every five (62.4%) persons who suffered from an illness or injury had to stop their usual activities. Two-thirds (66.2%) of those who reported being ill or injured consulted a health practitioner. Over a half of those who suffered an injury or illness consulted medical practitioners in public health facilities (52.2%) while 44.6 percent visited private non-religious facilities. The patronage of public health facilities is highest in rural forest (56.0%) and rural savannah (60.6%). The population 50 years and older (22.4%) and children 0-5 years (20.3%) recorded higher proportions of persons who suffered from an illness or injury during the period.

The average total medical expenses incurred by people who reported ill or injured in the two weeks preceding the interview was GH¢88.03, with the medical expenses being higher in rural areas, especially rural forest GH¢147.88 than the urban areas. Medical expenses were borne mainly by household members (54.5%) and through health insurance services (41.5%). About 9 percent of the women aged 15-49 reported that they were pregnant in the 12 months preceding the interview and about 5 percent were pregnant at the time of the interview. Overall, 13.5 percent of pregnancies did not result in live births. Nearly four out of every five women aged 15-49 years or their partners were not using any form of contraceptive method. On average, a woman spends GH¢3.30 on contraceptives each time it is purchased.

Less than 2 percent (1.7%) of children 5 years and below in the country had not received any vaccination at the time of interview. About 99 percent of all children 5 years and younger have been breastfed at one time or another, with 82.1 percent being weaned before reaching 12 months. Regarding HIV/AIDS, about four percent of people in Ghana have no knowledge that a healthy looking person may have the HIV. Four-fifths of women in Ghana (80.4 % in rural areas and 83.4% in urban areas) know about mother to child transmission.

Overall, 67.6 percent of the population are registered or covered by the health insurance scheme, with 99.1 percent of the health insurance registrants being on district mutual health insurance schemes nationwide.

## **Employment**

More than three-quarters of the population 15 years and older is economically active (77.1%). The proportion of economically active males (79.8%) is higher than females (74.9%). The population in rural areas are also more likely than those in urban areas to be economically active. About 75 percent of the population 15 years and older are employed, with majority of them engaged in Agriculture (44.7%) and Services (40.9%). Nearly two-thirds (68.7%) of the working population are own account workers (46.4%) and contributing family workers (22.3%).

The working population is dominated by people with education up to the basic level (BECE) (57.2) while a quarter (25.2%) has no education. Workers engaged in the agriculture sector worked for less than 40 hours in a week. Less than half of the employed population (45.4%) worked for more than 40 hours in a week.

Even though the unemployment rate (5.2%) is low, more than one-third of the working population are underemployed (i.e., these individuals work less than 35 hours a week). The proportion of persons engaged in agricultural activities who are underemployed (61.5%) is higher than those in non-agricultural activities (38.5%). About 3.2 million (20.5%) persons 15 years and older are economically not active, citing education or training (54.5%) as being the main reason for inactivity.

Overall, 28.8 percent of children aged 5-14 years are currently employed and 70.1 percent are economically not active. Majority of these were engaged in agriculture, forestry and fishing, with the proportion of males (84.6%) being higher than females (71.2%).

## **Migration and Tourism**

The data on migration indicates that 48.6 percent of the population is made up of migrants, with Accra (GAMA) having the highest proportion of migrants (60.3%). Urban areas other than GAMA, has 46.7 percent of migrants. Over half (51.6%) of the population in rural forest are migrants. while in rural coastal, migrants constitute 44.6 percent of the population. Rural savannah (37.5%) has the least proportion of migrant population. Half of the female population (50.1%) is made up of migrants compared to 46.5 percent of males.

More than half of the migrant population (52.4%) had relocated to the rural areas, while 10.5 percent had relocated to Accra (GAMA), with the rest (37.1%) relocating to other urban areas. About a fifth moved from one rural locality to another rural locality, while less than ten percent migrated from rural localities to other urban areas (8.8%).

The results also show that 51.4 percent of the population are non-migrants, 17.1 percent are in-migrants and 31.5 percent are return migrants. Generally, the movement of the population is found to be related to age. Among the in-migrants, those within the age group of 25-29, the 10-14 and 30-34 year olds constitute 31.8 percent (10.8%, 10.3% and 10.7% and 10.3% respectively). Children aged 7-9 years constitute 6.1 percent. With regard to the return migrants, 3.6 percent are aged 7-9 while 11.2 percent are within the age group 25-29. Among the non-migrant population those within the age group 10-14 constitute the largest proportion (22.7%).

The Ashanti region accounts for about a quarter of the in-migrants (24.5%) followed by the Eastern (13.4%) and Western (11.9%) regions. The Upper West region has the least proportion of the in-migrant population (2.5%). The in-migrants to the regions are mostly from other urban areas (57.8 %). A little less than one-third is from rural areas (30.6%).

Tourists make up approximately 27 percent of the household population. Of these, domestic tourists account for 98 percent. Persons aged 25 to 44 constitute 37.5 percent of domestic tourists. For the same age group, almost the same proportions of males (37.8%) and females (37.3%) travel as domestic tourists. With regard to outbound tourism, 46.7 percent of persons aged 25 to 44 travel as domestic tourists. This is made up of 50.2 percent males and 42.6 percent females.

## **Housing**

Most households in the country (60.6%) live in compound houses. One out of every 15 households in Accra (GAMA) (6.7%) lives in improvised homes. The proportion of urban households that live in compound houses (68.1%) is higher than rural households (51.3%). In Accra (GAMA), 63.9 percent of households live in compound houses; this proportion is lower than in other urban areas where 68.2 percent of households live in compound houses.

More than two out of every five households (45.9%) own the houses in which they live. Three out every five rural households (62.1%) compared to about one-third urban households (32.8%) own their houses. Two out of every five urban households (41.0%) live in rented premises compared to one out of every five in rural areas. The proportion of households owning a dwelling is highest in the rural savannah (75.3%) and lowest in urban areas other than Accra (GAMA).

More than three-quarters of houses within rural savannah are constructed from mud, mud bricks or earth compared to 50.0 percent in the rural forest and 39.5 percent in rural coastal zones. About two-thirds of the outer walls of houses are built with cement blocks or concrete; mud, mud bricks and earth also constitute 31.1 percent. Four out of every five households use cement as their flooring material. Three-quarters of households occupy dwelling units roofed with metal sheets, while 7.1 percent of households live in dwelling units roofed with slates or asbestos.

One-fifth of the households are single person households and one-third of them occupy single rooms. About one-tenth of five member households occupy one room while less than two percent of households with ten or more members occupy one or two rooms.

Sachet water (44.5%) constitutes the major source of drinking water for households in the urban areas. The use of pipe-borne water for drinking is more prevalent in other urban areas (44.5%) than Accra (GAMA) (26.3%). Nearly two-fifths of rural coastal households use pipe-borne water for drinking (38.0%) while 58.7 percent and 64.5 percent of rural forest and rural savannah households, respectively, use a well. Also, 42 percent of households use pipe-borne water for general household use.

Seven out of every ten households is connected to the national electricity grid (70.6%) while about a quarter of households rely on torch or flashlight for lighting (24.3%). Electricity is the main source of lighting for 88.6 percent of urban households, with 93.1 percent of households in Accra (GAMA) having access. In the rural areas, less than 50 percent of households have electricity as the main source of lighting. The use of wood or charcoal is still very popular among households. About three-quarters of households depend on wood or charcoal for cooking while less than one-quarter use LPG (22.3%). In the urban areas, 43.6 percent of households use charcoal while 35.8 percent use gas.

Less than one-fifth of households have their solid waste collected while half depend on public dumping sites. About three-quarters of households throw their liquid waste in the open.

Households using WC, Pit Latrine and KVIP constitute 13.9 percent, 19.1 percent and 12.1 percent respectively.

More than half (53.5%) of households in the country had drinking water that met both arsenic and E. coli levels. Two out of every five households (41.5%) had drinking-water in the household which met the arsenic standard but contained E. coli. Overall, 43.5 percent of the population had source water with detectable E. coli, and this value increased to 62.32 percent for household samples, reflecting that high levels of contamination occur at the household level.

### **Household Agriculture**

It is estimated that a little over half (51.5%) of households in Ghana own or operate a farm. Farming is mostly rural, engaging about 83 percent of rural households. Again, in the rural areas, agricultural operators are common in rural savannah with about 93 percent of households involved. The corresponding figures for the forest and rural coastal areas are 81.2 percent and 65.4 percent respectively. The proportion of females engaged in agriculture in rural coastal (48.7%) is higher than females in the other rural areas.

Consumption of own products take place mostly in rural households, with an average annual value of GHC5,004.56 compared to GHC3,713.62 for urban households.

### **Non-Farm Enterprise**

About 3.7 million households, representing 44.3 percent of households in the country operate non-farm enterprises, half of which are in urban localities (50.4%) while a little over one-third are in rural areas (36.8%). In the urban areas, the proportion of females (69.0%) engaged in trading activities is higher than males (67.1%). On the contrary, the proportion of males engaged in trading activities (32.9%) in the rural areas is higher than females (31.0%). Households spend an average of GH¢110.40 on inputs for operating their enterprises with the highest average expenditure being on raw materials (GH¢641.70), followed by purchase of articles for resale (GH¢387.80) and fuel and lubricants (GH¢316.80).

### **Household income and expenditure**

The annual average household expenditure for the country is estimated at GH¢9,317 with a mean annual per capita expenditure of GH¢6,337. The total annual household expenditure for the country is GHC61,507 million with the share of urban expenditure (65.8%) almost twice as much as that of rural localities (34.2%). Moreover, the average household expenditure in urban localities (GH¢11,061) is about 1.5 times that of the rural localities (GH¢7,152).

The household's mean annual per capita expenditure on food (actual and imputed) of GHC1,302 accounts for the largest share (46.7%) of the total annual household expenditure of GHC61.507 million. Households' total expenditure on housing accounts for 12.4 percent of total expenditure with an annual average of GHC1,156 and an annual per capita expenditure of GHC395.

The major source of household income is from non-farm self-employment, contributing 48.3% to sources of household income. Wages from employment is the second major contributor to household income (GH¢7,718.10) followed by household agriculture (GH¢3,342.23). Income from rent, remittances and other sources contributes less than 5 percent to household income.

The results again show that 46.4 percent of urban households have savings accounts while in the rural localities only 21.5 percent of households have savings accounts. In the urban areas, the proportion of households having a savings account in Accra (GAMA) (54.1%) is higher than for other urban (42.9%) areas. In the rural localities, a relatively higher proportion of males have a savings account (58.6%) compared to females (41.4%).

### **Governance, Peace and security**

Peace, safety and security are important tenets of good governance and they have a direct relationship with development. More than one-quarter of households were victims of theft, robbery or attempted robbery during the five years before the survey. The incidence of robbery was higher among rural households (29.2%) than urban households (26.9%). To prevent robberies, most households use dogs (16.6%), special window or door grilles (12.4%) and special door locks (10.8%).

Less than one-tenth of households who were victims of theft or robbery (8.0%) reported the incident to the Police. A similar proportion reported cases of sexual offence to the Police. More than two-fifths of households did not report the incident to the Police because they either did not consider it serious enough (46.0%) or they solved it themselves (30.0%).

Six out of ten households feel very safe from crime and violence at home (59.8%). About seven percent of households live in communities where force or violence has been used in the neighbourhood.

Overall, the study results indicate that Ghana has made progress in many important areas such as education, healthcare and infrastructure. However, some key indicators such as sanitation, quality of drinking water, security and the engagement of children in economic activities continue to lag behind international and national targets.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

One of the major challenges facing many developing countries, including Ghana, has been the need for more comprehensive, reliable and up-to-date statistics and indicators to monitor and evaluate the impact of development policies and programmes on the living conditions of their citizens. The Ghana Living Standards Survey was an initiative aimed at addressing this need.

The Living Standards Measurement Study (LSMS), customized by implementing countries, including Ghana (Ghana Living Standards Survey), is a research project that was initiated in 1980 by the Policy Research Division of the World Bank. The project is to make available relevant data for policy and decision-makers to measure socio-economic indicators and appreciate their determinants. Programmes could then be developed and implemented to address challenges in the various sectors of the economy such as health, education, economic activities and housing conditions, among others. Living Standards Surveys have, therefore, made it possible to provide valuable insights into living conditions in developing countries.

The Ghana Living Standards Survey (GLSS) has emerged as one of the important tools in the welfare monitoring system and together with other surveys like the Core Welfare Indicators Questionnaire (CWIQ) and the Ghana Demographic and Health Survey (GDHS) have provided a wealth of information for understanding living conditions in Ghana.

The first Ghana Living Standards Survey was conducted in 1987. The second, third, fourth and fifth rounds were conducted in 1988, 1991/92, 1998/99 and 2005/06 in that order. The sixth and latest round of the GLSS was conducted between October 2012 and October 2013. While maintaining the questionnaires used during the fifth round, three new modules were introduced in this sixth round. These are the Labour Force Module which focused on employment and time use, a module on Household Access to Financial Services and a module on Governance, Peace and Security.

### 1.2 Objectives of GLSS6

The objectives of the sixth round of the Ghana living Standards Survey Round Six were to:

- Provide information on the patterns of household consumption and expenditure at a lower level of disaggregation.
- Serve as the basis for the construction of a new basket for the next re-basing of the Consumer Price Index.
- Provide information for up-dating the country's National Accounts.
- Provide information on household access to and use of financial services.
- Estimate the number of persons in the labour force (Employed, Under-employed and Unemployed) and their distribution by sex, major age-groups, educational level, disability status, geographical and rural/ urban spread, as well as the ecological manifestations of these.
- Estimate the number of child workers (or children in employment) aged 5-17 years, and its distribution by sex, major age-groups, educational status, geographical, ecological and rural/urban spread, etc.

### **1.3 Survey instruments**

To achieve the set objectives, detailed information was collected on key elements of socio-economic life using the following questionnaires:

- Household Questionnaire
- Non-farm Household Questionnaire
- Community Questionnaire
- Governance, Peace and Security Questionnaire
- Prices of Food and Non-food Items Questionnaire

The Household Questionnaire is made up of two parts, A and B. Part A and has seven sections namely: demographic characteristics of respondents; education and skills training; health and fertility behavior; employment and time use; migration and tourism; household agriculture; housing and housing conditions.

Part B covers five sections namely: agriculture; household income and expenditure; income transfers; migration and remittances and credit, assets and use of financial services.

The Community Questionnaire covers general information on facilities available in the communities whilst the Price Questionnaire was used to solicit information on the market prices of consumer items.

The questionnaire on Governance, Peace and Security was used to solicit for information on theft, robbery, sexual offences, violence and security, safety, peace and social cohesion, as well as political engagement.

### **1.4 Sample design**

The sixth round of the Ghana Living Standards Survey (GLSS6), like the previous rounds, was designed to provide nationally and regionally representative indicators. Consequently, it applied the same sampling methodology, the same questionnaires and covered the same broad range of topics such as education, health, employment, housing conditions, migration and tourism, among others.

In order to cater for the needs of the Savannah Accelerated Development Authority (SADA) areas and also provide nationally representative quarterly labour force statistics, the number of primary sampling units (PSUs) and households were increased from 580 and 8,700 to 1,200 and 18,000 respectively – an increase of about 107% over the GLSS5 figures. (See Appendix Tables A1 and A2). Accordingly, a two-stage stratified sampling design was adopted. At the first stage, 1,200 enumeration areas (EAs) were selected to form the PSUs.

The PSUs were allocated into the 10 regions using probability proportional to population size (PPS). The EAs were further divided into urban and rural localities of residence. A complete listing of households in the selected PSUs was undertaken to form the secondary sampling units (SSUs). At the second stage, 15 households from each PSU were selected systematically. Hence, the total sample size came to 18,000 households nationwide.

### **1.5 Training and fieldwork**

Personnel with a minimum qualification of Higher National Diploma were recruited and trained to undertake the fieldwork. These attended a 21-day training programme during which members of the Project Implementation Team (PIT) took them through the various

sections of the questionnaire including the concepts and definitions used. The training also involved assessment exercises, field practice, role plays and group discussions and interviews in the major local languages.

The fieldwork was over a twelve-month period and took place from 18<sup>th</sup> October 2012 to 17<sup>th</sup> October 2013. Thirty teams were deployed to the field, each comprising of a supervisor, senior interviewer/editor, three interviewers and a driver. Data capture centres were setup in the regional offices of the Service and each centre had a data entry officer.

Field monitoring exercises were undertaken by the Top Management of the Service, Steering Committee members, Technical Advisory Committee (TAC) members and the Project Implementation Team. The monitors observed interviews and checked completed questionnaires to ensure consistency of responses and to ensure data quality.

## **CHAPTER TWO**

### **DEMOGRAPHIC CHARACTERISTICS**

#### **2.1 Introduction**

As previously indicated, the Ghana Living Standards Survey round six (GLSS6) was expected to provide national and regional level indicators, as well as additional indicators pertaining to the northern savannah ecological zone, where a major Government of Ghana initiative, the Savannah Accelerated Development Authority (SADA) project, was being implemented.

This chapter discusses some key demographic characteristics of the household and household population by region and locality, marital status, mean age of population at first marriage, nationality, ethnicity and religion of household heads.

#### **2.2 Household composition**

The composition of the Ghanaian household is a reflection of the social structure of the population. For the purposes of the survey, a household is defined as a person or group of related or unrelated persons who live together in the same housing unit, sharing the same housekeeping and cooking arrangements and are considered as one unit, who acknowledge an adult male or female as the head of the household. In general, a household may consist of a man, his wife or wives and children and some relatives or non-relatives who may be living with them. Members of a household are not necessarily related by blood or marriage.

Out of the 18,000 households selected for the survey, 16,772 were successfully interviewed. Table 2.1 shows the mean household size, estimated population in private households, and estimated number of households, by region and locality. The estimated household population from the survey is 26.3 million, while the projected population in households for 2013 based on the 2010 Population and Housing Census is 25.7 million. With regard to the regional distribution of the estimated population, Ashanti and Greater Accra regions have the highest of 5.2 million and 4.3 million respectively. Upper East (1.1 million) and Upper West (0.8 million) regions have the lowest population. The distribution of the population by locality shows that more people live in rural forest (6.9 million) than in rural savannah (4.7 million) and rural coastal (1.5 million).

The estimated number of households in Ghana is 6.6 million. The mean household size for the country is 4 compared to 4.4 obtained from the 2010 Census. Average household sizes that are higher than the national average are found in the three northern regions (5.5 for Upper West, 5.4 for Northern and 4.5 for Upper East) and in Volta and Brong Ahafo regions (each with a mean household size of 4.3 each).

The table further reveals that in general rural (4.5) household size is larger than urban (3.6) household size. Rural Savannah has the highest mean household size of 5.5, while rural coastal has the least (3.8).

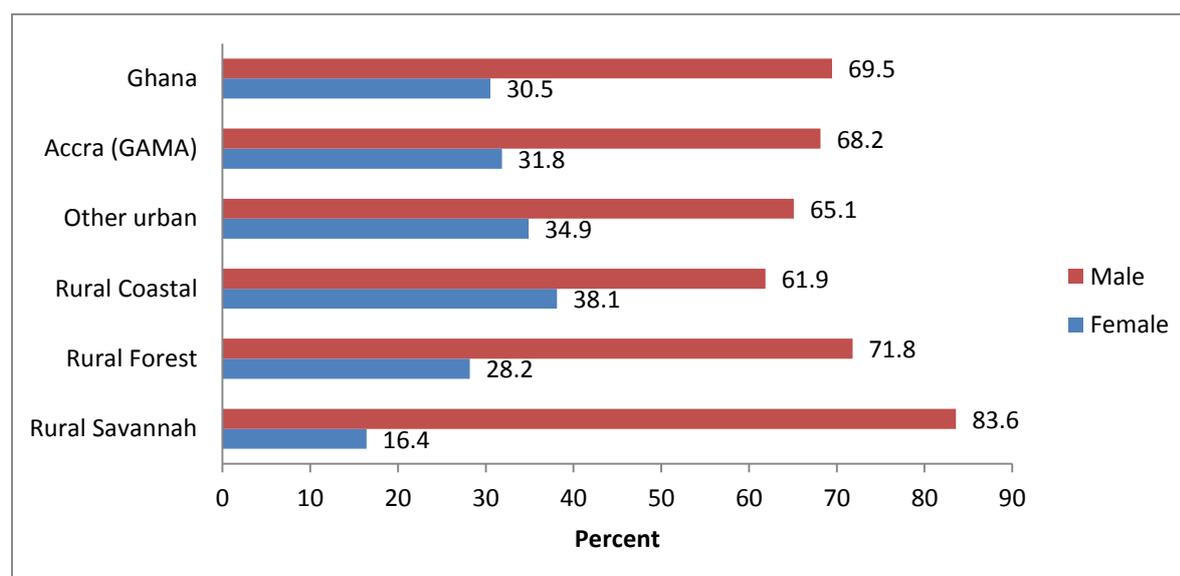
**Table 2.1: Mean household size, estimated population in private households and estimated number of households by region and locality**

Region/Locality	Mean Household Size		Population in Households (Million)		Estimated number of Households (Thousand)
	2010 Census*	2012/2013 GLSS6	Projected from Census**	Estimated from 2012/2013 GLSS6	
<b>Ghana</b>	<b>4.4</b>	<b>4.0</b>	<b>25.7</b>	<b>26.3</b>	6,601.5
Western	4.2	4.0	2.4	2.4	605.8
Central	4.0	3.8	2.3	2.3	612
Greater Accra	3.8	3.4	4.2	4.3	1,250.80
Volta	4.2	4.3	2.2	2.3	526.2
Eastern	4.1	3.8	2.7	2.7	721.6
Ashanti	4.1	3.7	5.0	5.2	1,400.8
Brong Ahafo	4.6	4.3	2.4	2.6	614.5
Northern	7.7	5.4	2.6	2.6	491.7
Upper East	5.8	4.5	1.1	1.1	240.3
Upper West	6.2	5.5	0.7	0.8	137.8
<b>Urban</b>		<b>3.6</b>	<b>13.0</b>	<b>13.2</b>	<b>3,656.5</b>
Accra (GAMA)***		3.4		4.0	1,162.5
Other Urban		3.7		9.2	2,494.0
<b>Rural</b>		<b>4.5</b>	<b>12.7</b>	<b>13.1</b>	<b>2,945.0</b>
Rural Coastal		3.8		1.5	400.4
Rural Forest		4.1		6.9	1,674.9
Rural Savannah		5.5		4.7	869.7

Note: \*September 2010; \*\*Midyear 2013; Excludes institutional population.\*\*\*GAMA means Greater Accra Metropolitan Area; GAMA comprises Accra Metropolitan Area (AMA), Adenta Municipal, Ledzokuku Krowor, and Urban areas in Ga East, Ga West, Ga South Districts.

The survey results indicate that a higher proportion of households are headed by males (69.5%) than females (30.5%) (Fig.2.1). The proportion of male-headed households is highest in rural savannah (83.6%) but lowest in rural coastal (61.9%). The proportion of female-headed households is higher in rural coastal (38.1%) than all other localities, with the least (16.4%) in rural savannah.

**Figure 2.1: Percentage of household heads by sex and locality**



The average age of a household head is 45.1 years (Table 2.2). On the average female household heads (48.0 years) are older than their male (43.8 years) counterparts. The table also shows that household heads in the rural areas tend to be older (47.0 years) than those in the urban areas (43.5 years), including Accra. The mean age of male and female household heads in the rural areas are higher than that of male and female household heads in the urban areas.

**Table 2.2: Average age of household heads by locality and sex**

Locality	Both Sexes	Male	Female
<u>Urban</u>	43.5	42.1	45.8
Accra (GAMA)	42.1	41.1	44.2
Other urban	44.2	43.0	46.5
<u>Rural</u>	47.0	45.4	51.5
Rural Coastal	46.7	42.9	52.8
Rural Forest	47.4	45.9	51.4
Rural Savannah	46.2	45.4	50.6
Total	45.1	43.8	48.0

The proportion of households with at least one adult of each sex together and one or more children is 49.7 percent (Table 2.3). The survey results also indicate that 6.9 percent of households contain one female adult living with one or more children compared to 0.8 percent of their male adult counterparts. The percentage of households containing one male adult without children (13.7%) is much higher than the corresponding percentage of households containing one female adult without children (6.6%). The proportion of households without children but with one male adult (13.7%) is higher than those with one female adult (6.6%).

**Table 2.3: Distribution of households by adult composition and presence of children**

Adults in Household	With children		Without Children	
	Percentage of Total	Estimated number of Households	Percentage of Total	Estimated number of Households
At least one adult of each sex	49.7	3,283,000	13.0	861,000
One male adult	0.8	55,000	13.7	902,000
Two or more male adults	0.3	17,000	1.4	92,000
One female adult	6.9	459,000	6.6	437,000
Two or more female adults	5.0	328,000	2.6	169,000
Ghana	62.7	4,141,000	37.3	2,460,000

Note: A child is defined as a person aged less than 15 years at the time of the interview

About one-fifth of the total households have children living with only their mother while about three percent (2.7%) of the households have children living with only their father (Table 2.4). The rural savannah zone (67.4%) has the highest proportion of households which have both parents present followed by rural forest (48.2%), other urban (39.3%) and Accra (39.2%).

**Table 2.4: Distribution of households by presence of parent and locality**

Presence of parent	Locality					Total
	Accra (GAMA)	Other urban	Rural Coastal	Rural Forest	Rural Savannah	
No parent	39.5	35.2	36.7	31.0	17.8	32.7
Only father	3.2	2.6	2.1	3.0	2.1	2.7
Only mother	18.1	22.9	22.6	17.7	12.7	19.4
Both parents	39.2	39.3	38.6	48.2	67.4	45.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

### 2.3 Age and Sex Distribution of the Population

The results of the survey show that males constitute 48.3 percent and females 51.7 percent of the population. This indicates a sex ratio of 93 males to every 100 females. In all the localities, the proportion of females is higher than males (Table 2.5). However, for lower age groups (0-4 years and 5-9 years) there are higher proportions of males than females.

Children under 15 years account for 39.4 percent of the population while persons 65 years and older constitute 4.8 percent. Based on this structure, the survey reveals a dependency ratio of about 79 compared to 82 in the GLSS 5 survey. The current dependency ratio means that there are 8 persons in the dependent ages (0-14 and 65+) for every 100 persons in the working age group (15-64). The proportion of children (under 15 years) in the rural areas (42.4%) is higher than in Accra (33.8%) and other urban areas (37.6%).

**Table 2.5: Age distribution of population by locality and sex (percent)**

Age group	Accra (GAMA)		Other urban		Rural		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
0 - 4	6.1	5.4	6.0	5.7	7.3	7.0	6.7	6.3
5 - 9	5.5	4.7	6.8	6.3	7.5	7.2	6.9	6.5
10 - 14	5.8	6.3	6.0	6.8	7.1	6.3	6.5	6.5
15 - 19	4.7	6.3	6.3	7.1	6.7	6.1	6.2	6.5
20 - 24	3.7	3.6	2.9	3.9	2.6	3.0	2.9	3.4
25 - 29	4.6	5.6	3.3	4.2	2.9	3.3	3.3	4.0
30 - 34	3.9	4.5	3.2	3.6	2.4	3.0	2.9	3.4
35 - 39	3.7	3.8	2.6	3.4	2.3	2.9	2.6	3.2
40 - 44	2.9	3.4	2.2	2.8	2.2	2.6	2.3	2.8
45 - 49	2.2	2.5	1.9	2.4	1.8	2.0	1.9	2.2
50 - 54	1.8	1.9	1.6	2.0	1.6	1.9	1.6	1.9
55 - 59	1.2	1.1	1.3	1.4	1.2	1.3	1.3	1.3
60 - 64	0.7	1.1	0.9	1.1	1.0	1.1	0.9	1.1
65+	1.5	1.6	1.1	2.7	2.6	3.0	2.1	2.7
All Ages	48.3	51.7	46.5	53.5	49.3	50.7	48.2	51.8

Note: \*\*\*GAMA means Greater Accra Metropolitan Area; GAMA comprises Accra Metropolitan Area (AMA), Adenta Municipal, Ledzokuku Krowor, and Urban areas in Ga East, Ga West, Ga South Districts.

## 2.4 Marital Status and Age at first marriage

Table 2.6 indicates that 57.7 percent of the population 12 years and older have ever married (consensual union, married, divorced, separated or widowed) while 42.3 percent have never married. The rural savannah (47.7%) has the highest proportion of people who are currently married, followed by rural forest (38.2%), with Accra (36.6%) having the lowest. The percentage who have never married is lower in the rural localities (coastal, forest and savannah) compared to the urban areas (Accra and other urban).

The results also indicate that the proportion of persons who are divorced is highest in rural coastal (3.9%), followed by other urban (4.0%), but lowest in rural savannah (1.3%). The percentage of persons in consensual union is relatively high in all the localities (between 5% and 11%), while those separated is very low in all localities (between 1.0% and 3%) when compared with the proportion never married and married.

**Table 2.6: Population by marital status and locality**

Marital status	Locality					Total
	Accra (GAMA)	Other urban	Rural Coastal	Rural Forest	Rural Savannah	
Never married	46.1	44.4	39.9	39.3	39.5	42.3
Consensual union	6.2	5.8	7.8	10.6	5.1	7.1
Married	36.6	38.0	37.8	38.2	47.7	39.4
Separated	3.0	2.2	2.4	2.2	1.0	2.2
Divorced	3.6	3.9	4.3	3.9	1.3	3.4
Widowed	4.5	5.7	7.8	5.9	5.4	5.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The survey results show that the mean age at first marriage is 22.6 years, with females marrying about four years earlier than their male counterparts. Age at first marriage varies by locality as shown in Table 2.7. In rural areas, the mean age at first marriage is 21.9 years compared to 23.3 years in the urban areas. The results also show that females in both the rural and urban areas marry earlier (20.1 years for rural and 21.4 years for urban) than their male counterparts (24.3 years for rural and 25.9 years for urban). This may probably be due to the economic status and level of education of the individuals in the various localities.

**Table 2.7: Mean age of population at first marriage by sex and locality**

Locality	Male	Female	Total
<b>Urban</b>	<b>25.9</b>	<b>21.4</b>	<b>23.3</b>
Accra (AMA)	27.2	22.2	24.5
Other urban	25.3	21.0	22.7
<b>Rural</b>	<b>24.3</b>	<b>20.1</b>	<b>21.9</b>
Rural Coastal	25.2	21.1	22.7
Rural Forest	24.3	20.1	21.9
Rural Savannah	24.1	19.6	21.5
<b>Ghana</b>	<b>25.1</b>	<b>20.8</b>	<b>22.6</b>

## 2.5 Nationality

The composition of the population by sex and nationality is summarized in Table 2.8. The table shows that the vast majority of the populations are Ghanaians (98.5%), with less than two percent (1.5%) being non-Ghanaians. Ivorian and Togolese nationals constitute majority of non-Ghanaians, probably because of the proximity of these countries to Ghana.

**Table 2.8: Percentage distribution of population by sex and nationality**

Sex	Ghanaian	Burkinabe	Malian	Nigerian	Ivorian	Togolese	Liberian	Other ECOWAS	Other African	Other	Total
Male	98.4	0.1	0.1	0.1	0.3	0.3	0.1	0.2	0.2	0.3	100.0
Female	98.6	0.1	0.2	0.0	0.4	0.1	0.1	0.1	0.2	0.3	100.0
Total	98.5	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.2	0.3	100.0

## 2.6 Ethnicity

Members of the same ethnic group share certain beliefs, values and norms that relate to a common cultural background. Table 2.9 indicates that the majority of the heads of households within the country are Akan (49.7%) followed by Mole-Dagbani (14.2%) and Ewe (13.3%) whilst the Mande (1.1%) constitute the smallest ethnic group.

The survey results show that except for Volta and the three Northern regions, household heads that belong to the Akan ethnic group are predominant in the remaining six regions. The majority of the household heads in Upper East (67.2%), Northern (67.1%) and Upper West (65.0%) are Mole-Dagbani and in Volta, Ewe (71.7%). In Greater Accra, the highest proportion of household heads identified themselves as Akan (34.5%) and Ga-Dangme (30.8%) while Ewes constituted 20.7 percent. Most of the household heads that belong to the Gurma ethnic group are located in the Northern (17.9%) and Volta (11.8%) regions.

**Table 2.9: Household heads by ethnicity and region**

Ethnicity	Greater		Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	Total
	Western	Central									
Akan	79.9	78.8	34.5	2.5	54.4	78.7	58.9	1.3	0.4	1.7	49.7
<i>Asante</i>	5.8	1.4	13.6	31.5	5.8	74.2	13.2	9.5	0.0	36.9	24.5
<i>Fante</i>	17.7	29.8	20.5	14.2	7.9	5.9	2.4	16.9	16.3	15.4	15.8
<i>Other Akan</i>	76.5	68.8	65.9	54.3	86.3	19.9	84.4	73.6	83.7	47.7	59.7
Ga Dangme	3.6	3.1	30.8	1.8	19.6	1.7	1.6	0.5	0.0	0.3	9.3
Ewe	4.9	9.7	20.7	71.7	13.4	2.6	2.7	0.9	0.1	0.5	13.3
Guan	1.4	4.0	3.0	9.1	5.0	1.7	4.8	8.0	0.2	3.5	3.8
Gurma	0.8	1.1	1.8	11.8	1.7	3.1	4.8	17.9	3.6	0.3	4.2
Mole-Dagabni	6.9	2.1	5.4	0.4	2.6	7.8	16.7	67.1	67.2	65.0	14.2
Grusi	0.3	0.2	1.0	0.1	0.8	1.7	3.8	1.3	19.2	27.9	2.4
Mande	1.4	0.5	0.5	0.0	0.5	1.5	1.7	0.1	6.8	0.4	1.1
All others	0.9	0.5	2.3	2.5	1.9	1.3	4.9	2.9	2.3	0.4	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## 2.7 Religious affiliation by locality

Table 2.10 shows that 73.0 percent of heads of households in Ghana are Christians. This is reflected in all the localities with the highest proportion in Accra (85.6%), followed by rural forest (79.5%), other urban (74.7%) and rural coastal (71.0%), with rural savannah (40.0%) having the least. Household heads that practice Islam constitute 20.2 percent and about seven percent (6.7%) have no religion. Islam is practiced by a high proportion of household heads in rural savannah (51.9%), followed by household heads in other urban (20.7%) and Rural coastal (17.5%). In Accra (GAMA), about 12 percent (11.8%) of household heads practice Islam.

**Table 2.10: Household heads by religion and locality**

Religion	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	Total
Christians	85.6	74.7	71.0	79.5	40.0	73.0
<i>Catholic</i>	9.3	14.8	14.7	17.7	43.3	16.5
<i>Protestant</i>	22.2	25.4	21.4	28.0	13.2	24.6
<i>Pentecostal/Charismatic</i>	54.4	43.5	47.6	38.5	32.2	43.8
<i>Other Christian</i>	13.2	16.2	16.3	15.7	11.3	15.1
Islam	11.8	20.7	17.5	9.5	51.9	20.2
Traditional	0.0	0.0	0.0	0.0	0.0	0.0
No religion	2.4	4.6	11.6	10.9	8.1	6.7
Other	0.3	0.1	0.0	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

## 2.8 Religious affiliation by region

Table 2.11 presents the religious affiliation of household heads by region. Christianity is dominant in all the regions except Northern, Upper East and Upper West. The majority of household heads in the Upper East (59.0%) and Upper West (78.9%) regions who are Christians are Catholic, whereas Pentecostals constitute the largest group of Christians in all

other regions and form the majority in Greater Accra. More than 80 percent (83.6%) of household heads in the Northern region practice Islam. Islam is also a major religion in Upper East (55.7%) and Upper West (48.0%). On the other hand, about nine percent of household heads in Western (9.4%), Volta (9.3%) and Brong Ahafo (8.9%) have no religion.

**Table 2.11: Household heads by religion and region**

Religion	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	Total
Christians	81.4	81.5	85.3	72.4	83.7	79.8	70.4	14.0	39.6	46.6	73.0
<i>Catholic</i>	16.9	12.1	8.8	20.4	8.7	16.5	26.9	31.4	59.0	78.9	16.5
<i>Protestant</i>	27.0	24.5	22.9	23.6	32.4	25.2	22.7	12.9	7.7	6.1	24.6
<i>Pentecostal/ Charismatic</i>	42.3	46.4	54.8	42.7	42.4	39.7	37.0	39.7	29.4	13.8	43.8
<i>Other Christian</i>	13.9	17.1	13.4	13.3	16.6	18.6	13.3	16.0	4.0	1.2	15.1
Islam	9.2	11.4	11.6	17.8	8.0	12.2	20.7	83.6	55.7	48.0	20.2
Traditional*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No religion	9.4	7.0	2.9	9.3	8.4	7.9	8.9	2.5	4.6	5.4	6.7
Other	0.0	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note:\* Data obtained on traditional religion were few and therefore the values did not reflect significantly when it was converted to percentage (one decimal place).

# CHAPTER THREE

## EDUCATION

### 3.1 Introduction

Education is an important aspect of societal development. It is the process of acquiring knowledge, skills, values and attitudes to fully develop individual capacities for societal well-being. Over the past decade there have been a number of educational policies and programmes to improve education access and participation: Capitation Grant, School Feeding Programme, access to functional literacy programmes, education and training for employability for our educational development and sustainability, and national development. Targets set for these policies need to be monitored and assessed. The results of the Ghana Living Standards Survey are used to track the achievements and impact of these policies. It also assists in monitoring performance to meet commitments such as the Education for All (EFA) goals, Millennium Development Goals (MDGs), UNESCO Goals and Ghana Education Strategic Plan (2010-2020).

This chapter provides information on the levels of educational attainment by the adult population, current school enrolment, and educational expenditure by household, adult literacy rates and apprenticeship training.

### 3.2 Educational Attainment

Statistics on educational attainment help in knowing the present educational levels of the adult population as well as availability of skilled manpower for various types of economic activity. Table 3.1 shows the level of educational attainment of the population 15 years and older. Nearly one-fifth of the adult population (19.7%) has never been to school while 44.6 percent have attained a level below Middle School Leaving Certificate (MSLC) or Basic Education Certificate Examination (BECE). About 21 percent of the population has MSLC/BECE and only 14.7 percent have acquired Secondary/Senior Secondary School (SSS) or Senior High School (SHS) or a higher level of education.

**Table 3.1: Population aged 15 years and older by educational attainment and sex**

Level of educational attainment	Percent			Estimates (Million)		
	Both sexes	Male	Female	Both sexes	Male	Female
Never been to school	19.7	14.6	24.3	4.4	1.6	2.8
Less than MSLC/BECE	44.6	44.5	44.7	10.0	4.7	5.2
MSLC/BECE/Vocational	20.9	22.8	19.3	4.7	2.4	2.3
Secondary/SSS/SHS and higher	14.7	18.0	11.7	3.3	1.9	1.4
<b>Total</b>	100.0	100.0	100.0	22.3	10.6	11.7

There is disparity in educational attainment between the sexes. The proportion of females who have never been to school (24.3%) is higher than for males (14.6%). On the other hand, the proportion of males (22.8%) who have attained MSLC/BECE/Vocational education is higher than the proportion of females (19.3%). The same pattern is observed at the Secondary/SSS/SHS and higher category where the level of attainment is higher for males (18.0%) than for females (11.7%).

### 3.3 School attendance

The starting age for the first level of formal education in Ghana is six years. Pre-school which comprises nursery and kindergarten starts from three years. In this section, however, the school attendance for the population 6-25 years old is analyzed. Table 3.2 shows that the school attendance rate for persons 6-25 years is 93.4 percent for males and 90.6 percent for females. With the exception of rural savannah where school attendance rate is below 80 percent, the rates for all other localities are beyond 90 percent. The rate is particularly higher among those in the age group 12-15 years, with males recording slightly higher rates than females, except in rural savannah.

In general, the attendance rates for males are higher than for females and the differences become more noticeable with increasing age. The total attendance rates recorded for males and females in the age group 6-11 years are 93.3 percent and 92.6 percent respectively compared with 93.4 percent for males and 90.6 percent for females 19-25 years. This is even more pronounced for females in the age group 19-25 years in the rural savannah where a very low rate of 53.2 percent is recorded.

**Table 3.2: School attendance rate by age, locality and sex**

Age group	Accra (AMA)		Other Urban		Rural Coastal		Rural Forest		Rural Savannah		Ghana	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
6 - 11	98.3	97.5	97.2	96.4	94.0	93.8	96.2	94.7	80.2	80.1	93.3	92.6
12 - 15	100.0	98.4	97.8	96.1	97.3	97.1	97.7	97.5	82.7	83.2	95.1	94.7
16 - 18	99.6	91.8	98.1	95.3	97.3	95.4	95.3	96.6	81.8	76.9	94.2	92.1
19 - 25	98.7	93.7	95.7	90.5	92.3	86.5	93.2	88.3	73.7	53.2	91.4	84.1
Total	99.0	95.6	97.1	94.5	94.8	92.8	95.8	94.0	79.5	73.3	93.4	90.6

Table 3.3 shows that school attendance rate is 80.8 percent, with Greater Accra having the highest attendance rate of 92.0 percent while the Northern region has the lowest rate of 50.4 percent. The Upper East (63.4%) and the Upper West (63.6%) regions also recorded relatively lower rates of school attendance. Attendance rates in southern Ghana are generally higher than in the northern regions of the country. The rate for males is generally higher in all regions than that of their female counterparts. A wider difference is observed among the sexes in the Northern and Central regions while the gaps are narrow among the males and females in the Greater Accra and Ashanti regions. While Ashanti, Upper East and Upper West regions recorded slightly higher rates for females than males in the age group 6-11, the Volta and Upper West regions recorded higher school attendance rates for females than males in the age group 12-15 years.

**Table 3.3: School attendance rate by region, age and sex**

Region	Age group										
	6 - 11		2 - 15		16 -18		19 – 25		25-Jun		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Western	96.0	95.2	98.6	96.9	98.2	94.7	94.6	88.2	91.6	83.3	87.4
Central	97.1	95.7	96.9	96.6	93.9	97.8	95.0	90.9	90.8	77.5	83.6
Greater Accra	97.1	97.0	99.7	98.3	99.2	92.1	98.6	93.6	95.3	89.0	92.0
Volta	87.8	85.8	94.9	96.9	92.9	89.6	88.6	81.1	82.4	72.2	77.0
Eastern	96.8	95.4	98.8	98.0	99.1	98.0	95.1	90.1	91.1	82.5	86.6
Ashanti	97.8	98.4	98.0	96.9	97.0	97.8	96.0	94.6	91.6	84.5	87.9
Brong Ahafo	94.7	93.7	96.2	95.8	94.3	91.5	90.2	83.1	83.5	74.8	78.9
Northern	77.6	73.4	74.6	73.1	78.0	65.4	68.8	43.0	58.6	42.6	50.4
Upper East	92.1	96.0	93.1	90.4	91.9	92.3	85.4	71.5	69.6	57.6	63.4
Upper West	87.3	89.6	88.9	93.2	90.3	93.1	83.2	73.1	70.0	57.3	63.6
Total	93.3	92.6	95.1	94.7	94.2	92.1	91.4	84.1	85.7	76.3	80.8

**Currently attending public or private school**

With regard to the type of schools being currently attended, Table 3.4 shows that people are more likely to be enrolled in public schools (71.9%) than private schools (28.1%). The highest proportions of persons attending public schools are those at the post graduate (92.7%), post-secondary diploma (84.3%), college of education or nursing (82.4%) and JHS (81.4%). On the other hand, higher proportions of those attending private schools are in the vocational, technical or commercial (34.4%) levels of education and kindergarten (34.2%). In the urban areas, the variation between the proportion of household members attending public (58.7%) and private (41.3%) is closer than in rural areas where 85.9 percent attend public school.

**Table 3.4: Currently attending private or public school by level of education and type of locality**

Level of education	Total			Urban			Rural		
	Estimated population ('000)	Public	Private	Estimated population ('000)	Public	Private	Estimated population ('000)	Public	Private
Total	7,744	71.9	28.1	3,995	58.7	41.3	3,748	85.9	14.1
Kindergarten	3,651	65.8	34.2	1,790	47.2	52.8	1,861	83.7	16.3
Primary	2,459	75.1	24.9	1,156	60.5	39.5	1,303	88.0	12.0
JHS	1,060	81.4	18.6	632	76.6	23.4	428	88.6	11.4
SHS	402	77.8	22.2	291	73.9	26.1	112	88.0	12.0
Voc/Tech/Comm	13	65.6	34.4	8	54.8	45.2	6	79.9	20.1
College of education /nursing	39	82.4	17.6	24	77.1	22.9	15	90.9	9.1
Post Sec Dip (HND)	54	84.3	15.7	45	84.2	15.8	9	84.6	15.4
Bachelor degree	49	76.8	23.2	44	77.3	22.7	6	73.1	26.9
Post graduate	16	92.7	7.3	7	84.4	15.6	9	99.3	0.7

Table 3.5 shows that slightly more than three-quarters (76.5%) of all adults 15 years and older in the country have ever attended school. This ranges from nine out of every 10 adults (90.4%) in Greater Accra region to about two out of every five adults (38.2%) in the Northern region. Also, only half of the adults in the Upper East and Upper West regions have ever attended school. School attendance is higher among males (83.5%) than females (70.4%), with the highest gaps in favour of males observed in the Northern, Upper West and Central regions. School attendance is also higher in urban than in rural areas and for males than for females. While the Northern region recorded the highest sex disparity (25.5%) in school attendance rates for the urban areas, the Central Region had the highest gap of 22.4 percent between males and females in the rural areas of the country.

**Table 3.5: Proportion of adults 15 years and older who have ever attended school by region, locality and sex**

Region	Urban			Rural			Total		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Western	90.6	95.5	86.4	79.4	86.7	72.3	84.3	90.4	78.6
Central	82.9	91.4	76.6	76.1	88.2	65.8	79.1	89.6	70.7
Greater Accra	91.3	95.7	87.4	76.5	86.8	68.0	90.4	95.2	86.2
Volta	83.1	91.1	76.8	69.9	78.4	62.7	74.1	82.4	67.3
Eastern	88.5	95.1	83.4	79.6	87.4	72.4	83.9	90.9	78.0
Ashanti	89.1	93.2	85.7	79.3	86.2	72.9	84.7	90.0	80.2
Brong Ahafo	76.7	83.4	71.5	68.8	75.9	62.1	72.7	79.4	67.0
Northern	55.7	69.6	44.1	29.0	38.9	20.0	38.2	49.2	28.6
Upper East	59.4	69.6	50.4	47.9	56.6	40.5	50.4	59.4	42.6
Upper West	71.7	81.8	62.6	47.5	57.6	38.0	51.7	61.8	42.4
Total	85.3	91.3	80.3	66.8	75.4	59.0	76.5	83.5	70.4

### 3.4 Educational expenses

The survey also collected information on educational expenses incurred by households on each member attending school or college during the 12 months preceding the interview. The results show that households spent on average GH¢458.90 annually per household member attending school (Table 3.6). On average, the total annual amount spent is higher in Accra (Gh¢1,024.14) than other urban (Gh¢520.53) and all the rural areas. Similarly, expenses on all educational items are higher in Accra (GAMA) than other urban or rural areas. In the rural areas, the average total expenses are less than the national average. Across localities, rural savannah has the lowest average total educational expenses of Gh¢120.31 per household member. Table 3.6 also indicates that higher proportions of educational expenditures are spent on school and registration fees (40.3%) and on food, boarding and lodging (31.2%) while expenses on books and school supplies (9.2%) are lower.

**Table 3.6: Average total amount spent by household per member attending school/college in the last 12 months by locality (GH¢)**

Item	Locality					Ghana	Percent
	Accra (AMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah		
School and registration fees	475.57	211.69	94.02	74.29	35.41	185.02	40.3
Contribution to PTA	16.16	9.42	6.34	7.67	4.34	9.01	2.0
Uniforms and sports clothes	34.53	19.20	15.94	15.77	11.39	19.20	4.2
Books and school supplies	97.13	46.79	25.48	26.77	11.47	42.34	9.2
Transportation to and from school	71.03	32.11	19.92	14.38	3.67	28.35	6.2
Food, board and lodging	255.37	170.16	106.55	106.78	46.64	143.17	31.2
Expenses on extra classes	64.78	27.47	20.15	17.80	4.51	26.64	5.8
In-kind expenses	9.57	3.68	2.68	6.37	2.88	5.15	1.1
Total	1,024.14	520.53	291.08	269.83	120.31	458.90	100.0

Table 3.7 provides information on household members responsible for paying for most of the educational expenses of household members currently attending school. Slightly more than half (51.4%) of all educational expenses are paid for by the father. The data show that the mother pays 17.5 percent of the educational expenses of the household members while both parents together pay 17.2 percent. Other household members (7.5%) and other relatives (4.7%) also contribute to the payment of educational expenses. At the levels of JHS and below, fathers pay about 52 percent of the educational expenses, but the contribution of fathers reduces for household members attending secondary or vocational (47.9%) or higher (35.4%) levels of education.

**Table 3.7: Level of education of household members currently attending school/college by type of locality and persons paying for most educational expenses**

Total	Number	Total	Percent							
			Father	Mother	Both parents	Other household member	Other relative	Non-relative	Self	Other
<b><u>Both localities</u></b>										
Total	10,078,134	100.0	51.4	17.5	17.2	7.5	4.7	0.4	1.1	0.1
JHS and less	8,808,723	100.0	52.4	17.2	17.4	8.0	4.3	0.4	0.2	0.1
Secondary/Voc.	905,091	100.0	47.9	21.9	16.8	4.0	7.7	0.4	1.0	0.2
Higher	364,320	100.0	35.4	13.9	14.5	4.5	7.2	1.0	23.2	0.3
<b><u>Urban</u></b>										
Total	5,161,026	100.0	48.2	19.0	18.3	7.2	5.0	0.6	1.6	0.1
JHS and less	4,283,647	100.0	49.3	18.7	18.7	7.9	4.4	0.6	0.2	0.1
Secondary/Voc.	578,228	100.0	46.2	23.7	16.7	4.0	8.1	0.6	0.8	0.0
Higher	299,151	100.0	35.9	14.4	15.2	4.2	6.6	1.2	22.2	0.4
<b><u>Rural</u></b>										
Total	4,917,107	100.0	54.7	15.9	16.1	7.8	4.4	0.2	0.6	0.2
JHS and less	4,525,076	100.0	55.3	15.8	16.1	8.1	4.2	0.2	0.2	0.2
Secondary/Voc.	326,862	100.0	51.0	18.9	17.1	4.0	7.0	0.1	1.3	0.6
Higher	65,169	100.0	32.8	11.9	11.4	6.1	9.8	0.4	27.7	0.0

Similarly, in the urban areas, fathers (48.2%), mothers (19.0%) and both parents together (18.3%) are responsible for the payment of the majority of educational expenses. In the rural areas, about 55 percent of most educational expenses are paid for by the father. Table 3.7 reveals that, at the higher levels of education, about one-fifth of the students pay for their educational expenses themselves. The proportion of persons in rural areas attending higher levels of education who pay for most of their educational expenses is 27.7 percent compared to 22.2 percent in the urban areas.

### 3.5 Literacy

This section provides information on the literacy status of persons 15 years and older by sex and locality of residence. For the purpose of this survey, literacy is defined as the ability to read and write a simple sentence in English and any Ghanaian language with understanding. Table 3.8 shows that the literacy rate in Ghana is 56.3 percent. The literacy rate for males (67.3%) is higher than for females (46.9%). There are substantial differences between rural and urban literacy rates. Whereas seven out of every 10 persons (69.6%) 15 years and older in the urban areas is literate, only about two out of every five (41.7%) of their rural counterparts are literate. A similar pattern is observed among male and females in the urban and rural areas of the country. Greater Accra (79.6%) and other urban (65.1%) have the highest literacy rates while the rural savannah area (30.0%) has the lowest; this is also true for males and females.

**Table 3.8: Adult literacy rates by sex and locality (read and write in English)**

Sex	Locality							Ghana
	Urban			Rural				
	Accra (AMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
Male	89.0	77.1	80.9	67.4	59.5	38.4	53.0	67.3
Female	71.4	55.5	60.3	39.4	35.4	22.4	31.4	46.9
Total	79.6	65.1	69.6	51.7	47.0	30.0	41.7	56.3

Table 3.9 provides information on adults who are literate in English and a Ghanaian Language. A higher proportion of the adult population is literate in English Language only (35.7%) than in Ghanaian Language only (28.4%) and only 11.7 percent are literate in both English and a Ghanaian Language. Among the various localities, there are variations in the adult population who are literate in English only. Other urban (38.3%) and Accra (GAMA) (37.8%) have the highest proportions of the adult population who are literate in English only while the Rural Savannah (25.0%) has the lowest. The proportions of male adults who are literate in English only (33.7%), a Ghanaian Language (27.0%) and English and a Ghanaian Language (25.7%) are higher than females who are literate in English only (28.2%), Ghanaian Languages only (22.4%) and English and Ghanaian Languages (20.7%).

**Table 3.9: Adult literacy in English and Ghanaian Languages by sex and locality**

Sex/Locality	Literate (Read and Write) in			Illiterate	Total
	English only	Ghanaian Languages only	English and Ghanaian Languages		
<b>Male</b>					
Accra (AMA)	39.6	29.0	28.2	3.2	100.0
Other urban	35.0	28.6	27.8	8.5	100.0
Rural coastal	33.9	27.8	26.1	12.3	100.0
Rural Forest	30.7	27.6	25.3	16.3	100.0
Rural Savannah	26.9	17.2	15.7	40.1	100.0
Total	33.7	27.0	25.7	13.7	100.0
<b>Female</b>					
Accra (AMA)	35.3	27.3	26.2	11.2	100.0
Other urban	30.6	24.7	23.1	21.6	100.0
Rural coastal	26.0	20.2	18.6	35.1	100.0
Rural Forest	23.5	20.8	18.4	37.3	100.0
Rural Savannah	18.6	9.8	9.0	62.6	100.0
Total	28.2	22.4	20.7	28.7	100.0
<b>Both sexes</b>					
Accra (AMA)	37.8	28.4	27.2	6.6	100.0
Other urban	38.3	31.0	13.7	17.0	100.0
Rural coastal	34.6	27.8	10.5	27.1	100.0
Rural Forest	31.8	28.4	9.7	30.0	100.0
Rural Savannah	25.0	14.9	4.7	55.4	100.0
Total	35.7	28.4	11.7	24.2	100.0

Table 3.10 shows the population 15 years and older who have ever attended a literacy course by region, locality and sex. About one out of every 25 (3.8%) of the adult population 15 years and older in the country has ever attended a literacy course. The proportion of females (3.9%) who have ever attended a literacy course is slightly more than males (3.7%).

There are regional differences in the proportions of the population who have ever attended a literacy course. The Upper East region (7.0%) has the highest proportion of the population who had ever attended a literacy course while the Greater Accra region has the least (1.0%).

Disparities also exist between males and females across the regions. The Northern region has the highest proportion of males (7.9%) who have ever attended a literacy course compared to their counterparts in the other regions. For the females, the highest proportion is in the Volta region (7.0%). The Greater Accra region has very low proportions of both males (0.8%) and females (1.1%) who have ever attended a literacy course.

**Table 3.10: Population 15 years and older by region, locality, sex and literacy course attendance**

Region/ locality	Male			Female			Total		
	Estimated population 15+ years (’000)	Ever attended literacy course		Estimated population 15+ years (’000)	Ever attended literacy course		Estimated population 15+ years (’000)	Ever attended literacy course	
		Number	Percent		Number	Percent		Number	Percent
<b>Total</b>	7,370	<b>269,105</b>	<b>3.7</b>	8,545	<b>329,603</b>	<b>3.9</b>	15,915	<b>598,708</b>	<b>3.8</b>
Western	698	23,969	3.4	737	29,234	4.0	1,435	53,203	3.7
Central	626	16,593	2.6	785	18,854	2.4	1,411	35,447	2.5
Greater Accra	1,315	10,921	0.8	1,511	16,654	1.1	2,826	27,575	1.0
Volta	604	36,751	6.1	733	51,041	7	1,337	87,792	6.6
Eastern	772	18,513	2.4	911	41,281	4.5	1,683	59,794	3.6
Ashanti	1,454	35,289	2.4	1,703	74,069	4.3	3,157	109,358	3.5
Brong Ahafo	708	36,895	5.2	820	44,268	5.4	1,528	81,163	5.3
Northern	678	53,719	7.9	770	19,263	2.5	1,448	72,982	5.0
Upper East	301	22,932	7.6	345	22,086	6.4	646	45,018	7.0
Upper West	215	13,524	6.3	230	12,851	5.6	444	26,375	5.9
<b>Urban</b>	3,784	<b>62,019</b>	<b>1.6</b>	4,591	<b>90,168</b>	<b>2.0</b>	8,374	<b>152,187</b>	<b>1.8</b>
Accra (GAMA)	954	8,517	0.9	1,095	7,892	0.7	2,049	16,409	0.8
Other Urban	2,830	53,502	1.9	3,496	82,276	2.4	6,326	135,778	2.1
<b>Rural</b>	3,586	<b>207,086</b>	<b>5.8</b>	3,954	<b>239,435</b>	<b>6.1</b>	7,541	<b>446,521</b>	<b>5.9</b>
Rural Coastal	395	14,322	3.6	504	27,796	5.5	899	42,118	4.7
Rural Forest	1,940	78,802	4.1	2,092	136,457	6.5	4,032	215,259	5.3
Rural Savannah	1,252	113,962	9.1	1,358	75,182	5.5	2,610	189,144	7.2

There are substantial differences between the localities. A higher proportion of the rural population (5.9%) has ever attended a literacy course compared to 1.8 percent of those in urban areas. Males and females in rural areas are also more likely to have taken courses in literacy than those in urban areas. Considering the three rural areas, rural savannah recorded 7.2 percent whereas rural coastal recorded the lowest proportion of 4.7 percent.

### 3.6 Apprenticeship training

The survey sought information on the population 15 years and older who had ever undergone apprenticeship training. These are persons who are either working or had worked for a skilled or qualified person in order to learn a trade or profession in various fields. Table 3.11 shows that 31.7 percent of the apprentices are in the making of textiles, apparel and furnishing, 21.9 percent are in personal/grounds services, 13.8 percent are in building and 10.0 percent are in automotive trade. Building (28.1%), automotive (20.9%), transportation and material moving (15.4%) and mechanical trades (14.1%) are male dominated apprenticeship trades. On the other hand, textiles, apparel and furnishing (52.0%) and personal/grounds services (41.2%) are female dominated.

In both urban and rural areas, the majority of apprentices are in the making of textiles, apparel and furnishing, personal/ground services, building and automobile trades. However, apprentices in urban areas are more likely than those in rural areas to be involved in personal/ground services (24.1% against 18.5%), automobile trades (10.6% against 9.1%) and mechanical trades (8.8% against 3.7%). On the contrary, apprentices in rural areas are more likely than their urban counterparts to learn the textiles, apparel and furnishing (32.9%), building (17.5%) and transportation and material moving (10.9%) trades.

**Table 3.11: Apprentices 15 years and older by main trade learnt, locality and sex**

Main trade learnt	Urban			Rural			Ghana		
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
Food preparation/processing and beverage services	0.3	3.8	2.1	0.0	4.2	2.2	0.2	3.9	2.1
Health service and related activities	0.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.2
Personal/grounds service	0.6	45.2	24.1	0.8	35.1	18.5	0.7	41.2	21.9
Building	23.8	0.3	11.4	34.6	1.5	17.5	28.1	0.8	13.8
Automotive	22.3	0.0	10.6	18.7	0.0	9.1	20.9	0.0	10.0
Electrical	10.5	0.4	5.2	5.7	0.0	2.8	8.6	0.2	4.2
Mechanical	18.4	0.2	8.8	7.6	0.0	3.7	14.1	0.1	6.8
Fishing/Hunting/Forestry	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Textile, Apparel and Furnishing	10.9	48.8	30.8	7.2	56.8	32.9	9.4	52.0	31.7
Other production related trades	0.5	1.0	0.7	1.6	1.6	1.6	0.9	1.2	1.1
Transportation and material moving trades	10.8	0.3	5.3	22.2	0.4	10.9	15.4	0.3	7.5
Visual and Performance Artists	0.3	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.1
Administrative/Support Services	0.3	0.0	0.2	0.3	0.0	0.1	0.3	0.0	0.2
Others	0.6	0.2	0.4	1.1	0.2	0.6	0.8	0.2	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 3.12 provides information on the average length of time spent on apprenticeship training for the population 15 years and older. On average, it takes about 35 months (almost three years) to complete apprenticeship training. The longest periods spent on apprenticeship training are in the areas of electrical works (38.2 months) and health service and related activities (37.6 months). Generally, males take a longer duration (35.6 months) to complete apprenticeship training than females (34.3 months). The longest average duration of apprenticeship training for males is spent on health service and related activities (38.6 months) while the highest for females is automotive apprenticeship (40.0 months). Apprenticeship training in the urban areas takes a relatively longer period (average 35.3 months) to complete than training undertaken in rural areas (average 34.6 months).

**Table 3.12: Average length of time (in months) spent on apprenticeship training by main trade, locality and sex**

Main trade learnt	Urban			Rural			Ghana		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Food preparation processing and beverage services	30.0	32.0	31.8	32.2	31.9	31.9	31.1	32.0	31.9
Health service and related activities	40.5	40.2	40.4	36.0	34.0	34.8	38.6	36.8	37.6
Personal/grounds service	35.5	34.6	34.7	31.8	34.6	34.5	34.0	34.6	34.6
Building	36.5	36.0	36.5	36.1	36.8	36.1	36.3	36.6	36.3
Automotive	38.2	39.0	38.3	35.3	42.0	35.4	36.9	40.0	36.9
Electrical	38.9	36.0	38.8	37.1	0.0	37.1	38.2	36.0	38.2
Mechanical	37.9	40.0	38.0	37.8	36.0	37.7	37.9	38.4	37.9
Fishing/Hunting/Forestry	26.2	32.0	27.3	35.5	33.2	34.3	32.1	33.1	32.6
Textile, Apparel and Furnishing	35.8	34.9	35.1	34.4	34.5	34.5	35.1	34.7	34.8
Other production related trades	35.4	25.2	29.2	27.8	24.2	25.3	31.1	24.6	26.8
Transportation and material moving trades	33.1	44.0	33.1	33.0	32.8	33.0	33.0	34.4	33.0
Visual and Performance Artists	31.3	0.0	31.3	33.9	0.0	33.9	32.2	0.0	32.2
Administrative/Support Services	0.0	36.0	36.0	36.0	0.0	36.0	36.0	36.0	36.0
Others	33.0	40.5	34.0	31.7	30.3	31.5	32.3	34.0	32.6
Total	36.1	34.5	35.3	35.0	34.0	34.6	35.6	34.3	35.0

# CHAPTER FOUR

## HEALTH

### 4.1 Introduction

Health, according to the World Health Organization (2012), is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. For the public to benefit from health information it should be well packaged for potential users such as programme managers, health care providers, policy makers and researchers. Health indicators must also be available to guide the health sector to realize their performance with reference to programme areas and where possible re-package the intervention measures to improve the health delivery system to reduce morbidity, mortality and improve the nutritional status of children in the country.

The chapter principally focuses on the general health conditions of the household members two weeks preceding the interview. Issues such as fertility, pre-natal care and contraceptive use, child health, HIV/AIDS awareness and knowledge and health insurance are also discussed.

### 4.2 Health condition in the two weeks preceding the interview

This section discusses the general health status of all household members during the survey. For household members who reported suffering from an injury or illness two weeks preceding the interview, additional information was sought on whether they had to stop their usual activities as a result of the ill-health and for how long. Information was also gathered from household members on whether they consulted a health practitioner for health care and if they did who they consulted and the reason for seeing a health practitioner. Another important indicator is the type of facility from which people usually seek medical care, be it public, private or medical alternatives. Health expenditure on illness or injury, in-patient (admissions) service delivery and drugs are also discussed.

About 14 percent of the population reported that they suffered from an illness or injury two weeks preceding the interview (Figure 4.1). Reported illness or injury varies with age, with the oldest and youngest age groups being mostly affected. For example, while about one-fifth (20.3%) of children 0-5 years and persons aged 50 years and older (22.4%) were reported to have suffered from an injury or illness two weeks preceding the interview, the proportion of those who suffered illness or injury was relatively low among the intervening age groups, with the age group 6-19 years being the least affected.

**Figure 4.1: Proportion of persons who suffered from an illness or injury two weeks preceding interview by age group**

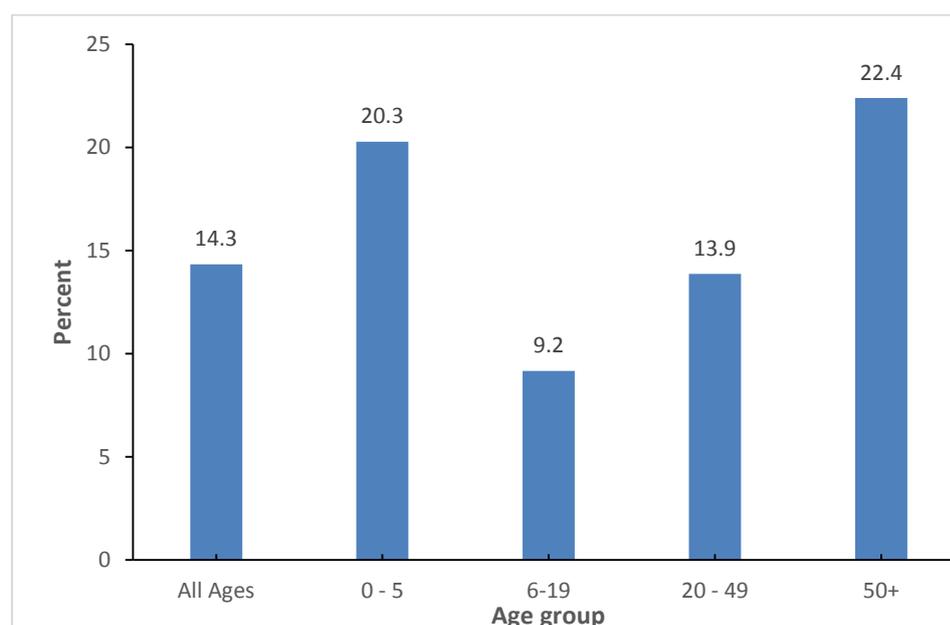


Table 4.1 shows that among the localities, a relatively lower percentage of persons in Accra (GAMA) than other urban areas and the three rural localities reported suffering from an illness or injury. While in Accra (GAMA), about 9 percent of persons suffered from illness or injury during the reference period, the corresponding percentages for the other localities range from 14.4 percent in other urban areas to 16.3 percent in rural forest. Nationwide, females are slightly more likely to be sick (15.6%) than males (13.0%). The male and female disparities in illness or injury in the different localities is not different from the pattern realized for the country. For instance, 15.9 percent of females and 12.7 percent of males in other urban areas suffered from an illness or injury two weeks prior to the interview; the reported rates for females and males in rural savannah were 16.2 percent and 14.8 percent respectively.

**Table 4.1: Percentage of persons suffering from an illness or injury during the two weeks preceding interview by age group, locality and sex**

Age group	Locality								
	Ghana			Accra (GAMA)			Other Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 5	21.4	19.1	20.3	14.2	12.4	13.4	21.0	19.3	20.2
6 - 19	8.4	10.0	9.2	5.2	5.7	5.5	8.2	10.5	9.4
20 - 49	11.8	15.6	13.9	7.0	10.3	8.7	12.5	16.3	14.6
50+	18.5	25.7	22.4	12.2	17.5	14.9	16.0	25.0	21.1
Total	13.0	15.6	14.3	8.1	10.0	9.1	12.7	15.9	14.4

Table 4.1 Cont'd

Age group	Locality								
	Rural Coastal			Rural Forest			Rural Savannah		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 5	22.9	16.8	19.7	24.2	21.9	23.1	22.7	19.6	21.2
6-19	8.0	10.5	9.3	8.8	10.3	9.5	10.2	11.4	10.7
20 - 49	12.9	16.5	14.8	13.8	17.8	15.9	12.7	16.5	14.8
50+	14.7	28.5	23.3	22.0	30.4	26.4	22.5	23.6	23.1
Total	12.9	16.7	14.9	14.8	17.8	16.3	14.8	16.2	15.5

In the two weeks prior to the interview 62.4 percent of persons who suffered from an illness or injury had to stop their usual activities (Table 4.2). At the locality level, 59 percent each of persons who reported sick in Accra (GAMA) and other urban areas had to stop their usual activities as a result of the illness or injury compared to 62.5 percent, 66.3 percent and 64.9 percent for rural coastal, rural forest and rural savannah respectively. Between the sexes, the differences are generally small. At the national level, a slightly lower proportion of females (62.2%) than males (62.7%) stopped their usual activities because of an illness or injury. In terms of locality, a similar observation is made for other urban areas, rural coastal and rural savannah where slightly fewer females than males are unable to work due to an illness or injury. The reverse is true for Accra (GAMA) and rural forest where fewer males than females miss work because of an illness or injury.

**Table 4.2: Percentage of persons suffering from an illness or injury who had to stop their usual activity during the two weeks preceding the interview by age group, locality and sex**

Age group	Locality								
	Ghana			Accra (GAMA)			Other Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 5	62.9	62.7	62.8	54.0	53.6	53.8	57.1	61.0	58.9
6 - 19	64.7	65.1	64.9	58.0	52.6	55.0	62.5	64.9	63.9
20 - 49	58.3	59.6	59.1	57.7	66.3	63.1	56.7	52.5	54.1
50+	67.7	63.3	65.0	60.4	56.2	57.9	63.9	60.5	61.6
Total	62.7	62.2	62.4	57.2	60.1	58.9	59.2	58.3	58.7

(Cont'd)

Age group	Locality								
	Rural Coastal			Rural Forest			Rural Savannah		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 5	66.5	57.3	62.5	65.3	64.2	64.8	70.4	67.6	69.1
6 - 19	70.7	62.4	65.9	65.4	69.8	67.7	67.4	64.9	66.2
20 - 49	58.7	64.9	62.4	61.8	65.1	63.7	56.2	61.1	59.2
50+	69.2	56.8	59.7	70.8	69.3	69.9	70.1	63.6	66.7
Total	65.1	60.8	62.5	65.5	66.9	66.3	65.9	63.9	64.9

Two-thirds (66.2%) of those who reported being ill or injured consulted a health practitioner (Table 4.3). The data indicate that more persons in Accra (GAMA) (76.9%), other urban localities (67.6%) and rural coastal (69.1%) consulted health practitioners than persons in rural forest (62.3%) and rural savannah (63.3%). Between the sexes, more females (67.1%) than males (65.0%) consulted health practitioners and the pattern is the same for all localities, except rural savannah where the proportion of males and females are almost the same. Consultation of health practitioners is common among the age group 0-5 years (70.0%) This observed pattern is similar across all the localities except Accra (GAMA) and rural forest where consultation is highest among those aged 50 years and older.

**Table 4.3: Percentage of persons who reported ill and consulted a health practitioner during the two weeks preceding interview by age group, locality and sex**

Age group	Locality								
	Ghana			Accra (GAMA)			Other Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 5	71.1	68.6	70.0	84.1	76.4	80.8	71.9	73.4	72.6
6 - 19	62.9	66.3	64.8	56.1	78.7	68.5	65.5	66.3	66.0
20 - 49	61.1	66.0	64.1	78.3	73.5	75.3	61.8	67.1	65.1
50+	65.2	68.4	67.2	77.8	89.2	84.7	69.5	69.3	69.3
Total	65.0	67.1	66.2	75.6	77.9	76.9	66.4	68.4	67.6

Cont'd

Age group	Locality								
	Rural Coastal			Rural Forest			Rural Savannah		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 5	77.4	74.0	75.9	65.7	61.9	63.9	70.4	67.2	69.0
6-19	72.4	68.9	70.4	57.9	62.9	60.5	65.9	65.4	65.6
20 - 49	59.0	70.4	65.9	56.1	62.6	60.0	57.0	62.0	60.0
50+	66.2	66.9	66.8	64.2	66.7	65.7	56.3	59.3	57.8
Total	68.4	69.6	69.1	60.8	63.6	62.3	63.2	63.5	63.3

Table 4.4 indicates that majority of persons who consulted a health practitioner indicated that they did so due to an illness (87.7%). The other reasons cited are injury (5.4 %) and going for a check-up (3.5%). There is little variation in the proportions of persons who sought consultation due to illness by locality; the proportions ranged between 85.2 percent in the rural forest to 90.7percent in the rural coastal. For both sexes, 4.1 percent of the consultations in the rural coastal area and 7.2 percent in the rural forest were due to injury.

**Table 4.4: Percentage distribution of persons who reported ill and consulted a health practitioner two weeks preceding the interview by reason for medical consultation**

Reason for medical consultation	Locality								
	Ghana			Accra (GAMA)			Other Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Illness	87.7	87.5	87.8	87.0	90.4	84.4	85.8	8.5	86.1
Injury	5.4	7.0	4.1	3.6	3.2	3.9	4.6	6.6	3.3
Follow-up	1.0	0.9	1.2	1.0	0.5	1.4	1.5	1.3	1.6
Check-up	3.5	3.1	3.7	5.2	4.6	5.7	5.4	5.2	5.4
Prenatal care	0.8	0.1	1.3	1.2	0.0	2.1	0.7	0.0	1.1
Delivery	0.2	0.0	0.3	0.4	0.0	0.7	0.2	0.0	0.3
Postnatal care	0.9	0.9	1.0	0.8	0.5	1.1	1.1	0.8	1.3
Vaccination	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.1
Other	0.4	0.5	0.4	0.8	0.9	0.7	0.5	0.5	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Cont'd

Reason for medical consultation	Locality								
	Rural Coastal			Rural Forest			Rural Savannah		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Illness	90.7	89.4	91.6	85.2	84.5	85.9	90.6	90.3	90.8
Injury	4.1	5.5	3.1	7.2	9.7	5.3	5.4	6.6	4.4
Follow-up	0.4	0.0	0.6	1.6	1.9	1.4	0.4	0.1	0.6
Check-up	3.1	2.8	3.4	3.8	3.4	4.1	1.2	1.0	1.3
Prenatal care	0.6	0.5	0.6	1.0	0.0	1.7	0.7	0.1	1.3
Delivery	0.0	0.0	0.0	0.3	0.0	0.5	0.1	0.1	0.2
Postnatal care	1.1	1.8	0.6	0.3	0.3	0.3	1.2	1.2	1.1
Vaccination	0.0	0.0	0.0	0.2	0.0	0.3	0.1	0.1	0.1
Other	0.0	0.0	0.0	0.4	0.3	0.4	0.4	0.5	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

A high proportion of those who suffered an injury or illness consulted medical practitioners in public (52.2%) facilities or in private non-religious (44.6%) facilities. The patronage of public health facilities is highest in rural forest (52.0%) and rural savannah (60.6%). Private non-religious facilities are used by the majority of those who consulted a medical practitioner in Accra (GAMA, 72.0 %) rural coastal (52.0%). Private religious facilities are used by only 3.2 percent of the population and this varied slightly by sex and locality.

**Table 4.5: Percentage distribution of persons who reported ill and underwent medical consultation two weeks preceding the interview by type of facility, locality and sex**

Type of facility	Locality								
	Ghana			Accra (GAMA)			Other Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Public	52.2	51.0	53.1	25.6	20.6	29.4	48.3	48.1	48.4
Private Religious	3.2	3.0	3.4	2.4	3.3	1.8	4.1	3.6	4.4
Private Non-religious	44.6	45.9	43.6	72.0	76.2	68.8	47.6	48.3	47.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Cont'd

Type of facility	Locality								
	Rural Coastal			Rural Forest			Rural Savannah		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Public	44.3	44.4	44.3	56.0	54.7	57.1	60.6	58.3	62.6
Private Religious	3.4	2.8	3.8	4.2	4.7	3.8	1.8	1.5	2.1
Private Non-religious	52.3	52.8	51.9	39.8	40.6	39.2	37.6	40.2	35.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Consultations with medical practitioners usually take place in hospitals (46.7%) and clinics (17.8%) although a reasonable percentage take place in chemical stores (23.8%). Chemical stores are highly patronized in all localities except Accra (GAMA) where only 12.1 percent do consultation. On the other hand, a sizeable proportion of persons in GAMA (27.3%) patronize a pharmacy (Table 4.6).

**Table 4.6: Percentage distribution of persons who reported ill and underwent medical consultation two weeks preceding the interview by category of facility, locality and sex**

Type of facility	Locality								
	Ghana			Accra (GAMA)			Other Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Hospital	46.7	43.9	48.9	35.0	31.6	37.7	55.2	53.7	56.3
Clinic	17.8	17.6	18.0	22.1	20.7	23.3	17.2	16.0	18.0
MCH Clinic	2.7	2.8	2.6	0.7	0.5	0.8	1.6	1.6	1.6
Maternity Home	0.5	0.5	0.5	0.0	0.0	0.0	0.3	0.3	0.3
Pharmacy	5.2	5.8	4.8	27.3	31.6	23.7	5.7	6.2	5.5
Chemical store	23.8	25.7	22.3	12.1	13.5	11.0	18.4	20.4	17.1
Consultant's Home	0.4	0.4	0.4	0.9	0.5	1.3	0.2	0.3	0.1
Patient's Home	0.3	0.3	0.3	0.5	0.5	0.4	0.3	0.1	0.3
Other	2.5	3.0	2.2	1.4	1.0	1.7	1.1	1.5	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.6 cont'd

Type of facility	Locality								
	Rural Coastal			Rural Forest			Rural Savannah		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Hospital	47.0	42.2	50.0	46.0	44.3	47.4	39.7	36.7	42.5
Clinic	23.5	24.0	23.1	16.2	15.8	16.5	17.1	18.3	16.0
MCH Clinic	0.8	1.9	0.0	3.2	3.6	2.9	4.7	4.2	5.2
Maternity Home	1.0	1.3	0.8	0.5	0.6	0.5	0.8	0.8	0.7
Pharmacy	3.5	2.6	4.1	1.4	1.8	1.1	1.6	1.9	1.4
Chemical store	23.2	26.6	21.1	29.2	29.9	28.8	30.1	31.7	28.6
Consultant's Home	0.0	0.0	0.0	0.4	0.6	0.3	0.6	0.5	0.6
Patient's Home	0.3	0.6	0.0	0.6	0.8	0.5	0.1	0.1	0.1
Other	0.8	0.6	0.8	2.3	2.6	2.1	5.2	5.8	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The average total medical expenses incurred by people who reported ill or injured in the two weeks preceding the interview was GH¢88.03 (Table 4.7). Total medical expenses are higher in rural than the urban areas, especially in rural forest (GH¢147.88) areas. Payment made for drugs at the health facilities averaged GH¢33.84 compared to an average of GH¢34.32 being payment made for medication that were bought outside the health facility. Payment made for medicines is higher in Accra (GAMA), GH¢44.61 than in all other localities, with rural coastal recording an average expenditure on medicines as low as GH¢11.25. An average payment of GH¢347.03 was made for overall treatment fees. Registration fees and transport costs are generally low across all localities.

**Table 4.7: Average consultation fees and payments for medicines (GH¢) two weeks preceding the interview (excluding those who paid nothing) by locality and sex**

Medical expenses	Locality								
	Ghana			Accra (GAMA)			Other Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Consultation fees	16.60	17.33	16.00	15.20	13.72	16.62	15.19	11.93	16.90
Amount for medicine	34.32	37.38	32.00	65.22	61.80	67.47	19.29	29.88	11.98
Total medical expenses	88.03	132.38	49.49	40.97	103.04	0.00	53.34	60.32	48.11
Registration fees	5.05	6.30	4.02	7.60	9.25	5.99	4.50	5.65	3.89
Diagnosis fees	13.28	20.09	7.66	22.52	29.28	16.05	17.15	37.98	6.17
Amount for drugs	33.84	37.22	31.05	44.61	46.83	42.49	42.65	50.54	38.49
How much was paid for overall treatment fees	47.03	48.83	45.58	65.62	67.37	63.94	45.30	36.37	50.12
Amount for transport	4.85	5.40	4.40	5.47	6.56	4.43	3.50	3.33	3.58

Table 4.7 cont'd

	Locality								
	Rural Coastal			Rural Forest			Rural Savannah		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Medical expenses									
Consultation fees	28.37	18.25	34.25	19.99	29.24	11.59	13.82	19.16	7.48
Amount for medicine	24.42	0.00	24.42	15.20	11.74	19.47	50.64	53.38	47.96
Total medical expenses	52.67	85.60	26.21	147.88	197.62	103.54	124.00	188.92	41.59
Registration fees	2.88	4.91	1.70	2.97	4.12	1.93	2.77	2.65	2.90
Diagnosis fees	2.52	4.71	1.24	0.88	1.64	0.19	0.57	0.98	0.05
Amount for drugs	11.25	16.61	8.14	19.54	27.13	12.65	14.79	14.79	14.79
How much was paid for overall treatment fees	23.05	38.80	12.76	23.45	29.94	18.72	28.91	30.48	27.07
Amount for transport	7.07	4.18	8.75	6.06	7.29	4.95	3.25	3.30	3.19

Table 4.8, which provides information on financiers or persons who paid for the medical bills including the cost of consultations, medicines and hospital admissions, reveals that the expenditures are borne mainly by household members (54.5%) and through health insurance services (41.5%). Settling of medical bills through health insurance is very much depended upon in all localities except the rural coastal where patronage seems relatively low (25.0%). In other areas, patronage ranges from 35.1 percent in Accra (GAMA) to 48.0 percent in other urban areas.

**Table 4.8: Proportion of persons who reported ill during the two weeks preceding the interview by financier of medical expenses, locality and sex**

	Locality								
	Ghana			Accra (GAMA)			Other Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Persons who reported ill									
Household member	54.5	57.3	52.0	58.0	60.6	55.6	47.6	50.6	45.1
Other relative	2.9	2.6	3.2	3.7	3.6	3.8	3.2	3.0	3.4
Government	0.3	0.3	0.2	0.8	0.9	0.6	0.2	0.3	0.2
Employer	0.3	0.4	0.2	0.8	1.1	0.6	0.5	0.7	0.3
Household member's employer	0.3	0.2	0.3	0.9	0.7	1.2	0.3	0.4	0.3
Health insurance	41.5	38.9	43.9	35.1	32.2	37.8	48.0	44.9	50.6
Other	0.2	0.2	0.1	0.7	0.9	0.4	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.8 Cont'd

	Locality								
	Rural Coastal			Rural Forest			Rural Savannah		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Persons who reported ill									
Household member	68.8	70.8	67.0	57.8	60.6	55.1	55.8	57.9	53.7
Other relative	5.9	5.3	6.4	2.2	1.8	2.6	1.8	1.6	1.9
Government	0.0	0.1	0.0	0.2	0.1	0.3	0.1	0.1	0.1
Employer	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Household member's employer	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Health insurance	25.0	23.6	26.2	39.5	37.3	41.8	42.3	40.4	44.2
Other	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

### 4.3 Fertility, pre-natal care and contraceptive use

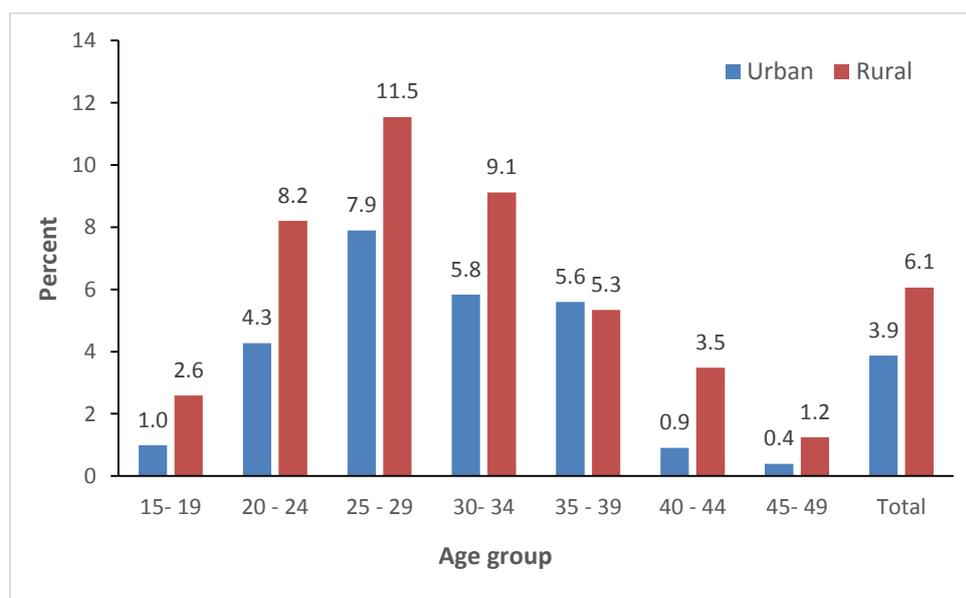
Table 4.9 presents the pregnancy status of women aged 15-49 years by age group and locality. Overall, 65.8 percent of the women aged 15-49 reported ever being pregnant. About 9 percent reported being pregnant in the last 12 months while 4.9 percent were pregnant at the time of the interview (currently pregnant). In all cases, the proportions were relatively higher for rural areas than for urban areas. . Across age groups, the percentage of women who were currently pregnant or pregnant in the last 12 months peaks at the 25-29 age group, and then gradually declines. Current pregnancy among women aged 45-49 years is relatively low (0.8%) compared to women in other age groups. On the other hand, the proportion of women in the reproductive age group who have ever been pregnant increases with age till it reaches its highest peak of 97.4 percent among those aged 45-49 years.

**Table 4.9: Pregnancy status of women 15-49 years by age group and locality**

Age group	Ever Pregnant				Pregnant within the last 12 months				Currently pregnant			
	Urban	Rural	Total	Number	Urban	Rural	Total	Number	Urban	Rural	Total	Number
15- 19	5.9	13.9	9.6	137,912	1.6	4.9	3.1	45,173	1.0	2.6	1.7	24,888
20 – 24	35.4	61.6	47.3	550,680	6.6	16.5	11.1	128,842	4.3	8.2	6.1	70,524
25 – 29	70.7	88.1	78.0	819,009	12.9	21.4	16.5	173,113	7.9	11.5	9.4	98,893
30- 34	89.4	95.9	92.2	834,101	15.0	13.8	14.5	130,965	5.8	9.1	7.2	65,569
35 – 39	92.0	97.9	94.7	791,327	9.0	13.2	10.9	91,323	5.6	5.3	5.5	45,851
40 – 44	96.9	97.1	97.0	720,097	4.4	6.8	5.5	41,052	0.9	3.5	2.1	15,635
45- 49	96.9	98.1	97.4	565,107	0.7	1.7	1.1	6,634	0.4	1.2	0.8	4,472
Total	61.5	71.1	65.8	4,418,233	7.3	11.5	9.2	617,102	3.9	6.1	4.9	325,832

Figure 4.2 shows the proportion of women who are currently pregnant by age group and by urban and rural location. The proportion of women who are currently pregnant is higher in rural areas than in urban areas among all age groups except the 35-39 year olds, where the reverse is true. For women aged 35-39 years, the proportion currently pregnant in urban areas is 5.6 percent compared to 5.3 percent in rural areas.

**Figure 4.2: Proportion of women currently pregnant by age group and locality**



Women who were pregnant in the 12 months prior to the interview were asked about the outcome of their pregnancy. The results are shown in Table 4.10. Overall, 13.5 percent of pregnancies did not result in live births. One-fifth (20.4 %) of pregnancies of urban women did not result in live births compared to 5.5 percent of their rural counterparts. Women who are 35 years and older are less likely to have pregnancies that do not result in live births (15.8%) compared to those who are less than 35 years (11.5%).

**Table 4.10: Proportion of pregnancies in the last 12 months that did not result in a live birth by locality and age of woman**

Locality	35 years and older		Total
	Under 35 years		
Urban	18.1	22.7	20.4
Rural	4.4	6.8	5.5
Total	11.5	15.8	13.5

Table 4.11 shows the distribution of women aged 15-49 years who are currently pregnant or were pregnant during the 12 months preceding the interview who received pre-natal care by age and locality. Four out of every five (80.0%) women who was pregnant in the 12 months preceding the survey received antenatal care in Ghana. Women in Accra (GAMA) recorded the highest antenatal care uptake (88%) followed by those in other urban areas (83.7%) and rural forest (77.9%). Women living in the rural coastal area recorded the lowest antenatal care uptake (74.1%). The distribution by age group show that antenatal care uptake is highest among the youngest age group (i.e., those aged 15-19 years) and in the Greater Accra Metropolitan area and other urban areas, all pregnant women aged 15-19 were reported to have received antenatal care. Conversely, women in the 45-49 age group recorded the lowest antenatal care uptake (68.1%).

**Table 4.11: Women aged 15-49 years currently pregnant or pregnant during the last 12 months who received pre-natal care by age and locality**

Age group	Locality					All
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
15 – 19	100.0	100.0	70.3	94.4	77.9	90.7
20 -24	93.7	82.1	68.7	71.9	76.4	77.4
25 – 29	85.7	80.4	62.0	86.7	70.5	80.0
30 – 34	90.8	81.0	83.8	75.6	73.7	79.7
35 – 39	80.0	91.3	100.0	57.1	78.4	78.8
40 – 44	100.0	93.2	83.2	81.5	72.7	81.8
45 – 49	0.0	38.9	66.4	100.0	69.3	68.1
All age groups	88.4	83.7	74.1	77.9	73.8	80.0

Table 4.12a indicate that contraceptive prevalence among all women is 21.9 percent and ranges from 19.1 percent in rural savannah to 24.9 percent in rural coastal. Among the age groups, the use of contraception is highest among the 25-29 year olds (31/6%) and lowest among the 15-19 year olds (6.5%).

**Table 4.12a: Percent distribution of women 15-49 years who are using any contraceptive method to prevent or delay pregnancy by age and locality**

Age group	Locality					Ghana
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
15-19	5.1	5.8	9.3	6.8	7.9	6.5
20-24	20.1	21.6	24.1	31.5	21.2	23.8
25-29	31.2	34.4	40.6	30.7	24.2	31.6
30-34	30.2	30.7	31.2	33.9	25.3	30.4
35-39	31.1	25.2	42.2	32.8	26.6	29.2
40-44	22.6	20.3	20.8	23.5	20.1	21.5
44-49	16.5	14.9	15.6	14.2	15.5	15.1
Total	22.4	21.0	24.9	23.8	19.5	21.9

Table 4.12b shows the distribution of currently married women aged 15-49 years who are using a contraceptive method to prevent or delay pregnancy by age and locality. Overall, 29.5 percent of married women use some method of contraception. The Table indicates that contraceptive use is lowest in the rural savannah area (22.6%) and highest in the rural forest area (35.2%). Within the age groups, use of contraception is more prevalent among the age groups 20-39 years and lowest in the 15-19 and 45-49 age groups.

**Table 4.12b: Percent distribution of currently married women aged 15-49 years (or their partners) who are using any contraceptive method to prevent or delay pregnancy by age and locality**

Age group	Locality					Ghana
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
15-19	19.6	26.5	25.4	18.8	12.1	19.3
20-24	36.4	32.9	31.6	39.1	23.3	32.7
25-29	37.0	35.4	43.1	30.2	22.6	32.2
30-34	32.4	32.9	34.8	37.0	24.1	32.2
35-39	36.7	28.6	48.8	37.4	27.7	33.1
40-44	28.5	24.3	26.7	26.4	19.6	24.9
45-49	22.7	18.8	22.4	18.1	17.7	19.2
Total	32.6	29.4	35.2	31.8	22.6	29.5

The use of contraception by women or their partners by type and age-group is shown in Table 4.13. Utilization of contraceptive methods is rather low, as noted above, with 16.0 percent using modern methods of contraception and 78.1 percent reporting not using any method at all. Of all the modern methods used to prevent or delay pregnancy, the use of the pill is quite common among women 15-49 years in Ghana (5.4%). The injectable (5.2%) is the next commonly used method, followed by the male condom (2.8%), with the rest of the modern methods recording less than one percent each. Women who use traditional methods account for 5.9 percent of those interviewed. Overall, 5.9 percent of the women reported using traditional methods to delay or avoid pregnancy. The traditional methods commonly used are the rhythm (3.2%), abstinence (1.7%), and withdrawal (0.7%). A similar pattern holds across all age groups. The highest proportion (93.5%) of females who do not use any contraceptive

method was reported among the 15-19 year olds. The age group that is most likely to use some form of contraception is the 25-29 year olds, with overall contraceptive prevalent rate of 31.6 percent.

**Table 4.13: Women aged 15-49 years (or their partners) by age group and contraceptive method used**

Contraceptive Method	Age group							Ghana
	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	
<b>Modern method</b>	<b>4.8</b>	<b>19.0</b>	<b>24.5</b>	<b>23.4</b>	<b>19.1</b>	<b>14.2</b>	<b>9.1</b>	<b>16.0</b>
Pill	1.6	7.0	9.0	7.5	6.4	3.6	2.7	5.4
Male condom	2.2	4.1	4.6	2.6	2.1	1.5	1.1	2.8
Female condom	0.0	0.2	0.3	0.1	0.2	0.0	0.0	0.1
IUD	0.0	0.6	1.0	0.9	0.7	0.8	0.8	0.6
Injection	0.6	5.5	7.3	9.1	7.1	5.7	3.1	5.2
Female sterilization	0.0	0.0	0.0	0.2	0.2	1.3	0.9	0.3
Male sterilization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Implants	0.1	0.9	1.2	2.1	1.5	1.0	0.4	1.0
Foam/Jelly	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0
LAM	0.2	0.6	0.8	0.8	0.9	0.3	0.1	0.5
<b>Traditional method</b>	<b>1.7</b>	<b>4.8</b>	<b>7.1</b>	<b>7.0</b>	<b>10.1</b>	<b>7.3</b>	<b>6.0</b>	<b>5.9</b>
Abstinence	0.7	1.1	2.0	1.7	2.9	2.6	1.5	1.7
Rhythm	0.7	2.7	4.1	3.9	5.8	3.6	3.5	3.2
Withdrawal	0.2	0.8	0.7	0.9	1.1	0.5	0.9	0.7
Other	0.0	0.2	0.2	0.6	0.2	0.6	0.1	0.3
<b>No method used</b>	<b>93.5</b>	<b>76.2</b>	<b>68.4</b>	<b>69.6</b>	<b>70.8</b>	<b>78.5</b>	<b>84.9</b>	<b>78.1</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

With respect to locality of residence, Table 4.14 shows that the proportion of women who do not use any contraceptive method is highest in rural savannah (80.5%), followed by those in other urban areas (79.0%) and Accra (GAMA) (77.6%). Within Accra (GAMA), the most common methods used are the pill (6.2%), male condom (4.4%) and injection (3.2%). The pill is also the most common method used in other urban areas (5.1%) and rural forest (7.0%), whereas in the rural coastal and rural savannah areas, the injection is the most common, accounting for 5.4 percent and 7.8 percent respectively.

**Table 4.14: Percentage distribution of women aged 15-49 years (or their partners) by locality and contraceptive method used**

Contraceptive Method	Locality					Ghana
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
<b>Modern method</b>	<b>16.3</b>	<b>14.9</b>	<b>16.3</b>	<b>18.5</b>	<b>14.9</b>	<b>16.0</b>
Pill	6.2	5.1	3.7	7.0	3.5	5.4
Male condom	4.4	2.6	3.8	1.9	2.5	2.8
Female condom	0.2	0.2	0.0	0.1	0.2	0.1
IUD	0.6	0.6	0.4	1.0	0.3	0.6
Injection	3.2	4.9	5.4	5.5	7.8	5.2
Female sterilization	0.1	0.3	0.3	0.5	0.1	0.3
Male sterilization	0.0	0.0	0.1	0.0	0.0	0.0
Implants	1.2	0.7	1.3	1.6	0.4	1.0
Foam/Jelly	0.0	0.1	0.0	0.1	0.0	0.0
LAM	0.4	0.5	1.4	0.8	0.1	0.5
<b>Traditional Method</b>	<b>6.1</b>	<b>6.1</b>	<b>8.4</b>	<b>5.3</b>	<b>4.6</b>	<b>5.9</b>
Abstinence	3.2	1.0	1.4	0.6	3.1	1.7
Rhythm	2.3	4.0	4.1	3.7	1.3	3.2
Withdrawal	0.5	0.8	2.4	0.6	0.2	0.7
Other	0.1	0.2	0.5	0.5	0.0	0.3
No method used	77.6	79.0	75.3	76.2	80.5	78.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 4.15 shows the amount paid (in Ghana Cedis) by women aged 15-49 years who use contraception the last time a method was used. On average, a woman spends GH¢3.10 on contraceptives. One-quarter of the women who used a method paid less than GH¢1.00 while one-third paid GH¢5.00 or more. Less than one-fifth of the women paid between GH¢2.00 and GH¢2.99. Overall, 8.5 percent of women who use contraceptives do not pay any amount for their use, with a tenth of women aged 25-29 years (10.3%) and 12.8 percent of those aged 45-49 years not paying anything for contraceptives.

Within the age groups, a higher proportion of women 15-19 years (44.7%) paid less than GH¢1.00 compared to the other age groups. On the other hand, the proportion of women who paid GH¢5.00 or more is highest among those aged 40-44 years (GH¢3.10). Women in rural savannah (GH¢2.50) spend less than the national average amount.

**Table 4.15a: Percentage distribution of women aged 15-49 years who used contraceptives by amount paid and age group**

Amount paid (GH¢)	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Ghana
No payment	6.3	7.7	10.3	8.9	6.3	8.8	12.8	8.6
Less than 1.00	44.7	28.7	21.4	21.5	26.2	19.9	26.8	25.3
1.00-1.99	3.5	2.5	5.3	7.6	5.5	1.9	5.6	4.7
2.00-2.99	21.8	16.9	16.4	17.4	16.3	17.7	14.7	17.1
3.00-3.99	4.9	11.3	8.5	11.6	5.1	4.4	5.0	8.4
4.00-4.99	1.4	2.7	2.9	3.9	2.9	2.0	0.3	2.7
5.00 and more	17.3	30.1	35.1	29.2	37.7	45.4	34.7	33.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average amount paid (GH¢)	2.2	3.0	3.2	3.1	3.1	3.3	2.8	3.1

Table 4.15b shows the distribution of women aged 15-49 years who used contraceptives by the amount paid (in GH¢) and by age group. Women aged 40-44 years spend the highest amount of money on contraceptives (GH¢4.50) while the least (GH¢2.80) is spent by women 15-19 years. The proportion of women spending GH¢5.00 or more on contraceptives is also highest among those aged 40-44 years (35.8%).

**Table 4.15b: Women aged 15-49 years who used contraceptives by amount paid (GH¢) and age group (percent)**

Amount paid (GH¢)	15-19	20-24	25-29	30-34	35-39	40-44	45-49
No payment	3.9	5.5	7.6	9.7	11.5	13.7	14.5
Less than 1.00	22.1	9.9	7.5	7.1	7.7	5.2	6.6
1.00-1.99	35.7	29.1	24.4	24.4	20.8	17.5	28.5
2.00-2.99	21.2	18.5	20.3	18.0	21.7	19.6	17.5
3.00-3.99	3.2	10.9	9.2	10.3	6.1	4.4	5.2
4.00-4.99	2.5	2.5	2.9	3.3	2.5	3.7	1.3
5.00 and more	11.5	23.6	28.1	27.2	29.7	35.8	26.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Average amount paid (GH¢)</b>	<b>2.80</b>	<b>3.60</b>	<b>3.90</b>	<b>4.00</b>	<b>4.10</b>	<b>4.50</b>	<b>4.00</b>

## 4.4 Child Health (Welfare)

### 4.4.1 Preventive health care

This section focuses on vaccination of children aged 0-5 years against the six childhood killer diseases, the source of vaccination, and the expenses incurred. Table 4.16 indicates that 1.7 percent of children 5 years and below in the country had not received any vaccination at the time of the interview. The proportion is higher for children below one year (4.5%). The proportion of children 5 years and below who have not received any vaccination is higher in Accra (GAMA) (2.2%) compared to the other areas; the differential is even higher for those aged below one year.

**Table 4.16: Percent distribution of children aged 5 years and younger who have not been vaccinated by age of child and locality**

Age in years	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	Ghana
Below 1 year	6.7	3.6	4.3	4.0	5.3	4.5
1 year	1.8	0.6	0.7	1.8	0.3	1.1
2 years	2.7	1.1	0.0	0.4	0.9	1.0
3 years	0.7	2.1	3.3	1.0	1.4	1.5
4 years	1.9	1.4	1.5	2.3	1.7	1.8
5 years	0.0	0.4	0.0	0.0	0.2	0.2
Total	2.2	1.5	1.6	1.6	1.7	1.7

Immunization or vaccination of children is virtually free in the country. Table 4.17 shows that 94.8 percent of parents make no payment for the vaccination of their children while 2.6 percent pay GH¢1.00 or less for the service. The situation is similar in all localities of residence in the country.

**Table 4.17: Amount paid in for vaccination and/or child welfare consultation by locality**

Amount paid (GH¢)	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	Total
No payment	97.8	96.2	97.8	89.6	97.1	94.8
Less than 1.00	0.0	1.8	0.8	6.0	1.1	2.6
1.00 - 1.99	0.5	1.2	0.7	1.8	0.6	1.1
2.00 - 2.99	1.2	0.6	0.2	1.4	0.6	0.9
3.00 - 3.99	0.0	0.0	0.2	0.4	0.4	0.2
4.00 - 4.99	0.0	0.1	0.0	0.0	0.0	0.0
5.00 and more	0.6	0.1	0.3	0.6	0.1	0.3
All	100.0	100.0	100.0	100.0	100.0	100.0

#### 4.4.2 Breastfeeding and complementary feeding

Medical advice suggests that for the first six months, a healthy infant needs no food or fluid other than breast milk. Beyond six months, the breast milk should increasingly be supplemented with solid food and other fluids. In estimating the average age at weaning, the analysis is limited to children aged 24 months and older since most of the younger children were still being breastfed.

The level of breastfeeding in Ghana is very high, as less than one percent of children 5 years and younger are not breastfed (0.9%). In other words, about 99 percent of all children 5 years and younger have been breastfed at one time or another (Table 4.18). The pattern of weaning is generally consistent across all ages. Overall, about 82.1 percent of children 5 years and younger are weaned before reaching 12 months, with an additional 6.9 percent being weaned between 12 and 17 months. Less than one percent (0.4%) are weaned between 18 and 23 months of age.

## 4.5 HIV/AIDS Awareness

Respondents were asked a series of questions to assess their awareness and understanding of HIV/AIDS. Overall, 6.2 percent of people in the country “do not know” that a healthy looking person may have HIV. More than four out of every five persons are aware that a

**Table 4.18: Percentage distribution of children aged 2-5 years old by age of child and age (in months) at weaning**

Age of child	Not breastfed					Total
	< 12	12 - 17	18 - 23	24+		
2 years	0.0	90.6	7.8	0.8	0.8	100.0
3 years	0.1	89.9	8.6	0.4	1.0	100.0
4 years	0.0	89.8	8.9	0.5	0.8	100.0
5 years	0.0	94.6	4.9	0.0	0.5	100.0
All ages	0.0	82.1	6.9	0.4	10.6	100.0

healthy-looking person can have HIV while 7 percent have no idea (Table 4.19). Awareness is lowest among those in the Northern region (72.5%) but very high among people in Greater Accra (92.7%) and Ashanti (92.6%) regions.

Among the localities, knowledge is higher in urban (90.5%) than in rural areas (82.7%); with awareness being higher in Accra (GAMA) than other urban areas, and higher in rural forest and rural coastal than in rural savannah.

**Table 4.19: Percent distribution of persons who know that a healthy-looking person may have HIV by region and locality**

Region/Locality	Yes			No			Don't know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>Region</b>	<b>86.8</b>	<b>41.4</b>	<b>45.5</b>	<b>6.2</b>	<b>2.9</b>	<b>3.3</b>	<b>7.0</b>	<b>3.0</b>	<b>3.9</b>
Western	79.0	39.3	39.7	11.7	5.8	5.9	9.3	4.1	5.2
Central	82.4	38.8	43.5	7.4	3.1	4.2	10.3	3.9	6.4
Greater Accra	92.7	43.9	48.9	4.1	2.0	2.1	3.2	1.4	1.8
Volta	83.9	37.8	46.2	12.7	5.7	6.9	3.4	1.7	1.7
Eastern	89.6	42.7	46.9	4.6	2.2	2.4	5.8	2.3	3.5
Ashanti	92.6	44.0	48.7	3.0	1.3	1.7	4.4	2.0	2.4
Brong Ahafo	88.1	41.4	46.7	6.6	2.9	3.8	5.3	2.2	3.1
Northern	72.5	36.0	36.5	7.4	3.6	3.9	20	9.2	10.8
Upper East	85.2	40.9	44.3	5.7	2.6	3.1	9.1	3.8	5.4
Upper West	85.3	43.1	42.2	4.3	2.1	2.2	10.5	4.6	5.8
<b>Urban</b>	<b>90.5</b>	<b>41.8</b>	<b>48.7</b>	<b>4.9</b>	<b>2.3</b>	<b>2.7</b>	<b>4.6</b>	<b>1.8</b>	<b>2.8</b>
Accra (GAMA)	92.8	43.8	48.9	4.2	2.1	2.2	3.0	1.3	1.7
Other Urban	89.4	40.9	48.5	5.3	2.4	2.9	5.4	2.0	3.4
<b>Rural</b>	<b>82.7</b>	<b>40.9</b>	<b>41.8</b>	<b>7.7</b>	<b>3.5</b>	<b>4.1</b>	<b>9.6</b>	<b>4.5</b>	<b>5.2</b>
Rural Coastal	87.1	40.4	46.7	6.1	2.4	3.7	6.8	2.7	4.1
Rural Forest	84.4	42.1	42.3	7.6	3.5	4.1	8.0	3.6	4.4
Rural Savannah	78.3	39.0	39.3	8.4	4.0	4.3	13.4	6.5	6.9

Although most people have heard about HIV, advocacy efforts to improve awareness need to be intensified. One of the key intervention methods to minimize the HIV infection rate is prevention of mother to child transmission during pregnancy, delivery and breastfeeding. Table 4.20 shows the level of awareness of the possibility of mother to child transmission. Four-fifths of women in in both rural and urban areas (80.4% and 83.4% percent respectively) know about mother to child transmission. There are however, sizable proportions of people in the Central (14.1%), Northern (22.1%), Upper East (14.0%) and Upper West (15.4%) regions who do not know about mother to child transmission of HIV infection.

**Table 4.20: Percent distribution of persons who are aware of mother to child transmission of HIV infection by region and locality**

Region/Locality	Total	Yes		No			Don't know		
		Male	Female	Total	Male	Female	Total	Male	Female
Region	82.0	38.4	43.6	8.7	4.2	4.5	9.4	4.7	4.7
Western	80.8	39.5	41.3	9.9	5.6	4.4	9.2	4.1	5.2
Central	78.9	36.2	42.8	7.0	3.5	3.5	14.1	6.2	7.9
Greater Accra	84.0	39.8	44.2	9.7	4.1	5.6	6.3	3.4	3.0
Volta	86.0	38.5	47.5	8.1	3.9	4.2	6.0	2.8	3.1
Eastern	81.9	38.2	43.6	10.2	5.0	5.2	7.9	3.9	4.0
Ashanti	87.9	41.3	46.5	6.7	3.1	3.6	5.4	2.8	2.6
Brong Ahafo	79.8	36.0	43.8	11.2	5.6	5.6	9.0	4.9	4.1
Northern	70.3	33.4	36.9	7.6	4.0	3.6	22.1	11.4	10.7
Upper East	75.8	35.1	40.7	10.3	4.8	5.5	14.0	7.3	6.6
Upper West	79.0	39.8	39.2	5.6	2.7	2.9	15.4	7.4	8.0
<b>Urban</b>	<b>83.4</b>	<b>38.0</b>	<b>45.3</b>	<b>9.3</b>	<b>4.3</b>	<b>5.0</b>	<b>7.3</b>	<b>3.5</b>	<b>3.8</b>
Accra (GAMA)	83.8	39.7	44.1	10.0	4.3	5.7	6.2	3.2	2.9
Other Urban	83.1	37.2	45.9	9.0	4.3	4.7	7.8	3.6	4.2
<b>Rural</b>	<b>80.4</b>	<b>38.8</b>	<b>41.6</b>	<b>7.9</b>	<b>4.0</b>	<b>3.9</b>	<b>11.7</b>	<b>6.0</b>	<b>5.7</b>
Rural Coastal	82.7	37.6	45.1	6.5	3.1	3.3	10.9	4.8	6.1
Rural Forest	83.6	40.8	42.8	7.5	4.0	3.5	8.9	4.5	4.5
Rural Savannah	74.2	36.1	38.1	9.1	4.4	4.7	16.7	9.0	7.7

## 4.6 Health Insurance

This section presents information on the population covered by health insurance, reasons for not registering, types of health schemes, expected benefits from the scheme and the proportion of the population that benefited from the scheme. The health insurance data provide important information to assess the national response to the health insurance scheme.

Table 4.21 indicates the percentage distribution of males and females who have registered or are covered by health insurance. Overall, 67.6 percent of the population are registered or covered by the health insurance scheme. At the regional level, the highest coverage of health insurance is in the Brong Ahafo (80.2%) region and the lowest in Greater Accra where a little over one quarter (26.4%) are either registered or covered by a scheme. Nearly one-third (32.3%) of the population were neither registered nor covered by a health insurance scheme during the period of data collection. The proportion of the population registered or covered in by a health insurance scheme in the urban areas (71.5%) is higher than in the rural areas (63.9%).

**Table 4.21: Coverage rate of health insurance by region, locality and sex**

Region/Locality	Registered or covered under a scheme			Not registered or covered by a scheme		
	Total	Male	Female	Total	Male	Female
<b>Ghana</b>	<b>67.6</b>	<b>30.7</b>	36.9	<b>32.3</b>	<b>17.4</b>	<b>14.9</b>
Western	66.2	30.9	35.3	33.8	18.2	15.6
Central	47.4	20.1	27.3	52.5	26.6	26.0
Greater Accra	58.3	26.0	32.4	41.7	22.3	19.4
Volta	66.1	29.7	36.6	33.8	18.0	15.8
Eastern	70.0	31.0	39.0	30.0	16.9	13.0
Ashanti	74.1	33.4	40.6	25.9	14.6	11.3
Brong Ahafo	82.2	37.7	44.5	17.8	9.8	8.0
Northern	63.3	29.9	33.4	36.7	19.2	17.5
Upper East	80.5	37.2	43.4	19.5	10.7	8.7
Upper West	86.0	42.5	43.5	14.0	7.8	6.2
<b>Urban</b>	<b>71.5</b>	<b>31.6</b>	39.8	<b>28.6</b>	<b>15.4</b>	<b>13.2</b>
Accra (GAMA)	58.9	26.2	32.7	41.1	22.1	19.0
Other Urban	76.8	34.0	42.8	23.2	12.5	10.7
<b>Rural</b>	<b>63.9</b>	<b>29.8</b>	<b>34.1</b>	<b>36.1</b>	<b>19.5</b>	<b>16.7</b>
Rural Coastal	51.5	22.1	29.3	48.5	24.0	24.5
Rural Forest	63.9	29.7	34.1	36.1	20.0	16.2
Rural Savannah	67.9	32.4	35.5	32.1	17.3	14.9

Majority of respondents cited the lack of money (56.0%) as the main reason why they were not registered or covered by health insurance (Table 4.22). About one in ten (10.9%) respondents said they did not need health insurance. The same proportion (10.9%) also said that health insurance did not cover the services they needed. Other reasons cited include lack of confidence in the programme (9.6%), high premium (6.9%) and registration office too far (4.3%). Across the regions, no money is the main reason cited for not registering. In Greater Accra, 18.5 percent said they do not have confidence in the operators of the scheme while 21.9 percent in the Western region indicated that they do not need health insurance.

**Table 4.22: Persons who are not covered by Health Insurance by reason for not registering, region, locality and sex**

Region/Locality	Premium too high			Don't have confidence in operators of schemes			Covered by other alternatives			No knowledge of any scheme			Don't know where to register			Registration office too far		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>Ghana</b>	<b>6.9</b>	<b>3.7</b>	<b>3.2</b>	<b>9.6</b>	<b>5.4</b>	<b>4.2</b>	<b>2.4</b>	<b>1.3</b>	<b>1.1</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.6</b>	<b>0.4</b>	<b>0.3</b>	<b>4.3</b>	<b>2.3</b>	<b>2.0</b>
Western	2.5	1.4	1.1	6.4	3.9	2.5	4.2	2.6	1.6	0.2	0.1	0.2	0.3	0.3	0.1	4.4	2.4	2.0
Central	5.8	3.1	2.7	11.9	6.4	5.5	0.3	0.2	0.2	0.2	0.1	0.0	0.5	0.4	0.2	3.6	1.8	1.8
Greater Accra	10.9	5.4	5.5	18.5	10.5	8.0	3.7	1.9	1.8	0.0	0.0	0.0	0.8	0.4	0.3	1.4	0.8	0.6
Volta	7.6	4.2	3.4	5.5	3.2	2.3	0.9	0.6	0.3	0.2	0.0	0.1	0.0	0.0	0.0	11.3	6.4	4.9
Eastern	2.8	1.6	1.1	6.5	3.8	2.7	6.3	3.8	2.6	0.0	0.0	0.0	0.3	0.2	0.1	3.5	1.9	1.7
Ashanti	6.9	4.2	2.7	9.9	5.4	4.5	2.6	1.2	1.4	0.4	0.2	0.2	0.9	0.5	0.4	3.9	2.2	1.7
Brong Ahafo	4.6	2.9	1.8	4.1	2.7	1.4	0.8	0.3	0.5	0.3	0.1	0.2	0.2	0.2	0.0	3.7	1.7	2.1
Northern	9.8	4.9	4.9	2.8	1.4	1.4	0.2	0.1	0.1	0.2	0.0	0.2	1.4	0.6	0.8	7.0	3.4	3.6
Upper East	1.7	1.1	0.6	7.9	4.1	3.8	0.9	0.7	0.3	0.4	0.3	0.1	0.4	0.3	0.1	2.4	1.3	1.1
Upper West	4.2	3.1	1.1	0.6	0.6	0.0	0.2	0.2	0.0	0.8	0.6	0.2	0.1	0.1	0.1	1.0	0.7	0.3
<b>Urban</b>	<b>8.0</b>	<b>4.1</b>	<b>3.9</b>	<b>14.7</b>	<b>8.3</b>	<b>6.5</b>	<b>4.7</b>	<b>2.5</b>	<b>2.2</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.5</b>	<b>0.3</b>	<b>0.2</b>	<b>1.7</b>	<b>0.9</b>	<b>0.8</b>
Accra (GAMA)	11.7	5.8	5.9	19.5	11.0	8.5	4.1	2.0	2.0	0.0	0.0	0.0	0.8	0.5	0.3	1.3	0.7	0.6
Other Urban	5.2	2.9	2.3	11.1	6.2	4.9	5.1	2.8	2.3	0.3	0.1	0.2	0.4	0.2	0.2	1.9	1.0	0.9
<b>Rural</b>	<b>6.0</b>	<b>3.4</b>	<b>2.6</b>	<b>5.6</b>	<b>3.2</b>	<b>2.4</b>	<b>0.7</b>	<b>0.4</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.7</b>	<b>0.4</b>	<b>0.3</b>	<b>6.4</b>	<b>3.4</b>	<b>3.0</b>
Rural Coastal	5.1	2.4	2.7	8.0	4.5	3.5	0.5	0.4	0.1	0.1	0.0	0.1	0.7	0.3	0.4	5.2	2.4	2.7
Rural Forest	4.9	3.1	1.8	5.9	3.5	2.4	0.8	0.4	0.4	0.2	0.1	0.1	0.7	0.4	0.2	5.2	2.8	2.4
Rural Savannah	8.1	4.2	3.9	4.0	2.0	1.9	0.5	0.3	0.2	0.2	0.1	0.1	0.8	0.4	0.4	9.0	4.8	4.2

**Table 4.22: Persons who are not covered by Health Insurance by reason for not registering, region, locality and sex (Cont'd)**

Region/Locality	Do not need health\ insurance			Health Insurance does not cover the services needed			Health Insurance does not cover the facilities used			No money			other		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>Ghana</b>	<b>10.9</b>	<b>7.2</b>	<b>3.7</b>	<b>1.9</b>	<b>1.1</b>	<b>0.8</b>	<b>0.6</b>	<b>0.3</b>	<b>0.3</b>	<b>56.0</b>	<b>28.6</b>	<b>27.4</b>	<b>6.6</b>	<b>3.5</b>	<b>3.1</b>
Western	21.9	14.5	7.4	4.0	2.5	1.6	1.2	0.5	0.7	52.1	24.4	27.7	2.6	1.3	1.3
Central	6.0	3.4	2.6	1.5	0.9	0.7	0.6	0.2	0.4	66.1	32.3	33.8	3.4	1.9	1.5
Greater Accra	11.6	7.2	4.4	1.6	0.9	0.7	1.0	0.6	0.4	36.4	18.4	18.0	14.0	7.2	6.8
Volta	2.9	2.1	0.8	1.3	0.7	0.6	0.2	0.1	0.1	60.6	31.2	29.4	9.5	4.8	4.7
Eastern	13.4	9.6	3.8	1.0	0.7	0.2	0.6	0.3	0.3	61.7	32.4	29.3	3.9	2.2	1.6
Ashanti	17.8	11.7	6.1	4.2	2.4	1.8	0.7	0.4	0.2	46.5	24.8	21.7	6.2	3.2	3.0
Brong Ahafo	11.2	8.1	3.1	0.7	0.4	0.3	0.3	0.2	0.1	68.6	35.1	33.5	5.5	3.7	1.9
Northern	3.6	2.8	0.8	0.1	0.1	0.0	0.1	0.1	0.0	72.3	37.4	34.9	2.4	1.4	1.0
Upper East	2.9	1.9	1.0	0.4	0.2	0.2	0.1	0.1	0.0	81.1	44.3	36.8	1.8	0.9	0.9
Upper West	1.5	1.5	0.0	0.1	0.1	0.1	0.1	0.0	0.1	87.7	46.8	41.0	3.5	1.9	1.6
<b>Urban</b>	<b>14.8</b>	<b>9.8</b>	<b>5.0</b>	<b>2.5</b>	<b>1.4</b>	<b>1.1</b>	<b>1.0</b>	<b>0.5</b>	<b>0.5</b>	<b>41.8</b>	<b>20.6</b>	<b>21.2</b>	<b>10.2</b>	<b>5.3</b>	<b>4.8</b>
Accra (GAMA)	11.9	7.4	4.5	1.6	0.9	0.7	1.0	0.6	0.4	33.4	17.1	16.3	14.9	7.7	7.2
Other Urban	17.0	11.6	5.4	3.2	1.8	1.4	1.0	0.4	0.6	48.2	23.3	24.9	6.6	3.6	3.0
<b>Rural</b>	<b>7.7</b>	<b>5.1</b>	<b>2.6</b>	<b>1.4</b>	<b>0.9</b>	<b>0.5</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>67.2</b>	<b>34.9</b>	<b>32.4</b>	<b>3.7</b>	<b>2.0</b>	<b>1.7</b>
Rural Coastal	9.3	5.4	3.9	1.9	1.0	0.9	0.3	0.2	0.1	64.1	30.4	33.7	5.0	2.5	2.5
Rural Forest	10.3	6.7	3.5	2.1	1.4	0.7	0.5	0.3	0.2	65.6	34.4	31.1	3.8	2.0	1.8
Rural Savannah	2.8	2.3	0.6	0.2	0.1	0.1	0.1	0.0	0.0	71.5	37.7	33.7	2.9	1.8	1.2

The type of health insurance schemes being used is presented in Table 4.23. Overall, 99.1 percent of the health insurance holders are registered with district mutual health insurance schemes nationwide, while less than one percent are on private mutual health insurance schemes (Table 4.23). The proportion of scheme holders on the National Health Insurance Scheme (NHIS) in rural localities (99.4%) is slightly higher than those in urban areas (98.9%).

**Table 4.23: Percentage distribution of persons with health insurance coverage by type of scheme, region, locality and sex**

Region/Locality	National/District Health Insurance (NHIS)			Private Health Insurance			Both		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>Ghana</b>	<b>99.1</b>	<b>44.9</b>	<b>54.3</b>	<b>0.8</b>	<b>0.3</b>	<b>0.4</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>
Western	99.0	45.7	53.3	1.0	0.4	0.6	0.0	0.0	0.0
Central	99.1	42.4	56.7	0.9	0.3	0.6	0.0	0.0	0.0
Greater Accra	97.3	43.3	54.0	2.3	0.9	1.4	0.4	0.1	0.3
Volta	99.5	44.1	55.4	0.5	0.2	0.3	0.0	0.0	0.0
Eastern	99.6	43.8	55.7	0.4	0.2	0.3	0.0	0.0	0.0
Ashanti	99.3	45.0	54.3	0.6	0.4	0.3	0.0	0.0	0.0
Brong Ahafo	99.7	45.4	54.3	0.3	0.1	0.2	0.1	0.1	0.0
Northern	99.9	46.7	53.2	0.1	0.0	0.0	0.0	0.0	0.0
Upper East	99.8	45.9	53.9	0.2	0.1	0.1	0.0	0.0	0.0
Upper West	99.7	49.4	50.3	0.3	0.1	0.2	0.0	0.0	0.0
<b>Urban</b>	<b>98.9</b>	<b>43.7</b>	<b>55.2</b>	<b>1.0</b>	<b>0.4</b>	<b>0.6</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>
Accra (GAMA)	97.2	43.2	54.1	2.4	0.9	1.5	0.4	0.1	0.3
Other Urban	99.5	43.9	55.6	0.4	0.2	0.3	0.0	0.0	0.0
<b>Rural</b>	<b>99.4</b>	<b>46.2</b>	<b>53.2</b>	<b>0.6</b>	<b>0.3</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Rural Coastal	98.5	41.4	57.1	1.3	0.6	0.6	0.2	0.1	0.1
Rural Forest	99.2	46.1	53.2	0.8	0.4	0.3	0.0	0.0	0.0
Rural Savannah	99.8	47.5	52.3	0.2	0.1	0.1	0.0	0.0	0.0

Table 4.24 reports the expected benefits to be derived from the health insurance scheme. These include medication (33.4%), OPD services (31.7%), inpatient services (25.6%) and diagnostic services (9.3%). These expected benefits differ across the regions. OPD services (38.9%) and medication (36.1%) accounted for the highest in Ashanti, while inpatient services (31.0%) and diagnostic services (19.1%) were the benefits commonly reported the in the Upper East and Upper West regions respectively.

**Table 4.24: Expected benefit of scheme by region, locality and sex**

Region/Locality	Only OPD services			In patient services		
	Total	Male	Female	Total	Male	Female
<b>Ghana</b>	31.7	14.5	17.1	25.6	11.8	13.8
Western	21.3	9.5	11.8	30.1	13.8	16.3
Central	37.1	16.2	20.9	22.7	10.1	12.6
Greater Accra	32.7	13.8	18.9	24.1	10.2	13.9
Volta	27.1	12.2	14.9	30.0	13.5	16.5
Eastern	26.7	12.4	14.2	27.5	13.4	14.2
Ashanti	38.9	18.7	20.2	20.1	10.1	10.0
Brong Ahafo	35.0	15.8	19.3	25.1	11.2	13.9
Northern	31.5	14.9	16.6	25.5	11.8	13.7
Upper East	27.8	13.4	14.3	31.0	14.6	16.4
Upper West	18.3	8.9	9.4	26.6	13.0	13.6
<b>Urban</b>	31.8	14.0	17.8	23.9	10.5	13.4
Accra (GAMA)	34.3	14.5	19.7	23.6	10.0	13.6
Other Urban	31.1	13.9	17.2	24.0	10.7	13.3
<b>Rural</b>	31.5	15.0	16.5	27.1	13.0	14.2
Rural Coastal	24.4	10.8	13.6	25.2	10.7	14.5
Rural Forest	33.2	16.0	17.2	28.2	13.8	14.4
Rural Savannah	30.5	14.5	16.0	26.1	12.3	13.8

**(cont'd)**

Region/Locality	Medication			Diagnostics (lab)		
	Total	Male	Female	Total	Male	Female
<b>Ghana</b>	<b>33.4</b>	<b>15.3</b>	<b>18.1</b>	<b>9.3</b>	<b>4.2</b>	<b>5.1</b>
Western	34.1	15.3	18.8	14.6	6.2	8.4
Central	36.9	15.7	21.2	3.2	1.2	2.0
Greater Accra	34.0	14.5	19.6	9.2	3.9	5.3
Volta	29.3	13.5	15.9	13.6	6.4	7.2
Eastern	31.4	15.2	16.3	14.4	7.2	7.2
Ashanti	36.1	17.3	18.9	4.9	2.0	2.9
Brong Ahafo	33.4	15.1	18.2	6.5	2.9	3.6
Northern	33.5	15.6	17.9	9.5	4.8	4.7
Upper East	30.0	14.0	16.0	11.1	4.9	6.2
Upper West	36.0	18.0	18.0	19.1	9.7	9.4
<b>Urban</b>	<b>34.5</b>	<b>15.1</b>	<b>19.4</b>	<b>9.7</b>	<b>4.2</b>	<b>5.6</b>
Accra (GAMA)	33.8	14.3	19.5	8.3	3.4	4.9
Other Urban	34.7	15.4	19.3	10.1	4.4	5.7
<b>Rural</b>	<b>32.4</b>	<b>15.5</b>	<b>16.8</b>	<b>9.0</b>	<b>4.3</b>	<b>4.7</b>
Rural Coastal	35.3	15.3	20.0	15.1	5.9	9.2
Rural Forest	32.6	15.9	16.7	6.0	2.8	3.1
Rural Savannah	31.7	15.1	16.6	11.7	5.9	5.9

# CHAPTER FIVE

## EMPLOYMENT

### 5.1 Introduction

The labour force module of the GLSS6, which was based on the standard labour force framework, was used to collect work-related statistics from the selected households. The data generated are expected to be used to update various indicators of labour force statistics to assist in monitoring employment and labour market developments in Ghana.

Seven days prior to the interview date is used as the reference period to measure current activity. One month (last 30 days) is the reference period for unemployed and underemployed persons to look for work or seek for more hours of work respectively. These reference periods are all in accordance with international statistical standards.

### 5.2 Concepts and definitions

The concepts and definitions used in the Labour Force Survey are explained so that readers are familiar with them in order to be able to interpret the results presented.

#### **Work**

Labour Force Surveys collect data about work activities. Work refers to any economic activity performed by the respondent that contributes to economic production of goods and services. Examples are selling in a market/street, working in an enterprise/business or for government, working in one's own farm or enterprise, working in a household member's farm etc. The work activities included in the survey are in line with the current International Labour Organization (ILO) standards.

#### **Employed**

There are two situations in which a person can be classified as being currently employed. Either the person was actually engaged in any work (as defined above) during the reference week, or he/she had an attachment to a job or business but for some reasons did not work during the reference week.

#### **Unemployed**

In this report, the relaxed definition of unemployment is adopted. Thus, a person is considered as unemployed if he/she was not engaged in any work (as defined above), had no attachment to a job or business and was "potentially" available for jobs. The potential labour force includes those who were seeking but unavailable, those who were available but not seeking as well as those who were not seeking, not available but unemployed.

#### **Underemployment**

The concept of time-related underemployment has been introduced to complement the statistics on unemployment. While unemployment represents a situation of total lack of work during the reference period, many people may have jobs but suffer from partial lack of work. The currently employed group can, therefore, be sub-classified as either in time-related underemployment or not.

In operational terms, the time-related underemployed persons are defined as those whose total actual hours worked were less than a threshold relating to working time. In this report, this threshold is 35 hours. Thus, anyone who worked less than 35 hours a week in the reference period is considered underemployed. It should be noted that this definition of underemployment is limited to hours of work, and no account is taken of whether these individuals had actually been looking for additional work or were doing so voluntarily.

### **Economically active and economically not active**

A person is considered as economically active if he/she was employed or unemployed, otherwise the person is economically not active. The economically not active persons are those who did not work and were not seeking for work; that is, are not currently employed or unemployed. This group includes persons such as those who are studying or performing household duties (homemakers), retired persons, the disabled and persons who were unable to work because of their age (too young or old to work)

### **Labour force participation rate**

This is the proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work. It provides an indication of the relative size of the supply of labour for the production of goods and services.

### **Occupation**

Occupation refers to the type of work the person was engaged in at the establishment where he/she worked. All persons who worked during the reference period 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. Up to two occupations were considered if a person was engaged in more than one occupation. However, only the main occupation has been included in this report.

### **Industry**

Industry refers to the type of product produced or service rendered at the respondent's place of work (irrespective of the occupation the person has). In this report, information on only the main product produced or service rendered in the establishment during the reference period has been considered.

## **5.3 Current activity status of the population**

Table 5.1 shows that an estimated 22.9 million persons aged 5 years and older, comprising 10.95 million males and 11.99 million females were identified as the survey population. Of the total survey population aged 5 years and older, 14.04 million persons or 61.2 percent are currently economically active. For those aged 15 years and older, 12.30 million out of 15.95 million persons or 77.1 percent are economically active.

**Table 5.1: Total population and currently economically active population by age and sex**

Age (years)	Total population (million)			Currently economically active population (million)		
	Male	Female	Total	Male	Female	Total
5 – 14	3.56	3.43	6.99	0.89	0.85	1.74
15 – 24	2.39	2.60	4.99	1.36	1.39	2.75
25 – 44	2.92	3.53	6.46	2.78	3.13	5.91
45 – 64	1.51	1.72	3.23	1.39	1.52	2.91
65+	0.57	0.71	1.28	0.36	0.37	0.73
All	10.95	11.99	22.94	6.79	7.26	14.04

Table 5.2 shows the current activity status of the survey population. About three-quarters (75.5%) of the population 15 years and older are employed, 1.7 percent are unemployed and 22.8 percent are economically not active. Irrespective of sex, the population in rural areas (81.7%) is more likely to be employed than those in urban areas (69.9%). On the other hand, the population in the urban area is more likely than rural dwellers to be unemployed and economically not active.

Table 5.2 further shows that for both urban and rural dwellers and irrespective of sex, children (5-14 years) are more likely to be economically not active (75.1%) .

**Table 5.2: Current activity status by age, locality and sex**

Age/ Locality	Economically active						Economically not active		
	Employed			Unemployed			Male	Female	Total
	Male	Female	Total	Male	Female	Total			
<b><u>5 - 14 years</u></b>									
Urban	13.0	15.4	14.2	0.4	0.4	0.4	86.6	84.2	85.4
Rural	34.8	32.9	33.9	0.2	0.1	0.1	65.0	67.0	66.0
Total	24.8	24.5	24.6	0.3	0.3	0.3	74.9	75.3	75.1
<b><u>15 years+</u></b>									
Urban	73.3	67.2	69.9	2.4	2.6	2.5	24.4	30.2	27.6
Rural	83.7	79.9	81.7	0.8	0.9	0.9	15.5	19.2	17.4
Total	78.4	73.1	75.5	1.6	1.8	1.7	20.1	25.1	22.8

Table 5.3 indicates that the activity rate of the population aged 25 to 44 years (93.6%) is higher than that of any other age group. As expected, the younger population (5-14 years) has a lower activity rate (24.7%) compared to other age groups irrespective of sex and locality of residence. The activity rates of the population residing in rural areas, especially those in the savannah and forest areas (about two-thirds) are higher than the activity rates of urban dwellers (55.1%). This is also true for both males and females.

**Table 5.3: Current activity rate by sex, age group and locality**

Sex/Age group	Urban			Rural				Ghana
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
<b>Male</b>								
5 - 14	4.3	15.2	13.0	19.1	34.7	39.8	34.9	24.9
15 - 24	31.3	43.1	40.6	54.2	66.0	73.4	67.4	54.3
25 - 44	90.8	92.7	92.2	93.1	96.6	94.0	95.3	93.6
45 - 64	86.1	90.5	89.4	92.0	96.8	91.4	94.7	92.0
65+	43.0	52.8	50.7	64.6	72.0	76.9	73.2	64.2
All	54.8	55.2	55.1	57.9	67.5	68.1	66.7	61.0
<b>Female</b>								
5 - 14	7.9	17.2	15.4	18.4	32.8	37.5	32.9	24.5
15 - 24	27.4	42.1	38.9	51.9	62.2	71.8	64.3	50.6
25 - 44	78.9	85.3	83.6	85.4	92.5	91.3	91.2	86.9
45 - 64	75.6	86.1	83.7	87.3	94.1	87.6	91.2	87.3
65+	26.2	46.7	43.1	46.7	61.0	57.9	57.6	51.1
All	48.9	54.9	53.5	56.0	66.1	67.3	65.3	59.2
<b>Both sexes</b>								
5 - 14	6.1	16.2	14.2	18.7	33.8	38.7	34.0	24.7
15 - 24	29.1	42.6	39.7	53.0	64.1	72.6	65.9	52.3
25 - 44	84.5	88.6	87.5	88.8	94.4	92.5	93.1	89.9
45 - 64	80.6	88.1	86.3	89.3	95.4	89.4	92.9	89.5
65+	33.9	49.1	46.3	52.1	66.0	68.0	64.8	56.9
All	51.7	55.0	54.3	56.8	66.8	67.7	66.0	60.0

The employment status of currently employed persons 15 years and older indicates that 46.4 percent are own account workers, 22.5 percent are employees and 22.3 percent are contributing family workers. Employers and apprentices form 6.2 percent and 2.6 percent respectively of the employed population (Table 5.4).

Table 5.4 further shows that marked differences exist in the employment status between urban and rural areas. In urban areas, employees (35.1%) constitute the second largest category after own account workers (40.4%), whereas in rural areas, contributing family workers (32.5%) form the second largest category of workers after own account workers (52.0%). In addition, the proportion of employees in urban areas (35.1%) is about three times higher than their counterparts in rural areas (10.2%). In contrast, the proportion of contributing family workers in urban areas (11.7%) is much lower than that in rural areas (32.5%).

There are higher proportions of males who are employees compared to females. On the other hand, females are more likely than males to be own account workers and contributing family workers. In urban areas, the proportion of female own account workers (52.8%) is twice that of their male counterparts (26.7%). However, in rural areas, the proportion of males who are own account workers is higher than for females (55.9% and 48.3% respectively).

**Table 5.4: Employment status of the currently employed population 15 years and older by sex and locality**

Employment status	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Employee	51.0	20.8	35.1	15.5	5.7	10.5	32.5	13.2	22.5
Employer	9.4	8.5	8.9	4.6	2.6	3.5	6.9	5.5	6.2
Own account worker	26.6	52.8	40.4	55.9	48.3	52.0	41.9	50.5	46.4
Contributing family worker	9.3	13.8	11.7	22.9	41.6	32.5	16.4	27.9	22.3
Apprentice	3.4	4.0	3.7	1.2	1.7	1.5	2.3	2.8	2.6
Other	0.3	0.1	0.2	0.0	0.1	0.0	0.1	0.1	0.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

As shown in Table 5.5, about one-fifth (20.2%) of currently employed persons aged 15 years and older reported that they are engaged in wage employment. Of those involved in self-employment, 26.4 percent are engaged in agriculture while 26.0 percent are into non-agricultural activities. Less than one-quarter (22.3%) of the employed persons are contributing family workers engaged in family enterprises and receiving no pay, the majority of whom (18.9%) are involved in agricultural activities.

There are sharp contrasts between urban and rural dwellers, and also between males and females regarding the type of work in which they are engaged. Wage employment is more of an urban phenomenon as about one-third (32.5%) of urban workers are engaged in wage employment, while the corresponding proportion in rural areas is much lower (8.6%). The proportion of males in wage employment (29.5%) is much higher than for females (11.7%). More urban workers (38.3%) are engaged in self-employed non-agricultural activities, whereas their rural counterparts (41.1%) work mainly in agriculture. In contrast, the proportion of female contributing family workers (in both agricultural and non-agriculture activities) (27.9%) is much higher than for males (16.3%). This pattern is the same in both rural and urban localities (Table 5.5).

**Table 5.5: Type of work engaged in by the currently employed population aged 15 years and older by locality and sex**

Type of work	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Wage employment	47.5	19.1	32.5	12.9	4.5	8.6	29.5	11.7	20.2
Self-employed with employees									
Non-agricultural	7.5	7.3	7.4	1.8	1.5	1.7	4.5	4.4	4.4
Agricultural	1.9	1.3	1.6	2.7	1.1	1.9	2.3	1.2	1.7
Self-employed without employees									
Non-agricultural	15.8	44.5	30.9	7.2	18.2	12.8	11.3	31.2	21.6
Agricultural	10.8	8.3	9.5	48.7	30.1	39.2	30.5	19.3	24.7
Contributing family worker									
Non-agricultural	3.2	6.0	4.6	1.4	3.1	2.3	2.2	4.5	3.4
Agricultural	6.1	7.9	7.1	21.5	38.5	30.2	14.1	23.4	18.9
Domestic employee	0.4	0.3	0.4	0.1	0.2	0.1	0.3	0.2	0.2
Apprentice	3.1	1.4	2.2	2.5	1.1	1.8	2.8	1.3	2.0
Casual worker	3.4	4.0	3.7	1.2	1.7	1.5	2.3	2.8	2.6
Other	0.3	0.1	0.2	0.0	0.1	0.0	0.1	0.1	0.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

According to Table 5.6, 5.9 percent of currently employed persons 15 years and older are in public sector employment, 4.2 percent of females and 7.6 percent of males. The male dominance in the public sector is observed across both the urban and rural areas of the

country. The private formal sector employs almost the same proportion of persons (5.7%) as the public sector, with about twice the proportion of males as females. The Agri-business sector employs 46.1 percent with slightly more males than females. While seven out of every 10 (72.1%) employed persons 15 years and older in the rural areas are into agri-business employment, it employs less than one in every five (18.7%) of their urban counterparts.

The private informal sector engages about two out of every five (41.9%) of the currently employed persons 15 years and older, 47.8 percent of females and 35.5 percent of males. The data shows that three-fifths (61.5%) of the employed urban population is engaged as private informal employees whereas less than one-quarter (23.3%) of their rural counterparts have private informal employers. Irrespective of the locality of residence, more females than males are engaged by private informal employers.

**Table 5.6: Currently employed population aged 15 years and older by type of employer, locality and sex**

Type of employer	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
<b>Public Service</b>									
Civil Service	5.0	2.6	3.7	1.5	0.7	1.1	3.2	1.6	2.4
Other Public Service	6.7	4.0	5.3	1.8	1.0	1.4	4.2	2.5	3.3
Parastatal	0.4	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2
<b>Private Sector</b>									
Formal	14.2	5.8	9.8	2.7	1.1	1.9	8.2	3.4	5.7
Informal	52.8	69.3	61.5	19.6	26.8	23.3	35.5	47.8	41.9
NGOs	0.5	0.1	0.3	0.1	0.0	0.1	0.3	0.1	0.2
Cooperatives	0.2	0.1	0.1	0.1	0.0	0.1	0.2	0.0	0.1
International Organization	0.3	0.0	0.2	0.1	0.0	0.1	0.2	0.0	0.1
Agri-Business	19.7	17.8	18.7	74.0	70.2	72.1	48.0	44.4	46.1
other	0.2	0.1	0.2	0.0	0.1	0.0	0.1	0.1	0.1
<b>All</b>	<b>100.0</b>								

Table 5.7 presents information on the main occupation of currently employed persons 15 years and older by their locality of residence and sex. Skilled agricultural or fishery workers constitute the largest occupational group with 44.3 percent of all persons 15 years older across the country. This is followed by service or sales workers (24.5%) and craft and its related workers (12.7%). These three occupations together engage four out of every five (81.5%) currently employed persons in the country. While the proportion of males is higher than females in the agricultural or craft related occupations, there is nearly four times the proportion of females (37.2%) than males (10.8%) in service or sales occupations.

As expected, agricultural and fishery occupations are predominant in rural Ghana, engaging 70.7 percent of all workers. Only one in six (16.5%) urban dwellers are agricultural/fishery workers with slightly more males (19.0%) than females (14.3%). The dominant occupation among urban females is service or sales work with nearly three out of every five (57.4%) currently employed females 15 years and older in this occupation. Among the urban males, however, craft and related workers dominate.

**Table 5.7: Main occupation of currently employed population 15 years and older by locality and sex**

Main occupation	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Legislators/managers	3.1	1.8	2.4	0.6	0.5	0.5	1.8	1.1	1.4
Professionals	10.6	5.4	7.8	2.9	1.5	2.2	6.6	3.4	4.9
Technicians and associate professionals	5.3	1.2	3.1	0.8	0.3	0.5	3.0	0.7	1.8
Clerical support workers	2.4	2.2	2.3	0.5	0.1	0.3	1.4	1.2	1.3
Service/sales workers	17.9	57.4	38.7	4.3	17.6	11.1	10.8	37.2	24.5
Skilled agric/fishery workers	19.0	14.3	16.5	73.7	67.8	70.7	47.5	41.4	44.3
Craft and related trades workers	21.9	13.7	17.6	7.4	8.7	8.1	14.4	11.2	12.7
Plant machine operators and assemblers	13.5	0.2	6.5	4.6	0.3	2.4	8.8	0.3	4.4
Elementary occupations	6.3	3.7	4.9	5.1	3.4	4.2	5.7	3.5	4.5
Other occupations	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.8 indicates that 45 percent of all employed persons 15 years and older are engaged in the agriculture, forestry and fishing industry. The wholesale and retail trade industry engages one in five persons (19.5%) while about one-tenth (9.1%) are in the manufacturing industry. The wholesale and retail trade, manufacturing, accommodation and food service activities industries among others are dominated by females while the agriculture and fishery industries and others such as construction, transportation and storage are male dominated. For instance, almost three times the proportion of females (28.0%) than males (10.3%) are engaged in the wholesale and retail trade compared to about 25 times more males (7.7%) than females (0.3%) in the transportation and storage industry.

The agriculture, forestry and fishing industry is the only one dominated by the rural population with all the other industries being predominantly urban. While only 14.2 percent of the currently employed urban population 15 years and older are into agriculture, forestry and fishing; nearly one-third (30.9%) are engaged in the wholesale and retail trade with more females (43.1%) than males (17.2%) engaged in this sector. The proportion of rural females engaged in the wholesale and retail trade (13.3%), manufacturing (8.1%) and service industries (2.4%) is also higher than males.

**Table 5.8: Currently employed population 15 years and older by industry group, locality and sex**

Industry group	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Agriculture, forestry and fishing	19.7	14.2	16.8	74.5	67.9	71.1	48.2	41.4	44.7
Mining and quarrying	2.5	0.3	1.4	3.0	0.8	1.9	2.8	0.6	1.6
Manufacturing	11.2	12.6	11.9	4.5	8.1	6.4	7.7	10.3	9.1
Electricity, gas, stream and air conditioning supply	0.6	0.1	0.3	0.1	0.0	0.0	0.3	0.0	0.2
Water supply, sewerage, waste management	0.5	0.3	0.4	0.1	0.1	0.1	0.3	0.2	0.2
Construction	10.0	0.2	4.8	3.6	0.2	1.8	6.7	0.2	3.3
Wholesale and retail trade	17.2	43.1	30.9	4.0	13.3	8.8	10.3	28.0	19.5
Transportation and storage	12.3	0.5	6.1	3.5	0.0	1.7	7.7	0.3	3.8
Accommodation and food service activities	1.4	9.6	5.7	0.4	3.8	2.1	0.9	6.7	3.9
Information and communication	1.2	0.3	0.7	0.1	0.0	0.0	0.6	0.2	0.4
Financial and insurance activities	1.7	1.0	1.4	0.2	0.1	0.1	0.9	0.5	0.7
Real estate activities	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Professional, scientific and technical activities	2.4	1.2	1.8	0.2	0.3	0.3	1.3	0.7	1.0
Administrative and support service activities	2.6	0.9	1.7	0.5	0.2	0.3	1.5	0.5	1.0
Public administration and defence	2.0	0.8	1.4	0.3	0.0	0.2	1.2	0.4	0.8
Education	6.4	4.6	5.5	2.6	1.2	1.9	4.4	2.9	3.6
Human health and social work activities	1.5	1.8	1.7	0.4	0.5	0.4	0.9	1.1	1.0
Arts, entertainment and recreation	1.4	0.1	0.7	0.3	0.0	0.2	0.8	0.1	0.4
Other service activities	4.6	7.1	5.9	1.1	2.4	1.8	2.8	4.8	3.8
Activities of households as employers	0.6	1.1	0.9	0.7	1.1	0.9	0.6	1.1	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The data in Table 5.9 show that 17.8 percent of the currently employed persons 15 years and older have attained a secondary school or higher education. One-third have attained middle school leaving certificate (MSLC) or basic education certificate examination (BECE), while 27.1 percent have never been to school. The educational attainment of male workers is higher than that of females. A high proportion of male workers have attained MSLC/BECE (37.6%) while 22.9 percent have attained secondary or higher education. The corresponding proportions for female workers are 29.2 percent and 12.6 percent respectively. While only one-fifth (19.4%) of the males have never been to school, a third (34.2%) of the females have never had any schooling.

**Table 5.9: Educational attainment of currently employed population 15 years and older by sex and main occupation**

Main occupation	Educational attainment				Total
	Never been to school	Less than MSLC/BECE	MSLC/BECE	Secondary or higher	
<b>Male</b>					
Legislators/managers	5.6	1.8	22.6	70.0	100.0
Professionals	1.1	1.7	9.7	87.5	100.0
Technicians and associate professionals	1.2	5.0	31.3	62.6	100.0
Clerical support workers	1.4	1.7	34.7	62.1	100.0
Service/sales workers	10.4	13.8	40.7	35.1	100.0
Skilled agric/fishery workers	31.8	27.4	32.3	8.5	100.0
Craft and related trades workers	9.3	16.4	54.4	19.9	100.0
Plant machine operators and assemblers	8.9	15.9	57.4	17.9	100.0
Elementary occupations	14.3	26.7	43.8	15.2	100.0
Other occupations	0.0	0.0	36.3	63.7	100.0
All	19.4	20.1	37.6	22.9	100.0
<b>Female</b>					
Legislators/managers	10.1	17.3	28.2	44.5	100.0
Professionals	1.4	0.8	10.5	87.3	100.0
Technicians and associate professionals	6.4	7.8	19.4	66.4	100.0
Clerical support workers	0.0	1.1	12.8	86.2	100.0
Service/sales workers	22.6	23.4	39.9	14.1	100.0
Skilled agric/fishery workers	51.1	27.1	19.2	2.6	100.0
Craft and related trades workers	28.2	23.7	38.4	9.7	100.0
Plant machine operators and assemblers	34.5	21.3	31.3	12.9	100.0
Elementary occupations	33.4	30.5	30.4	5.7	100.0
Other occupations	0.0	0.0	0.0	100.0	100.0
All	34.2	24.0	29.2	12.6	100.0
<b>Both sexes</b>					
Legislators/managers	7.4	8.1	24.9	59.6	100.0
Professionals	1.2	1.4	10.0	87.4	100.0
Technicians and associate professionals	2.2	5.6	28.8	63.4	100.0
Clerical support workers	0.8	1.4	24.5	73.3	100.0
Service/sales workers	20.0	21.4	40.1	18.6	100.0
Skilled agric/fishery workers	41.2	27.3	25.9	5.6	100.0
Craft and related trades workers	18.0	19.7	47.1	15.2	100.0
Plant machine operators and assemblers	9.6	16.0	56.6	17.7	100.0
Elementary occupations	22.0	28.2	38.4	11.4	100.0
Other occupations	0.0	0.0	30.0	70.0	100.0
All	27.1	22.1	33.2	17.6	100.0

The educational attainment of the currently employed population varies widely according to their main occupation and sex. About 60 percent of legislators or managers, 87.4 percent of professionals, and 63.4 percent of technicians and associate professionals have attained at least secondary school education. Skilled agriculture/fishery workers, craft and related trades workers, and service or sales workers have large proportions of persons with low (less than MSLC/BECE) or no educational attainment. More than four-fifths (86.2%) of females in clerical support work have secondary or higher education, compared to three-fifths (62.1%) of their male counterparts.

Table 5.10 shows the average number of hours worked per week by currently employed persons 15 years and older by their main occupation. Overall, 45.1 percent of those who had a job during the reference period spent less than 40 hours per week on their main job. This may be a reflection of the level of time-related underemployment in the labour force. About

15 percent of the currently employed persons work for less than 20 hours a week on their main job. Time-related underemployment is particularly marked among agriculture or fishery workers where nearly 61 percent work less than 40 hours per week. One out of every five (21.9%) agriculture or fishery workers and persons in elementary occupations (20.6%), work less than 20 hours per week in their main occupation.

**Table 5.10: Hours worked per week by currently employed population 15 years and older by main occupation**

Main occupation	Hours worked per week								Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Legislators/managers	2.4	2.2	6.9	11.0	33.7	13.1	11.9	18.9	100.0
Professionals	2.5	3.4	9.9	30.3	34.7	8.6	4.6	5.8	100.0
Technicians and associate professionals	2.5	4.3	6.7	12.8	38.7	12.6	8.7	13.8	100.0
Clerical support workers	2.1	2.0	6.5	10.6	37.5	15.6	8.0	17.7	100.0
Service/sales workers	4.2	6.0	9.3	13.6	20.6	10.5	12.3	23.5	100.0
Skilled agric/fishery workers	10.2	11.7	17.2	21.5	22.8	7.4	5.1	4.1	100.0
Craft and related trades workers	4.3	6.2	7.9	13.6	28.4	12.6	14.4	12.6	100.0
Plant machine operators and assemblers	1.9	2.4	4.3	8.8	21.2	8.9	14.7	37.7	100.0
Elementary occupations	9.4	11.2	12.3	13.4	22.1	11.1	9.8	10.7	100.0
Other occupations	0.0	0.0	0.0	13.0	43.8	27.7	9.4	6.1	100.0
All	6.8	8.3	12.4	17.6	24.1	9.4	8.9	12.5	100.0

About one-fifth (21.4%) of the working population spend 60 hours or more per week on their main job. Particularly, plant machine operators and assemblers (52.4%), service or sales workers (35.8%) and legislators or managers (30.7%) spend 60 hours or more per week in their main occupation. Professionals and agriculture or fishery workers are the only occupations where less than 11 percent of workers spend 60 hours or more per week. With the exception of service or sales workers and plant machine operators and assemblers, all other occupational groups have high proportions of their workers spending between 40 and 49 hours per week in their main occupations.

Table 5.11 shows the hours worked per week by industry of employment as indicated by the currently employed persons 15 years and older. The hours of work also vary substantially by sector of employment. More than half (54.7%) of employees in the transportation and storage industry as well as about one-third of those in wholesale and retail trade, information and communication, administrative and support service activities, and other service activities industries work 60 hours or more per week. The data also show that more than half of the workers in three industries (Water supply, sewerage and waste management, 61.6%; Agriculture, forestry and fishing, 60.7%; and Education, 52.7%) work less than 40 hours per week, which may be indicative of time-related underemployment in these industry groups.

**Table 5.11: Hours worked per week by currently employed population 15 years and older by industry group**

Industry	Hours worked per week								Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Agriculture, forestry and fishing	10.2	11.7	17.3	21.5	22.8	7.4	5.1	4.1	100.0
Mining and quarrying	5.8	5.8	7.9	13.1	25.1	11.7	16.9	13.7	100.0
Manufacturing	5.2	6.8	9.2	14.3	27.2	12.7	12.4	12.2	100.0
Electricity, gas, stream and air conditioning supply	3.5	0.0	12.8	9.9	51.5	13.5	4.9	3.9	100.0
Water supply, sewerage, waste management	5.4	18.3	13.8	24.1	21.9	3.3	4.0	9.2	100.0
Construction	3.0	5.9	7.1	13.0	31.6	13.4	14.6	11.4	100.0
Wholesale and retail trade	4.3	6.0	8.9	13.0	21.3	10.6	13.3	22.7	100.0
Transportation and storage	2.0	2.9	3.6	7.3	20.4	9.0	12.4	42.3	100.0
Accommodation and food service activities	4.6	8.3	13.4	19.3	20.1	7.3	10.3	16.7	100.0
Information and communication	0.0	1.7	6.6	7.6	30.5	18.5	14.1	20.9	100.0
Financial and insurance activities	1.9	2.0	1.4	8.6	49.6	16.8	7.8	12.0	100.0
Real estate activities	0.0	12.3	0.0	0.0	47.4	22.0	6.1	12.2	100.0
Professional, scientific and technical activities	1.2	3.1	6.7	7.7	41.8	15.1	11.8	12.6	100.0
Administrative and support service activities	4.5	3.4	9.4	7.0	20.1	18.1	7.3	30.1	100.0
Public administration and defence	1.8	1.6	2.8	6.5	45.8	15.4	6.0	20.2	100.0
Education	2.5	3.2	10.6	36.4	34.3	7.8	2.0	3.3	100.0
Human health and social work activities	1.5	2.2	6.1	19.5	40.5	9.6	8.9	11.7	100.0
Arts, entertainment and recreation	6.3	9.0	12.1	20.6	12.0	10.6	10.0	19.3	100.0
Other service activities	4.8	5.1	6.9	12.2	20.8	11.4	15.2	23.7	100.0
Activities of households as employers	13.2	11.4	10.5	12.9	22.7	8.2	5.7	15.4	100.0
Activities of extraterritorial organizations and bodies	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0
Total	7.8	9.5	14.2	20.1	27.6	10.8	10.1	14.2	100.0

Hourly earnings for workers are computed by dividing the total wage receipts in a given period by the number of hours worked. Table 5.12 shows that the average hourly earnings of the employed population aged 15 years and older is GH¢1.17. However, the average hourly earnings of persons employed in wholesale and retail trade (GH¢1.14); activities of extraterritorial organizations and bodies (GH¢0.58); agriculture, forestry and fishing (GH¢0.69), activities of households as employers (GH¢0.98); manufacturing (GH¢1.07) and other services (GH¢1.11) are lower than the national average. Generally, the average hourly earnings of males (GH¢1.44) are higher than females (GH¢0.96). Disparity in earnings between males and females is highest for those employed in real estate activities (about five times); followed by those engaged in electricity, gas, stream and air conditioning supply; and financial and insurance activities (about double).

**Table 5.12: Average basic hourly earnings (GH¢) of currently employed population 15 years and older by industry and sex**

Main industry	Earnings (GH¢)		
	Male	Female	Total
Agriculture, forestry and fishing	0.82	0.51	0.69
Mining and quarrying	2.90	1.92	2.56
Manufacturing	1.42	0.92	1.07
Electricity, gas, stream and air conditioning supply	2.56	5.65	2.56
Water supply, sewerage, waste management	2.16	1.28	1.53
Construction	2.30	1.42	2.30
Wholesale and retail trade	1.51	1.00	1.14
Transportation and storage	1.53	1.64	1.53
Accommodation and food service activities	1.64	1.40	1.40
Information and communication	2.18	2.30	2.19
Financial and insurance activities	3.84	1.73	2.49
Real estate activities	2.88	0.55	2.21
Professional, scientific and technical activities	2.69	1.63	2.12
Administrative and support service activities	1.05	1.94	1.25
Public administration and defence	3.30	3.45	3.40
Education	3.49	2.76	3.22
Human health and social work activities	2.88	2.99	2.88
Arts, entertainment and recreation	1.83	2.02	1.83
Other service activities	1.67	0.86	1.11
Activities of households as employers	0.87	1.00	0.98
Activities of extraterritorial organizations and bodies	0.58	0.00	0.58
Total	1.44	0.96	1.17

Table 5.13 shows the average basic hourly earnings of the employed population aged 15 years and above among the various occupational groups. From the Table, professionals receive the highest average basic hourly rate (GH¢5.80) followed by legislators/managers (GH¢4.86). The lowest average basic hourly earnings are recorded among skilled agricultural/fishery workers (GH¢0.86).

Generally, the hourly earnings of males in the various occupational groups are higher than those of females except for clerical support workers where on average females (GH¢3.61) earn more than males (GH¢2.57).

**Table 5.13: Average basic hourly earnings (GH¢) of currently employed Population 15 years and older by main occupation and sex**

Main occupation	Earnings (GH¢)		
	Male	Female	Total
Legislators/managers	4.35	2.30	3.54
Professionals	3.84	3.22	3.50
Technicians and associate professionals	2.67	2.30	2.56
Clerical support workers	2.22	1.97	2.05
Service/sales workers	1.33	1.00	1.11
Skilled agric/fishery workers	0.80	0.50	0.66
Craft and related trades workers	1.74	1.00	1.38
Plant machine operators and assemblers	1.65	1.40	1.64
Elementary occupations	1.50	0.99	1.26
Other occupations	4.77	9.72	5.06
Total	1.44	0.96	1.17

Table 5.14 shows the conditions of service of the employed population aged 15 years and older at their work places. Almost one quarter (23.8%) have no contract of employment, and this is similar for males (23.3%) and females (24.7%). While almost three-quarters stated that they had a contract, only half of these said they had a written contract while the rest reported oral or verbal contracts. These conditions include having a signed contract, having a union at the workplace, taxes, and paid holidays, among others. Four-fifths (80.4%) of the working population indicated that there is no subsidized medical facility for them when they are sick. Another 70.9 percent are not entitled to any social security while 70.1 percent do not receive retirement benefits such as a pension. On tax deductions, only about a quarter (26.1%) of those currently employed are captured as tax payers.

**Table 5.14: Currently employed population 15 years and older with contracts, unions, tax deductions and employee benefits by sex**

	Male	Female	Both sexes
<b>Signed written contract with employer</b>			
Yes, written	38.7	37.0	38.1
Yes, oral/verbal	38.0	38.2	38.1
No	23.3	24.7	23.8
Total	100.0	100.0	100.0
<b>Trade union available at work place</b>			
Yes	30.1	26.5	28.9
No	69.9	73.5	71.1
Total	100.0	100.0	100.0
<b>Taxes already deducted from pay</b>			
Yes	30.1	22.0	26.1
No	69.9	78.0	73.9
Total	100.0	100.0	100.0
<b>Entitled to paid Holidays</b>			
Yes	40.8	37.3	39.6
No	59.2	62.7	60.4
Total	100.0	100.0	100.0
<b>Entitled to paid sick leave or maternity</b>			
Yes, sick leave	38.5	18.0	31.6
Yes, maternity	5.9	9.9	7.3
Yes, both	4.4	19.4	9.5
No	51.1	52.7	51.7
Total	100.0	100.0	100.0
<b>Receive any retirement pension</b>			
Yes	31.5	26.6	29.9
No	68.5	73.4	70.1
Total	100.0	100.0	100.0
<b>Entitled to any social security</b>			
Yes	30.5	26.2	29.1
No	69.5	73.8	70.9
Total	100.0	100.0	100.0
<b>Entitled to subsidized medical care</b>			
Yes	21.2	16.3	19.6
No	78.8	83.7	80.4
Total	100.0	100.0	100.0

## 5.4 Unemployment

As indicated earlier, unemployment rate has been computed on persons who during the reference period were without jobs and were “potentially” available for jobs. Table 5.15 indicates that the unemployment rate for persons aged 15 years and older is 5.2 percent; the rate is higher for females (5.5%) than for males (4.8%). The unemployment rate is highest among the 15-25 year age group (10.9%) for both sexes. The rate declines with age for both sexes. The incident of unemployment is also higher in urban areas (6.5%) than in the rural areas (3.9%) for all age groups. In the urban areas, Accra (GAMA) has the highest unemployment rate (7.4%) which is also true for almost all age groups. The unemployment rate for rural forest (5.1%) is higher compared to the rural savannah (3.9%) and rural coastal (2.6%) areas.

**Table 5.15: Unemployed rates by sex, age and locality**

Sex/Age group	Urban			Rural				Ghana
	Accra (GAMA)	Other Urban	All Urban	Rural Coastal	Rural Forest	Rural Savannah	All Rural	
<b>Male</b>								
15 - 25	18.8	15.2	15.8	6.1	5.7	6.6	6.6	10.2
25 - 44	5.1	3.7	4.1	1.0	3.7	2.3	2.3	3.3
45 - 64	5.2	2.6	3.2	0.5	6.0	2.3	2.3	2.8
65+	0.0	2.3	1.9	0.0	6.1	2.9	2.9	2.6
All	6.8	5.8	6.1	2.1	5.0	3.6	3.6	4.8
<b>Female</b>								
15 - 25	25.6	14.8	16.7	7.8	6.8	7.7	7.7	11.7
25 - 44	4.5	5.2	5.0	2.3	3.8	3.1	3.1	4.1
45 - 64	5.8	16.1	21.2	0.9	5.7	2.6	2.6	3.2
65+	2.9	0.1	0.1	0.0	6.6	2.5	2.5	2.5
All	8.1	6.6	6.9	3.1	5.2	4.1	4.1	5.5
<b>Both sexes</b>								
15 - 25	22.4	15.0	16.3	6.9	6.2	7.1	7.1	10.9
25 - 44	4.8	4.5	4.6	1.7	3.8	2.8	2.8	3.8
45 - 64	5.5	3.0	3.5	0.7	5.8	2.5	2.5	3.0
65+	1.2	2.4	2.3	0.0	6.3	2.7	2.7	2.5
All	7.4	6.2	6.5	2.6	5.1	3.9	3.9	5.2

## 5.5 Underemployment

Table 5.16 shows that 32.4 percent of persons aged 15 years and older in the country work for more than 40 hours a week in their main jobs while 43 percent work 40 hours or less in their main jobs. The rest are either unemployed (1.7%) or inactive (22.9%). However, the proportion of males (37.5%) who work 40 hours or more in their main job is higher than the females (28.0%). The trend is similar for both urban and rural areas. Only 2.2 percent of persons who work 40 hours or less in their main job are ready to work more hours, with the proportion of males being higher than females except in the urban areas.

Table 5.16 further indicates that one-third (33.3%) of the employed persons work 35 hours or less in their main jobs, while 42.2 percent work more than 35 hours. About two percent (2.2%) of this group of employed persons desire more hours of work. This means that 2.2 percent of the working population is ready to work more than 35 hours in their main job.

**Table 5.16: Activity status of population 15 years and older in the last 7 days by hours worked, locality and sex**

Activity in the last 7 days	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
<b>Working</b>									
More than 40 hours in main job	42.5	33.0	37.3	32.2	22.3	27.0	37.5	28.0	32.4
40 hours or less in main job	30.7	34.2	32.6	51.5	57.5	54.6	40.8	45.0	43.0
Want more hours	2.5	2.9	2.7	2.4	1.4	1.9	2.5	2.0	2.2
Do not want more hours	97.5	97.1	97.3	97.6	98.6	98.1	97.5	98.0	97.8
More than 35 hours in main job	52.0	41.4	46.2	43.0	33.0	37.7	47.6	37.5	42.2
35 hours or less in main job	21.2	25.8	23.7	40.7	46.8	43.9	30.7	35.5	33.3
Want more hours	2.5	2.7	2.6	2.5	1.6	2.0	2.5	2.0	2.2
Do not want more hours	97.5	97.3	97.4	97.5	98.4	98.0	97.5	98.0	97.8
<b>Not working</b>									
Unemployed	2.3	2.5	2.4	0.8	0.9	0.8	1.6	1.8	1.7
Inactive	24.5	30.3	27.7	15.6	19.3	17.5	20.2	25.2	22.9
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## 5.6 Working Children

The ILO Convention 138 (Minimum age convention, 1973) sets 15 years as the age below which children should not be engaged in any form of work. In 1998, Ghana enacted the Children's Act which prohibits children from engaging in any work that is exploitative or hazardous to the child's health, education, or development. There is evidence that children in Ghana, even as young as five years, engage in economic activities (Ghana Child Labour Survey, GSS, 2003).

Figure 5.1 shows the activity status of children aged 7-14 years. Overall, 28.8 percent of children are currently employed and 70.1 percent are economically not active. As expected, the older children (10-14 years) are more likely than the younger children (7-9 years) to engage in some economic activity (35.4% and 18.0% respectively). On the contrary, younger children (7-9 years) are more likely than the older children (10-14 years) to be economically not active (81.1% and 63.2% respectively).

**Figure 5.1: Current activity status of children 7-14 years by age**

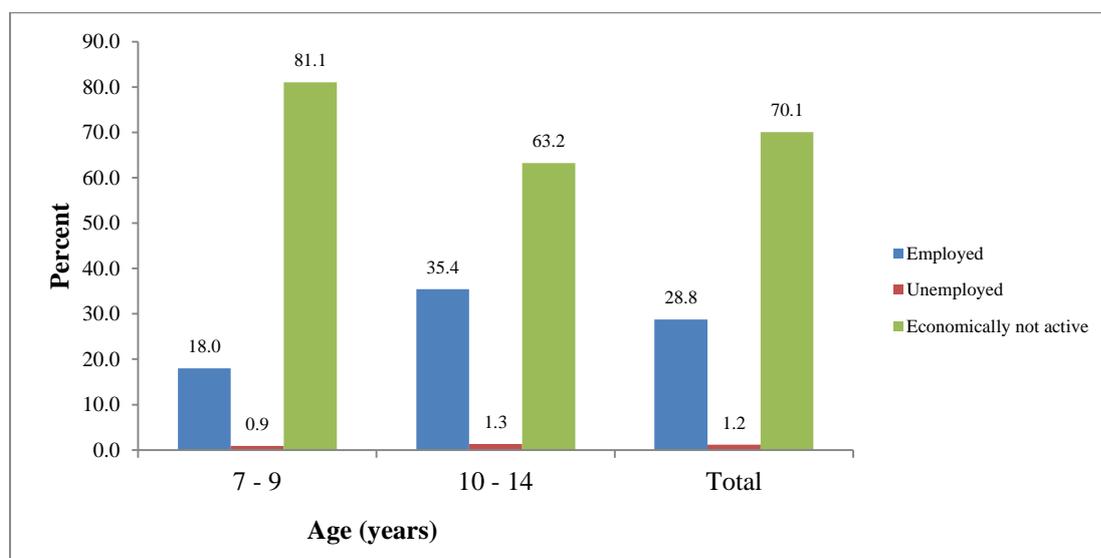


Table 5.17 presents data on currently employed children aged 7 - 14 years by industry, locality of residence and sex. The majority (91.2%) of the children are engaged in agriculture, forestry and fishing, followed by wholesale and retail trade (13.2%). The proportion of males (84.6%) engaged in agriculture, forestry and fishing is higher than females (71.2%).

By geographical location, the proportion of children in rural areas engaged in agriculture, forestry and fishing (88.2%) is higher than those in urban areas (51.8%). On the other hand, the proportion of children in urban areas engaged in wholesale and retail trade (29.8%) is nearly five times those in rural areas (6.7%). Very small proportions of children in the rural areas are engaged in mining and quarrying. In both urban and rural areas, the proportion of females engaged in wholesale and retail trade is higher than their male counterparts (Table 5.17).

**Table 5.17: Currently employed children aged 7 - 14 years by industry, locality and sex**

Industry	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Agriculture, forestry and fishing	64.8	41.1	51.8	91.2	84.8	88.2	84.6	71.2	78.0
Mining and quarrying	0.0	0.0	0.0	0.6	0.3	0.5	0.4	0.2	0.3
Manufacturing	6.3	7.3	6.9	2.0	1.9	2.0	3.1	3.6	3.3
Construction	0.1	0.7	0.5	0.1	0.1	0.1	0.1	0.3	0.2
Wholesale and retail trade	20.3	37.6	29.8	4.2	9.6	6.7	8.2	18.3	13.2
Transportation and storage	1.4	0.2	0.7	0.0	0.0	0.0	0.3	0.1	0.2
Accommodation and food service activities	4.7	10.2	7.7	0.4	2.2	1.2	1.5	4.7	3.0
Information and communication	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.2	0.1
Other service activities	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Activities of households as employers	2.3	2.2	2.3	1.6	1.1	1.4	1.8	1.5	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.18 shows that more than two-thirds (67.8%) of the working children worked for less than 20 hours and about a third (32.2%) of them worked for at least 20 hours in the reference week. It is observed that children who worked in the following industrial activities worked for relatively long hours (20 hours or more) in the reference week – Manufacturing (48.0%); Transport and storage (68.3%); Mining and quarrying (83.4%); Art, entertainment, recreation and other services (100.0%). Working for long hours could affect the health, education and physical development of these children.

**Table 5.18: Hours worked per week by currently employed children  
7 - 14 years by industry**

Industry	Hours worked per week								Total
	0 - 9	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70+	
Agriculture, forestry and fishing	45.5	24.2	12.9	5.9	6.2	2.7	1.5	1.1	100.0
Mining and quarrying	8.0	8.6	1.2	72.5	0.0	0.0	9.7	0.0	100.0
Manufacturing	23.6	28.4	28.5	8.4	3.8	1.4	3.6	2.3	100.0
Construction	24.2	60.6	0.0	15.2	0.0	0.0	0.0	0.0	100.0
Wholesale and retail trade	26.8	35.6	25.0	7.2	3.4	0.7	0.1	1.3	100.0
Transportation and storage	0.0	31.7	0.0	0.0	0.0	0.0	0.0	68.3	100.0
Accommodation and food service activities	12.3	48.5	15.1	10.4	5.5	1.4	1.6	5.2	100.0
Information and communication	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Arts, entertainment and recreation	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0
Other service activities	0.0	0.0	0.0	0.0	79.9	12.5	7.6	0.0	100.0
Activities of households as employers	51.1	25.1	2.1	1.7	10.5	0.0	7.6	1.8	100.0
<b>Total</b>	<b>41.3</b>	<b>26.5</b>	<b>14.7</b>	<b>6.4</b>	<b>5.8</b>	<b>2.4</b>	<b>1.5</b>	<b>1.4</b>	<b>100.0</b>

Children working in the various sectors of the economy receive an average monthly earning of GH¢82.27 (Table 5.19). Those engaged in mining and quarrying receive the highest average monthly earning of GH¢228.87. This is followed by those engaged in the transport and storage sector (GH¢200.00). Children working in these two sectors of employment are all males. Within the wholesale and retail trade sector, females (GH¢97.47) on average earn more than males (GH¢52.55). The situation is similar for the service and sales workers, those engaged in agriculture, forestry and fisheries as well as for skilled agriculture and fisheries workers where females receive earnings which are almost twice that of males.

**Table 5.19: Average monthly earnings (GH¢) of currently employed children  
7 - 14 years by industry, occupation and sex**

Industry	Earnings (GH¢)		
	Male	Female	Both sexes
Agriculture, forestry and fishing	26.43	56.21	37.72
Mining and quarrying	228.87	0.00	228.87
Manufacturing	102.22	35.23	73.97
Construction	100.00	0.00	100.00
Wholesale and retail trade	52.55	97.47	87.89
Transportation and storage	200.00	0.00	200.00
Accommodation and food service activities	0.00	64.48	64.48
Arts, entertainment and recreation	8.33	0.00	8.33
Activities of households as employers	0.00	45.56	45.56
Professionals	8.33	0.00	8.33
Technicians and associate professionals	3.33	0.00	3.33
Service/sales workers	52.64	95.98	88.40
Skilled agric/fishery workers	29.53	57.62	41.14
Craft and related trades workers	96.79	55.04	80.29
Elementary occupations	153.79	8.58	136.15
<b>Total</b>	<b>80.67</b>	<b>83.53</b>	<b>82.27</b>

## 5.7 Housekeeping activities by population 7 years and older

Table 5.20 shows the average time spent per day on a range of household activities by the population aged 7 years and older. It is observed that more than half of household members engaged in washing clothes (57.3%), cleaning activities (52.4%) and fetching water (52.2%). More than two out of every five people are also engaged in washing dishes and cooking (49.0% and 43.4% respectively). Very low proportions of household members are engaged in taking care of the elderly, the sick and helping children with school work. The proportions of females involved in washing clothes (73.0%) and cleaning (70.8%) are higher than that of males (57.3% and 52.4% respectively).

**Table 5.20: Average time (minutes) spent on various housekeeping activities by population 7 years and older by sex and locality**

Activity/Sex	Proportion doing that activity (%)	Average time (minutes) spent per day		
		Urban	Rural	Ghana
Collecting firewood				
Male	15.5	16.8	19.8	19.3
Female	27.7	20.0	23.7	23.1
All	21.9	18.9	22.4	21.8
Fetching water				
Male	39.8	11.6	16.6	14.0
Female	63.4	15.2	22.9	19.0
All	52.2	13.9	20.7	17.2
Washing clothes				
Male	39.9	12.3	12.6	12.4
Female	73.0	19.3	19.8	19.5
All	57.3	16.9	17.5	17.2
Ironing				
Male	32.3	8.7	7.7	8.4
Female	26.5	8.3	7.1	8.0
All	29.2	8.5	7.5	8.2
Cleaning				
Male	32.1	10.8	11.6	11.1
Female	70.8	16.1	18.2	17.1
All	52.4	14.5	16.3	15.4
Cooking				
Male	15.7	24.2	28.8	26.4
Female	68.5	41.8	47.8	44.6
All	43.4	38.8	44.6	41.5
Shopping				
Male	16.7	12.2	13.9	12.9
Female	41.7	16.0	17.9	16.8
All	29.8	15.0	16.9	15.8
Running errands				
Male	41.2	17.4	21.1	19.4
Female	43.6	15.8	17.6	16.7
All	42.4	16.5	19.3	17.9
Washing dishes				
Male	31.0	9.3	10.9	10.1
Female	65.4	13.2	15.2	14.1
All	49.0	12.0	13.9	12.9
Taking care of children				
Male	12.3	32.3	31.9	32.1
Female	33.2	47.0	46.8	46.9
All	23.3	43.5	42.9	43.2

**Table 5.20: Average time (minutes) spent on various housekeeping activities by population 7 years and older by sex and locality (Cont'd)**

Activity/Sex	Proportion doing that activity (%)	Average time (minutes) spent per day		
		Urban	Rural	Ghana
Taking care of elderly				
Male	2.0	18.9	27.8	24.1
Female	3.8	31.3	34.6	33.0
All	2.9	27.6	32.3	30.1
Taking care of sick				
Male	1.7	20.2	26.9	24.4
Female	3.2	30.8	31.0	30.9
All	2.5	27.9	29.5	28.8
Collecting food from the garden				
Male	11.4	18.5	21.5	21.1
Female	11.7	21.0	21.1	21.0
All	11.5	19.9	21.3	21.1
Helping children with school work				
Male	6.6	11.6	13.1	12.2
Female	6.7	12.2	14.7	13.2
All	6.7	11.9	13.9	12.7

With regard to time spent on housekeeping activities, females spend an average of nearly 19 minutes on either fetching water or washing clothes compared to 14 minutes by males. Females also spend, on average, a little more time than males in taking care of children, the elderly and the sick. The population in the rural areas spends more time collecting firewood, fetching water and cooking compared to those in the urban areas (Table 5.20).

Table 5.21 provides the average time spent per day on housekeeping activities for the different localities and ecological zones. Generally, females spend more time on average than males in carrying out most housekeeping activities except running of errands.

The survey results also show that the average time spent on fetching water in the rural areas per day (16.2 minutes in rural coastal, 15.8 minutes in rural forest and 31.0 minutes in rural savannah) is higher than the average time spent per day on the same activity in the urban localities (11.9 minutes per day in Accra (GAMA) and 14.8 minutes per day in other urban areas). In the urban areas, females spend more time on average in fetching water, washing clothes, cleaning and cooking than males. The average time spent in collecting firewood, fetching water and cooking is relatively higher in rural savannah than the other rural areas. Similarly, in the urban communities, people in urban Accra (GAMA) spent more time on washing clothes, shopping, taking care of children, the elderly and the sick than those in other urban areas.

**Table 5.21: Average time (minutes) spent per day by population 7 years and older on various housekeeping activities by sex and locality**

Activity/Sex	Urban		Rural		
	Accra (GAMA)	Other Urban	Coastal	Forest	Savannah
Collecting firewood					
Male	23.6	16.7	14.8	18.7	25.4
Female	16.3	20.1	17.6	19.1	31.4
All	18.4	18.9	16.6	18.9	30.0
Fetching water					
Male	10.7	12.1	14.0	14.8	23.5
Female	12.8	16.3	17.7	16.5	33.5
All	11.9	14.8	16.2	15.8	31.0
Washing clothes					
Male	13.7	11.6	12.6	11.0	16.3
Female	19.8	19.0	18.0	17.7	23.8
All	17.6	16.6	16.1	15.4	21.8
Ironing					
Male	9.9	7.9	7.3	6.6	12.1
Female	9.5	7.6	6.5	6.7	9.6
All	9.7	7.7	6.9	6.6	11.0
Cleaning					
Male	11.6	10.2	9.7	10.6	15.3
Female	15.9	16.2	14.9	15.9	23.2
All	14.4	14.6	13.1	14.2	21.4
Cooking					
Male	22.2	25.5	27.3	27.8	34.7
Female	34.9	44.9	44.7	44.0	55.2
All	32.3	41.9	41.1	40.6	53.4
Shopping					
Male	13.9	11.0	10.9	10.6	23.0
Female	17.2	15.3	15.7	14.0	25.9
All	16.2	14.3	14.2	13.1	25.2
Running errands					
Male	18.1	17.1	15.9	17.3	29.1
Female	16.6	15.4	14.5	15.0	23.6
All	17.3	16.2	15.2	16.1	26.4
Washing dishes					
Male	9.9	9.0	9.0	10.1	15.5
Female	13.4	13.0	11.4	12.3	21.0
All	12.2	11.9	10.6	11.6	20.0
Taking care of children					
Male	37.0	29.2	25.6	28.2	41.1
Female	46.6	47.2	43.0	40.2	56.8
All	43.9	43.3	37.8	36.9	53.2
Taking care of elderly					
Male	28.8	17.5	8.3	33.2	30.8
Female	45.6	26.8	30.4	33.0	39.9
All	42.5	23.8	23.9	33.1	37.0

**Table 5.21: Average time (minutes) spent per day by population 7 years and older on various housekeeping activities by sex and locality (Cont'd)**

Activity/Sex	Urban		Rural		
	Accra (GAMA)	Other Urban	Coastal	Forest	Savannah
Taking care of sick					
Male	39.8	14.3	13.4	32.1	36.5
Female	43.3	26.9	22.3	32.7	35.4
All	42.4	23.4	18.4	32.5	35.6
Collecting food from the garden					
Male	8.2	18.6	16.8	20.8	26.8
Female	17.1	21.0	17.1	20.3	26.8
All	10.3	19.9	17.0	20.6	26.8
Helping children with school work					
Male	11.2	11.9	9.2	12.1	18.5
Female	12.3	12.2	8.4	13.0	24.0
All	11.8	12.1	8.8	12.6	21.3

The classification of time use data by age is recommended by the ILO in order to help identify working children including those engaged in housekeeping activities. This is due to the fact that prolonged engagement of children in housekeeping activities can have a direct bearing on child welfare, conflicting with formal education and leisure activities needed for a healthy childhood development that prepares individuals to become productive and responsible citizens. However, a major weakness in such a recommendation is that there is no threshold for permissible time that children can spend on housekeeping activities beyond which the child's development could be affected.

Table 5.22 indicates that children aged 7-14 years spend an average of nearly 30 minutes (28.4 minutes) daily caring for other children and 27.9 minutes cooking. Those aged 15-19 years spend an average of 36.4 minutes cooking, 35.2 minutes taking care of children and 23.2 minutes taking care of the sick. In general, females in this age group spend more time on housekeeping activities than their male counterparts. Females aged 25-44 and 45-59 years spend about the same time on most housekeeping activities. They, however, spend less than 10 minutes per day ironing.

**Table 5.22: Average time (minutes) spent per day by population 7 years and older on various housekeeping activities by sex and age**

Activity/Sex	Age group					
	7 - 14	15 - 19	20 - 24	25 - 44	45 - 59	60+
Collecting firewood						
Male	17.5	19.3	18.9	20.5	20.3	22.2
Female	19.8	21.8	24.9	24.6	23.7	22.3
All	18.7	20.7	22.8	23.6	22.8	22.3
Fetching water						
Male	15.6	15.9	13.3	11.1	11.0	11.9
Female	17.7	19.9	20.2	19.9	16.9	17.8
All	16.7	18.2	17.7	17.5	15.6	16.4
Washing clothes						
Male	11.5	12.9	13.2	12.6	11.8	11.6
Female	13.9	17.9	21.2	22.8	18.4	15.8
All	12.9	15.6	18.0	20.1	17.1	15.0
Ironing						
Male	7.3	8.2	8.9	8.7	8.6	7.3
Female	7.5	8.2	8.4	8.4	7.5	5.1
All	7.4	8.2	8.6	8.5	8.1	6.5
Cleaning						
Male	11.1	12.2	11.8	10.3	10.8	10.7
Female	14.0	16.9	18.0	18.7	17.0	15.7
All	12.9	15.2	15.9	16.7	15.8	14.7
Cooking						
Male	22.2	26.0	24.1	26.8	30.5	31.0
Female	29.7	39.2	44.0	48.8	46.9	45.4
All	27.9	36.4	40.2	45.4	44.7	43.4
Shopping						
Male	9.7	11.0	12.0	14.4	13.1	13.3
Female	11.0	14.7	16.8	18.2	17.3	14.8
All	10.5	13.7	15.5	17.2	16.3	14.5
Running errands						
Male	17.3	17.8	20.1	21.5	21.4	23.9
Female	17.1	16.5	16.1	16.6	16.4	17.1
All	17.2	17.1	17.9	18.6	18.4	20.2
Washing dishes						
Male	11.9	11.1	8.5	7.6	7.3	8.4
Female	15.3	15.1	14.1	14.0	12.1	10.9
All	14.0	13.7	12.5	12.6	11.2	10.5
Taking care of children						
Male	25.2	22.7	29.3	34.4	33.6	39.8
Female	30.2	39.6	50.0	51.4	43.5	40.5
All	28.4	35.2	47.3	47.5	40.2	40.3
Taking care of elderly						
Male	17.0	22.3	29.4	27.2	26.7	23.9
Female	18.6	32.6	33.3	36.2	35.6	40.7
All	18.0	28.6	31.9	33.7	33.0	37.7
Taking care of sick						
Male	19.8	21.8	20.7	27.7	26.5	28.6
Female	17.6	24.4	34.5	30.0	36.0	37.5
All	18.6	23.2	30.0	29.4	32.6	35.6
Collecting food from the garden						
Male	17.2	20.4	21.5	22.3	22.3	22.1
Female	16.1	19.2	20.9	22.2	23.5	21.3
All	16.6	19.9	21.2	22.3	22.9	21.7
Helping children with school work						
Male	9.8	11.8	12.0	13.1	12.8	12.7
Female	10.3	10.6	13.1	15.0	14.0	13.4
All	10.0	11.2	12.6	14.2	13.3	13.0

# CHAPTER SIX

## MIGRATION AND TOURISM

### 6.1 Introduction

Migration is the movement of people from one place to another with the intention of settling in the new locality. The people involved in this movement either choose to move on their own volition (voluntary migration) or are compelled to move (involuntary migration) due to several reasons. The migration phenomenon is as old as humanity. It is a socio-economic phenomenon which is the result of complex mechanisms involving social, psychological, economic, political and institutional determinants (GSS, 2013). The movement is usually over long distances and normally from one country to another referred to as International Migration, but internal migration is also more frequent. This chapter examines data on spatial mobility of the population 7 years and older, which usually results in a change of place of residence.

### 6.2 Migration patterns

Migratory movement within Ghana has usually been from the north to the south and from the less developed rural areas to the relatively developed urban areas, serving as growth poles. In order to understand migration patterns we need to understand the closeness and extent of their determination by economic consideration and prospects for personal development and how they are linked to economic development needs.

The data presented in Table 6.1 indicates that 48.6 percent of the population has migrated. By locality of residence, Accra (GAMA) has the highest proportion of migrants (60.3%) followed by the rural forest (51.6%). The other urban area has 46.7 percent of migrants while rural coastal has 44.6 percent. Rural savannah (37.5%) has the least proportion of the migrant population.

The Table further shows that half of the female population (50.1%) is made up of migrants compared with 46.5 percent of males. With the exception of Accra (GAMA) where the proportion of male migrants (60.9%) is slightly higher than females (59.8%), the proportion of female migrants is higher than males in all the other localities.

**Table 6.1: Extent of migration of population 7 years and older by sex and current locality of residence**

Sex	Locality of residence					Total
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
Male	60.9	45	42.7	50.4	32	46.5
Female	59.8	48.1	46.1	52.7	42.8	50.1
All	60.3	46.7	44.6	51.6	37.5	48.6

### 6.3 Migration status by region

Table 6.2 shows that 51.4 percent of the population is non-migrant, 17.1 percent are in-migrants while 31.5 percent are return migrants. The table further indicates that in all the regions, the non-migrant population constitutes the majority, with the three northern regions having proportions above 60 percent. The Greater Accra region (40.4%) has the least

proportion of the non-migrant population. This implies that more than half of the population in Greater Accra are either in-migrants or return migrants. This could be as a result of its pre-eminent status as the region hosting the national capital and therefore receiving the largest inflow of in-migrants (38.9%) and return migrants (20.7%).

The Central region has more than half (55.4%) of its population being non-migrants and about one-quarter (24.3%) as in-migrants. It also has the least proportion of return migrants (20.3%). The Ashanti and Brong Ahafo regions have about half of their population being non-migrants.

**Table 6.2: Migration status by region (percent)**

Region of current residence	Migration status			Total
	In-Migrants	Return Migrants	Non-Migrants	
<b>All</b>	<b>17.1</b>	<b>31.5</b>	<b>51.4</b>	<b>100.0</b>
Western	11.1	41.7	47.2	100.0
Central	24.3	20.3	55.4	100.0
Greater Accra	38.9	20.7	40.4	100.0
Volta	15.6	34.1	50.3	100.0
Eastern	11.3	39.7	49.0	100.0
Ashanti	10.8	38.6	50.6	100.0
Brong Ahafo	18.5	31.4	50.1	100.0
Northern	5.8	29.3	64.9	100.0
Upper East	5.4	24.7	69.9	100.0
Upper West	4.6	27.5	67.9	100.0

## 6.4 Sex and age differentials in migration

The data in Table 6.3 show that generally, the movement of the population is related to age. Among the in-migrants, those within the age group of 25-29 and 10-14 constitute 21.5 percent (10.8% and 10.7% respectively). Children aged 7-9 years constitute 6.0 percent while adults aged 30-34 make up 10.3 percent. This means that the population 7-24 years constitutes 36.3 percent of the in-migrants and this could be due to the fact that as parents move, they go along with their children of school-going age. Beyond the age group 30-34, the proportion of in-migrants drops with age and the age group 60-64 has the least proportion of in-migrants (2.6%). In terms of sex, among the in-migrants though there are marginal differences at different age cohorts, none of the sexes has a clear dominance.

With regard to the return migrants, 3.6 percent are aged 7-9 while 11.2 percent are within the age group 25-29. About thirty percent (29.8%) of the population are within the age group 7-24. Those aged 30-34 constitute 10.4 percent. After the age cohort 30-34, the proportion of return migrants begins to decline till age 60-64 (3.7%) which recorded the least proportion of return migrants. In terms of sex, males dominate among children 7-9 and 10-14 as well as adults 40 years and older, while females have a slightly higher proportion of return migrants than males in the other age groups.

Among the non-migrants, about a fifth (22.6%) is aged 10-14, with 15 percent aged 7-9 years. Those within the age bracket 7-24 years constitute 65.1 percent. With regard to sex, males dominate from age 7-24 while the females dominate in all the age groups 25 and above.

**Table 6.3: Migration status by age and sex (percent)**

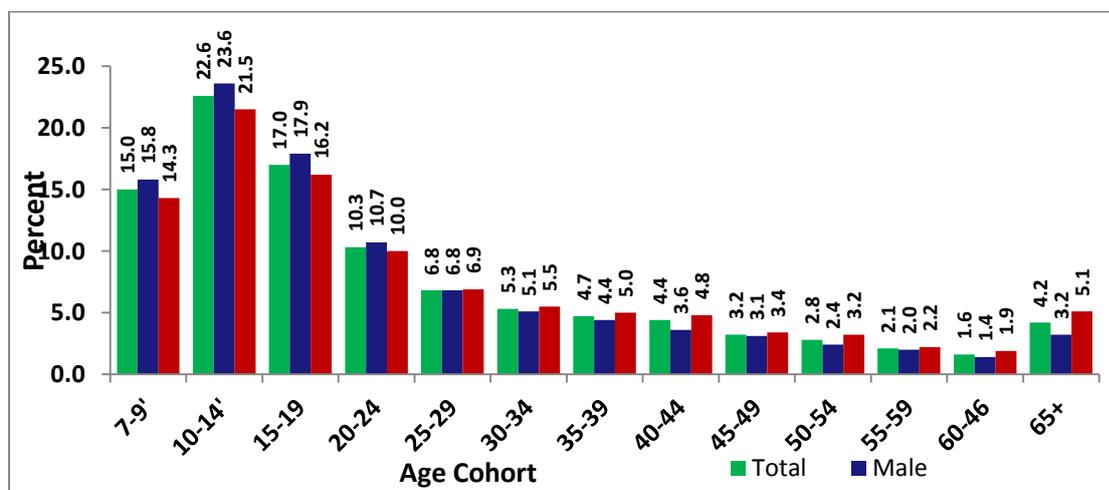
Age group	Migration status								
	In-migrants			Return migrants			Non-migrants		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
7-9	7.4	4.9	6.0	4.0	3.2	3.6	15.8	14.3	15.0
10-14	10.6	10.8	10.7	8.3	7.6	7.9	23.6	21.6	22.6
15-19	9.1	10.8	10.0	8.1	8.3	8.2	17.9	16.2	17.0
20-24	9.5	9.7	9.6	8.9	11.1	10.1	10.7	10.0	10.3
25-29	10.3	11.3	10.8	10.4	11.9	11.2	6.8	6.9	6.8
30-34	9.9	10.6	10.3	10.4	10.4	10.4	5.1	5.5	5.3
35-39	9.5	9.5	9.5	9.3	10.0	9.7	4.4	5.0	4.9
40-44	8.4	8.3	8.3	8.7	8.3	8.5	3.6	4.8	4.2
45-49	5.9	6.5	6.3	7.6	7.0	7.3	3.1	3.4	3.2
50-54	6.3	5.6	5.9	6.4	5.9	6.1	2.4	3.2	2.8
55-59	4.0	3.1	3.5	5.0	4.5	4.7	2.0	2.2	2.1
60-64	2.7	2.6	2.7	3.9	3.6	3.7	1.4	1.8	1.6
65+	6.4	6.3	6.4	9.0	8.2	8.6	3.2	5.1	4.2

#### 6.4.1 Age and sex selectivity in migration

The age and sex selectivity of migration could have important implications for both urban and rural populations. This could result in the female becoming demographically dominant among the urban and metropolitan population while the males dominate in the rural areas of their origin.

The data presented in Figure 6.1 indicate that among the non-migrant population those within the age group 10-14 constitute the largest proportion (22.7%). With the exception of those in age group 7-9 (which is not a full age cohort), the proportion of each higher age group declines gradually from age 0-14 for both sexes. It is observed that those within the age bracket of 7-19 constitute about 54 percent of the migrant population.

**Figure 6.1: Distribution of the non-migrant population by age**

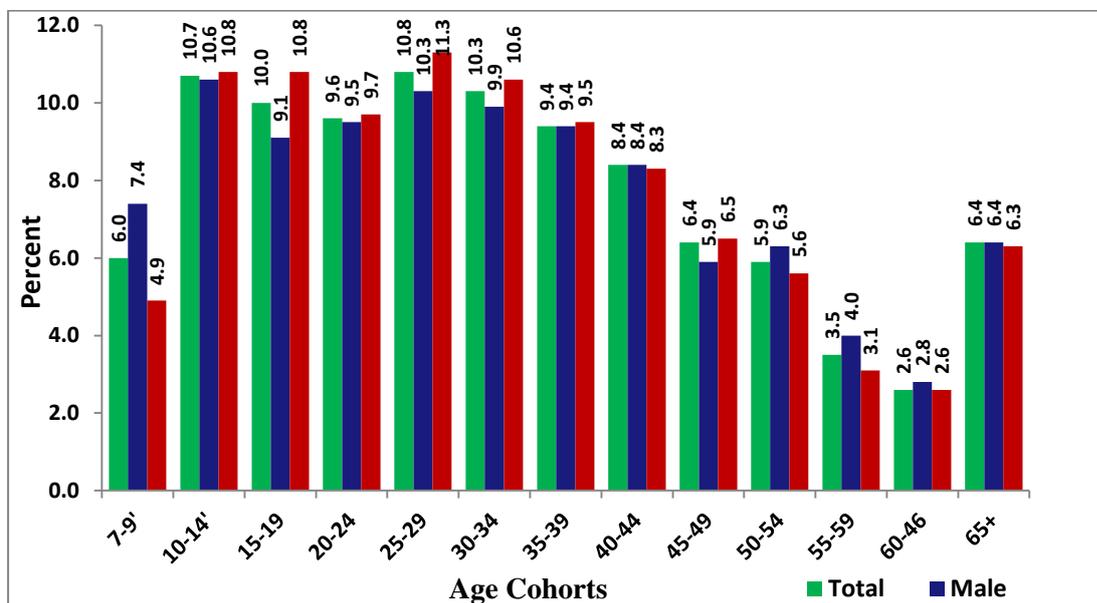


The dominance of the age bracket 7-19 could imply that parents with school-going children are reluctant to move or even when they do, they leave their children in the care of other family members so that the children’s schooling is not disrupted.

Figure 6.2 shows that the age group 25-29 constitutes the highest proportion of the in-migrant population for both sexes as indicated by Nabila (1974). Beyond this age group, the proportion of in-migrants declines for every successive higher age group except those 65 years and older.

In terms of the sexes, the proportion of females within the age group 25-29 (11.6%) is higher than males (10.1%). Among the children aged 10-14 and 15-19, the proportions of females (10.8%) are also higher compared with males (10.6 and 9.1%). This could be as a result of the fact that as the parent travels, if the intention is not to return any time soon, they prefer to move with their children of school going age.

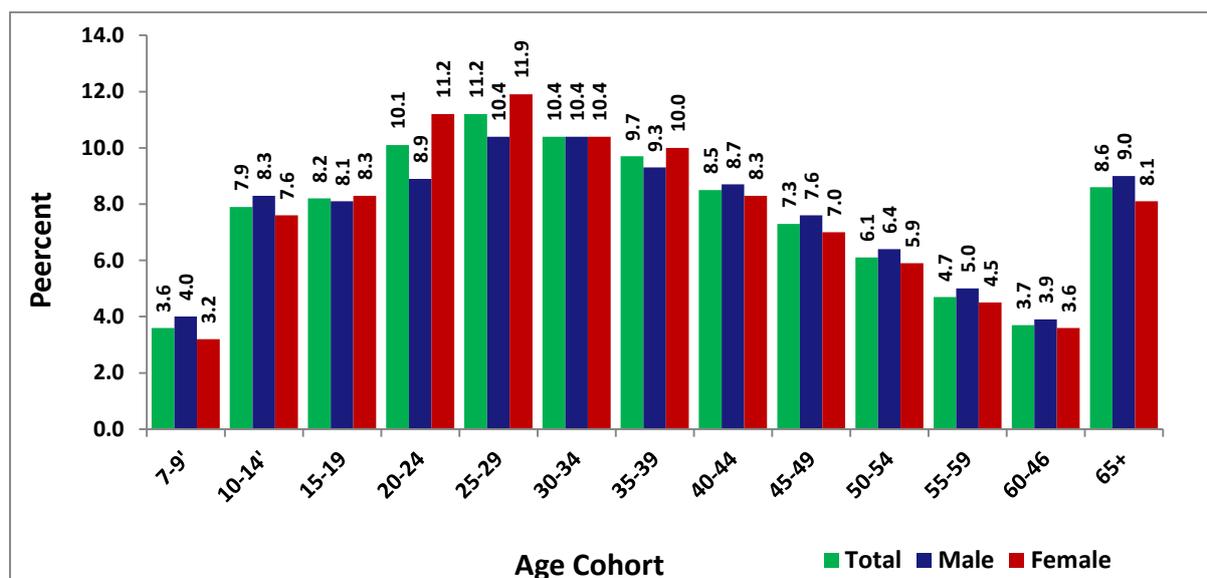
**Figure 6.2: Distribution of in-migrant population by age**



The distribution of the population of return migrants is not quite different from the in-migrants (Figure 6.3). Among the return migrants, those within the age group 25-29 constitute the highest proportion (11.2%). The proportion of the females (11.9%) is higher than males (10.3%). After the age group 25-29, each successive higher age group records a lower proportion of return migrants for both sexes except for those 65 years and older. Again the cumulative effect of age group 65 and above indicates that quite a significant proportion of return migrants (8.8%) are within that age group, with 8.3 percent as females and 9.3 percent as males. Also, among the return migrants there is a significant proportion of children aged 15-19 years (8.1%) of which females constitute 8 percent and males 8.1 percent.

When return migrants and in-migrants are considered together as migrants, the population within the age group 25-34 has the highest proportion (22.3%) of migrants. This could be a confirmation that it is usually the young adults (i.e. those within the age bracket 25-34) who are more likely to migrate (Nabila, 1974).

**Figure 6.3: Distribution of return migrants by age**



## 6.5 Migration flows by previous residence and region of current residence

Table 6.4 shows a reasonably low mobility of the population across the regions. The Ashanti region accounts for about one-quarter of the in-migrants (24.9%) followed by the Eastern (13.4%) and Western (11.9%) regions. The Upper West Region has the least proportion of the in-migrant population (2.6%).

The in-migrants to the regions are mostly from other urban areas (57.8 %). A little less than one-third is from rural areas (30.6%). The Ashanti region again has the highest proportion of in-migrants in both urban areas (15.0%) and rural areas (7.8%). Very low proportions of in-migrants are from Accra (GAMA). This could be as a result of the fact that many people in Accra (GAMA) are unwilling to migrate to any other regions due to their economic activities.

**Table 6.4: Migration flows by region of current residence and locality of previous residence (percent)**

Region of current residence	Locality of previous residence			
	Accra (GAMA)	Other Urban	Rural	All
<b>Total</b>	<b>11.6</b>	<b>57.8</b>	<b>30.6</b>	<b>100.0</b>
Western	0.8	8.2	2.9	11.9
Central	1.2	3.7	0.9	5.7
Greater Accra	1.5	8.9	0.6	11.1
Volta	1.6	3.2	4.1	8.9
Eastern	2.8	7.3	3.2	13.4
Ashanti	2.1	15.0	7.8	24.9
Brong Ahafo	0.5	4.8	4.2	9.5
Northern	0.6	3.2	5.1	8.8
Upper East	0.4	2.3	0.5	3.2
Upper West	0.1	1.2	1.3	2.6

## 6.6 Migration flows by previous residence

Migration flows, as shown in Table 6.5, are largely towards rural areas. The data indicate that 52.4 percent of migrants have relocated to the rural areas while 10.5 percent and 37.1 percent of migrants have relocated to Accra (GAMA) and other urban areas respectively, suggesting that rural areas are the ultimate destinations of most migrants.

The data also indicate that of the migrant population, 57.8 percent moved from other urban areas, while 30.5 percent migrated from rural areas. A little over ten percent of the migrants are from Accra (11.6%). More than a quarter of the migrant population (26.0%) moved from other urban areas to settle in rural areas, while a lower proportion (23.2%) migrated to other urban areas. About a fifth (21.2%) moved from a rural locality to another rural locality, while less than ten percent migrated from rural areas to other urban areas (8.8%). Only 5.1 percent each moved from Accra (GAMA) to settle in rural localities and other urban localities.

**Table 6.5: Migration flows by previous residence and current residence (percent)**

Location of previous residence	Locality of current residence			Total
	Accra (GAMA)	Other Urban	Rural	
Total	10.5	37.1	52.4	100.0
Accra	1.4	5.1	5.1	11.6
Other urban	8.6	23.2	26.0	57.8
Rural	0.5	8.8	21.2	30.5

## 6.7 Distribution of migrants in current locality by previous residence

Table 6.6 indicates that migrants from other urban areas constitute the largest proportion of migrants in any given locality. In particular, 81.7 percent of migrants in Accra (GAMA) are from other urban areas, with 13.2 percent coming from other parts of Accra. The remaining 5.1 percent are from the rural areas. In the case of the other urban areas, 62.7 percent of the resident migrants are from other urban areas while 23.7 percent are from the rural areas.

Nearly half of the migrants (49.6%) in the rural areas are from other urban areas, with an additional two out of five coming from other rural areas (40.5%). Less than ten percent of the migrants (9.9%) relocated from a locality in Accra (GAMA) to a rural locality.

**Table 6.6: Migrants by locality of current residence and previous residence (percent)**

Location of previous residence	Locality of current residence			Total
	Accra (GAMA)	Other Urban	Rural	
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Accra	13.2	13.6	9.9	11.6
Other urban	81.7	62.7	49.6	57.8
Rural	5.1	23.7	40.5	30.6

## 6.8 Reasons for moving

People migrate from one place to another for a variety of reasons; these include having better access to public services or to various recreational options, and for economic gain. Therefore, differences in average income or wage levels between origin and destination areas are significant determinants of migration flows between two locations. These are referred to as the push and pull factors. The push factors include all the reasons that compel the people to move or migrate from their usual place of residence.

Table 6.7 indicates that the main motivation for migration is family considerations. Marriage reasons constitute 12.5 percent, accompanying parents account for 16.1 percent while those who cited other family reasons constitute 33.1 percent. These together make up reasons for the relocation of 61.7 percent of the migrant population. A further 13.6 percent migrated to seek employment.

**Table 6.7: Migrants by reason for most recent migration and locality of current residence**

Reason for recent migration	Locality of current residence					Total
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Job transfer	2.9	5.4	4.3	2.0	1.4	3.4
Seeking employment	26.2	13.5	10.7	13.2	7.1	13.6
Own business	2.8	6.7	6.9	10.5	4.6	7.2
Spouse's employment	1.7	3.0	1.9	2.4	1.6	2.4
Accompanying parent	17.4	15.7	16.2	17.8	12.7	16.1
Marriage	10.3	9.2	10.7	11.8	23.9	12.5
Other family reasons	22.3	34.2	37.1	32.6	38.4	33.1
Political/religious reasons	0.3	0.8	1.1	0.8	0.3	0.7
Education	9.8	8.0	5.8	5.2	3.9	6.6
War	0.1	0.6	0.2	0.6	0.9	0.6
Fire	0.0	0.0	0.3	0.1	0.0	0.1
Flood/famine/drought	0.1	0.1	0.8	0.2	0.9	0.3
Other	6.1	2.8	4.0	2.8	4.3	3.4

The table also shows that, in the different localities of residence, family considerations dominate the reasons for migration. In Accra (GAMA), for example, 51.7 percent of the migrants moved because of family considerations (accompanying parent, marriage, spouse's employment and other family reasons) accounted for 51.7 percent. This was followed by those who migrated in order to seek employment (26.2%). In the other urban areas, 62.3 percent of the population migrated because of family reasons. In the rural localities, the proportions that migrated due to family considerations were higher (64.6% for rural forest, 65.9% for rural coastal and 76.6% in rural savannah). Very low proportions of the population within the various localities migrated due to job transfer.

## 6.9 Domestic and Outbound Tourism

Tourism involves the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from the place visited.

People travel for several reasons such as holiday, visiting friends and relatives (VFR), professional, business, recreation, sports, etc. Travelling for the purpose of visiting friends and relatives (VFR) remains the dominant purpose of both domestic and outbound travel in Ghana. This chapter presents information on tourism, specifically domestic and outbound visitors and trips by purpose of travel, mode of travel, type of tour and sponsorship, type of accommodation unit stayed in, and duration of stay within and outside Ghana. Domestic tourism is where the place of visit of the traveller or visitor is within the political boundaries of the country while outbound tourism involves travel outside the economic territory of the country.

### 6.9.1 Domestic and Outbound Visitors by Sex, Locality and Age Group

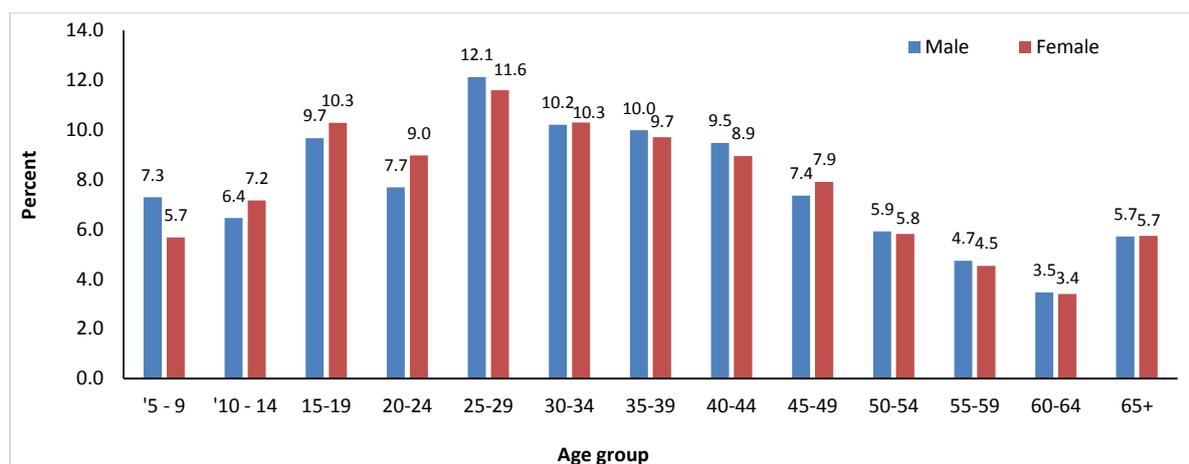
Table 6.8a shows that lightly more than a quarter of all household members (26.8%) were tourists. The distribution ranged from 26.8 percent for all rural localities to 28.6 percent for all urban localities. The extent of tourism is similar among the two sexes (27.0% for males and 26.6% for females). Across localities, tourism is found to be more common among rural forest residents (33.9%) followed by GAMA (31.4%). The rural savannah recorded the lowest percentage of tourists (12.0%).

**Table 6.8a: Distribution of tourists by locality and sex**

Sex	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	Total
Male	32.5	27.2	28.8	23.4	33.7	12.8	25.1	27.0
Female	30.4	27.5	28.4	22.1	34.2	11.2	24.6	26.6
Total	31.4	27.4	28.6	22.7	33.9	12.0	24.9	26.8

Figure 6.4 indicates that tourism is highest among the age group 25-29 years, with males 25-29 constituting 12.1 percent and females in the same age group accounting for 11.6 percent of the tourists.

**Figure 6.4: Distribution of tourists by age group and sex**



Overall, domestic visitors constitute 98.0 percent of tourists. Table 6.8b presents the distribution of domestic and outbound visitors by sex and age group. Persons aged 25 to 44 constitute 37.5 percent of domestic tourists. For the same age group, almost the same proportions of males (37.8%) and females (37.3%) travel as domestic tourists. Almost one-quarter of children aged 0-14 years (20.4%) as well as adults 45-64 years (19.7%) travel as domestic visitors.

With regard to outbound tourism, 46.7 percent of persons aged 25 to 44 undertook this activity. This is made up of 50.2 percent males and 42.6 percent of females. Small proportions of children 0-14 years are involved in outbound tourism. For travel both inside and outside Ghana, nearly six out of ten persons 25-44 years have undertaken such trips (59.1%). The proportion of females in the same age group who were involved in both domestic and outbound tourism (59.9%) is slightly higher than males (58.8%). The elderly aged 65 and over constitute the least travelled group in terms of both domestic and outbound travels (6.7%).

**Table 6.8b: Domestic and outbound visitors by age group and sex**

Age group	In Ghana			Outside Ghana			Both in and outside Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
0-14	21.3	19.6	20.4	14.1	13.6	13.9	1.9	-	1.2
15-24	16.2	17.9	17.1	4.3	13.5	8.5	10	11.5	10.6
25-44	37.8	37.3	37.5	50.2	42.6	46.7	58.8	59.9	59.1
45-64	19.5	19.9	19.7	27.3	27.4	27.4	20.9	24.7	22.4
65+	5.2	5.3	5.3	4.1	2.9	3.5	8.4	3.9	6.7

**6.9.2 Domestic and Outbound Visitors by Number of Trips and Sex**

Table 6.9a presents the distribution of domestic visitors by number of trips in the 12 months preceding the survey. More than half (57.6%) of same-day visitors and less than four-fifths (77.7%) of domestic overnight visitors made less than 5 trips each. A larger proportion of males made more trips than their female counterparts.

**Table 6.9a: Domestic visitors by number of trips and sex**

Number of trips	Domestic same day visitors				Domestic overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
below 5	57.7	57.6	57.6	1,626,342	76.2	79.0	77.7	3,954,480
5-9	18.7	18.4	18.5	523,175	14.5	14.1	14.3	726,406
10-14	11.4	12.5	12.0	337,891	5.9	4.5	5.2	263,793
15-19	4.1	3.2	3.7	103,135	1.3	0.7	1.0	51,535
20-24	3.4	4.1	3.7	105,151	1.2	0.8	1.0	49,705
25+	4.7	4.2	4.4	125,467	0.9	0.9	0.9	44,435
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>2,821,161</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>5,090,354</b>

Less than one-fifth percent of domestic same-day visitors (18.5%) and 14.3 percent of domestic overnight visitors made between 5 and 9 trips in the year prior to the survey. Nearly the same proportions of males (17.7%) and females (18.4%) made this number of same-day trips. For overnight trips, the proportion of males (14.8%) who made between 5 and 9 trips is slightly higher than females (14.5%). About 4 percent of domestic same-day visitors and 1.0 percent of overnight visitors made between 20 and 24 trips each.

Table 6.9b presents the distribution of outbound visitors by number of trips, and sex of visitor. More than three fifths of outbound same-day visitors and outbound overnight visitors (62.4% and 62.5% respectively) made one trip each. A larger proportion of males (63.2 %) than females (61.2%) made one outbound same-day trip. On the other hand, a larger proportion of females (67.7%) made one outbound overnight trip compared with their male counterparts (58.4%).

**Table 6.9b: Outbound visitors by number of trips and sex of visitor (percent)**

Number of trips	Outbound same day visitors				Outbound overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>34,084</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>128,408</b>
1	63.2	61.2	62.4	21,283	58.4	67.7	62.5	80,248
2	6.3	5.9	6.2	2,102	25.2	15.6	20.9	26,887
3	10.2	10.7	10.3	3,520	6.8	5.8	6.4	8,190
4	8.6	2.4	6.2	2,113	1.7	2.5	2.1	2,661
5+	11.7	19.8	14.9	5,066	7.9	8.4	8.1	10,422

A little over 6 percent of same-day and a little over one-fifth of overnight outbound visitors make two trips. A higher proportion of males (25.2%) made two outbound overnight trips than females (15.6%), and a larger proportion of males (6.3%) made two outbound same-day trips than females (5.9%).

A little over six percent (6.2%) of same-day visitors and 2.1 percent of outbound overnight visitors make four trips each. For same-day overnight trips, a larger percentage of males (8.6%) report making four outbound trips than their female (2.4%) counterparts. For overnight outbound trips, a larger percentage of females (2.5%) than males (1.7%) report making four outbound trips. About 19.8 percent of same-day and 8.1 percent of overnight visitors made five or more outbound trips.

### 6.9.3 Region of Visit in Ghana and Country of Visit

Ghana is made up of ten regions and visitors can travel to any of the regions for tourism purposes. The choice of any region by these visitors depends on the reason for the trip. Some visitors, apart from visiting any region in Ghana, also visit other countries for tourism purposes.

Table 6.10 shows that Ashanti region received more than one-third of domestic same-day visitors (36.7%) and about one-quarter of domestic overnight visitors (26.7%). The proportion of female visitors to the Ashanti region (both domestic same-day and overnight) is slightly higher than males. One-fifth of the same day domestic visitors travelled to the Greater Accra (21.4%) while one out of ten visited the Eastern region (11.3%). The proportion of domestic overnight visitors to the Volta region (10.7%) is twice the proportion of domestic same-day visitors.

The regions with the least number of domestic same-day and overnight visitors are Upper East and Upper West, respectively. Upper East has 1.5 percent of same-day and 3.0 percent of overnight visitors while Upper West has only 0.7 percent of same-day and 1.8 percent of overnight visitors.

**Table 6.10: Domestic visitors by region visited and sex of visitor (percent)**

Region visited	Domestic same day visitors				Domestic overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>2,766,487</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>4,947,339</b>
Western	6.0	5.0	5.5	152,646	8.7	8.5	8.6	424,087
Central	9.8	9.4	9.6	266,295	8.5	9.0	8.8	433,112
Greater Accra	20.6	22.5	21.4	592,733	16.5	17.3	16.9	836,423
Volta	5.4	5.6	5.5	152,350	10.9	10.5	10.7	529,507
Eastern	11.6	10.9	11.3	311,752	13.2	13	13.1	648,352
Ashanti	36.9	38.3	37.6	1,040,933	26.2	27.2	26.7	1,321,914
Brong Ahafo	4.6	3.6	4.1	112,940	6.6	7.2	6.9	341,660
Northern	2.8	2.8	2.8	77,882	4.2	2.9	3.5	174,514
Upper East	1.5	1.4	1.5	40,899	3.2	2.8	3.0	147,432
Upper West	0.8	0.5	0.7	18,057	2.0	1.7	1.8	90,338

Table 6.11 examines trips made abroad by both Ghanaian and non-Ghanaian residents. The data show that 92.1 percent of the outbound same-day trips abroad are made to other ECOWAS countries and 7.9 percent to other African countries other than ECOWAS. For outbound overnight trips, 82.5 percent of the visitors travel to other ECOWAS countries, 2.2 percent of them travel to African countries other than ECOWAS, and 15.3 percent go to countries outside Africa. The proportion of same day male visitors to other ECOWAS countries (97.5%) is higher than females (86.5%). On the other hand, the proportion of same day female visitors to countries in Africa other than ECOWAS (13.5%) is higher compared with males (2.5%). In the case of outbound overnight, visitors more females (83.9%) travel to other ECOWAS countries than males (81.3%).

**Table 6.11: Visitors by country visited and sex of visitor**

Country visited	Outbound same day visitors				Outbound overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>13,086</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>131,746</b>
Other ECOWAS country	97.5	86.5	92.1	12058	81.3	83.9	82.5	108,631
Africa other than ECOWAS	2.5	13.5	7.9	1028	2.4	2.0	2.2	2,897
Outside Africa	-	-	-	-	16.3	14.1	15.3	20,218

#### 6.9.4 Mode of Travel

Tables 6.12a and 6.12b report on the mode of travel of domestic and outbound visitors, disaggregated by sex. When a visitor decides to use more than one mode of travel to his or her destination, the one mostly used is taken as the main mode of travel.

Table 6.12a shows that almost all (98.9 %) the domestic same-day visitors travelled by road. Very small proportions travel on foot (1.0%) or by sea/lake (0.1%). More than nine out of ten of the domestic overnight visitors travel by road (99.3%) while the rest travel by either air, sea or on foot (0.7%). There is very little variation in the mode of travel used by male and

female domestic same-day and overnight visitors. A smaller proportion of female overnight visitors, however, travel by sea or lake (0.4%) compared with males (0.7%). Nearly the same proportions of overnight visitors of both sexes (0.1) travel on foot.

**Table 6.12a: Domestic visitors by mode of travel and sex of visitor (percent)**

Mode of travel	Domestic same day visitors				Domestic overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>2,747,502</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>5,025,605</b>
Road	99.2	98.6	98.9	2,716,381	99.1	99.4	99.3	4,987,289
Sea/lake	0.1	0.1	0.1	3,301	0.7	0.4	0.5	27,511
Air	0.0	0.0	0.0	528	0.1	0.1	0.1	4,566
Foot	0.7	1.3	1.0	27,292	0.1	0.1	0.1	6,239

Table 6.12b shows the mode of travel by outbound visitors. For outbound same-day visitors, 91.5% percent travel by road, 2.9 percent travel by air, and 5.6 percent by sea or lake. A larger proportion of males (94.1%) travel by road compared to females (88.8%). Six percent of females also travel by air.

Similarly, 73.3 percent of the outbound overnight visitors travel by road, 24.2 percent by air, 2.5 percent travel by sea or lake. A slightly higher proportion of females (79.1%) than males (69.5%) travel by road while more males travel by air (27.5%) compared to females (19.1%).

**Table 6.12b: Outbound visitors by mode of travel and sex of visitor (percent)**

Mode of travel	Outbound same day visitors				Outbound overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>15,852</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>132,928</b>
Road	94.1	88.8	91.5	14,501	69.5	79.1	73.3	97,380
Sea/lake	5.9	5.2	5.6	884	3.0	1.8	2.5	3,372
Air	-	6.0	2.9	467	27.5	19.1	24.2	32,176

### 6.9.5 Domestic and Outbound Visitors by Purpose of Visit

A visitor may undertake a trip for various reasons, but the main reason for the trip is often reported as the purpose of visit. Table 6.13a shows that 28.1 percent of domestic same day visitors travelled for the purpose of visiting their families and friends; one-quarter travelled for business and professional reasons (25.4%) while one-fifth attended funerals (20.9%). A slightly larger proportion of females than males travelled to attend funerals (22.1% and 19.7% respectively). Again, larger percentages of females (28.9) than males (27.2) visit their friends and relatives. The data also show that more males (27.6%) travel for business or professional reasons than females (23.2%).

A little over a quarter (25.7%) of the domestic overnight visitors attend funerals, 46.5 percent visit their friends and relatives while 9.9 percent travel for business and professional reasons.

Larger percentages of females (28.0%) travel for funerals and to see friends and family (46.5%) compared with males (23.3% and 43.2%).

**Table 6.13a: Domestic visitors by main purpose of visit and sex (percent)**

Main purpose of visit	Domestic same day visitors				Domestic overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
All	100.0	100.0	100.0	2,653,896	100.0	100.0	100.0	4,942,364
Funerals	19.7	22.1	20.9	555,218	23.3	28.0	25.7	1,272,460
Marriage Ceremonies	8.5	10.7	9.6	254,177	3.3	4.1	3.7	182,868
Birthday Parties	0.7	0.5	0.6	16,750	0.2	0.1	0.1	6,525
Open Days	3.8	3.6	3.7	98,216	0.4	0.2	0.3	15,961
Graduation Ceremonies	0.1	0.1	0.1	3,460	0.2	0.2	0.2	9,711
Business/Professional	27.6	23.2	25.4	674,077	14.9	5.4	9.9	490,754
Holidays/Vacation/Leisure	3.5	2.8	3.1	82,901	5.4	4.9	5.1	253,795
Visiting Family/Friends	27.2	28.9	28.1	745,638	43.2	49.2	46.5	2,289,664
Convention/Conference/Workshop	0.6	1.1	0.9	22,606	1.7	1.7	1.7	84,654
Religious/Pilgrimage	1.1	0.9	1	25,766	1.4	1.2	1.3	65,204
Government Affairs	0.2	0	0.1	2,820	0.1	0	0.1	4,216
Culture/Festival	0.8	0.3	0.6	14,827	1	0.9	0.9	45,429
Studies	1.3	0.7	1	26,501	2.2	1.6	1.9	93,430
Teaching	0.2	0.1	0.2	4,298	0.2	0.1	0.1	7,070
Health	2.2	2.7	2.4	63,963	1.3	1.9	1.6	79,354
Sports/Recreation	1	0.7	0.8	22,562	0.3	0.1	0.2	9,002
Other (specify)	1.5	1.6	1.5	40,116	0.9	0.4	0.7	32,267

Table 6.13b presents the distribution of outbound visitors by purpose of visit and sex. For outbound same-day visitors, business and professional reasons account for 61.2 percent, visiting friends and family, 15.2 percent and funerals, 2.3 percent. More males (65.4%) travel for business or professional reasons compared to females (56.9%). A higher proportion of male outbound same day visitors (19.1%) compared to females (11.3%) cited visiting families and friends.

For outbound overnight visitors, visiting family and friends account for 36.9 percent, business and professional reasons, 27.1 percent, and funerals, 19.4 percent. A higher percentage of female outbound overnight visitors (47.9%) than males (29.4%) reported visiting family and friends. Nearly one-quarter of female outbound visitors (24.8%) also reported attending funerals compared to 15.6 percent of males.

**Table 6.13b: Outbound visitors by main purpose of visit and sex (percent)**

Main purpose of visit	Outbound same day visitors				Outbound overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>16,908</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>128,304</b>
Funerals	2.3	2.4	2.3	392	15.6	24.8	19.4	24,897
Marriage Ceremonies	-	12.4	6.1	1,025	0.2	1.2	0.6	770
Birthday Parties	-	-	-	-	-	-	-	-
Open Days	-	-	-	-	-	-	-	-
Graduation Ceremonies	-	-	-	-	0.5	-	0.3	361
Business/Professional	65.4	56.9	61.2	10,356	36.1	14.2	27.1	34,808
Holidays/Vacation/Leisure	-	-	-	-	3.5	3.2	3.4	4,379
Visiting Family/Friends	19.1	11.3	15.2	2,578	29.4	47.9	36.9	47,404
Convention/Conference/ Workshop	6.7	5.6	6.2	1,047	2.6	0.7	1.8	2,368
Religious/Pilgrimage	-	9.2	4.5	761	2.4	3	2.6	3,241
Government Affairs	4.4	-	2.3	381	3	0.7	2.1	2,665
Culture/Festival	-	-	-	-	1.2	0.6	1	1,256
Studies	-	-	-	-	0.8	-	0.5	599
Teaching	-	-	-	-	1.4	1.2	1.3	1,703
Health	-	-	-	-	1.9	-	1.1	1,453
Sports/Recreation	-	-	-	-	-	-	-	-
Other (specify)	2.1	2.2	2.2	368	1.4	2.5	1.9	2,400

### 6.9.6 Duration of Stay of Domestic and Outbound same-Day Visitors

Table 6.14 presents the duration of stay (in hours) by domestic and outbound same-day visitors and sex. A little over one-quarter (25.3%) of the visitors spend between 3 and 5 hours while another two out of five (40.0%) spend between 6 and 8 hours.. An additional 13.5 percent spend 12 hours or more during their visits. Only 5.7 percent of domestic same-day visitors spend less than three hours during their visits. A slightly higher proportion of females (42.4%) spend between 6 and 8 hours during their trips compared with males (37.6%).

More than one-third of the outbound same-day visitors (37.0%) spend 12 hours or more during their visits, while 13.4 percent spend less than three hours. A little over a quarter also spend between 3 and 5 hours (27.5%) while 20 percent spend between 6 and 8 hours during their visits or trips.

**Table 6.14: Domestic and outbound same-day visitors by length of stay and sex**

Hours spent	Domestic same day visitors				Outbound same day visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>2,657,664</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>18,875</b>
Below 3 hours	6.2	5.2	5.7	151,323	18.2	5.4	13.4	2,532
3-5 hours	25.2	25.4	25.3	671,281	24.1	33.2	27.5	5,190
6-8 hours	37.6	42.4	40.0	1,062,616	11.3	34.8	20.0	3,784
9-11 hours	16.8	14.4	15.6	414,807	3.3	-	2.0	385
12+ hours	14.2	12.7	13.5	357,637	43.2	26.6	37.0	6,984

### 6.9.7 Type of Accommodation Unit Stayed in by Domestic and Outbound Visitors and the Average Duration of Stay

Table 6.15a shows that more than nine out of every ten of the domestic tourists (90.3%) stay in residences of friends or relatives, while 2.4 percent stay in private homes. Only 1.3 percent and 2.0 percent domestic tourists stay in hotels or educational institutions respectively. A slightly higher proportion of females (93.1%) than males (87.2%) stay in residences of friends and relatives.

The longest duration of stay is in hostels (29.1 nights) followed by educational institutions (22.7 nights), holiday resorts (19.6 nights) and health establishments (20.7 nights). Tourist camp sites recorded the shortest duration of stay (6.5 nights). The remaining accommodation types recorded between 7 and 16 nights of stay (Table 6.15a). Males spend more nights in hostels (31.0 nights) while females spend more nights in holiday resorts (90 nights). The average length of stay (nights stayed) in accommodation establishments by domestic overnight visitors is 11 nights.

**Table 6.15a: Domestic overnight visitors and average nights stayed by type of accommodation and sex of visitor (percent)**

Type of Accommodation	Distribution of Domestic overnight visitors			Average no. of nights stayed			Estimated No. of Visitors
	Male	Female	All	Male	Female	All	
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>10.7</b>	<b>11.3</b>	<b>11.0</b>	<b>5,021,426</b>
Hotel (other lodging services)	2.2	0.6	1.3	7.3	10.8	8.1	67,183
Guest House	1.7	0.4	1.0	7.8	6.0	7.4	51,958
Health Establishments	0.4	0.7	0.6	23.7	18.9	20.7	28,380
Educational Institutions	2.0	1.9	2.0	22.7	22.6	22.7	98,181
Work/Holiday Camps	1.1	0.3	0.7	16.0	15.3	15.9	34,714
Hostels	0.8	0.5	0.7	31.0	26.4	29.1	33,450
Holiday Resorts	0.1	0.0	0.1	11.1	90.0	19.6	2,854
Tourists Camp Sites	0.4	0.3	0.3	6.5	6.6	6.5	17,281
Friends/Relatives Residence	87.2	93.1	90.3	10.1	10.9	10.5	4,534,314
Private Homes	3.1	1.8	2.4	15.4	13.0	14.5	121,456
Others (specify)	0.9	0.3	0.6	13.5	7.5	11.8	31,655

Table 6.15b shows that nearly three-quarters of outbound tourists stay in the residence of friends or relatives (73.5%), followed by hotels (10.7%). Only 3.3 percent of tourists stay in guest houses; 1.8 percent stay in work or holiday camps, 1.3 percent in educational institutions and 4.5 percent in private homes. A higher proportion of females (84.69%) than males (65.2%) stay in the residence of friends or relatives. On the other hand, the proportion of males staying in guest houses (4.4%) is higher than females (1.9%)

The highest average duration of stay is in educational institutions (43.6 nights) followed by private homes (37.9 nights), work or holiday camps (20.7 nights) and residence of friends or relatives (18.5 nights). Females tend to stay longer in educational institutions (56.0 nights), residences of friends or relatives (20.9 nights), health establishments (14.0 nights) and hotels (18.2 nights) while males stay longer in guest houses (20.7 nights).

**Table 6.15b: Outbound overnight visitors and average number of nights stayed, by type of accommodation and sex of visitor**

Accommodation type	Distribution of outbound visitors			Average number of nights stayed		
	Male	Female	All	Male	Female	All
All	100.0	100.0	100.0	18.3	20.4	19.2
Hotel (other lodging services)	13.7	6.8	10.7	18.5	17.4	18.2
Guest House	4.4	1.9	3.3	20.7	5.0	17.6
Health Establishments	0.7	1.0	0.8	4.0	14.0	7.3
Educational Institutions	1.8	0.5	1.3	3.0	56.0	43.6
Work/Holiday Camps	2.7	0.5	1.8	21.6	15.0	20.7
Hostels	0.4	0.9	0.6	-	13.2	13.2
Holiday Resorts	1.1	-	0.7	3.0	-	3.0
Friends/Relatives Residence	65.2	84.6	73.5	16.2	20.9	18.5
Private Homes	6.4	1.8	4.5	37.9	37.6	37.8
Others (specify)	3.5	2.0	2.9	8.8	2.0	7.9

### 6.9.8 Type of Tour

Tables 6.16a and 6.16b present the distribution of domestic and outbound same-day and overnight visitors by type of tour. A self-arranged or non-packaged tour is one in which the visitor does his or her own travel arrangements in terms of the purchase of tourism products. A packaged tour comprises a number of tourism products which are purchased by a traveler as a single entity. Such packages usually, but not necessarily, comprise transport and accommodation. They may also include meals, coach tours, car hire, or any other product of interest to a visitor.

Table 6.16a shows that more than eight out of ten domestic same-day visitors (81.4%) arrange their own travel, while only 15.5 percent travel on packaged tours. For domestic overnight visitors, 80.6 percent arrange their own travel, while 12.4 percent use packaged tours. There is little variation with regard to type of tour taken by males and females for domestic trips. However, for same-day visitors, a higher proportion of males tend to arrange for their own travel than females, while a higher proportion of females (16.2%) use packaged tours than males (14.9%).

**Table 6.16a: Domestic visitors by type of tour and sex of visitor (percent)**

Type of tour	Domestic same day visitors				Domestic overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>2,636,070</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>5,062,910</b>
Packaged tour	14.9	16.2	15.5	409,880	12.6	12.2	12.4	629,251
Self-arranged	82.0	80.6	81.4	2,143,487	80.5	80.6	80.6	4,078,621
Other	3.1	3.2	3.1	82,703	6.9	7.2	7.0	355,038

Table 6.16b shows that 37.9 percent of male and 30.5 percent of female outbound same-day visitors tend to use a package for their traveling arrangements. About 69.9 percent of male and 77.8 percent of female outbound overnight visitors make their own travel arrangements; only a little over one-quarter travel on a package (22.7%).

**Table 6.16b: Outbound visitors by type of tour and sex of visitor (percent)**

Type of tour	Outbound same day visitors				Outbound overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>15,967</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>131,484</b>
Packaged tour	37.9	30.5	34.6	5,532	27.5	15.9	22.7	29,903
Self-arranged	58.5	67.9	62.7	10,001	69.9	77.8	73.2	96,144
Other	3.6	1.6	2.7	434	2.6	6.3	4.1	5,437

### 6.9.9 Type of Sponsorship

Table 6.17a indicates that more than three quarters of the domestic same-day visitors (77.7%) and over two-thirds of the domestic overnight visitors (68.3%) are self-financed. About 20 percent of the domestic same-day visitors and nearly one-third of the domestic overnight visitors are sponsored by household members. Private organizations sponsor just 1.9 percent and 1.7 percent of domestic same-day and overnight visitors respectively. Government and international organizations sponsor less than one percent of same-day and overnight visitors. A larger percentage of males pay for their own domestic trips compared to their female counterparts.

**Table 6.17a: Domestic visitors by type of sponsorship and sex of visitor (percent)**

Type of sponsorship	Domestic same day visitors				Domestic overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>2,656,313</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>4,934,441</b>
Self-sponsored	80.2	75.3	77.7	2,064,897	72.3	64.6	68.3	3,368,201
Household member	16.2	22.6	19.5	515,315	24.1	32.7	28.6	1,409,909
Private organization	2.5	1.3	1.9	50,257	2.3	1.2	1.7	84,812
Government	0.2	0.2	0.2	5,653	0.4	0.1	0.3	13,636
International organization		0	0	371	0	0	0	1,489
Other	0.9	0.6	0.7	19,820	0.9	1.4	1.1	56,394

For outbound tourism, 71.0 percent of same-day visitors and 58.7 percent of overnight visitors finance their own trips. About one-fifth of both outbound same-day visitors (19.7%) and overnight visitors (19.8%) are financed by household members. Private organizations finance 10.8 percent of the outbound overnight visitors. Government and international organizations sponsor 6.2 percent of same-day outbound visitors and 0.7 percent outbound overnight visitors (Table 6.17b).

For travels within the country, a larger proportion of males finance their own domestic trips than females. Similarly, more males than females self-sponsor their outbound trips.

**Table 6.17b: Outbound visitors by type of sponsorship and sex of visitor (percent)**

Type of sponsorship	Outbound same day visitors				Outbound overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>12,238</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>126,261</b>
Self-sponsored	77.4	63.9	71.0	8,693	61.3	55.2	58.7	74,056
Household member	10.8	29.5	19.7	2,402	13.5	28.3	19.8	25,125
Private organization	-	-	-	-	17.4	2.1	10.8	13,620
Government	5.9	6.6	6.2	762	0.7	0.7	0.7	894
International organization	5.9	-	3.1	381	4.3	1.0	2.9	3,628
Other	-	-	-	-	2.8	12.7	7.1	8,938

### 6.9.10 Visitor arrivals to some selected Tourist Sites

Table 6.18 shows the distribution of domestic visitors to selected tourist sites by sex of visitor. The data indicate that the Kakum National Park and Kumasi Zoological Gardens are the two main sites visited by domestic same-day visitors, accounting for 22.2 percent and 17.2 percent of visitors respectively. These are followed by Aburi Botanical Gardens (14.8%), Mole National Park (13.6%), Accra Zoological Gardens (10.1%) and Cape Coast Castle (5.4%).

For domestic overnight visitors, Kumasi Zoological Gardens (22.5%), Kakum National Park (14.9%), Mole National Park (16.0%) and Accra Zoological Gardens (9.1%) are the main sites visited.

**Table 6.18: Domestic and overnight visitors by tourist site visited and sex**

Tourist site	Domestic same day visitors				Domestic overnight visitors			
	Male	Female	All	Estimated No. of Visitors	Male	Female	All	Estimated No. of Visitors
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>138,461</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>66,190</b>
Cape Coast Castle	2.9	8.5	5.4	7,428	8.1	8.8	8.4	5,560
Elmina Castle	3.3	4.4	3.8	5,242	6.3	3.2	5.1	3,404
Kumasi Zoo	15.9	18.8	17.2	23,758	19.4	27.8	22.5	14,907
Accra Zoological Gardens	8.4	12.3	10.1	14,040	12.4	3.7	9.1	6,043
Agumatsa Resource Reserve	3.1	1.5	2.4	3,335	2.5	5.3	3.5	2,348
Shai Hills Resource Reserve	3.6	3.2	3.4	4,724	0.9	3.6	1.9	1,275
Aburi Botanical Gardens	15.5	14	14.8	20,557	6.0	1.6	4.4	2,893
Kakum National Park	22.0	22.3	22.2	30,667	14.1	16.1	14.9	9,842
Mole national Park	16.0	10.6	13.6	18,859	16.8	14.7	16.0	10,568
Ankasa Wildlife Resource Reserve	0.5	-	0.3	424	-	-	-	-
Dubois Centre	-	-	-	-	0.8	-	0.5	318
Assin Atandasu Resource Reserve	1.3	-	0.7	1,002	-	-	-	-
Bui National Park	0.7	0.7	0.7	941	1.2	-	0.7	480
Kalakpa Resource Reserve	3.1	2.8	2.9	4,073	2.2	6.9	4.0	2,636
Kogyae Strict Nature Reserve	-	-	-	-	2.0	0.9	1.6	1,064
Nini-Suhien	-	0.2	0.1	116	-	1.1	0.4	264
Kyabobo National Park	-	-	-	-	0.4	0.2	0.3	203
Owabi Wildlife Resource Reserve	1.7	0.5	1.2	1,630	6.5	5.0	6.0	3,951
Wli Water Falls	0.2	0.2	0.2	227	0.4	0.6	0.5	304
Boti Water Falls	0.9	-	0.5	699	-	0.5	0.2	130
Sirigu	0.9	-	0.5	739	-	-	-	-

Other tourist sites visited by overnight visitors are Cape Coast Castle (8.4%), Owabi Wildlife Resource Reserve (6.0%), Elmina Castle (5.1%) and Kalakpa Resource Reserve (4.0%).

# CHAPTER SEVEN

## HOUSING

### 7.1 Introduction

The periodic provision of information on housing and housing conditions is important both to assess the extent of provision of housing to meet the housing deficit and planning for the future. To this effect, embarking on strategies that are aimed at improving housing has the potential to contribute to economic growth and social development and further enhance “security and stability”, generation of employment and the health of town and city inhabitants (IHC, 2007)<sup>1</sup>. While the challenge to provide sustainable affordable housing is common for all countries, the need for decent affordable housing is particularly acute in developing regions. These countries are experiencing rapid and continuing urbanization, driven by population growth and migrations from rural to urban areas, (Golubchikov and Badyina, 2012)<sup>2</sup>.

Information collected on housing conditions include 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.

### 7.2 Type of dwelling, occupancy and tenancy arrangement

#### 7.2.1 Households by Type of dwelling

Table 7.1 presents data on the type of dwelling households occupy by locality. The data show that most households (60.6%) live in compound houses made up of several rooms. The proportion of households that live in compound houses in all urban areas (68.1%) is higher than rural (51.3%). In Accra (GAMA) and other urban areas, 63.9 percent and 70.0 percent of households respectively live in compound houses. About one-quarter (22.2%) of households live in a separate house (bungalow), semi-detached house, flat or apartment. Similar proportions of households in both urban (20.4%) and rural (24.6%) areas live in these types of dwelling.

Accra (GAMA) has a relatively high proportion of households (3.6%) living in improvised homes compared to the other areas. The proportion of households who live in several huts/buildings on the same compound is much higher in the rural savannah zone (31.4%) than in any other area.

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<sup>1</sup> IHC document on ‘*The health of the planet and the health of the people are two vital interlinked concerns our society must address ... The urban form of our towns and cities impacts on ...*’/ihc/documents/A.4.1.4\_Australia\_and\_New\_.

<sup>2</sup> **2012-Sustainable-Housing-for-Sustainable-Cities**, Mar 3, 2014 - A POLICY FRAMEWORK FOR **DEVELOPING COUNTRIES** ... and layout: Editor: Contributors: Oleg **Golubchikov** and Anna **Badyina**. .... the need for **decent affordable housing is particularly acute** in developing regions.

**Table 7.1: Households by type of dwelling and locality (percent)**

Type of Dwelling	Locality							Ghana
	Urban areas			Rural areas				
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
Separate house	14.9	14.1	14.3	23.0	20.6	5.1	16.4	15.2
Semi-detached house	6.4	5.9	6.1	7.1	7.8	9.4	8.2	7.0
Flat/Apartment	7.4	4.6	5.5	2.4	1.3	0.8	1.3	3.6
Compound house (rooms)	63.9	70.0	68.1	49.3	53.7	47.5	51.3	60.6
Huts/Buildings (same compound)	0.7	3.9	2.9	15.4	14.7	31.4	19.7	10.4
Huts/Buildings (different compound)	-	0.1	0.1	1.5	1.5	3.2	2.0	0.9
Tent	0.1	-	0.1	-	-	0.1	-	-
Improvised home (kiosk/container, etc.)	3.6	0.4	1.4	0.4	0.1	-	0.1	0.8
Living quarters attached to office/shop	0.6	0.2	0.3	0.3	0.2	0.1	0.2	0.3
Uncompleted building	2.4	0.6	1.2	0.5	0.1	0.1	0.2	0.7
Other	0.1	0.2	0.2	-	-	2.2	0.7	0.4
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

### 7.2.2 Occupancy Status

From Table 7.2, nearly half (45.9%) of the households in Ghana own the houses they live in. More than one-quarter (27.0%) of households live in rent-free houses while a similar proportion (26.8%) live in rented premises. Perching is not common, accounting for less than one percent of households. Owning a house is more common in rural areas (62.1%) than in urban areas (32.8%), whereas renting houses and rooms is more common in urban areas (39.9%) compared to rural areas (10.7%). The proportion of households owning a dwelling is highest in the rural savannah (75.3%) area and lowest in urban areas other than Accra (GAMA).

**Table 7.2: Households by present occupancy status and locality (percent)**

Occupancy Status	Locality							Ghana
	Urban areas			Rural areas				
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
Owning	35.2	31.7	32.8	52.2	57.6	75.3	62.1	45.9
Renting	41.0	39.3	39.9	14.9	13.0	4.3	10.7	26.8
Rent-free	23.1	28.6	26.8	32.9	29.3	20.3	27.1	27.0
Perching	0.5	0.2	0.3	-	0.1	0.1	0.1	0.2
Squatting	0.3	0.2	0.2	-	-	-	0.0	0.1
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

### 7.2.3 Holding and Tenancy Arrangement

According to the data displayed in Table 7.3, almost half (49.8%) of dwellings occupied by households are owned by other private individuals who are not household members nor relatives to the head of household, with the urban and rural proportions being 57.9 percent and 32.0 percent respectively. About two-fifths (41.8%) of occupied dwellings are owned by a relative who is not a household member. More than three-fifths of such dwellings (60.5%) are in rural areas compared to 33.3 percent in urban areas. The rural savannah area has the highest proportion of households living in dwellings which are owned by relatives who are not household members (77.4%).

Public and government institutions own 2.9 percent of the dwellings while private employers and other private agencies (estate developers) provide 2.2 percent.

Government/Public ownership accounts for only 3.3 percent of occupied dwellings in urban areas and only about two percent in rural areas. Ownership of dwellings by private employers is higher in the rural forest zone (2.7%) than the other zones.

**Table 7.3: Households by ownership status and locality (percent)**

Ownership of dwelling	Locality							Ghana
	Urban			Rural				
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
Owned by household member	1.7	2.3	2.1	3.8	2.1	1.7	2.3	2.2
Being purchased (e.g. mortgage)	1.1	0.7	0.8	0.5	0.7	0.3	0.6	0.7
Relative, not a household member	26.8	36.2	33.3	61.4	55.1	77.4	60.5	41.8
Other private individual	64.1	55.2	57.9	28.2	37.4	17.5	32.0	49.8
Private employer	2.0	1.7	1.8	1.8	2.6	0.1	2.0	1.8
Other private agency	0.2	0.5	0.4	0.8	0.1	-	0.2	0.4
Public/Government ownership	3.5	3.2	3.3	3.1	1.5	2.8	2.0	2.9
Other	0.6	0.2	0.3	0.5	0.5	0.3	0.5	0.4
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## 7.3 Room Occupancy

### 7.3.1 Households and number of rooms occupied

Room occupancy relates to the number of rooms occupied by a household excluding bathrooms, toilets and kitchens. As shown in Table 7.4, about half of households (49.9%) in the country occupy one room for living while 26.7 percent occupy two rooms. The proportion of households occupying one room in urban areas (53.5%) is higher than in rural areas (45.4%). With the exception of rural savannah, the majority of households in the various localities occupy single rooms (between 48.0% and 55.7%). A little more than one-quarter of households in urban areas (26.5) and rural areas (27.0%) occupy two rooms, with the proportions being slightly higher in Accra (35.4%) and rural savannah (28.6%). Rural savannah has the highest percentage of households that occupy more than two rooms (47.7%). Slightly higher than 16 percent of households in rural savannah occupy five or more rooms compared to other areas where less than five percent have this number of rooms.

**Table 7.4: Number of rooms occupied by locality by (percent)**

Number of rooms	Locality							Ghana
	Urban areas			Rural areas				
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
1	42.7	58.5	53.5	48.0	55.7	24.5	45.4	49.9
2	35.4	22.4	26.5	26.4	26.3	28.6	27.0	26.7
3	9.0	9.1	9.1	13.1	9.5	18.7	12.7	10.7
4	6.4	5.0	5.5	5.8	4.5	12.0	6.9	6.1
5+	6.5	5.0	5.5	6.7	4.0	16.2	8.0	6.6
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

### 7.3.2 Household size by number of rooms

Table 7.5 indicates that about a third of households occupying single rooms are single member households. Households with two or three members account for 32.7 percent of single-room occupants, those with four members account for 14.0 percent and households with five members account for 9.4 percent of those who occupy a single room. Of the households occupying two rooms, almost 18.0 percent have a household size of four and 28.9 percent are households with five or six members. About one-quarter of households occupying five or more rooms (24.1%) have a household size of ten or more, while 3.1 percent of single households also occupy five or more rooms.

**Table 7.5: Household size by number of rooms occupied (percent)**

Household size	Number of rooms					Total
	1	2	3	4	5+	
1	33.7	9.9	4.9	1.7	3.1	20.3
2	15.9	12.9	7.3	6.8	5.4	12.9
3	16.8	15.3	11.1	11.1	7.8	14.8
4	14.0	17.7	15.2	13.6	9.3	14.8
5	9.4	16.5	17.1	16.1	11.8	12.7
6	5.9	12.4	15.6	13.9	13.1	9.7
7	2.5	8.0	11.7	13.5	10.3	6.2
8	1.2	4.2	6.9	7.4	8.7	3.5
9	0.3	1.8	4.1	5.9	6.3	1.9
10+	0.4	1.3	6.1	10.0	24.1	3.4
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 7.4 Housing Conditions

### 7.4.1 Main Construction Material for Walls

The main construction materials used for the walls, floors and roof of dwellings are presented in Table 7.6. Cement blocks and concrete (65.0%) is the most common material for construction of walls, followed by mud, mud bricks and earth, which constitute 31.1 percent.

In the urban areas, 85.3% of dwellings have their outer walls made of cement blocks and concrete, while 10.4 percent are made of mud, mud bricks and earth. In Accra (GAMA), more than nine out of every ten (91.5%) dwellings have an outer wall constructed with cement blocks or concrete.

More than half (56.9%) of dwellings in rural areas have mud, mud bricks or earth as the main material for their outer walls while four in ten (39.7%) use cement blocks and concrete. Within rural areas, more than three-quarters of houses within the rural savannah are constructed from mud/ mud bricks/ earth compared with 50.0 percent in the rural forest and 39.5 percent in rural coastal.

**Table 7.6: Main materials used for outer wall of dwellings by locality (percent)**

Material	Locality							Ghana
	Urban areas			Rural areas				
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
Mud/Mud bricks/Earth	0.6	15.0	10.4	39.5	50.0	78.1	56.9	31.1
Wood	6.5	0.6	2.5	2.2	0.7	0.1	0.7	1.7
Metal sheet/slate/asbestos	1.0	1.0	1.0	0.2	0.6	0.4	0.5	0.8
Stone	0.2	-	0.1	0.2	0.1	0.1	0.1	0.1
Burnt bricks	0.1	0.4	0.3	0.4	2.0	0.3	1.3	0.7
Cement blocks/concrete	91.5	82.5	85.3	55.4	46.1	20.2	39.7	65.0
Landcrete	-	0.4	0.3	0.2	0.5	0.1	0.3	0.3
Bamboo	-	-	-	0.8	-	-	0.1	0.1
Palm leaves/Thatch(grass/Raffia)	-	0.1	0.1	1.0	0.1	0.6	0.4	0.2
Other	0.1	-	-	-	-	-	-	-
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

#### 7.4.2 Main Material for Floor

The majority (82.6%) of the dwellings occupied by households have cement or concrete as the major material used for the floor, while about eight percent (7.7%) use earth or mud. The pattern is the same in the urban areas and rural areas where 85.2 percent and 79.2 percent of dwellings, respectively, have cement or concrete as the main material for the floor (Table 7.7).

#### 7.4.3 Main Material for Roof

Three-quarters (76.8%) of dwellings in the country have metal sheets as the main material for the roof while 7.1 percent have slate and asbestos as the main material. About seven percent (6.8%) of dwellings are roofed with palm leaves and thatch. Within the localities, the proportion of dwellings in urban areas with metal sheets as the main roofing material is higher (79.2%) than in rural areas (73.9%). The rural forest (84.4%) has the highest proportion of dwellings with metal sheet as the main roofing material, with the lowest in rural coastal (57.6%). The use of palm leaves and thatch as roofing material is most prevalent in the rural savannah (28.1%) compared to the other localities (Table 7.7).

**Table 7.7: Main materials used for floor and roof of dwellings by locality (percent)**

Material	Urban areas			Rural areas				Ghana
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
<b>Main floor material</b>								
Earth/Mud	0.4	3.2	2.3	9.5	14.4	16.3	14.3	7.7
Cement/Concrete	79.7	87.8	85.2	76.0	81.8	75.7	79.2	82.6
Stone	4.4	4.8	4.7	9.8	2.1	5.4	4.1	4.4
Burnt brick	2.0	0.1	0.7	2.5	-	0.1	0.4	0.6
Wood	1.6	0.3	0.7	0.4	0.1	0.1	0.1	0.5
Vinyl tiles	5.1	1.0	2.3	0.8	0.1	-	0.2	1.4
Ceramic/Porcelain/Granite/Marble tiles	3.7	1.1	2.0	0.4	1.3	2.0	1.4	1.7
Terrazzo/Terrazzo tiles	3.1	1.5	2.0	0.6	0.1	-	0.1	1.2
Other	-	-	-	-	-	0.3	0.1	-
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Main roof material</b>								
Mud/Mud bricks/Earth	0.2	1.4	1.0	0.4	2.1	3.1	2.1	1.5
Wood	7.0	3.8	4.8	13.9	2.5	6.4	5.2	5.0
Metal sheet	69.5	83.8	79.2	57.6	84.4	61.2	73.9	76.8
Slate/Asbestos	19.8	6.2	10.6	10.1	2.0	0.7	2.7	7.1
Cement/Concrete	2.4	2.9	2.7	1.0	1.3	0.3	1.0	1.9
Bamboo	0.7	0.2	0.4	1.2	1.4	-	1.0	0.7
Palm leaves/Thatch(grass/Raffia)	0.2	1.5	1.1	15.3	6.3	28.1	14.0	6.8
Roofing tile	0.2	0.2	0.2	0.5	-	-	0.1	0.1
Other	0.1	0.1	0.1	-	-	0.2	0.1	0.1
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 7.5 Main Source of Water Supply

### 7.5.1 Households by Main Source of Water Supply for Drinking

According to Table 7.8a, nearly one-third (32.3%) of households in the country have their main source of drinking water from a well, while 28.9% have pipe-borne water as their source of drinking water. Nearly thirty percent (26.7%) use other sources of water (including protected spring, bottled water, sachet water and tanker supply) of which sachet water (28.0%) constitutes the largest proportion. In the case of pipe-borne water, most households (12.5%) use a public tap or standpipe.

In the urban areas, sachet water (44.5%) constitutes the major source of drinking water for households. This is followed by pipe-borne water (38.6%) and well (13.9%). The proportion of households using pipe-borne water for drinking is more prevalent in other urban areas (44.5%) than Accra (GAMA) (26.3%). Sachet water is used for drinking by slightly more than two-thirds (70.9%) of households in Accra (GAMA).

Nearly three-quarters (73.9%) of households in rural areas use either a well (55.3%) or natural sources (18.6%) as their main source of drinking water. Almost two-fifths (38.0%) of rural coastal households use pipe-borne water for drinking while 58.7 percent and 64.5 percent of rural forest and rural savannah households, respectively, use a well. The Table also

shows that in rural savannah, almost two-thirds (64.5%) of households rely on a well as their main source of water for drinking.

**Table 7.8a: Households by main source of water supply for drinking and locality (percent)**

Source of water supply	Locality							Ghana
	Urban areas			Rural areas				
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
<b>Pipe-borne</b>	<b>26.3</b>	<b>44.5</b>	<b>38.6</b>	<b>38.0</b>	<b>13.6</b>	<b>12.5</b>	<b>16.6</b>	<b>28.9</b>
Pipe-borne inside dwelling	8.8	8.9	8.9	1.7	0.5	1.3	0.9	5.3
Pipe-borne outside dwelling but not on compound	4.6	5.9	5.4	3.6	0.9	1.4	1.4	3.7
Pipe-borne outside dwelling but from neighbour's house	11.9	10.1	10.6	8.7	1.9	3.5	3.3	7.4
Public tap/Standpipe	1.0	19.6	13.7	24.0	10.3	6.3	11.0	12.5
<b>Well</b>	<b>0.5</b>	<b>20.2</b>	<b>13.9</b>	<b>20.2</b>	<b>58.7</b>	<b>64.5</b>	<b>55.3</b>	<b>32.3</b>
Bore-hole/Pump/Tube well	0.2	12.6	8.6	10.9	53.4	58.6	49.2	26.7
Protected well	0.3	6.4	4.5	4.7	1.7	1.5	2.1	3.4
Unprotected well	-	1.2	0.8	4.6	3.6	4.4	4.0	2.2
<b>Natural sources</b>	<b>0.1</b>	<b>1.9</b>	<b>1.3</b>	<b>22.6</b>	<b>16.4</b>	<b>20.9</b>	<b>18.6</b>	<b>9.0</b>
River/Stream	0.1	1.3	0.9	13.2	14.5	14.6	14.4	6.9
Rain water	-	0.5	0.3	2.1	0.4	0.1	0.5	0.4
Dugout/Pond/Lake/Dam/Canal	-	0.1	0.1	7.3	1.5	6.2	3.7	1.7
<b>Others</b>	<b>73.2</b>	<b>33.6</b>	<b>46.1</b>	<b>19.3</b>	<b>11.1</b>	<b>2.2</b>	<b>9.6</b>	<b>29.8</b>
Protected spring	-	0.5	0.3	-	0.2	-	0.1	0.2
Bottled water	1.0	0.5	0.6	0.1	-	-	-	0.4
Sachet water	70.9	32.1	44.5	18.6	8.4	0.9	7.6	28.0
Tanker supply/Vendor provided	1.3	0.3	0.6	-	-	0.7	0.2	0.4
Unprotected spring	-	0.1	0.1	0.1	2.5	0.2	1.5	0.7
Other	-	0.1	-	0.5	-	0.4	0.2	0.1
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

### 7.5.2 Households by main source of water supply for general use

Table 7.8b shows that 42 percent of households use pipe-borne water for general household activities, out of which 14.5 percent rely on public tap or standpipe. Almost the same proportion (40.4%) use water from a well while 12.1 percent and 5.3 percent use natural sources and other sources respectively (Table 7.8b).

The main source of water for general use by households in urban areas is pipe-borne water, accounting for more than sixty percent (62.3%) while more than one-quarter (25.9%) use water from a well. Water from natural and other sources is utilized by only four percent and 7.9 percent of households respectively. A relatively higher proportion of households in Accra (GAMA) (17.4%) use water from tanker suppliers for general use.

In the rural areas, the well (58.5%) and natural sources (22.1%) are the major sources of water for general use. More than twice the proportion of households in rural coastal (35.3%) has access to pipe-borne water for general use compared to those in rural forest (16.0%) and rural savannah (11.0%). In rural savannah and rural coastal about one-quarter of households (26.0% and 25.7%) use water from natural sources for general use.

**Table 7.8b: Households by main source of water supply for general use and locality (percent)**

Source of water supply	Locality							Ghana
	Urban areas			Rural areas				
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
<b>Pipe-borne</b>	<b>70.9</b>	<b>58.2</b>	<b>62.3</b>	<b>35.3</b>	<b>16.0</b>	<b>11.0</b>	<b>17.1</b>	<b>42.1</b>
Pipe-borne inside dwelling	18.9	14.2	15.7	2.1	0.9	1.4	1.2	9.2
Pipe-borne outside dwelling but not on compound	15.5	9.4	11.4	3.7	1.0	1.5	1.5	7.0
Pipe-borne outside dwelling but from neighbour's house	30.0	12.3	17.9	9.4	2.1	3.1	3.4	11.4
Public tap/Standpipe	6.5	22.3	17.3	20.1	12.0	5.0	11.0	14.5
<b>Well</b>	<b>6.7</b>	<b>34.8</b>	<b>25.9</b>	<b>37.3</b>	<b>61.8</b>	<b>61.8</b>	<b>58.5</b>	<b>40.4</b>
Bore-hole/Pump/Tube well	4.0	17.4	13.2	13.6	54.0	53.5	48.4	28.9
Protected well	2.1	13.9	10.1	11.0	3.1	2.1	3.9	7.3
Unprotected well	0.6	3.5	2.6	12.7	4.7	6.2	6.2	4.2
<b>Natural sources</b>	<b>2.0</b>	<b>4.8</b>	<b>4.0</b>	<b>25.7</b>	<b>19.4</b>	<b>26.0</b>	<b>22.1</b>	<b>12.1</b>
River/Stream	0.4	4.0	2.9	14.8	17.3	18.3	17.2	9.3
Rain water	0.2	0.4	0.4	0.7	0.2	0.1	0.2	0.3
Dugout/Pond/Lake/Dam/Canal	1.4	0.4	0.7	10.2	1.9	7.6	4.7	2.5
<b>Others</b>	<b>20.3</b>	<b>2.1</b>	<b>7.9</b>	<b>1.7</b>	<b>2.8</b>	<b>1.3</b>	<b>2.2</b>	<b>5.3</b>
Protected spring	-	0.6	0.4	0.1	0.2	-	0.1	0.3
Sachet water	2.4	0.2	0.9	0.2	0.1	-	0.1	0.5
Tanker supply/Vendor provided	17.4	1.1	6.3	0.9	-	0.6	0.3	3.6
Unprotected spring	-	0.1	0.1	0.4	2.5	0.5	1.6	0.8
Other	0.5	0.1	0.2	0.1	-	0.2	0.1	0.1
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 7.6 Source of lighting

Electricity (mains) is the main source of lighting and is accessed by seven in ten households (70.6%). It is the main source of lighting for 88.6 percent of urban households, with 93.1 percent of households in Accra (GAMA) having access. In the rural areas overall less than 50 percent of households have electricity as the main source of lighting. The proportion of households in rural coastal areas with electricity as the main source of lighting (60.7%) is higher than in rural forest (55.3%) and rural savannah (29.3%). Apart from electricity, 45 percent of rural households use torchlight as the main source of lighting with the rural savannah area (65.7%) having the highest proportion.

The use of kerosene is highest among households in the rural coastal area at 14.5 percent. Solar energy is used as a source of lighting by very few households, with rural savannah having the highest proportion located of 1.2 percent (Table 7.9).

**Table 7.9: Households by source of basic utilities and locality (percent)**

Utility	Locality							Ghana
	Urban areas			Rural areas				
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah	All	
<b>Source of lighting</b>								
Electricity (mains)	93.1	86.5	88.6	60.7	55.3	29.3	48.3	70.6
Electricity (private generator)	-	0.1	0.1	0.8	0.3	0.3	0.3	0.2
Kerosene lamp	1.5	3.0	2.5	14.5	3.7	3.3	5.0	3.6
Gas Lamp	0.4	0.1	0.2	0.1	0.1	-	0.1	0.1
Solar energy	0.3	0.1	0.2	0.1	0.5	1.2	0.6	0.4
Candles	0.7	0.5	0.6	0.7	0.3	-	0.3	0.4
Torches(flashlights)	4.0	9.3	7.6	22.8	39.6	65.7	45.0	24.3
Firewood	-	-	-	-	-	-	-	-
Crop residue	-	0.1	-	-	-	-	-	-
Other	0.1	0.2	0.2	0.3	0.3	0.2	0.3	0.2
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Source of Cooking fuel</b>								
None, No Cooking	6.4	4.9	5.4	2.1	2.7	1.3	2.2	3.9
Wood	0.8	20.5	14.3	57.6	72.4	87.4	74.8	41.3
Charcoal	38.9	45.8	43.6	30.0	17.9	7.6	16.5	31.5
Gas	52.7	28.0	35.8	9.8	6.7	1.3	5.5	22.3
Electricity	0.6	0.5	0.5	0.1	0.1	0.1	0.1	0.3
Kerosene	0.5	0.1	0.2	0.3	0.1	0.1	0.1	0.2
Crop residue	-	0.2	0.1	-	0.1	2.2	0.7	0.4
Sawdust	-	-	-	-	-	-	-	-
Animal waste	-	-	-	-	-	-	-	-
Other	-	0.1	-	-	-	-	-	-
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Method of rubbish disposal</b>								
Collected	67.0	12.5	29.8	5.1	3.6	3.6	3.8	18.2
Burned by household	16.2	12.0	13.4	22.5	18.3	24.4	20.7	16.6
Public dump	15.9	69.3	52.3	55.9	65.7	25.4	52.5	52.4
Dumped indiscriminately	0.8	6.2	4.5	16.5	12.4	46.6	23.0	12.8
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Method of liquid waste disposal</b>								
Discharged in open area	42.3	65.7	58.3	91.5	91.4	95.8	92.7	73.7
Discharged into drains	52.2	28.9	36.2	6.0	6.7	2.4	5.4	22.4
Septic tank	2.4	2.2	2.3	1.6	0.8	0.7	0.9	1.6
Discharge into sewer	3.0	3.0	3.0	0.8	0.6	0.5	0.6	1.9
Other	0.2	0.3	0.3	-	0.5	0.5	0.4	0.3
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 7.7 Cooking fuel

Table 7.9 shows that more than two-fifths (41.3%) of households use wood as the main source of cooking fuel. This is followed by the use of charcoal (31.5%) and gas (22.3%). In the urban areas, 43.6 percent and 35.8 percent of households, respectively, use charcoal or gas as their main sources of cooking fuel. Over fifty percent (52.7%) of households in Accra (GAMA) use gas compared to 28.0 percent of households in other urban areas. Small proportions of households in Accra, GAMA (6.4%) and other urban areas (4.9%) reported that they do not cook.

Almost three-quarters (74.8%) of households in rural areas are using wood as the main source of fuel for cooking, while 16.5 percent are using charcoal. The use of wood as cooking fuel is most predominant in rural savannah (87.4%). Only 1.3 percent of rural savannah households use gas.

## 7.8 Disposal of rubbish and liquid waste

More than half (52.4%) of households dispose of their rubbish by taking it to a public dump site while less than one-fifth (18.2%) have their rubbish collected (Table 7.9). The distribution by locality suggest that over half of households in urban areas (52.3%) dispose of their rubbish through a public dump site, with 29.8 percent having their refuse collected.

There is a huge disparity between Accra (GAMA), the other urban areas and the rural areas in terms of rubbish disposal. In Accra (GAMA), more than two-thirds (67.7%) of households have their rubbish collected while in the other urban areas and the rural areas, almost 70 percent (69.3%) and 52.4 percent of households respectively dispose of their refuse by taking them to the public dump site. Furthermore, in the rural areas, 20.7 percent bury their rubbish while 23.0 percent dispose of refuse indiscriminately (Table 7.9).

Almost three-quarters of households dispose of their liquid waste in open areas (73.7%), with an additional 22.4 percent disposing this in open spaces (Table 7.9). This is particularly the case in rural areas where 92.7 percent of households dispose of their liquid waste in open spaces. This practice has the potential of creating conditions for an outbreak of communicable diseases in those communities.

## 7.9 Toilet Facilities

Table 7.10 shows access to sanitation facilities and types of facilities used by localities. Public toilet is the commonest form of toilet facility used by households, accounting for 35.7 percent. Households using WC, Pit Latrine and KVIP constitute 13.9 percent, 19.1 percent and 12.1 percent respectively. About 19 percent (18.8%) of households have no toilet facilities and therefore use the bush, field or beach.

Among the urban households, nearly four in every ten (42.1%) use a public toilet while 23.3 percent use a water closet (WC). The use of a water closet is higher (34.3%) among households in Accra (GAMA) compared to other urban areas (18.2%). The use of a public toilet is, on the other hand, more prevalent among households in other urban areas (42.1%) compared to Accra (GAMA) (31.4%).

In the rural areas, about a third of households have no toilet facilities (32.9%) or use the public toilet (32.1). However, when examined independently, it is observed that more than 70 percent (72.6%) of households in the rural savannah area have no toilet facilities. Clearly, this has implications for the health and well-being of the people living in the area.

**Table 7.10: Households by type of toilet facility used and locality (percent)**

Utility	Locality							All	Ghana
	Urban areas			Rural areas					
	Accra (GAMA)	Other Urban	All	Rural Coastal	Rural Forest	Rural Savannah			
<b>Type of toilet used household</b>									
No facilities (bush/beach/field)	3.0	9.5	7.4	30.3	12.8	72.6	32.9	18.8	
W.C.	34.3	18.2	23.3	5.0	2.5	0.8	2.3	13.9	
Pit latrine	10.0	17.3	15.0	22.2	32.7	8.7	24.2	19.1	
KVIP	20.7	12.7	15.3	7.6	10.7	3.6	8.2	12.1	
Bucket/Pan	0.5	0.2	0.3	-	0.2	-	0.1	0.2	
Public toilet (WC, KVIP, Pit, Pan, etc.)	31.4	42.1	38.7	34.2	40.8	14.4	32.1	35.7	
Other	0.1	-	0.1	0.6	0.3	-	0.2	0.1	
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	

Note: Flush toilet and KVIP are exclusively for use of households

## 7.10 Quality of drinking water

Safe drinking water is a human right and a basic requirement for good health. Microbiological contamination of drinking water can lead to diarrhoeal diseases including shigellosis and cholera. Other pathogens in drinking water can cause hepatitis, typhoid, and polio myelitis. Drinking water can also be contaminated with chemicals, with harmful effects on human health. The MDG Target 7C is to reduce by half, between 1990 and 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation. *A World Fit for Children* calls for a reduction in the proportion of households without access to hygienic sanitation facilities and affordable and safe drinking water by at least one-third.

The global indicator for tracking progress towards the MDG drinking water target is use of an ‘improved source’ of drinking water. However, improved sources may be contaminated and, therefore, may provide unsafe water for use by households. The GLSS6 is the first nationally representative survey in Ghana to include measurement of microbiological and chemical quality of drinking water at the household level.

During the survey, 15 households were randomly selected from the full listing of households in each cluster in order to administer the GLSS6 questionnaire. Three of these households were then randomly selected for the testing of household drinking water: survey respondents were asked to provide “a glass of water which you would give a child to drink” which was then tested on-site for arsenic and *E. coli*. In one of these three households, the source of drinking water was also visited and tested for arsenic and *E. coli*, without sterilization. In the case of piped water, the source sample was taken from the tap or other point of collection. In the case of sachet water, the source sample was taken directly from the sachet, without transfer to a glass or other drinking vessel. At one in five households where water quality testing was done at the source, quality assurance testing was also done, including analysis of a blank for *E. coli*, and collection of duplicate samples for laboratory analysis of arsenic and *E. coli*.

### *Arsenic test*

Arsenic is a known human carcinogen, which has been found in groundwater in parts of Ghana since the 1990s. The WHO provisional guideline value for arsenic since 1993 is 10 parts per billion (ppb), and the same value has been adopted as a standard by Ghana, the US EPA and the European Union, amongst others. Many developing countries, including India and some other severely arsenic affected countries, use a 50 ppb standard. This was the WHO provisional guideline value for drinking water up to 1993. A non-statutory level of 200 ppb is used in this report, to characterize high levels of health risk.

Arsenic was measured in the GLSS6 using the Arsenic Econo-Quick Test Kit (Industrial Test Systems, USA), which yields a semi-quantitative measure of arsenic in drinking water. Test chemicals are added to a 50 mL water sample, and after 12 minutes results are recorded as 0, 10, 25, 50, 100, 200, 300, 500 or 1000 ppb arsenic.

The distribution of the population by arsenic levels in household drinking water and source are shown in Tables 7.11a and 7.11b. A total of 1,220 valid tests were made at the source and 3,055 at the household level.

**Table 7.11a: Proportion of households with arsenic concentration in household drinking water**

	Arsenic concentration in source water				Total	Number of households
	<=10 ppb	>10 - 50 ppb	>50 - <200 ppb	>=200 ppb		
<b>Total</b>	91.4	7.9	0.6	0.2	100.0	465,341
<b>Region</b>						
Western	96.4	3.6	0.0	0.0	100.0	53,928
Central	80.4	18.9	0.7	0.0	100.0	92,972
Greater Accra	94.8	5.2	0.0	0.0	100.0	51,119
Volta	85.3	14.7	0.0	0.0	100.0	35,843
Eastern	95.4	2.7	0.0	1.9	100.0	47,735
Ashanti	92.9	5.1	2.1	0.0	100.0	85,491
Brong Ahafo	95.2	4.8	0.0	0.0	100.0	39,465
Northern	97.9	2.2	0.0	0.0	100.0	31,943
Upper East	96.3	3.7	0.0	0.0	100.0	16,001
Upper West	95.1	2.9	1.0	1.0	100.0	10,843
<b>Ecological Zone</b>						
Coastal	86.1	13.1	0.9	0.0	100.0	80,946
Forest	92.7	6.3	0.7	0.4	100.0	252,594
Savannah	91.5	8.2	0.1	0.1	100.0	90,017
GAMA	93.7	6.3	0.0	0.0	100.0	41,785
<b>Area</b>						
Urban	94.5	5.2	0.3	0.0	100.0	228,245
Rural	88.4	10.4	0.8	0.4	100.0	237,096
<b>Improved/unimproved water source</b>						
Unimproved water source	73.6	25.0	0.0	1.3	100.0	69,448
Improved water source	95.4	3.7	0.8	0.0	100.0	303,492
Bottled water/sachet	94.7	5.3	0.0	0.0	100.0	88,316
<b>Source of water collected</b>						
Piped into dwelling	100.0	0.0	0.0	0.0	100.0	28,043
Piped into yard or plot	100.0	0.0	0.0	0.0	100.0	23,206
Public tap/standpipe	94.0	5.3	0.7	0.0	100.0	92,916
Bore-hole	94.4	4.1	1.4	0.1	100.0	137,234
Protected well	95.8	4.2	0.0	0.0	100.0	18,106
Unprotected well	79.1	20.9	0.0	0.0	100.0	13,861
Surface water	70.4	27.7	0.0	1.9	100.0	48,107
Sachet and bottled water	94.7	5.3	0.0	0.0	100.0	88,316
Other	89.8	10.2	0.0	0.0	100.0	11,465

Overall, 8.6 percent of the households collected drinking water from a source with arsenic above the Ghana standard of 10 ppb, and 5.6 percent of the households had drinking water that exceeded the standard limit at the point of consumption (Table 7.11b). Less than 1 percent of source or households samples were above 50 ppb. Non-compliance at the household level varied regionally from 3 percent or less in Greater Accra and the Upper West region to about 19 percent in the Central and Volta regions. Households in rural areas are twice as likely to have drinking water above 10 ppb compared to those in urban areas.

**Table 7.11b: Proportion of households by arsenic concentration in household drinking water**

	Arsenic concentration in household drinking water				Total	Number of households
	<=10 ppb	>10 - 50 ppb	>50 - <200 ppb	>=200 ppb		
<b>Total</b>	93.4	6.1	0.2	0.2	100.0	1,193,230
<b>Region</b>						
Western	96.4	3.6	0.0	0.0	100.0	124,532
Central	78.7	21.3	0.0	0.0	100.0	112,883
Greater Accra	97.4	2.7	0.0	0.0	100.0	208,542
Volta	80.4	18.5	0.0	1.1	100.0	93,419
Eastern	96.8	3.2	0.0	0.0	100.0	128,133
Ashanti	96.5	2.0	0.9	0.6	100.0	246,883
Brong Ahafo	94.8	5.2	0.0	0.0	100.0	116,850
Northern	97.0	3.0	0.0	0.0	100.0	92,822
Upper East	91.4	8.0	0.6	0.0	100.0	46,534
Upper West	98.2	1.3	0.0	0.5	100.0	22,632
<b>Ecological Zone</b>						
Coastal	91.1	9.0	0.0	0.0	100.0	186,258
Forest	94.7	4.5	0.4	0.4	100.0	595,824
Savannah	89.8	9.9	0.1	0.2	100.0	254,286
GAMA	97.1	2.9	0.0	0.0	100.0	156,863
<b>Area</b>						
Urban	95.6	4.3	0.1	0.1	100.0	647,629
Rural	90.9	8.3	0.4	0.5	100.0	545,601
<b>Improved/unimproved water source</b>						
Unimproved water source	83.9	15.7	0.0	0.4	100.0	177,710
Improved water source	94.2	5.2	0.4	0.3	100.0	708,681
Bottled water/sachet	98.1	1.9	0.0	0.0	100.0	294,854
<b>Source of water collected</b>						
Piped into dwelling	98.4	1.6	0.0	0.0	100.0	62,352
Piped into yard or plot	99.5	0.5	0.0	0.0	100.0	56,700
Public tap/standpipe	92.4	7.3	0.2	0.0	100.0	210,414
Bore-hole	94.4	4.4	0.6	0.6	100.0	318,997
Protected well	89.9	10.1	0.0	0.0	100.0	41,299
Unprotected well	86.0	14.0	0.0	0.0	100.0	28,485
Surface water	81.2	18.2	0.0	0.6	100.0	125,109
Sachet and bottled water	98.1	1.9	0.0	0.0	100.0	294,854
Other	93.1	6.9	0.0	0.0	100.0	43,036

Unimproved water sources are much more likely to have arsenic contamination than improved sources. Sachet water was only rarely found to contain arsenic. Piped water supplies were largely free from arsenic contamination, though public taps/standpipes showed some contamination. Protected and unprotected wells were moderately contaminated, but surface water sources (including rivers and streams, dams, lakes, ponds, and canals) were the most frequently contaminated.

### ***E. coli* test**

Hundreds of species of protozoa, bacteria, and viruses can cause disease in humans; many of these are transmitted through the faecal-oral pathway. Rather than monitor the presence of individual pathogens, faecal indicators are used to identify contamination. The bacteria species *Escherichia coli* is the most commonly recommended faecal indicator, and many countries, including Ghana, have set a standard that no *E. coli* should be found in a 100 mL sample of drinking water.

*E. coli* was measured in the field, by GLSS6 teams, by filtering 100 mL of sample through a 0.45 micron filter (Millipore Microfil) which was then placed onto Compact Dry EC growth media plates (Nissui, Japan). A 1 mL sample was also tested from the same source directly on a second media plate. Incubation was done at ambient temperature. After 24 hours, the number of blue colonies, signifying the presence of *E. coli* colony forming units (cfu), was recorded.

The distribution of the population by *E. coli* level in source waters is shown in Table 7.12a, and the corresponding values for *E. coli* in household drinking water samples are shown in Table 7.12b. A total of 919 valid tests were made at the source and 2,157 at the household level.

Overall, 43.5 percent of the population had source water with detectable *E. coli*, and this value increased to 62.1 percent for household samples, reflecting contamination occurring at the household level. The proportion of the population having water containing very high levels of contamination (>100 cfu/100 mL) increased from 8.4 percent at the source to 17.6 percent at the household level.

Contamination at both the source and the household level was lowest in Greater Accra, Central and Upper West regions. Higher levels of contamination were found in Volta, Eastern and Ashanti regions, where about one-quarter of household drinking water contained very high levels of *E. coli*. Households in urban areas were more likely to have source water free from *E. coli*; this difference was even more marked at the household level, where urban dwellers were more than twice likely to have water free from *E. coli*.

*E. coli* levels were much lower in improved sources than in unimproved sources, at both the source and household level. Protected wells had significantly better quality, but still only 31 percent were free from *E. coli* at the source. Water piped into the dwelling, yard or plot was of much higher quality, with 66.1 and 73.8 percent free from *E. coli* at the point of collection. Public taps and standpipes were slightly more contaminated at the source, with 52.8 percent free from *E. coli*. Water quality from piped schemes degraded significantly within the household: only 33.3 percent of the households with in-house connections had water free from *E. coli* at the point of consumption. Sachet and bottled water had the best microbiological water quality, with 89.2 percent of samples free from *E. coli* at the source (i.e. taken directly from the sachet or bottle) and 77.5 percent free from *E. coli* at the point of consumption (i.e. sampled from a glass or other drinking vessel).

**Table 7.12a: Proportion of households by E. coli risk in source water**

	<i>E. coli</i> risk level in source water (cfu/100 mL)				Total	Number of households
	Low: <1	Medium: 1-10	High: 11-100	Very High: >100		
<b>Total</b>	56.5	19.3	15.8	8.4	100.0	356,882
<b>Region</b>						
Western	65.7	17.1	6.9	10.4	100.0	43,936
Central	63.9	26.0	7.8	2.3	100.0	51,015
Greater Accra	66.8	22.6	8.6	2.1	100.0	46,126
Volta	49.5	7.3	24.3	18.9	100.0	24,164
Eastern	52.8	8.9	23.2	15.1	100.0	43,711
Ashanti	58.1	9.8	24.6	7.5	100.0	73,358
Brong Ahafo	38.2	35.9	14.4	11.5	100.0	26,310
Northern	45.0	31.1	16.3	7.7	100.0	27,112
Upper East	41.9	39.1	11.0	7.9	100.0	12,595
Upper West	67.9	23.6	8.5	0.0	100.0	8,554
<b>Ecological Zone</b>						
Coastal	60.3	20.4	12.9	6.3	100.0	50,392
Forest	54.7	15.6	19.2	10.6	100.0	205,716
Savannah	49.2	31.3	12.7	6.8	100.0	62,667
GAMA	76.6	16.4	5.4	1.6	100.0	38,106
<b>Area</b>						
Urban	63.5	17.8	15.1	3.6	100.0	184,483
Rural	49.6	20.9	16.4	13.2	100.0	172,398
<b>Improved/unimproved water source</b>						
Unimproved water source	29.2	11.3	28.9	30.7	100.0	41,193
Improved water source	51.9	23.3	18.0	6.8	100.0	246,004
Bottled water/sachet	89.2	10.6	0.3	0.0	100.0	68,722
<b>Source of water collected</b>						
Piped into dwelling	66.1	12.4	20.6	1.0	100.0	22,962
Piped into yard or plot	73.8	23.7	2.5	0.0	100.0	24,116
Public tap/standpipe	52.8	20.6	22.1	4.5	100.0	71,002
Bore-hole	47.0	27.5	16.4	9.1	100.0	113,152
Protected well	31.0	8.8	36.2	24.0	100.0	11,359
Unprotected well	9.9	20.8	19.6	49.8	100.0	7,292
Surface water	29.1	11.1	31.4	28.3	100.0	27,137
Sachet and bottled water	89.2	10.6	0.3	0.0	100.0	68,722
Other	39.8	13.2	27.4	19.7	100.0	10,177

**Table 7.12b: Proportion of population with *E. coli* level risk level in household drinking water**

	<i>E. coli</i> risk level in household drinking water (cfu/100 mL)				Total	Number of households
	Low: <1	Medium: 1-10	High: 11-100	Very High: >100		
<b>Total</b>	37.7	19.5	24.9	17.6	100.0	887,057
<b>Region</b>						
Western	45.6	13.2	18.7	22.2	100.0	104,092
Central	55.2	21.3	15.3	8.2	100.0	78,140
Greater Accra	58.3	24.4	11.5	5.9	100.0	195,775
Volta	19.9	25.3	30.6	24.2	100.0	52,131
Eastern	31.3	9.6	33.3	25.6	100.0	96,202
Ashanti	32.4	18.2	28.0	21.0	100.0	193,389
Brong Ahafo	26.4	19.1	32.6	20.7	100.0	60,187
Northern	13.3	21.6	41.3	23.8	100.0	63,491
Upper East	16.1	25.9	37.0	21.0	100.0	30,544
Upper West	27.6	37.9	31.1	2.4	100.0	13,106
<b>Ecological Zone</b>						
Coastal	39.3	24.7	23.5	12.5	100.0	152,042
Forest	33.8	15.9	27.6	22.4	100.0	441,157
Savannah	17.0	24.0	37.7	20.9	100.0	145,681
GAMA	67.9	21.0	6.1	5.1	100.0	148,178
<b>Area</b>						
Urban	48.3	21.7	18.3	11.4	100.0	526,805
Rural	22.2	16.3	34.7	26.6	100.0	360,252
<b>Improved/unimproved water source</b>						
Unimproved water source	9.9	7.6	34.4	47.8	100.0	95,609
Improved water source	20.8	22.5	35.4	20.9	100.0	504,877
Bottled water/sachet	77.5	18.4	3.3	0.7	100.0	276,662
<b>Piped into dwelling</b>	33.3	39.5	15.7	11.5	100.0	51,967
Piped into yard or plot	47.7	25.8	20.4	6.2	100.0	53,051
Public tap/standpipe	22.9	15.4	37.7	24.0	100.0	147,768
Bore-hole	11.6	22.0	42.2	23.8	100.0	213,515
Protected well	14.4	21.9	28.4	32.5	100.0	27,134
Unprotected well	4.0	8.5	40.7	46.9	100.0	18,499
Surface water	11.1	3.1	30.3	55.0	100.0	58,041
Sachet and bottled water	77.5	18.4	3.3	0.7	100.0	276,662
Other	11.2	24.8	44.8	19.1	100.0	30,512

### ***Combined water quality***

Arsenic and *E. coli* contamination were measured within the same households, which allowed tabulation of the proportion of households having both arsenic and *E. coli* contaminated drinking water, as presented in Tables 7.13a and 7.13b. Nationally, 53.5 percent of households collect water from a source which meets the country standard for both arsenic (50

ppb) and *E. coli* (<1 cfu/100 mL), but by the point of consumption this figure drops to 36.8 percent (Appendix Table 7A.3). Majority of households (59.2%) had drinking water in the household which met the arsenic standard but contained *E. coli*. The proportion of households meeting both standards at the household level is much higher in urban (48.0%) than in rural areas (20.4%); it is also much higher in improved (20.1%) than in unimproved sources (5.7%), and is highest of all among those drinking sachet or bottled water (77.5%).

**Table 7.13a: Proportion of households by levels of arsenic and *E. coli* risk levels in source of drinking water**

	Arsenic and <i>E. Coli</i> risk levels in source drinking water				Total	Number of households
	Arsenic ≤ 10ppb and <i>E. coli</i> < 1 cfu/100ml	Arsenic ≤ 10ppb and <i>E. coli</i> ≥ 1 cfu/100ml	Arsenic > 10ppb and <i>E. coli</i> < 1 cfu/100ml	Arsenic > 10ppb and <i>E. coli</i> ≥ 1 cfu/100ml		
<b>Total</b>	53.5	41.5	3.5	1.5	100.0	307,427
<b>Region</b>						
Western	64.6	32.4	1.0	1.9	100.0	35,553
Central	58.2	33.0	6.1	2.7	100.0	44,087
Greater Accra	67.4	29.9	0.0	2.7	100.0	36,625
Volta	52.3	46.9	0.0	0.8	100.0	22,204
Eastern	51.9	46.1	2.1	0.0	100.0	36,692
Ashanti	48.7	41.7	9.6	0.0	100.0	63,545
Brong Ahafo	35.5	58.2	1.8	4.5	100.0	24,585
Northern	45.0	53.1	0.0	1.9	100.0	24,540
Upper East	41.4	57.5	1.1	0.0	100.0	11,627
Upper West	64.1	33.6	2.4	0.0	100.0	7,969
<b>Ecological Zone</b>						
Coastal	59.9	36.2	0.5	3.4	100.0	43,091
Forest	49.6	44.3	5.7	0.3	100.0	177,100
Savannah	48.4	48.4	0.6	2.7	100.0	57,876
GAMA	77.9	18.7	0.0	3.4	100.0	29,359
<b>Area</b>						
Urban	64.4	33.5	0.2	1.9	100.0	151,786
Rural	43.0	49.2	6.7	1.1	100.0	155,641
<b>Improved/unimproved water source</b>						
Unimproved water source	13.0	64.7	17.7	4.6	100.0	34,940
Improved water source	49.7	46.9	1.9	1.4	100.0	212,011
Bottled water/sachet	90.7	8.5	0.8	0.0	100.0	59,513
<b>Source of water collected</b>						
Piped into dwelling	66.1	33.9	0.0	0.0	100.0	17,689
Piped into yard or plot	71.5	28.5	0.0	0.0	100.0	19,487
Public tap/standpipe	51.4	46.6	0.9	1.1	100.0	61,512
Bore-hole	44.0	50.6	3.4	2.0	100.0	102,030
Protected well	31.0	65.3	0.0	3.7	100.0	8,573
Unprotected well	3.5	82.8	6.4	7.4	100.0	5,729
Surface water	5.5	69.0	25.5	0.0	100.0	22,817
Sachet and bottled water	90.7	8.5	0.8	0.0	100.0	59,513
Other	41.4	45.8	0.0	12.8	100.0	9,114

Of the households whose drinking water meets both arsenic and *E. coli* standards, 27.6 percent collect water from a piped source (including piped into dwelling, yard, or plot, and public tap connections), 24.7 percent take water from a borehole, and 32.2 percent use sachet and bottled water for drinking.

**Table 7.13b: Proportion of households by arsenic and E. coli risk levels in household drinking water**

	Arsenic and E. coli risk levels in household drinking water				Total	Number of households
	Arsenic <= 10ppb and <i>E. coli</i> < 1 cfu/100ml	Arsenic <= 10ppb and <i>E. coli</i> ≥ 1 cfu/100ml	Arsenic > 10ppb and <i>E. coli</i> < 1 cfu/100ml	Arsenic > 10ppb and <i>E. coli</i> ≥ 1 cfu/100ml		
<b>Total</b>	36.8	59.2	1.0	3.1	100.0	779,752
<b>Region</b>						
Western	45.3	52.4	0.4	1.9	100.0	88,200
Central	44.2	38.5	11.0	6.3	100.0	46,289
Greater Accra	58.3	40.4	0.0	1.3	100.0	177,493
Volta	19.3	75.0	0.8	4.9	100.0	46,871
Eastern	30.6	65.5	0.8	3.1	100.0	91,762
Ashanti	31.9	63.8	0.4	3.8	100.0	175,041
Brong Ahafo	26.4	69.8	0.0	3.8	100.0	56,137
Northern	13.3	84.0	0.0	2.7	100.0	62,358
Upper East	15.3	79.2	0.8	4.7	100.0	24,125
Upper West	27.6	71.0	0.0	1.5	100.0	11,474
<b>Ecological Zone</b>						
Coastal	38.6	59.0	0.8	1.6	100.0	117,628
Forest	32.2	62.4	1.6	3.8	100.0	391,645
Savannah	16.9	79.4	0.2	3.6	100.0	133,946
GAMA	67.9	30.4	0.0	1.7	100.0	136,534
<b>Area</b>						
Urban	48.0	50.0	0.4	1.6	100.0	463,041
Rural	20.4	72.6	1.8	5.2	100.0	316,711
<b>Improved/unimproved water source</b>						
Unimproved water source	5.7	82.0	4.2	8.1	100.0	85,875
Improved water source	20.1	75.6	0.8	3.5	100.0	438,462
Bottled water/sachet	77.5	21.8	0.2	0.6	100.0	248,888
<b>Source of water collected</b>						
Piped into dwelling	33.0	66.7	0.3	0.0	100.0	44,668
Piped into yard or plot	47.7	51.7	0.0	0.7	100.0	44,638
Public tap/standpipe	21.4	73.7	1.6	3.3	100.0	123,821
Bore-hole	10.9	84.1	0.7	4.3	100.0	191,106
Protected well	14.1	74.5	0.3	11.1	100.0	23,922
Unprotected well	4.0	75.3	0.0	20.7	100.0	14,912
Surface water	4.5	83.5	6.7	5.4	100.0	54,040
Sachet and bottled water	77.5	21.8	0.2	0.6	100.0	248,888
Other	11.2	84.3	0.0	4.5	100.0	27,230

## CHAPTER EIGHT

### HOUSEHOLD AGRICULTURE

#### 8.1 Introduction

The Agricultural Sector has contributed significantly to the Ghanaian economy, although more recently it has been overtaken by the Services Sector. However, the sector continues to provide employment for almost fifty percent of employed persons in Ghana. The Household Agriculture section of the GLSS6 questionnaire sought information on household agricultural activities. This chapter presents information on households' ownership and operation of farms as well as ownership of equipment, technology use, processing, harvesting and marketing, and consumption of own produce, among others.

#### 8.2 Agricultural activities and assets

Table 8.1 shows the distribution of households owning or operating a farm. It is estimated that a little over half (51.5%) of households in Ghana own or operate a farm. Farming is predominantly rural, with 82.5 percent of rural households involved. In the rural areas, agricultural operators are common in the rural savannah with about 93 percent of households involved. The corresponding figures for the rural forest and rural coastal is 81.3 percent and 64.7 percent respectively.

The proportion of females involved in agriculture is about the same in both urban and rural areas (41.2%) across the country. The proportion of females engaged in agriculture in rural coastal areas (48.3%) is higher than in the other rural areas.

**Table 8.1: Households owning or operating a farm by locality**

Locality	Households owning or operating a farm		*Female proportion of persons engaged in agricultural activities
	Percent	Estimated Total Number	
<b>Urban</b>	<b>26.6</b>	<b>970,934</b>	<b>41.2</b>
Accra (GAMA)	4.0	46,106	38.7
Other Urban	37.1	924,918	41.3
<b>Rural</b>	<b>82.5</b>	<b>2,430,638</b>	<b>41.3</b>
Rural Coastal	64.7	253,089	48.3
Rural Forest	81.3	1,369,281	43.8
Rural Savannah	92.9	808,269	35.1
<b>Ghana</b>	<b>51.5</b>	<b>3,401,572</b>	<b>41.2</b>

Note: \*The base for this indicator is household members engaged in agricultural activities

From Table 8.2, nearly 2 million (1,825,882) households are involved in raising chickens while more than a million (1,061,784) own goats. A much smaller number of households own other forms of livestock (8,507) and ostriches (695).

In all, Ghanaian households rear about 39 million chickens, over 7 million goats, about 6 million sheep, a little over 2 million cattle, and about 4 million guinea fowls. The estimated value of all these livestock is GH¢4,553 million, of which GH¢455 million (representing

10%) was sold during the previous 12 months. Purchases made within the period for the purpose of breeding animals amounts to GH¢184 million. The highest expenditures are in the rearing of goats (GH¢88.32 million), cattle (GH¢35.32 million) and chickens (GH¢32.32 million).

**Table 8.2: Estimated number of households raising livestock, livestock numbers and estimated values, sales and purchases of livestock**

Type of livestock	Estimated number of households raising	Number of livestock	Total value of livestock (Million GH¢)	Sales in the last 12 months (Million GH¢)	Purchases in the last 12 months (Million GH¢)
Draught animals	77,504	197,732	122.71	9.83	8.65
Cattle including calves	244,643	2,190,974	2,255.93	165.16	35.32
Sheep	634,754	6,048,660	728.46	55.51	11.34
Goats	1,061,784	7,344,102	619.21	66.44	88.32
Pigs	182,046	1,162,996	170.17	37.68	6.12
Rabbits	14,741	146,789	4.37	0.66	0.24
Other livestock	8,507	*	*	0.02	0.01
Chicken	1,825,750	39,053,232	562.69	102.33	32.73
Guinea fowl	283,973	4,022,746	62.18	10.84	0.51
Turkey	20,579	191,505	9.01	3.16	0.12
Duck	91,971	669,311	18.93	2.82	0.40
Ostrich	695	3,966	0.08	0.01	0.00
Other poultry	9,055	*	*	0.77	0.03
Total	4,456,002	61,032,014	4,553.74	455.23	183.78

Note: There could be double counting for the number of households

Livestock rearing is concentrated in the rural savannah areas where 86 percent of draught animals, 63 percent of cattle and about 80 percent of guinea fowls are being reared (Table 8.3). Rabbits owned by households in other urban and rural forest areas are about 34 percent and 45 percent respectively. Households in Accra (GAMA) and the rural coastal areas own the least proportion of almost all the animals. Apiculture (bee keeping) is mainly practiced in the rural forest areas where about 91 percent of households involved in this activity are found. All mushroom farming is undertaken in other urban localities while almost the same proportions of households in other urban (48.6%) and rural forest (51.4%) areas are engaged in snail farming.

**Table 8.3: Percentage distribution of livestock by locality**

Type of livestock	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	Total livestock
Draught animals	0.0	12.0	0.0	2.4	85.6	197,732
Cattle including calves	2.7	18.2	4.6	11.5	63.1	2,190,974
Sheep	0.2	15.6	1.9	23.3	59.0	6,048,660
Goats	1.0	20.2	3.8	32.6	42.4	7,344,102
Pigs	2.2	18.9	2.7	13.3	62.9	1,162,996
Rabbits	7.6	34.3	0.9	44.7	12.5	146,789
Chicken	0.9	35.7	4.4	35.9	23.1	39,053,232
Guinea fowl	0.0	13.2	1.0	6.1	79.7	4,022,746
Turkey	0.0	59.0	1.7	11.3	27.9	191,505
Duck	1.9	17.1	8.6	28.9	43.5	669,311
Ostrich	0.0	0.0	0.0	75.9	24.1	3,966
Grass cutter	0.0	20.9	4.6	38.9	35.6	36,856
Bee hives	0.0	0.0	0.0	91.0	9.0	7,292
Fish (farming)	0.4	21.0	0.0	72.1	6.5	1,054,376
Snail (farming)	0.0	48.6	0.0	51.4	0.0	35,698
Mushroom	0.0	100.0	0.0	0.0	0.0	3,625,474

## 8.3 Harvesting and disposal of crops

### 8.3.1 Staples and cash crops

The estimated total number of households engaged in harvesting crops in the 12 months preceding the survey is presented in Table 8.4. A little over two million (2.1 million) households harvested maize. Other major crops, in terms of the number of households involved, are cocoa (794,129), groundnut/peanut (534,766), beans/peas (362,333) and rice (332,504). Estimates of the number of households in each ecological zone that harvested different crops in the previous 12 months vary widely across the country depending on the types of crop grown. Maize and cocoa are the only staple grain and cash crops grown extensively in all the three zones. More than half of the two million households that cultivate maize are located in the forest zone. Tiger nut, shea nut, tobacco, sorghum and cotton are exclusively grown by households in the savannah zone.

**Table 8.4: Households harvesting various crops in the previous 12 months by ecological zone**

Crop	Ecological zone				Ghana
	Coastal	Forest	Savannah	GAMA	
Cocoa	17,637	750,354	24,363	1,775	794,129
Coffee	0	7,079	1,085	0	8,164
Rubber	1,459	1,107	620	984	4,170
Coconut	11,047	14,965	146	0	26,158
Wood lot	0	2,345	1,260	0	3,605
Kenef	105	5,905	27,539	0	33,549
Cotton	0	0	6,300	0	6,300
Groundnut/Peanut	9,826	43,923	481,017	0	534,766
Tobacco	0	0	4,630	0	4,630
Sugar cane	4,673	8,229	1,306	341	14,549
Maize	138,588	1,113,918	836,276	3,309	2,092,779
Rice	2,947	33,048	296,489	984	333,504
Guinea corn/Sorghum	0	0	210,280	0	210,280
Millet	333	7,228	296,586	0	304,147
Beans/Peas	2,993	56,924	302,416	0	362,333
Shea nut	0	0	7,787	0	7,787
Cashew nut	406	5,260	73,229	0	78,895
Ginger	1,098	7,014	1,520	0	9,632
Tiger nut	0	0	1,679	0	1,679
Other crops	6,374	10,803	53,532	725	71,434

The estimated number of households harvesting various crops, percentage selling crops and estimated annual value of harvest are shown in Table 8.5. All the households that grow woodlots did not process their produce before selling. High proportions of households growing cashew nut (97.5%), cocoa (95.6%), rubber (85.3%), shea nut (85.0%) and tiger nut (82.7%) also did not process their farm products before selling. Crops which were sold unprocessed by smaller proportions of households are kenef (10.4%), millet (21.1%) and tobacco (25.9%).

The estimated total annual value of harvested staple grains, field crops and cash crops produced by Ghanaian households is about GHC4,897.9 million. The total value of sales within the same period is GHC2,742.3 million representing 60 percent of harvest value. Cocoa and maize are the major cash crops in terms of both volume and value of sales; the value of cocoa harvested by households within the 12 month period is GHC2,021.9 million, with sales value amounting to GHC1,580 million while the annual maize harvest was valued at GHC1,712.1 million with the total sales amounting to GHC597.8 million. These two crops account for 76 percent of the total harvest of the staple grains and cash crops, and 79 percent of all sales. Three other crops that are important in terms of the value of their sales are: groundnut/peanut, rice and cashew nut with the annual sales of around GHC174 million, GHC158 million and GHC79 million respectively.

**Table 8.5a: Estimated number of households harvesting various crops, percentage selling crops and estimated annual value of harvest and sales**

Crop	Estimated number of households harvesting crops in last 12 months	Percentage of households selling any unprocessed crop in the last 12 months	Estimated annual value (Million GHC)	
			Total harvest	Sales
Beans/Peas	362,333	44.0	130.92	59.47
Cashew nut	78,895	97.5	111.90	78.55
Cocoa	794,129	95.6	2,021.90	1,579.77
Coconut	26,158	40.2	7.88	4.67
Coffee	8,164	75.4	4.06	3.03
Cotton	6,300	85.5	5.25	4.72
Ginger	9,632	47.3	2.52	0.68
Groundnut/Peanut	534,766	66.1	358.63	173.98
Guinea corn/Sorghum	210,280	28.8	59.95	11.41
Kenef	33,549	10.4	20.41	2.57
Maize	2,092,779	51.1	1,712.08	597.71
Millet	304,147	21.1	111.25	15.93
Rice	333,504	55.4	258.82	157.67
Rubber	4,170	85.3	23.51	17.22
Sheanut	7,787	85.0	2.04	0.80
Sugar Cane	14,549	71.2	8.27	6.89
Tiger nut	1,679	82.7	0.74	0.25
Tobacco	4,630	25.9	2.87	0.67
Wood lot	3,605	100.0	0.79	0.74
Other crops	71,434	55.9	54.15	25.57
All crops	4,902,490	57.6	4,897.93	2,742.31

Note: Households can be engaged in more than one activity

Table 8.5b presents data on the estimated number of households engaged in fish farming, estimated value, sales and purchases by locality. It shows that a total of 3,521 households were engaged in aquaculture (fish farming) mostly in the rural forest, other urban and the GAMA localities. There was virtually no aquaculture activity in the rural coastal locality.

The estimated total value of fish being cultured was about GH¢7.3 million, while about GH¢5 million of it was sold in the last 12 months. Purchases of fingerlings within the same period was GH¢0.28 million.

**Table 8.5b: Estimated number of households engaged in fish farming, estimated value of sales and purchases by locality**

Locality	Estimated no. of households	Total value of fish (Million GHC)	Sales in the last 12 months (Million GHC)	Purchases in the last 12 months (Million GHC)
Accra (GAMA)	1,024	0.01	0.61	0.00
Other Urban	1,069	5.36	0.00	0.22
Rural Coastal	0	0	0	0
Rural Forest	1,086	1.82	4.14	0.00
Rural Savannah	342	0.14	0.14	0.06
Total	3,521	7.32	4.90	0.28

Table 8.6 shows that cocoa, cassava and plantain are the three most important cash crops grown in the forest zone, accounting for 62 percent of total harvest value of crops (Table 8.6). Cassava and cocoa are also the two most important crops in the coastal zone though their values are not as much compared to those of the forest and savannah zones. Maize and yam account for more than half of the total crop harvest value in the savannah zone. In terms of the value of crop sales, cocoa is the most important accounting for 45 percent of crop sales in the forest zone while yam and maize represent 59 percent of sales in the savannah zone. Again, cocoa is the most important crop in terms of the value of sales in the coastal zone, accounting for 24 percent. Other crops of significant value in the coastal zone are oil palm (22%) and cassava (16%).

Overall, households in the forest zone account for more than half of the crops harvested and value of sales (55% of harvest and 58% of sales respectively).

**Table 8.6: Estimated annual value of harvested crops and value of sales by households of staple crops, unprocessed field and cash crops by ecological zone**

Crop	Annual value of harvest (Thousand GHC)					Annual value of sales (Thousand GHC)				
	Coastal	Forest	Savannah	GAMA	All	Coastal	Forest	Savannah	GAMA	All
Beans/Peas	968.30	24,950.14	105,004.08		130,922.52	690.50	15,562.58	43,213.59		59,466.67
Cashew nut	1,216.71	2,702.97	107,981.42		111,901.10	1,216.71	2,746.46	74,589.94		78,553.10
Cocoa	82,825.39	1,785,338.23	148,806.94	4,930.03	2,021,900.58	73,548.25	1,399,877.66	101,413.56	4,930.03	1,579,769.51
Coconut	6,269.30	1,535.73	70.29		7,875.32	4,109.51	534.66	23.43		4,667.60
Coffee		2,836.28	1,221.72		4,058.00		2,101.03	931.82		3,032.85
Cotton			5,251.51		5,251.51			4,720.99		4,720.99
Ginger	531.72	724.07	1,267.23		2,523.02	531.72	43.21	107.32		682.26
Groundnut/Peanut	5,415.30	21,267.98	331,946.98		358,630.27	4,497.31	14,277.20	155,203.61		173,978.13
Guinea corn/Sorghum			59,952.99		59,952.99			11,409.99		11,409.99
Kenef	41.86	18,601.49	1,767.04		20,410.38		1,853.15	716.85		2,569.99
Maize	63,270.56	591,417.95	1,052,863.03	4,045.97	1,712,078.27	22,035.91	342,626.30	229,124.51	3,856.82	597,712.22
Millet	66.67	970.63	110,208.55		111,245.86	16.67	265.94	15,645.50		15,928.11
Rice	11,086.63	42,374.15	203,633.00	1,721.80	258,815.58	9,690.26	28,185.60	118,077.18	1,721.80	157,674.83
Rubber	9,537.42	10,756.52	611.85	2,607.29	23,513.07	3,925.77	10,521.13	186.70	2,582.69	17,216.30
Sheanut			2,037.06		2,037.06			803.93		803.93
Sugar cane	6,378.86	1,742.02	139.35	6.81	8,267.05	5,606.15	1,239.37	44.39		6,889.91
Tiger nut			743.26		743.26			250.19		250.19
Tobacco			2,868.75		2,868.75			674.90		674.90
Wood lot		562.54	223.21		785.75		515.79	223.21		739.00
Other crops	11,227.67	4,602.28	37,721.45	593.77	54,145.17	10,116.75	1,382.13	13,605.52	461.65	25,566.04
Avocado pear	409.84	26,235.49	3,534.00		30,179.34	2,725.03	7,463.38	280.59		10,469.01
Bananas	3,649.06	55,845.07	18,738.13		78,232.27	574.50	32,990.56	5,764.35		39,329.41
Cassava	167,725.74	1,102,705.64	257,495.13	25,862.36	1,553,788.87	50,037.44	361,250.26	114,349.98		525,637.69
Cocoyam	3,768.42	187,370.72	16,216.97		207,356.11	256.03	37,517.50	6,948.21		44,721.74
Colanut		891.44	71.06		962.50		775.19			775.19
Garden eggs	6,796.10	35,201.01	26,522.53		68,519.64	1,351.64	18,063.64	2,263.46		21,678.74
Leafy vegetables	938.62	288,210.86	7,652.60		296,802.07	483.59	2,117.57	79.59		2,680.75
Lime/Lemon	1,566.81		16.25		1,583.06	783.41				783.41

**Table 8.6: Estimated annual value of harvested crops and value of sales by households of staple crops, unprocessed field and cash crops by ecological zone (cont'd)**

Crop	Annual value of harvest (Thousand GHC)					Annual value of sales (Thousand GHC)				
	Coastal	Forest	Savannah	GAMA	All	Coastal	Forest	Savannah	GAMA	All
Mango	136.05	5,122.65	2,971.14		8,229.83			1,113.57		1,113.57
Oil palm	67,828.05	247,093.59	10,448.97	32,155.27	365,399.07	67,034.85	106,888.43	5,678.47	35,173.83	215,090.51
Okro	9,353.76	40,573.95	76,231.54		126,159.25	7,362.06	23,050.58	16,001.99		46,414.62
Onion	3,923.60	3,780.08	2,895.44		10,599.11	1,953.76	1,829.48	2,690.52		6,473.75
Oranges/Tangerine	10,332.18	33,933.51	868.72	37,987.73	83,122.15	8,756.43	17,191.64		26,220.49	52,168.57
Pawpaw	756.94	87,439.59	4,459.74		92,656.27		81,641.75	154.64		81,796.38
Pepper	23,297.77	96,339.99	97,362.53		217,000.28	20,264.92	39,536.06	35,548.93		95,349.91
Pineapples	2,221.20	25,589.12	1,104.16		28,914.48	826.52	15,009.02			15,835.54
Plantain	11,589.26	866,323.28	29,970.93	265.70	908,149.16	4,339.11	316,050.33	16,322.97		336,712.41
Potatoes/Sweet potatoes	479.85	350.58	9,217.46		10,047.89	445.84		3,593.81		4,039.65
Tomatoes	26,700.50	139,980.80	208,310.78		374,992.08	610.70	108,725.11	26,464.21		135,800.02
Yam	17,758.03	250,541.71	1,347,621.30		1,615,921.04	821.51	76,905.32	888,414.43		966,141.26
Other fruits		1,402.32	1,305.67		2,707.99		220.78	5,477.60		5,698.38
Other vegetables		38,742.04	475.09		39,217.13	395.64	24,997.62			25,393.26
<b>Total</b>	<b>558,068.16</b>	<b>6,071,709.55</b>	<b>4,297,809.83</b>	<b>118,530.67</b>	<b>11,018,465.10</b>	<b>305,008.48</b>	<b>3,093,956.42</b>	<b>1,902,114.44</b>	<b>75,330.9</b>	<b>5,376,410.3</b>

### 8.3.2 Roots, fruits, vegetables and other crops

Of all the crops presented in Table 8.7, cassava, plantain, yam and pepper are harvested by the largest numbers of households in Ghana. About 1.8 million households harvest cassava, 1.2 million plantains, a little over one million yams, and a little less than a million harvested pepper.

In the coastal zone, 28 percent of the households harvesting crops harvested cassava, while 20 percent in the forest zone harvested the same crop. In Accra (GAMA), cassava was harvested by 41 percent of households who reported harvesting crops.

**Table 8.7: Estimated number of households harvesting various fruits, root crops and vegetables in the previous 12 months by ecological zone**

Crop	Ecological Zone				
	Coastal	Forest	Savannah	GAMA	Ghana
Avocado pear	6,681	215,720	13,700	0	236,101
Bananas	15,562	286,534	39,905	341	342,342
Cassava	146,469	1,353,578	335,775	3,458	1,839,280
Cocoyam	18,444	646,857	49,041	0	714,342
Cola nut	0	3,960	1,261	0	5,221
Garden eggs	33,0859	214,364	68,605	0	317,828
Leafy vegetables	12,199	229,751	105,430	0	347,380
Lime/Lemon	2,009	372	1,875	0	4,256
Mango	2,047	75,702	36,279	0	114,028
Oil palm	38,372	447,244	32,894	1,590	520,100
Okro	26,834	248,990	412,207	3,071	691,102
Onion	2,009	35,903	38,001	0	75,913
Oranges/Tangerine	18,398	187,182	13,565	984	220,129
Pawpaw	12,777	226,172	56,072	0	295,021
Pepper	60,806	544,658	379,122	0	984,586
Pineapples	16,752	158,318	24,844	0	199,914
Plantain	46,991	1,086,579	69,332	1,325	1,204,227
Potatoes/Sweet potato	2,148	4,830	35,474	0	42,452
Tomatoes	32,944	265,469	220,030	0	518,443
Yam	18,488	544,447	465,371	0	1,028,336
Other fruits	0	17,274	5,090	341	22,705
Other vegetables	998	19,221	21,837	0	42,056

Table 8.8 presents data on the estimated number of households harvesting crops, the percentage harvesting and selling crops in the two weeks prior to the interview and the estimated annual value of harvest and sales. The data reveal that households growing cassava, leafy vegetables and plantain harvested some of their produce in the two-weeks prior to the interview. Of all the households that harvested root crops, fruits and vegetables, about a tenth (11.1%) sold their produce in the last two weeks. The crops that a large percentage of households sold after harvesting are lime/lemon (47.2%), plantain (21.6%) and banana (21.4%).

The estimated annual value of all harvest is GH¢ 6.1 billion, and the major crops in terms of harvest value are yam (GH¢1.6 billion), cassava (GH¢1.6 billion) and plantain (GH¢0.13 billion). Other important crops in terms of harvest value are tomatoes, oil palm and leafy vegetables. The total estimated sales value of crops harvested is about GH¢2.6 billion; sales of harvest of individual crops is highest for yam (GH¢0.97 billion) followed by cassava (GH¢0.53 billion) and plantain (GH¢0.34 billion).

**Table 8.8: Estimated number of households harvesting various fruits, root crops and vegetables, percentage harvesting and selling in the previous two weeks and estimated annual value of harvest and sales**

Crop	Estimated number of households harvesting crop in last 12 months	Percentage of households		Estimated annual value ('000 GH¢)	
		Harvesting in last 2 weeks	Selling produce in last 2 weeks	Total harvest	Sales
Avocado pear	236,101	36.8	8.6	30,180	10,470
Bananas	342,342	48.6	21.4	78,230	39,330
Cassava	1,839,280	70.0	13.6	1,553,790	525,640
Cocoyam	714,342	54.2	6.5	207,360	44,720
Colanut	5,221	37.5	11.9	960	780
Garden eggs	317,828	53.3	8.8	68,520	21,680
Leafy vegetables	347,380	68.9	1.1	296,800	2,680
Lime/Lemon	4,256	61.9	47.2	1,580	780
Mango	114,028	26.3	1.2	8,230	1,110
Oil palm	520,100	60.2	17.4	365,400	215,090
Okro	691,102	38.8	6.6	126,160	46,410
Onion	75,913	24.4	7.1	10,600	6,470
Oranges/Tangerine	220,129	43.1	9.3	83,120	52,110
Pawpaw	295,021	42.1	1.7	92,660	81,800
Pepper	984,586	49.8	7.1	21,700	95,350
Pineapples	199,914	43.2	11.9	2,891	15,840
Plantain	1,204,228	71.4	21.6	908,150	336,710
Potatoes/Sweet potato	42,452	14.0	2.2	10,050	4,040
Tomatoes	518,443	39.2	9.7	37,499	135,800
Yam	1,028,336	42.1	8.3	1,615,920	966,140
Other fruits	22,705	26.9	8.7	2,710	5,700
Other vegetables	42,056	49.0	6.3	39,220	25,390
All crops	9,765,763	54.2	11.1	6,120,540	2,634,100

Note: Households could be engaged in multiple activities.

Table 8.9 shows the estimated value of harvest and of sales in the two weeks preceding the survey by ecological zone. The forest zone had the largest value of both harvest and sales of the category of crops in the table in the 12 months preceding the survey. More than half (57.7%) of the total annual harvest value was recorded in the forest zone while a little less than half (48.3%) was realized in terms of sales value in the same zone. Of the crops listed, oil palm (GH¢40 million), orange/tangerine (GH¢38 million), cassava (GH¢26 million) and plantain (GH¢0.27 million) are the only crops harvested in Accra (GAMA), with about 59 percent of their total harvest value sold in the year.

**Table 8.9: Estimated value of harvest and sales of root crops, fruits and vegetables by ecological zone**

Crop	Estimated annual value of harvest (Million GHC)					Estimated annual value of sales (Million GHC)				
	Coastal	Forest	Savannah	GAMA	Ghana	Coastal	Forest	Savannah	GAMA	Ghana
Avocado pear	0.41	26.24	3.53	0.00	30.18	2.73	7.46	0.28	0.00	10.47
Bananas	3.65	55.85	18.74	0.00	78.23	0.57	32.99	5.76	0.00	39.33
Cassava	167.73	1,102.71	257.50	25.86	1,553.79	50.04	361.25	114.35	0.00	525.64
Cocoyam	3.77	187.37	16.22	0.00	207.36	0.26	37.52	6.95	0.00	44.72
Colanut	0.00	0.89	0.07	0.00	0.96	0.00	0.78	0.00	0.00	0.78
Garden eggs	6.80	35.20	26.52	0.00	68.52	1.35	18.06	2.26	0.00	21.68
Leafy vegetables	0.94	288.21	7.65	0.00	296.80	0.48	2.12	0.08	0.00	2.68
Lime/Lemon	1.57	0.00	0.02	0.00	1.58	0.78	0.00	0.00	0.00	0.78
Mango	0.14	5.12	2.97	0.00	8.23	0.00	0.00	1.11	0.00	1.11
Oil palm	67.83	247.09	10.45	40.03	365.40	67.03	106.89	5.68	35.49	215.09
Okro	9.35	40.57	76.23	0.00	126.16	7.36	23.05	16.00	0.00	46.41
Onion	3.92	3.78	2.90	0.00	10.60	1.95	1.83	2.69	0.00	6.47
Oranges/Tangerine	10.33	33.93	0.87	37.99	83.12	8.76	17.19	0.00	26.22	52.17
Pawpaw	0.76	87.44	4.46	0.00	92.66	0.00	81.64	0.15	0.00	81.80
Pepper	23.30	96.34	97.36	0.00	217.00	20.26	39.54	35.55	0.00	95.35
Pineapples	2.22	25.59	1.10	0.00	28.91	0.83	15.01	0.00	0.00	15.84
Plantain	11.59	866.32	29.97	0.27	908.15	4.34	316.05	16.32	0.00	336.71
Potatoes/Sweet potato	0.48	0.35	9.22	0.00	10.05	0.45	0.00	3.59	0.00	4.04
Tomatoes	26.70	139.98	208.31	0.00	374.99	0.61	108.73	26.46	0.00	135.80
Yam	17.76	250.54	1,347.62	0.00	1,615.92	0.82	76.91	888.41	0.00	966.14
Other fruits	0.00	1.40	1.31	0.00	2.71	0.00	0.22	5.48	0.00	5.70
Other vegetables	0.00	38.74	0.48	0.00	39.22	0.40	25.00	0.00	0.00	25.39
All crops	359.23	3,533.67	2,123.49	104.14	6,120.54	169.02	1,272.22	1,131.15	61.71	2,634.10

**Table 8.9: Estimated value of harvest and sales of root crops, fruits and vegetables by ecological zone (Cont'd)**

Crop	Estimated annual value of harvest (Million GHC)					Estimated annual of sales (Million GHC)				
	Coastal	Forest	Savannah	GAMA	Ghana	Coastal	Forest	Savannah	GAMA	Ghana
Avocado pear	0.02	1.01	0.14	0.00	1.16	0.10	0.29	0.01	0.00	0.40
Bananas	0.14	2.15	0.72	0.00	3.01	0.02	1.27	0.22	0.00	1.51
Cassava	6.62	42.24	9.90	0.99	59.76	1.96	13.86	4.40	0.00	20.22
Cocoyam	0.15	7.20	0.62	0.00	7.98	0.01	1.44	0.27	0.00	1.72
Colanut	0.00	0.03	0.00	0.00	0.04	0.00	0.03	0.00	0.00	0.03
Garden eggs	0.26	1.35	1.02	0.00	2.64	0.05	0.69	0.09	0.00	0.83
Leafy vegetables	0.04	11.09	0.29	0.00	11.42	0.02	0.08	0.00	0.00	0.10
Lime/Lemon	0.06	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.00	0.03
Mango	0.01	0.20	0.11	0.00	0.32	0.00	0.00	0.04	0.00	0.04
Oil palm	2.95	9.46	0.40	1.24	14.05	2.60	4.10	0.22	1.35	8.27
Okro	0.36	1.56	2.93	0.00	4.85	0.28	0.89	0.62	0.00	1.79
Onion	0.15	0.15	0.11	0.00	0.41	0.08	0.07	0.10	0.00	0.25
Oranges/Tangerine	0.40	1.31	0.03	1.46	3.20	0.34	0.66	0.00	1.01	2.01
Pawpaw	0.03	3.36	0.17	0.00	3.56	0.00	3.14	0.01	0.00	3.15
Pepper	0.90	3.70	3.74	0.00	8.35	0.78	1.52	1.37	0.00	3.67
Pineapples	0.09	0.98	0.04	0.00	1.11	0.03	0.58	0.00	0.00	0.61
Plantain	0.71	33.06	1.15	0.01	34.93	0.29	12.04	0.63	0.00	12.95
Potatoes/Sweet potato	0.02	0.01	0.35	0.00	0.39	0.02	0.00	0.14	0.00	0.16
Tomatoes	1.03	5.38	8.01	0.00	14.42	0.02	4.18	1.02	0.00	5.22
Yam	0.70	9.62	51.83	0.00	62.15	0.03	2.96	34.17	0.00	37.16
Other fruits	0.00	0.05	0.05	0.00	0.10	0.00	0.01	0.21	0.00	0.22
Other vegetables	0.00	1.49	0.02	0.00	1.51	0.02	0.96	0.00	0.00	0.98
All crops	14.61	135.42	81.67	3.70	235.41	6.68	48.76	43.51	2.36	101.31

### 8.3 Other agricultural income

Besides grains, vegetables, roots and cash crops, households also derived income from the sale of other agricultural produce and which are presented in Table 8.10. The data show that a large number of households derive income from the sale of fruits and berries followed by the sale of snails and hunting than for the other items listed. However, the product that derived the highest sales value was eggs, accounting for 75 percent of the total sales value. Almost all the eggs were sold in the urban areas (99%). Game hunting is second in terms of value, accounting for 12 percent of the total sales, with the bigger share of sales being derived in the rural areas as expected.

**Table 8.10: Households selling various types of agricultural produce and estimated value of sales**

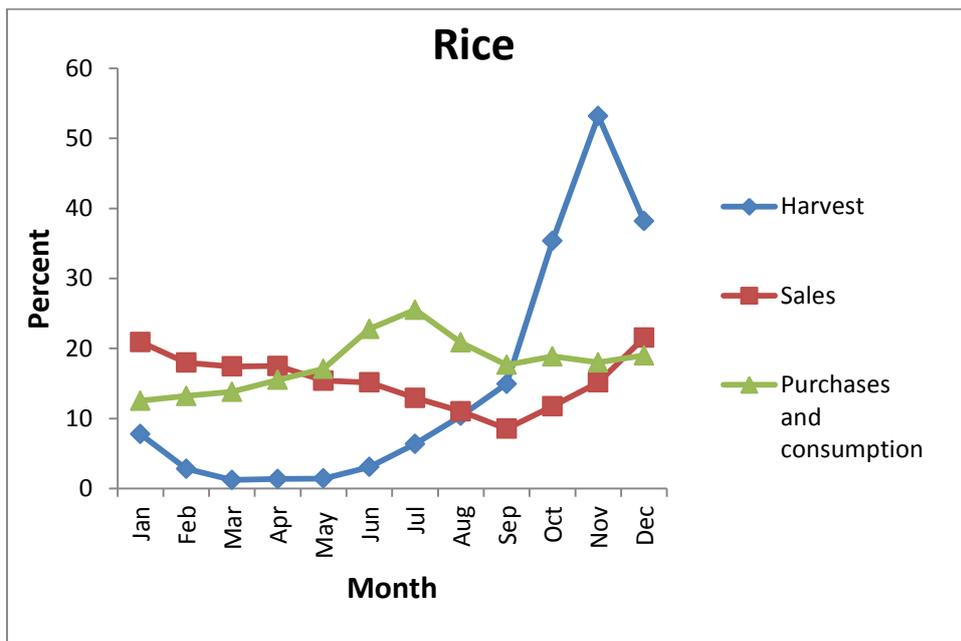
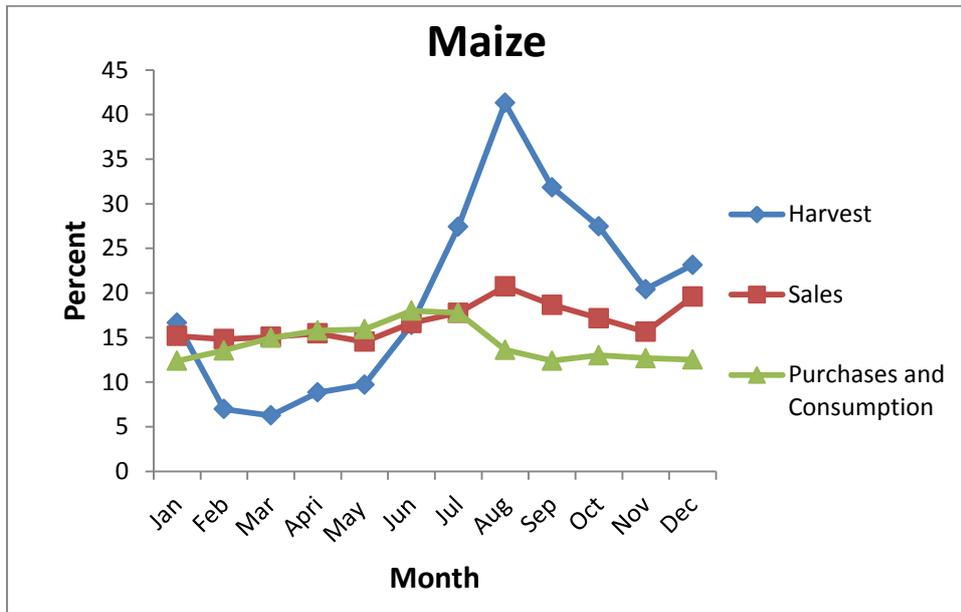
Source of sale	Number of households			Annual value of sales (Million GHC)		
	Urban	Rural	Ghana	Urban	Rural	Ghana
Hunting (game)	10,859	96,759	107,618	1.40	25.74	27.14
Honey	4,147	19,345	23,492	0.90	2.16	3.05
Fruits and berries	42,773	150,588	193,361	3.98	11.79	15.77
Milk from cow	1,689	8,700	10,388	0.51	0.40	0.91
Other dairy products	1,109	2,562	3,671	0.06	0.10	0.16
Eggs	20,242	48,350	68,592	172.85	1.32	174.17
Mushroom	10,539	62,802	73,340	0.25	2.36	2.60
Snail	13,296	124,491	137,787	0.25	7.22	7.47
Total				180.18	51.08	231.27

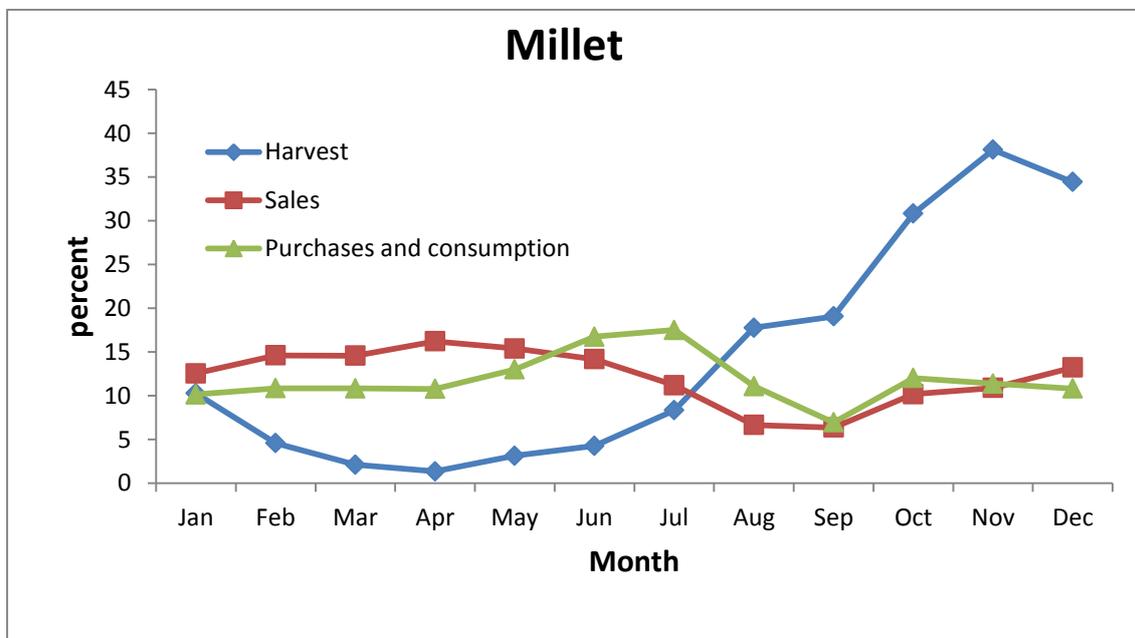
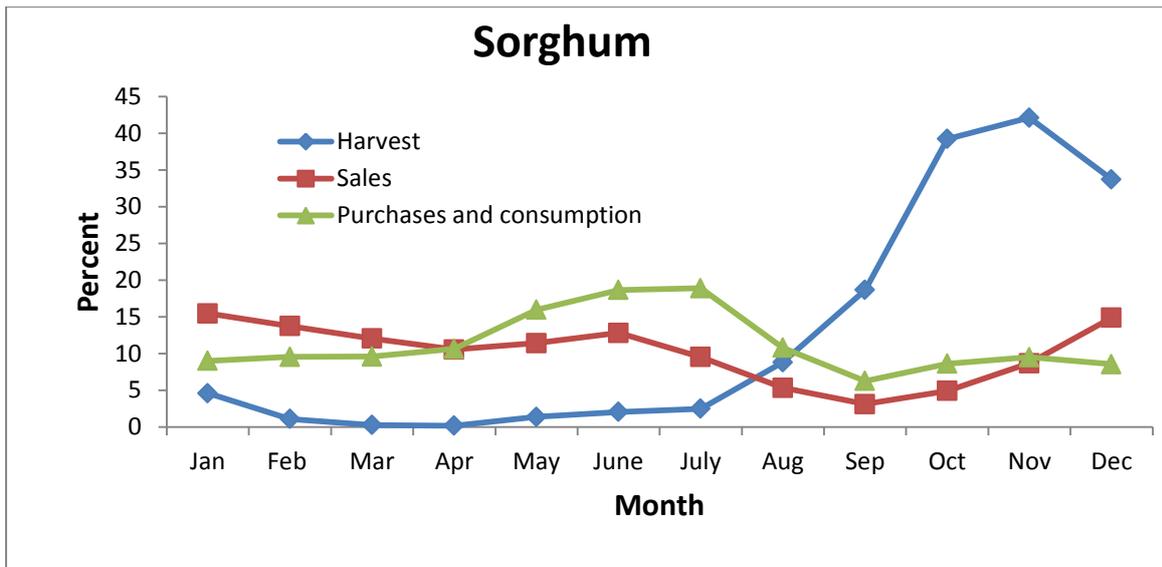
### 8.4 Seasonal patterns

Agricultural households that cultivated any of the eight main crops (cassava, yam, cocoyam, plantain, maize, rice, sorghum and millet) during the 12 months prior to the survey were asked about the seasonal characteristics of the crops grown. They were asked to specify the main months of the year when each crop was harvested, sold or bought for home consumption.

Figure 8.1 shows the proportion of households and the seasonal patterns of harvesting, selling, buying and consumption of cereals (maize, rice, millet and sorghum). Cereal crops show marked variations in the pattern of harvesting. The majority of maize-growing households harvest their crops in July, August and September; rice, millet and sorghum are harvested mainly during the period of October to December.

**Figure 8.1: Seasonal patterns of households' harvest, sales, purchases and consumption of cereals**

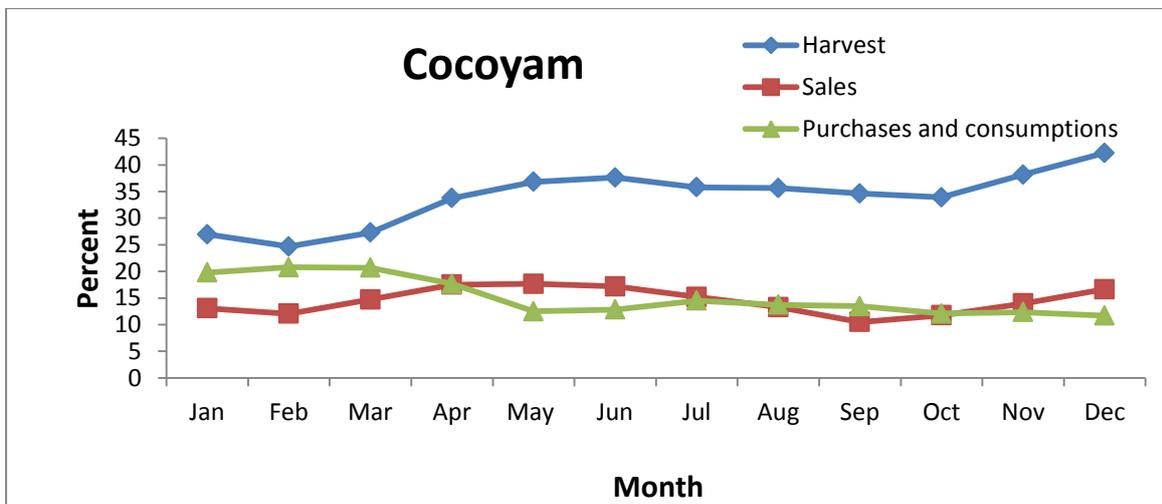
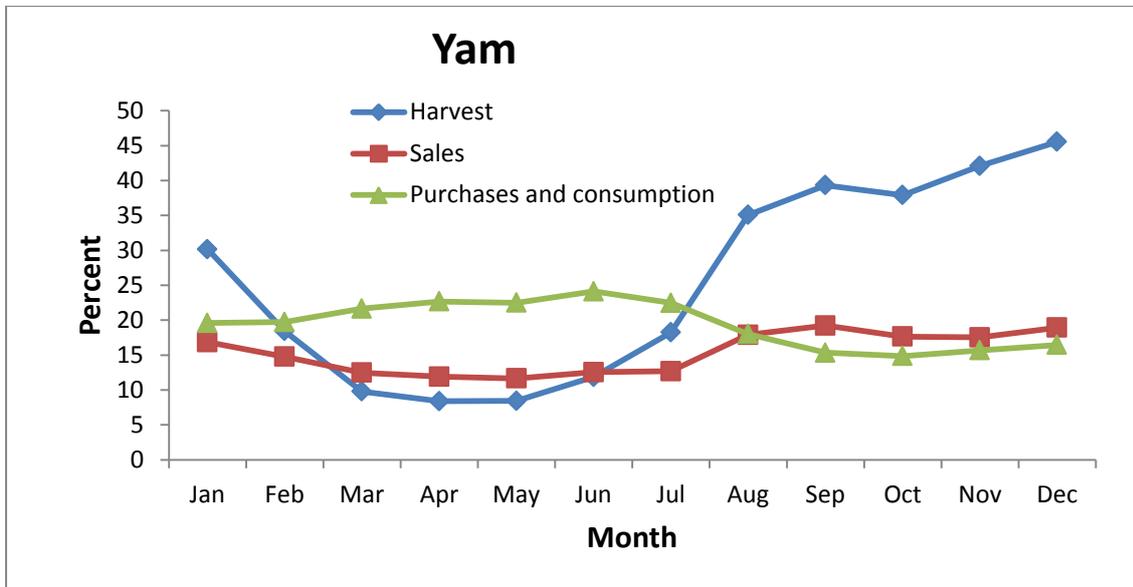
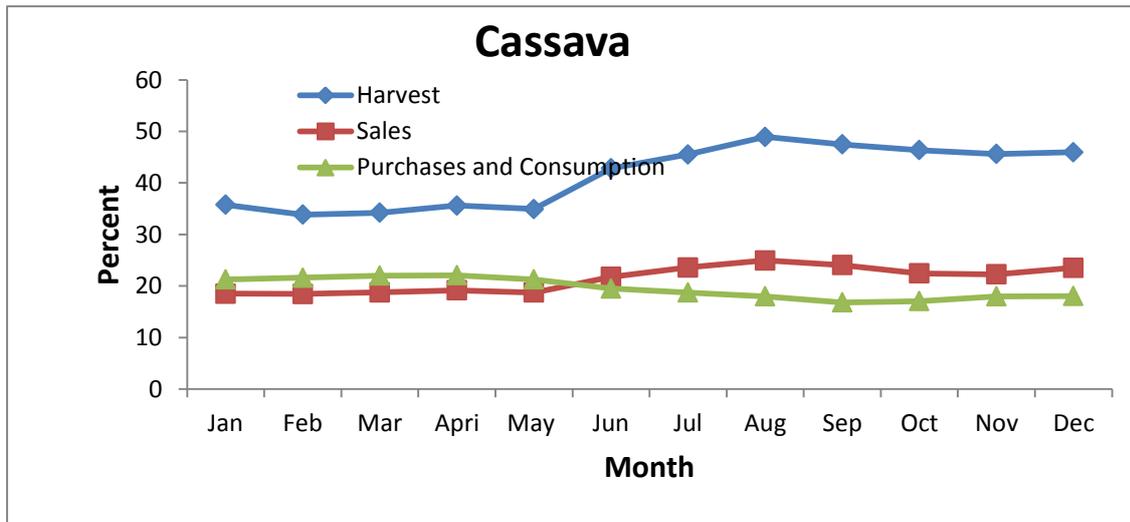


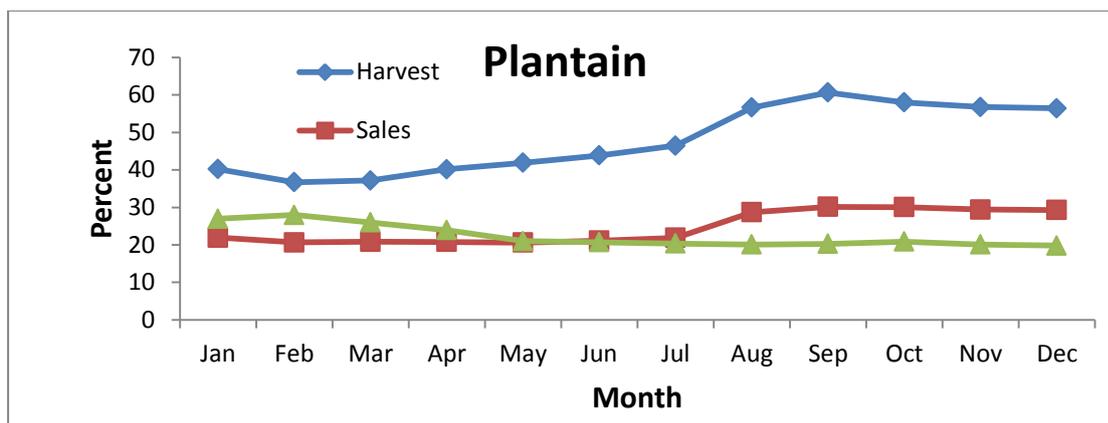


The sale of maize by households is spread evenly throughout the year, with two peaks in August and December. Rice, millet and sorghum exhibit almost the same sales pattern, with high sales in January and December and low sales in September.

In the case of the root crops (Figure 8.2), cassava is the crop with the most consistent pattern of harvesting throughout the year but has a peak season in August. Yam displays quite a strong seasonal pattern in harvesting, with most households harvesting their yams during the second half of the year starting from August; sales are also higher during this period. Like cassava, the percentage of cocoyam harvested exceeds percentage sold throughout the year. Purchases and consumption of cocoyam is about 20 percent at the beginning of the year, but rises slightly in the first quarter and falls thereafter to between 12-14 percent in the second, third and fourth quarters of the year. Plantain shows a much more even pattern of harvesting, although this builds up to a peak in September and October, and sales follow almost the same pattern as harvesting throughout the year.

**Figure 8.2: Seasonal patterns of households harvest, sales, purchases and consumption of root crops and plantain**





## 8.5 Agricultural Inputs

Table 8.11 provides a summary of the cost of producing crops and raising livestock. Out of a total of about 3.4 million households that were engaged in agricultural activities in the 12 months preceding the survey, about 1.9 million purchased herbicides for use on their farms and one million purchased insecticides for their farming activities. About 1.6 million hired labour to work on the farms and 1.4 million households purchased locally made hand tools. Out of the total amount of GH¢1,833.16 million spent on different types of agricultural inputs, as much as 80 percent or about GH¢1,500 million was spent on crop inputs, while only 10 percent and 9 percent were spent on livestock and fish inputs respectively.

Of the total expenditure incurred on crop inputs, about 31 percent was spent on hiring farm labourers while 16.3 percent was spent on inorganic fertilizers. An insignificant proportion (0.2%) of the expenditure was on the purchase of imported hand tools. With regard to the expenditure on livestock, about 43 percent was spent on animal feeds, including salt.

The table also shows that about 85 percent of the households purchase their agricultural inputs from private dealers. Similar to the case of crop inputs, more than 90 percent of livestock inputs are purchased from private dealers. In respect of fish inputs, more than two thirds (71%) of the expenditure incurred was on fuel and lubricants with more than 90 percent of it purchased from private dealers.

About 52 percent of households reported that inorganic fertilizers are difficult to come by while 8.3 and 9.6 percent of households respectively, reported non-availability of farm labour and animals to rent for use on their farms.

**Table 8.11: Expenditure on crops, livestock and fisheries inputs and their source of purchase**

Input	Estimated number of households purchasing in past 12 months	Amount spent per year (cash and kind) (million GHC)	Percent of amount spent on inputs per year	Percent obtaining item from:					Percent reporting that item is sometimes unavailable
				Private sector	Cooperative	MOFA	NGOs	Other	
<b>Crops</b>									
Fertilizer (Inorganic)	991,210	239.44	16.3	84.8	2.0	11.4	1.5	0.4	51.9
Fertilizer (Organic)	419,535	111.38	7.6	86.8	3.1	9.4	0.3	0.5	45.5
Insecticides	1,012,713	122.66	8.3	89.9	1.7	7.1	0.8	0.5	49.1
Herbicides	1,905,565	190.42	12.9	93.9	0.9	4.0	0.6	0.7	44.8
Storage of crops	115,959	7.76	0.5	95.2	0.6	3.4	0.0	0.8	27.1
Purchased seed, seedlings, etc.	554,279	42.76	2.9	92.0	1.5	5.2	0.1	1.2	33.1
Irrigation	24,835	12.55	0.9	88.5	4.4	6.3	0.0	0.9	26.9
Bags, containers, string	664,977	24.46	1.7	98.4	0.3	0.9	0.1	0.4	41.9
Petrol/Diesel/Oil	371,704	67.21	4.6	99.1	0.2	0.2	0.1	0.4	40.4
Spare parts	75,433	22.65	1.5	98.3	1.1	0.6	0.0	0.0	44.9
Hired labour	1,578,938	455.50	30.9	97.3	0.5	0.2	0.0	2.0	8.3
Transport of crops	516,201	60.14	4.1	96.5	0.2	0.2	0.1	2.9	12.6
Renting animals	61,122	10.82	0.7	99.6	0.0	0.0	0.0	0.4	9.6
Renting equipment	389,296	59.90	4.1	98.7	0.3	0.5	0.0	0.6	21.2
Hand tools local	1,415,016	35.40	2.4	98.1	0.5	0.3	0.0	1.0	43.5
Hand tools imported	99,286	2.37	0.2	98.7	0.4	0.8	0.0	0.2	46.4
Repairs/Maintenance	107,538	4.42	0.3	98.7	0.0	0.4	0.0	1.0	35.6
Other crop costs	13,947	2.02	0.1	97.5	2.5	0.0	0.0	0.0	9.6
<b>Total</b>		<b>1,471.86</b>	<b>100.0</b>						

**Table 8.11: Expenditure on crops, livestock and fisheries inputs and their source of purchase (Cont'd)**

Input	Estimated number of households purchasing in past 12 months	Amount spent per year (cash and kind) (million GHC)	Percent of amount spent on inputs per year	Percent obtaining item from:					Percent reporting that item is sometimes unavailable
				Private sector	Cooperative	MOFA	NGOs	Other	
<b><u>Livestock</u></b>									
Animal feed including salt	286,618	83.03	43.4	93.0	0.6	2.5	0.0	3.9	29.3
Vet. services incl. vacc. and medicine	390,898	28.82	15.1	65.4	1.0	32.6	0.5	0.5	52.5
Paid labour for herding	61,956	35.95	18.8	88.7	0.0	0.7	0.0	10.6	19.5
Maintenance of pens, stables/hencoops	119,607	7.87	4.1	94.9	1.2	0.0	0.0	3.8	13.1
Transport of animal feed	32,309	3.38	1.8	93.8	0.0	0.0	0.0	6.2	19.7
Commission on sale of animals	24,045	0.62	0.3	96.4	0.0	0.0	0.0	3.6	
Other livestock costs	20,248	0.97	0.5	96.8	0.0	1.8	0.0	1.4	32.6
Compensation for damage caused by animals	46,964	4.93	2.6	91.8	0.5	0.0	0.0	7.8	
Hired labour	24,829	25.88	13.5	98.7	0.0	0.0	0.0	1.3	15.3
<b>Total</b>		<b>191.46</b>	<b>100.0</b>						
<b><u>Fisheries</u></b>									
Fuel lubricants	17,972	122.12	71.9	93.3	2.7	1.2	0.0	2.9	63.5
Hired labour	9,031	10.8	6.4	84.7	0.0	0.0	0.0	15.3	17.8
Spare parts	11,972	8.79	5.2	95.0	0.0	0.5	0.0	4.5	63.7
Repairs and maintenance	28,074	17.67	10.4	91.6	3.1	0.0	0.0	5.3	47.2
Hiring of equipment	2,993	3.43	2.0	95.0	0.0	0.0	5.0	0.0	28.3
Other Input	14,601	7.03	4.1	98.6	0.0	0.0	0.0	1.4	60.3
<b>Total</b>		<b>169.84</b>	<b>100.0</b>						
<b>Grand Total</b>		<b>1,833.16</b>							

## 8.6 Home Processing of Agricultural Produce

Information collected on the estimated number of households processing specific agricultural produce is presented in Table 8.12. The data which was collected from all households, both agricultural and non-agricultural, shows that 42.3 percent of households are involved in some form of food processing (29.8% in urban areas and 57.9% in rural areas).

The results also clearly show women's responsibility for processing of agricultural produce, with women's share being over 80 percent in every locality and close to 90 percent in urban areas.

**Table 8.12: Households processing agricultural products for sale or for use by the household by locality**

Type of locality	Percentage	Estimated number	Women's share of responsibility for processing
<b>Urban</b>	29.8	1,089,270	88.1
Accra (GAMA)	13.2	121,096	89.9
Other Urban	35.4	968,175	87.8
<b>Rural</b>	57.9	1,706,445	82.8
Rural Coastal	53.4	208,768	83.7
Rural Forest	48.2	812,328	80.6
Rural Savannah	78.8	685,348	85.1
<b>All localities</b>	42.3	2,795,715	84.9

Note: The base for computing percentages is all households in the survey, and that of the women's share is all persons engaged in processing activities

The main food item processed by households is maize with about 1.5 million households involved in processing it into flour, and 13 million processing it into corn dough. Other food processing activities include the processing of cassava into flour, dough, chips and gari; the processing of nuts and pulses into cooking oil; the processing of other grains (including sorghum, millet, guinea corn) into flour; processing of groundnut into paste; husking and polishing of rice and millet; processing of meat and fish and the processing of grains into home-brewed drinks. Virtually every household that reported that they had engaged in a processing activity during the previous 12 months had been involved in some processing activity during the two weeks prior to the interview (Table 8.13).

Total annual labour costs (in cash or in kind including the time spent on the processing activities by the household members themselves) amounts to GH¢368.56 million, while other costs, mainly inputs, totaled GH¢408.72 million (Table 8.13). The costs incurred are mainly from raw materials purchased.

Total annual sales of home-processed agricultural items amount to about GH¢846.57 million. More than two-thirds of households involved in fish processing (69.5%) and gari making (66.4%) sell some amount of their processed products. Also, 44.1 percent of households brewing pito sell it to the public.

Very significant amounts of sales are realized from the sale of processed fish (GH¢327.33 million) and processed meat (GH¢243.30 million). Proceeds from the sale of other processed products are below one hundred million Ghana Cedis (Table 8.13).

**Table 8.13: Estimated number of households processing various agricultural items, value of labour and other inputs, percentage selling items and estimated annual value of sales**

Item	Estimated number of households processing item in the last 12 months	Estimated annual value of labour costs (million GHC)	Estimated annual value of other costs (million GHC)	Percentage of households selling item in the last 2 weeks	Estimated annual value of sales (million GHC)
Cassava flour	365,985	38.36	10.54	2.2	7.92
Cassava chips	74,387	3.12	1.72	34.0	15.20
Cooking oils	96,631	10.94	4.05	39.8	36.34
Flour from other grains	170,908	12.79	4.22	0.6	5.74
Gari	63,890	7.60	2.61	66.4	30.10
Groundnut paste	177,784	5.16	2.21	1.7	19.96
Home-brewed drink	20,625	1.24	1.94	44.1	4.82
Millet rice	79,755	2.85	1.19	4.4	2.99
Maize flour	1,461,855	132.44	69.70	0.7	5.70
Processed fish	85,024	33.50	43.21	69.5	327.33
Processed meat	20,443	13.57	223.82	14.5	243.30
Shea butter	57,978	1.38	1.02	21.1	4.37
Cassava dough	393,193	28.33	6.18	14.5	46.56
Corn dough	1,285,365	65.53	26.16	3.0	58.22
Other	106,597	11.74	10.14	16.4	38.01
Total		368.56	408.72		846.57

## 8.7 Home consumption of own produce

For many households, particularly in the rural areas, a large proportion of the food consumed comes from their own farms. The quantities of home produced food that were consumed were estimated by the respondents, who were also asked to state how much they could sell one unit of each of the items for. The prices stated, which were regarded as farm-gate prices, were used to compute the value of the household's consumption of own produce.

On the average, a household in Ghana consumes GH¢4,702.47 worth of its own produced food items and GH¢201.28 of own produced alcoholic drinks. This results in a per capita consumption of GH¢1,125.05 for own produced food and GH¢42.56 for alcoholic drinks. Of the own produced food consumed by an average household, the value of roots, tubers and plantain constitute about half (49.5%) compared to non-alcoholic drinks (0.1%). The other food items which feature prominently in the consumption of own produce are grains and flours (18.4%), vegetables (10.9%). Meat, poultry and fish account for about 9.6 percent (Table 8.14).

**Table 8.14: Value of average annual household and per capita consumption of own produce and estimate of total annual value by food groups**

Group	Average annual household consumption (GHC)	Average annual per capita consumption (GHC)	Estimated value of annual consumption (Million GHC)	Percentage distribution of annual consumption
<b><i>Food</i></b>	<b>4,702.47</b>	<b>1,125.05</b>	<b>6,519.04</b>	<b>99.9</b>
Grains and Flours	629.09	136.83	1,198.26	18.4
Roots, Tubers and Plantain	1,488.48	382.03	3,232.31	49.5
Pulse, Nuts and Seed/Oil	447.12	113.55	543.42	8.3
Fruits	281.11	82.24	190.19	2.9
Vegetables	418.84	102.52	714.30	10.9
Meat, Poultry and Fish	744.60	162.57	629.26	9.6
Other Livestock Products	242.22	40.94	1.78	0.0
Non-Alcoholic Drinks	451.02	104.38	9.52	0.1
<b><i>Alcoholic Drinks</i></b>	<b>201.28</b>	<b>42.56</b>	<b>6.18</b>	<b>0.1</b>
<b><i>All Home Consumption</i></b>	<b>4,903.75</b>	<b>1,167.61</b>	<b>6,525.21</b>	<b>100.0</b>

As would be expected, the consumption of own produce takes place mostly in rural households with an average value of GH¢5,004.56, compared to GH¢3,713.62 for urban households (Table 8.15). The estimated annual consumption of roots and tubers and plantain in the rural areas (GH¢2,608.46) is about four times that of urban areas (GH¢623.84). The average annual household consumption of alcohol, is however, higher in urban areas (GH¢332.31) compared to rural areas (GH¢38.65).

The distribution of the value of home produced food items consumed by households within the ecological zones is shown in Table 8.16. The average annual value of household consumption of home produced food is highest in the rural savannah zone (GH¢6,321.32) followed by coastal (GH¢4,620.81) and forest (GH¢3,154.82) zones. The trend is similar for the consumption of home produced alcoholic drinks. With the exception of Accra (GAMA), the value of average annual consumption of roots account for the highest proportion of the household consumption. In the forest areas, it accounts for 39.6 percent, and 37.1% in the forest and 29.3 percent in the savannah zones (Table 8.16).

Table 8.17 shows the consumption of own produce across food groups by region, total annual value of consumption, average household consumption and average per capita consumption. The average regional consumption of meat, poultry and fish product is about 9.64 percent and is highest for the Northern region (18%) followed by Upper East (14%) and Greater Accra (13%).

**Table 8.15: Value of average annual household and per capita consumption of home produced food and estimate of total annual value by food groups and locality**

Group	Urban				Rural			
	Average annual household consumption (GHC)	Average annual per capita consumption (GHC)	Estimated value of annual consumption (Million GHC)	Percentage distribution of annual consumption	Average annual household consumption (GHC)	Average annual per capita consumption (GHC)	Estimated value of annual consumption (Million GHC)	Percentage distribution of annual consumption
<b>Food</b>	<b>3,713.62</b>	<b>989.05</b>	<b>1,246.38</b>	<b>99.9</b>	<b>5,004.56</b>	<b>1,161.43</b>	<b>5,272.65</b>	<b>99.9</b>
Grains and Flours	630.28	136.11	311.87	25.0	628.67	137.08	886.40	16.8
Roots, Tubers and Plantain	1,229.43	335.72	623.84	50.0	1,567.47	396.14	2,608.46	49.4
Pulse, Nuts and Seed/Oil	414.50	100.61	106.08	8.5	455.83	117.00	437.34	8.3
Fruits	207.15	74.60	31.88	2.6	302.88	84.49	158.31	3.0
Vegetables	186.98	53.99	60.80	4.9	473.46	113.95	653.50	12.4
Meat, Poultry and Fish	698.05	188.73	110.09	8.8	755.28	156.57	519.17	9.8
Other Livestock Products	111.48	11.35	0.04	0.0	249.69	42.63	1.74	0.0
Non-Alcoholic Drinks	235.76	87.93	1.78	0.1	571.29	113.56	7.73	0.1
<b>Alcoholic Drinks</b>	<b>332.31</b>	<b>78.54</b>	<b>1.00</b>	<b>0.1</b>	<b>187.03</b>	<b>38.65</b>	<b>5.18</b>	<b>0.1</b>
<b>All Home Consumption</b>	<b>4,045.94</b>	<b>1,067.59</b>	<b>1,247.38</b>	<b>100.0</b>	<b>5,191.59</b>	<b>1,200.08</b>	<b>5,277.83</b>	<b>100.0</b>

**Table 8.16: Value of average annual household and per capita consumption of home produced food and estimate of total annual value by food group and ecological zone**

Group	Average annual household consumption (GHC)					Average annual per capita consumption (GHC)				
	Coastal	Forest	Savannah	GAMA	All	Coastal	Forest	Savannah	GAMA	All
<b>Food</b>	<b>4,620.81</b>	<b>3,154.82</b>	<b>6,321.32</b>	<b>3,080.98</b>	<b>4,702.47</b>	<b>1,638.88</b>	<b>813.74</b>	<b>1,266.97</b>	<b>1,173.07</b>	<b>1,125.05</b>
Grains and Flours	450.02	411.36	856.31	994.27	629.09	129.16	93.93	173.23	225.03	136.83
Roots, Tubers and Plantain	1,755.06	1,312.01	1,926.38	460.93	1,488.48	650.66	359.79	381.24	191.05	382.03
Pulse, Nuts and Seed/Oil	731.02	254.73	670.49	325.52	447.12	385.99	61.77	140.12	123.94	113.55
Fruits	569.09	257.49	290.65	207.62	281.11	188.95	75.60	75.03	75.28	82.24
Vegetables	338.91	322.76	602.73	186.42	418.84	101.39	89.38	125.90	77.97	102.52
Meat, Poultry and Fish	461.99	456.30	1,138.50	670.45	744.60	137.93	113.24	210.98	391.88	162.57
Other Livestock Products	314.71	0.00	235.91	0.00	242.22	44.79	0.00	40.60	0.00	40.94
Non-Alcoholic Drinks	0.00	140.16	600.36	235.76	451.02	0.00	20.02	119.87	87.93	104.38
<b>Alcoholic Drinks</b>	<b>157.48</b>	<b>146.37</b>	<b>257.62</b>	<b>219.00</b>	<b>201.28</b>	<b>133.45</b>	<b>35.46</b>	<b>43.99</b>	<b>43.80</b>	<b>42.56</b>
<b>All Home Consumption</b>	<b>4,778.29</b>	<b>3,301.19</b>	<b>6,578.94</b>	<b>3,299.98</b>	<b>4,903.75</b>	<b>1,772.32</b>	<b>849.19</b>	<b>1,310.96</b>	<b>1,216.87</b>	<b>1,167.61</b>

(Cont'd)

Group	Estimated value of annual consumption (Million GHC)					Percentage distribution of annual consumption				
	Coastal	Forest	Savannah	GAMA	All	Coastal	Forest	Savannah	GAMA	All
<b>Food</b>	463.33	3,042.15	2,871.94	141.37	6,519.04	99.97	99.93	99.87	99.95	99.91
Grains and Flours	85.79	339.42	684.92	88.07	1,198.26	18.51	11.15	23.82	62.26	18.36
Roots, Tubers and Plantain	240.97	1,914.90	1,066.78	9.66	3,232.31	51.99	62.90	37.10	6.83	49.54
Pulse, Nuts and Seed/Oil	49.36	155.70	318.13	20.23	543.42	10.65	5.11	11.06	14.30	8.33
Fruits	22.91	131.60	33.88	1.80	190.19	4.94	4.32	1.18	1.27	2.91
Vegetables	27.92	319.42	360.23	6.55	714.30	6.02	10.49	12.53	4.63	10.95
Meat, Poultry and Fish	36.20	181.00	398.79	13.28	629.26	7.81	5.95	13.87	9.39	9.64
Other Livestock Products	0.19	0.00	1.60	0.00	1.78	0.04	0.00	0.06	0.00	0.03
Non-Alcoholic Drinks	0.00	0.12	7.61	1.78	9.52	0.00	0.00	0.26	1.26	0.15
<b>Alcoholic Drinks</b>	0.14	2.14	3.82	0.07	6.18	0.03	0.07	0.13	0.05	0.09
<b>All Home Consumption</b>	463.48	3,044.29	2,875.76	141.44	6,525.21	100.00	100.00	100.00	100.00	100.00

**Table 8.17: Consumption of own produce across food groups by region**

Group	Region										Ghana
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Food</b>	99.89	100.00	99.95	99.98	99.86	99.92	99.95	99.98	99.99	98.78	99.91
Grains and Flours	6.21	9.31	56.68	19.44	17.54	7.47	8.60	23.63	56.23	38.24	18.36
Roots, Tubers and Plantain	76.41	56.36	7.29	58.67	55.50	58.14	63.16	32.03	0.44	17.31	49.54
Pulse, Nuts and Seed/Oil	4.31	15.83	12.82	2.41	5.89	4.83	5.51	12.37	17.52	22.62	8.33
Fruits	2.52	3.55	2.99	2.50	4.16	6.33	3.19	0.12	0.47	0.84	2.91
Vegetables	4.84	8.27	5.52	8.81	6.51	18.50	9.21	13.90	9.97	14.30	10.95
Meat, Poultry and Fish	5.61	6.69	13.44	8.12	10.26	4.65	10.28	17.83	13.57	5.26	9.64
Other livestock Products	0.00	0.00	0.11	0.03	0.00	0.00	0.00	0.07	0.12	0.03	0.03
Non-Alcoholic Drinks	0.00	0.00	1.10	0.00	0.00	0.01	0.00	0.02	1.67	0.18	0.15
<b>Alcoholic Drinks</b>	0.11	0.00	0.05	0.02	0.14	0.08	0.05	0.02	0.01	1.22	0.09
<b>All Home Consumption</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total annual consumption (million GH¢)	473.43	510.21	162.11	1,015.88	522.32	1,074.60	1,098.14	1,001.70	411.08	255.75	6,525.21
Average household consumption (GH¢)	2,801.82	3,852.76	3,896.81	6,475.67	2,659.36	3,330.55	4,264.47	6,360.98	4,770.31	7,243.74	4,903.75
Average per capita consumption (GH¢)	758.99	1,176.75	1,285.88	1,472.40	743.20	855.65	1,015.04	1,170.64	1,036.72	1,238.55	1,167.61
Total annual food consumption (million GH¢)	472.92	510.21	162.03	1,015.70	521.58	1,073.80	1,097.61	1,001.50	411.06	252.64	6,519.04
Average household food consumption (GH¢)	2,659.62	3,852.76	3,677.81	6,366.74	2,545.63	3,044.58	4,006.64	6,209.00	4,672.74	6,987.99	4,702.47
Average per capita food consumption (GH¢)	703.59	1,176.75	1,242.08	1,430.26	712.16	798.30	958.78	1,144.82	1,024.52	1,196.80	1,125.05

# **CHAPTER NINE**

## **NON-FARM ENTERPRISES**

### **9.1 Introduction**

The agricultural sector has been contributing significantly to the country's economy, overshadowing household non-farm activities which also contribute to the economy. The activities of these non-farm enterprises which include the informal sector, is sizable and plays a very important role in the economy. Between the 2000 and 2010 Population and Housing Censuses, the informal sector grew by 6.1 percentage points. These activities are basically those which are not related to agriculture and especially take place during agricultural off-seasons.

This chapter presents an analysis of information on the characteristics of non-farm enterprises by sex and locality, sources of capital, and the principal activity in which the household enterprises are involved. It also presents data on the revenue, the cost of inputs for the production process, and how the revenues or incomes of the household are allocated. It must be noted that most non-farm enterprises are very small in size in terms of capital and operations and rely almost exclusively on household members to provide the required labour inputs.

### **9.2 Characteristics of non-farm enterprises**

Table 9.1 shows the characteristics of non-farm enterprises classified into major groups (Manufacturing, Trading and Other Activities) according to the UN Statistical Classification System called the "International Standard Industrial Classification of all Economic Activities (ISIC), Revision 4". From the table, approximately 3.7 million households, representing 44.3 percent of households in the country, operate non-farm enterprises. Half of these non-farm household enterprises are in urban localities (50.4%), while a little over one-third are in rural areas (36.8%).

In the urban areas, the proportion of females (69.0%) engaged in trading activities is higher than males (67.1%). On the contrary, the proportion of males engaged in trading activities (32.9%) in the rural areas is higher than females (31.0%). The table further shows that a higher proportion of household businesses are operated by females (70.6%). The proportion of females operating non-farm enterprises is much higher in urban areas (71.4%) than in the rural areas (69.1%).

**Table 9.1: Characteristics of non-farm enterprises by industrial classification and sex**

Locality	Proportion of households operating a business	Estimated number of businesses	Industrial Classification						Total		Proportion operated by Females
			Manufacturing		Trading		Others		Male	Female	
			Male	Female	Male	Female	Male	Female			
Urban	50.4	2,309,241	119,085	248,458	253,420	1,068,008	286,929	333,340	659,434	1,649,807	71.4
Accra (GAMA)	42.8	479,413	17,273	58,075	65,639	207,233	60,670	70,523	143,582	335,832	70.1
Other Urban	53.0	1,829,827	101,812	190,383	187,781	860,775	226,259	262,817	515,851	1,313,975	71.8
Rural	36.8	1,367,369	131,598	269,682	124,515	479,778	166,593	195,203	422,706	944,663	69.1
Rural Coastal	41.1	211,023	11,998	34,907	16,161	86,033	26,011	35,913	54,170	156,853	74.3
Rural Forest	38.2	794,386	91,743	142,748	64,085	290,245	99,357	106,208	255,185	539,201	67.9
Rural Savannah	32.2	361,961	27,857	92,027	44,269	103,500	41,225	53,082	113,351	248,609	68.7
All	44.3	3,676,610	250,683	518,140	377,935	1,547,786	453,522	528,544	1,082,140	2,594,470	70.6

Table 9.2 presents information on the main source of capital for non-farm enterprises by industrial classification and sex. The table reveals that the main source of capital for non-farm enterprises is household savings (73.0%). This is followed by assistance from relatives or friends (14.6%), and the banks (1.9%). With regard to manufacturing activities, the main source of capital is household savings (73.8%), followed by assistance from relatives or friends (12.5%); the least is obtained from proceeds from the family farm (7.0%). The trend is similar for the sources of capital for trading and other activities.

More than three-quarters of males engaged in manufacturing activities (78.2%) depend on household savings as a source of capital compared to their female counterparts (71.7%). This trend is similar for the other two non-farm activities. Proceeds from the family farm are the next important sources of capital for the operation of non-farm enterprises. Like household savings, a higher proportion of males (6.4%) than females (3.8%) depend on this source for capital. However, the proportion of females who depend on a relative or family member as their source of capital is higher than males across all industries.

**Table 9.2: Main source of capital for non-farm enterprises by industrial classification and sex (%)**

Main source of capital	Manufacturing			Trading			Others			Total		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Household savings	78.2	71.7	73.8	74.1	71.4	71.9	74.9	74.2	74.5	75.4	72.0	73.0
Bank	1.0	1.3	1.2	2.5	2.2	2.2	2.2	1.3	1.7	2.0	1.8	1.9
Remittance from abroad	0.0	0.2	0.1	0.7	0.5	0.6	0.6	0.0	0.3	0.5	0.4	0.4
Proceeds from family farm	7.2	6.9	7.0	6.5	3.4	4.0	5.9	1.9	3.8	6.4	3.8	4.6
Proceeds from family non-farm enterprises	0.8	1.7	1.4	1.2	1.4	1.4	1.6	1.1	1.3	1.3	1.4	1.3
Income from family property(ies)	0.2	0.1	0.2	0.8	0.3	0.4	0.6	0.3	0.4	0.6	0.2	0.3
NGO support	0.3	0.0	0.1	0.1	0.0	0.0	0.2	0.0	0.1	0.2	0.0	0.1
District Assembly/Town Development Assoc. support	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Church assistance	0.0	0.3	0.2	0.0	0.1	0.1	0.5	0.5	0.5	0.2	0.2	0.2
Money lenders	1.9	0.7	1.0	1.0	1.2	1.2	0.7	1.2	1.0	1.1	1.1	1.1
Relative/Friends	7.6	14.9	12.5	10.2	17.5	16.1	10.2	15.9	13.3	9.6	16.7	14.6
Other partners	0.5	0.3	0.4	0.9	0.6	0.6	1.1	0.2	0.6	0.9	0.4	0.6
Cooperatives	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.3	0.2	0.0	0.2	0.2
Other	2.3	1.9	2.1	2.0	1.2	1.3	1.4	2.8	2.1	1.8	1.7	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 9.3 shows the main source of credit for non-farm enterprises by industrial classification and sex. According to the table, 92.3 percent of households did not obtain any credit facility for their activities in the 12 months preceding the interview. This trend cuts across all the activities and for both male and female. The proportions are, however, higher for males than for females. Only two percent of household non-farm enterprises obtained financial assistance from the banks, while 1.9 percent obtained credit from family or friends.

The proportions of females engaged in trading and other economic activities who borrow from “other financial agencies” (2.1% for trading and 1.9% for other activities) are higher than their male counterparts (1.5% for trading and 0.6% for other activities). The situation is the same with regard to credit from family or friends, where the proportion of females who obtain such credit is higher than males. For trading activities, the same proportion of males and females use credit facility from family or friends (1.9%).

**Table 9.3: Main source of credit for non-farm enterprises by industrial classification and sex (%)**

Main source of credit	Manufacturing			Trading			Others			Total		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
No credit used	93.4	93.0	93.1	92.2	91.4	91.5	93.9	92.7	93.2	93.2	92.0	92.3
Bank	1.1	1.2	1.2	2.8	2.5	2.5	2.2	1.1	1.6	2.2	1.9	2.0
Other financial agencies	2.9	1.5	2.0	1.5	2.1	2.0	0.6	1.9	1.3	1.4	2.0	1.8
Cooperative	0.8	0.6	0.6	0.6	0.7	0.7	0.3	0.3	0.3	0.5	0.6	0.6
Money lender	0.2	0.7	0.6	0.2	0.6	0.5	0.3	0.6	0.4	0.3	0.6	0.5
Family/Friends	1.0	2.2	1.8	1.9	1.9	1.9	1.8	2.2	2.1	1.7	2.0	1.9
Proceeds from other enterprises	0.1	0.1	0.1	0.0	0.1	0.1	0.5	0.2	0.3	0.2	0.1	0.1
Government agencies	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1
NGOs	0.1	0.1	0.1	0.2	0.2	0.2	0.0	0.5	0.3	0.1	0.3	0.2
Other	0.1	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 9.4a shows the distribution of persons currently engaged in household non-farm enterprises by principal activity, skill and sex. From Table 9.4a more than six million persons in the country are engaged in non-farm enterprises. More than half of all persons engaged in trading activities are females (52.1%) while 45 percent of males (45.0%) are into other activities, including education, hotels and restaurants.tc.

**Table 9.4a: Number of persons engaged in non-farm enterprises by principal activity, skill and sex**

Principal activity	Persons currently engaged											
	All persons engaged			Casual workers			Skilled			Unskilled		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Manufacturing	499,863	866,043	1,365,906	71,404	68,636	140,040	369,212	616,091	985,303	104,786	222,519	327,305
Trade	712,824	2,001,015	2,713,839	98,925	65,190	164,115	422,118	1,310,156	1,732,274	235,092	439,711	674,803
Others	993,302	970,254	1,963,556	195,785	72,188	267,973	698,274	608,570	1,306,844	243,441	305,276	548,717
Total	2,205,989	3,837,312	6,043,301	366,114	206,014	572,128	1,489,605	2,534,816	4,024,421	583,319	967,505	1,550,824

Of the persons currently engaged in other economic activities, more males (53.5%) compared to their female (35.0%) counterparts are casual workers. For skilled workers who are currently engaged, a little more than half of females are into trading activities (51.7%), while a higher proportion of skilled males (46.9%) are engaged in other activities. One would have expected that manufacturing activities would have had more skilled workers compared with the results from GLSS 5<sup>3</sup> where more skilled workers especially females (41.6%) and males (34.2%) were engaged in the industry. On the contrary, the survey reveals that less than one-quarter of both males and females (24.8% and 24.3% respectively) engaged in manufacturing activities are skilled workers.

The proportion of unskilled female workers involved in trading activities (45.4%) is higher than the male workers (40.3%).

**Table 9.4b: Distribution of persons engaged in no-farm enterprises by principal activity, skill and sex**

Principal activity	Persons currently engaged							
	All persons engaged		Casual workers		Skilled		Unskilled	
	Male	Female	Male	Female	Male	Female	Male	Female
Manufacturing	22.7	22.6	19.5	33.3	24.8	24.3	18.0	23.0
Trade	32.3	52.1	27.0	31.6	28.3	51.7	40.3	45.4
Others	45.0	25.3	53.5	35.0	46.9	24.0	41.7	31.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

### 9.3 Expenditure on input for non-farm enterprises by type of activity

Table 9.5 presents information on expenditure on inputs for household non-farm enterprises. From the table, households spend an average of GH¢110.40 on inputs for operating their enterprises. The highest average expenditure is on raw materials (GH¢641.7), followed by purchase of articles for resale (GH¢387.8) and fuel and lubricants (GH¢316.8). As would be expected, in the manufacturing sector, the highest expenditure is on raw materials (GH¢1,548.2) while for trading activities, the highest expenditure is on the purchase of articles for resale (GH¢589.8).

Households engaged in non-farm enterprises incur an estimated annual expenditure of GH¢7,121.6 million on inputs. While operators engaged in manufacturing activities spend an estimated annual amount of GH¢1,005.3 million on raw materials, those in trading activities spend GH¢1,018.4 million on the purchase of articles for resale. Operators of other activities spend GH¢ 921.4 million on fuel and lubricants.

<sup>3</sup> Conducted in 2005/2006 by Ghana Statistical Service

**Table 9.5: Expenditure on input for non-farm enterprises by type of activity (average)**

Expenditure item	Average annual expenditure on input per enterprise (GH¢)				Estimated annual value of inputs (Million GH¢)			
	Type of activity			All non-farm enterprises	Type of activity			All non-farm enterprises
	Manufac-turing	Trade	Others		Manufac-turing	Trade	Others	
Taxes on product	48.8	38.7	261.7	99.6	31.8	66.7	223.5	322.0
Articles for resale	72.0	589.8	220.4	387.8	46.9	1,018.4	188.2	1,253.6
Rents on assets/land and buildings	15.1	22.3	30.5	23.0	9.8	38.4	26.0	74.2
Raw materials	1,548.2	252.1	740.5	641.7	1,005.3	435.4	632.7	2,073.4
Travel and Transport	123.8	256.7	488.4	291.3	80.3	442.7	416.8	939.9
Fuel and lubricants	80.3	28.9	1078.8	316.8	52.1	49.9	921.4	1,023.4
Electricity	36.7	27.3	45.1	33.9	23.8	47.1	38.5	109.5
Water	13.7	6.8	42.7	17.7	8.9	11.7	36.4	57.1
Telephones	10.6	11.4	48.0	20.9	6.9	19.7	41.0	67.6
Printing/Stationery/Postage/Packaging	6.1	9.3	933.4	252.9	4.0	16.0	797.3	817.3
Spare parts	7.7	9.8	60.8	22.8	5.0	16.9	51.9	73.8
Repairs/Maintenance of fixed assets	6.1	4.8	71.1	22.6	3.9	8.4	60.7	72.9
Lease of machinery or transport equipment	1.5	0.3	160.6	43.0	1.0	0.5	137.3	138.8
Advertising/Computer service	0.1	1.3	0.7	0.9	0.0	2.3	0.6	2.9
Bank charges (excl. bank interest charge)	0.0	0.8	0.3	0.5	0.0	1.3	0.2	1.5
Training	0.0	0.1	1.2	0.4	0.0	0.2	1.0	1.2
Treatment/Disposal of waste products	0.2	0.6	4.5	1.5	0.2	1.0	3.8	5.0
Uniform and clothing	0.1	0.1	0.8	0.3	0.0	0.2	0.7	0.9
Accident claims	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Others	17.3	38.2	13.3	27.4	11.0	64.3	11.1	86.3
Total expenditure	99.5	65.0	210.4	110.4	1,291.1	2,241.3	3,589.2	7,121.6

#### 9.4 Sources of revenue and income disposal by non-farm enterprises

Table 9.6 shows the sources of revenue for non-farm enterprises and how the income is allocated. The total annual estimated revenue earned by all non-farm enterprises is GH¢48,645.9 million. The highest annual estimated earnings is from trading activities (GH¢31,134.3 million) of which, GH¢30,309.0 million is on cash basis. This is followed by other activities which generated an estimated annual revenue of GH¢9,614.1 million, almost all of which is based on cash received (GH¢9,138.9 million). Manufacturing enterprises received the least estimated annual revenue of GH¢7,897.5 million.

On the allocation or distribution of income earned by household non-farm enterprises, the largest share of GH¢7,467.9 million was allocated to own households, while GH¢3,578.2 million was saved, and another GH¢970.9 million allocated for other purposes.

**Table 9.6: Source of revenue and allocation of income from non-farm enterprises by principal activity and sex of owner**

Source of income	Average revenue per enterprise (GHC)						Estimated revenue (Million GHC)					
	Manufacturing		Trade		Others		All enterprises		Manufacturing	Trade	Others	All non-farm enterprises
	Male	Female	Male	Female	Male	Female	Male	Female				
Cash received	20,492.60	5,057.70	30,061.10	12,562.60	11,340.30	7,773.20	11,340.30	7,773.20	7,704.80	30,309.00	9,138.90	47,152.60
Receipts as goods and services	117.90	3.20	79.00	7.50	377.10	21.70	212.70	9.60	31.00	40.90	179.60	251.50
Home consumption of output	72.40	189.00	266.30	223.20	71.60	225.40	139.60	216.80	115.20	438.90	150.20	704.30
Delivery of goods sold	21.60	19.50	305.30	60.40	74.40	36.40	141.40	47.40	14.20	190.40	48.90	253.50
Provision of other services	64.10	18.00	192.90	6.60	116.60	33.30	130.50	14.30	23.30	75.10	65.00	163.30
Rental of buildings	0.80	0.10	7.80	2.70	3.10	0.20	4.20	1.70	0.20	6.60	1.40	8.20
Rental of machinery and transport equipment	4.00	3.00	29.20	0.40	7.50	0.00	14.20	0.80	2.30	10.50	3.10	15.90
Commissions Royalties, Copyright etc. belonging to the household	5.50	0.30	81.50	4.50	30.70	5.60	42.30	3.90	1.40	34.20	15.50	51.10
Storage and handling fees	0.00	0.00	1.90	0.10	0.00	0.00	0.70	0.10	0.00	0.80	0.00	0.90
Inspection and valuation fees	0.00	0.00	0.30	0.00	0.50	0.00	0.30	0.00	0.00	0.10	0.20	0.40
Sale of scraps	6.20	0.50	22.60	0.10	16.90	0.20	16.40	0.20	1.70	7.80	7.20	16.60
Profit on sale of fixed assets	0.90	5.60	9.90	1.00	4.50	0.30	5.50	1.80	2.80	4.80	2.00	9.60
Other	0.50	0.20	43.10	0.50	1.40	0.40	15.50	0.40	0.20	15.20	0.80	16.20
<b>Total</b>									<b>7,897.50</b>	<b>31,134.30</b>	<b>9,614.10</b>	<b>48,645.90</b>
<b>Allocation of income</b>												
Own household	2,320.10	1,580.40	2,751.00	1,809.60	2,505.40	2,187.30	2,547.70	1,841.40	1,386.10	3,804.30	2,277.50	7,467.90
Other household	1,823.80	1,629.90	2,411.70	933.10	1,946.70	1,213.90	2,094.30	1,116.20	144.50	326.70	241.30	712.50
Savings	1,727.10	1,073.70	3,196.10	1,844.10	2,528.30	1,474.10	2,614.40	1,618.80	484.80	2,154.70	938.60	3,578.20
Other purposes	1,354.70	741.70	4,126.70	727.80	1,359.90	734.20	2,235.10	732.40	177.00	557.70	236.10	970.90
<b>Total</b>									<b>2,192.40</b>	<b>6,843.50</b>	<b>3,693.50</b>	<b>12,729.40</b>

# CHAPTER TEN

## HOUSEHOLD EXPENDITURE, INCOME AND THEIR COMPONENTS

### 10.1 Introduction

This chapter presents information on household expenditure, income and their components. Household consumption expenditure, gleaned from GLSS6 data, is the sum of the value of goods and services purchased by households, consumed from home production, or received as gifts or payment in kind. The components of consumption expenditure used to construct this aggregate fall into two main groups: (i) food items, and (ii) non-food items. The specific items in each group, the method used in aggregating the consumption components, and the results of the survey are also presented in this chapter.

Household income in this chapter comprises income from employment, agricultural and non-farm activities, rent, remittances, and other sources.

### 10.2 Total household expenditure

The distribution of mean annual household expenditure and per capita expenditure by quintiles are presented in Table 10.1. Nationally, the annual average household expenditure is GH¢9,317 with a mean annual per capita expenditure of GH¢3,117. Disaggregation of household expenditure by quintiles shows that the highest quintile spends on average GH¢14,665 annually and this is almost four times the annual mean expenditure of the lowest quintile (GH¢3,294).

The lowest or first quintile, which has a mean household size of 6.1 accounts for 5.6 percent of the total household expenditure while the highest or fifth quintile, with a mean household size of 2.6, accounts for 47.9 percent of total expenditure. The share of total expenditure by the third quintile with a mean household size of 4.4 is 14.6 percent.

The highest quintile has an annual per capita expenditure of GH¢6,337 per person which is twice the national average of (GH¢3,117) and almost ten times higher than that of the lowest quintile (GH¢664). The national average annual per capita expenditure of GH¢3,117 shows that, on average, a person spends about GH¢8.85 per day.

**Table 10.1: Mean annual household and per capita expenditure by quintile group**

Quintile group	Mean annual household expenditure (GHC)	Mean annual per capita expenditure (GHC)	Mean household size	Percentage share of total expenditure
First (Lowest)	3,924	664	6.1	5.6
Second	5,833	1,194	5.0	10.0
Third	7,444	1,761	4.4	14.6
Fourth	9,238	2,656	3.6	21.9
Fifth (Highest)	14,665	6,337	2.6	47.9
<b>Ghana</b>	<b>9,317</b>	<b>3,117</b>	<b>4.0</b>	<b>100.0</b>

Table 10.2 presents the distribution of households in each region by quintile, mean annual expenditure and per capita expenditure. The highest annual average household expenditure of GH¢13,303 is recorded in Greater Accra followed by the Western region with an annual average expenditure of GH¢9,529 and Upper West recording the lowest (GH¢ 5,991).

The Greater Accra region has the highest annual per capita expenditure of GH¢ 4,875 which translates into an average expenditure of about GH¢13 per day per person. The Ashanti region follows with an annual per capita expenditure of GH¢ 3,318 and then Western region with an annual per capita expenditure of GH¢3,119. The lowest annual per capita expenditure is recorded by the Upper West region (GH¢1,476). With the exception of Greater Accra, Ashanti and the Western regions, all the other regions have per capita expenditure lower than the national average.

The table further shows that Greater Accra has the highest proportion of households (56.6%) falling in the upper 20 percent or highest quintile and a smaller proportion of households in the lowest quintile (2.9%) compared to all the other regions. This is followed by the Ashanti region with 33.6 percent of households in the highest quintile and 7 percent in the lowest quintile.

In contrast, the three northern regions; Northern, Upper East and Upper West have high proportions of households in the lowest quintile than in the highest quintile. Upper West region has the highest proportion of households in the lowest quintile (55.7%) and the Northern region recorded the lowest proportion in the highest quintile (10.2%). This could be an indication that poverty is more prevalent in the three northern regions, particularly in the Upper West Region.

**Table 10.2: Households by quintile, mean annual household expenditure and per capita expenditure by region**

Region	Quintile						Mean annual household expenditure (GHC)	Mean annual per capita expenditure (GHC)
	1	2	3	4	5	All		
Western	11.5	16.2	17.9	25.1	29.4	100.0	9,529	3,119
Central	10.0	19.6	23.5	21.7	25.3	100.0	8,133	2,825
Greater Accra	2.9	5.6	11.9	23.0	56.6	100.0	13,303	4,875
Volta	18.9	21.6	17.9	20.8	20.8	100.0	8,217	2,508
Eastern	11.7	18.7	23.0	24.4	22.2	100.0	7,838	2,555
Ashanti	7.0	15.0	19.1	25.3	33.6	100.0	9,489	3,318
Brong Ahafo	16.1	19.9	21.5	21.0	21.5	100.0	8,154	2,511
Northern	34.1	22.6	18.7	14.4	10.2	100.0	7,153	1,790
Upper East	32.4	21.3	17.7	15.8	12.8	100.0	6,210	1,753
Upper West	55.7	16.6	10.4	6.3	11.0	100.0	5,991	1,476
<b>Ghana</b>	<b>13.2</b>	<b>16.0</b>	<b>18.3</b>	<b>22.1</b>	<b>30.4</b>	<b>100.0</b>	<b>9,317</b>	<b>3,117</b>

The estimates of mean annual household expenditure by locality and ecological zones are shown in Table 10.3. The total annual household expenditure for Ghana is GHC61,507 million with the share of urban expenditure (65.8%) almost twice as much as that of rural localities (34.2%). Moreover, the average household expenditure in urban localities (GH¢11,061) is about 1.5 times that of the rural localities (GH¢7,152). In the urban localities average annual household expenditure is higher in Accra (GAMA) (GH¢13,677) than in

other urban areas. However, rural coastal areas have a slightly higher annual expenditure of GH¢ 7,663 compared to the rural forest areas (GH¢ 7,301).

The average annual per capita expenditure in urban localities is GH¢3,926, implying an average per capita of almost GH¢11 per person per day while the rural areas have an average per capita of GH¢ 2,112, implying an average per capita of about GH¢ 5.7 per person per day.

**Table 10.3: Mean annual household per capita expenditure and estimated total annual expenditure by localities and ecological zones**

Locality	Mean annual household expenditure (GHC)	Mean annual per capita expenditure (GHC)	Mean household size	Percentage share of total expenditure	Estimated total annual expenditure (Million GHC)
<b>Urban</b>	<b>11,061</b>	<b>3,926</b>	<b>3.6</b>	<b>65.8</b>	<b>40,443</b>
Accra (GAMA)	13,677	5,039	3.4	25.8	15,900
Other Urban	9,841	3,407	3.7	39.9	24,544
<b>Rural</b>	<b>7,152</b>	<b>2,112</b>	<b>4.5</b>	<b>34.2</b>	<b>21,064</b>
Rural Coastal	7,663	2,784	3.8	4.9	2,997
Rural Forest	7,301	2,248	4.1	20.0	12,297
Rural Savannah	6,635	1,545	5.5	9.4	5,771
<b>Ghana</b>	<b>9,317</b>	<b>3,117</b>	<b>4.0</b>	<b>100.0</b>	<b>61,507</b>

### 10.3 Components of household expenditure

The breakdown of total expenditure into components is presented in Table 10.4. Household's expenditure on food (actual and imputed) accounts for the largest share (46.7%) of Ghana's total annual household expenditure of GH¢61,507 million, with a mean annual per capita food expenditure of GH¢1,302. Households' total expenditure on housing accounts for 12.4 percent of total expenditure with an annual average of GH¢1,156 and an annual per capita expenditure of GH¢395. The remaining 41 percent (GH¢25,177 million) of total expenditure represents other non-food expenditure (36.8 percent in cash and 4.1 percent representing the imputed value of non-food items used by the household).

**Table 10.4: Expenditure components, mean annual per capita and estimate of total annual Expenditure**

Expenditure component	Mean annual household expenditure (GHC)	Mean annual per capita expenditure (GHC)	Estimated total annual expenditure (Million GHC)	Percentage share of total expenditure
Food expenditure (actual)	3,672	1,302	24,241	39.4
Food expenditure (imputed)	676	166	4,460	7.3
Expenditure on housing	1,156	395	7,630	12.4
Other expenditure (actual)	3,432	1,119	22,659	36.8
Other expenditure (imputed)	381	134	2,518	4.1
<b>Ghana</b>	<b>9,317</b>	<b>3,117</b>	<b>61,507</b>	<b>100.0</b>

Data presented in Table 10.5 shows the distribution of household expenditures among the various components, for each region, locality and ecological zones. Among the notable features of the table is the greater importance of food expenditure (actual and imputed) in the overall expenditure of Ghanaian households.

The share of the total budget (actual and imputed) represented by cash expenditure on food does not vary so much across the quintiles, but consumption of home-produced food remains more important for households which have low welfare. As a result, food accounts for 41.5 percent of the total budget of households in the highest quintile, but over 56 percent of the budget of households in the lowest quintile. The proportion of the total budget that goes to housing and other non-food expenditures (both actual and imputed) is much higher for households in the higher quintiles (Table 10.5).

**Table 10.5: Components of household expenditure by locality**

Welfare/Locality/Region	Components of expenditure					Total	Food (actual and imputed) as a percentage of total expenditure
	Food		Housing	Other non-food			
	Actual	Imputed	Actual & Imputed	Actual	Imputed		
<b>Quintile</b>							
First (Lowest)	38.5	17.8	10.9	31.0	1.8	100.0	56.3
Second	40.9	12.8	10.9	33.4	1.9	100.0	53.7
Third	41.2	9.6	11.5	35.4	2.2	100.0	50.9
Fourth	42.2	7.2	12.0	36.0	2.7	100.0	49.4
Fifth (Highest)	37.4	4.2	13.3	39.1	6.0	100.0	41.5
<b>Urban</b>	<b>40.4</b>	<b>2.0</b>	<b>14.2</b>	<b>38.5</b>	<b>4.9</b>	<b>100.0</b>	<b>42.4</b>
Accra (GAMA)	41.0	0.7	16.7	37.3	4.4	100.0	41.7
Other Urban	40.0	2.8	12.6	39.4	5.2	100.0	42.9
<b>Rural</b>	<b>37.5</b>	<b>17.4</b>	<b>9.0</b>	<b>33.6</b>	<b>2.6</b>	<b>100.0</b>	<b>54.9</b>
Rural Coastal	43.2	11.3	9.0	33.8	2.6	100.0	54.5
Rural Forest	39.5	14.1	8.0	35.7	2.7	100.0	53.6
Rural Savannah	30.2	27.4	11.2	28.9	2.4	100.0	57.6
<b>Region</b>							
Western	39.7	5.6	9.7	40.6	4.4	100.0	45.3
Central	43.3	7.6	10.6	35.3	3.1	100.0	50.9
Greater Accra	41.3	0.7	16.4	37.3	4.3	100.0	42.0
Volta	35.0	19.0	9.7	33.3	3.0	100.0	54.0
Eastern	41.2	6.5	10.9	37.2	4.3	100.0	47.7
Ashanti	40.8	5.1	11.4	38.4	4.3	100.0	45.9
Brong Ahafo	31.5	15.2	10.5	37.7	5.1	100.0	46.7
Northern	35.4	17.1	14.6	29.9	3.0	100.0	52.5
Upper East	39.1	16.2	9.5	32.4	2.9	100.0	55.2
Upper West	30.4	20.1	10.7	33.5	5.2	100.0	50.6
<b>Ghana</b>	<b>39.4</b>	<b>7.3</b>	<b>12.4</b>	<b>36.8</b>	<b>4.1</b>	<b>100.0</b>	<b>46.7</b>

Rural households spend 55 percent of their expenditure on food (37.5% on actual and 17.4% on imputed) whereas urban households spend 42.4 percent of their total expenditure on food (40.4% actual and 2.0% imputed). The percent share of total expenditure on food does not

vary much across the regions. The highest percentage of total expenditure on food (actual and imputed) is seen in Upper East (55.2%), with Greater Accra having the least (42 percent).

The proportion of the total expenditure on housing in Ghana averages 12.4 percent. Households in the lowest quintile spend less (10.9%) than the national average on housing. Also notable is the high expenditure on housing in the Greater Accra region (16.4%) and Accra (GAMA). Western, Volta and Upper East regions spend less than ten per cent of their total expenditure on housing.

Households in rural savannah spend more on housing (11.2%) than households in rural coastal (8.9%) and rural forest (8.0%).

#### 10.4 Classification of household expenditure by groups

Household expenditure, in this analysis, is categorized according to the UN Statistical Classification System called “Classification of Individual Consumption According to Purpose” (COICOP). This categorization mainly divides expenditure into food and non-food components. The non-food component comprises expenditure on alcoholic beverages, tobacco and narcotics, clothing and footwear, housing, water, electricity, gas and other utilities, health, education, recreation, personal care and durable goods.

The average annual Ghanaian household expenditure is GH¢9,466 (Table 10.6) of which GH¢3,673, representing 45.8 percent, is spent on food and GH¢5,793, representing 54.2 percent, is spent on non-food items.

**Table 10.6: Average annual household per capita and estimated total annual cash expenditure by expenditure group**

Expenditure group	Average annual household cash expenditure (GHC)	Average annual per capita cash expenditure (GHC)	Total annual cash expenditure (Million GHC)	Percentage distribution
<b>Food</b>	<b>3,673</b>	<b>1,303</b>	<b>24,241</b>	<b>45.8</b>
Food and non-alcoholic beverages	3,673	1,303	24,241	45.8
<b>Non-food</b>	<b>5,793</b>	<b>1,964</b>	<b>28,656</b>	<b>54.2</b>
Alcoholic Beverage and Tobacco	315	127	551	1.0
Clothing and Footwear	556	186	3,586	6.8
Housing, Water, Electricity and Gas	1,015	354	5,997	11.3
Furnishings, Household Equipment and Maintenance	322	111	2,076	3.9
Health	148	50	559	1.1
Transport	692	244	3,649	6.9
Communication	434	166	2,186	4.1
Recreation and Culture	281	90	1,309	2.5
Education	1,271	306	5,591	10.6
Restaurants and Hotels	260	145	13	0.0
Miscellaneous Goods and Services	499	185	3,137	5.9
<b>Total</b>	<b>9,466</b>	<b>3,267</b>	<b>52,896</b>	<b>100.0</b>

The total annual expenditure for the country is GH¢52,896 million comprising GH¢28,656 million on non-food and GH¢24,241 million on food. Total expenditure on Housing, Water, Electricity and Gas contributes the highest in the non-food category (11.3%). The next most

important expenditure groups, in terms of amount spent, are Education (10.6%), Transport (6.9%), and Clothing and Footwear (6.8%).

The distribution of annual household expenditure by expenditure groups and locality is shown in Table 10.7. Whereas households in urban localities spend less (38.3%) of their annual expenditure on food relative to the 40.5 percent spent by households in rural localities, expenditure on non-food items is higher in the urban localities (61.7%) than in the rural localities (59.5%). It can further be seen that urban areas spend more on Education (15%) than the rural areas (10.6%). Likewise, Housing, Water, Electricity and Gas are more expensive in urban areas (11%) than in the rural areas (8.9%).

**Table 10.7: Mean annual household cash expenditure by expenditure group and locality**

Expenditure group	Mean annual cash expenditure (GHC)			Percentage of total		
	Urban	Rural	Total	Urban	Rural	Total
<b>Food</b>	<b>4,471</b>	<b>2,681</b>	<b>3,673</b>	<b>38.3</b>	<b>40.5</b>	<b>38.8</b>
Food and non-alcoholic beverages	4,471	2,681	3,673	38.3	40.5	38.8
<b>Non-food</b>	<b>7,203</b>	<b>3,939</b>	<b>5,793</b>	<b>61.7</b>	<b>59.5</b>	<b>61.2</b>
Alcoholic Beverage and Tobacco	380	275	315	3.3	4.2	3.3
Clothing and Footwear	645	446	556	5.5	6.7	5.9
Housing, Water, Electricity and Gas	1,288	589	1,015	11.0	8.9	10.7
Furnishings, Household Equipment and Maintenance	359	277	322	3.1	4.2	3.4
Health	169	126	148	1.4	1.9	1.6
Transport	874	431	692	7.5	6.5	7.3
Communication	529	299	434	4.5	4.5	4.6
Recreation and Culture	284	277	281	2.4	4.2	3.0
Education	1,745	699	1,271	15.0	10.6	13.4
Restaurants and Hotels	296	192	260	2.5	2.9	2.7
Miscellaneous Goods and Services	633	328	499	5.4	5.0	5.3
<b>Total</b>	<b>11,674</b>	<b>6,620</b>	<b>9,466</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Disaggregation of average annual per capita expenditure and estimated total annual cash expenditure by place of residence and expenditure groups shows notable differences between urban and rural localities on per capita basis (Table 10.8). The total estimated annual cash expenditure for Ghana is GH¢52,896 million which translates into an average annual cash expenditure of GH¢3,267 per person.

Cash expenditure is much higher in urban areas than in rural areas; average household cash expenditure is GH¢36,572 million per annum in urban areas, compared to GH¢16,324 million per annum in rural areas (Table 10.8). Considering that rural households tend to be larger than urban households, the differences are even more marked on per capita basis; average cash expenditure was GH¢4,234 per person per year in urban areas, but only GH¢2,016 in the rural areas. In percentage terms, rural households spend proportionately more on Alcoholic Beverages and Tobacco than their urban counterparts who spend most on Housing, Water, Electricity and Gas.

**Table 10.8: Mean annual per capita and estimated total annual cash expenditure by expenditure group and locality**

Expenditure group	Mean annual per capita cash expenditure (GHC)			Estimated total annual cash expenditure (Million GHC)			Rural share of total cash expenditure
	Urban	Rural	Total	Urban	Rural	Total	
<b>Food</b>	<b>1,672</b>	<b>844</b>	<b>1,303</b>	<b>16,348</b>	<b>7,893</b>	<b>24,241</b>	<b>32.6</b>
Food and non-alcoholic beverages	1,672	844	1,303	16,348	7,893	24,241	32.6
<b>Non-food</b>	<b>2,562</b>	<b>1,172</b>	<b>1,964</b>	<b>20,224</b>	<b>8,432</b>	<b>28,656</b>	<b>29.4</b>
Alcoholic Beverage and Tobacco	178	95	127	254	296	551	53.8
Clothing and Footwear	231	130	186	2,295	1,292	3,586	36.0
Housing, Water, Electricity and Gas	463	184	354	4,638	1,359	5,997	22.7
Furnishings, Household Equipment and Maintenance	132	86	111	1,282	794	2,076	38.3
Health	60	39	50	330	230	559	41.1
Transport	319	138	244	2,711	938	3,649	25.7
Communication	212	101	166	1,559	627	2,186	28.7
Recreation and Culture	97	82	90	717	592	1,309	45.2
Education	436	150	306	4,197	1,395	5,591	24.9
Restaurants and Hotels	191	57	145	10	3	13	25.2
Miscellaneous Goods and Services	243	111	185	2,231	906	3,137	28.9
<b>Total</b>	<b>4,234</b>	<b>2,016</b>	<b>3,267</b>	<b>36,572</b>	<b>16,324</b>	<b>52,896</b>	<b>30.9</b>

Variations in the pattern of expenditure among the different quintiles are shown in Table 10.9. Total cash expenditure per person in the highest quintile (GHC6,624) is above 10 times that in the lowest quintile (GHC613). For four expenditure groups (food and beverages; alcohol and tobacco; clothing and footwear; and household goods, operation and services), individuals in the highest quintile spend about ten times as much per capita as individuals in the lowest quintile; the corresponding ratios for other expenditure groups are about 54 times as much for medical care and health expenses, recreation, culture and education; 6 times as much for housing and utilities; 8 times for miscellaneous goods and services, and about 7 times for transport and communication.

**Table 10.9: Mean annual per capita cash expenditure by quintile and expenditure group**

Expenditure group	Quintile (GHC)						Quintile (%)					
	1	2	3	4	5	Ghana	1	2	3	4	5	Ghana
<b>Food</b>	<b>269</b>	<b>519</b>	<b>768</b>	<b>1,182</b>	<b>2,570</b>	<b>1,303</b>	<b>43.9</b>	<b>45.5</b>	<b>44.3</b>	<b>44.4</b>	<b>38.8</b>	<b>39.9</b>
Food and non-alcoholic beverages	269	519	768	1,182	2,570	1,303	43.9	45.5	44.3	44.4	38.8	39.9
<b>Non-food</b>	<b>343</b>	<b>621</b>	<b>965</b>	<b>1,482</b>	<b>4,054</b>	<b>1,964</b>	<b>56.1</b>	<b>54.5</b>	<b>55.7</b>	<b>55.6</b>	<b>61.2</b>	<b>60.1</b>
Alcoholic Beverage and Tobacco	33	57	73	112	265	127	5.4	5.0	4.2	4.2	4.0	3.9
Clothing and Footwear	49	79	112	158	362	186	8.0	6.9	6.5	5.9	5.5	5.7
Housing, Water, Electricity and Gas	57	106	178	276	709	354	9.3	9.3	10.3	10.4	10.7	10.8
Furnishings, Household Equipment and Maintenance	30	49	68	98	214	111	4.9	4.3	3.9	3.7	3.2	3.4
Health	12	22	28	42	95	50	2.0	1.9	1.6	1.6	1.4	1.5
Transport	32	57	92	149	521	244	5.2	5.0	5.3	5.6	7.9	7.5
Communication	29	46	78	128	338	166	4.7	4.1	4.5	4.8	5.1	5.1
Recreation and Culture	22	36	51	71	175	90	3.6	3.2	2.9	2.7	2.6	2.8
Education	54	107	177	293	742	306	8.9	9.4	10.2	11.0	11.2	9.4
Restaurants and Hotels	2	13	31	24	218	145	0.3	1.1	1.8	0.9	3.3	4.4
Miscellaneous Goods and Services	23	48	78	130	415	185	3.8	4.2	4.5	4.9	6.3	5.7
<b>Total</b>	<b>613</b>	<b>1,140</b>	<b>1,733</b>	<b>2,664</b>	<b>6,624</b>	<b>3,267</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 10.5 Cash expenditure at the subgroup and item level

The previous section presented information on expenditure at the group level. In this section cash expenditure is discussed in greater detail. Table 10.10 shows a similar breakdown of expenditure to that given in Table 10.9, but with expenditure given at the subgroup level. In the food sub group, the major expenditure items are fish and seafood (which accounts for 8.3% of total cash expenditure), bread and cereal products (8%), catering services (prepared meals) (6.9%), and vegetables (5.4%). In other groups, important subgroups of expenditure items are education (10.6% of total cash expenditure), transport services (4.4%), clothing materials (5.5%) and water supply and miscellaneous services related to dwelling (4.4%).

**Table 10.10: Average annual household expenditure, per capita expenditure and estimated total expenditure by subgroup of expenditure**

Group (item)	Average annual household cash expenditure (GHC)	Average annual per capita cash expenditure (GHC)	Total annual cash expenditure (Million GHC)	Percentage distribution
<b>1. Food and Non Alcoholic Beverages</b>	<b>3672.57</b>	<b>1302.68</b>	<b>24240.62</b>	<b>45.8</b>
Bread and cereals	658.30	215.15	4236.91	8.0
Meat	436.11	138.99	1977.51	3.7
Fish and Sea food	713.68	235.09	4412.13	8.3
Milk, Cheese and Eggs	180.39	64.24	825.09	1.6
Oils and Fats	154.64	47.83	769.85	1.5
Fruits	188.90	79.41	821.70	1.6
Vegetables	466.40	148.93	2835.81	5.4
Sugar, Jam, Honey and Chocolate	67.11	22.50	322.37	0.6
Food products n.e.c.	467.85	145.30	2882.76	5.4
Catering services (prepared meals)	723.76	347.96	3635.26	6.9
Non Alcoholic Beverages	285.97	112.33	1495.76	2.8
<b>2. Alcoholic Beverages and Tobacco</b>	<b>315.42</b>	<b>126.58</b>	<b>550.66</b>	<b>1.0</b>
Alcoholic Beverages	309.16	125.35	507.57	1.0
Tobacco	142.69	50.31	43.09	0.1
<b>3. Clothing and Footwear</b>	<b>556.12</b>	<b>185.70</b>	<b>3586.38</b>	<b>6.8</b>
Clothing Materials	451.94	151.75	2895.14	5.5
Footwear	116.70	38.07	691.24	1.3
<b>4. Housing, Water, Electricity and Gas</b>	<b>1014.74</b>	<b>354.26</b>	<b>5997.13</b>	<b>11.3</b>
Actual Rentals for housing	423.94	192.26	749.21	1.4
Maintenance and Repair of dwelling	568.18	178.99	1054.77	2.0
Water supply and Miscellaneous services related to Dwelling	491.18	163.05	2334.87	4.4
Electricity, Gas and Other fuels	351.06	122.15	1858.28	3.5
<b>5. Furnishings, Household Equipment and Maintenance</b>	<b>322.14</b>	<b>111.48</b>	<b>2076.22</b>	<b>3.9</b>
Furniture and furnishings, Carpets and floor coverings	158.24	57.43	249.12	0.5
Household Textiles	39.01	14.39	169.18	0.3
Household Appliances	34.37	14.15	9.71	0.0
Glassware, Tableware, Kitchenware and Household Utensils	54.06	17.79	208.62	0.4
Household and Garden Tools and Equipment	25.17	7.41	43.95	0.1
Goods of routine Household Maintenance and repairs	224.02	77.06	1395.64	

(Cont'd)

Group (item)	Average annual household cash expenditure (GHC)	Average annual per capita cash expenditure (GHC)	Total annual cash expenditure (Million GHC)	Percentage distribution
<b>6. Health</b>	<b>148.20</b>	<b>49.74</b>	<b>559.36</b>	<b>1.1</b>
Medical Products, Appliances and Equipment	125.16	42.32	433.75	0.8
Out-Patient Services	143.11	46.78	125.61	0.2
<b>7. Transport</b>	<b>691.83</b>	<b>244.38</b>	<b>3649.00</b>	<b>6.9</b>
Operations of Personal Transport Equipment including Fuel	1342.18	417.94	1299.70	2.5
Transport Services	479.40	180.43	2349.29	4.4
<b>8. Communication</b>	<b>433.66</b>	<b>165.84</b>	<b>2185.82</b>	<b>4.1</b>
Postal Services	243.59	102.93	26.19	0.0
Telephone and Telefax Equipment	381.94	146.20	1805.48	3.4
Telephone and Telefax Services	216.81	81.89	354.15	0.7
<b>9. Recreation and Culture</b>	<b>281.15</b>	<b>90.08</b>	<b>1309.34</b>	<b>2.5</b>
Audio-Visual, Photographic and Information Equipment	73.63	34.57	32.20	0.1
Other Articles and Equipment of Luxury	98.62	28.34	100.14	0.2
Recreational and Cultural Services	239.29	79.38	918.64	1.7
Newspapers, Books and Stationery	93.70	25.63	230.83	0.4
Packaged Holidays	160.58	45.07	27.54	0.1
<b>10. Education</b>	<b>1270.64</b>	<b>306.37</b>	<b>5591.03</b>	<b>10.6</b>
Education	1270.64	306.37	5591.03	10.6
<b>11. Restaurant and Hotels</b>	<b>260.31</b>	<b>145.10</b>	<b>13.29</b>	<b>0.0</b>
Hotel Accommodation Services	260.31	145.10	13.29	0.0
<b>12. Miscellaneous Goods and Services</b>	<b>499.01</b>	<b>184.74</b>	<b>3137.49</b>	<b>5.9</b>
Personal Care	245.83	85.76	1381.11	2.6
Personal Effects n.e.c.	48.99	17.82	199.71	0.4
Social Protection	292.12	116.75	1221.41	2.3
Insurance	67.64	21.99	130.78	0.2
Financial Services n.e.c.	656.29	251.60	176.81	0.3
Other Services n.e.c.	91.09	28.35	27.67	0.1
<b>Total</b>	<b>9465.78</b>	<b>3266.95</b>	<b>52896.35</b>	<b>100.0</b>

## 10.6 Total food consumption expenditure

In this section cash expenditure and the consumption of home produced food are combined to arrive at estimates of total food consumption, at the household level and on a per capita basis.

While the estimates of the value of total food consumption for different parts of the country provide some useful insights, it needs to be stressed that some of the differences observed may not reflect different nutritional intakes by households, as differences exist in prices between different parts of the country. All cash expenditures and values given for home consumption represent estimates of actual expenditures and values for those areas where the data were collected; no adjustments have been made for possible price differences between localities.

For the country as a whole, the average value of annual household food consumption is GH¢8,387. On a per capita basis, this works out to about GH¢2,524 (Table 10.11). The three most important food consumption subgroups, in terms of cash expenditure value are bread and cereals (17.7%), fish and seafood (15.8%) and vegetables (11.35). The other important food subgroups are catering services or prepared food (12.7%) and meat (7.6%).

**Table 10.11: Value of average annual household and per capita consumption (both cash expenditure and home produced) and estimated total value by food subgroups and food budget shares**

Food subgroup	Mean annual household food consumption (GH¢)			Mean annual per capita food consumption (GH¢)			Estimated value of all food consumption (Million GH¢)	Food budget share
	Cash expenditure	Home produced	Total	Cash expenditure	Home produced	Total		
<b>Food and non-alcoholic beverages</b>	<b>4,343</b>	<b>4,044</b>	<b>8,387</b>	<b>1,558</b>	<b>996</b>	<b>2,524</b>	<b>28,675</b>	<b>100.0</b>
Bread and cereals	658	437	1,095	215	97	312	5,069	17.7
Meat	436	349	785	139	75	214	2,166	7.6
Fish and Sea food	714	1,139	1,853	235	262	497	4,543	15.8
Milk, Cheese and Eggs	180	55	236	64	15	80	849	3.0
Oils and Fats	155	189	344	48	44	91	848	3.0
Fruits	189	129	318	79	39	118	912	3.2
Vegetables	466	245	712	149	61	209	3,254	11.3
Sugar, Jam, Honey and Chocolate	67	0	67	22	0	22	322	1.1
Food products n.e.c.	468	1,112	1,580	145	283	429	5,572	19.4
Catering services (prepared meals)	724	0	724	348	0	348	3,635	12.7
Non-alcoholic beverages	286	388	674	112	90	202	1,504	5.2
<b>Total food consumption</b>	<b>4,343</b>	<b>4,044</b>	<b>8,387</b>	<b>1,558</b>	<b>966</b>	<b>2,524</b>	<b>28,675</b>	<b>100.0</b>

Table 10.12 shows the value of average annual household food consumption and estimated total food consumption (both cash expenditure and home produced) by subgroups and locality. Generally, urban households spend more on all food and non-alcoholic beverages than their rural counterparts. The only exception is food not elsewhere classified on which

rural localities spend more than urban localities. Urban households spend more than three (GH¢2,850) times on catering services than their rural households (GH¢786).

**Table 10.12: Value of average annual household food consumption and estimated food consumption (both cash expenditure and home produced) food subgroups and locality**

Food subgroup	Urban			Estimated value of all food consumption (Million GHC)	Rural			Estimated value of all food consumption (Million GHC)
	Mean annual household food consumption (GHC)				Mean annual per capita food consumption (GHC)			
	Cash expenditure	Home produced	Total		Cash expenditure	Home produced	Total	
<b>Food and non-alcoholic beverages</b>	<b>5,110</b>	<b>2,844</b>	<b>7,954</b>	<b>17,126</b>	<b>3,128</b>	<b>4,519</b>	<b>7,647</b>	<b>11,548</b>
Bread and cereals	741	403	1,144	2,851	545	449	994	2,218
Meat	503	377	881	1,377	315	343	658	789
Fish and Sea food	789	471	1,259	2,684	614	1,399	2,014	1,859
Milk, Cheese and Eggs	215	96	311	640	106	48	155	208
Oils and Fats	167	337	504	494	130	136	266	354
Fruits	222	91	313	696	82	140	222	216
Vegetables	559	106	664	1,873	351	278	629	1,380
Sugar, Jam, Honey and Chocolate	78	0	78	200	55	0	55	123
Food products n.e.c.	547	832	1,379	2,307	360	1,195	1,554	3,266
Catering services (prepared meals)	937	0	937	2,850	397	0	397	786
Non-alcoholic beverages	353	132	484	1,155	174	531	705	349
<b>Total food consumption</b>	<b>5,110</b>	<b>2,844</b>	<b>7,954</b>	<b>17,126</b>	<b>3,128</b>	<b>4,519</b>	<b>7,647</b>	<b>11,548</b>

The average per capita household food consumption (both cash expenditure and home produced) by locality are presented in Table 10.13. The table shows that the total per capita food consumption for home produce is higher in the rural localities (GH¢1,032) than urban (GH¢807). Cash expenditure in urban areas (GH¢1,919), on the other hand, is more than twice the expenditure in rural areas (GH¢997).

**Table 10.13: Value of average per capita household food consumption (both cash expenditure and home produced) and food budget shares by food subgroups and locality**

Food (subgroup)	Urban				Rural			
	Mean annual per capita food consumption (GHC)			Food budget share	Mean annual per capita food consumption (GHC)			Food budget share
	Cash expenditure	Home produced	Total		Cash expenditure	Home Produced	Total	
<b>Food and non-alcoholic beverages</b>	<b>1,919</b>	<b>807</b>	<b>2,726</b>	<b>100.0</b>	<b>997</b>	<b>1,032</b>	<b>2,029</b>	<b>100.0</b>
Bread and cereals	254	93	348	12.8	163	99	262	12.9
Meat	165	100	265	9.7	94	69	164	8.1
Fish and Sea food	270	146	416	15.3	190	307	497	24.5
Milk, Cheese and Eggs	77	41	118	4.3	36	11	48	2.3
Oils and Fats	54	81	135	4.9	38	30	68	3.3
Fruits	95	35	130	4.8	31	40	71	3.5
Vegetables	183	32	215	7.9	107	67	174	8.6
Sugar, Jam, Honey and Chocolate	28	0	28	1.0	16	0	16	0.8
Food products n.e.c.	175	219	394	14.4	106	303	408	20.1
Catering services (prepared meals)	475	0	475	17.4	153	0	153	7.5
Non-alcoholic beverages	142	60	202	7.4	63	107	170	8.4
<b>Total food consumption</b>	<b>1,919</b>	<b>807</b>	<b>2,726</b>	<b>100.0</b>	<b>997</b>	<b>1,032</b>	<b>2,029</b>	<b>100.0</b>

Table 10.14 which presents the food budget shares by locality shows that the budget share on food products “not elsewhere classified” (n.e.c) for all localities in Ghana is the highest (19.4%) followed by the share on bread and cereals (17.7%) and fish and sea foods (15.8%). Households in urban localities spend their highest share of the food budget on catering services or prepared meals (21.6% for Accra) while that for the rural localities is on food products n.e.c; this is more so for rural savannah (31%). The table further shows that the lowest budget share of both rural and urban households is on sugar, jam, honey and chocolate.

**Table 10.14: Food budget shares (both cash expenditure and home produced) by locality**

Food (subgroup)	Locality					
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	Ghana
Bread and cereals	15.4	17.4	19.7	16.6	24.2	17.7
Meat	7.5	8.4	4.6	7.0	7.6	7.6
Fish and Sea food	15.2	16.0	18.0	18.6	10.1	15.8
Milk, Cheese and Eggs	4.1	3.5	2.7	1.7	1.5	3.0
Oils and Fats	2.3	3.2	2.7	2.8	3.8	3.0
Fruits	5.5	3.1	3.4	1.9	1.0	3.2
Vegetables	10.6	11.2	9.7	11.6	13.8	11.3
Sugar, Jam, Honey and Chocolate	1.0	1.2	1.0	0.9	1.4	1.1
Food products n.e.c.	8.6	16.5	24.8	27.8	31.0	19.4
Catering services (prepared meals)	21.6	13.5	9.4	7.8	3.5	12.7
Non-alcoholic beverages	8.0	6.0	3.9	3.3	2.1	5.2
<b>Total food consumption</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 10.7 Availability of consumer items

Besides the detailed expenditure data, the survey collected information on the availability of various key consumer items. Households were asked whether, in the last 12 months, they had tried to purchase any of the selected consumer items but found them unavailable or if they do sometimes find them unavailable. If they ever found them unavailable, they were asked whether the shortages over the last 12 months were worse, the same, or better compared with the preceding year.

In analyzing the information in Table 10.15, the frequency with which households purchased these different items should be borne in mind. About ten percent of households reported the non-availability of gas (10.5%) while 11.0 percent reported the non-availability of kerosene during the 12 months preceding the data collection. A little less than thirty percent of households in rural savannah indicated the non-availability of kerosene (29.6%) and gas (29.2%) during the period. One-tenth of households in rural forest, on the other hand, reported the non-availability of sorghum (10.3%) and millet (10.0%).

Whereas anti-malaria drugs are available at all times in the urban localities, rural localities indicated its non-availability at some point in time, with rural savannah (19.0%) recording the highest followed by rural forest (15.4%).

**Table 10.15: Percentage of households reporting items unavailable in the past 12 months by locality**

Group (subgroup)	Locality					
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	Ghana
Anti-malaria drugs	0.0	0.0	11.4	15.4	19.0	7.1
Soap (all detergents)	0.0	0.0	0.8	5.6	7.1	2.4
Firewood	0.8	0.7	0.5	2.9	3.2	1.6
Charcoal	0.8	0.2	0.7	2.2	4.6	1.4
Kerosene	0.8	3.7	6.3	20.2	29.6	11.0
Petrol/Diesel	0.9	0.8	5.4	11.2	9.9	4.9
Premix fuel	0.9	5.7	4.8	5.9	19.7	6.7
Maize	0.8	0.5	2.2	1.3	4.2	1.4
Maize flour	0.1	0.7	4.8	4.4	20.8	4.4
Rice	0.1	0.0	0.5	2.5	7.2	1.7
Sorghum	0.9	2.3	2.9	10.3	16.0	5.9
Millet	0.9	1.2	3.1	10.0	10.0	4.6
Cooking oil	0.1	0.0	0.5	2.8	5.9	1.6
Sugar	0.0	0.0	0.2	2.6	3.9	1.2
Gas	0.7	6.3	7.5	14.5	29.2	10.5
<b>All items</b>	<b>0.5</b>	<b>1.5</b>	<b>3.4</b>	<b>7.5</b>	<b>12.7</b>	<b>4.4</b>

## 10.8 Total Annual Expenditure and Type of House

For the purpose of this survey a housing/dwelling unit is defined to include all types of structures occupied by members of households. These may consist of a room inside a house, a group of houses, a multi-story house, a hut or group of huts.

Table 10.16 presents the annual expenditures by the type of dwelling occupied and the locality. The table reveals that households residing in flats/apartments have higher expenditure (GH¢14,778) than those residing in any other types followed by those residing in living quarters attached to office/shops. In terms of locality the annual household expenditure for those residing in huts or buildings within the same compound in Accra (GAMA) is much higher (GH¢28,411) than that of all other localities followed by those residing in separate houses (GH¢20,116). It can be seen that households dwelling in separate houses in Accra (GAMA) on the average spend about twice the amount spent by their counterparts in the rural localities.

**Table 10.16: Average annual expenditure of households by type of dwelling occupied and locality (GH¢)**

Type of dwelling	Locality					Ghana
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
Separate house	20,116	13,423	7,373	8,703	9,233	11,890
Semi-detached house	13,399	10,295	9,467	6,586	6,614	8,946
Flat/Apartment	16,775	15,180	16,034	8,049	10,914	14,788
Compound house (rooms)	12,250	9,269	7,624	7,170	6,854	8,918
Huts/Buildings (same compound)	28,411	8,725	6,228	6,218	5,933	6,705
Huts/Buildings (different compound)	3,620	8,928	6,460	6,410	7,222	6,907
Tent	5,316	4,113	-	4,012	4,234	4,481
Improvised home (kiosk/container, etc.)	10,054	7,023	8,246	10,803	4,376	8,930
Living quarters attached to office/shop	10,609	18,114	7,591	6,693	3,167	12,970
Uncompleted building	7,666	7,603	5,633	5,803	1,842	7,388
Other	12,899	4,279	3,879	4,072	3,187	3,798
<b>All</b>	<b>13,569</b>	<b>10,217</b>	<b>7,663</b>	<b>7,301</b>	<b>6,619</b>	<b>9,313</b>

Table 10.17 shows the average annual expenditure of households by type of occupancy status and locality. From the table, households renting their dwellings on the average spend more (GH¢10,314) compared to those who own their dwelling (GH¢9,652). The annual average expenditure of households renting in Accra (GAMA), GH¢12,636 is higher than those in all the rural areas and the ecological zones: GH¢5,724 for rural savannah, GH¢7,336 for rural forest and GH¢8,259 for rural coastal. The table also indicates that the expenditure of those “perching” is higher in Accra (GAMA) GH¢7,297 followed by those in rural savannah (GH¢5,682).

**Table 10.17: Average annual expenditure of households by occupancy status and locality (GHC)**

Occupancy status	Locality					Ghana
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah	
Owning	16,849	10,852	8,313	7,784	6,887	9,652
Renting	12,636	10,148	8,259	7,336	5,724	10,314
Rent-free	10,873	8,353	6,350	6,352	5,900	7,790
Perching	7,297	4,920	-	4,037	5,682	5,724
Squatting	8,508	7,700	4,298	-	0	7,971
<b>All</b>	<b>13,677</b>	<b>9,841</b>	<b>7,624</b>	<b>7,308</b>	<b>6,635</b>	<b>9,317</b>

Table 10.18 shows that the mean income of a household in an urban locality is GH¢20,930.05 while that of rural is GH¢11,408.01. Among the urban localities, households in other urban areas have a higher average income compared to those in Accra (GAMA) while households in rural forest have the highest average income (GH¢12,102.59) among the rural localities.

Urban households in the country have a mean annual income of GH¢74,893.45, representing 69.2 percent of the total national income while rural localities have GH¢33,406.63, representing 30.8 percent (Table 10.18). The table further shows that among the rural localities, rural forest has the highest annual income of GH¢20,257.47 followed by rural savannah (GH¢8,767.67), with rural coastal having the lowest (GH¢4,381.49).

Table 10.18 further indicates that the annual average per capita income in urban localities is GH¢7,019.72 which implies an average income of GH¢19.23 per person per day while their rural counterparts have an average annual income of GH¢3,302.83 which represents an average income of GH¢9.04 per person per day.

**Table 10.18: Mean annual household income, per capita income and estimated total income by locality**

Locality	Mean annual household income (GHC)	Mean annual per capita income (GHC)	Estimated total annual income (Million GHC)	Percentage share of total income
<b>Urban</b>	<b>20,930.05</b>	<b>7,019.72</b>	<b>74,893.45</b>	<b>69.2</b>
Accra (GAMA)	17,023.71	5,603.23	19,191.11	17.7
Other Urban	22,726.77	7,671.23	55,702.34	51.4
<b>Rural</b>	<b>11,408.01</b>	<b>3,302.83</b>	<b>33,406.63</b>	<b>30.8</b>
Rural Coastal	11,351.13	3,681.58	4,381.49	4.1
Rural Forest	12,102.59	3,816.30	20,257.47	18.6
Rural Savannah	10,094.73	2,144.97	8,767.67	8.1
<b>Ghana</b>	<b>16,644.59</b>	<b>5,346.91</b>	<b>108,300.07</b>	<b>100</b>

## 10.9 Sources of household income

Table 10.19 presents information on the main sources of the income of households. The data reveal that almost half of household income is from non-farm self-employment, contributing 48.3 percent to sources of household income. Wages from employment is the second major contributor (36.3%) with household agriculture accounting for one-tenth (10.1%). Income from rent, remittances and other sources make up less than 5 percent of household income.

**Table 10.19: Sources of household income, per capita and estimated total income**

Source of income	Mean annual household income (GHC)	Mean annual per capita income (GHC)	Estimated total annual income (Million GHC)	Percentage distribution
Wage	7,814.10	2,622.59	39,324.86	36.3
Household agriculture	3,342.23	855.22	10,967.51	10.1
Non-farm self-employment	18,217.20	5,871.02	52,289.47	48.3
Rent	628.69	178.94	3,138.35	2.9
Remittances	848.49	375.61	1,803.88	1.7
Other	2,868.30	894.66	776.01	0.7
<b>All</b>	<b>16,644.59</b>	<b>5,346.91</b>	<b>108,300.07</b>	<b>100.0</b>

Table 10.20 shows the sources of household income by quintile, locality and region. Households in the lowest quintile have their major source of income from non-farm self-employment (34.2%) followed by wages from employment (22.0%). The highest quintile also shows the same trend as the lowest with the major source of income being non-farm self-employment (42.0%) followed by wages from employment (31.2%). Within all the quintiles, income from rent and remittances contribute less than 10 percent to household income.

**Table 10.20: Sources of households income by quintile, locality and region**

Quintile/Locality/Region	Sources of income						Total
	Wage income from employment	Household agricultural income	Non-farm self-employment income	Rental income (actual and imputed)	Remittance	Other income	
<b>Quintile</b>							
Lowest	22.0	13.8	34.2	4.5	3.7	21.8	100.0
Second	31.0	9.4	36.9	3.6	3.5	15.5	100.0
Third	29.8	8.4	41.6	3.6	2.2	14.4	100.0
Fourth	33.7	5.7	43.3	2.3	3.0	11.9	100.0
Highest	31.2	12.4	42.0	3.9	1.9	8.5	100.0
<b>Urban</b>	28.4	8.2	48.2	3.6	2.4	9.2	100.0
Accra (GAMA)	26.9	7.6	51.7	5.0	1.5	7.3	100.0
Other Urban	29.3	8.5	46.4	2.9	2.8	10.2	100.0
<b>Rural</b>	39.7	17.2	22.4	3.4	2.1	15.3	100.0
Rural Coastal	32.2	20.9	24.0	3.1	5.9	13.8	100.0
Rural Forest	43.4	14.8	22.3	3.1	1.3	15.0	100.0
Rural Savannah	24.0	27.9	21.9	5.2	3.6	17.5	100.0
<b>Region</b>							
Western	25.2	11.1	43.6	3.2	2.0	14.8	100.0
Central	59.7	6.6	22.1	2.1	1.2	8.3	100.0
Greater Accra	27.2	7.5	51.2	5.0	1.7	7.4	100.0
Volta	16.6	7.6	39.8	2.2	2.0	31.8	100.0
Eastern	22.4	30.8	33.4	1.8	2.7	8.9	100.0
Ashanti	39.8	4.1	43.2	1.8	3.0	8.1	100.0
Brong Ahafo	31.7	11.9	35.0	8.6	2.9	10.0	100.0
Northern	8.5	31.8	33.2	3.9	3.7	18.8	100.0
Upper East	24.4	14.4	19.9	11.5	2.0	27.8	100.0
Upper West	23.3	4.6	57.7	4.7	1.0	8.6	100.0
<b>Ghana</b>	<b>31.2</b>	<b>10.4</b>	<b>41.8</b>	<b>3.6</b>	<b>2.3</b>	<b>10.7</b>	<b>100.0</b>

In the urban localities, the major source of income for households comes from non-farm self-employment which contributes 48.2 percent followed by wages from employment (28.4%). On the other hand, wages from employment (39.7%) is the major contributor to the income of rural households followed by non-farm self-employment (22.4%).

In the regions, apart from Central and Upper East where wages from employment and other income are the major sources of income, all the other regions have non-farm self-employment as the major source of income followed by wages from employment. The table further indicates that only the Northern and Eastern regions have more than thirty percent of their income source from agriculture; all the other regions have less than 15 percent of their income from agriculture.

## 10.10 Transfers and Remittances

The survey also collected information on income transfers to and from households. As shown in Table 10.21, income transfers to non-household members is highest for children in both rural and urban localities with a higher proportion going to male children in the rural areas. Remittances to parents is the second highest in both rural and urban localities, female parents in urban localities receive a greater proportion of remittances followed by their rural counterparts.

**Table 10.21: Income transfers to non-household members by locality**

Relationship of non-household member to head	Urban		Rural		Ghana	
	Male	Female	Male	Female	Male	Female
Parent	21.6	38.3	10.1	27.7	16.2	34.4
Spouse	0.8	13.2	1.1	14.1	0.9	13.5
Child	36.3	19.6	54.1	30.2	44.6	23.5
Brother/sister	19.5	8.2	17.6	9.4	18.6	8.7
Other relative	16.6	16.2	13.3	14.0	15.1	15.4
Non relative	5.1	4.3	3.8	4.7	4.5	4.5
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 10.22 indicates that a higher proportion of transfer payments received by households go to children both in urban and rural localities especially female children (45.7%) compared to male children (33.2%). Female children in the rural localities also receive the highest proportion of all transfers received by households compared to their urban counterparts. Brothers and sisters are the second highest recipients of transfers by households (16.9%) while spouses are the lowest beneficiaries of transfer payments received by households.

**Table 10.22: Transfers and payments received by households by locality**

Relationship of member to head	Urban		Rural		Ghana	
	Male	Female	Male	Female	Male	Female
Parent	7.5	12.5	8.9	10.8	7.9	11.9
Spouse	22.3	6.9	9.5	3.0	18.8	5.5
Child	31.6	41.9	37.4	52.6	33.2	45.7
Brother/sister	9.7	17.2	16.4	16.3	11.5	16.9
Other relative	15.8	14.7	19.0	9.4	16.7	12.8
Non relative	13.0	6.9	8.8	7.9	11.9	7.3
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 10.11 Total Household Income

In this analysis, gross household income comprises income from employment, agricultural and non-farm activities, rent, remittances, and income from other sources.

Table 10.23 indicates that the average annual gross household income is about GH¢16,645 while the average per capita gross income is GH¢5,347. Using the prevailing annual average exchange rate of 2013, GH¢1.9708<sup>4</sup> to the US dollar, average annual gross household income and average per capita gross income amounts to US\$8,446 and US\$2,713 respectively. The highest quintile has an average annual gross income of GH¢25,200.9 and for the lowest quintile the corresponding gross income is GH¢6,571.8. This implies that a household within the highest quintile has income that is about four times as much as that of a household within the lowest quintile. The annual per capita income is GH¢5,347 implying that an average person lives on an average gross income of GH¢14.65 per day (Table 10.23).

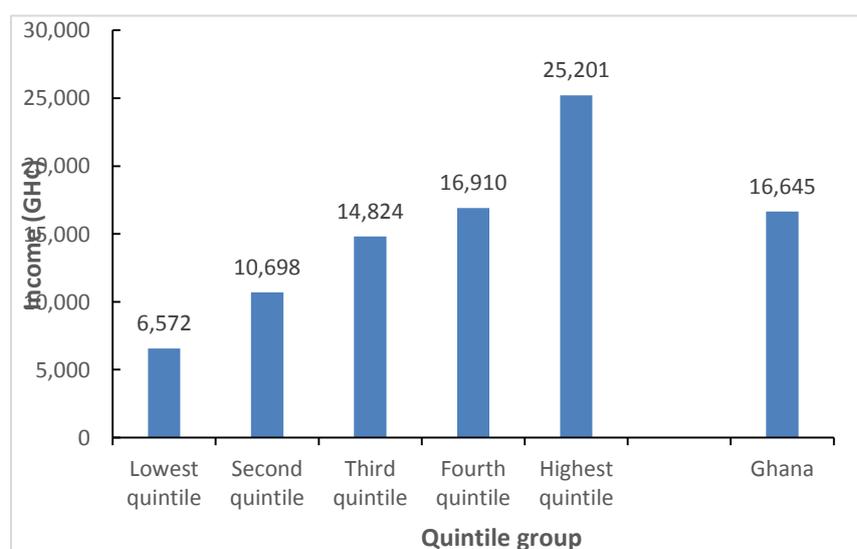
**Table 10.23: Mean annual household and per capita income by quintile group**

Quintile	Mean annual household income (GH¢)	Mean annual per capita income (GH¢)	Mean household size	Percentage share of annual income
First (Lowest)	6,571.8	1,153.3	6.1	5.3
Second	10,698.0	2,160.7	5.0	10.3
Third	14,823.5	3,357.8	4.4	16.4
Fourth	16,909.7	4,841.1	3.6	22.4
Fifth (Highest)	25,200.9	10,492.6	2.6	45.6
<b>Ghana</b>	<b>16,644.6</b>	<b>5,346.9</b>	<b>4.0</b>	<b>100.0</b>

Note: This is gross income and this applies to subsequent tables

The highest quintile has an average per capita gross income of about GH¢10,493 which is twice as high as the national average and nine times more than that of the lowest quintile (Figure 10.1).

**Figure 10.1: Mean annual per capita income (GH¢) by quintile**



On the other hand,

<sup>4</sup> Source: Bank of Ghana statistical bulletin, June 2014

disparities between the two extreme quintiles are lower if the national average is considered. People who fall in the lowest quintile therefore have an average per capita gross income of about GH¢96 per month which is about 14 times less than the national monthly average gross income of GH¢1,387.

At the regional level, Ashanti has the highest average gross annual income of GH¢23,120 which is higher than the average national income of GH¢16,645 (Table 10.24). This is followed by the Western region and then Greater Accra. The three northern regions have the lowest mean annual gross income of less than GH¢13,000. In terms of per capita income, three regions (GH¢8,205.4 for Ashanti, GH¢7,730.7 for Western and GH¢5,428.5 for Greater Accra) have an annual per capita gross income above the national annual average (GH¢5,346.9), with Ashanti recording the highest. Seven regions recorded an average per capita annual gross income that is below the national average annual per capita income (Fig.10.2).

**Figure 10.2: Average annual per capita income by region**

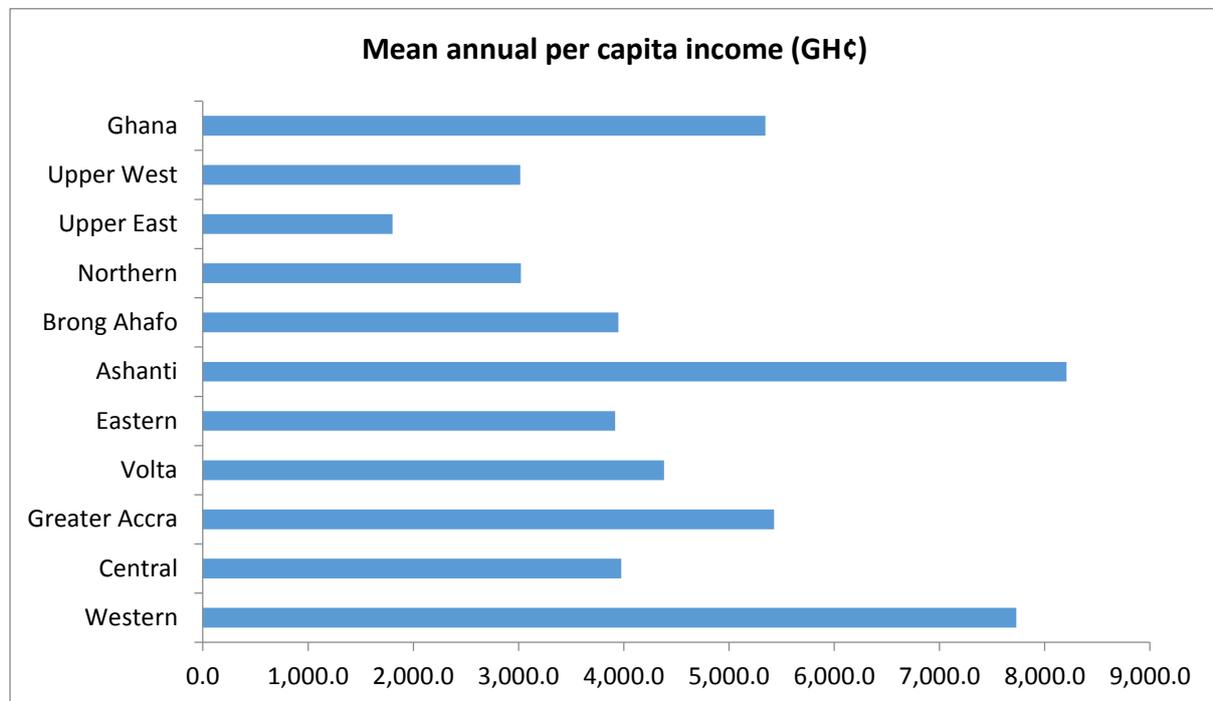


Table 10.24 further reveals that Greater Accra region has more than half of its households falling within the highest quintile, and less than five percent of the households within the lowest quintile. Ashanti region follows with about a third and nearly seven percent of its households within the highest and lowest quintiles respectively.

On the other hand, Northern, Upper East and Upper West have much lower proportions of households ranging from 10.2 percent in Northern to 12.7 percent in Upper East in the highest quintile and high proportions of households ranging from 34.2 percent in the Northern region to 56.1 percent in the Upper West region in the lowest quintile. This indicates very high incidence of poverty in the northern parts of the country.

**Table 10.24: Households by quintile, Mean annual household and per capita income by region**

Region	Quintile						Mean annual household income (GHC)	Mean annual per capita income (GHC)
	1	2	3	4	5	All		
Western	11.6	16.4	17.9	25.2	28.9	100.0	22,599.1	7,730.7
Central	10.1	19.8	23.6	21.4	25.1	100.0	12,004.0	3,975.7
Greater Accra	3.0	5.7	11.9	23.2	56.2	100.0	16,580.8	5,428.5
Volta	19.0	21.4	18.0	20.8	20.8	100.0	15,451.1	4,382.2
Eastern	11.7	18.8	23.0	24.4	22.1	100.0	13,074.3	3,919.1
Ashanti	7.1	15.0	19.1	25.3	33.6	100.0	23,119.5	8,205.4
Brong Ahafo	16.4	20.0	21.9	20.9	20.7	100.0	14,167.8	3,949.1
Northern	34.2	22.7	18.7	14.2	10.2	100.0	12,281.4	3,023.5
Upper East	32.5	21.3	17.7	15.9	12.7	100.0	7,240.5	1,801.9
Upper West	56.1	16.6	10.5	6.3	10.6	100.0	11,977.5	3,015.7
<b>Ghana</b>	<b>13.3</b>	<b>16.1</b>	<b>18.4</b>	<b>22.1</b>	<b>30.1</b>	<b>100.0</b>	<b>16,644.6</b>	<b>5,346.9</b>

Table 10.25 indicates that the estimated total annual amount of all remittances paid out by households is GH¢1,673.1 million. Households which actually remitted incurred an annual expenditure of about GH¢698.7. In terms of place of residence, households in the urban localities paid out an annual estimated total amount of GH¢993.8 million. Urban households who actually remitted paid an annual expenditure on remittances of about GH¢869.6 million, while, overall, household annual expenditure on remittances was GH¢271.8 million. Households in the rural areas incur an annual estimated expenditure of GH¢679.3million which is less than half of the national estimated annual total expenditure. Households in the rural areas which actually remitted also paid out an annual amount of GH¢548.4 million while all households in the rural areas paid GH¢230.7 million.

**Table 10.25: Mean annual household expenditure on and receipts from remittances and estimated total remittances by locality**

Locality	Annual expenditure on remittances			Annual receipts from remittances		
	By households who actually remitted (GHC)	All households (GHC)	Estimated total expenditure (Million GHC)	By households who actually received (GHC)	All households (GHC)	Estimated total income (Million GHC)
<b>Urban</b>	<b>859.57</b>	<b>271.80</b>	<b>993.83</b>	<b>1,175.64</b>	<b>346.98</b>	<b>1,268.72</b>
Accra (GAMA)	913.00	183.72	213.57	1,262.56	232.88	270.72
Other Urban	846.02	312.86	780.26	1,154.09	400.16	997.99
<b>Rural</b>	<b>548.44</b>	<b>230.66</b>	<b>679.29</b>	<b>511.23</b>	<b>181.72</b>	<b>535.2</b>
Rural Coastal	553.18	157.68	61.67	760.35	240.45	96.03
Rural Forest	691.99	293.20	493.83	519.42	202.38	3408.6
Rural Savannah	374.46	142.34	123.79	375.67	115.29	100.27
<b>Ghana</b>	<b>698.66</b>	<b>253.45</b>	<b>1,673.12</b>	<b>848.49</b>	<b>273.25</b>	<b>1,803.88</b>

Households also received some income from individuals who are not members of their households. Like remittances, such in-flows are usually not to be repaid. The annual estimated total value of remittances received in the country amounted to GH¢1,804 million.

Annual receipt of remittances by households which actually received them amounted to GH¢848.5 million. The estimated total annual value of remittances received by urban households (GH¢1,268.7 million) was about twice that which was received by rural households (GH¢535.2 million).

## 10.12 Miscellaneous income and expenditure

Apart from remittances, the survey also sought information on miscellaneous or other income and expenditure of the households. In the case of miscellaneous income, households were asked how much income either in cash or in kind they received in the 12 months prior to the survey from social security payments, state pensions, or other sources from the central government such as the LEAP<sup>5</sup>. They were also asked about cash or in kind receipts from retirement benefits, dowries or inheritances, or from other non-government sources such as churches and institutions, dividends and interest. Receipts from susu (the mutual savings scheme widely used in Ghana) were specifically excluded.

As indicated in Table 10.26, from an estimated total miscellaneous income of GH¢663.9 million, 10.6 percent was received from other sources in the form of dowry or inheritance while the rest was from central government. The most important source of income for households from government sources is state pension, accounting for more than a third of all miscellaneous estimated income for households (37.7%). Social security followed, recording 25.3 percent of the estimated total miscellaneous income, and LEAP was the least reported source of miscellaneous income received by the households.

**Table 10.26: Mean annual income received by households from various sources by locality**

Source of income	Mean household income (GH¢)			Percentage share of total estimated miscellaneous income	Estimated total miscellaneous income (Million GH¢)
	Urban	Rural	All		
<b>Central Government</b>	<b>5,777.9</b>	<b>6,857.8</b>	<b>6,149.0</b>	<b>89.4</b>	<b>593.5</b>
Social Security	3,598.9	2,578.7	3,304.7	25.3	168.1
State Pension	7,020.1	5,770.1	6,679.2	37.7	250.3
LEAP	192.0	1,061.6	1,003.9	1.0	7.0
Retirement Benefits	6,453.2	18,985.7	12,551.8	25.3	168.2
<b>Other Sources</b>	<b>1,564.0</b>	<b>1,018.6</b>	<b>1,265.4</b>	<b>10.6</b>	<b>70.4</b>
Dowry or Inheritance	2,018.4	1,047.1	1,438.5	8.6	57.4
Other (excluding susu)	713.3	877.1	781.7	2.0	13.0
<b>All</b>	<b>4,596.5</b>	<b>4,100.5</b>	<b>4,389.8</b>	<b>100.0</b>	<b>663.9</b>

Information captured in the survey on miscellaneous expenditures includes taxes (TV licences, property, etc.); contributions to self-help projects; weddings, dowries, funerals or other ceremonies; gifts and presents (excluding any transfers); and other miscellaneous expenditures (excluding contributions to susu).

From Table 10.27, urban and rural households in Ghana on the average spend about GH¢629 annually on the various items. Out of the estimated total miscellaneous expenditure of about GH¢3,612.5million spent by households, 45.7 percent was spent on gifts and presents. The second largest spending by all households was on wedding, dowry, and funerals. This

<sup>5</sup> Livelihood Empowerment Against Poverty

expenditure item constitutes about 26 percent of the estimated total miscellaneous expenditure in Ghana. The least recorded expenditure incurred by all households is the payment of taxes on property and TV license fees constituting less than 2 percent of the estimated total miscellaneous expenditure.

**Table 10.27: Mean annual expenditure paid by urban and rural households for various purposes and estimated total miscellaneous expenditure**

Purpose of expenditure	Mean household expenditure (GHC)			Estimated total miscellaneous income (Million GHC)
	Urban	Rural	All	
Taxes (TV license, property tax, etc.)	150.2	72.7	127.0	51.9
Contributions to self-help projects	1,157.8	622.7	918.2	847.2
Wedding, dowry, funeral, etc.	196.6	166.7	182.8	926.7
Gifts and presents (excluding remittances)	195.7	598.9	370.8	1,650.7
Other (excluding susu)	133.2	52.2	96.2	136.1
<b>Total</b>	<b>554.4</b>	<b>722.2</b>	<b>629.2</b>	<b>3,612.5</b>

# CHAPTER ELEVEN

## ACCESS TO FINANCIAL AND INSURANCE SERVICES, CREDIT AND ASSETS

### 11.1 Introduction

Credit is the provision of resources by a party to another, material or financial and with an arrangement for the return or repayment of such at a later date. Savings is the setting aside of unspent income in a bank or a non-bank financial institution or in other forms of arrangement such as pension plans and some insurance products. An asset is a resource with economic value that a household or members of a household own or control with the expectation that it will provide current and future benefits. There are tangible and intangible assets. The three, Credit, Assets and Savings are interrelated, and access to credit and savings services and ownership of assets impact on the living standards of individual and households, their communities and the nation as a whole.

### 11.2 Access to financial services

Table 11.1 shows the type of financial institutions in which accounts are held by members of the households in the various localities. The table shows that the proportion of urban households holding accounts in all the financial institutions is higher compared to rural households. For account holders in Investment and Mortgage, 90.9 percent are in urban localities with only 9.1 percent in rural localities. With Commercial Banks, 80.7 percent of the account holders are in the urban localities compared to 19.2 percent in rural localities. More than 50.0 percent of account holders in Community/ Rural banks, Savings and Loan Schemes, Cooperative Credit Unions and Susu Schemes are all in urban localities.

**Table 11.1: Type of financial institution in which account is held by locality**

Locality	Financial institution						
	Commercial Bank	Investment /Mortgage	Community / Rural Bank	Savings and Loans Scheme	Cooperative / Credit Union	Susu Scheme	Other
<b>Urban</b>	<b>80.76</b>	<b>90.89</b>	<b>60.36</b>	<b>65.96</b>	<b>66.89</b>	<b>54.91</b>	<b>68.14</b>
Accra (GAMA)	36.4	53.8	4.2	22.5	6.9	9.1	51.5
Other Urban	44.4	37.1	56.2	43.5	60.0	45.8	16.6
<b>Rural</b>	<b>19.2</b>	<b>9.1</b>	<b>39.6</b>	<b>34.0</b>	<b>33.1</b>	<b>45.1</b>	<b>31.9</b>
Rural Coastal	2.9	1.9	4.2	2.4	1.2	4.2	12.8
Rural Forest	11.4	5.3	26.4	28.2	20.6	30.9	13.2
Rural Savannah	5.0	2.0	9.0	3.5	11.3	10.0	5.9
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0

According to Table 11.2, the proportion of males holding accounts for all account types is higher than females. The proportion of males (67.8%) holding a current or cheque account is more than twice the proportion of females (32.2%). The pattern is almost the same for both urban and rural areas except rural savannah where the proportions of females holding a fixed deposit account or E-zwich (84.9% and 72.0% respectively) are far higher than males (15.1% and 28.0% respectively).

**Table 11.2: Type of account being held in financial institutions by locality and sex of individual (percent)**

Account type	Urban				Rural						Ghana		Number
	Accra (GAMA)		Other Urban		Rural Coastal		Rural Forest		Rural Savannah		Male	Female	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female			
Current or cheque	68.2	31.8	64.3	35.7	68.1	31.9	78.0	22.0	70	30	67.8	32.2	2,243
Investment	69.2	30.8	59.8	40.2	100.0	0.0	59.8	40.2	53	47	64.6	35.4	203
Savings account	56.3	43.7	54.6	45.4	70.6	29.4	67.0	33.0	74	26	58.6	41.4	7,138
Fixed deposit	62.9	37.1	51.2	48.8	46.3	53.7	61.6	38.4	15.1	84.9	53.3	46.7	58
E-zwich	55.9	44.1	50.2	49.8	0.0	0.0	61.5	38.5	28	72	50.4	49.6	37
Other	55.1	44.9	68.6	31.4	33.6	66.4	55.3	44.7	45.3	54.7	54.1	45.9	58
<b>Total</b>	<b>55.4</b>	<b>44.6</b>	<b>52.3</b>	<b>47.7</b>	<b>63.1</b>	<b>36.9</b>	<b>58.5</b>	<b>41.5</b>	<b>62.1</b>	<b>37.9</b>	<b>55.1</b>	<b>44.9</b>	<b>9,737</b>

Table 11.3 shows the proportion of households with members having an insurance policy by locality. For all localities, 34.1 percent of persons had an insurance policy. In the urban localities, the percentage of persons in households with insurance policies (41.5%) is higher than in rural areas (24.9%). The percentage of persons in households in the other urban areas with an insurance policy (44.6%) is higher than GAMA (34.9%). In the rural localities, the proportion of persons in households without insurance policies is 75.1 percent, with the rural savannah having the highest proportion of 77.9 percent.

**Table 11.3: Proportion of households with members holding an insurance policy by locality**

Locality	Yes	No	N
<b>Urban</b>	41.5	58.5	7,445
Accra (GAMA)	34.9	65.1	1,697
Other Urban	44.6	55.4	5,748
<b>Rural</b>	24.9	75.1	9,327
Rural Coastal	25.3	74.7	1,156
Rural Forest	26.3	73.7	3,863
Rural Savannah	22.1	77.9	4,308
All	34.1	65.9	16,772

In Table 11.4, the main reason cited by members of households for not having an insurance cover is affordability (48.5%). The situation is almost the same in both the urban and rural localities (49.1% for urban and 48.0% for rural). In the rural areas, about one-third of the households (32.5%), which is more than twice the proportion in urban areas (14.7%), do not have an insurance policy because they do not know how insurance works. More than half of households in rural coastal (52.5%) and 56.9 percent in rural forest do not have insurance cover because they cannot afford it. Very small proportions of households indicate that the insurance companies are deceptive hence the decision not to take an insurance policy.

**Table 11.4: Reason for not having an insurance policy/cover by locality (percent)**

Locality	Reason							Other	Number
	Do not see it necessary	Cannot afford it	Insurance companies are deceptive	Inadequate compensation	Don't know how insurance works	Procedure for claims takes too long			
<b>Urban</b>	26.7	49.1	4.3	1.0	14.7	1.5	2.8	16,171	
Accra (GAMA)	33.8	46.0	7.9	0.4	5.3	2.0	4.7	3,761	
Other Urban	22.9	50.8	2.4	1.3	19.6	1.2	1.8	12,410	
<b>Rural</b>	15.1	48.0	1.2	0.2	32.5	1.1	1.9	31,171	
Rural Coastal	23.7	52.3	2.4	0.2	18.2	2.1	1.1	3,118	
Rural Forest	16.7	56.9	0.7	0.3	23.4	0.9	1.0	10,698	
Rural Savannah	10.1	33.7	1.4	0.1	50.2	0.9	3.4	17,355	
All	20.5	48.5	2.6	0.6	24.2	1.3	2.3	47,342	

Table 11.5 shows the type of short term insurance policies held by persons in households across localities. More than three out of five (60%) short term insurance policy holders are in urban households. Almost 90 percent of persons in urban households hold a commercial or business policy, 83.3 percent hold property policy and 77.4 percent hold vehicle or motor policy. Medical (38.1%), funeral (25.7% and vehicle or motor (22.6%) are the main insurance policies held by persons in rural households. The proportion of these policy holders is higher in rural forest than in other rural areas.

**Table 11.5: Type of short-term insurance policy held by households by locality (percent)**

Locality	Type of policy								N
	Vehicle/ motor	Medical	Funeral	Property	Commer- cial/ business	Travel	None	Other	
<b>Urban</b>	77.4	61.9	74.3	83.3	89.4	87.1	77.7	84.4	23,600
Accra (GAMA)	32.1	9.4	29.6	31.6	42.4	33.0	36.2	40.9	4,913
Other Urban	45.4	52.5	44.7	51.7	47.1	54.0	41.5	43.5	18,687
<b>Rural</b>	22.6	38.1	25.7	16.7	10.6	12.9	22.3	15.6	37,544
Rural Coastal	3.0	3.6	4.9	3.9	-	1.2	2.1	5.4	3,824
Rural Forest	10.3	22.6	15.8	12.1	6.1	1.3	13.8	7.1	13,713
Rural Savannah	9.3	12.0	5.0	0.7	4.5	10.4	6.4	3.1	20,007
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	61,144

The proportion of household members with long term insurance policies follows the same pattern as for short term holders, with more than 70 percent of members holding a long term policy. In the urban areas, 78.6 percent have a retirement or annuity plan; 70.6 percent have an education policy while 74.4 percent have an insurance policy paid for by the employer (Table 11.6). A higher proportion of persons in urban areas do not have a policy (60.5%) compared to the rural areas (39.5%). The proportion of life insurance policy holders who pay for their insurance in other urban areas (52.9%) is higher than in GAMA (17.9%). The situation is the same for education policy holders.

In the rural areas, the dominant policy is an endowment or savings plan (37.4%) followed by life insurance policies paid for by the holder (19.2%) and an education policy (29.4%).

**Table 11.6: Type of long-term insurance policy held by households by locality (percent)**

Locality	Type of policy							Number
	Life insurance paid by holder	Life insurance paid by employer	Retirement annuity/plan	Education	Other endowment/ investment saving plan	None	Other	
<b>Urban</b>	70.8	74.4	78.6	70.6	62.6	60.5	86.3	23,600
Accra (GAMA)	17.9	37.7	36.4	19.0	23.6	9.7	9.6	4,913
Other Urban	52.9	36.7	42.2	51.6	39.0	50.8	76.7	18,687
<b>Rural</b>	29.2	25.6	21.4	29.4	37.4	39.5	13.7	37,544
Rural Coastal	6.4	5.3	3.0	2.5	4.7	3.0	2.0	3,824
Rural Forest	12.9	13.1	13.0	17.7	18.4	23.6	8.7	13,713
Rural Savannah	9.8	7.3	5.3	9.2	14.4	12.8	3.1	20,007
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	61,144

### 11.3 Savings

A little over one-third (35.4%) of households have savings accounts or are contributing to a savings scheme, while as much as 64.6 percent of households have no savings accounts and are not contributing to a saving scheme (Table 11.7). Among all individuals who have savings accounts or are contributing to a savings scheme, the proportion of males (58.6%) is higher compared to females (41.3%).

Table 11.7 also shows that 46.4 percent of urban households have savings accounts while in the rural localities only 21.5 percent of households have savings accounts. In the urban areas, the proportion of households in Accra with savings accounts (54.1%) is higher than for other urban (42.9%). The proportion of male (56.3%) individuals having a savings account in Accra (GAMA) is higher than those in other urban (54.6%). The reverse is the case where the proportion of females with savings accounts (45.4%) in other urban areas is higher than those in Accra (GAMA) (43.7%). In the rural localities, very high proportions of male individuals have a savings account compared to females.

**Table 11.7: Households with a bank account or contributing to a savings scheme by locality and sex**

Locality	Households with			Individuals having savings accounts		
	Savings	No Savings	Total	Male	Female	All
<b>Urban</b>	<b>46.4</b>	<b>53.6</b>	<b>100.0</b>	<b>55.2</b>	<b>44.8</b>	<b>75.6</b>
Accra (GAMA)	54.1	45.9	100.0	56.3	43.7	28.2
Other Urban	42.9	57.1	100.0	54.5	45.4	52.7
<b>Rural</b>	<b>21.5</b>	<b>78.5</b>	<b>100.0</b>	<b>69.2</b>	<b>30.8</b>	<b>24.4</b>
Rural Coastal	22.6	77.4	100.0	70.2	29.8	3.4
Rural Forest	23.3	76.7	100.0	67.1	32.9	15.1
Rural Savannah	17.6	82.4	100.0	74.0	26.1	5.8
<b>All</b>	<b>35.4</b>	<b>64.6</b>	<b>100.0</b>	<b>58.6</b>	<b>41.4</b>	<b>100.0</b>

A high proportion of households (43.8%) cited inadequacy of money or income as the reason for not having a savings account or contributing to a savings scheme (Table 11.8). Another 29.4 percent indicated that they did not have a regular income while about one-quarter (19.9%) did not find it necessary to own a savings account. Smaller proportions are either not aware of the existence of a savings scheme or the institutions were sited far from where they live (2.4% and 1.3% respectively).

Among both males and females, high proportions (42.3% and 45.1% respectively) indicated that they did not have a savings account because they did not have enough money or income, while almost the same proportions (29.1% and 29.6%) cited irregular income as the reason. About one-quarter of them did not find it necessary to own a savings account while very small proportions (less than one percent) found the process cumbersome.

For households in the urban areas, 41.9 percent cited not having enough money or income as the reason for not having a savings account or not contributing to a savings scheme. The proportion of households in urban areas who said they did not have a regular income is 29.6 percent while 21.7 percent did not think it was necessary to have a savings account or operate a savings scheme.

**Table 11.8: Reasons for not having a savings account and not contributing to a savings scheme by locality and sex**

Sex/Locality	Reason							Total
	Not necessary /interested	Not aware of one	Process cumbersome	Financial institution too far away	Don't have enough money or income	Don't have regular income	Other	
Male	21.1	2.6	0.9	1.4	42.3	29.1	2.6	100.0
Female	18.9	2.3	0.7	1.2	45.1	29.6	2.3	100.0
<b>Urban</b>	<b>21.7</b>	<b>2.3</b>	<b>0.7</b>	<b>0.4</b>	<b>41.9</b>	<b>29.6</b>	<b>3.5</b>	100.0
Accra (GAMA)	27.7	2.1	1.0	0.7	39.4	21.0	7.9	100.0
Other Urban	19.5	2.3	0.6	0.3	42.7	32.7	1.8	100.0
<b>Rural</b>	<b>18.4</b>	<b>2.6</b>	<b>0.8</b>	<b>2.0</b>	<b>45.4</b>	<b>29.2</b>	<b>1.6</b>	100.0
Rural Coastal	22.5	1.8	2.0	1.3	47.4	21.8	3.2	100.0
Rural Forest	17.2	2.1	0.7	1.0	44.1	33.3	1.5	100.0
Rural Savannah	18.8	3.4	0.7	3.5	46.6	25.9	1.2	100.0
<b>All</b>	<b>19.9</b>	<b>2.4</b>	<b>0.8</b>	<b>1.3</b>	<b>43.8</b>	<b>29.4</b>	<b>2.4</b>	<b>100.0</b>

In the rural localities, 45.4 percent of all households said they did not have enough money or income to operate a savings account, 29.2 percent said they did not have a regular income and 18.4 percent said it was not necessary to operate a savings account or scheme. The patterns are similar in the different ecological zones.

## 11.4 Credit

Table 11.9 shows the proportion of households who applied for loans in the 12 months preceding the interview by locality. About a tenth (11.4%) of all households reported that they had applied for loans during the reference period while the rest (89.1%) did not. In the urban areas, 10.9 percent of the households applied for a loan in the last 12 months, with other urban areas reporting that 13.2 percent of their households had applied for a loan compared to 5.9 percent in Accra (GAMA).

In the rural localities, 12 percent of households reported to have applied for loans within the past 12 months; a higher proportion in rural forest (14.1%) areas applied for a loan compared to the other rural areas.

**Table 11.9: Households applying for a loan in the 12 months preceding the survey by locality**

Locality	Loan application		Number
	Yes (%)	No (%)	
<b>Urban</b>	<b>10.9</b>	<b>89.1</b>	<b>7,445</b>
Accra (GAMA)	5.9	93.5	1,697
Other Urban	13.2	86.8	5,748
<b>Rural</b>	<b>12.0</b>	<b>88.0</b>	<b>9,327</b>
Rural Coastal	8.0	92.0	1,156
Rural Forest	14.1	85.9	3,863
Rural Savannah	9.9	90.1	4,308
All	11.4	88.6	16,772

Table 11.10 indicates the purpose for which households applied for loans. The purpose for loans varies from locality to locality. In rural localities, 80.7 percent of households took loans for the purpose of purchasing agricultural inputs while in the urban localities only about one-fifth (19.3%) percent required loans for the same purpose. More than two-thirds of rural households (70.2%) applied for loans for the acquisition of agricultural equipment compared to 29.8 percent of urban households. An additional 54.6 percent took loans for the purpose of acquiring other consumer goods while 48.2 percent acquired loans for educational purposes.

**Table 11.10: Purpose of loans to households by locality**

Purpose for contracting loan	Locality							Number of persons with accounts
	Urban			Rural				
	Accra (GAMA)	Other Urban	Total	Rural Coastal	Rural Forest	Rural Savannah	Total	
Land	26.3	55.6	81.9	2.4	11.6	4.1	18.1	26
Agric Equipment	0.0	29.8	29.8	3.6	31.8	34.8	70.2	37
Agric Inputs	0.0	19.3	19.3	8.2	42.1	30.4	80.7	246
Business	9.7	52.3	62.0	3.5	28.6	5.9	38.0	733
Housing	7.7	64.9	72.6	3.5	13.8	10.0	27.4	155
Education/ Training	6.3	45.5	51.8	4.1	35.8	8.3	48.2	278
Wedding, travel, bride price	2.3	54.1	56.4	0.0	25.9	17.7	43.6	21
Vehicle	24.3	40.2	64.5	10.8	18.8	6.0	35.5	42
Debt Payment	21.1	36.4	57.5	2.1	27.1	13.3	42.5	52
Other Consumer goods	8.2	37.2	45.4	3.7	33.7	17.2	54.6	188
Other	1.5	30.7	32.2	4.3	51.1	12.4	67.8	210
Total	7.8	44.4	52.2	4.3	32.1	11.4	47.8	1,988

In the urban localities, land acquisition is the main purpose for which loans are secured by households, with as high as 81.9 percent of urban households applying for loans for this purpose. This is followed by housing (72.6%), vehicle acquisition (64.5%) and wedding, travel or payment of bride price (56.4%).

In the other urban localities, the main purposes for taking loans were housing (64.9 %), land acquisition (55.6%), wedding, travel or bride price (54.1%) and purchase of vehicle (40.2%). In Accra (GAMA), 26.3 percent of households applied for loans for the purpose of land acquisition while 24.3 percent required it to purchase a vehicle.

Table 11.11 shows the source of loans to household members by locality and sex. About one-fifth sourced their loans from relatives/friends/neighbours (22.0%) or from savings and loan schemes (19.5%) while 18.6 percent sourced their loans from private banks. The main sources of loans for females are savings and loan schemes (26.0%), Relatives/friends/ neighbours (18.3%) and private banks (16.3%)

In Accra (GAMA), 34.3 percent and 24.7 percent had their loans from savings and loan schemes and private banks respectively. More than one-fifth of persons in other urban households sourced their loans from savings and loan schemes (23.4%) and private banks (21.6%). In the rural localities, the major source of loans for persons in rural savannah and rural forest is relatives/friends/ neighbours (39.3% and 30.9% respectively). With persons in rural coastal households, the main sources of loans are private banks (24.0%) and susu schemes (23.3%).

**Table 11.11: Source of loans to households by locality and sex**

Source of loan	Locality					Ghana			Number
	Urban		Rural			Male	Female	All	
	Accra (GAMA)	Other Urban	Rural Coastal	Rural Forest	Rural Savannah				
State bank	16.3	17.6	9.9	5.7	7.1	14.4	9.9	12.2	220
Private bank	24.7	21.6	24.9	15.3	9.2	20.9	16.3	18.6	318
Cooperative	6.1	7.4	0.7	5.5	4.6	5.9	6.2	6.1	117
Gov't. Agency	0.9	1.5	2.3	0.5	0.4	1.4	0.7	1.0	18
NGOs	1.1	0.9	0.7	1.9	8.4	1.9	2.2	2.1	50
Business firm	2.1	0.8	1.2	1.1	1.0	1.1	1.0	1.0	20
Employer	5.0	1.6	0.0	0.4	0.3	1.4	1.2	1.3	23
Money lender	0.7	2.4	2.8	6.6	3.3	3.5	3.9	3.7	73
Savings and loans scheme	34.3	23.4	9.4	16.3	7.1	13.2	26.0	19.6	336
Susu scheme	3.8	3.7	23.4	10.4	14.7	4.5	11.3	7.9	239
Trader	0.0	2.0	0.0	2.0	1.8	2.6	0.8	1.7	35
Farmer	0.0	0.4	0.3	2.8	1.6	2.2	0.4	1.3	33
Relative/Friend/Neighbour	4.0	14.9	20.2	30.8	39.3	25.8	18.3	22.0	476
Other	0.9	1.8	4.1	0.8	1.1	1.2	1.6	1.4	30
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1988

Table 11.12 presents information on the guarantee or collateral required for the loans to be provided to household members. In the urban localities, 91.6 percent of households had to use vehicle documents as collateral for loans compared to only 8.4 percent of rural households. This is followed by the use of houses; in the urban areas, 83.4 percent of household members used houses and buildings while 16.6 percent used the same collateral in rural areas.

Another form of guarantee or collateral used in urban areas is employer, where 78.4 percent of loan applicants in urban areas used the employer as guarantee, followed by the channeling of salaries through the bank (71.8%).

Worth noting is the use of cattle as collateral. This only occurred in the rural savannah area where a 100 percent of households used cattle as collateral. The use of land as collateral for loans was predominant in the rural localities compared to urban localities, with 63.3 percent of rural households and 36.7 percent of urban households respectively using land as collateral for loans. More than half of rural households (54.2%) and 45.8 percent of urban households did not have to present any form of collateral or guarantee to be granted a loan.

**Table 11.12: Guarantee or collateral for loans to households by locality**

Guarantee required	Locality							Number
	Urban			Rural				
	Accra (GAMA)	Other Urban	Total	Rural Coastal	Rural Forest	Rural Savannah	Total	
None	4.4	41.4	45.8	3.2	37.2	13.9	54.2	1,173
Land	3.7	32.9	36.7	1.0	59.6	2.7	63.3	27
Cattle	0.0	0.0	0.0	0.0	0.0	100.0	100.0	4
House/building	33.0	50.3	83.4	2.2	12.0	2.4	16.6	24
Employer	16.3	62.1	78.4	6.4	3.3	12.0	21.6	52
Relatives	31.0	37.7	68.7	3.5	18.4	9.4	31.3	82
Non-relatives	1.9	67.3	69.2	6.0	21.9	2.8	30.8	72
Land title (with or without a house)	0.0	60.2	60.2	0.0	39.8	0.0	39.8	8
Salary channeled through lending institution	17.1	54.6	71.8	2.3	19.7	6.2	28.2	130
Vehicle documents	40.3	51.3	91.6	0.0	8.4	0.0	8.4	11
Cash or bank account or loan	8.9	42.7	51.6	8.8	31.4	8.2	48.4	270
Third party security	15.8	32.6	48.4	7.0	27.5	17.2	51.6	79
Other	19.0	35.0	54.0	5.7	31.0	9.3	46.0	56
All	8.7	43.5	52.2	4.3	32.1	11.4	47.8	1,988

Table 11.13 shows the percentage of households whose members were refused loans. About a tenth (10.1%) of the households whose members applied for loans had their applications refused. The proportion of loan refusal is slightly higher in urban (10.3%) than rural (9.8%) areas. Within the rural areas, the proportion of household members who were refused loans in rural savannah (15.5%) is higher than in the other rural areas.

**Table 11.13: Households whose members were refused loans by locality**

Locality	Loan refusal		N
	Yes (%)	No (%)	
<b>Urban</b>	10.3	89.7	862
Accra (GAMA)	12.0	88.0	92
Other Urban	9.9	90.1	770
<b>Rural</b>	9.8	90.2	1,092
Rural Coastal	9.9	90.1	103
Rural Forest	7.8	92.2	576
Rural Savannah	15.5	84.8	413
All	10.1	89.9	1,954

Table 11.14 shows the reasons why members of households did not try to obtain a loan by locality. About 60 percent members of rural households and 39.8 percent in urban areas indicated that they did not apply for a loan because they already had too much debt to pay. A little less than two-thirds (58.5%) of persons in rural households said they cannot obtain the amount needed as collateral compared to 41.5 percent of persons in urban households. Of those in urban households, 57 percent indicated that interest rates were too high while 42.5 percent in the rural areas cited the same reason.

**Table 11.14: Reasons for not trying to obtain a loan by locality**

Reason	Locality							Number
	Urban			Rural				
	Accra (GAMA)	Other Urban	Total	Rural Coastal	Rural Forest	Rural Savannah	Total	
No need	27.8	72.2	50.9	11.3	52.6	36.0	49.1	44,617
Interest rate too high	40.8	59.2	57.5	14.8	65.7	19.5	42.5	6,264
Demand for collateral	43.3	56.7	45.4	15.8	41.3	42.9	54.6	3,516
Already has too much debt	30.2	69.8	39.8	16.7	44.1	39.2	60.2	491
Cannot obtain the amount needed	10.6	89.4	41.5	4.1	50.7	45.2	58.5	2,584
Other	58.9	41.1	43.6	5.6	40.8	53.6	56.4	1,476
All	30.4	69.6	50.8	11.5	52.8	35.7	49.2	58,948

Of the members in urban households, 89.4 percent in other urban indicated that they did not apply for a loan because they could not obtain the needed amount required as collateral compared to 10.6 percent in Accra (GAMA). In the rural areas, 65.6 percent of persons in rural forest said they did not apply for a loan due to high interest rates; the same reason is assigned by 19.5 percent of those in rural savannah and 14.9 percent of members in rural coastal households.

## 11.5 Assets and durable consumer goods

More than four out of every five households (80.3%) in the country own a mobile phone. Another 57.2 percent own a television set while one-third (33.1%) own a refrigerator. The proportions owning a mobile phone, television set, refrigerator and fan are much higher in Accra. Higher proportions of households in rural forest (61.9%), rural savannah (56.2%) and rural coastal (54.3%) own a radio compared to other urban (44.8%) and GAMA (41.5%). It is worth noting that the proportion of households owning houses is higher in the rural localities than in the urban localities, with more than a third of households in rural savannah (45.4%), rural forest (34.7%) and rural coastal (33.9%) owning their houses compared to 17.3 percent and 15.8 percent respectively of households in other urban areas and Accra (GAMA).

**Table 11.15: Proportion of households owning various assets and consumer durables by locality**

Assets	Locality							Ghana	Number
	Urban			Rural					
	Accra (GAMA)	Other Urban	Total	Rural Coastal	Rural Forest	Rural Savannah	Total		
Furniture	63.7	54.9	57.7	40.7	32.3	25.3	31.4	46.0	16,766
Sewing machine	16.5	17.9	17.5	11.9	14.8	12.6	13.8	15.8	16,766
Stove (kerosene)	3.4	2.0	2.4	2.7	1.4	0.4	1.3	1.9	16,766
Stove (electric)	1.8	1.3	1.5	0.9	0.4	0.1	0.4	1.0	16,766
Stove (gas)	58.2	38.3	44.7	13.7	11.2	2.2	8.8	28.7	16,766
Refrigerator	61.9	42.8	48.8	15.8	16.9	6.5	13.6	33.1	16,766
Freezer	15.7	8.3	10.6	3.7	3.1	1.1	2.6	7.0	16,766
Air conditioner	3.6	1.0	1.8	0.3	0.2	0.1	0.2	1.1	16,766
Fan	82.1	62.9	69.0	32.5	28.6	15.3	25.2	49.5	16,766
Radio	41.5	44.8	43.8	54.1	61.9	56.2	59.2	50.6	16,766
Radio cassette	15.3	10.6	12.1	15.9	10.1	9.4	10.7	11.4	16,766
CD-player	12.3	6.4	8.2	7.9	4.2	2.2	4.1	6.4	16,766
3-in-one radio system	21.3	16.0	17.7	7.2	6.3	3.7	5.6	12.3	16,766
Video cassette player	2.5	3.2	2.9	3.0	3.3	0.8	2.5	2.8	16,766
VCD/DVD/mp3/mp4 player	50.6	44.2	46.2	20.5	21.8	13.1	19.1	34.1	16,766
Desktop computer	9.5	8.4	8.8	2.6	3.0	2.1	2.7	6.0	16,766
Laptop computer	14.8	8.7	10.6	2.3	1.7	1.1	1.6	6.6	16,766
Printer	2.0	1.1	1.4	0.8	0.3	0.1	0.3	0.9	16,766
Computer accessories	6.5	3.0	4.1	0.3	0.8	0.2	0.6	2.5	16,766
Camera/digital camera	6.4	2.8	3.9	0.9	0.8	0.5	0.7	2.5	16,766
Satellite dish	6.7	12.1	10.4	3.3	4.9	3.9	4.4	7.7	16,766
Washing machine	2.6	1.1	1.6	0.6	0.1	0.0	0.2	0.9	16,766
Television	85.9	70.6	75.5	42.9	39.5	20.8	34.4	57.2	16,766
Camera	4.0	1.8	2.5	0.6	1.2	0.4	0.9	1.8	16,766
Iron (electric)	78.5	57.7	64.3	32.0	26.4	9.4	22.2	45.5	16,766
Bicycle	7.7	16.6	13.8	10.8	13.7	63.8	28.1	20.2	16,766
Motor cycle	2.0	8.1	6.2	4.5	3.6	21.1	8.9	7.4	16,766
Car	7.8	6.6	7.0	2.7	3.0	1.2	2.4	4.9	16,766
House	15.8	17.3	16.8	34.2	34.7	45.4	37.8	26.2	16,766
Land/Plot	12.9	20.5	18.1	19.8	24.9	30.4	25.8	21.5	16,766
Shares	1.0	1.7	1.4	0.3	0.8	0.5	0.6	1.1	16,766
Boat	0.1	0.3	0.3	1.5	0.3	1.2	0.7	0.5	16,766
Outboard motor	0.2	0.3	0.3	0.6	0.1	0.9	0.4	0.3	16,766
Microwave	13.5	6.5	8.7	0.7	0.8	0.2	0.6	5.1	16,766
Food processor/blender	32.6	15.4	20.9	2.4	3.1	0.9	2.4	12.6	16,766
Hoover	1.3	0.4	0.7	0.1	0.2	0.1	0.2	0.5	16,766
Rice cooker	27.7	15.8	19.6	4.7	4.2	1.7	3.5	12.4	16,766
Toaster	5.3	2.5	3.4	0.6	0.3	0.0	0.3	2.0	16,766
Electric kettle	18.3	8.9	11.9	2.1	1.9	0.8	1.6	7.3	16,766
Water heater (bathroom)	1.1	1.3	1.3	0.3	0.2	0.2	0.2	0.8	16,766
Box iron	6.4	11.2	9.7	12.0	18.3	10.9	15.3	12.2	16,766
Mobile phone	90.0	87.6	88.3	73.0	72.9	63.8	70.3	80.3	16,766
Ipad	3.2	0.8	1.6	0.4	0.4	0.3	0.3	1.0	16,766
Generator	1.9	0.8	1.2	1.0	2.1	1.0	1.6	1.4	16,766
Jewellery	23.6	17.2	19.3	21.0	14.3	3.4	12.0	16.0	16,766

# CHAPTER TWELVE

## GOVERNANCE, PEACE AND SECURITY

### 12.1 Introduction

Governance, in general denotes the overall setting, application and enforcement of rules that guide the exercise of political authority. It is the process by which political decisions are made and implemented. Peace, safety and security are important tenets of good governance and they have a direct relationship with development. The quality of the security sector and governance institutions determines the extent to which the sector can deliver security, peace and safety in an effective and efficient manner to citizens of a community or state. In an atmosphere of peace and security, the citizens can go about their lawful activities without any constraints for the development of the nation. The survey, therefore, sought the views of respondents on their perceptions about security in the country.

### 12.2 Theft, robbery and burglary

Table 12.1 presents data on household members who experienced theft, stealing or attempted stealing during the last five years (since 2008). Overall, about three in ten respondents (27.9%) indicated that they had been victims of stealing or attempted stealing. Less than a tenth indicated that they knew of other household members (7.4%) who had been victims. The Western region has the highest proportion of respondent who were victims of theft, stealing or attempted stealing (37.6%).

**Table 12.1: Households who experienced stealing or attempted stealing during the last five years by member involved, region and locality**

Locality/Person involved	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Respondent	42.5	27.3	19.5	26.8	29.8	30.1	28.4	29.7	22.3	39.3	26.9
Other household member	6.0	2.2	7.4	6.3	8.5	8.7	6.3	12.1	6.0	10.1	7.4
None	51.3	70.1	72.6	65.0	61.5	60.3	64.7	56.9	67.8	50.7	65.0
Don't know	0.1	0.3	0.4	1.9	0.2	0.9	0.6	1.2	4.0	0.0	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Respondent	33.7	27.9	18.3	29.9	32.0	29.6	33.6	21.9	26.8	27.3	29.2
Other household member	4.9	3.4	1.1	7.6	9.0	5.1	8.4	10.7	12.9	15.7	7.5
None	61.3	68.5	80.6	61.8	58.9	64.8	57.3	66.0	58.1	56.6	62.7
Don't know	0.0	0.2	0.0	0.6	0.1	0.4	0.6	1.5	2.2	0.5	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Respondent	37.6	27.6	19.5	28.9	30.9	29.9	30.9	24.9	25.8	29.8	27.9
Other household member	5.4	2.8	7.1	7.2	8.8	7.2	7.4	11.2	11.4	14.5	7.4
None	56.9	69.3	73.0	62.9	60.2	62.2	61.2	62.5	60.2	55.3	64.0
Don't know	0.1	0.3	0.4	1.1	0.2	0.7	0.6	1.4	2.6	0.4	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In terms of locality, a higher proportion of respondents in rural areas (29.2%) had been victims of theft, stealing or attempted robbery compared with urban areas (26.9%). In the urban areas, the proportion of respondents who were victims is highest in the Western region (42.5%) followed by the Upper West (39.3%). The Ashanti, Eastern and Northern regions also have about one-third of respondents reporting being victims.

In order to protect themselves from robbery, households equip their dwellings with various forms of protection. Table 12.2 shows that most respondents use dogs (16.6%) to protect their homes. About a tenth use special door locks (10.8%) while 12.4 percent use special window or door grilles. Very small proportions depend on neighborhood watch schemes (4.2%), barbed wires (1.0%) or security guards (0.8%).

The Upper West region has half of the respondents using dogs to protect their homes (50.3%) followed by the Upper East (44.8%). The use of special door locks and window or door grilles is more prominent in the Greater Accra region where about 20 percent of respondents depend on this method of protection (21.5% and 19% respectively). Respondents in the Upper East also depend on these for protecting their homes.

**Table 12.2: Type of protection available to households by region**

Type of protection	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Special door locks</b>											
Yes	11.8	11.3	21.5	3.3	10.7	9.3	5.0	2.4	14.4	1.0	10.8
No	88.2	88.7	78.5	96.7	89.3	90.7	95.0	97.6	85.6	99.0	89.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Special window/ door grilles</b>											
Yes	8.5	10.4	19.0	2.1	19.3	15.1	10.6	1.4	12.2	1.1	12.4
No	91.5	89.6	81.0	97.9	80.7	84.9	89.4	98.6	87.8	98.9	87.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Neighbourhood watch scheme</b>											
Yes	6.9	6.4	2.4	5.4	2.6	6.5	2.3	0.7	3.0	3.4	4.2
No	93.1	93.6	97.6	94.6	97.4	93.5	97.7	99.3	97.0	96.6	95.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Security Guard</b>											
Yes	0.5	0.4	1.7	1.1	0.2	0.7	0.5	0.6	0.5	1.2	0.8
No	99.5	99.6	98.3	98.9	99.8	99.3	99.5	99.4	99.5	98.8	99.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Dogs</b>											
Yes	11.0	11.0	13.0	12.5	18.1	11.8	22.0	24.0	44.8	50.3	16.6
No	89.0	89.0	87.0	87.5	81.9	88.2	78.0	76.0	55.2	49.7	83.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Barbed wire</b>											
Yes	0.1	0.7	3.2	0.7	0.5	0.4	0.4	0.5	0.3	0.6	1.0
No	99.9	99.3	96.8	99.3	99.5	99.6	99.6	99.5	99.7	99.4	99.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Other</b>											
Yes	3.8	0.2	0.9	2.1	2.5	2.7	3.6	0.3	0.1	4.5	2.0
No	96.2	99.8	99.1	97.9	97.5	97.3	96.4	99.7	99.9	95.5	98.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Households which are victims of theft, stealing and attempted stealing are often intimidated, threatened or assaulted. Table 12.3 shows that 5.6 percent of households interviewed indicated that their members were intimidated, threatened or assaulted during the incidence of theft. Households in the Greater Accra region recorded the highest incidence of intimidation (14.7%) followed by the Western region (7.3%).

In the urban areas, the Greater Accra region reported the highest proportion of households who were victims of intimidation, threat or assault (15.1%) while in rural areas, the Western and Brong Ahafo regions reported the highest (6.0% and 6.1% respectively).

**Table 12.3: Experience of intimidation, threat or assault by region and locality**

Intimidation/ threat or assault	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes	8.6	8.2	15.1	9.0	2.2	5.3	2.0	2.2	5.6	4.6	7.7
No	91.1	89.2	83.9	84.9	95.7	93.5	97.7	95.5	90.9	94.1	90.8
Don't know	0.4	2.6	1.1	6.1	2.1	1.2	0.3	2.3	3.5	1.3	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Yes	6.0	1.6	5.4	2.8	1.8	3.2	6.1	0.6	5.0	1.0	3.3
No	93.6	96.9	87.7	94.6	97.0	95.5	93.3	97.6	93.0	97.4	95.3
Don't know	0.4	1.5	6.9	2.5	1.3	1.3	0.6	1.8	2.1	1.6	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Yes	7.3	4.6	14.7	4.7	2.0	4.5	4.2	1.3	5.1	1.9	5.6
No	92.3	93.3	84.0	91.7	96.4	94.3	95.4	96.7	92.6	96.6	92.9
Don't know	0.4	2.0	1.3	3.6	1.7	1.2	0.5	2.0	2.3	1.5	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The incidence of theft, robbery or burglary is to be reported to the appropriate security agencies, particularly the Police for investigation and the appropriate measures taken to prosecute the offender. According to Table 12.4, only eight percent of the incidents were reported to the Police, with the Upper East having the highest proportion of households reporting such incidents (11.4%), followed by Greater Accra (10.3%).

In terms of locality, more than one-fifth of households in urban areas in the Upper East region (23.4%) reported the incidence to the Police, while about a tenth in the Western (10.3%), Greater Accra (10.4%) and Eastern (10.5%) regions also reported the incident. Generally, very low proportions of households in the rural areas report the incidence of intimidation, threat or assault to the police compared with the urban areas.

**Table 12.4: Households for which incidence of theft was reported to the Police by region and locality**

Incident reported	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes	10.3	9.4	10.4	11.2	10.5	11.6	9.4	6.6	23.4	15.9	10.5
No	89.7	90.3	87.6	88.3	88.7	88.2	89.6	92.3	73.0	83.2	88.5
Don't know	0.0	0.4	2.0	0.5	0.8	0.3	1.0	1.1	3.5	0.8	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Yes	7.4	2.5	7.4	4.9	6.9	5.6	2.7	1.5	9.0	5.2	5.1
No	92.6	97.5	91.1	94.7	92.1	94.2	96.1	97.6	90.2	93.7	94.3
Don't know	0.0	0.0	1.5	0.5	0.9	0.2	1.2	0.9	0.8	1.1	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Yes	8.8	5.6	10.3	6.8	8.6	9.2	5.9	3.8	11.4	7.7	8.0
No	91.2	94.2	87.7	92.7	90.5	90.5	93.1	95.2	87.4	91.3	91.2
Don't know	0.0	0.2	2.0	0.5	0.9	0.3	1.1	1.0	1.2	1.0	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Persons involved in theft and robbery often disguise themselves so that they cannot be easily identified by their victims. Less than a tenth of respondents indicated they knew the name of the offender (7.5%) while three percent knew the offender by face (Table 12.5). This is an indication that most offences are committed by persons who disguise themselves.

The proportion of respondents who knew the offender by name is relatively higher in rural (8.0%) than in urban (6.3%) areas. In the rural parts of the Western region, 15.1 percent of the households knew the offender by name while in rural Ashanti, 11.1 percent also knew the offender by name.

**Table 12.5: Knowledge of offender by name or face by region and locality**

Knowledge of offender	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Know offender by name	6.7	4.9	4.4	8.8	8.2	8.5	4.0	6.2	5.1	0.8	6.3
Know offender by face only	3.6	5.2	3.2	5.6	4.7	4.5	1.3	2.7	2.7	2.9	3.8
Did not see offender	65.7	69.5	66.1	58.0	64.8	62.5	83.9	64.7	40.8	91.7	66.3
Did not know offender	24.0	20.4	26.3	27.6	22.3	24.5	10.7	26.4	51.3	4.6	23.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Know offender by name	15.1	7.7	7.5	10.3	9.3	11.1	7.3	3.4	3.6	4.9	8.8
Know offender by face only	1.6	2.5	0.0	2.6	3.8	1.9	1.2	1.3	1.9	0.8	2.1
Did not see offender	73.6	75.3	71.7	62.9	70.2	65.5	76.7	82.5	70.1	78.6	71.6
Did not know offender	9.8	14.4	20.7	24.2	16.8	21.5	14.8	12.9	24.4	15.7	17.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Know offender by name	10.9	6.4	4.5	9.8	8.8	9.5	5.8	4.6	3.8	4.0	7.5
Know offender by face only	2.6	3.7	3.1	3.5	4.2	3.5	1.3	1.9	2.1	1.3	3.0
Did not see offender	69.7	72.7	66.3	61.4	67.6	63.7	80.1	74.6	65.2	81.7	68.8
Did not know offender	16.8	17.2	26.0	25.2	19.4	23.4	12.9	18.9	28.9	13.1	20.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In perpetrating their activities, robbers often carry weapons which they use to either intimidate or threaten their victims. Table 12.6 shows that in 47.7 percent of the incidents, a weapon was used. More than four-fifths of households in the Eastern region reported the use of a weapon (83.0%) while about two-thirds in the Western region (67.9%) reported the same.

In the urban areas, the Eastern region reported that weapons were used in all the robberies while in the Western region four out of every five robberies involved the use of a weapon (80.5%). The Central and Eastern regions (73.0% and 70.1% respectively) have higher proportions of households in rural areas which reported that the incidents of robbery involved the use of a weapon.

**Table 12.6: Actual use of weapon during the incident by region and locality**

Use of weapon	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes	80.5	23.8	41.0	65.8	100.0	46.2	54.3	30.5	0.0	74.5	48.2
No	19.5	76.2	54.5	34.2	0.0	53.8	45.7	69.5	100.0	25.5	49.6
Don't know	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Yes	43.4	73.0	0.0	21.2	70.1	37.5	24.3	0.0	48.7	28.8	45.1
No	56.6	27.0	0.0	78.8	29.9	62.5	75.7	100.0	51.3	71.2	54.9
Don't know	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Yes	67.9	48.6	41.0	33.4	83.0	45.0	36.8	26.2	43.6	50.8	47.4
No	32.1	51.4	54.5	66.6	17.0	55.0	63.2	73.8	56.4	49.2	51.0
Don't know	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

### 12.3 Sexual offences

Sexual offences include holding, grabbing and touching certain parts of a person in a manner that irritates or angers the person involved. Table 12.7 shows that less than three percent of households reported that their members were sexually offended. The proportions reported in the urban and rural areas are also very low (2.5% and 2.0% respectively). These low figures may be due to the stigma associated with sexual offences for which reason households may withhold information relating to these acts.

In the urban areas, Western region has the highest proportion of households reporting that a member was sexually offended (5.2%), followed by the Ashanti region with 4.2 percent. Both the Western and Upper East regions have the same proportions of households which reported the incidence of sexual offence against a household member (3.7%).

**Table 12.7: Household members who experienced sexual offences by region and locality**

Locality	Region										All
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes	5.2	2.1	2.2	1.1	0.8	4.2	1.0	2.5	0.8	0.3	2.5
No	94.8	97.9	97.8	98.9	99.2	95.8	99.0	97.5	99.2	99.7	97.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Yes	3.7	2.2	2.1	1.8	0.8	2.6	0.9	0.5	3.7	1.2	2.0
No	96.3	97.8	97.9	98.2	99.2	97.4	99.1	99.5	96.3	98.8	98.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Yes	4.3	2.1	2.2	1.6	0.8	3.5	0.9	1.3	3.1	1.0	2.3
No	95.7	97.9	97.8	98.4	99.2	96.5	99.1	98.7	96.9	99.0	97.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sexual offences are usually committed by offenders who are either close relatives of the victim or persons known by the victim's parents or relatives and so are rarely reported but settled at home. According to Table 12.8, more than nine out of ten cases of sexual offences were not reported to the Police (92.0%). The situation is similar for both urban and rural areas. The proportion of households reporting sexual offences to the Police is higher in urban (9.0%) than rural (6.0%) areas.

The Greater Accra region has the highest proportion of households that reported cases of sexual offence to the Police (15.6%), followed by the Volta (12.9%) and Northern (12.7%) regions. With the exception of the Ashanti region (17.9%), very low proportions of rural households in the Western (2.5%), Central (3.0%) and Volta (3.3%) reported cases to the Police. This may be attributed to either the unavailability of a Police station or appropriate authorities in the area, or the settlement of the cases at home.

**Table 12.8: Households reporting sexual offence to the Police by region and locality**

Locality	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes	2.1	10.7	15.6	12.9	9.2	5.7	0.0	12.7	0.0	0.0	9.0
No	97.9	89.3	84.4	87.1	90.8	94.3	100.0	87.3	100.0	100.0	91.0
Don't know	-	-	-	-	-	-	-	-	-	-	-
<b>Rural</b>											
Yes	2.5	3.0	0.0	3.3	0.0	17.9	0.0	0.0	0.0	0.0	6.0
No	97.5	97.0	100.0	96.7	100.0	82.1	100.0	100.0	100.0	100.0	94.0
Don't know	-	-	-	-	-	-	-	-	-	-	-
<b>All</b>											
Yes	2.3	6.6	14.7	5.6	4.6	9.6	0.0	9.5	0.0	0.0	8.0
No	97.7	93.4	85.3	94.4	95.4	90.4	100.0	90.5	100.0	100.0	92.0
Don't know	-	-	-	-	-	-	-	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

There are various reasons why people would not report a sexual offence to the Police for the necessary action to be taken. Information in Table 12.9 shows that more than four-fifths of households did not report the incident to the Police because they thought it was not serious enough (46.0%). About one-third of households did not report the incident because they solved the issue by themselves (30.0%) while a tenth indicated that their family solved the problem (10%). Only one percent cited stigmatization and fear of reprisal.

At the regional level, Brong Ahafo region had the highest proportion of households that said they did not report the incident to the Police because it was not serious (65.2%). Half of the households in the Central region (50.8%) and about three out of five in the Ashanti region also cited the same reason. Appreciable proportions of households in the Upper East (14.6%) and Eastern (6.3%) did not report for fear of stigmatization. In the Northern region, 16.6 percent of the households said they did not want the Police involvement in the case.

**Table 12.9: Reasons for not reporting incidence of sexual offence to the Police by region**

Reason for not reporting	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
Not serious enough	44.5	50.8	41.7	34.2	43.0	58.2	65.2	18.8	8.8	32.7	46.0
Solved it myself/ perpetrator known to me	36.7	24.8	29.7	26.5	42.1	24.7	22.2	11.6	53.3	42.1	30.0
My family solved it	3.4	9.4	12.4	9.7	5.6	7.0	9.0	44.2	16.6	6.8	10.0
Inappropriate for Police /Police not necessary	4.1	0.0	8.8	11.5	0.0	4.4	0.0	0.0	0.0	7.6	4.0
Solved by chiefs /elders/traditional authorities	4.4	2.0	0.0	0.0	0.0	1.4	0.0	0.0	6.1	0.0	2.0
Reported to other public or private agencies	1.4	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Police could do nothing/lack of proof	0.6	1.9	0.0	0.0	0.0	1.2	0.0	4.0	0.0	0.0	1.0
Police won't do anything about it	0.0	0.0	2.7	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.0
Fear/dislike of Police / no involvement with Police	0.0	3.1	0.0	0.0	0.0	0.0	0.0	16.1	0.6	0.0	1.0
Time wasting	0.8	6.3	4.7	5.5	0.0	0.0	0.0	0.0	0.0	6.3	2.0
Didn't care for fear of reprisal	0.0	1.6	0.0	0.0	0.0	1.9	3.6	0.0	0.0	0.0	1.0
Fear of stigmatization	1.4	0.0	0.0	0.0	6.3	0.0	0.0	0.0	14.6	4.5	1.0
Other	1.4	0.0	0.0	6.8	0.0	0.0	0.0	5.2	0.0	0.0	1.0
Don't know	1.5	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## 12.4 Violence and security

Table 12.10 presents responses from households on whether any member or person they know was attacked, assaulted or threatened in the 12 months preceding the interview. The table shows that 6.4 percent of the respondents were personally victims of an attack, assault or threat. One-tenth of the respondents in the Western region were also victims of an attack (10.3%).

In terms of locality, a higher proportion of respondents in rural (7.0%) compared to urban (5.9%) areas indicated that they were personally attacked. Again, a higher proportion of household members in rural areas (2.8%) were attacked compared to (1.9%) urban areas.

Within the urban areas, a higher proportion of respondents in the Western region reported being a victim of an attack (9.3%), followed by the Central region (8.8%). The two regions also have a relatively higher proportion of respondents who said the victim was a member of their household.

**Table 12.10: Incidence of attack, assault or threat in the last 12 months  
by region and locality**

Locality	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes, myself	9.3	8.8	4.5	5.9	6.0	7.4	3.7	3.2	6.1	7.7	5.9
Yes, a member of household	1.2	1.0	1.6	3.5	3.1	2.2	1.0	1.4	6.0	2.9	1.9
Yes, a relative	0.7	0.8	1.3	1.4	0.9	2.4	1.4	0.9	3.6	2.3	1.5
Yes, someone I know	0.5	1.9	1.7	0.3	2.8	4.8	0.4	0.5	5.5	1.5	2.2
Yes, someone I do not know	1.3	0.9	0.8	0.6	0.6	2.3	0.0	0.1	0.0	0.0	1.0
No	87.0	86.7	90.1	88.2	86.5	80.8	93.5	94.0	78.8	85.8	87.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Yes, myself	11.1	10.5	2.6	9.9	5.4	7.0	4.1	2.9	7.3	3.5	7.0
Yes, a member of household	2.1	1.6	3.4	4.8	3.3	1.8	2.8	2.8	3.7	3.0	2.8
Yes, a relative	0.3	1.0	1.0	0.5	1.3	2.7	0.6	0.9	3.0	2.1	1.4
Yes, someone I know	0.3	0.5	0.0	0.6	2.4	1.2	1.2	0.1	2.7	1.8	1.1
Yes, someone I do not know	0.2	1.2	0.0	0.0	0.1	0.3	0.1	0.0	0.5	0.0	0.3
No	86.1	85.2	93.1	84.1	87.5	87.0	91.3	93.4	82.8	89.6	87.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Yes, myself	10.3	9.7	4.4	8.6	5.7	7.2	3.9	3.0	7.1	4.3	6.4
Yes, a member of household	1.7	1.3	1.7	4.4	3.2	2.0	1.8	2.3	4.2	3.0	2.3
Yes, a relative	0.5	0.9	1.3	0.8	1.1	2.5	1.0	0.9	3.1	2.1	1.4
Yes, someone I know	0.4	1.2	1.6	0.5	2.6	3.3	0.8	0.2	3.3	1.7	1.7
Yes, someone I do not know	0.7	1.0	0.7	0.2	0.4	1.5	0.1	0.1	0.4	0.0	0.7
No	86.5	85.9	90.3	85.5	87.0	83.4	92.4	93.6	81.9	88.8	87.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

There are various forms that an attack, assault or threat can take. Table 12.11 shows that two-fifths of the attacks were verbal assaults (39.0%), followed by physical assault (36.1%). Other forms of attack, assault or threat suffered by respondents or their household members are robbery (7.9%), a curse (5.7%) and theft (2.4%). Very low proportions experienced highway attacks (2.1%) and rape or seduction (0.9%).

Verbal assaults were more prominent in the Northern (55.1%), Volta (54.5%) and Central (50.9%) regions. In the case of physical assault, the Brong Ahafo (48.1%) region had the highest proportion of respondents who were victims, followed by the Western region (46.0%). More than one-third of respondents in the Upper West region were victims of robbery (36.5%).

Very low proportions of the incident of rape or seduction were reported in the Western (1.5%), Central (1.7%) and Ashanti (1.1%) regions.

**Table 12.11: Type of attack, assault or threat by region**

Type of assault	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
Physical assault	46.0	30.8	34.5	37.1	31.0	37.3	48.1	38.7	27.7	25.0	36.1
Verbal assault	38.5	50.9	33.6	54.5	40.6	31.5	31.2	55.1	37.5	33.1	39.0
Curse	5.4	2.0	2.8	3.8	17.9	6.9	3.5	0.4	1.8	0.0	5.7
Riots in the public place	0.0	0.4	2.9	0.4	1.0	2.0	4.5	0.5	11.7	0.0	2.1
Vandalism	0.0	0.0	2.6	0.4	2.9	0.0	0.0	0.5	0.4	0.0	0.8
Robbery	6.5	2.4	7.0	0.4	1.3	15.4	7.4	2.6	6.9	36.5	7.9
Theft	0.0	3.4	8.8	1.0	1.4	1.2	0.0	0.0	2.1	0.0	2.4
Rape/Seduction	1.5	1.7	0.5	0.4	0.5	1.1	0.8	0.0	0.8	0.0	0.9
Defilement	0.0	0.8	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
Sexual harassment	0.0	0.4	0.5	0.0	0.0	1.7	0.0	0.5	4.3	0.0	0.8
Arson	0.0	2.4	0.0	0.0	0.4	1.3	0.0	0.0	0.2	0.0	0.7
Highway attack	0.5	2.0	5.1	0.0	0.8	0.8	4.6	1.3	6.2	4.8	2.1
Kidnapping/Abduction	0.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2
Text message/Phone call	1.1	1.4	0.5	0.6	1.1	0.4	0.0	0.0	0.2	0.0	0.6
Other	0.5	1.2	0.5	1.2	0.8	0.6	0.0	0.4	0.1	0.0	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 12.12 shows that about three out of ten respondents (27.7%) who were victims of attack, assault or threat indicated that they reported the incident to the Police while two out of three persons (67.3%) said no report was made to the Police. Five percent also indicated they did not know whether a report was made to the Police or not. The table further shows that a higher proportion of urban dwellers (30.6%) reported the incident to the Police compared to those in rural areas (24.0%), indicating that urban residents are more likely to report an incident to the Police than those in rural areas.

**Table 12.12: Households reporting incidence of attack, assault or threat to the Police by region and locality**

Locality	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes	30.4	26.8	23.5	48.7	33.8	33.0	42.3	24.4	23.6	38.7	30.6
No	66.9	69.7	67.6	51.3	60.9	61.6	57.7	68.7	44.9	55.2	63.2
Don't know	2.7	3.5	9.0	0.0	5.3	5.5	0.0	6.9	31.5	6.1	6.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Rural</b>											
Yes	21.3	23.0	18.1	12.8	25.7	35.9	34.0	8.4	19.0	33.8	24.0
No	77.2	69.4	81.9	86.1	73.3	56.7	66.0	91.6	77.6	57.5	72.5
Don't know	1.5	7.5	0.0	1.2	1.1	7.4	0.0	0.0	3.4	8.7	3.6
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Yes	25.2	24.7	23.2	22.5	29.8	33.9	37.7	14.2	20.2	35.1	27.7
No	72.8	69.5	68.2	76.7	67.0	60.0	62.3	83.3	69.1	56.9	67.3
Don't know	2.0	5.7	8.6	0.8	3.2	6.1	0.0	2.5	10.7	8.0	5.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The region with the highest proportion of households reporting incidents to the Police is Brong Ahafo (37.7%). This is followed by Upper West (35.1%), Ashanti (33.9%) and Eastern (29.8%) regions in that order. Victims in the Northern (83.3%), Volta (76.7%) and Western (72.8%) regions rarely report incidents to the Police.

The survey sought the opinion of respondents on their perception of the incidence of crime in communities as well as the workplace and how frequently they occurred. Table 3.15 shows that at the community level, about two in ten persons (18.4%) rated the incidence of crime as occurring “very often”; three in ten (26.3%) rated it as “often”, while nearly half rated it as “less often (49.1%). Very small proportions were indifferent with the exception of Volta and Upper West.

With regard to the workplace or school, 5.4 percent of respondents rated the occurrence as “very often”; 11.1 percent as “often”, while more than half rated it as less often (54.1%).

**Table 12.13: Frequency of the incidence of crime in community or workplace in the 12 months preceding the survey by region**

Place of incident	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Community</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Very often	20.0	19.1	17.3	9.8	26.5	24.8	8.2	2.8	7.2	10.2	18.4
Often	23.4	24.2	33.1	18.4	25.3	26.2	34.8	14.9	36.6	11.6	26.3
Less often	50.6	51.4	41.9	53.8	44.2	45.4	53.0	77.6	51.9	64.5	49.1
Don't know	6.0	5.3	7.7	18.0	3.9	3.6	4.0	4.7	4.3	13.7	6.3
N/A	-	-	-	-	-	-	-	-	-	-	-
<b>Workplace/School</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Very often	4.5	6.4	3.8	5.1	7.8	7.7	2.1	0.0	1.6	2.1	5.4
Often	8.2	6.2	15.3	13.7	13.9	12.3	8.6	5.3	6.6	5.0	11.1
Less often	50.0	46.5	43.7	31.4	61.7	60.3	67.8	58.8	75.9	62.9	54.1
Don't know	22.2	30.2	23.3	33.2	7.4	5.2	10.2	15.0	6.7	16.2	16.0
N/A	15.1	10.8	13.9	16.6	9.2	14.5	11.4	20.9	9.2	14.0	13.4

## 12.5 Public Safety

Table 4.1 provides information on how safe people feel walking down the street alone in their neighborhood at night. The table shows that about six out of every ten persons at the national level feel “very safe” walking down the street alone in their neighborhood at night (59.0%). In addition, one out of ten reported feeling “fairly safe” walking alone in the street at night in their neighborhood (10.5%). Only five percent indicated they “do not feel safe at all”.

While only half of respondents in the urban areas “feel very safe” walking down the street at night alone (51.1%), more than two-thirds in rural areas “feel very safe” (68.4%). The patterns for urban and rural areas are similar in the regions. More than four-fifths of respondents in rural areas in the Western region (80.3%) feel “very safe” compared with 58.6 percent in urban areas. In the Ashanti region, the proportions are 75.1 percent for rural areas and 53.3 percent for urban areas.

**Table 12.14: Level of feeling of safety walking down the street at night in neighbourhood by region and locality**

Locality	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Very safe	58.6	49.2	45.6	47.8	65.0	53.3	53.7	55.6	38.2	31.1	51.5
Fairly safe	10.7	16.5	23.2	12.6	14.1	15.2	15.3	14.8	23.6	23.0	17.6
Safe	8.2	10.2	17.4	13.6	8.0	8.0	10.6	8.1	9.7	14.9	11.8
A bit unsafe	16.5	13.1	9.8	17.4	9.8	14.2	13.3	19.4	18.4	16.4	12.8
Not safe at all	6.0	11.0	4.0	8.6	3.1	9.3	7.1	2.1	10.1	14.6	6.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Very safe	80.3	67.4	60.4	65.8	75.3	75.1	67.9	56.4	50.6	61.2	68.4
Fairly safe	7.1	12.2	11.9	10.6	5.2	7.6	6.2	14.6	19.6	11.4	9.8
Safe	3.6	8.4	13.7	5.4	6.2	5.8	12.8	12.7	15.3	24.1	8.8
A bit unsafe	7.2	7.9	9.6	11.5	9.7	8.8	9.0	14.6	9.9	2.2	9.5
Not safe at all	1.8	4.1	4.4	6.7	3.6	2.7	4.1	1.7	4.6	1.1	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Very safe	70.7	58.7	46.5	59.8	70.3	62.4	60.5	56.1	47.9	54.9	59.0
Fairly safe	8.7	14.3	22.6	11.2	9.6	12.0	10.9	14.7	20.5	13.8	14.1
Safe	5.6	9.2	17.2	8.2	7.2	7.1	11.7	10.9	14.0	22.2	10.5
A bit unsafe	11.3	10.4	9.7	13.5	9.6	11.9	11.2	16.5	11.8	5.2	11.3
Not safe at all	3.7	7.4	4.0	7.3	3.4	6.5	5.6	1.8	5.8	3.9	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Besides safety walking at night in one's neighbourhood, safety in the home is equally important. Table 4.2 shows that overall, more than seven out of every ten persons feel "very safe" when alone at home after dark (71.6%), while only about two percent "do not feel safe at all". A higher proportion of rural households (77.2%) feel "very safe" compared to urban households (67.0%).

At the regional level, the Eastern region has the highest proportion of households (81.9%) who feel "very safe" when alone at home after dark followed by the Western region (80.0%).

**Table 12.15: Level of feeling of safety when alone at home after dark by region and locality**

Locality	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Very safe	71.5	66.6	63.5	55.9	80.1	68.1	72.4	66.3	47.4	41.5	67.0
Fairly safe	14.0	13.6	17.6	12.3	9.3	13.9	12.8	17.8	20.9	27.6	14.9
Safe	8.8	13.5	13.9	14.9	5.6	9.4	9.6	9.2	9.1	17.9	11.1
A bit unsafe	4.7	4.8	3.6	12.3	4.3	6.3	4.0	6.1	14.4	8.6	5.2
Not safe at all	1.0	1.5	1.4	4.6	0.7	2.3	1.2	0.6	8.3	4.4	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Very safe	86.6	77.3	69.1	72.2	83.6	83.2	79.2	68.9	54.2	77.9	77.2
Fairly safe	7.0	10.0	6.8	10.2	4.6	6.9	6.2	12.2	18.1	13.1	8.9
Safe	3.8	8.5	16.9	6.1	5.9	6.6	9.2	13.0	19.6	6.4	8.4
A bit unsafe	2.2	3.8	5.6	7.4	4.8	2.7	4.1	5.3	6.5	1.9	4.3
Not safe at all	0.4	0.4	1.6	4.2	1.1	0.6	1.3	0.6	1.6	0.7	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Very safe	80.0	72.2	63.8	66.8	81.9	74.4	75.7	67.9	52.7	70.3	71.6
Fairly safe	10.1	11.8	17.0	10.8	6.9	11.0	9.7	14.3	18.8	16.2	12.2
Safe	6.0	10.9	14.1	9.0	5.8	8.2	9.4	11.5	17.3	8.8	9.9
A bit unsafe	3.3	4.2	3.7	9.0	4.5	4.8	4.0	5.6	8.2	3.2	4.8
Not safe at all	0.6	0.9	1.4	4.4	0.9	1.6	1.2	0.7	3.0	1.5	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 12.16 provides information on the safety of households from crime and violence at home by region and locality. The table shows that overall, about six out of every ten (59.8%) persons feel “very safe” from crime and violence at home while two percent “do not feel safe at all”. The proportion of households that feel “very safe” in rural areas (65.9%) is higher compared to urban areas (54.9%). While in the urban areas, Eastern region has the highest proportion of households who feel “very safe” from crime and violence, the Western region (80.6%) has the highest proportion of the rural households who feel “very safe”.

**Table 12.16: Safety of households from crime and violence at home by region and locality**

Safety of Household	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Very safe	60.2	56.5	48.7	61.0	71.8	58.4	45.3	55.8	35.7	33.5	54.9
Fairly safe	12.5	17.8	24.8	15.3	12.5	17.6	21.0	16.7	32.9	30.1	19.5
Safe	9.2	14.4	18.9	13.8	8.9	12.1	19.0	12.0	11.5	20.0	14.7
A bit unsafe	9.2	8.2	6.4	6.6	6.3	9.9	12.3	14.8	12.6	14.3	8.6
Not safe at all	8.9	3.1	1.2	3.3	0.5	2.0	2.4	0.7	7.3	2.1	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Very safe	80.6	70.6	61.1	74.4	79.0	68.4	50.4	51.1	39.9	56.9	65.9
Fairly safe	7.2	9.3	11.6	12.8	6.9	11.2	16.9	12.9	24.6	27.7	12.5
Safe	3.2	11.9	17.1	5.5	8.7	9.3	17.5	14.3	27.9	14.1	11.4
A bit unsafe	6.9	6.0	9.1	5.5	4.9	9.8	12.2	20.3	6.2	1.1	8.7
Not safe at all	2.1	2.2	1.1	1.8	0.5	1.3	3.0	1.4	1.4	0.2	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Very safe	71.7	63.9	49.4	70.0	75.5	62.6	47.8	52.9	39.0	52.0	59.8
Fairly safe	9.4	13.4	24.0	13.7	9.6	14.9	19.0	14.5	26.4	28.2	16.4
Safe	5.9	13.1	18.8	8.2	8.8	10.9	18.2	13.4	24.3	15.3	13.2
A bit unsafe	7.9	7.0	6.6	5.8	5.6	9.9	12.3	18.1	7.6	3.9	8.7
Not safe at all	5.1	2.6	1.2	2.3	0.5	1.7	2.7	1.1	2.7	0.6	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## 12.6 Peace and social cohesion

Peace and social cohesion are essential for people living in the same community to enable them live and work together towards its development. Table 5.3 shows how often communities have experienced force or violence by other groups of people or by one group against the other in the past 5 years preceding the survey. At the national level, 46.5 percent of respondents indicated that their communities had never experienced force or violence by other groups of people or one group against the other. One in three respondents (31.8%) indicated that their communities had occasionally experienced force or violence while about seven percent had frequently gone through this experience.

The use of force or violence is likely to occur more frequently in urban (7.7%) than rural (5.4%) areas. A relatively higher proportion of urban communities in Brong Ahafo (16.2%) and Upper East regions (18.2%) have frequently experienced communal violence while about two out of every five urban communities in the Volta (43.6%), Eastern (39.9%), Ashanti (41.4%), Brong Ahafo (45.7%) and Upper East (39.9%) regions have occasionally experienced the use of force or violence by one group against the other. The pattern is similar in the rural areas with the exception of Ashanti and Upper East regions where the level of incidence is lower in the urban areas compared to rural areas.

**Table 12.17: Frequency of use of force or violence in communities or neighbourhood in the past five years by region and locality**

Frequency	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes, Frequently	10.0	4.3	4.4	8.7	6.0	9.9	16.2	3.4	18.2	7.0	7.7
Yes, occasionally	20.5	20.6	37.1	43.6	39.9	41.4	45.7	36.9	39.9	10.9	37.4
Yes, once	14.7	13.4	18.1	11.6	6.0	3.8	20.6	9.1	34.2	58.8	12.1
Never	54.8	61.7	40.4	36.1	48.1	44.9	17.5	50.5	7.6	23.2	42.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Yes, Frequently	11.3	1.5	6.4	4.9	5.7	7.3	2.1	3.3	2.0	2.1	5.4
Yes, occasionally	12.0	12.1	36.8	34.7	41.5	16.2	24.5	39.7	10.2	13.0	24.5
Yes, once	16.1	21.4	13.7	24.3	11.7	19.1	19.8	20.7	16.3	11.3	18.7
Never	60.6	65.1	43.1	36.1	41.2	57.3	53.6	36.4	71.5	73.5	51.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Yes, Frequently	10.8	3.4	4.5	6.2	5.9	8.6	11.6	3.4	6.8	3.5	6.7
Yes, occasionally	15.2	17.8	37.1	37.7	40.4	28.7	38.8	38.0	19.0	12.5	31.8
Yes, once	15.6	16.0	17.8	20.0	8.0	11.6	20.3	13.6	21.6	24.3	14.9
Never	58.4	62.8	40.6	36.1	45.7	51.1	29.2	45.1	52.6	59.8	46.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Community violence and conflicts are the result of many factors. These include situations where people are competing for scarce resources such as land or territories, jobs and income, and housing, when these are not fairly distributed. Conflicts may also arise due to oppressive or infamous leadership; religious and political beliefs and ethnic divide.

Table 12.18 shows that about a third of conflicts are due to chieftaincy disputes (31.0%); 28.4 percent are attributed to land disputes and 11.5 percent are due to political differences. In rural areas, most respondents cited land disputes (41.5%) as the major cause of conflicts in their communities. This is followed by issues related to chieftaincy (29.7%). In urban areas, however, issues of chieftaincy (31.8%) form the major cause of conflicts followed by land disputes (19.9%).

At the regional level, most households in the Brong Ahafo (57.4%) and Northern (63.6%) regions cite chieftaincy as the main cause of conflicts. In the Central (42.2%), Eastern (40.1%) and Upper East (40.3%) regions, land disputes are the major cause of conflicts. Conflicts in the Upper East are also attributed to ethnicity by more than two-fifths of households (43.5%).

In the urban areas of the Northern region, more than four out of every five households see chieftaincy as the major source of conflicts (84.1%) while in the rural areas, almost two-thirds of households in Upper East (65.8%) attribute conflicts to land dispute.

**Table 12.18: Major causes of conflict in community or neighbourhood by region and locality**

Cause of conflict	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Indebtedness	3.6	1.7	14.1	17.6	4.9	1.0	0.0	0.0	0.0	0.0	5.6
Ethnic/tribal conflict	18.7	22.8	13.1	5.1	0.9	8.1	4.5	0.0	61.0	3.1	10.3
Political differences	6.2	3.9	12.7	4.9	6.9	35.0	21.2	5.8	5.4	52.6	15.1
Marriage	12.4	3.9	2.8	13.6	4.9	5.1	5.3	0.0	0.0	0.0	4.8
Land dispute	25.4	36.0	18.6	21.2	36.6	8.8	12.8	8.5	21.8	11.5	19.9
Chieftaincy	33.8	31.8	16.3	31.3	30.9	16.3	56.2	84.1	11.0	32.7	31.8
Religion	0.0	0.0	0.0	1.3	5.0	0.0	0.0	0.0	0.0	0.0	0.9
Other	0.0	0.0	22.3	5.0	9.9	25.6	0.0	1.6	0.8	0.0	11.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Indebtedness	3.9	7.0	8.7	11.4	6.9	0.0	3.2	1.1	0.0	8.5	5.2
Ethnic/tribal conflict	7.8	11.1	0.0	2.2	3.1	1.0	0.0	1.8	19.6	3.1	3.5
Political differences	5.2	6.2	0.0	5.6	9.7	5.3	10.6	5.1	0.0	2.7	5.9
Marriage	16.0	3.2	27.9	10.4	11.4	9.2	3.6	0.0	0.4	6.5	8.8
Land dispute	31.2	56.6	47.7	42.4	45.8	30.9	20.8	52.8	65.8	52.6	41.5
Chieftaincy	30.7	15.8	0.0	19.3	17.1	48.8	61.9	38.1	14.3	11.0	29.7
Religion	1.6	0.0	0.0	1.2	0.0	1.4	0.0	0.0	0.0	0.0	0.8
Other	3.6	0.0	15.7	7.5	6.2	3.4	0.0	1.0	0.0	15.6	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Indebtedness	3.8	3.3	13.7	13.5	5.7	0.6	0.7	0.5	0.0	3.9	5.4
Ethnic/tribal conflict	12.3	19.2	12.1	3.2	1.7	5.0	3.5	0.8	43.5	3.1	7.6
Political differences	5.6	4.6	11.7	5.4	7.9	21.9	19.0	5.5	3.1	29.4	11.5
Marriage	14.5	3.7	4.8	11.5	7.3	6.9	4.9	0.0	0.2	3.0	6.4
Land dispute	28.8	42.2	20.9	35.2	40.1	18.5	14.5	28.2	40.3	30.7	28.4
Chieftaincy	32.0	27.0	15.0	23.4	25.7	30.6	57.4	63.6	12.4	22.6	31.0
Religion	0.9	0.0	0.0	1.3	3.1	0.6	0.0	0.0	0.0	0.0	0.9
Other	2.1	0.0	21.8	6.7	8.5	15.8	0.0	1.4	0.5	7.3	8.9
Total	100.0	100.0	100.0	100.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0

An essential ingredient for a community to develop is for its citizens to be assured of peace and the absence of violence, so that they can go about their lawful activities. Table 12.19 presents data on the level of risk of violence between different groups as perceived by respondents. The table shows that one-third of respondents think that the level of risk of violence in their community or town reduced slightly (33.7%) in the past five years while 31.8 percent said it reduced greatly. Similar proportions of respondents in urban and rural areas indicated that the level of risk of violence either reduced slightly or greatly. In the urban areas, 12.9 percent of respondents indicated that the level of risk of violence in their communities slightly increased, while a relatively higher proportion in the rural areas (13.9%) made the same assertion.

In the Upper East region, 16.5 percent of respondents in the urban areas indicated that the level of risk of violence had greatly increased with 14.5 percent in rural areas indicating the same situation. The Central region has about one-fifth of respondents indicating that the level of risk of violence had slightly increased during the past five years. The level of risk of violence in urban communities in the Upper West region, as indicated by respondents had greatly reduced (89.3%).

**Table 12.19: Level of increase in risk of violence in community or town between different groups in the past 5 years by region**

Level of risk	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Greatly increased	8.8	4.4	5.0	0.5	3.9	4.9	3.6	7.5	16.5	0.0	5.0
Slightly increased	17.0	21.3	7.5	9.9	16.7	13.5	16.8	9.1	6.4	0.0	12.9
Did not change	0.0	6.4	21.2	27.6	32.0	5.9	29.7	5.5	3.2	4.9	17.6
Slightly reduced	46.5	42.0	44.3	22.4	16.9	37.8	30.2	51.0	38.1	5.8	34.8
Greatly reduced	27.7	25.9	22.0	39.6	30.5	38.0	19.7	26.8	35.9	89.3	29.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rural</b>											
Greatly increased	16.6	0.0	5.2	12.7	4.9	1.6	2.2	1.8	0.5	25.4	6.2
Slightly increased	13.4	10.3	8.7	18.6	14.4	12.8	12.1	8.0	14.5	9.1	13.9
Did not change	7.1	12.8	26.3	21.9	11.2	11.9	29.5	6.1	1.5	0.0	14.2
Slightly reduced	23.4	34.5	43.6	24.9	39.3	37.9	18.4	39.3	28.4	14.8	32.1
Greatly reduced	39.5	42.4	16.1	22.0	30.2	35.8	37.8	44.7	55.1	50.7	33.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>All</b>											
Greatly increased	13.4	3.2	5.0	8.5	4.2	3.5	3.3	5.0	9.7	12.2	5.5
Slightly increased	14.9	18.3	7.6	15.6	15.8	13.2	15.8	8.6	9.8	4.3	13.3
Did not change	4.2	8.1	21.6	23.8	24.2	8.5	29.6	5.8	2.5	2.6	16.3
Slightly reduced	32.9	40.0	44.3	24.0	25.4	37.8	27.7	45.8	34.0	10.1	33.7
Greatly reduced	34.6	30.4	21.5	28.0	30.4	37.0	23.6	34.8	44.0	70.8	31.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

When a person or groups of persons are in dispute or disagreement in a community, the surest way to resolve their differences is through arbitration. The survey sought to find out from respondents if they knew about any mechanisms for dispute resolution. Table 12.20 shows that two-thirds of respondents have knowledge about the dispute resolution mechanism (66.7%). Knowledge about dispute resolution mechanisms is highest in the Upper West region (92.6%). The proportion of respondents in rural areas who have knowledge about dispute resolution (83.8%) is far higher than those in urban areas (53.0%). This may be due to the dominance in the use of traditional authorities for dispute resolution in rural areas.

The Upper West region has the highest proportion of respondents who have knowledge about dispute resolution mechanisms in both urban and rural areas (79.1% in urban and 96.1% in rural). The Greater Accra region has the least proportion of respondents with knowledge of dispute resolution mechanisms.

**Table 12.20: Knowledge about any dispute resolution mechanism by region and locality**

Locality	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Yes	62.3	63.1	31.8	75.0	72.8	54.8	68.9	60.4	57.3	79.1	53.0
No	37.7	36.9	68.2	25.0	27.2	45.2	31.1	39.6	42.7	20.9	47.0
<b>Rural</b>											
Yes	92.4	75.2	57.5	90.6	80.0	86.0	85.7	80.5	78.1	96.1	83.8
No	7.6	24.8	42.5	9.4	20.0	14.0	14.3	19.5	21.9	3.9	16.2
<b>Ghana</b>											
Yes	79.2	69.5	33.3	85.4	76.4	67.9	77.1	72.8	73.6	92.6	66.7
No	20.8	30.5	66.7	14.6	23.6	32.1	22.9	27.2	26.4	7.4	33.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The extent to which people would resort to the use of dispute resolution mechanisms to settle their differences is when they have confidence in the process. Table 12.21 shows that more than seven out of every ten respondents said they were extremely confident with the dispute resolution mechanisms (72.0%) they know while about one-fifth indicated that they were somewhat confident (19.7%). The proportion of respondents in rural areas who are extremely confident in the dispute resolution mechanism (76.5%) is higher than in urban areas (66.4%).

**Table 12.21: Level of confidence in dispute resolution mechanism by region and locality**

Locality	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
<b>Urban</b>											
Extremely confident	65.7	69.7	57.9	59.1	66.9	70.7	71.2	66.5	77.6	76.4	66.4
Somewhat confident	21.4	19.6	33.9	24.8	21.2	18.6	16.3	28.5	17.6	21.7	23.0
Not very confident	9.1	6.8	5.1	5.8	4.8	4.8	6.3	2.9	2.0	0.5	5.4
Not at all confident	1.5	2.5	1.5	3.1	3.8	2.7	3.8	1.4	1.8	0.7	2.5
Don't know	2.4	1.4	1.7	7.1	3.3	3.2	2.4	0.8	1.1	0.7	2.6
<b>Total</b>											
<b>Rural</b>											
Extremely confident	76.4	84.6	58.4	72.6	76.8	80.5	82.2	78.7	58.4	65.1	76.5
Somewhat confident	18.5	13.3	35.1	17.0	13.4	11.4	13.9	18.9	31.8	32.3	17.0
Not very confident	3.0	1.6	2.9	5.3	5.0	3.8	1.9	1.6	8.1	2.2	3.6
Not at all confident	1.1	0.5	3.6	2.3	2.6	2.0	1.8	0.3	1.4	0.2	1.6
Don't know	1.1	0.1	0.0	2.9	2.3	2.3	0.3	0.5	0.3	0.3	1.3
<b>All</b>											
Extremely confident	72.7	78.2	57.9	68.7	72.2	75.9	77.1	74.8	61.7	67.1	72.0
Somewhat confident	19.5	16.0	34.0	19.3	17.1	14.8	15.0	21.9	29.3	30.4	19.7
Not very confident	5.1	3.8	4.9	5.4	4.9	4.3	3.9	2.0	7.1	1.9	4.4
Not at all confident	1.2	1.3	1.7	2.6	3.1	2.3	2.7	0.6	1.5	0.3	2.0
Don't know	1.5	0.7	1.5	4.1	2.8	2.7	1.3	0.6	0.4	0.3	1.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The level of confidence in dispute resolution mechanisms is highest in the Central region (78.2%) followed by Brong Ahafo (77.1%), Western (72.7%) and Eastern (72.2%) regions. In the urban areas, the Upper East (77.6%), Upper West (76.4%), Brong Ahafo (71.2%) and Ashanti (70.7%) regions have higher proportions of respondents who have knowledge in dispute resolution mechanisms. In the rural areas however, the Central (84.6%), Brong Ahafo (82.2%), Ashanti (80.5%), Northern (78.7%) and Western (76.4%) follow in that order.

## 12.7 Governance

The extent to which governments take into account the views of the people before enacting, changing and implementing laws determines how the people embrace these laws. Table 12.22 shows that more than two-fifths of respondents think that the government never takes their views into account before changing laws (46.3%). In addition, 18.3 percent think that the government only occasionally took their views into account before laws were changed. Only 5.4 percent of respondents indicated that their views were always taken into account before laws were changed.

The Ashanti region (55.2%) has the highest proportion of respondents who indicated that their views were never considered before laws were changed; this is followed by Greater Accra (51.7%), Upper West (50.5%) and Brong Ahafo (49.1%). One-tenth of respondents in the Volta region (10.7%) indicated that their views were always considered while 10.5 percent in the Western region think that their views were occasionally considered before laws were changed.

**Table 12.22: Households' view of the extent to which government takes their views into account before changing laws by region**

Frequency	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
Always	6.7	3.7	6.0	10.7	4.0	6.2	5.6	2.0	2.5	1.2	5.4
Most of the time	10.5	7.5	6.8	9.1	10.6	6.0	12.8	12.0	5.4	4.4	8.5
About half the time	8.5	6.6	9.7	2.0	15.4	5.8	7.2	3.9	9.1	11.4	7.9
Occasionally	17.5	23.5	20.6	12.7	19.9	17.1	16.0	18.9	14.7	16.4	18.3
Never	35.3	43.9	51.7	45.3	34.9	55.2	49.1	37.5	47.9	50.9	46.3
Don't know	21.4	14.7	5.2	20.2	15.2	9.7	9.2	25.6	20.4	15.6	13.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

There is the perception that until moneys are paid to government officials they do not perform the duties for which they have been employed. The survey, therefore, sought information on the views of respondents about this perception.

As presented in Table 12.23, a little more than a third of respondents indicated that they never paid additional money to government officials in order for them to render the needed services (34.1%). About one out of five respondents indicated that they had to pay additional money most of the time in order for them to receive the needed services (19.9%) while 13.6 percent said they always had to pay for the services. The Upper West region had the highest proportion of respondents who said they never paid additional money (76.6%) followed by the Volta region (62.5%).

More than one-quarter of respondents in the Eastern region (26.5%) indicated that they always had to pay additional money to have services provided; the Ashanti and Brong Ahafo regions follow with 19.0 percent and 15.2 percent respectively.

**Table 12.23: Households' view of the extent of payment of additional money to government officials to get things done by region**

Frequency	Region										Total
	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	
Always	6.3	12.3	13.3	10.3	26.5	19.0	15.2	3.2	1.2	0.8	13.6
Most of the time	24.5	18.1	35.0	12.6	21.0	11.8	16.4	21.0	10.2	2.2	19.9
About half the time	15.6	14.0	10.0	1.7	8.5	4.0	6.7	11.4	8.3	2.6	8.4
Occasionally	19.1	16.4	18.6	6.9	9.5	9.5	13.5	20.6	19.5	13.9	14.3
Never	21.8	27.0	19.7	62.5	23.1	45.0	36.6	26.1	53.1	76.6	34.1
Don't know	12.7	12.1	3.3	5.9	11.5	10.7	11.7	17.6	7.7	4.0	9.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## **CHAPTER THIRTEEN**

### **SUMMARY AND CONCLUSIONS**

The sixth round of the Ghana Living Standards Survey provides a wealth of information that would be useful for policy review and programme planning. A summary of the main findings are presented in this chapter with some conclusions.

#### **Demographic characteristics**

The results show that the estimated household population from the survey is 26.3 million compared to a projected population of 25.7 million for 2013 based on the 2010 Population and Housing Census. The estimated the number of households as 6.6 million, with an average household size of 4.0 compared to 4.4 obtained from the 2010 PHC. The population is made up of 48.3 percent males and 51.7 females, indicating a sex ratio of 93 males to 100 females. Children under 15 years constitute 39.4 percent of the population while persons 65 years and older constitute 4.8 percent. This leads to a dependency ratio of 79.2.

More than two-thirds of households in the country are headed by males (69.5%) compared to 30.5 percent for females. The average age of a household head is 45.1 years and is higher for female household heads (48.0 years) than males (43.8 years). Almost half of households in the country (49.7%) have at least one adult of each sex.

About one-fifth of the households have children living with only their mother (19.4%) while only 2.7 live with their father alone. This implies that females are highly likely to be single parents than males. This has implications for parental care for children and their future development.

More than two-fifths (42.3%) of the population 12 years and older have never married with the proportion married being slightly lower (39.4%). Only 2.2 percent are separated while 3.4 percent are divorced.

#### **Education**

Almost one-fifth of the population has never been to school (19.7%) with 44.6 percent attaining less than Middle School Leaving Certificate or Basic Education Certificate. The proportion of females who have never been to school (24.3%) is higher than males (14.6%). In the case of attainment of secondary or higher education, the gender gap is bigger (18.0% males compared to 11.8% females). This calls for a concerted effort if the country is to attain the MDG Goal 3A which is related to the elimination of gender disparity in education at the primary and secondary level by 2005, and at all levels by 2015.

The school attendance rate for males (93.4%) is higher than females (90.6%). Attendance rates are lowest for the population in rural savannah for both male and female (79.5% and 73.3% respectively) and lowest for females 19-25 years. Most of the females from the rural savannah in the age group 19-25 are known to be engaged as potters (kayaye) in Accra, Kumasi and other big towns. There is the need to assist these individuals to learn other vocations if they are to improve their on their livelihoods.

The literacy rate for the population 15 years and older is 56.3 percent with the rate for males (67.3%) being higher than females (46.9%). Literacy levels are higher in urban (69.6%) than rural (41.7%) areas with the rural savannah having the lowest rate of 30 percent.

About four percent of the population 15 years and older has ever attended a literacy course. The proportion of females (3.9%) who have ever attended these courses is slightly higher than males (3.7%).

## **Health**

An estimated 14.2 percent of the population suffered from an illness or injury during the two weeks preceding the interview. About one-fifth of these were children 0-5 years (20.3%) with a slightly higher proportion being adults 50 years and older (22.4%). About 14 percent were within the age group 20-49 years (13.9%).

About two-thirds of the population who suffered an illness or injury consulted a health practitioner (66.2%). Majority of those who consulted a health practitioner did so due to an illness (87.7%) while 5.4 percent consulted with this category of persons due to an injury. More than half of the persons who reported ill or injured visited a public health facility (52.2%), with 44.6 percent visiting a private non-religious facility. Almost half of the visits were made to a hospital (46.7%) while a little less than one-quarter (23.8%) visited a chemical store.

About one out of ten (9.2%) women reported being pregnant in the last 12 months. Rural residents reported higher pregnancy rates (11.5%) compared to their urban counterparts (7.3%). Of these pregnancies, 13.5 percent did not result in live births, with urban females reporting higher rates (20.4%) than rural females (5.5%) areas.

Nearly four out of every five females 15-49 years never used any form of contraception (78.1%) to either prevent or delay pregnancy. Very small proportions used a male condom (2.8%), pill (5.4%) or injection (5.2%). With regard to traditional methods, 3.2 percent use the rhythm method while 1.7 percent relies on abstinence as a way of preventing or delaying pregnancy.

Less than two percent of children 5 years and below had not received any form of vaccination as at the time of the survey. More than ninety percent of parents made no payment for the immunization or vaccination of their children (94.8%). This is because child immunization is supposed to be free.

Almost all children 5 years and below (99.1%) have been breastfed at one time or another. More than four out of every five children (82.1%) were weaned before reaching the age of 12 months.

About 94 percent of the population knows that a healthy-looking person may have HIV. In addition, 91.3 percent are aware of mother to child transmission of HIV. The proportion of females who are aware of both situations is slightly higher among females than males. This situation requires the intensification of awareness campaigns to make the level of awareness universal among the population, especially males.

More than two-thirds of the population are either registered or covered by a health insurance scheme (67.6%). Coverage is higher in urban (71.5%) than in rural (63.9%). Efforts however, need to be intensified and the registration process simplified to increase health insurance coverage in the wake of the rising cost of accessing medical care.

## **Employment**

More than three-quarters of the population 15 years and older is economically active (77.1%), with 75.5 percent employed and 1.7 percent unemployed. About four out of every five

persons in rural areas is employed (81.7%) compared to 69.9 percent in urban areas. The activity rate of the population is 60 percent. The rate is slightly higher for males (61.0%) than females (59.2%).

The unemployment rate, as computed for persons who during the reference period were without jobs and were “potentially” available for work is 5.2 percent; the rate is higher for females (5.5%) than males (4.8%). Unemployment is higher in urban (6.5%) than in rural (3.9%) areas.

Majority of the employed population is made up of own account workers (46.4%) with nearly the same proportions being employees (22.5%) or contributing family workers (22.3%). About half of the females (50.5%) are own account workers compared to males (41.9%). The proportion of females who are contributing family workers (27.9%) is also higher than males (16.4%). In contrast, 32.5 percent of males are employees compared to 13.2 percent of females.

Only one-fifth of the employed population 15 years and older (20.2%) are in wage employment. Almost one-quarter (24.7%) are self-employed in the agricultural sector without employees while 18.9 percent are contributing family workers in the same sector. These may be persons who are engaged in agricultural activities of household members without an income.

Less than six percent of the employed persons are engaged in the public sector (5.9%); 46.1 percent are engaged in agri-business while 41.9 percent are engaged in the private informal sector. More than two-fifths the population 15 years and older are engaged as agricultural and fishery workers (44.3%) with about one-quarter engaged as sales and service workers (24.5%)

Less than one-quarter of the currently employed persons (17.8%) have attained secondary or higher education. About one-third (33.2%) have middle school leaving certificate or basic education examination certificate. A higher proportion of males (37.6%) than females (29.2%) have middle school leaving certificate or basic education certificate.

About one-fifth of the working population 15 years and older (21.4%) spend 60 hours or more in their main job. More than half of employed persons in the transportation and storage industry (54.7%) spend 60 hours or more a week on their job. Workers in the water supply, sewerage and waste management, agriculture, forestry and fishing as well as education spend less than 40 hours a week in their main job.

Nearly six out of every ten household members aged 7 years and older (57.3%) are engaged in washing clothes while a little over half are engaged in cleaning activities or fetching water (52.4% for cleaning and 52.2% for fetching water). The proportion of females engaged in these housekeeping activities is higher than males. Females spend an average of 19 minutes a day fetching water compared to 14 minutes by males. Females also spend more time cooking (44.6 minutes) as against 26.4 minutes by males.

### **Migration and Tourism**

Almost half of the population 7 years and older (48.6%) have migrated, with the Greater Accra Metropolitan Area (GAMA) having the highest proportion of migrants (60.3%). Less than one-third of the population is made up of return migrants (31.5%) while 17.1 percent are in-migrants. The proportion of female migrants (50.1%) across the country is higher than males (46.5%).

Return migrants are mainly concentrated within the age groups 20-24 (10.1%), 25-29 (11.2%) and 30-34 (10.4%) while in-migrants are mostly found in the age group 10-39 years. Majority of non-migrants are below age 30 years.

Nearly sixty percent of migrants have moved from other urban areas while 30.5 percent migrated from rural areas. More than half of the migrant population relocated to rural areas (52.4%) while 37.1 percent moved to urban areas other than GAMA.

About 26 percent of the migrants moved from other urban areas to settle in rural areas while 23.2 percent relocated from urban areas to other urban areas. A little over one-fifth moved from rural areas (21.2%) to settle in other rural localities.

About 14 percent of migrants moved to their present locations in search of employment; 16.1 percent for accompanying parents; 12.5 percent due to marriage and 33.1 percent due to other family reasons.

Tourists constitute about 27 percent of household population. Of these, 98 percent are domestic tourists. More than one-third of domestic tourists are within the age group 25-44 (37.5%) while one-fifth are 45-64 years (19.7%). Outbound tourism is more common among the age groups 25-44 (46.7%) and 45-64 (27.4%). The proportions of males and females who embarked on domestic tourism and tourism outside the country are nearly the same (19 percent for domestic tourism and 27 percent outbound tourism).

More than 92 percent of outbound same-day tourists visit other ECOWAS countries while 7.9 percent visit other African countries other than ECOWAS. Majority of same-day domestic visitors (98.9%) and overnight visitors (99.3%) travel by road. The purpose of travel by domestic overnight visitors is mainly for business (25.4%), visiting families (28.1%) and attending funerals (20.9%). Domestic visits are also made to some of the country's tourist sites with 17.5 percent of same-day visits as well as 22.5 percent of domestic over-night visits being made to the Kumasi zoo. Ten percent of same-day visitors and 14.8 percent of same-day visitors also visited the Accra Zoological Gardens and Aburi Botanical Gardens respectively. Most domestic travels are self-packaged (81.4%) while 15.5 percent are packaged tours.

## **Housing**

Majority of households (60.6%) in the country live in compound houses made up of several rooms. About one-tenth (10.4%) live in huts or buildings within the same compound while 15.2 percent live in separate houses. Small proportions live in semi-detached houses (7.0%) or flats and apartments (3.6%).

More than two out of every five households (45.9%) live in their own houses while 26.8 percent live in rented premises. Almost 50 percent of households occupy one room while 26.7 percent occupy two rooms.

The number of rooms available to a household is a determinant of the social status of the household. It also has implications for the health of the members. Overcrowding in a few rooms could lead to the easy spread of communicable diseases among people occupying the rooms. About one-third of households (32.7%) with two or three members occupy a single room while 14 percent of households with four members occupy a single room. In addition, 9.4 percent of households with five members occupy a single room.

Nearly two-thirds of households (65.0%) live in dwellings whose outer walls are of cement blocks or concrete while 31.1 percent have their outer walls made of mud, bricks or earth. In terms of the floor, 82.6 percent of households live dwellings with cement or concrete floor. The main material used for the dwellings of 78.6 percent of households is metal sheet.

About one-third of households (32.3%) have their main source of drinking water as a well while 28.9 percent have their source as pipe-borne. In addition, 12.5 percent of households obtain their water from a public tap or standpipe.

Every seven out of ten households (70.6%) have electricity (mains) as their main source of lighting. Urban households (88.6%) are more likely to access electricity for lighting than rural households (60.7%).

Forty percent of households use wood fuel for cooking, with an additional 31.5 percent using charcoal. Only 22.3 percent of households use gas for cooking. The overdependence on wood and charcoal has the potential of depleting our forests, leading to environmental degradation. Measures need to be taken to encourage the population to shift to the use of other forms of energy, especially gas, to save our forests and prevent environmental degradation. The measures should include ensuring that the product is available at all times and at reasonable cost to encourage patronage.

Environmental issues have been of concern in recent times with the outbreak of various communicable diseases. The survey showed that more than half of households dispose of their rubbish at a public dump (52.4%) while 12.8 percent dispose of them indiscriminately. Less than one-fifth of households (18.2%) have their rubbish collected. The indiscriminate disposal of rubbish has the potential of the outbreak of diarrheal diseases, including cholera. Agencies responsible for environmental sanitation must ensure that they create proper dumping places where the rubbish can occasionally be fumigated to kill disease-carrying agents such as flies and rodents.

With regard to liquid waste disposal, about three-quarters of households (73.7%) discharge their liquid waste into open areas, with another 22.4 percent discharging it into open drains. Only 1.9 percent of households dispose their liquid waste through a septic tank. This again, is a worrying situation that needs to be tackled by agencies entrusted with ensuring good sanitation practices in the country.

More than one-third of households use a public toilet facility (35.7%) while 19.1 percent use a pit latrine. Only 13.9 percent of households use a water closet facility while 18.8 percent of households have no toilet facility and so use open spaces including the bush, field or beach. This again is a situation that the sanitation agencies, including the District Assemblies, must tackle to improve the sanitation situation in the country.

Water collected from households and water sources was tested for the presence of arsenic and E.coli. The results show that 8.6 percent of households collected water from a source that had arsenic above the country's standard of 10ppb (parts per billion) while 5.6 percent of households had drinking water in the household that exceeded the standard limit.

In the case of E.coli, 43.5 percent of households had source water with E.coli present, while at the household level, 62.1 percent of households had drinking water with E.coli present.

Overall, 53.5 percent of households collect water from a source which meets both arsenic and E. coli standards, but at the point of consumption in the household, only 36.5 percent meet

the accepted standards. This implies that there is contamination at the household level due to the method of storage.

### **Household Agriculture**

More than half of households (51.5%) in the country own or operate a farm; this is made up of 82.5 percent of households in rural areas and 17.5 percent in urban areas. It is estimated that 4.5 million households rear livestock with an estimated total value of GH¢4,553.7 million.

It is also estimated that 4.9 million households were involved in harvesting various crops during the 12 months preceding the interview with an estimated total annual value of GH¢4,897.9 million. The leading crops in terms of value are cocoa and maize. About 3,500 households were also engaged in fishing with an estimated total value of GH¢4.9 million.

About one-third of the total expenditure on crop inputs (31%) is spent on the hiring of farm labour while 16.3 percent is spent on inorganic fertilizers. In the case of livestock, 43 percent of the expenditure is spent on animal feeds (including salt) and 15.1 percent on veterinary services.

More than two-fifths of households are involved in some form of food processing (42.3%), with women (84.9%) dominating.

Households consume part of their farm produce and it is estimated that the average annual household consumption of own produce is GH¢4,702, with an average annual per capita consumption of GH¢1,125

### **Non-farm Enterprises**

More than two-fifths of the households in the country (44.3%) operate a non-farm enterprise (classified as Manufacturing, Trading and Other Activities). About 70 percent of these enterprises are operated by females (70.6%). Household savings account for 73 percent of the source of capital for operating non-farm enterprises. Only 2 percent of non-farm enterprises source capital from banks.

More than ninety percent of non-farm enterprises (92.3%) did not obtain any credit facility for their operations during the 12 months preceding the interview.

The average annual expenditure on inputs by non-farm enterprises per enterprise was GH¢110.4 per enterprise, while the estimated annual value of inputs was GH¢7,121.6 million. The annual estimated revenue for non-farm enterprises was GH¢48,645.9 million. The largest share of this revenue was allocated to households (GH¢7,467.9 million), with GH¢3,578.2 million going into savings.

### **Household Income and Expenditure**

The mean annual household expenditure is GH¢9,317, with the highest wealth quintile having an average expenditure of GH¢14,665 compared to GH¢3,924 for the lowest quintile. The share of the highest quintile in the mean annual household expenditure is 47.9 percent. The highest quintile has a mean annual per capita income of GH¢6,337 while the lowest quintile has a mean per capita income of GH¢644.

The Greater Accra region has the highest mean annual expenditure of GH¢13,303 while the Upper West region has the lowest (GH¢5,991). Greater Accra also has the highest proportion of households (56.6%) falling within the highest quintile. The Northern (10.2%), Upper East

(12.8%) and Upper West (11.0%) have low proportions of households falling within the highest quintile indicating that income levels are very low among these regions.

Expenditure on food (actual and imputed) accounts for 46.7 percent of total household's estimated total annual expenditure of G¢61,507 million. Expenditure on housing accounts for 12.4 percent of total expenditure by households. Households in the lowest quintile spend 56.3 percent of their income on food compared to 41.5 percent for households in the highest quintile.

Almost half of households' mean annual income is derived from non-farm self-employment (48.3%) while about a third is from wages (36.3%). Income from household agriculture contributes 10.1 percent to mean annual household income.

Income transfers by females to non-household members are mainly to parents (34.4%) while for males, the transfers are mainly to children outside the household (44.6%).

Transfers and payments received by households are mainly from their children, with the proportion of females receiving these payments (45.7%) being higher than males (33.2%).

### **Household Access to Financial Services**

More than one-third of household members (34.1%) hold an insurance policy in the country. For households in which no member holds a policy, almost half (48.5%) attribute it to affordability while one-fifth (20.5%) do not find it necessary to hold a policy. A higher proportion of household members in urban areas have a short-term insurance policy covering commercial or business (89.4%), property (83.3%), vehicle (77.4%) and funeral (74.3%).

For long-term policies, the main areas of coverage by household members in urban areas are life insurance paid by the holder (70.8%), life insurance paid by employer (74.4%), retirement or annuity (78.6%) and education (70.6%).

More than one-third of households (35.4%) hold a bank account or are contributing to a savings scheme. For those not holding an account, the main reason was inadequacy of money or income (43.8%). About 30 percent cited not having a regular income while 19.9 percent did not find it necessary to own a savings account.

Only 11.4 percent of households have members who applied for a loan in the 12 months preceding the interview. In urban areas majority of households (81.9%) applied for the loans for the purpose of land acquisition while in rural areas the main purpose was for the purchase of agricultural inputs (80.7%).

The main sources of loan acquisition were relatives and friends (22.0%), savings and loan schemes (19.6%) and private banks (18.6%).

One-third of households in the country own a refrigerator (33.1%), 50 percent own a fan or radio cassette while one-fifth owns a bicycle. Four out of every five households own a mobile phone (80.3%) and one-quarter own a house (26.2%). Television sets are owned by 57.2 percent of households.

### **Governance, Peace and Security**

Peace and security in a country allow citizens to go about their lawful activities in a peaceful and secure environment.

The survey results show that within the last five years, 27.9 percent of households have been victims of stealing or attempted stealing. About 17 percent of households rely on dogs for the security of their homes while 12.4 percent use special window or door grilles. Most households do not use any form of security in their homes and therefore are vulnerable to robbery. Community policing using watchdog committees and volunteers is therefore needed to ensure the security of the citizens. In almost half of the robbery or theft cases (47.4%), a weapon was actually used by the perpetrators.

Less than three percent of households (2.5%) reported incidents of sexual offence during the period. Only 8 percent of these incidents were reported to the Police. The reasons assigned for not reporting include the fact that the incident was not serious (46.0%), perpetrator was known and so the problem was solved amicably (30.0%) and the problem solved by family (10.0%). Four percent of the households also thought the problem was not appropriate to be reported to the Police. Small proportions cited time wasting, fear of stigmatization and fear of reprisals.

About half of the households in the country (51.1%) feel that they are very safe walking down the street at night in their neighbourhood.

Almost 32 percent of respondents indicate that their communities had occasionally experienced force or violence in the last five years, with 7 percent reporting that their communities frequently go through this experience. The major causes of conflicts are chieftaincy (31.0%), land disputes (28.4%) and political differences (11.5%).

Two-thirds of respondents have knowledge about a dispute resolution mechanism (66.7%), with 72 percent being very confident in their ability to resolve disputes.

More than two out of every four respondents (46.3%) think government never takes their concerns into account before changing laws. Lastly, about one-fifth of households (19.9%) think that people have to pay additional monies to government officials most of the time in order to have things done for them.

In conclusion, even though there have been improvements in some of the key indicators for measuring progress towards the attainment of the MDGs, a lot still remains to be done to attain the various goals.

- Pre-natal care among pregnant women declined from 87.3 percent in GLSS5 to 80.8 percent in GLSS6 despite efforts to achieve universal antenatal care. Also, contraceptive use remains very low in the country. If we are to achieve our objective of reducing the incidence of HIV and sexually transmitted diseases, then the advocacy and campaign for the use of contraceptive or advocacy for abstinence, especially among the youth, must be stepped up. On the other hand, almost all children were weaned before the age of 12 months compared to 97.2 percent in GLSS5.
- There has been substantial progress in educational attainment among the population. However, school attendance rates are still low in the three northern regions of the country. Where the rates are relatively high, there are gender gaps that need to be addressed.
- There are clear and significant disparities in per capita annual income between urban and rural residents. Strategies must be put in place to bridge this yawning gap.

Access to credit remains a mirage for many households because of the type of collateral required by those providing such financial services.

- The use of wood and charcoal as cooking fuel is still high in the country, declining from 84.1 percent in GLSS5 to 72.8 percent in GLSS6. If the situation is not controlled the country's forest cover would be devastated leading to environmental degradation. There is therefore the need to encourage the use of alternative sources, especially liquefied petroleum gas.
- Majority of the population continues to dump refuse and liquid waste indiscriminately. This has the potential of creating environmental pollution leading to the outbreak of diarrheal and other diseases. This situation has to be tackled with all the seriousness it deserves to prevent the outbreak of any such diseases.

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# APPENDICES

# APPENDIX 1

## METHODOLOGY OF THE SURVEY

### 1. Introduction

The sixth round of the Ghana Living Standards Survey (GLSS6), like the previous rounds, was designed to provide nationally and regionally representative indicators. It applied the same sampling methodology, the same questionnaires and covered the same broad range of topics such as education, health, employment, housing conditions, migration and tourism among others.

#### What is new?

The GLSS6, however, focused attention on the Labour Force by expanding the employment section to include Child Labour, Decent Work, Hazardous Work and Health Safety. It also included sections on: Migrants and Remittances, Water Quality Testing and Financial Services.

To cater for the needs of the Savannah Accelerated Development Authority (SADA) areas and also provide nationally representative quarterly labour force statistics, the number of primary Sampling Units (PSUs) and households were increased from 580 and 8,700 to 1,200 and 18,000 respectively –an increase of about 107% over the GLSS5 figures (Tables A1 and A2).

**Table A1.1: Comparative samples between the fifth and sixth rounds of the GLSS**

<i>Description</i>	<i>2005/2006</i>	<i>2012/2013</i>
<i>Survey period</i>	<i>3<sup>rd</sup> September 2005 to 2<sup>nd</sup> September 2006</i>	<i>18<sup>th</sup> October 2012 to 17<sup>th</sup> October 2013</i>
<b><i>Number of PSUs selected</i></b>	<b>580</b>	<b>1,200</b>
Urban	240	545
Rural	340	655
<b><i>Number of households selected</i></b>	<b>8,700</b>	<b>18,000</b>
Urban	3,600	8,175
Rural	5,100	9,825
<b><i>PSUs interviewed</i></b>	<b>580</b>	<b>1,200</b>
Urban	240	545
Rural	340	655
<b><i>Households interviewed</i></b>	<b>8,687</b>	<b>16,772</b>
Urban	3,588	7,445
Rural	5,099	9,327

**Table A1.2: Regional distribution of EAs covered for GLSS6/LFS**

Region	EA			Households			Percentage of EAs	Proportion Urban	Proportion Rural
	Urban	Rural	Total	Urban	Rural	Total			
Western	51	69	120	765	1,035	1,800	10	42.5	57.5
Central	55	61	116	825	915	1,740	9.7	47.4	52.6
Greater Accra	130	14	144	1,950	210	2,160	12	90.3	9.7
Volta	39	77	116	585	1,155	1,740	9.7	33.6	66.4
Eastern	56	72	128	840	1,080	1,920	10.7	43.8	56.3
Ashanti	90	58	148	1,350	870	2,220	12.3	60.8	39.2
Brong Ahafo	52	64	116	780	960	1,740	9.7	44.8	55.2
Northern	35	81	116	525	1,215	1,740	9.7	30.2	69.8
Upper East	21	79	100	315	1,185	1,500	8.3	21.0	79.0
Upper West	16	80	96	240	1,200	1,440	8	16.7	83.3
<b>Ghana</b>	<b>545</b>	<b>655</b>	<b>1,200</b>	<b>8,175</b>	<b>9,825</b>	<b>18,000</b>	<b>100</b>	45.4	54.6

## 2. Survey Period

The survey was spread over a 12-month period in order to ensure a continuous recording of household consumption and expenditures and seasonal changes occurring thereof. Thirty teams were involved in the data collection. There were no relieving teams and the field staff did not take annual leave. Rather, a rotational arrangement was put in place which made it possible for the Senior Interviewer/Editor to relieve the interviewers in each cycle.

There were 10 cycles of 35 days each and one travelling day, giving a total of 360 days in the survey year. A cycle in both rural and urban areas lasted 35 days. Interviewers in rural and urban areas all used the diary method as far as possible to capture each household's daily consumption and expenditure.

## 3. Team Composition

Thirty teams were constituted and each was made up of:

Supervisor	...	1
Senior Interviewer/Editor	...	1
Interviewers	...	4
Data Capture staff	...	1
Driver	...	1
<b>Total</b>	<b>...</b>	<b>8</b>

## 4. Interviewer Workload

A team of four interviewers worked in four EAs during a 35-day cycle. In both rural and urban areas, one interviewer was assigned to complete 15 household interviews in one EA during the cycle. Each interviewer conducted five interviews per day and completed selected sections of the questionnaire. An interviewer visited each household in the EA assigned to him/her every sixth day i.e. after every five days. In other words, the interviewer visited each of the 15 selected household seven (7) times in order to complete the cycle. The total household interviews a team completed in a cycle was 60.

The interviewer's workload of 15 households per cycle was therefore divided into five batches of three households a day. The batches were visited according to the following batch-day and household-day of schedule of visits during a 35-day cycle (see Tables A3 and A4).

**Table A1.3: Days of Visit**

Batch	Days of Visit						
Batch 1	DAY1	DAY6	DAY11	DAY16	DAY21	DAY26	DAY31
Batch 2	DAY2	DAY7	DAY12	DAY17	DAY22	DAY27	DAY32
Batch 3	DAY3	DAY8	DAY13	DAY18	DAY23	DAY28	DAY33
Batch 4	DAY4	DAY9	DAY14	DAY19	DAY24	DAY29	DAY34
Batch 5	DAY5	DAY10	DAY15	DAY20	DAY25	DAY30	DAY35

**Table A1.4: Schedule of visits**

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Household	1	4	7	10	13	1	4	7	10	13
Household	2	5	8	11	14	2	5	8	11	14
Household	3	6	9	12	15	3	6	9	12	15
	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16	Day 17	Day 18	Day 19	Day 20
Household	1	4	7	10	13	1	4	7	10	13
Household	2	5	8	11	14	2	5	8	11	14
Household	3	6	9	12	15	3	6	9	12	15
	Day 21	Day 22	Day 23	Day 24	Day 25	Day 26	Day 27	Day 28	Day 29	Day 30
Household	1	4	7	10	13	1	4	7	10	13
Household	2	5	8	11	14	2	5	8	11	14
Household	3	6	9	12	15	3	6	9	12	15
	Day 31	Day 32	Day 33	Day 34	Day 35	Day 36				
Household	1	4	7	10	13	Travel				
Household	2	5	8	11	14					
Household	3	6	9	12	15					

**NOTE:** The 36<sup>th</sup> day of each cycle would be used for travelling to the next EA

A diary of daily consumption and expenditure was used to support the interviews. During the first visit, a literate person already identified in each household was trained to record all subsequent expenditures made by the household and submit the diary to the interviewer on his next visit for entry into the appropriate sections. Where a household had no literate member, the interviewer made daily visits to the household and recorded all expenditures in the diary meant for the household.

At the end of the 5<sup>th</sup> visit (day 15<sup>th</sup>), the interviewer should have completed Part A of the questionnaire and this was edited and submitted for data capture by the Supervisor on the 17<sup>th</sup> day. The Data Capture staff entered all the 60 Part A questionnaires for the cluster before the team left for the next set of EAs.

## **5. Survey Instruments**

Four separate survey instruments were used for the GLSS6. The instruments are:

- a. A household questionnaire for collecting information at the household and individual levels, as well as at the level of household economic activities (agriculture and home businesses). The household questionnaire was divided into Part A and Part B. The employment section was expanded to address child labour, decent work, hazardous work and health safety issues;
- b. A community questionnaire for collecting data on the environment in which households function with a focus on the available services, economic activities, access to markets and, social capital;
- c. A price questionnaire administered in every area where households are located to allow cost of living adjustments; and
- d. Facility questionnaires administered to local service providers to obtain information on the types and quality of services available to households.

Precautions which were taken to ensure that good quality data were collected and processed without delay include the following:

- The questionnaire was almost entirely pre-coded. This obviously eliminated the very slow and tedious coding process, which is often liable to various types of errors.
- Microcomputers were installed in all data collection centres located in regional/district offices of the Statistical Service. This facilitated the quick entry of data close to the points of data collection.
- A data entry application system was designed to check the data automatically to detect inconsistencies so that any errors could be corrected by the interviewer in consultation with the supervisor.
- Close supervision was enforced with one supervisor to a team of four interviewers and one data entry operator. The senior interviewer also edited and stood by for emergency relief.
- Regular spot-check monitoring visits were undertaken by officials from the head office and survey team members to assess progress of fieldwork, challenges faced and feedback on issues that were identified at the data processing stage.

## **6. Sample Design**

### **6.1 Objectives of the Sample Design**

The major focus of the GLSS6 survey was to provide estimates which are not only comparable with the previous rounds of the GLSS but also with acceptable precision and reliability for a variety of indicators on various aspects of living conditions, including, household consumption and expenditure, health, education, employment, child labour, housing conditions, the operation of non-farm household enterprises, agricultural activities, remittances, savings, credit and assets as well as household financial services.

Accordingly, a two-stage stratified sampling design was adopted. At the first stage, 1,200 enumeration areas (EAs) were selected to form the primary sampling units (PSUs).

The PSUs were allocated into the 10 regions using probability proportional to population size (PPS). The EAs were further divided into Urban and Rural localities of residence. A complete listing of households in the selected PSUs was undertaken to form the secondary sampling units (SSUs). At the second stage, 15 households from each PSU were selected systematically. Hence, the total sample size came to 18,000 households nationwide.

## **6.2 Sampling Frame and Units**

The GLSS6 is a household probability sample survey designed to cater for a variety of analyses at the various domains of interest. As in all probability sample surveys, it is important that each sampling unit in the target population has a known, non-zero probability of being included in the sample. To achieve this, an appropriate list, or sampling frame of the PSUs is required. The list of standardized census EAs - together with their respective population and household sizes - obtained from the 2010 Population and Housing Census (PHC) conducted by the Ghana Statistical Service was used as the sampling frame for the GLSS6.

However, the unit of measurement was the population living within individual households. The institutional population (those who were in schools, hospitals, etc.), which represents a very small percentage of the 2010 Population and Housing Census (PHC), was excluded from the frame.

## **6.3 Stratification**

To enhance the precision and reliability of the survey results, the EAs were first stratified into **10 main domains** according to the ten administrative regions. Within each region, the EAs were further stratified into their rural and urban categories, bringing the total number of sub-strata to 20. Again, the three ecological zones, namely 1) Coastal, 2) Forest, and 3) Savannah (SADA) were taken into consideration. Therefore, the major domains of analysis used for the survey are:

- ❖ Ghana as a whole,
- ❖ Each of the ten Administrative regions
- ❖ Urban and Rural localities of Residence (each as a separate domain),
- ❖ Each of the three ecological zones, as well as Greater Accra Metropolitan Area (GAMA)
  1. Coastal
    - Urban coastal
    - Rural coastal
  2. Forest
    - Urban forest
    - Rural forest
  3. Savannah (SADA)
    - Urban savannah
    - Rural savannah
  4. GAMA

## **6.4 Sample size and Allocation**

The following factors were considered in determining the minimum sample size required to improve the reliability of the estimates from the survey:

e, the precision or relative sampling error needed, which is 5 percent;

- the level of confidence desired, which is 95 percent;
- $p$ , the estimated or known proportion of the population in the specified target group;
- $r$ , the predicted or anticipated coverage rate, or prevalence, for the specified indicator;
- $d$ , the sample design effect (sample deff);
- $h$ , the average household size;
- $1+nse$ , an adjustment for potential loss of sample households due to non-response of rate  $nse$ .

Therefore, the sample size per domain used is given by the relation:

$$N^* = [4*(1-p)p*d*(1+nse)]/[(e*p)^2*h*r]$$

Where:

e = Relative error (5% in the case of the GLSS6);

p= Proportion of those who are under the poverty line or the incidence of poverty- GLSS5;

d = Design effect (deff) for the indicator in GLSS5;

nse = Non response rate for households in GLSS5;

h = Average household size in GLSS5;

r = All household members;

n = Minimum number of households to be interviewed for the indicator and;

Confidence level - 95 %.

The results of the computations are presented in Table A5.

**Table A1.5: Required household sample size by region (Poverty line as indicator)**

Code	Region	p = P <sub>0</sub>	D	nse	H	r	n*	Population share	Proportional distribution	Final number of households (n)
1	Western	0.184	2.50	0.048	4.2	1	4,426	0.10	1,825	1,800
2	Central	0.199	1.40	0.060	4.0	1	2,389	0.09	1,643	1,740
3	Greater Accra	0.118	3.60	0.083	3.8	1	12,270	0.16	2,920	2,160
4	Volta	0.314	1.30	0.045	4.2	1	1,131	0.10	1,643	1,740
5	Eastern	0.151	3.10	0.038	4.1	1	7,060	0.11	2,008	1,920
6	Ashanti	0.203	1.60	0.069	4.1	1	2,621	0.18	3,468	2,220
7	Brong Ahafo	0.295	1.00	0.051	4.6	1	874	0.09	1,643	1,740
8	Northern	0.523	2.90	0.047	7.7	1	575	0.10	1,825	1,740
9	Upper East	0.704	1.40	0.043	5.8	1	169	0.05	730	1,500
10	Upper West	0.879	0.40	0.042	6.2	1	15	0.03	548	1,440
	<b>National</b>	<b>0.285</b>	<b>1.90</b>	<b>0.053</b>	4.4	<b>1</b>	<b>1,825</b>	<b>1.00</b>	<b>18,250</b>	<b>18,000</b>

The minimum sample size by probability proportional to size is 548 households. However, to cater for the requirements of the SADA areas, namely: the three northern regions, northern Brong Ahafo (55.3% of B/A population), northern Volta (19.9% of Volta population), and also the LFS, a minimum of 96 EAs (1,440 households) was needed per domain per quarter. Consequently, the sample allocation was adjusted in such a way that there would be enough households to meet the requirements, bringing the final number of households needed to 18,000 (Table A6).

## 7. Non Response and Raising Factors

The overall non-response rate is 6.8%. The regions with the highest non-response rates are Greater Accra (10.9%), Ashanti (10.8%), Volta (9.5%) and Central ((7.9%). The regions with the lowest non-response rates are Northern (2.2%), Upper West (2.8%) and Upper East (3.5%) (Table A6).

**Table A1.6: Non-response Rates**

Region	Urban			Rural			Total		
	Household found	Household interviewed	Response Rate	Household found	Household interviewed	Response Rate	Household found	Household interviewed	Response Rate
Western	765	726	94.9	1,035	992	95.8	1,800	1,718	<b>95.4</b>
Central	825	759	92.0	915	843	92.1	1,740	1,602	<b>92.1</b>
Greater Accra	1,950	1,727	88.6	210	197	93.8	2,160	1,924	<b>89.1</b>
Volta	585	513	87.7	1,155	1,061	91.9	1,740	1,574	<b>90.5</b>
Eastern	840	779	92.7	1,080	1,025	94.9	1,920	1,804	<b>94.0</b>
Ashanti	1,350	1,184	87.7	870	797	91.6	2,220	1,981	<b>89.2</b>
Brong Ahafo	780	721	92.4	960	900	93.8	1,740	1,621	<b>93.2</b>
Northern	525	508	96.8	1,215	1,194	98.3	1,740	1,702	<b>97.8</b>
Upper East	315	302	95.9	1,185	1,145	96.6	1,500	1,447	<b>96.5</b>
Upper West	240	226	94.2	1,200	1,173	97.8	1,440	1,399	<b>97.2</b>
<b>Total</b>	<b>8,175</b>	<b>7,445</b>	<b>91.1</b>	<b>9,825</b>	<b>9,327</b>	<b>94.9</b>	<b>18,000</b>	<b>16,772</b>	<b>93.2</b>

The overall raising factor for the survey is 368. This means that, on average, the GLSS6 conducted interviews with 1 in 368 of the population of all ages per cluster. However, interviewing rates ranged from as low as 1 in 97 in Upper West Region and 1 in 158 in Upper East Region to as high as 1 in 650 in the Greater Accra Region and 1 in 703 in Ashanti Region (Table A7).

**Table A1.7: Distribution of achieved sample, and corresponding population estimates**

Sample	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Brong Ahafo	Northern	Upper East	Upper West	Total
Households Interviewed	1,718	1,602	1,924	1,574	1,804	1,981	1,621	1,702	1,447	1,399	16,772
Household members	6,824	6,077	6,609	6,651	6,940	7,393	6,937	9,519	6,744	7,830	71,524
<b>Estimates</b>											
Households	605,825	611,962	1,250,848	526,182	721,603	1,400,844	614,521	491,663	240,250	137,784	6,601,484
Population (persons in households)	2,430,492	2,332,229	4,297,465	2,284,116	2,735,480	5,194,243	2,611,620	2,633,549	1,068,873	759,700	26,347,768
Raising Factors	356	384	650	343	394	703	376	277	158	97	368

## 8. Challenges and lessons learned

There were some challenges encountered during the GLSS6 fieldwork both during the listing exercise and the main data collection. During the listing exercise, which was in the second half of the rainy season, some communities were cut off due to rivers overflowing their banks. This resulted in the suspension of work in these areas until the flood waters had receded.

The delivery of questionnaires for the main data collection was delayed by some of the printing houses. This led to shortages of questionnaires during the early stages of data collection. Some of the questionnaires which were delivered late had loose binding and this made it difficult for some of the field personnel to handle the questionnaires.

There were challenges in travelling to some island communities that had been selected for the survey. Field personnel had to rely on canoes and boats to travel to these islands which sometimes posed a danger to their lives apart from the high cost of hiring these boats.

In future surveys, organizers would have to ensure that all the field logistics are delivered on time before the start of the fieldwork to avert the situation where personnel run out of logistics, thereby delaying the fieldwork.

## 9. Computation of Weights

The GLSS6 is not a self-weighting sample design because disproportionately larger samples from regions with smaller populations were drawn. Therefore, each sample household did not have the same chance of selection into the survey sample. Hence, weights were computed to reflect the different probabilities of selection in order to obtain the true contribution of each selected EA in the sample based on the first and second stage probabilities of selection. E.g., an observation with a sampling weight of 600 represents six hundred individuals from the target population while another observation with a sampling weight of say 50 represents only fifty individuals.

Let  $M_{hi}$  = Number of 2010 Population Census households in the  $i^{\text{th}}$  selected EA (PSU) in the  $h^{\text{th}}$  stratum or region

$M_{hi}^*$  = Number of households listed in the  $i^{\text{th}}$  selected EA in the  $h^{\text{th}}$  stratum (U/R in the region)

$\Sigma M_{hi}$  = Total number of households in the  $i^{\text{th}}$  stratum (i.e. number of households in either an urban or rural areas in a region)

$a_{hi}$  = Number of sample EAs allocated to the  $h^{\text{th}}$  stratum (U/R in the region)

e.g.  $a_{11} = 51$  for urban area in Western Region

and  $a_{12} = 69$  for a rural area in Western Region

$b$  = 15 (number of selected households per EA in each stratum)

Then, the first and second stage probabilities of selection are:

$$P_{1hi} = \frac{a_{hi}M_{hi}}{\sum M_{hi}} \quad \text{and} \quad P_{2hi} = \frac{b}{M_{hi}^*}$$

Where,

$P_{1\ hi}$  is the probability of selecting the  $i^{\text{th}}$  EA in the  $h^{\text{th}}$  stratum, and  $P_{2\ hi}$  is the probability of selecting a household in the  $i^{\text{th}}$  EA of the  $h^{\text{th}}$  stratum. The overall probability of selection of a household in the  $i^{\text{th}}$  selected EA of the  $h^{\text{th}}$  stratum is given by:

$$F_{hi} = P_{1\ hi} * P_{2\ hi}$$

$$= \frac{a_{hi}b}{\sum M_{hi}} * \frac{M_{hi}^*}{M_{hi}}$$

The weighting factor (or expansion factor),  $W_{hi}$ , for a household in the  $i^{\text{th}}$  selected EA in the  $h^{\text{th}}$  stratum is the reciprocal (inverse) of the overall probability of selecting that household.

That is,  $W_{hi} = \frac{1}{F_{hi}}$

$$= \frac{\sum M_{hi}}{a_{hi}b} * \frac{M_{hi}}{M_{hi}^*}$$

The number of households successfully interviewed in each EA was used in the computation. Therefore, the final weight for the sample households in the  $j^{\text{th}}$  cluster and in the  $i^{\text{th}}$  sample PSU in stratum  $h$  is given by:

$$W'_{hi} = W_{hi} * \frac{b'}{b''}$$

Where:

$b'$  = The number of interviews plus the number of no interviews in the sample cluster

$b''$  = Total number of interviewed sample households selected in the  $j^{\text{th}}$  sample PSU within the  $i^{\text{th}}$  sample stratum  $h$ .

## 10. Estimates of Sampling Errors

The SPSS Version 19 Complex Samples (CSPlan) module was used for estimating the sampling errors, the coefficient of variation (CV), the confidence limits, the design effect and the square root of the design effect for the GLSS6 data. The sampling errors have been calculated for the total country, regions, urban/rural areas as well as the ecological zones. Sampling errors have been computed for 14 indicators of interest (Table A8).

**Table A1.8: Sampling Errors for Selected Indicators**

No.	Indicator	Estimate	Base Population
1	Population	Number	All household members
2	Households	Number	All households
3	Household size	Mean	All households
4	Currently married	Proportion	All household members 12 +
5	No Education	Proportion	All household members 15 +
6	MSLC/BECE	Proportion	All household members 15 +
7	Secondary or higher	Proportion	All household members 15 +
8	Adult literacy	Rate	All household members 15 +
9	Currently using any contraceptive method	Proportion	All women 15-49 years
10	Child fully immunized	Proportion	Children 5 years and under
11	Currently economically active population	Number	All household members 15 and older
12	Unemployed	Proportion	All household members aged 15+
13	Employed	Proportion	All household members aged 15+
14	Underemployed	Proportion	All household members aged 15+

### 10.1 Sampling Errors for Selected Indicators

The design effect is the ratio of the variance of an indicator used in the sample design to the variance calculated under a simple random sampling. If the square root of the design effect is 1.0, it indicates that the sample design is as efficient as a simple random sample, whereas a value greater than 1.0 indicates an increase in the sampling error due to the use of a more complex and less statistically efficient design. Again, a CV not exceeding 20 percent is deemed precise enough for the indicator and indicates that the sample size for the domain is appropriate. The results are shown in Tables A9-A22.

**Table A1.9: Total Population**

Region	Estimate	Standard Error	Household members Only		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			95% Confidence Interval					
			Lower	Upper				
Western	2,430,492	187,867	2,061,906	2,799,079	0.077	43.543	6.599	6,824
Central	2,332,229	156,100	2,025,967	2,638,492	0.067	31.201	5.586	6,077
Greater Accra	4,297,465	340,191	3,630,025	4,964,905	0.079	87.588	9.359	6,609
Volta	2,284,116	130,610	2,027,863	2,540,368	0.057	22.259	4.718	6,651
Eastern	2,735,480	124,206	2,491,794	2,979,167	0.045	17.129	4.139	6,940
Ashanti	5,194,243	280,386	4,644,137	5,744,349	0.054	51.314	7.163	7,393
Brong Ahafo	2,611,620	139,870	2,337,201	2,886,040	0.054	22.634	4.757	6,937
Northern	2,633,549	146,142	2,346,824	2,920,274	0.055	24.526	4.952	9,519
Upper East	1,068,873	79,440	913,016	1,224,730	0.074	16.750	4.093	6,744
Upper West	759,700	44,888	671,631	847,769	0.059	7.434	2.727	7,830
<b>Urban/Rural</b>								
Urban	13,204,582	600,485	12,026,454	14,382,710	0.045	149.007	12.207	27,195
Rural	13,143,186	488,681	12,184,414	14,101,958	0.037	98.685	9.934	44,329
<b>Ecological Zone</b>								
Coastal	3,660,671	373,934	2,927,028	4,394,314	0.102	120.747	10.988	9,216
Forest	12,692,381	443,311	11,822,623	13,562,139	0.035	81.320	9.018	27,058
Savannah	6,835,767	298,772	6,249,589	7,421,945	0.044	47.997	6.928	30,148
GAMA	3,158,949	255,905	2,656,873	3,661,025	0.081	64.116	8.007	5,102
<b>Total country</b>	26,347,768	579,431	25,210,949	27,484,588	0.022	.	.	71,524

**Table A1.10: Total Number of Households**

REGION	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	605,825	43,391	520,694	690,957	0.072	8.715	2.952	1,718
Central	611,962	34,891	543,508	680,417	0.057	5.584	2.363	1,602
Greater Accra	1,250,848	81,308	1,091,326	1,410,371	0.065	16.608	4.075	1,924
Volta	526,182	19,382	488,155	564,208	0.037	1.976	1.406	1,574
Eastern	721,603	35,294	652,357	790,848	0.049	4.936	2.222	1,804
Ashanti	1,400,844	67,860	1,267,705	1,533,983	0.048	10.628	3.26	1,981
Brong Ahafo	614,521	26,802	561,938	667,105	0.044	3.283	1.812	1,621
Northern	491,663	26,727	439,226	544,100	0.054	3.998	2	1,702
Upper East	240,250	21,106	198,840	281,660	0.088	4.901	2.214	1,447
Upper West	137,784	6,907	124,233	151,336	0.05	0.901	0.949	1,399
<b>Urban/Rural</b>								
Urban	3,656,461	149,035	3,364,061	3,948,861	0.041	34.681	5.889	7,445
Rural	2,945,023	112,111	2,725,065	3,164,981	0.038	19.625	4.43	9,327
<b>Ecological Zone</b>								
Coastal	1,012,354	90,368	835,057	1,189,652	0.089	24.267	4.926	2,567
Forest	3,287,920	105,682	3,080,577	3,495,263	0.032	17.236	4.152	6,924
Savannah	1,352,531	57,755	1,239,218	1,465,844	0.043	7.9	2.811	5,773
GAMA	948,679	74,836	801,854	1,095,503	0.079	17.559	4.19	1,508
<b>Total country</b>	<b>6,601,484</b>	<b>133,654</b>	<b>6,339,261</b>	<b>6,863,707</b>	<b>0.02</b>	<b>.</b>	<b>.</b>	<b>16,772</b>

**Table A1.11: Mean Household Size**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	4.0	0.086	3.84	4.18	0.021	1.801	1.342	1,718
Central	3.8	0.133	3.55	4.07	0.035	4.551	2.133	1,602
Greater Accra	3.4	0.128	3.18	3.69	0.037	9.867	3.141	1,924
Volta	4.3	0.149	4.05	4.63	0.034	3.452	1.858	1,574
Eastern	3.8	0.09	3.61	3.97	0.024	2.852	1.689	1,804
Ashanti	3.7	0.087	3.54	3.88	0.023	4.783	2.187	1,981
Brong Ahafo	4.3	0.11	4.03	4.47	0.026	2.432	1.559	1,621
Northern	5.4	0.149	5.06	5.65	0.028	2.494	1.579	1,702
Upper East	4.5	0.166	4.12	4.77	0.037	2.578	1.606	1,447
Upper West	5.5	0.165	5.19	5.84	0.03	0.874	0.935	1,399
<b>Urban/Rural</b>								
Urban	3.6	0.057	3.5	3.72	0.016	5.417	2.328	7,445
Rural	4.5	0.061	4.34	4.58	0.014	3.427	1.851	9,327
<b>Ecological Zone</b>								
Coastal	3.6	0.135	3.35	3.88	0.037	8.173	2.859	2,567
Forest	3.9	0.051	3.76	3.96	0.013	3.587	1.894	6,924
Savannah	5.1	0.086	4.89	5.22	0.017	2.514	1.586	5,773
GAMA	3.3	0.098	3.14	3.52	0.029	4.949	2.225	1,508
<b>Total country</b>	4.0	0.041	3.91	4.07	0.01	4.106	2.026	16,772

**Table A1.12: Proportion of Persons 12 years and Older Currently Married**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.50	0.008	0.49	0.52	0.017	1.187	1.089	2,253
Central	0.49	0.012	0.46	0.51	0.024	2.390	1.546	1,953
Greater Accra	0.46	0.012	0.44	0.49	0.025	4.480	2.117	2,262
Volta	0.51	0.011	0.49	0.53	0.022	1.945	1.395	2,197
Eastern	0.48	0.010	0.46	0.50	0.021	1.970	1.403	2,285
Ashanti	0.48	0.009	0.46	0.49	0.019	3.202	1.789	2,382
Brong Ahafo	0.46	0.012	0.44	0.49	0.027	2.846	1.687	2,157
Northern	0.59	0.013	0.56	0.61	0.022	2.981	1.727	3,325
Upper East	0.53	0.011	0.51	0.55	0.021	0.922	0.960	2,348
Upper West	0.48	0.014	0.45	0.51	0.029	1.066	1.032	2,474
<b>Urban/Rural</b>								
Urban	0.46	0.006	0.45	0.47	0.012	3.120	1.766	8,849
Rural	0.52	0.005	0.51	0.53	0.010	2.414	1.554	14,787
<b>Total</b>	0.49	0.004	0.48	0.50	0.008	2.962	1.721	23,636

**Table A1.13: Proportion of Persons 15 years or older with No Education**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.152	0.043	0.079	0.275	0.284	55.636	7.459	620
Central	0.206	0.03	0.147	0.281	0.147	21.154	4.599	757
Greater Accra	0.091	0.015	0.063	0.129	0.162	19.829	4.453	430
Volta	0.261	0.054	0.159	0.397	0.207	54.297	7.369	1,024
Eastern	0.153	0.047	0.074	0.289	0.309	77.935	8.828	703
Ashanti	0.157	0.044	0.082	0.28	0.278	122.521	11.069	716
Brong Ahafo	0.266	0.044	0.179	0.375	0.167	41.211	6.42	1,092
Northern	0.626	0.104	0.384	0.819	0.166	180.089	13.42	3,243
Upper East	0.492	0.039	0.407	0.578	0.079	10.514	3.242	1,937
Upper West	0.48	0.073	0.326	0.639	0.152	25.426	5.042	2,294
<b>Urban/Rural</b>								
Urban	0.148	0.031	0.092	0.232	0.209	172.057	13.117	2,892
Rural	0.327	0.06	0.21	0.471	0.183	329.523	18.153	9,924
<b>Ecological Zone</b>								
Coastal	0.170	0.023	0.125	0.227	0.134	22.243	4.716	1,018
Forest	0.164	0.022	0.121	0.219	0.134	73.146	8.553	2,788
Savannah	0.494	0.055	0.374	0.616	0.112	127.978	11.313	8,729
GAMA	0.073	0.007	0.059	0.091	0.099	4.435	2.106	281
<b>Total country</b>	<b>0.233</b>	<b>0.036</b>	<b>0.162</b>	<b>0.324</b>	<b>0.156</b>	<b>316.629</b>	<b>17.794</b>	<b>12,816</b>

**Table A1.14: Proportion of Persons 15 years or older with MSLC/BECE**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.394	0.023	0.345	0.445	0.057	8.169	2.858	1,544
Central	0.356	0.005	0.344	0.368	0.015	0.456	0.675	1,261
Greater Accra	0.375	0.006	0.362	0.388	0.016	1.097	1.047	1,551
Volta	0.304	0.020	0.262	0.349	0.064	6.509	2.551	1,213
Eastern	0.418	0.018	0.379	0.457	0.042	5.734	2.395	1,747
Ashanti	0.387	0.026	0.330	0.447	0.068	25.076	5.008	1,758
Brong Ahafo	0.308	0.017	0.270	0.347	0.056	5.786	2.406	1,239
Northern	0.120	0.038	0.058	0.231	0.313	52.032	7.213	597
Upper East	0.159	0.026	0.109	0.226	0.164	8.901	2.983	692
Upper West	0.139	0.020	0.099	0.191	0.147	4.179	2.044	605
<b>URBAN/RURAL</b>								
Urban	0.369	0.018	0.331	0.409	0.048	29.849	5.463	6,100
Rural	0.289	0.035	0.217	0.373	0.122	121.648	11.029	6,107
<b>ECOLOGICAL ZONE</b>								
Coastal	0.356	0.008	0.338	0.374	0.023	1.718	1.311	1,954
Forest	0.391	0.012	0.365	0.417	0.030	11.891	3.448	6,338
Savannah	0.169	0.021	0.127	0.221	0.125	33.092	5.753	2,674
GAMA	0.383	0.006	0.369	0.397	0.016	0.930	0.964	1,241
<b>Total Country</b>	<b>0.331</b>	<b>0.016</b>	<b>0.297</b>	<b>0.367</b>	<b>0.047</b>	<b>47.308</b>	<b>6.878</b>	<b>12,207</b>

**Table A1.15: Proportion of Persons 15 years or older with Secondary or Higher Education**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.186	0.086	0.061	0.447	0.462	187.375	13.689	822
Central	0.133	0.074	0.035	0.391	0.559	180.937	13.451	514
Greater Accra	0.367	0.024	0.316	0.422	0.065	18.690	4.323	1,591
Volta	0.145	0.066	0.050	0.356	0.453	125.119	11.186	546
Eastern	0.164	0.077	0.053	0.408	0.471	197.252	14.045	642
Ashanti	0.190	0.094	0.057	0.479	0.495	488.002	22.091	898
Brong Ahafo	0.129	0.057	0.045	0.316	0.447	120.984	10.999	506
Northern	0.100	0.049	0.032	0.273	0.490	104.391	10.217	469
Upper East	0.149	0.032	0.091	0.236	0.215	14.143	3.761	578
Upper West	0.120	0.074	0.027	0.396	0.622	62.973	7.936	498
<b>Urban/Rural</b>								
Urban	0.286	0.033	0.219	0.364	0.115	118.251	10.874	4,871
Rural	0.088	0.006	0.075	0.102	0.067	8.856	2.976	2,193
<b>Ecological Zone</b>								
Coastal	0.215	0.048	0.127	0.340	0.223	82.048	9.058	1,192
Forest	0.171	0.045	0.091	0.296	0.266	300.363	17.331	2,702
Savannah	0.111	0.024	0.067	0.178	0.220	63.086	7.943	1,854
GAMA	0.392	0.010	0.369	0.414	0.026	2.420	1.556	1,316
<b>Total Country</b>	0.192	0.041	0.116	0.300	0.214	462.997	21.517	7,064

**Table A1.16: Adult Literacy Rate**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.633	0.105	0.387	0.825	0.166	182.580	13.512	2,534
Central	0.594	0.078	0.416	0.749	0.131	94.589	9.726	2,197
Greater Accra	0.791	0.031	0.714	0.851	0.039	43.771	6.616	3,373
Volta	0.578	0.097	0.362	0.769	0.167	138.377	11.763	2,269
Eastern	0.595	0.111	0.345	0.803	0.186	230.398	15.179	2,452
Ashanti	0.631	0.126	0.338	0.851	0.200	579.141	24.065	2,858
Brong Ahafo	0.519	0.060	0.388	0.648	0.115	58.578	7.654	2,079
Northern	0.306	0.099	0.135	0.553	0.323	178.683	13.367	1,515
Upper East	0.366	0.049	0.265	0.480	0.134	17.974	4.240	1,527
Upper West	0.380	0.083	0.219	0.574	0.218	35.130	5.927	1,644
<b>Urban/Rural</b>								
Urban	0.718	0.036	0.631	0.791	0.050	143.227	11.968	12,055
Rural	0.448	0.034	0.374	0.523	0.075	93.247	9.656	10,393
<b>Ecological Zone</b>								
Coastal	0.670	0.045	0.563	0.763	0.068	56.229	7.499	3,711
Forest	0.614	0.060	0.474	0.737	0.098	315.995	17.776	9,874
Savannah	0.374	0.048	0.273	0.486	0.130	104.419	10.219	6,146
GAMA	0.811	0.017	0.770	0.846	0.021	10.795	3.286	2,717
<b>Total Country</b>	0.590	0.053	0.470	0.700	0.089	490.417	22.145	22,448

**Table A1.17: Proportion of women 15-49 years currently using any contraceptive method**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.172	0.008	0.154	0.192	0.049	2.180	1.476	837
Central	0.150	0.004	0.142	0.159	0.025	0.478	0.692	660
Greater Accra	0.199	0.010	0.178	0.221	0.049	5.063	2.250	1,027
Volta	0.160	0.004	0.150	0.170	0.027	0.578	0.760	690
Eastern	0.174	0.003	0.168	0.180	0.016	0.262	0.512	842
Ashanti	0.127	0.014	0.100	0.161	0.108	16.580	4.072	682
Brong Ahafo	0.155	0.003	0.148	0.162	0.021	0.366	0.605	714
Northern	0.119	0.035	0.060	0.223	0.295	51.553	7.180	746
Upper East	0.236	0.027	0.182	0.301	0.113	7.699	2.775	954
Upper West	0.161	0.008	0.144	0.179	0.049	0.639	0.799	792
<b>Urban/Rural</b>								
Urban	0.172	0.010	0.151	0.195	0.058	17.498	4.183	3,496
Rural	0.149	0.012	0.124	0.177	0.080	25.901	5.089	4,448
<b>Ecological Zone</b>								
Coastal	0.142	0.016	0.110	0.183	0.116	15.246	3.905	988
Forest	0.153	0.005	0.142	0.164	0.033	4.484	2.117	3,025
Savannah	0.154	0.018	0.118	0.197	0.115	28.163	5.307	3,048
GAMA	0.225	0.008	0.209	0.243	0.034	2.129	1.459	883
<b>Total Country</b>	0.161	0.006	0.147	0.176	0.040	15.077	3.883	7,944

**Table A1.18: Proportion of children fully immunized**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.988	0.002	0.983	0.992	0.002	0.308	0.555	925
Central	0.980	0.001	0.977	0.983	0.001	0.070	0.265	719
Greater Accra	0.971	0.004	0.961	0.978	0.004	0.746	0.864	760
Volta	0.985	0.001	0.984	0.986	0.001	0.023	0.150	951
Eastern	0.960	0.011	0.928	0.979	0.011	2.725	1.651	789
Ashanti	0.991	0.002	0.985	0.994	0.002	0.845	0.919	943
Brong Ahafo	0.985	0.002	0.981	0.988	0.002	0.152	0.389	938
Northern	0.963	0.013	0.919	0.983	0.014	5.874	2.424	1,543
Upper East	0.994	0.006	0.954	0.999	0.006	1.884	1.373	804
Upper West	0.978	0.004	0.967	0.985	0.004	0.192	0.438	924
<b>Urban/Rural</b>								
Urban	0.977	0.005	0.962	0.987	0.005	5.603	2.367	3,140
Rural	0.980	0.004	0.970	0.987	0.004	3.941	1.985	6,156
<b>Ecological Zone</b>								
Coastal	0.982	0.003	0.975	0.987	0.003	0.496	0.705	1,127
Forest	0.984	0.003	0.975	0.989	0.003	2.781	1.668	3,435
Savannah	0.975	0.004	0.964	0.983	0.004	2.214	1.488	4,154
GAMA	0.965	0.004	0.956	0.972	0.004	0.367	0.606	580
<b>Total Country</b>	0.979	0.002	0.973	0.984	0.002	2.523	1.588	9,296

**Table A1.19: Total number of currently economically active population 15 years and older**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	1,192,984	216,208	711,243	1,674,726	0.181	113.623	10.659	3,367
Central	1,032,899	158,754	679,174	1,386,625	0.154	69.994	8.366	2,657
Greater Accra	2,038,981	1,791,556	(1,952,853)	6,030,816	0.879	4,842.078	69.585	3,216
Volta	1,069,833	447,207	73,394	2,066,272	0.418	537.589	23.186	3,092
Eastern	1,384,031	134,059	1,085,328	1,682,733	0.097	38.147	6.176	3,521
Ashanti	2,541,279	109,211	2,297,942	2,784,616	0.043	14.977	3.870	3,604
Brong Ahafo	1,293,784	68,180	1,141,869	1,445,699	0.053	10.490	3.239	3,431
Northern	1,204,091	426,914	252,868	2,155,315	0.355	439.243	20.958	4,308
Upper East	557,118	333,120	(185,119)	1,299,355	0.598	553.729	23.531	3,521
Upper West	380,234	270,066	(221,510)	981,978	0.710	527.195	22.961	3,891
<b>Urban/Rural</b>								
Urban	6,270,747	2,623,683	424,817	12,116,676	0.418	4,851.926	69.656	12,924
Rural	6,424,488	2,220,280	1,477,395	11,371,581	0.346	3,446.170	58.704	21,684
<b>Ecological Zone</b>								
Coastal	1,691,597	414,694	767,602	2,615,592	0.245	305.095	17.467	4,270
Forest	6,191,799	414,476	5,268,288	7,115,310	0.067	121.638	11.029	13,218
Savannah	3,285,451	645,334	1,847,556	4,723,346	0.196	428.260	20.694	14,604
GAMA	1,526,387	1,402,530	(1,598,644)	4,651,419	0.919	3823.280	61.833	2,516
<b>Total Country</b>	<b>12,695,235</b>	<b>1,970,361</b>	<b>8,304,997</b>	<b>17,085,472</b>	<b>0.155</b>	<b>4,014.171</b>	<b>63.357</b>	<b>34,608</b>

**Table A1.20: Proportion employed 15 years and older**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.783	0.048	0.657	0.872	0.062	53.310	7.301	3,162
Central	0.697	0.039	0.603	0.776	0.056	27.463	5.240	2,525
Greater Accra	0.669	0.003	0.661	0.676	0.005	.405	0.636	2,967
Volta	0.771	0.059	0.614	0.877	0.077	71.714	8.468	2,975
Eastern	0.784	0.063	0.615	0.892	0.080	104.868	10.240	3,395
Ashanti	0.767	0.064	0.597	0.880	0.083	194.386	13.942	3,414
Brong Ahafo	0.819	0.045	0.698	0.898	0.055	55.385	7.442	3,337
Northern	0.790	0.046	0.668	0.875	0.059	50.653	7.117	4,161
Upper East	0.766	0.018	0.724	0.803	0.023	3.109	1.763	3,211
Upper West	0.785	0.044	0.670	0.867	0.056	13.954	3.735	3,597
<b>Urban/Rural</b>								
Urban	0.699	0.013	0.668	0.728	0.019	18.992	4.358	12,042
Rural	0.816	0.012	0.788	0.842	0.015	19.612	4.429	20,702
<b>Ecological Zone</b>								
Coastal	0.702	0.015	0.667	0.734	0.022	06.627	02.574	3,983
Forest	0.772	0.031	0.696	0.834	0.040	112.958	10.628	12,655
Savannah	0.800	0.022	0.747	0.845	0.027	31.624	5.623	13,787
GAMA	0.664	0.006	0.649	0.677	0.009	0.997	0.998	2,319
<b>Total Country</b>	<b>0.754</b>	<b>0.023</b>	<b>0.701</b>	<b>0.801</b>	<b>0.030</b>	<b>117.343</b>	<b>10.832</b>	<b>32,744</b>

**Table A1.21: Proportion unemployed 15 years and older**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	0.047	0.001	0.044	0.049	0.025	0.114	0.337	205
Central	0.034	0.013	0.014	0.080	0.394	20.690	4.549	132
Greater Accra	0.052	0.001	0.049	0.054	0.018	0.134	0.366	249
Volta	0.026	0.006	0.016	0.043	0.217	4.592	2.143	117
Eastern	0.035	0.016	0.013	0.093	0.448	33.247	5.766	126
Ashanti	0.037	0.016	0.014	0.094	0.429	60.252	7.762	190
Brong Ahafo	0.025	0.010	0.010	0.059	0.392	16.086	4.011	94
Northern	0.038	0.005	0.029	0.052	0.133	2.779	1.667	147
Upper East	0.092	0.012	0.070	0.121	0.125	2.768	1.664	310
Upper West	0.065	0.007	0.051	0.082	0.105	0.928	0.963	294
<b>Urban/Rural</b>								
Urban	0.049	0.002	0.045	0.053	0.040	1.821	1.350	882
Rural	0.033	0.006	0.021	0.050	0.193	25.504	5.050	982
<b>Ecological Zone</b>								
Coastal	0.049	0.002	0.044	0.054	0.049	0.733	0.856	287
Forest	0.034	0.008	0.020	0.057	0.229	38.310	6.190	563
Savannah	0.044	0.008	0.029	0.068	0.190	17.556	4.190	817
GAMA	0.052	0.001	0.049	0.055	0.027	0.233	0.483	197
<b>Total Country</b>	<b>0.041</b>	<b>0.005</b>	<b>0.032</b>	<b>0.053</b>	<b>0.115</b>	<b>24.190</b>	<b>4.918</b>	<b>1,864</b>

**Table A1.22: Proportion Underemployed 15 years and older**

Region	Estimate	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect	Square Root Design Effect	Un-weighted Count
			Lower	Upper				
Western	.0153	.0071	.0054	.0427	.465	13.005	3.606	94
Central	.0083	.0053	.0020	.0341	.643	13.057	3.613	25
Greater Accra	.0063	.0014	.0039	.0103	.220	2.338	1.529	29
Volta	.0065	.0038	.0018	.0236	.583	7.989	2.827	27
Eastern	.0124	.0038	.0062	.0246	.310	5.444	2.333	50
Ashanti	.0140	.0016	.0109	.0180	.112	1.506	1.227	60
Brong Ahafo	.0094	.0002	.0090	.0099	.021	.017	.131	34
Northern	.0048	.0016	.0023	.0102	.334	2.115	1.454	26
Upper East	.0044	.0000	.0043	.0045	.009	.001	.024	25
Upper West	.0041	.0003	.0035	.0047	.063	.019	.140	20
<b>Urban/Rural</b>								
Urban	.009	.001	.006	.012	.156	4.902	2.214	143
Rural	.010	.002	.006	.017	.220	10.177	3.190	247
<b>Ecological Zone</b>								
Coastal	.007	.002	.004	.012	.247	2.663	1.632	41
Forest	.013	.002	.009	.018	.148	5.891	2.427	227
Savannah	.006	.001	.005	.009	.134	1.216	1.103	102
GAMA	.006	.000	.005	.006	.052	.085	.292	20
<b>Total Country</b>	.010	.001	.007	.013	.140	8.068	2.840	390

## **APPENDIX 2**

### **LIST OF PROJECT PERSONNEL**

#### **PROJECT STEERING COMMITTEE**

Dr. Philomena Nyarko, Government Statistician and Chairman  
Mr. Kofi Agyeman-Duah, Acting Deputy Government Statistician (OP)  
Daniel Chachu, ILO/IPEC  
Mr. Ettinne Rusamira, UNICEF  
Ms. Lynne Henderson, World Bank  
Ms. Maria Dyrberg, UNICEF  
Mr. P. Lamin Beyani, UNDP  
Jemaila Sulaiman, UNFPA  
Mrs. Lucy Booth, DFID  
Captain Patrick Donkor, NDPC  
Ms. Efua Enyanful, MOWAC  
Dr. Reginald Odai, MOH  
Dr. Pealore, MOE  
Mr. Frank Sofo, MESS  
Mr. Anthony Amuzu, GSS

#### **PROJECT DIRECTORATE**

Dr. Philomena Nyarko, Government Statistician and National Project Director  
Mr. Baah Wadieh, Deputy Government Statistician, Technical Support  
Mr. Kofi Agyeman-Duah, Acting Deputy Government Statistician, Operations  
Mr. Anthony Amuzu, National Project Coordinator  
Mr. Henry Nii Odai, Project Coordinator  
Mr. K.B. Danso-Manu, Project Coordinator  
Mr. Sylvester Gyamfi, Director, Coordination and Project Development Directorate  
Mrs. Abena Osei-Akoto, (Member, Data Processing Team)  
Mrs. Jacqueline Dede Anum, (Member, Data Processing Team)  
Mrs. Samilia Enyamah Mintah, (Member, Data Processing Team)  
Mr. Yaw Misefa, (Member, Data Processing Team)  
Mr. Rochester Appiah Kusi-Boateng, (Member, Data Processing Team)  
Mr. Ernest Enyan, (Member, Data Processing Team)  
Mrs. Brenda Osei-Kofi, Acting Director of Administration/HR  
Mr. Ben Gadzekpo, Project Accountant  
Mr. Gideon Abbey, Project Accountant  
Mr. Emmanuel Cobbinah, Head of Procurement Unit

#### **WORLD BANK/ILO ADVISORS/CONSULTANTS**

Miss Lynne Henderson  
Mr. Yacouba Diallo  
Miss Marie Ndiaye  
Miss Xiao Ye  
Mr. Vasco Molini  
Miss Rose Mungai  
Mr. Harold Coloumbe

## REPORT WRITERS

Mr. Anthony Amuzu-Pharin	Mrs. Lucy Twumwaah Afriyie
Mr. Asuo Afram	Mrs. Bernice Ofosu-Baadu
Mr. Owusu Kagya	Mr. Francis Nyarko-Larbi
Mr. Kwaku Peprah	Mr. Ebenezer Kojo Ocran
Mr. Godwin Odei-Gyebi	Mr. J.B.K Amankrah
Mr. Gershon Togoh	Mrs. Mabel Appiah-Danso
Mr. Francis Dzah	Miss Sarah Woode
Mrs. Augusta Okantey	Mr. Kofi Debrah
Mr. Maxwell Hlorgbey	Mr. John Foster Agyaho
Mr. Emmanuel Boateng	Mr. Dominic Odoom
Mr. Anthony Krakah	Mr. Isaac Dadson
Mr. Anthony Oduro-Denkyera	Mrs. Victoria Anim Ansah
Mr. Omar Seidu	Mr. Vitus Bornuo
Mr. Emmanuel George Ossei	Mr. Victor Owusu Boateng
Mr. Emmanuel Nana Poku	Mr. Isaac Odoom
Mr. Francis Bright Mensah	Mr. Michael Beckoe
Mr. Abaka Ansah	Miss Dieudonne Ankamah
Mr. Christopher Amewu	Mr. Samuel Mortey
Miss Ama Akoto Bamfo	Mr. Richard Kuadamah

## ZONAL SUPERVISORS

Mr. Emmanuel Nana Poku  
Mr. Francis Bright Mensah  
Mrs. Emma Sepah  
Mrs. Augusta Okantey  
Mr. Abaka Ansah  
Mr. Emmanuel George Ossei  
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Mr. Salifu Amadu  
Mr. Festus Manuh  
Mr. Sixtus Jeremiah Dery

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Alhaji Salihu Anum	Samuel Akrofi Darko
Isaac Addae	Nana Addo Ogyiri
Yaw Adu-Twum	Michael Sampah Boateng
Michael Opoku Acheampong	Solomon Owusu Bempah
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Emmanuel Baidoo	Peregrino-Brimah Rahman
Ken Yirenkyi	Haruna Mustapha
Sebastian K. Atsrin	Jude Koomson
Richard Kumashie	Fuseini Jibril
Abugri Banabas	Samuel Brefo Darkwa
Michael Opoku Ayete	Kwamina Issifu
Kwame Djangba	Joseph Tenkorang
Emmanuel Opoku-Addo	Gabriel Opare-Mintah

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Laud Budu Ani	Peter Aboagye Augustus
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Dieudonnee Ankamah	David Afful
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Timothy Bansah	William Eyimah
Priscilla Opoku	Abdallah A. Mogtar
Samuel Adotevi	Kanyiri Yakubu
Francisca Draï	

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Isaac K. Antwi-Adjei	Isaac Opoku Karikari
Antwiwa Tetteh	Janet Adenyo
Gertrude Elleamoh	Emmanuel Kyei
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Parry Kwesi Tano Asare	Questus Fritz Sackey
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Onesimus Fearon	John Agbadza
Francis Dodoo	Habib Allassani
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Pearl Noi-Lartey	Lydia Tuffour
Gertrude Pennin	Hannah Kusi Boateng
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Edna Ovulley	Comfort Boateng
Aurelia Hotor	Regina Pelabia
Rose Addy	Fati Inusah
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Patience Amerloku	Sanita Agyeman
Shineforth Owusu	Patrick Attah
Mercy Quarshie	Evelyn Agambire
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Evelyn Amassah	Patrick Adjei Amoako
Wilhelmina Tweneboah	

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Emmanuel Oduro  
Roland Akrong  
Isaac Opare  
Justice Nortey

Danso Antepim  
Vincent Afful  
George Ackonnor  
Amponsah Joseph  
Theophilus Ankrah

**PROJECT SECRETARIAT**

Mr. Michael Beckoe  
Miss Hanna Frempong Konadu  
Miss Justina Yeboah  
Miss Jennifer Asante  
Mr. Abdulai Ibrahim