



2010

POPULATION & HOUSING CENSUS

DISTRICT ANALYTICAL REPORT

KASSENA NANKANA WEST DISTRICT



Canada

MINISTRY OF FOREIGN AFFAIRS OF DENMARK
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DEVELOPMENT COOPERATION

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PREFACE AND ACKNOWLEDGEMENT

No meaningful developmental activity can be undertaken without taking into account the characteristics of the population for whom the activity is targeted. The size of the population and its spatial distribution, growth and change over time, in addition to its socio-economic characteristics are all important in development planning.

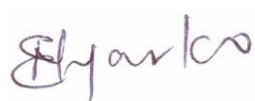
A population census is the most important source of data on the size, composition, growth and distribution of a country's population at the national and sub-national levels. Data from the 2010 Population and Housing Census (PHC) will serve as reference for equitable distribution of national resources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

The Ghana Statistical Service (GSS) is delighted to provide data users, especially the Metropolitan, Municipal and District Assemblies, with district-level analytical reports based on the 2010 PHC data to facilitate their planning and decision-making.

The District Analytical Report for the Kassena Nankana West District is one of the 216 district census reports aimed at making data available to planners and decision makers at the district level. In addition to presenting the district profile, the report discusses the social and economic dimensions of demographic variables and their implications for policy formulation, planning and interventions. The conclusions and recommendations drawn from the district report are expected to serve as a basis for improving the quality of life of Ghanaians through evidence-based decision-making, monitoring and evaluation of developmental goals and intervention programmes.

For ease of accessibility to the census data, the district report and other census reports produced by the GSS will be disseminated widely in both print and electronic formats. The report will also be posted on the GSS website: www.statsghana.gov.gh.

The GSS wishes to express its profound gratitude to the Government of Ghana for providing the required resources for the conduct of the 2010 PHC. While appreciating the contribution of our Development Partners (DPs) towards the successful implementation of the Census, we wish to specifically acknowledge the Department for Foreign Affairs, Trade and Development (DFATD) formerly the Canadian International Development Agency (CIDA) and the Danish International Development Agency (DANIDA) for providing resources for the preparation of all the 216 district reports. Our gratitude also goes to the Metropolitan, Municipal and District Assemblies, the Ministry of Local Government, Consultant Guides, Consultant Editors, Project Steering Committee members and their respective institutions for their invaluable support during the report writing exercise. Finally, we wish to thank all the report writers, including the GSS staff who contributed to the preparation of the reports, for their dedication and diligence in ensuring the timely and successful completion of the district census reports.



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ACRONYMS AND ABBREVIATIONS

GSS:	Ghana Statistical Service
KNWD:	Kassena Nankana West District
KVIP:	Kumasi Ventilated Improved Project
MDG:	Millennium Development Goal
MMDAs:	Metropolitan, Municipal and District Assemblies
NGOs:	Non-Governmental Organisations
PHC:	Population and Housing Census
PWDs:	Persons With Disabilities

EXECUTIVE SUMMARY

Introduction

The district census report is the first of its kind since the first post-independence census was conducted in 1960. The report provides basic information about the district. It gives a brief background of the district, describing its physical features, political and administrative structure, socio-cultural structure and economy. Using data from the 2010 Population and Housing Census (2010 PHC), the report discusses the population characteristics of the district, fertility, mortality, migration, marital status, literacy and education, economic activity status, occupation, employment; Information Communication Technology (ICT), disability, agricultural activities and housing conditions of the district. The key findings of the analysis are as follows (references are to the relevant sections of the report):

Population size, structure and composition

The population of Kassena Nankana West District, according to the 2010 Population and Housing Census, is 70,667 representing 6.8 percent of the region's total population. Males constitute 50.8 percent and females represent 49.2 percent. Seventy nine percent of the population is rural. The district has a sex ratio of 96.7. The population of the district is youthful (47.9%) depicting a broad base population pyramid which tapers off with a small number of elderly persons (7.3%). The total age dependency ratio for the District is 83.4, the age dependency ratio for males is higher (87.7) than that of females (78.5).

Fertility, mortality and migration

The Total Fertility Rate for the district is 2.78. The General Fertility Rate is 77.8 births per 1000 women aged 15-49 years. The Crude Birth Rate (CBR) is 18.5 per 1000 population. The crude death rate for the district is 8.0 per 1000. Accident/violence/homicide/suicide accounted for 8.3 percent of all deaths while other causes constitute 91.7 percent of deaths in the district. Majority of migrants (61.8 percent) living in the district were born in the region while 38.2 percent were born elsewhere in another region. For migrants born in another region, those born in Ashanti Region constitute 49.2 percent followed by Upper West with 11.4 percent and Greater Accra, 9.4 percent.

Household size, composition and structure

The district has a household population of 69,965 with a total number of 12,813 households. The average household size in the district is 5.5 persons per household. Children constitute the largest proportion of the household structure accounting for 47.9 percent. Spouses form about 10.6 percent. Nuclear households (head, spouse(s) and children) constitute 26.1 percent of the total number of households in the district.

Marital status

About four in ten (46.4%) of the population aged 12 years and older are married, 40.4 percent have never married, 0.4 percent are in consensual unions, 8.7 percent are widowed, 1.7 percent are divorced and 2.4 percent are separated. By age 25-29 years, more than half of females (68.8%) are married compared to a little over forty two percent of males (42.3%). At age 65 and above, widowed females account for as high as 58.2 percent while widowed males account for only 11.8 percent. . Among the married, 71.7 percent have no education

while about 16.8 percent of the unmarried have never been to school. More than half of the married population (59.1 percent) are employed, 42.8 percent are unemployed and 18.3 percent are economically not active. A greater proportion of those who have never married (69.9%) are economically not active with 45.5 percent unemployed.

Nationality

The proportion of Ghanaians by birth in the district is 95.5 percent. Those who have naturalised constitute 0.7 percent and the non-Ghanaian population in the district is 2.1 percent.

Literacy and education

Of the population 11 years and above, 50.2 percent are literate and 49.8 percent are non-literate. The proportion of literate males is higher (57.5 %) than that of females (43.3%). Five out of ten people (68.9%) indicated they could speak and write both English and Ghanaian languages. Of the population aged 3 years and above (110,282) in the district, 41.8 percent has never attended school, 42.2 percent are currently attending and 16.0 percent have attended in the past.

Economic activity status

About 74.0 percent of the population aged 15 years and older are economically active while 26.0 percent are economically not active. Of the economically active population, 97.6 percent are employed while 2.4 percent are unemployed. For those who are economically not active, a larger percentage of them are students (52.6%), 19.2% perform household duties and 6.3 percent are disabled or too sick to work. Five out of ten unemployed are seeking work for the first time.

Occupation

Of the employed population, about 81.7 percent are engaged as skilled agricultural, forestry and fishery workers, 5.6 percent in service and sales, 5.9 percent in craft and related trade, and 3.3 percent are engaged as managers, professionals, and technicians.

Employment status and sector

Of the population 15 years and older 56.9 percent are self-employed without employees, 27.6 percent are contributing family workers, 1.3 percent are casual workers and 0.5 percent are domestic employees (house helps). Overall, men constitute the highest proportion in each employment category except the contributing family workers and apprentices. The private informal sector is the largest employer in the district, employing 95.2 percent of the population followed by the public sector with 3.7 percent.

Information Communication Technology

Of the population 12 years and above, 19.4 percent have mobile phones. Men who own mobile phones constitute 24.1 percent as compared to 15.0 percent of females. A little over one percent (1.2%) of the population 12 years and older uses internet facilities in the district. Only 169 households representing 1.3 percent of the total households in the district have desktop/laptop computers.

Disability

About 6.3 percent of the district's total population has one form of disability or the other. The proportion of the male and female populations with disability is the same (6.3 percent) each. The types of disability in the district include sight, hearing, speech, physical, intellect, and emotion. Persons with sight disability recorded the highest of 43.8 percent followed by emotional (20.7%). About 6.7 percent of the population with disability are in the urban localities. There are more females with sight disability and more males with physical disability in the district. Of the population disabled, almost 64 percent have never been to school.

Agriculture

As high as 90.7 percent of households in the district are engaged in agriculture. In the rural localities, nine out of ten households (93.4%) are agricultural households while in the urban localities, 75.4 percent of households are into agriculture. Most households in the district (98.2%) are involved in crop farming. Poultry (chicken) is the dominant animal reared in the district.

Housing

The housing stock of Kassena Nankana District is 7,640 representing 6.7 percent of the total number of houses in the Upper East Region. The average number of persons per house is 9.2.

Type, tenancy arrangement and ownership of dwelling units

Over half (69.2%) of all dwelling units in the district are compound houses; 15.7 percent are separate houses and 6.0 percent are semi-detached houses. More than half (92.2%) of the dwelling units in the district are owned by members of the household; 2.7 percent are owned by private individuals; 3.0 percent are owned by a relative who is not a member of the household and only 1.2 percent are owned by public or government. About one percent of the dwelling units is owned through mortgage schemes.

Material for construction of outer wall, floor and roof

The main construction material for outer walls of dwelling units in the district is mud/mud bricks or earth accounting for 85.3 percent with cement/concrete constituting 12.1 percent of outer walls of dwelling units in the district. Cement (57.2%) and mud/earth (40.8%) are the two main materials used in the construction of floors of dwelling units in the district. Metal sheets are the main roofing material (46.7 %) for dwelling units in the district.

Room occupancy

One room constitutes the highest percentage (57.2%) of sleeping rooms occupied by households in housing units in the district. About 2.1 percent of households with 10 or more members occupy single rooms.

Utilities and household facilities

The three main sources of lighting in dwelling units in the district are kerosene lamp (57.1%), flashlight/torch (26.8%) and electricity (12.7%) The main source of fuel for cooking for most households in the district is wood (73.3%). The proportion for rural (78.4%) is higher than that of urban (45.1%). The four main sources of water in the district are borehole, pipe borne

water outside dwelling unprotected well and public tap/standpipe,. About half of households (72.7%) drink water from boreholes.

A small proportion of the population in the district use the public toilet (WC, KVIP, Pit, Pan) representing 3.3 percent followed by KVIP (3.1%) and pit latrine 1.6 percent. Majority of the people 91.0 percent have no toilet facility and resort to defecation in the bush and open fields. Over forty two percent of households (42.6%) in the district have bathrooms for exclusive use while 22.3 percent use open space around the house for bathing.

Waste disposal

The most widely used method of solid waste disposal is by public dump in the open space accounting for 42.7 percent. About two in ten households (21.6%) dump their solid waste indiscriminately. House to house waste collection accounts for 8.5 percent. For liquid waste disposal, throwing waste onto the street (58.4%) and onto the compound (32.2%) are the two most common methods used by households in the district.

CHAPTER ONE

INTRODUCTION

1.1 Background

The Kassena-Nankana West District is one of the thirteen districts in the Upper East Region of Ghana. It was carved out of the Kassena Nankana Municipal in 2007 and inaugurated on Friday, 29th February 2008. The Local Government Instrument which established the district is Legislative Instrument (L.I) 1855. The paramount aim of creating this Assembly was to bring the business of governance to the doorsteps of the ordinary Ghanaian. It is located approximately between latitude 10.97° North and longitude 01.10° West. The district has a total land area of approximately 1,004 sq. km.

The Kassena-Nankana West District shares boundaries with Burkina Faso to the north, Bongo District to the north-east, Bolgatanga Municipal to east, Kassena Nankana Municipal to the south, Balsa District south-west and Sissala East District to the west.

1.2 Physical Features

1.2.1 Relief and drainage

The district is underlain mainly by Birrimian and Granitic rock formation. The relief of the district is generally low lying and undulating with isolated hills rising up to 300 meters above sea level in the western part of the district. Notably among these hills are Fie (9280 metres above sea level), Busono 350 metres, and Zambao 360 metres. The district is mainly drained by the Sissili River and its tributaries. There are however some few dug-outs and ponds which are used for livestock rearing, crop production and domestic purposes.

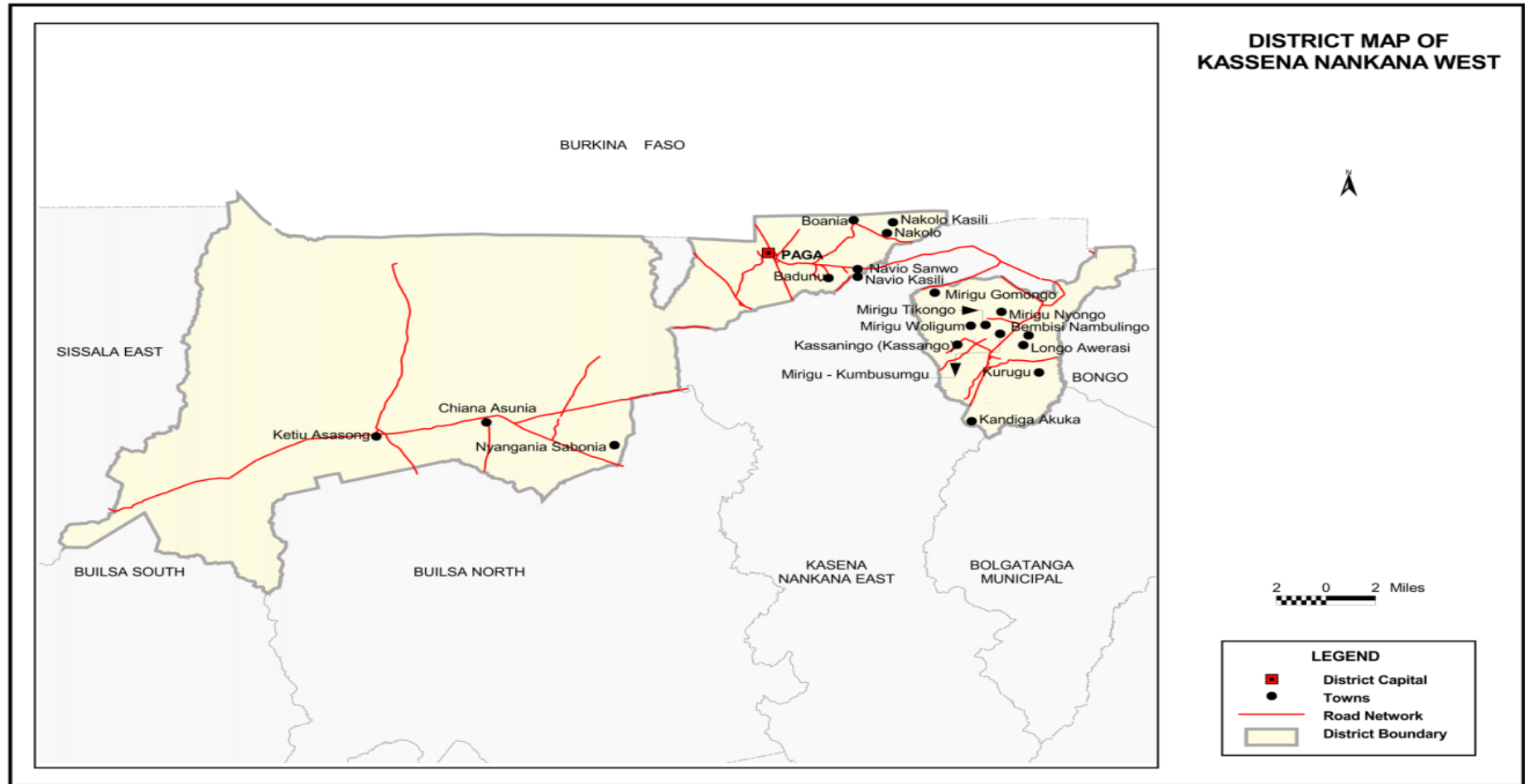
1.2.2 Climate

The Kassena-Nankana West District falls within the interior continental climatic zone of the country characterized by pronounced dry and wet seasons. The two seasons are influenced by two air masses. First is the warm, dusty and dry harmattan air mass which blows in the north easterly direction across the whole district from the Sahara desert.

During its period of influence (late November – early March) rainfall is entirely absent, vapour pressure is very low (less than 10mb) and relative humidity rarely exceeds 20.0% during the day but may rise to 60.0% during the nights and early mornings.

Temperatures are usually modest at this time of the year by tropical standards (26°C – 28°C). May to October is the wet season. During this period, the whole of West African sub-region including Kassena-Nankana West District is under the influence of a deep tropical maritime air mass. This air mass together with rising convection currents provides the district with rains. The total rainfall averages 950 mm per annum. The above phenomenon adversely affects the water table and reduces underground water. Water harvesting is probably a viable option in the district.

Figure 1.1: Map of Kassena Nankana West District



Source: Ghana Statistical Service, 2010 Population and Housing Census

1.2.3 Vegetation

The vegetation is mainly of Sahel Savannah type consisting of open savannah with fire swept grassland separating deciduous trees among which may be seen a few broad-leafed and fire-leached tree species. Some of the most densely vegetated parts of this district can be found along river basins and forest reserves. Examples are the Sissili and Asibelika basins. Most of these trees in the forested areas shed their leaves during the dry season. The human activities over the years have also affected the original vegetation considerably. Common trees which are also of economic importance include Dawadawa, Sheanut, Baobab, Nim and Mango. The low vegetation cover of the area hampers sufficient rainfall thereby reducing underground water supply.

1.2.4 Soil

Two main soil types can be found in the district. These soil types are the Savannah Ochrosols and the ground water laterite. The northern and eastern parts of the district are covered by the Savannah Ochrosols, while the rest of the district is characterized by ground water laterite. The Savannah Ochrosols are porous, well drained, loamy, mild acidity and interspersed with patches of black or dark grey clay soils. This soil type is suitable for cultivation of cereals and legumes. The ground water laterites are developed over shale and granite. Due to the underlying rock type, they become water logged during the rainy season and dry up during the dry season, thus causing cemented layers of iron-stone which make cultivation difficult. This would probably have contributed significantly to food insecurity in the district.

1.3 Political Administration

The Assembly has a total membership of 68 people made up of 46 elected members, 20 appointed members, the ex-officio members being the 1 Member of Parliament and the District Chief Executive. The present Assembly has ten (10) female members, four of whom are elected and 6 appointed.

There are 11 Area Councils in the district which include the Chiana Town Council, Mirigu, Sirigu, Kandiga, Kayoro, Katiu, Nakong, Batiu, Paga, Nabango and Kejelo Area Councils.

Administrative set up

Administratively, the district is divided into 3 zones namely the North, East and West Zones. The District Assembly has the following departments in place and functioning under the District Co-ordinating Director. The District Directorate of Health Service, The Ghana Education Service (GES), Department of Community Development, Birth and Deaths Registry, District Environmental Health Unit, Department of Agriculture.

The following national agencies which do not form part of the Departments of the Assembly are also in place: The National Service Secretariat, The NCCE, The Immigration Service, The CEPS, The Police Service. The other key decentralized departments which are yet to be established in the District include the following: Department of Town and Country Planning, Information Service Department, Department of Parks and Gardens.

Other important national agencies that are crucial but not yet established in the district are: The Fire Service, The Statistical Service Department, Survey Department, The Forestry Commission, Commission on Human Rights and Administrative Justice (CHRAJ), The Land Valuation Board

Committees of the assembly

The following committees have been constituted and are operational as part of the political and administrative machinery of the district. The Executive Committee (which is supported by the following sub-committees): Finance and Administration, Works, Justice and Security, Development Planning, Health and Environment, Education, Agriculture, Women and Children. The other committees in the district are: District HIV/AIDS Committee, District Security Council, District Tender Committee, District Tender Review Board, Audit Report Implementation Committee, and District Budget Committee.

1.4 Social and Cultural Structure

1.4.1 Traditional set-up

There are seven paramountcies in the Kassena Nankana West District, namely, Paga, Chiana, Katiu, Nakong, Kayoro, Mirigu, and Sirigu. Every paramountcy has a 'Tindana' who acts as the chief priest and relates with the ancestral traditions which he holds in trust for the people. Matters concerning chieftaincy, culture, and tradition are handled by the various traditional council's and the individual chiefs.

1.4.2 Ethnicity

The predominant tribes in the district are the Kassena and the Nankana and Mamprusis. Minor ethnic groups include Kantosi, Moshie, Builsa, Zambrama and few migrant workers from Burkina-Faso. These tribes have co-existed over the years, enhancing the development of the district.

Despite the varied ethnic composition of the district, the society is generally patrilineal and traditionally male-dominated. Women are generally less involved in decision making and are traditionally responsible for the bulk of household activities such as cooking, fetching of water and caring for the children as well as other farming activities such as planting, weeding, harvesting and are also more involved in other commercial activities such as buying and selling.

1.4.3 Religious composition

The major religious denominations are Christians, Muslims, and Traditionalist. The traditionalists are mostly found in the rural parts of the district. Their spiritual roles contribute to enhancing peace and development in the district.

1.4.4 Festivals

Festivals are significant practices in the district. The Fao Festival is the predominant in Paga Traditional Area. This festival is celebrated to thank the gods for a bumper harvest. Another post-harvest festival is Gakwea which is also celebrated to give reverence and thanks to the gods for a bumper harvest which has implication for food security in the district. The Posiga and Monkera festivals are also celebrated by the people of Sirigu and Kandiga respectively. The festivals celebrated in the district strengthen the traditional family unions and systems of the people.

1.4.5 Marriage

The traditional marriage system entails a distinctive practice or payment of bride price, a system where the family of the bridegroom meets some marriage expenses including cola nuts, tobacco and guinea fowls. The bridegroom apart from the above items pays seven sheep and a cow. In the event of the bridegroom's inability to pay the initial sheep and cow, the children would be mandated to settle their father's indebtedness before they can dowry their wives. The above arrangement ensures strengthened ties between families and ensures security of marriages.

1.4.6 Inheritance

The patrilineal system of inheritance is practised. The eldest son inherits the deceased father in trust of the family. There is no form of ownership of family assets by daughters within the traditional system. Inheritance in the district invariably denies women access to productive resources including land.

1.4.7 Funerals

Funerals have become expensive in the way they are performed these days in the district due to show of real wealth and competition. The practice of funeral rites and other associated customary practices is another emerging issue affecting the welfare of the living standards of several families and individuals. The performance of funerals has of late been quite a source of worry and economic hardships to several families. Funerals are mostly organized after the harvest.

1.4.8 Land title and ownership

Individuals do not own lands but rather the family heads take care of the land on behalf of members. The chiefs oversee the distribution and sale of land. The Tidanas/Tigatus are the original owners of the land; however they transfer land to other family heads.

1.5 Economy

1.5.1 Agriculture

Agriculture is the dominant economic activity in the district. The sector employs over 68.7% of the people. Male farmers' population stands at 33,307 (48.4%) and female farmers 35,509 (51.6%). The major crops grown are millet, sorghum, rice, groundnuts, leafy vegetables, cowpea, bambara beans, okro, cotton, tomatoes and onion. Livestock reared in the district include cattle, sheep, goats, pigs, guinea fowls, fowls and other domestic animals like donkeys. Fish farming involving Tilapia and Mudfish is quite significant.

Farm sizes are quite small and yields are very low as compared to other parts of the country due in part to poor soils and unreliable rainfall. There are few dams and dugouts which are being used for dry season farming. This has implications for food insecurity.

1.5.2 Commerce

Trading and commercial activities in the district revolve mainly around foodstuff, semi-processed food and crafts. These commodities are sold in the local markets and outside the district. The 3-day and 6-day market cycles play a very important role in the local economy. Commodities traded in range from foodstuffs and livestock to manufactured goods. The main markets are Chiana, Paga, Sirigu, Kandiga, Mirigu, Katiu, Nakong and Kayoro.

1.5.3 Manufacturing

The Kassena-Nankana West District has no large scale manufacturing industries. It is characterized by small scale food processing, craft and manufacturing industries. Examples include smock weaving, pottery and blacksmithing.

1.5.4 Agro industry/processing

Processing of foodstuff, cash crops and goods are common features of the local economy. The major small scale industrial activities include sheabutter extraction, pito brewing, milling or grinding of millet for domestic use, dawadawa processing, weaving and dressmaking, pottery, rice milling and soap making. Frequencies of the various cottage light industrial activities in the district are displayed in Table 1.1.

Table 1.1: Distribution of light industrial activities in KNWD

No.	Business type	No.	Location
1	Hairdressers	70	District wide
2	Tailors and dress makers	75	District wide
3	Bakers	9	Paga
4	Sheabutter extractors	92	Nakolo, Kalvio
5	Bee keepers	25	Nakong
6	Soap makers	120	Paga, Nabango, Chiana, Kalvio
7	Guinea fowl rearers	75	Chiana, Nakolo, Nakong
8	Smock weavers	17	Nabango, Paga Central
9	Batik tie and dye	30	Paga, Nakolo

Source: Ghana Statistical Service, 2010 Population and Housing Census

Most of these small scale industries are one-man or one woman businesses and hardly employ people. The sector is dominated by females who need to be organized into groups and their capacities built to enhance their businesses. There are also varied business types in the district which need to be developed in order to boost the local economy (see Table 1.1).

1.5.5 Banking and financial services

The district has one banking institution, the Naara Rural Bank Limited located in Paga with branches at Navrongo, Chiana and Sirigu. There are also non-banking institutions in the district which collaborate with the financial institutions to offer credit to groups and individuals. Such institutions include Non-governmental Organizations, Community Based Rural Development Project and National Board for Small Scale Industries. In addition, non-formal credit arrangements such as “Susu” are available for traders and small-scale producers.

1.5.6 Hospitality industry

The following are a list of hospitality facilities which complement the tourist industry in the district. They include Kubs lodge, the CEPS Canteen, Black heritage, More Hope Enterprise and several other pito bars. However, most of these facilities need to be developed in order to attract more users which would in turn boost the private sector in the district.

1.5.7 Unemployment and underemployment

The level of unemployment is very high in the district especially among the youth. Agriculture pursuits dominate the employment scene. Over 70.0 percent of the active

population is into agriculture and the unemployment situation is worse during the prolonged dry season when no farming activity can take place.

Dry season gardening is practised only in communities where there are small-scale dams. This invariably compels most of the youth to migrate to the southern part of the country in search of jobs. Other areas that offer employment opportunities to the people include the public services, retail trade, food processing, pottery and other agro-based processing. The above characteristics do affect the growth and expansion of the district's economy.

1.5.8 Tourism

There are quite a large number of tourist attractions in the district including the Paga Sacred Crocodile Ponds, the Zenga Pond, Pikworo Slave Camp, a Pottery Art Centre at Sirigu which are operational. The other tourist sites such as the Caves at Chiana, the sacred pythons at Kayoro, and the remains of the Catholic Church at Kayoro need to be developed. There is therefore the need for the district assembly to attract investors into the tourism area of the district.

1.6 Census Methodology, Concepts and Definitions

1.7.1 Introduction

Ghana Statistical Service (GSS) was guided by the principle of international comparability and the need to obtain accurate information in the 2010 Population and Housing Census (2010 PHC). The Census was, therefore, conducted using all the essential features of a modern census as contained in the United Nations Principles and Recommendations for countries taking part in the 2010 Round of Population and Housing Censuses.

Experience from previous post independence censuses of Ghana (1960, 1970, 1984 and 2000) was taken into consideration in developing the methodologies for conducting the 2010 PHC. The primary objective of the 2010 PHC was to provide information on the number, distribution and social, economic and demographic characteristics of the population of Ghana necessary to facilitate the socio-economic development of the country.

1.6.2 Pre-enumeration activities

Development of census project document and work plans

A large scale statistical operation, such as the 2010 Population and Housing Census required meticulous planning for its successful implementation. A working group of the Ghana Statistical Service prepared the census project document with the assistance of two consultants. The document contains the rationale and objectives of the census, census organization, a work plan as well as a budget. The project document was launched in November 2008 as part of the Ghana Statistics Development Plan (GSDP) and reviewed in November 2009.

Census secretariat and committees

A well-structured management and supervisory framework that outlines the responsibilities of the various stakeholders is essential for the effective implementation of a population and housing census. To implement the 2010 PHC, a National Census Secretariat was set up in January 2008 and comprised professional and technical staff of GSS as well as staff of other Ministries, Departments and Agencies (MDAs) seconded to GSS. The Census Secretariat was primarily responsible for the day-to-day planning and implementation of the census activities. The Secretariat had seven units, namely; census administration, cartography, recruitment and training, publicity and education, field operations and logistics management, data processing, and data analysis and dissemination.

The Census Secretariat was initially headed by an acting Census Coordinator engaged by the United Nations Population Fund (UNFPA) in 2008 to support GSS in the planning of the Census. In 2009, the Census Secretariat was re-organised with the Government Statistician as the National Chief Census Officer and overall Coordinator, assisted by a Census Management Team and a Census Coordinating Team. The Census Management Team had oversight responsibility for the implementation of the Census. It also had the responsibility of taking critical decisions on the census in consultation with other national committees. The Census Coordinating Team, on the other hand, was responsible for the day-to-day implementation of the Census programme.

A number of census committees were also set up at both national and sub-national levels to provide guidance and assistance with respect to resource mobilization and technical advice. At the national level, the committees were the National Census Steering Committee (NCSC), the National Census Technical Advisory Committee (NCTAC) and the National Census Publicity and Education Committee (NCPEC). At the regional and district levels, the committees were the Regional Census Implementation Committee and the District Census Implementation Committee, respectively.

The Regional and District Census Implementation Committees were inter-sectoral in their composition. Members of the Committees were mainly from decentralized departments with the Regional and District Coordinating Directors chairing the Regional Census Implementation Committee and District Census Implementation Committee, respectively. The Committees contributed to the planning of district, community and locality level activities in areas of publicity and field operations. They supported the Regional and District Census Officers in the recruitment and training of field personnel (enumerators and supervisors), as well as mobilizing logistical support for the census.

Selection of Census topics

The topics selected for the 2010 Population and Housing Census were based on recommendations contained in the UN Principles and Recommendations for 2010 Round of Population and Housing Censuses and the African Addendum to that document as well as the needs of data users. All the core topics recommended at the global level, i.e., geographical and internal migration characteristics, international migration, household characteristics, demographic and social characteristics such as age, date of birth, sex, and marital status, fertility and mortality, educational and economic characteristics, issues relating to disability and housing conditions and amenities were included in the census.

Some topics that were not considered core by the UN recommendations but which were found to be of great interest and importance to Ghana and were, therefore, included in the

2010 PHC are religion, ethnicity, employment sector and place of work, agricultural activity, as well as housing topics, such as, type of dwelling, materials for outer wall, floor and roof, tenure/holding arrangement, number of sleeping rooms, cooking fuel, cooking space and Information Communication Technology (ICT).

Census mapping

A timely and well implemented census mapping is pivotal to the success of any population and housing census. Mapping delineates the country into enumeration areas to facilitate smooth enumeration of the population. The updating of the 2000 Census Enumeration Area (EA) maps started in the last quarter of 2007 with the acquisition of topographic sheets of all indices from the Survey and Mapping Division of the Lands Commission. In addition, digital sheets were also procured for the Geographical Information System Unit.

The Cartography Unit of the Census Secretariat collaborated with the Survey and Mapping Division of the Lands Commission and the Centre for Remote Sensing and Geographic Information Services (CERSGIS) of the Department of Geography and Resource Development, University of Ghana, to determine the viability of migrating from analog to digital mapping for the 2010 PHC, as recommended in the 2000 PHC Administrative Report. Field cartographic work started in March 2008 and was completed in February 2010.

Development of questionnaire and manuals

For effective data collection, there is the need to design appropriate documents to solicit the required information from respondents. GSS consulted widely with main data users in the process of the questionnaire development. Data users including MDAs, research institutions, civil society organizations and development partners were given the opportunity to indicate the type of questions they wanted to be included in the census questionnaire.

Documents developed for the census included the questionnaire and manuals, and field operation documents. The field operation documents included Enumerator's Visitation Record Book, Supervisor's Record Book, and other operational control forms. These record books served as operational and quality control tools to assist enumerators and supervisors to control and monitor their field duties respectively.

Pre-tests and trial census

The trial census provided GSS with an opportunity to assess its plans and procedures as well as the state of preparedness for the conduct of the 2010 PHC. The common errors found during editing of the completed questionnaires resulted in modifications to the census questionnaire, enumerator manuals and other documents. The results of the trial census assisted GSS to arrive at technically sound decisions on the ideal number of persons per questionnaire, number of persons in the household roster, migration questions, placement of the mortality question, serial numbering of houses/housing structures and method of collection of information on community facilities. Lessons learnt from the trial census also guided the planning of the recruitment process, the procedures for training of census field staff and the publicity and education interventions.

1.6.3 Census Enumeration

Method of enumeration and field work

All post- independence censuses (1960, 1970, 1984, and 2000) conducted in Ghana used the de facto method of enumeration where people are enumerated at where they were on census night and not where they usually reside. The same method was adopted for the 2010 PHC. The de facto count is preferred because it provides a simple and straight forward way of counting the population since it is based on a physical fact of presence and can hardly be misinterpreted. It is thought that the method also minimizes the risks of under-enumeration and over enumeration. The canvasser method, which involves trained field personnel visiting houses and households identified in their respective enumeration areas, was adopted for the 2010 PHC.

The main census enumeration involved the canvassing of all categories of the population by trained enumerators, using questionnaires prepared and tested during the pre-enumeration phase. Specific arrangements were made for the coverage of special population groups, such as the homeless and the floating population. The fieldwork began on 21st September 2010 with the identification of EA boundaries, listing of structures, enumeration of institutional population and floating population.

The week preceding the Census Night was used by field personnel to list houses and other structures in their enumeration areas. Enumerators were also mobilized to enumerate residents/inmates of institutions, such as, schools and prisons. They returned to the institutions during the enumeration period to reconcile the information they obtained from individuals and also to cross out names of those who were absent from the institutions on Census Night. Out-door sleepers (floating population) were also enumerated on the Census Night.

Enumeration of the household population started on Monday, 27th September, 2010. Enumerators visited houses, compounds and structures in their enumeration areas and started enumerating all households including visitors who spent the Census Night in the households. Enumeration was carried out in the order in which houses/structures were listed and where the members of the household were absent, the enumerator left a call-back-card indicating when he/she would come back to enumerate the household. The enumeration process took off smoothly with enumerators poised on completing their assignments on schedule since many of them were teachers and had to return to school. However, many enumerators ran short of questionnaires after a few days' work.

Enumeration resumed in all districts when the questionnaire shortage was resolved and by 17th October, 2010, enumeration was completed in most districts. Enumerators who had finished their work were mobilized to assist in the enumeration of localities that were yet to be enumerated in some regional capitals and other fast growing areas. Flooded areas and other inaccessible localities were also enumerated after the end of the official enumeration period. Because some enumeration areas in fast growing cities and towns, such as, Accra Metropolitan Area, Kumasi, Ksoa and Techiman were not properly demarcated and some were characterized by large EAs, some enumerators were unable to complete their assigned tasks within the stipulated time.

1.6.4 Post Enumeration Survey

In line with United Nations recommendations, GSS conducted a Post Enumeration Survey (PES) in April, 2011 to check content and coverage error. The PES was also to serve as an important tool in providing feedback regarding operational matters such as concepts and procedures in order to help improve future census operations. The PES field work was carried out for 21 days in April 2011 and was closely monitored and supervised to ensure quality output. The main findings of the PES were that:

- 97.0 percent of all household residents who were in the country on Census Night (26th September, 2010) were enumerated.
- 1.3 percent of the population was erroneously included in the census.
- Regional differentials are observed. Upper East region recorded the highest coverage rate of 98.2 percent while the Volta region had the lowest coverage rate of 95.7 percent.
- Males (3.3%) were more likely than females (2.8%) to be omitted in the census. The coverage rate for males was 96.7 percent and the coverage rate for females was 97.2 percent. Also, the coverage rates (94.1%) for those within the 20-29 and 30-39 age groups are relatively lower compared to the coverage rates of the other age groups.
- There was a high rate of agreement between the 2010 PHC data and the PES data for sex (98.8%), marital status (94.6%), relationship to head of household (90.5%) and age (83.0%).

1.6.5 Release and dissemination of results

The provisional results of the census were released in February 2011 and the final results in May 2012. A National Analytical report, six thematic reports, a Census Atlas, 10 Regional Reports and a report on Demographic, Social, Economic and Housing were prepared and disseminated in 2013.

1.6.6 Concepts and definitions

Introduction

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

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

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

Region

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

District

In 1988, Ghana changed from the local authority system of administration to the district assembly system. In that year, the then existing 140 local authorities were demarcated into 110 districts. In 2004, 28 new districts were created; this increased the number of districts in the country to 138. In 2008, 32 additional districts were created bringing the total number of districts to 170. The 2010 Population and Housing Census was conducted in these 170 administrative districts (these are made-up of 164 districts/municipals and 6 metropolitan areas). In 2012, 46 new districts were created to bring the total number of districts to 216. There was urgent need for data for the 46 newly created districts for planning and decision-making. To meet this demand, the 2010 Census data was re-programmed into 216 districts after carrying out additional fieldwork and consultations with stakeholders in the districts affected by the creation of the new districts.

Locality

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

Population

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

Household

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

Head of household

The household head was defined as a male or female member of the household recognised as such by the other household members. The head of household is generally the person who has

economic and social responsibility for the household. All relationships are defined with reference to the head.

Household and non-household population

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

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

Age

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

Nationality

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

Ethnicity

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

Birthplace

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

Duration of residence

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

Religion

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

Marital status

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

Literacy

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

Education

School Attendance

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

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

Level of Education

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

Activity status

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

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

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

Occupation

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

Industry

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

Employment status

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

Employment sector

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

Disability

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

Information Communication Technology (ICT)

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

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

Fertility

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

Mortality

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

Agriculture

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

Housing conditions and facilities

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

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

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

1.7 Organization of the Report

The report consists of nine chapters. Chapter one provides basic information about the district. It gives a brief background of the district, describing its physical features, political and administrative structure, social and cultural structure, economy and the methodology and concepts used in the report. Chapter two discusses the population size, composition and age structure. It further discusses the migratory pattern in the district as well as fertility and mortality.

In chapter three, the focus is on household size, composition and headship as well as the marital characteristics and nationality of the inhabitants of the district. The chapter also discusses the religious affiliations and the educational statuses of the members of the district. Chapter four focuses on economic characteristics such as economic activity status, occupation, industries and the employment status and sectors that the people are employed.

Information Communication Technology (ICT) is discussed in chapter five. It analyses mobile phone ownership, internet use and ownership of desktop/laptop computers while chapter six is devoted to Persons living with disabilities (PWDs) and their socio-demographic characteristics. Chapter seven concentrates on the agricultural activities of the households, describing the types of farming activities, livestock rearing and numbers of livestock reared.

In chapter eight, housing conditions such as housing stock, type of dwelling and construction materials, room occupancy, holding and tenancy, lighting and cooking facilities, bathing and toilet facilities, waste disposal and source of water for drinking or for other domestic use in the district are discussed and analyzed in detail. The final chapter, Chapter nine presents the summary of findings and conclusions. It also discusses the policy implications of the findings for the district.

CHAPTER TWO

DEMOGRAPHIC CHARACTERISTICS

2.1 Introduction

The 2010 Population and Housing Census (PHC) with reference date 26th September 2010, was a "de facto" count of all the persons present in Ghana and particularly in this context the Kassena Nankana West District (KNWD). Like all the previous post independence censuses, the 2010 PHC solicited responses and gathered data to help determine such important demographic characteristics as the population size; population distribution by age, sex and locality; migration patterns as well as fertility and mortality rates.

The objective of this chapter is to analyse the size or numbers of persons in the KNWD; the distribution of these numbers by sex, age and locality type (rural and urban) within the district using data from the 2010 PHC. In view of the fact that changes in any population are brought about through the dynamics of fertility, mortality and migration, these phenomena in the district are also analysed in order to understand the state dimensions they assume.

2.2 Population Size and Distribution

Age and sex composition of a given population constitute important population characteristics in any demographic analysis, and as a result usually receive attention. From table 2.1, the district has a total population of 70,667 representing 6.8 percent of the population of Upper East Region. With an area of 872.8 square kilometres, the district has a population density of 81 persons per square kilometre. The proportion of the female population (50.8%) in the district is slightly higher than that of males (49.2%). The age category with the highest population is 5-9 constituting 6.9 percent of the total district population.

Table 2.1: Population age structure by sex

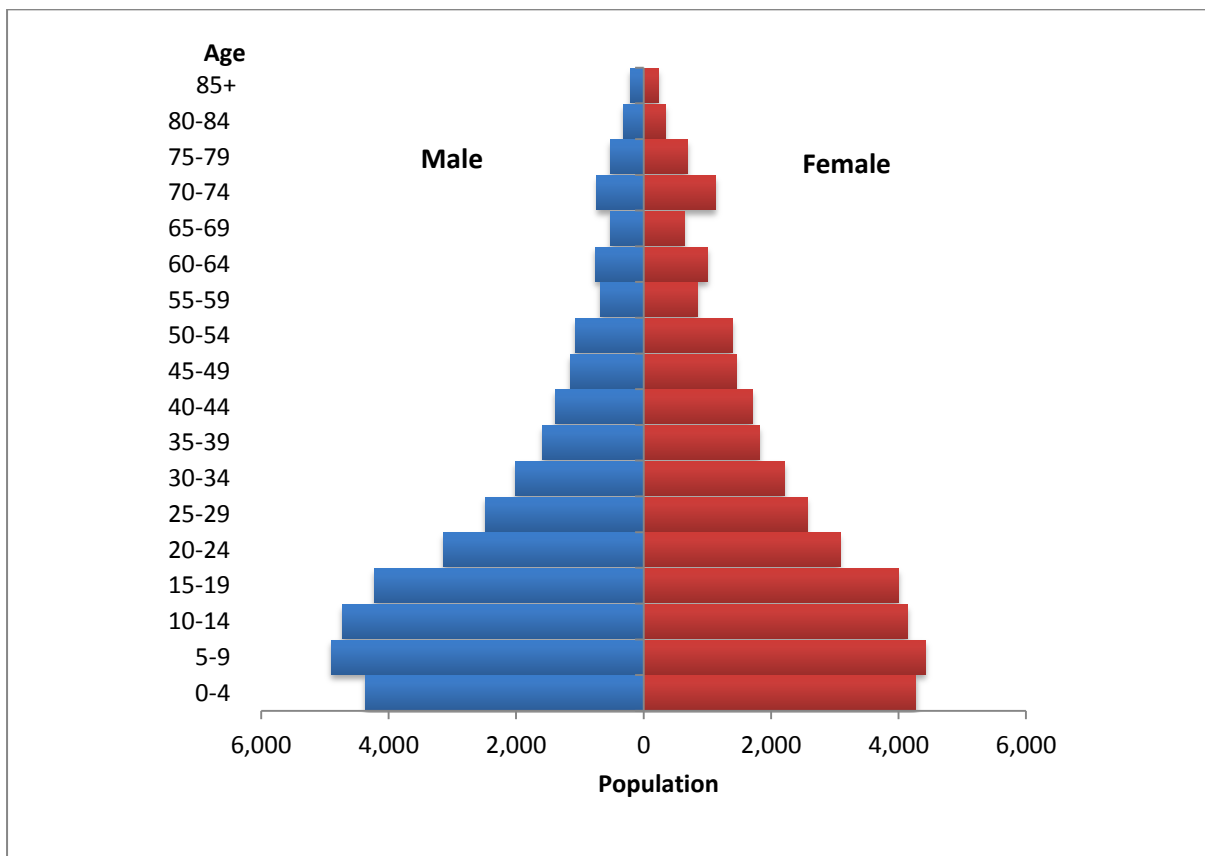
Age group	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All Ages	70,667	100.0	34,747	100.0	35,920	100.0
0 - 4	8,638	12.2	4,365	12.6	4,273	11.9
5 - 9	9,314	13.2	4,895	14.1	4,419	12.3
10 - 14	8,865	12.5	4,725	13.6	4,140	11.5
15 - 19	8,222	11.6	4,224	12.2	3,998	11.1
20 - 24	6,215	8.8	3,134	9.0	3,081	8.6
25 - 29	5,039	7.1	2,474	7.1	2,565	7.1
30 - 34	4,219	6.0	2,012	5.8	2,207	6.1
35 - 39	3,392	4.8	1,579	4.5	1,813	5.0
40 - 44	3,095	4.4	1,389	4.0	1,706	4.7
45 - 49	2,602	3.7	1,152	3.3	1,450	4.0
50 - 54	2,469	3.5	1,073	3.1	1,396	3.9
55 - 59	1,528	2.2	676	1.9	852	2.4
60 - 64	1,761	2.5	758	2.2	1,003	2.8
65 - 69	1,150	1.6	516	1.5	634	1.8
70 - 74	1,857	2.6	733	2.1	1,124	3.1
75 - 79	1,208	1.7	517	1.5	691	1.9
80 - 84	650	0.9	313	0.9	337	0.9
85+	275	0.4	133	0.4	142	0.4

2.3 Age-Sex Structure

The district has a relatively high proportion of its population within the youthful ages (0-24 years). This is demonstrated by a population pyramid with a broad base and a narrow top which gives it a conical shape (Figure 1.1). About 60 percent of the population is aged 0-24 years. The age structure affects general fertility rate and ultimately the nature of changes that are likely to occur in the population. Birth and death rates are influenced by the proportions of people in the different ages. Other things being equal, populations that have comparatively large numbers of elderly are likely to record more deaths and fewer births each year than population of equal size that is made of a large proportion of young people within the reproductive ages.

The above characteristics imply the need for the provision of basic social services such as schools, health centres, boreholes, toilets among others. The females constitute 51.9 percent of the population of the district; there is therefore the need to actively involve them in decision making processes. Also, it can be seen that a total of 38,542 people are in the working class representing 55.0 percent of the total population. This clearly indicates that majority of the populace are in the working class.

Figure 2.1: Population pyramid



Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 2.2 shows the population size of Upper East Region and the KNWD by locality of residence and sex. From the table, the total population of Upper East Region is 1,046,545 while KNWD is 70,667. Out of the district total population, 34,747 are males and 35,920 are females. The sex ratio of the total population is 96.7, implying there are about 97 males for

every 100 females. The ratio shows a larger proportion of females in the population of the district.

The rural population is 60,792, about six times that of urban (9,875). Also, out of the total population of the district, females constitute the majority (50.83%) and the remaining 49.17 percent are males. The percentage of male in the rural area is greater than those in the urban. However, the situation is the reverse for female population by locality. About 52.7 percent of the female population in the district live in urban areas while 50.5 lived in the rural area.

Table 2.2: Population size by locality of residence by district, region and sex

Age group	All Localities		Urban		Rural	
	Number	Percent	Number	Percent	Number	Percent
Upper East	1,046,545	100.0	219,646	21.0	826,899	79.0
Total	70,667	100.0	9,875	100.0	60,792	100
Male	34,747	49.2	4,670	47.3	30,077	49.5
Female	35,920	50.8	5,205	52.7	30,715	50.5

Percentage of regional population

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.4 Age-Dependency Ratio by Locality

The age-dependency ratio is theoretically indicative of the economic burden of the potential working population - the smaller the ratio, the lesser the economic burden. The determination of the ratio is predicated on the assumption that all persons less than 15 years or 65 years and older do not work or cannot work and therefore depend on others. Additionally, it also assumes that all persons aged 15-64 years are working; this is not so in reality.

The age dependency ratio is conventionally defined as the population aged less 15 years and 65 years and older divided by the population in the 15-64 years age group multiplied by 100. From Table 2.3, the age-dependency ratio of the district is 83.35. This means that every 100 people in the economically active population of KNWD have about 83 people to take care of.

The male age-dependency ratio (88.12) is greater than that of female (78.96) signifying that there are more male dependants than female dependants in the population of KNWD. Age-dependency ratio for rural areas (85.17) was also greater than that for urban (72.91). It is greater in the rural areas because the populations of the dependent age groups, that is, 0-14 (23,303) and 65+ (4,658) in the rural areas are more than their respective populations of 3,514 and 650 in urban areas.

Table 2.3: Age dependency ratio by locality

Age group/ratio	Both Sexes	Type of locality	
		Urban	Rural
All Ages	70,667	9,875	60,792
0-14	26,817	3,514	23,303
15-64	38,542	5,711	32,831
65+	5,308	650	4,658
Age-dependency ratio	83.35	72.91	85.17
Child Dependency Ratio	69.57		
Old Age Dependency Ratio	13.77		

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.5 Fertility, Mortality and Migration,

2.5.1 Fertility

Fertility is viewed as the actual production of children. It is defined as the number of live births women have during their reproductive life time. In the 2010 Population and Housing Census, the data on fertility were collected from females aged 12 years and older. Table 2.4 shows the data on fertility indicators for Kassena Nankana West District, compared with the other districts and the region.

Total fertility rate is a measure of the average number of children that would be born alive to a woman throughout her reproductive life span, with the assumptions that; she would survive the full period of her child bearing ages and also considering the fact that she would follow the fertility performance of each age group of women during the child bearing ages. The total fertility rate for Kassena Nankana West District is 2.78, which is less than the regional rate (3.45). Garu Tempene District has the highest total fertility rate (3.90) among the districts in the region.

The other fertility measures presented in the table include General Fertility Rate (GFR) and crude birth rate (CBR). From the table, Kassena Nankana West District has the lowest general fertility rate of 77.82 in the region while Builsa District recorded the highest of 109.17, Builsa District recorded the highest (25.33) crude birth rate in the region while, Kassena Nankana West District recorded the lowest rate of 18.52.

Table 2.4: Reported total fertility rate, general fertility rate and crude birth rate by district

District	Population	Number of women 15-49 years	Number of births in last 12 months	Total Fertility Rate	General Fertility Rate	Crude Birth Rate
All Districts	1,046,545	243,377	23,728	3.43	97.49	22.67
Builsa	92,991	21,571	2,355	3.85	109.17	25.33
Kassena Nankana West	70,667	16,820	1,309	2.78	77.82	18.52
Kassena Nankana East	109,944	25,941	2,539	3.37	97.88	23.09
Bolgatanga Municipal	131,550	34,909	3,089	3.00	88.49	23.48
Talensi Nabdum	115,020	24,786	2,593	3.62	104.62	22.54
Bongo	84,545	19,593	1,982	3.56	101.16	23.44
Bawku West	94,034	20,951	2,226	3.71	106.25	23.67
Garu Tempene	130,003	27,784	2,951	3.90	106.21	22.70
Bawku Municipal	217,791	51,022	4,684	3.28	91.80	21.51

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 2.5 provides information on female population 12 years and older by age, children ever born, children surviving and sex of child in the district. The table shows that the total number of female children ever born to the female population 12 years and older in the district is 35,684 with a total number of 28,090 children surviving. The proportion of male to female children ever born is 36,757 and 35,684 respectively and that for the children surviving 28,705 and 28,090 for males and females respectively. The total number of females within the ages of 12 years and older is 25,462 with age group 60 plus having the highest proportion (4,020) followed by age group 15-19 with 3,998 and the age group with the least proportion

is 55-59 (852). It is also important to note that more of the population of females 12 years and older are youth (12-34) constituting about 59.1 percent.

The table also indicates that total number of children ever born by females 12 years and older is 72,441 with male children forming about 50.7 percent. However, the age group with the highest number of children ever born is 60+ constituting 21,381. The trend remains almost same for children surviving, however, it is important to note that about 78.4 percent of children ever born in the district survived. It is also worth noting from the table that apart from age group 20-24 where females are more in both children ever born and surviving, male children and surviving male children and surviving dominate in all the age categories of the population.

Table 2.5: Female population 12 years and older by age, children ever born, children surviving and sex of child

Age	Number of Female	Children Ever Born			Children Surviving		
		Both Sexes	Male	Female	Both Sexes	Male	Female
All Ages	25,462	72,441	36,757	35,684	56,795	28,705	28,090
10-14	2,374	25	12	13	18	9	9
15-19	3,998	441	222	219	394	189	205
20-24	3,081	2,481	1,271	1,210	2,164	1,080	1,084
25-29	2,565	4,815	2,462	2,353	4,252	2,151	2,101
30-34	2,207	7,186	3,675	3,511	6,392	3,247	3,145
35-39	1,813	7,655	3,826	3,829	6,605	3,307	3,298
40-44	1,706	8,311	4,203	4,108	7,005	3,551	3,454
45-49	1,450	7,657	3,882	3,775	6,166	3,144	3,022
50-54	1,396	7,781	4,026	3,755	6,026	3,103	2,923
55-59	852	4,708	2,372	2,336	3,496	1,773	1,723
60+	4,020	21,381	10,806	10,575	14,277	7,151	7,126

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.5.2 Mortality

Mortality, as one of the three components of population, plays an important role in determining the growth of a population. The level and pattern of mortality is a reflection of the health status of a population.

Causes of death in household

Table 2.6 presents Causes of death in households by district in Upper East region. From the table, Kassena Nankana West District recorded as many as 566 deaths, constituting about five percent of all deaths in the region. About 8.3 percent of these deaths are due to Accident, violence, homicide or suicide while 91.7 percent were due to all other causes. With regard to pregnancy related deaths, the district has one of the least proportions, accounting for only 0.7 percent together with three other districts. Pusiga District has the lowest pregnancy related deaths in the region accruing for just 0.5 percent.

Table 2.6: Causes of death

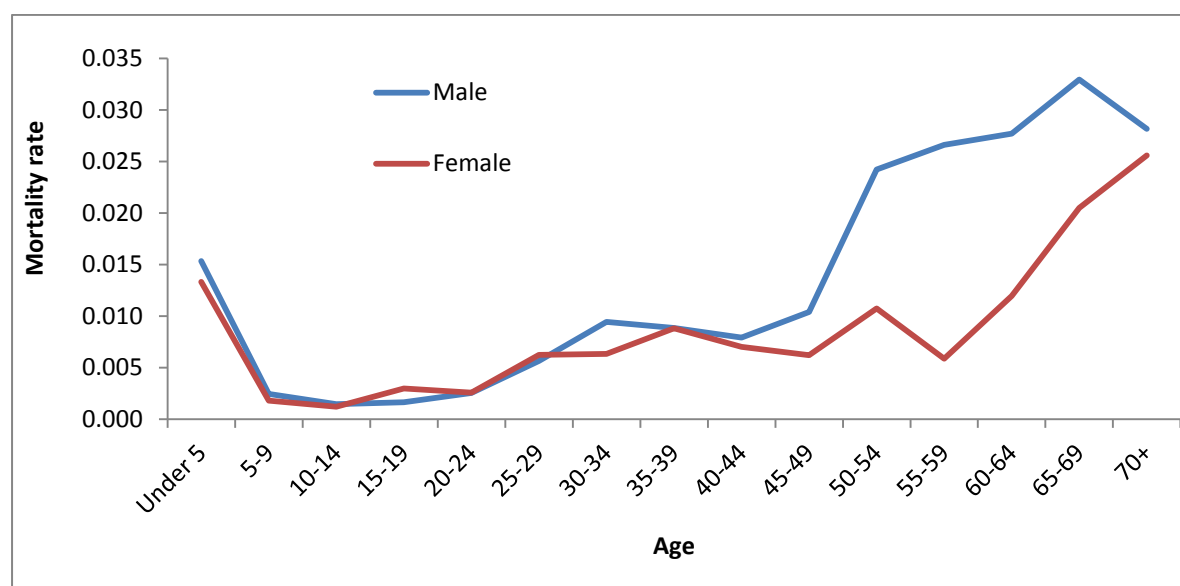
District	Death in households					
	Total deaths	Death due to				
		Accident/ violence/ homicide /suicide	All other causes	Total deaths	Pregnancy related death (female 15-54 years)	Not pregnancy related
All Districts	11,339	1,720	9,619	11,339	193	11,146
Builsa North	478	30	448	478	4	474
Kassena Nankana West	566	47	519	566	4	562
Kassena Nankana East	1,217	86	1,131	1,217	11	1,206
Bolgatanga Municipal	2,269	940	1,329	2,269	89	2,180
Talensi	1,218	165	1,053	1,218	6	1,212
Bongo	1,093	61	1,032	1,093	16	1,077
Bawku West	838	43	795	838	15	823
Garu Tempane	1,287	97	1,190	1,287	19	1,268
Bawku Municipal	691	65	626	691	14	677
Builsa South	337	14	323	337	4	333
Nabdram	473	79	394	473	4	469
Binduri	510	43	467	510	5	505
Pusiga	362	50	312	362	2	360

Source: Ghana Statistical Service, 2010 Population and Housing Census

Age-specific death rate (ASDR)

Age-specific death rate (ASDR) is the number of deaths of people in a specified age group per 1,000 population of that age group. Figure 2.1 presents the ASDR for males and females in the district. The graph shows that ASDR for male was higher than that for females. This could be due to high mortality rate in view of inadequate health facilities and personnel in the district. However, while some age groups have almost the same ASDR for both sexes (35-39, 20-24, 25-29, 10-14 and 5-9), some age groups had extremely high ASDR (65-69 and 70 plus). The graph also shows that on age group under five, male death rate is higher than female. This could be attributed to the fact that females within that age have an immune system that fights disease causing organisms. However, within age group 15-19, female death rate is higher than male.

Figure 2.1: Age-specific death rate



Source: Ghana Statistical Service, 2010 Population and Housing Census

Crude Death Rate

Of the total population of 70,667 in the district, about 566 household deaths were reported with a crude death rate of 8.0, lower than the regional crude Death Rate of 10.8.

Table 2.7: Total population, deaths in households and crude death rate

District	Total Population	Deaths in households	*Crude death rate
All Districts	1,046,545	11,339	10.8
Builsa North	56,477	478	8.5
Kassena Nankana West	70,667	566	8.0
Kassena Nankana East	109,944	1,217	11.1
Bolgatanga Municipal	131,550	2,269	17.2
Talensi	81,194	1,218	15.0
Bongo	84,545	1,093	12.9
Bawku West	94,034	838	8.9
Garu Tempane	130,003	1,287	9.9
Bawku Municipal	98,538	691	7.0
Builsa South	36,514	337	9.2
Nabdam	33,826	473	14.0
Binduri	61,576	510	8.3
Pusiga	57,677	362	6.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Note: * Number of deaths per 1,000 population

2.5.3 Migration

Table 2.4 presents information on internal migrants who were enumerated in the district. A total of 8,615 migrants were enumerated in the district. Out of that total number, 5,322 were born elsewhere in the region. Among all the migrants, the number of people who have resided in the district for 20 years or more constitute the highest percentage of 32.6. The least percentage, 12.5, are those who have resided in the district for a period less than one year.

Among migrants who were born elsewhere in another region other than the Upper East Region, there are more people born in the Ashanti Region (1,621) than any of the other regions. The number of those born in Upper West Region (378) is the second largest while the number born in Volta Region (70) is the least. These migrants born elsewhere in other regions have resided in the district for varying periods of time. Among the migrants who are born in the Western and Central Regions for instance, the greatest percentages (29.1) and (33.6) respectively have resided in the district for less than one year. It can also be deduced from the table that, 628 people are born outside Ghana and 37.4% have resided in the district for 20 plus years.

Table 2.8: Birthplace by duration of residence of migrants

Birthplace	Number	Duration of residence (%)				
		Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years
Total	8,615	12.5	19.1	12.6	16.4	32.6
Born elsewhere in the region	5,322	10.2	15.9	11.0	17.0	46.0
Born elsewhere in another region:						
Western	110	29.1	14.5	16.4	13.6	26.4
Central	107	33.6	29.0	6.5	17.8	13.1
Greater Accra	311	16.7	29.9	15.8	24.8	12.9
Volta	70	28.6	34.3	8.6	12.9	15.7
Eastern	161	25.5	28.0	15.5	19.9	11.2
Ashanti	1,621	14.1	28.0	20.5	18.9	18.4
Brong Ahafo	324	21.3	30.6	19.1	17.3	11.7
Northern	211	24.6	28.9	13.7	15.2	17.5
Upper East	-					
Upper west	378	20.9	25.9	14.8	17.2	21.2
Outside Ghana	628	9.7	21.0	15.0	16.9	37.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER THREE

SOCIAL CHARACTERISTICS

3.1 Introduction

This chapter presents an analysis of social characteristics in the Kassena Nankana District. Data on household characteristics, marital status, nationality, religious affiliation, literacy and education are presented.

3.2 Household Size, Composition and Headship

Table 3.1 shows household size by type of locality. From the table the district has a total household population of 69,967 with 9,792 being urban and 60,173 being rural. The table further indicates that there are a total of 12,813 households with 15.4 per cent in urban areas and 84.6 per cent in rural areas. Again, the average household size in the rural areas (5.5) is slightly higher than the average household size in urban areas (5.0).

Table 3.1: Household size

Categories	Total		District	Urban	Rural
	Country	Region			
Total household population	24,076,327	1,034,704	69,965	9,792	60,173
Number of houses	3,392,745	114,034	7,640	1,063	6,577
Number of households	5,467,054	177,629	12,813	1,968	10,845
Average households per house	1.6	1.6	1.7	1.9	1.6
Average household size	4.4	5.8	5.5	5	5.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.2 shows household population by composition and sex. The Table shows that, household heads are 18.3 percent of the total household population of KNWD. The table 3.2 further indicates that majority of the household population (47.9%) are children (son/daughter). Spouses (wife/husband) constituted 10.6 percent, grandchildren (6.1%), other relatives (6.2%), brother/sister (4.4%). Parent/parent-in-laws and son/daughter-in-laws are 3.1 percent and 1.4 percent respectively. Step children account for 1.4 percent while adopted children/foster children are 0.3 percent constituting the lowest proportion.

More than half (53.8%) of household male population are children (sons), followed by those who are male heads (26.0%), grandchildren (6.4%) and brothers (5.3%). Other male relatives account for 4.2 percent of household male population, male step children 1.5 percent, male parent/parent-in-laws 1.0 percent. Very small proportions of household male population are spouses, son-in-laws, adopted/foster children and non-relative males, accounting for less than one percent each. Of the household female population, like in the case of males, majority (42.2%) are children, followed by spouses (wives) (19.9%), heads (10.8%) and other relatives (8.1%).

Table 3.2: Household population by composition and sex

Household composition	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	69,965	100.0	34,397	100.0	35,568	100.0
Head	12,813	18.3	8,958	26.0	3,855	10.8
Spouse (wife/husband)	7,378	10.6	291	0.9	7,087	19.9
Child (son/daughter)	33,493	47.9	18,495	53.8	14,998	42.2
Parent/parent in-law	2,140	3.1	328	1.0	1,812	5.1
Son/Daughter in-law	948	1.4	65	0.2	883	2.5
Grandchild	4,261	6.1	2,199	6.4	2,062	5.8
Brother/Sister	3,072	4.4	1,821	5.3	1,251	3.5
Step child	961	1.4	531	1.5	430	1.2
Adopted/foster child	216	0.3	105	0.3	111	0.3
Other relative	4,334	6.2	1,447	4.2	2,887	8.1
Non-relative	349	0.5	157	0.5	192	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.3 presents data on household population by structure and sex. The structure of the household composition refers to the classification of households into categories. Classification of households depends on whether it is a single person household, household that consists of head and spouse only, nuclear household (head, spouse(s) and their children) or nuclear extended among other combinations.

The data indicates that households of the extended family system are the most common in the district constituting 37.8 percent of the household population. The next common category is the nuclear (head, spouse and children) representing 26.1 percent.

There is not much difference between males (12,983) and females (13,465) that live in the extended family households. Single parent extended/ non relative constitute the least proportion of 0.4 percent.

Table 3.3: Household population by structure and sex

Household structure	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	69,965	100.0	34,397	100.0	35,568	100.0
Head only	836	1.2	461	1.3	375	1.1
Head and a spouse only	534	0.8	268	0.8	266	0.8
Nuclear (head, spouse(s) and children)	18,281	26.1	9,722	28.3	8,559	24.1
Extended (head, spouse(s), children and head's relatives)	26,448	37.8	12,983	37.7	13,465	37.9
Extended + non relatives	714	1.0	333	1.0	381	1.1
Head, spouse(s) and other composition	1,428	2.0	698	2.0	730	2.1
Single parent nuclear	7,518	10.8	3,407	9.9	4,111	11.6
Single parent extended	10,306	14.7	4,632	13.5	5,674	16.0
Single parent extended + non relative	252	0.4	120	0.4	132	0.4
Head and other composition but no spouse	3,648	5.2	1,773	5.2	1,875	5.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3 Marital Status

Marriage is one of the institutions in Ghana which is held in high esteem. It is an indicator of one's social responsibility. It is also one of the determinants of an individual's social status, trust and achievement. Every adult is expected to marry unless afflicted by serious illness or deformity. In traditional Ghana, voluntary celibacy is not accepted and so frowned upon. Therefore, most adults would wish to get married at one time or the other. This is more peculiar to females.

Table 3.4 shows that more females than males are currently married (48% compared with 44.2%). The proportion of males who have ever married reflects the fact that men are more likely to postpone marriage since traditional practices expect the man to initiate the marriage by preparing the bride price and the responsibility for family maintenance, actions requiring careful and thorough preparation.

There are more males (49.4%) who have never married than females (32.1%). Also, slightly more females (2.5%) than males (2.3%) are have separated. The proportion of females (14.3%), who are widowed, is about seven times that of the males (2.2%).

Table 3.4: Persons 12 years and older by sex, age-group and marital status

Sex/age-group	Number	Total	Never married	Informal/ Consensual union/Living together	Married	Separated	Divorced	Widowed
Both Sexes								
Total	48,907	100.0	40.4	0.4	46.4	2.4	1.7	8.7
10 - 14	5,057	100.0	95.2	0.1	4.8	0.0	0.0	0.0
15 - 19	8,222	100.0	90.6	0.2	8.6	0.4	0.1	0.2
20 - 24	6,215	100.0	65.8	0.6	30.9	1.5	0.9	0.4
25 - 29	5,039	100.0	37.3	1.3	55.8	2.9	1.5	1.2
30 - 34	4,219	100.0	16.0	0.4	73.5	4.4	2.8	2.9
35 - 39	3,392	100.0	8.6	0.5	77.7	5.2	3.4	4.7
40 - 44	3,095	100.0	5.0	0.2	78.4	4.3	3.8	8.4
45 - 49	2,602	100.0	3.2	0.1	77.4	3.4	2.7	13.3
50 - 54	2,469	100.0	2.3	0.3	73.2	3.6	2.7	17.9
55 - 59	1,528	100.0	2.7	0.1	69.3	4.0	3.1	20.8
60 - 64	1,761	100.0	2.0	0.2	63.0	3.1	3.5	28.2
65+	5,308	100.0	3.4	0.0	54.2	2.2	1.9	38.2
Male								
Total	23,445	100.0	49.4	0.3	44.2	2.3	1.7	2.1
10 - 14	2,683	100.0	95.3	0.1	4.6	0.0	0.0	0.0
15 - 19	4,224	100.0	94.9	0.1	4.8	0.1	0.0	0.1
20 - 24	3,134	100.0	83.3	0.3	15.0	0.9	0.4	0.1
25 - 29	2,474	100.0	53.4	1.1	42.3	2.0	1.0	0.2
30 - 34	2,012	100.0	24.0	0.4	68.7	3.8	2.6	0.4
35 - 39	1,579	100.0	14.1	0.4	75.3	5.3	4.0	0.9
40 - 44	1,389	100.0	8.7	0.3	80.0	4.6	4.7	1.7
45 - 49	1,152	100.0	5.3	0.0	84.7	4.0	3.7	2.3
50 - 54	1,073	100.0	3.4	0.3	85.5	3.9	3.3	3.6
55 - 59	676	100.0	4.1	0.1	82.4	4.7	3.6	5.0
60 - 64	758	100.0	2.8	0.0	80.2	4.2	5.0	7.8
65+	2,291	100.0	4.6	0.0	78.0	3.6	2.1	11.8

Table 3.4: Persons 12 years and older by sex, age-group and marital status (cont'd)

Sex/age-group	Number	Total	Never married	Informal/Consensual union/Living together	Married	Separated	Divorced	Widowed
Female								
Total	25,462	100.0	32.1	0.4	48.4	2.5	1.7	14.9
10 - 14	2,374	100.0	95.0	0.0	5.0	0.0	0.0	0.0
15 - 19	3,998	100.0	86.0	0.4	12.5	0.7	0.1	0.4
20 - 24	3,081	100.0	47.9	0.9	47.0	2.2	1.4	0.6
25 - 29	2,565	100.0	21.8	1.4	68.8	3.7	2.0	2.2
30 - 34	2,207	100.0	8.7	0.4	77.8	4.9	3.0	5.1
35 - 39	1,813	100.0	3.9	0.5	79.8	5.1	2.8	8.0
40 - 44	1,706	100.0	2.0	0.1	77.0	4.0	3.0	13.9
45 - 49	1,450	100.0	1.5	0.2	71.6	2.9	1.8	22.0
50 - 54	1,396	100.0	1.4	0.4	63.8	3.4	2.2	28.9
55 - 59	852	100.0	1.5	0.1	58.9	3.4	2.7	33.3
60 - 64	1,003	100.0	1.5	0.3	50.0	2.3	2.4	43.6
65+	3,017	100.0	2.6	0.1	36.1	1.2	1.8	58.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.5 shows that the proportion never married generally decreases with higher education; whereas with the married, the proportion declines from 71.1 percent of never attended to 4.5 percent of those with secondary education and then further decreasing to 2.0 percent among those with post-secondary education. The proportion divorced exhibits some differences by education. The proportion divorced generally declines with increasing level of education such that the proportion divorced among those with higher level of education is about one-third that of their counterparts with no formal education. This pattern is repeated for the widowed. The proportion of the widowed among those with tertiary education is less than one percent.

Table 3.5: Persons 12 years and older by sex, marital status and level of education

Sex/marital status	Number	All levels	No Education	Basic ¹	Secondary ²	Voc./Techn./Commercial	Post middle/secondary certificate/diploma ³	Tertiary ⁴
Both Sexes								
Total	48,907	100.0	51.2	37.9	8.0	0.5	1.9	0.5
Never married	19,747	100.0	16.8	65.8	13.9	0.7	2.2	0.5
Informal/consensual union/living together	179	100.0	50.3	33.5	11.7	2.2	1.7	0.6
Married	22,705	100.0	71.7	20.7	4.5	0.5	2.0	0.7
Separated	1,172	100.0	68.6	23.3	5.5	0.5	2.0	0.1
Divorced	831	100.0	73.6	19.9	4.6	0.5	1.3	0.1
Widowed	4,273	100.0	91.6	7.3	0.4	0.2	0.4	0.0
Male								
Total	23,445	100.0	43.6	42.0	10.1	0.6	2.8	0.9
Never married	11,574	100.0	18.5	62.8	14.7	0.7	2.6	0.7
Informal/consensual union/living together	69	100.0	43.5	29.0	20.3	4.3	1.4	1.4
Married	10,372	100.0	67.2	22.3	5.6	0.6	3.1	1.2
Separated	538	100.0	65.4	24.5	6.7	0.4	3.0	0.0
Divorced	405	100.0	74.8	18.3	5.4	0.5	0.7	0.2
Widowed	487	100.0	89.1	8.6	1.4	0.2	0.6	0.0

Table 3.5: Persons 12 years and older by sex, marital status and level of education (cont'd)

Sex/marital status	Number	All levels	No Education	Basic ¹	Secondary ²	Voc./Techn./Commercial	Post middle/secondary certificate/diploma ³	Tertiary ⁴
Female								
Total	25,462	100.0	58.2	34.0	6.0	0.5	1.1	0.2
Never married	8,173	100.0	14.5	70.0	12.7	0.8	1.7	0.2
Informal/consensual union/living together	110	100.0	54.5	36.4	6.4	0.9	1.8	0.0
Married	12,333	100.0	75.6	19.5	3.5	0.4	1.0	0.2
Separated	634	100.0	71.3	22.2	4.6	0.6	1.1	0.2
Divorced	426	100.0	72.5	21.4	3.8	0.5	1.9	0.0
Widowed	3,786	100.0	91.9	7.1	0.3	0.2	0.4	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

¹ Basic: Primary, Middle and JSS/JHS

² Secondary: SSS/SHS and Secondary

³ Post Middle/Sec. Cert./Dipoloma: Teacher training/ College of education, Agric, Nursing, University Diploma, HND, etc.

⁴ Tertiary: Bachelor Degree and Post Graduate or higher

Table 3.6 provides information on persons 12 years and older by sex, marital status and economic activity status in Kassena Nankana West District. Of the total population 48,907 who are 12 years and older in the district, 68.1 percent are employed, 1.6 percent are unemployed and 30.3 percent are economically not active. Married people are in the majority of those employed accounting for 86.6 percent. It is interesting to note that the marital category with the least proportion of unemployed in the district is the widowed constituting only 0.7 compared with those in Informal/Consensual union/Living together which has the highest proportion of the unemployed (7.8%). There are more married males who are employed (89.5%) than married females (84.2%).

Table 3.6: Persons 12 years and older by sex, marital status and economic activity status

Sex/marital status	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	48,907	100.0	33,294	68.1	771	1.6	14,842	30.3
Never married	19,747	100.0	9,016	45.7	351	1.8	10,380	52.6
Informal/consensual union/living together	179	100.0	116	64.8	14	7.8	49	27.4
Married	22,705	100.0	19,663	86.6	330	1.5	2,712	11.9
Separated	1,172	100.0	980	83.6	25	2.1	167	14.2
Divorced	831	100.0	683	82.2	22	2.6	126	15.2
Widowed	4,273	100.0	2,836	66.4	29	0.7	1,408	33.0
Male								
Total	23,445	100.0	16,201	69.1	361	1.5	6,883	29.4
Never married	11,574	100.0	5,736	49.6	218	1.9	5,620	48.6
Informal/consensual union/living together	69	100.0	46	66.7	4	5.8	19	27.5
Married	10,372	100.0	9,280	89.5	116	1.1	976	9.4
Separated	538	100.0	456	84.8	9	1.7	73	13.6
Divorced	405	100.0	351	86.7	13	3.2	41	10.1
Widowed	487	100.0	332	68.2	1	0.2	154	31.6
Female								
Total	25,462	100.0	17,093	67.1	410	1.6	7,959	31.3
Never married	8,173	100.0	3,280	40.1	133	1.6	4,760	58.2
Informal/consensual union/living together	110	100.0	70	63.6	10	9.1	30	27.3
Married	12,333	100.0	10,383	84.2	214	1.7	1,736	14.1
Separated	634	100.0	524	82.6	16	2.5	94	14.8
Divorced	426	100.0	332	77.9	9	2.1	85	20.0
Widowed	3,786	100.0	2,504	66.1	28	0.7	1,254	33.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.4 Nationality

Table 3.7 presents data on population by nationality and sex. The data indicates the district has a population of 70,667 of which 67,507 are Ghanaians by birth representing 95.5 percent, Ghanaians by dual nationality constitute 1.7 percent and ECOWAS nationals form 1.1 percent.

The total male population is 34,747 of which 33,168 are Ghanaians by birth representing 95.5 percent, Dual Nationality constitutes 1.7 percent, ECOWAS Nationals 1.2 percent, Africans other than ECOWAS 0.6 percent and Other Nationals constitute 0.5 percent for male.

For the female population of 35,920 95.6 percent are Ghanaians by birth while those with dual nationality constitute 1.8 percent. Only 1.0 percent of the female population are ECOWAS nationals and less than 1.0 percent of Africans other than ECOWAS and other nationals.

Table 3.7: Population by nationality and sex

Nationality	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	70,667	100.0	34,747	100.0	35,920	100.0
Ghanaian by birth	67,507	95.5	33,168	95.5	34,339	95.6
Dual Nationality	1,215	1.7	581	1.7	634	1.8
Ghanaian by naturalisation	474	0.7	220	0.6	254	0.7
ECOWAS	782	1.1	420	1.2	362	1.0
Africa other than ECOWAS	367	0.5	194	0.6	173	0.5
Other	322	0.5	164	0.5	158	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.5 Religious Affiliation

The population by religion and sex is presented in Table 3.8. The Table shows that 28.0 percent of the population in the district are Catholics, 30.0 percent are Traditionalist and 12.3 percent belonging to Islam. Population with no religion constitutes 4.1 percent, Protestant (Anglican, Lutheran etc.) 6.8 percent, Pentecostal 13.3 percent and other Christians 4.5 percent.

The male and female populations exhibited different characteristics with 49.7 percent of the male population and 55.2 percent of female population respectively being Christians. About 33.1 percent of the male population are Traditionalist while 28.0 percent of the female population are Traditionalist. The percentage of male population in Islam is 12.2 while 12.3 percent of the female population are Muslims. The data further shows 4.4 percent of the male population have no religion while 3.8 percent of the female population have no religion. The data also reveal that, in the district, 4.1 percent of people have no religion at all. This implies that they are free thinkers.

Table 3.8: Population by religion and sex

Religion	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	70,667	100.0	34,747	100.0	35,920	100.0
No Religion	2,913	4.1	1,542	4.4	1,371	3.8
Catholic	19,774	28.0	9,306	26.8	10,468	29.1
Protestant (Anglican Lutheran etc.)	4,790	6.8	2,252	6.5	2,538	7.1
Pentecostal/Charismatic	9,384	13.3	4,216	12.1	5,168	14.4
Other Christians	3,153	4.5	1,490	4.3	1,663	4.6
Islam	8,663	12.3	4,251	12.2	4,412	12.3
Traditionalist	21,544	30.5	11,486	33.1	10,058	28.0
Other (Specify)	446	0.6	204	0.6	242	0.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

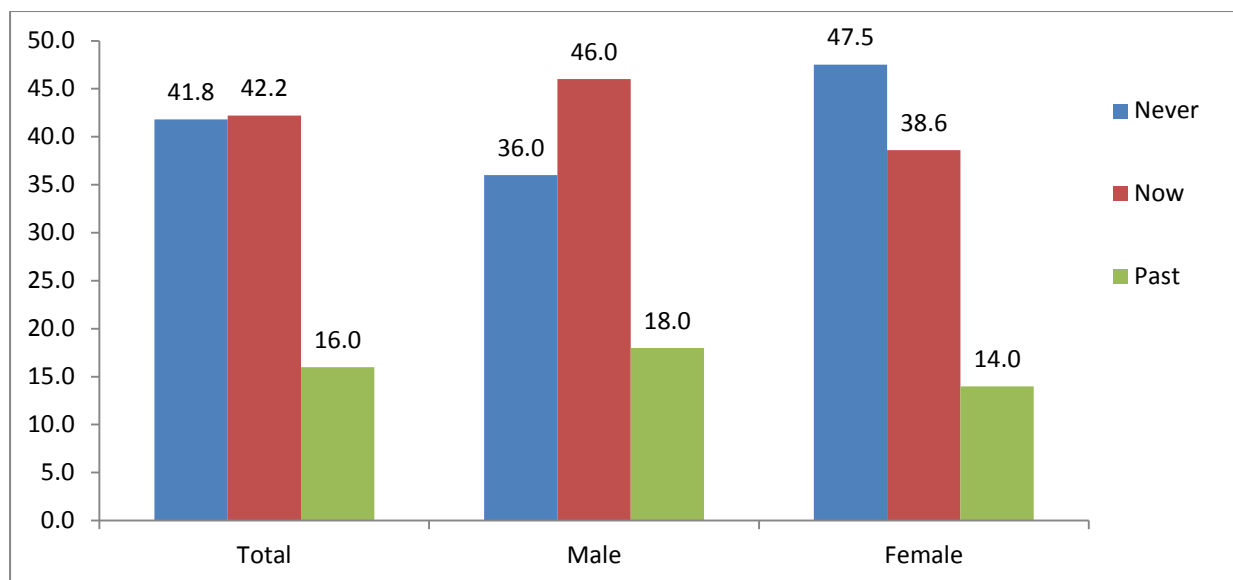
3.6 Literacy and Education

Literacy is defined as the ability to read and write in any language with understanding. The ability to read and write is critical for access and utilization of information to enhance socio-economic development.

3.6.1 School attendance

From Figure 3.1 below on literacy and education, a total proportion of 41.8 percent of persons in the district have never attended school. 42.2 percent currently attend school while 16.0 percent have attended school in the past. More females, 47.5 percent, compared with 38.6 percent males have never attended school and more males 46.0 percent than females 38.6 percent are currently in school in the district.

Figure 3.1: School attendance



Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.9 shows the percentage distribution of the population 11 years and older, by sex, age and literacy status. The table indicates that 25,200 are non-literates. Of this, the age group of 65 and older recorded the highest number (4,861) of people not literate, followed by 30-34 (2,683) and 40-44 (2,436). The table also shows that of the total of 25,353 literate, 38.8% are literate in English only, 56.1% are literate in English and Ghanaian language only. The data also reveals that the male literate are more (13,999) than that of the female (11,354). However, 42.1 percent of females are literate in English only compared with 36.1 percent males. It is also clear that 58.7 percent of males are literate in English and Ghanaian language against 52.9 percent females.

Table 3.9: Population 11 years and older by sex, age and literacy status

Age group	None (not literate)	Literate	Total	English only	Ghanaian language only	English and Ghanaian language	English and French	English, French and Ghanaian language
Both sexes								
Total	25,200	25,353	100.0	38.8	4.6	56.1	0.3	0.2
14-Nov	588	6,115	100.0	51.2	5.3	43.1	0.2	0.1
15-19	1,102	7,120	100.0	40.7	3.3	55.6	0.2	0.1
20-24	1,829	4,386	100.0	31.7	3.5	64.6	0.1	0.2
25-29	2,351	2,688	100.0	31.4	4.9	63.1	0.4	0.1
30-34	2,683	1,536	100.0	31.3	5.3	62.8	0.2	0.5
35-39	2,414	978	100.0	30.6	7.4	61.1	0.5	0.4
40-44	2,436	659	100.0	34.3	9.0	55.8	0.5	0.5
45-49	2,125	477	100.0	30.8	8.8	59.1	1.3	-
50-54	2,020	449	100.0	28.5	6.0	64.4	0.7	0.4
55-59	1,251	277	100.0	27.8	4.7	66.1	-	1.4
60-64	1,540	221	100.0	25.3	11.3	62.9	-	0.5
65+	4,861	447	100.0	35.3	3.6	60.2	0.2	0.7
Male								
Total	10,330	13,999	100.0	36.1	4.7	58.7	0.3	0.2
10-14	354	3,213	100.0	49.1	5.3	45.3	0.2	-
15-19	526	3,698	100.0	39.7	3.7	56.4	0.1	0.1
20-24	716	2,418	100.0	29.2	3.6	66.9	0.1	0.2
25-29	923	1,551	100.0	27.4	4.3	67.8	0.5	0.1
30-34	1,078	934	100.0	28.6	3.9	66.9	0.2	0.4
35-39	977	602	100.0	28.6	7.0	63.3	0.7	0.5
40-44	973	416	100.0	31.3	8.2	59.6	0.7	0.2
45-49	852	300	100.0	28.7	8.7	61.0	1.7	-
50-54	792	281	100.0	23.5	5.3	69.8	0.7	0.7
55-59	498	178	100.0	27.5	4.5	65.7	-	2.2
60-64	608	150	100.0	20.7	15.3	64.0	-	-
65+	2,033	258	100.0	32.2	3.9	63.2	0.4	0.4
Female								
Total	14,870	11,354	100.0	42.1	4.6	52.9	0.2	0.3
10-14	234	2,902	100.0	53.5	5.2	40.7	0.2	0.3
15-19	576	3,422	100.0	41.9	2.9	54.9	0.2	0.1
20-24	1,113	1,968	100.0	34.7	3.3	61.7	0.1	0.2
25-29	1,428	1,137	100.0	36.9	5.8	56.8	0.4	0.2
30-34	1,605	602	100.0	35.4	7.5	56.3	0.2	0.7
35-39	1,437	376	100.0	33.8	8.0	57.7	0.3	0.3
40-44	1,463	243	100.0	39.5	10.3	49.4	-	0.8
45-49	1,273	177	100.0	34.5	9.0	55.9	0.6	-
50-54	1,228	168	100.0	36.9	7.1	55.4	0.6	-
55-59	753	99	100.0	28.3	5.1	66.7	-	-
60-64	932	71	100.0	35.2	2.8	60.6	-	1.4
65+	2,828	189	100.0	39.7	3.2	56.1	-	1.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6.1 Past school attendance

The data in Table 3.10 show the distribution of past school attendance for persons aged 3 years and older by sex and highest level of school attended. From the table, as at 2010, almost 1 out of every 3 educated persons (37.2%) of population aged 3 years and older in KNWD have had primary education, followed by JSS/JHS (25.8%), SSS/SHS (14.5%) and middle school education (10.3%). Those who have had secondary education are 2.8 percent, vocational/technical/commercial 1.8 percent, the lowest in the district, post middle/secondary certificate 3.2 percent and tertiary 4.5 percent.

The table further reveals that of those who have ever attending school, the proportion of males who have had primary education is 34.0 percent while that of females is 41.1 percent. The proportion of males who have attended JSS/JHS is 22.9 percent whereas that for females is 29.4 percent. Respectively, proportions of males and females who have had middle school education are 11.9 percent and 8.4 percent. Proportion of males who ever attended SSS/SHS is greater (15.6%) than that for females (13.1%). Same proportions of males and females have had secondary and vocational/technical/commercial education (1.8% each). Proportion of males who have ever attended tertiary school (6.4%) is at least thrice the proportion of females with tertiary education (2.0%).

3.6.2 Current school attendance school

Table 3.9 shows the distribution of persons 3 years and older who were in school at the time of the census by sex and level of education. From the table, a total of 27,799 persons aged 3 years and older are currently attending school. Of those attending school, more than half (53.4%) are in primary school, followed by those in JSS/JHS (19.6%) and those in nursery (10.2%). Those attending Kindergarten are 7.7 percent, SSS/SHS 7.5 percent, tertiary 1.0 percent, Post middle/secondary certificate 0.4 percent and vocational/technical/commercial 0.3 percent representing the lowest proportions.

Of the number of males who have ever attended school, the proportion of males in primary schools 68.0 percent while that of females is 53.5 percent. The proportion of males attending school who are in JSS/JHS is 11.0 percent whereas that for females is 20.1 percent. The proportion of males attending school in SSS/SHS is greater (12.0%) than that for females (6.5%). More females (0.3%) are attending vocational/technical/commercial schools than males (0.0%). Proportion of males (1.0%) attending tertiary schools is almost twice the proportion of females (0.6%) attending tertiary schools.

Table 3.10: Population 3 years and older by level of education, school attendance and sex

Level of education	Currently attending						Attended in the past					
	Both sexes		Male		Female		Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	27,799	100.0	14,867	100.0	12,932	100.0	10,516	100.0	5,822	100.0	4,694	100.0
Nursery	2,823	10.2	1,448	-	1,375	10.6	-	-	-	-	-	-
Kindergarten	2,146	7.7	1,109	-	1,037	8.0	-	-	-	-	-	-
Primary	14,841	53.4	7,926	68.0	6,915	53.5	3,909	37.2	1,978	34.0	1,931	41.1
JSS/JHS	5,437	19.6	2,835	11.0	2,602	20.1	2,713	25.8	1,332	22.9	1,381	29.4
Middle	-	-	-	3.0	-	-	1,087	10.3	691	11.9	396	8.4
SSS/SHS	2,084	7.5	1,247	12.0	837	6.5	1,522	14.5	909	15.6	613	13.1
Secondary	-	-	-	2.0	-	-	292	2.8	209	3.6	83	1.8
Vocational/Technical/ Commercial	75	0.3	40	0.0	35	0.3	192	1.8	106	1.8	86	1.8
Post middle/secondary certificate	118	0.4	70	2.0	48	0.4	333	3.2	224	3.8	109	2.3
Tertiary	275	1.0	192	1.0	83	0.6	468	4.5	373	6.4	95	2.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FOUR

ECONOMIC CHARACTERISTICS

4.1 Introduction

The development of any country is based on the production of goods and services. Critical to the production process is the human capital of the country. Although all persons irrespective of age and sex consume goods and services produced, only the working population often referred to as the 'employed' produce them. Other things being equal, the larger the employed population, the more wealth is created leading to the general well-being of the population. This chapter analyses the economic characteristics of the population aged 15 years and older in the district including the economic activity status, occupation, industry, employment status, and employment sector.

4.2 Economic Activity Status

Table 4.1 shows the economic activity status of persons aged 15 years and older by sex in Kassena Nankana West District (KNWD). From the table, the total population of persons aged 15 years and older according to the 2010 PHC was 43,850. Out of the total number, 74.0 percent was economically active and 26.0 percent not economically active. The figures suggest that there was a larger proportion of potential working population in the district.

4.3 Economically Active Population

Of the economically active population, 97.6 percent are employed and 2.4 percent are unemployed. Of those who are employed, 97.6 percent worked for at least an hour in the 7 days preceding the census night; 2.0 percent did not work but have jobs to go back to; and 0.5 percent does voluntary work without pay. For those who are unemployed, 44.4 percent are either worked before or are seeking work and are available for work and 55.6 percent are seeking work for the first time and available for work.

Of the total population of males aged 15 years and older in KNWD, 75.4 percent are economically active while the proportion of economically active females is 72.7 percent.

Table 4.1: Population 15 years and older by activity status and sex

Activity status	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	43,850	100.0	20,762	100.0	23,088	100.0
Economically active	32,434	74.0	15,646	75.4	16,788	72.7
<i>Employed</i>	31,666	97.6	15,286	97.7	16,380	97.6
<i>Worked</i>	30,891	97.6	14,886	97.4	16,005	97.7
<i>Did not work but had job to go back to</i>	625	2.0	320	2.1	305	1.9
<i>Did voluntary work without pay</i>	150	0.5	80	0.5	70	0.4
<i>Unemployed</i>	768	2.4	360	2.3	408	2.4
<i>Worked before, seeking work and available</i>	341	44.4	151	41.9	190	46.6
<i>Seeking work for the first time and available</i>	427	55.6	209	58.1	218	53.4
Economically not active	11,416	26.0	5,116	24.6	6,300	27.3
Did home duties (household chore)	2,193	19.2	588	11.5	1,605	25.5
Full time education	6,002	52.6	3,357	65.6	2,645	42.0
Pensioner/retired	104	0.9	64	1.3	40	0.6
Disabled/sick	720	6.3	350	6.8	370	5.9
Too old/young	2,005	17.6	570	11.1	1,435	22.8
Other	392	3.4	187	3.7	205	3.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 4.2 shows the distribution of the population 15 years and older in KNWD by age group, sex and activity status. It further disaggregates the data into males and females. Out of the total population of 45,850 who are 15 years and over in the district, about 72.2 percent are employed, 1.8 percent is unemployed and 26.0 percent are economically not active. The age-group with the highest proportion of employed persons is 40-44 representing 93.3 percent, 1.3 percent of them are unemployed while 5.5 percent are economically not active. In all, 73.0 Percent of males are employed compared with 70.9 percent females. Again, 27.3 percent of females are economically not active compared with 24.6 percent males.

Table 4.2: Persons 15 years and older by age economic activity status and sex

Sex/age group	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	43,850	100.0	31,666	72.2	768	1.8	11,416	26.0
15-19	8,222	100.0	3,483	42.4	98	1.2	4,641	56.4
20-24	6,215	100.0	3,684	59.3	211	3.4	2,320	37.3
25-29	5,039	100.0	3,999	79.4	177	3.5	863	17.1
30-34	4,219	100.0	3,746	88.8	94	2.2	379	9.0
35-39	3,392	100.0	3,109	91.7	48	1.4	235	6.9
40-44	3,095	100.0	2,887	93.3	39	1.3	169	5.5
45-49	2,602	100.0	2,426	93.2	27	1.0	149	5.7
50-54	2,469	100.0	2,273	92.1	22	0.9	174	7.0
55-59	1,528	100.0	1,344	88.0	9	0.6	175	11.5
60-64	1,761	100.0	1,393	79.1	26	1.5	342	19.4
65+	5,308	100.0	3,322	62.6	17	0.3	1,969	37.1
Male								
Total	20,762	100.0	15,286	73.6	360	1.7	5,116	24.6
15-19	4,224	100.0	1,856	43.9	37	0.9	2,331	55.2
20-24	3,134	100.0	1,821	58.1	98	3.1	1,215	38.8
25-29	2,474	100.0	1,949	78.8	94	3.8	431	17.4
30-34	2,012	100.0	1,796	89.3	50	2.5	166	8.3
35-39	1,579	100.0	1,465	92.8	22	1.4	92	5.8
40-44	1,389	100.0	1,309	94.2	21	1.5	59	4.2
45-49	1,152	100.0	1,100	95.5	11	1.0	41	3.6
50-54	1,073	100.0	1,022	95.2	9	0.8	42	3.9
55-59	676	100.0	629	93.0	1	0.1	46	6.8
60-64	758	100.0	649	85.6	10	1.3	99	13.1
65+	2,291	100.0	1,690	73.8	7	0.3	594	25.9
Female								
Total	23,088	100.0	16,380	70.9	408	1.8	6,300	27.3
15-19	3,998	100.0	1,627	40.7	61	1.5	2,310	57.8
20-24	3,081	100.0	1,863	60.5	113	3.7	1,105	35.9
25-29	2,565	100.0	2,050	79.9	83	3.2	432	16.8
30-34	2,207	100.0	1,950	88.4	44	2.0	213	9.7
35-39	1,813	100.0	1,644	90.7	26	1.4	143	7.9
40-44	1,706	100.0	1,578	92.5	18	1.1	110	6.4
45-49	1,450	100.0	1,326	91.4	16	1.1	108	7.4
50-54	1,396	100.0	1,251	89.6	13	0.9	132	9.5
55-59	852	100.0	715	83.9	8	0.9	129	15.1
60-64	1,003	100.0	744	74.2	16	1.6	243	24.2
65+	3,017	100.0	1,632	54.1	10	0.3	1,375	45.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.3 Occupation

The occupation data presented in Table 4.3 show that 81.7 percent of employed population aged 15 years and older are skilled agricultural forestry and fishery workers, 5.9 percent are craft and related trades workers, 5.6 percent service and sales workers and 2.2 percent professionals.

The largest proportion (85.5%) of the employed male population aged 15 years and older are skilled agricultural forestry and fishery workers, 3.2 percent are professionals, 2.8 percent are service and sales workers and 2.7 percent are craft related trades workers. For employed

females aged 15 years and older, just as males, majority (78.1%) are skilled agricultural forestry and fishery workers, 8.9 percent craft and related trades workers and 8.2 percent service and sales workers while 1.3 percent are professionals.

Table 4.3: Employed population 15 years and older by occupation and sex

Occupation	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	31,666	100.0	15,286	100.0	16,380	100.0
Managers	173	0.5	80	0.5	93	0.6
Professionals	697	2.2	488	3.2	209	1.3
Technicians and associate professionals	198	0.6	153	1.0	45	0.3
Clerical support workers	75	0.2	58	0.4	17	0.1
Service and sales workers	1,772	5.6	433	2.8	1,339	8.2
Skilled agricultural forestry and fishery workers	25,865	81.7	13,076	85.5	12,789	78.1
Craft and related trades workers	1,879	5.9	415	2.7	1,464	8.9
Plant and machine operators and assemblers	360	1.1	259	1.7	101	0.6
Elementary occupations	609	1.9	295	1.9	314	1.9
Other occupations	38	0.1	29	0.2	9	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.4 Industry

Table 4.4 shows the proportions of employed males and females in the various industries in KNWD. Agriculture, including forestry and fishing industry, employs the largest percentage (81.0%) of the work force aged 15 years and older in KNWD. After agriculture, the next major industry, although employs a relatively lower proportion, is wholesale and retail; repair of motor vehicles and motorcycles employing (5.0%), manufacturing (4.9%) and education (2.2%). A small proportion of the population works in other industries accounting for less than 2.0 percent each.

The proportion of employed male population aged 15 years and older in agriculture including forestry and fishing is 84.7 percent, 3.5 percent in wholesale and retail; repair of motor vehicles and motorcycles, 1.5 percent in manufacturing and 1.3 percent in transportation. Less than one percent of employed male population is in each of the other industries as can be seen from the table.

Table 4.4: Employed population 15 years and older by industry and sex

Industry	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	31,666	100.0	15,286	100.0	16,380	100.0
Agriculture forestry and fishing	25,665	81.0	12,947	84.7	12,718	77.6
Mining and quarrying	172	0.5	95	0.6	77	0.5
Manufacturing	1,541	4.9	222	1.5	1,319	8.1
Electricity gas steam and air conditioning supply	5	0.0	3	0.0	2	0.0
Water supply; sewerage waste management and remediation activities	69	0.2	41	0.3	28	0.2
Construction	148	0.5	130	0.9	18	0.1
Wholesale and retail; repair of motor vehicles and motorcycles	1,588	5.0	537	3.5	1,051	6.4
Transportation and storage	213	0.7	198	1.3	15	0.1
Accommodation and food service activities	583	1.8	55	0.4	528	3.2
Information and communication	19	0.1	14	0.1	5	0.0
Financial and insurance activities	38	0.1	33	0.2	5	0.0
Real estate activities	0	0.0	0	0.0	0	0.0
Professional scientific and technical activities	71	0.2	31	0.2	40	0.2
Administrative and support service activities	75	0.2	62	0.4	13	0.1
Public administration and defence; compulsory social security	194	0.6	158	1.0	36	0.2
Education	682	2.2	496	3.2	186	1.1
Human health and social work activities	173	0.5	102	0.7	71	0.4
Arts entertainment and recreation	9	0.0	8	0.1	1	0.0
Other service activities	343	1.1	118	0.8	225	1.4
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	78	0.2	36	0.2	42	0.3
Activities of extraterritorial organizations and bodies	0	0.0	0	0.0	0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.5 Employment Status

Presented in Table 4.5 is information on employed population 15 years and older by employment status and sex. The table shows that more than half (56.9%) of the population aged 15 years and older in KNWD are self-employed without employee(s), contributing family workers constitute 27.6 percent and those who are employees are 10.3 percent. A small proportion is self-employed with employees (2.0%), casual workers (1.3%), apprentice (1.1%), domestic employees (house helps) (0.5%), and others (0.1%).

For employed males and females aged 15 years and older, majority (more than half each) are self-employed without employee(s) (57.7% of males and 56.2% of females), followed by those who are contributing family workers (23.1% of males and 31.7% of females) with 13.9 percent of males and 7.1 percent of females being employees. The proportion of employed males who work as casual workers is 1.6 percent whereas that of females is 1.1 percent. The proportion of employed males who are self-employed with employee(s) is 2.1 percent and that of females is 1.9 percent.

Table 4.5: Employed population 15 years and older by employment status and sex

Employment status	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	45,533	100.0	21,625	100.0	23,908	100.0
Employee	4,709	10.3	3,008	13.9	1,701	7.1
Self-employed without employee(s)	25,919	56.9	12,482	57.7	13,437	56.2
Self-employed with employee(s)	921	2.0	460	2.1	461	1.9
Casual worker	604	1.3	352	1.6	252	1.1
Contributing family worker	12,576	27.6	4,999	23.1	7,577	31.7
Apprentice	496	1.1	180	0.8	316	1.3
Domestic employee (house help)	245	0.5	115	0.5	130	0.5
Other	63	0.1	29	0.1	34	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.6 Employment Sector

Table 4.6 shows employed population aged 15 years and older by employment sector and sex in KNWD. The proportions of both sexes employed in public, private formal, private informal, semi-public/parastatal, NGOs and other international organisations are shown. From the table, majority (95.2%) of employed population aged 15 years and older work in the private informal sector, followed by those employed by government (public sector) (3.7%). The proportion of the population under consideration employed in the other sectors is less than 1.0 percent each.

Of all employed males aged 15 years and older, as high as 93.2 percent work in private informal sector while 5.6 percent work in the public sector. Those who work in the other sectors constitute less than 1.0 percent each. For employed women population aged 15 years and older, like the males, most of them (97.0%) work in private informal sector and only 1.9 percent in public sector. All other sectors contribute less than one percent each.

Table 4.6: Employed population 15 years and older by employment sector and sex

Employment sector	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	31,666	100	15,286	100	16,380	100
Public (Government)	1,159	3.7	852	5.6	307	1.9
Private Formal	243	0.8	140	0.9	103	0.6
Private Informal	30,140	95.2	14,244	93.2	15,896	97
Semi-Public/Parastatal	16	0.1	6	0	10	0.1
NGOs (Local and International)	104	0.3	43	0.3	61	0.4
Other International Organisations	4	0	1	0	3	0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FIVE

INFORMATION COMMUNICATION TECHNOLOGY

5.1 Introduction

The use of Information Communications Technologies (ICTs) by individuals and corporate organisations in our daily social and economic life has almost become imperative in this era of rapidly globalizing world that is highly driven by information technology. In Ghana, the recognition of the importance of ICTs is manifested in such actions as the formulation and deployment of institutional and regulatory framework for managing the sector, development of national ICT infrastructure, promotion of the use of ICT in all sectors, implementation of e-governance in all government institutions and the construction of national and regional data centres (Ghana Statistical Service, 2013).

In order to obtain data on the state of ownership and use of ICTs in the district, questions on ownership of mobile phones and use of internet by individuals and ownership of desktop/laptop computers. This chapter looks at the individual ownership of mobile phones, the use of internet among the population aged 12 years and above and ownership of desktop/laptop computers by members of the household by sex of household head.

5.2 Ownership of Mobile Phones (Individual)

Table 5.1 shows information on population aged 12 years and older owning mobile phones and using internet by sex, in the district. From the table, the proportion of persons aged 12 years and older owning mobile phone is 19.4 percent.. The male proportion with mobile phones is 24.1 percent compared with 15.0 percent females.

Table 5.1: Population 12 years and older by mobile phone ownership, internet facility usage, and sex

Sex	Population 12 years and older		Population having mobile phone		Population using internet facility	
	Number	Percent	Number	Percent	Number	Percent
Total	48,907	100.0	9,484	19.4	574	1.2
Male	23,445	47.9	5,658	24.1	411	1.8
Female	25,462	52.1	3,826	15.0	163	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.3 Use of Internet

Results of the 2010 PHC show that, for the population of 48,907 aged 12 years and older in KNWD, only 1.2 percent use the internet (Table 5.1). This means approximately only one out of every 100 persons of the population aged 12 years and older uses the internet; the number is very low compared to the total population. Of this, the proportion of males is 1.8 percent with a much lower percentage of females, constituting only 0.6 percent.

5.4 Household Ownership of Desktop or Laptop Computer

Table 5.2 Presents data on the percentage of male and female headed households having desktop/laptop computers. As shown in the table, out of the total number of households 12,813, only 169 (representing 1.3% of total households) households have desktop/laptop computers with more male headed households (1.5%) having desktop/laptop computers than female headed households (0.9%).

Table 5.2: Households having desktop/laptop computers and sex of head

Sex	Number of households		Households having desktop/laptop computers	
	Number	Percent	Number	Percent
Total	12,813	100.0	169	1.3
Male	8,958	69.9	133	1.5
Female	3,855	30.1	36	0.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SIX

DISABILITY

6.1 Introduction

According to GSS (2013), disability is inability to or being restricted in the performance of specific tasks/activities due to loss of function of some part of the body as a result of impairment or malformation.

Disability, in whatever form or type, reduces one's potential ability to function fully thus people living with disabilities (PWDs) are often regarded as unproductive. This sometimes results in unnecessary discrimination against PWDs. Ghana in an attempt to guarantee the rights of PWDs, aside making a constitutional provision for general fundamental human rights which include PWDs in the 1992 constitution of the republic of Ghana, ratified and adopted the Convention on the Rights of PWDs and the African Decade of the Disabled Persons, all seeking to protect the rights of all PWDs and to promote and respect their inherent dignity (GSS, 2013).

In order to get data on population with disability, the 2010 PHC asked questions on specific disabilities, namely sight, physical (mobility), emotional, hearing, speech intellectual and other forms of disability or conditions prevailing in the country.

This chapter analyses the distribution of the population of KNWD by disability type, sex and level of education. It is however worth noting that within the population with disability, some PWDs reported multiple disability conditions hence the computed percentages of disability types in the tables under this chapter may not necessarily add up to 100 percent.

6.2 Population with Disability

Table 6.1 shows the distribution of PWDs by locality type in KNWD of Upper East Region. The data shows that the percentage of PWDs in the district is 6.3 percent. Out of the total population with disability, those with sight disabilities constitute 43.8 percent, emotional 20.7 percent, hearing 20.1 percent, physical 18.8 percent, intellectual 10.0 percent and other forms of disabilities account for 5.1 percent.

Out of the total number of males recorded in the district, 6.3 percent have disabilities. Again, of the male population with disabilities, majority have sight disabilities (40.4%), followed by those with emotional challenges (20.3%), physical (19.4%) and hearing (17.5%). The proportions of population with speech and intellectual disorders were almost equal, 11.8 percent and 11.2 percent respectively.

For females with disabilities, those with sight disorders (47.1%) are in the majority. Those with hearing problems account for 22.6 percent while 21.0 percent have emotional disabilities. Physical disability accounts for 18.2 percent and intellectual 9.1 percent.

6.4 Distribution by Type of Locality

Table 6.1 shows that visual or sight disability is the most common type of disability among PWDs in both urban (46.7%) and rural areas (43.3%), followed by physical disability in urban areas (18.6%) and in rural areas (18.8%). However, the percentage of PWDs with

hearing disability is higher in rural areas (20.5%) than in urban localities (17.9%). The proportion of PWDs with emotional challenges is lower in urban (15.6%) than in rural (21.5%) localities. Intellectual disability is greater (12.3%) in urban areas than in rural areas (9.8%).

Table 6.1 further shows that visual or sight impairment is the most common type of disability among male population in both urban (41.3%) and rural (40.2%) areas. In the urban areas, physical disability (19.1%) is the next most prevalent disability condition among males after sight, whereas in the rural areas it is the third and accounts for 19.5 percent of the male population with disability. Hearing disability accounts for 16.3 percent of urban male population with disability and 17.6 percent of rural male population with disability.

Table 6.1: Population by type of locality and sex

Disability type	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All localities						
Total	70,667	100.0	34,747	100.0	35,920	100.0
Without disability	66,223	93.7	32,564	93.7	33,659	93.7
With disability	4,444	6.3	2,183	6.3	2,261	6.3
Sight	1,946	43.8	881	40.4	1,065	47.1
Hearing	892	20.1	381	17.5	511	22.6
Speech	439	9.9	258	11.8	181	8.0
Physical	835	18.8	424	19.4	411	18.2
Intellect	450	10.1	245	11.2	205	9.1
Emotion	918	20.7	444	20.3	474	21.0
Other	225	5.1	124	5.7	101	4.5
Urban						
Total	9,875	100.0	4,670	100.0	5,205	100.0
Without disability	9,214	93.3	4,382	93.8	4,832	92.8
With disability	661	6.7	288	6.2	373	7.2
Sight	309	46.7	119	41.3	190	50.9
Hearing	118	17.9	47	16.3	71	19.0
Speech	51	7.7	33	11.5	18	4.8
Physical	123	18.6	55	19.1	68	18.2
Intellect	81	12.3	42	14.6	39	10.5
Emotion	103	15.6	44	15.3	59	15.8
Other	51	7.7	27	9.4	24	6.4
Rural						
Total	60,792	100.0	30,077	100.0	30,715	100.0
Without disability	57,009	93.8	28,182	93.7	28,827	93.9
With disability	3,783	6.2	1,895	6.3	1,888	6.1
Sight	1,637	43.3	762	40.2	875	46.3
Hearing	774	20.5	334	17.6	440	23.3
Speech	388	10.3	225	11.9	163	8.6
Physical	712	18.8	369	19.5	343	18.2
Intellect	369	9.8	203	10.7	166	8.8
Emotion	815	21.5	400	21.1	415	22.0
Other	174	4.6	97	5.1	77	4.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

Visual or sight disability is the most common type of disability among the female population in both urban (50.9%) and rural (46.3%) areas, followed by hearing disability in urban areas (19.0%) and in rural areas (23.3%) . However the proportion of urban females with physical disability (18.2%) is the same for both localities.

6.5 Disability and Activity

Table 6.2 provides an analysis of Persons 15 years and Older with Disability by Sex and economic activity status in Kassena Nankana West District. Out of the total of 3,698 persons with disability in the district, 2,380 constituting 64.4 percent are employed, 1.5 percent are unemployed while 26.9 percent are economically not active.

Among the various types of disabilities, persons with emotional disability reported the highest proportions of the employed (78.1%), about 0.9 percent of them are unemployed and 41.3 percent are economically not active.

Table 6.2: Persons 15 years and older with disability by economic activity status and sex

Sex/Disability type	All status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	43,850	100.0	31,666	72.2	768	1.8	11,416	26.0
No disability	40,152	100.0	29,286	72.9	728	1.8	10,138	25.2
With a disability	3,698	100.0	2,380	64.4	40	1.1	1,278	34.6
Sight	1,778	100.0	1,073	60.3	9	0.5	696	39.1
Hearing	740	100.0	440	59.5	5	0.7	295	39.9
Speech	289	100.0	186	64.4	1	0.3	102	35.3
Physical	737	100.0	412	55.9	10	1.4	315	42.7
Intellectual	341	100.0	190	55.7	9	2.6	142	41.6
Emotional	735	100.0	526	71.6	11	1.5	198	26.9
Other	163	100.0	105	64.4	1	0.6	57	35.0
Male								
Total	20,762	100.0	15,286	73.6	360	1.7	5,116	24.6
No disability	18,991	100.0	14,050	74.0	341	1.8	4,600	24.2
With a disability	1,771	100.0	1,236	69.8	19	1.1	516	29.1
Sight	783	100.0	522	66.7	1	0.1	260	33.2
Hearing	297	100.0	201	67.7	2	0.7	94	31.6
Speech	170	100.0	124	72.9	0	0.0	46	27.1
Physical	363	100.0	234	64.5	5	1.4	124	34.2
Intellectual	176	100.0	103	58.5	7	4.0	66	37.5
Emotional	360	100.0	269	74.7	6	1.7	85	23.6
Other	88	100.0	54	61.4	0	0.0	34	38.6
Female								
Total	23,088	100.0	16,380	70.9	408	1.8	6,300	27.3
No disability	21,161	100.0	15,236	72.0	387	1.8	5,538	26.2
With a disability	1,927	100.0	1,144	59.4	21	1.1	762	39.5
Sight	995	100.0	551	55.4	8	0.8	436	43.8
Hearing	443	100.0	239	54.0	3	0.7	201	45.4
Speech	119	100.0	62	52.1	1	0.8	56	47.1
Physical	374	100.0	178	47.6	5	1.3	191	51.1
Intellectual	165	100.0	87	52.7	2	1.2	76	46.1
Emotional	375	100.0	257	68.5	5	1.3	113	30.1
Other	75	100.0	51	68.0	1	1.3	23	30.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

With respect to sex and type of disability, the category of male PWDs with the majority of the employed is emotional disability accounting for 74.4 percent, 1.7 percent is unemployed and 23.6 percent are economically not active. In the case of the females, emotional disability also accounts for the highest proportion of the employed constituting 68.5 percent, with 1.3 percent unemployed while 30.1 percent are economically not active. While persons with intellectual disability form the least proportion of males employed (58.5%), among the females, it is physical disability accounting for 47.6 percent.

6.6 Disability, Education and Literacy

Table 6.3 shows population 3 years and older by sex, disability type and level of education. Out of a total population of 4,335 PWDs three years and older, 64.0 percent have never attended school. Of the proportion with formal education, 26.7 percent have basic education (Primary/Middle/JHS/JSS) while 5.9 percent of PWDs have attained secondary or higher education. Majority of PWDs with emotional and other disabilities accounting for 32.9% are in the majority of those with basic education. Approximately 7.8 percent of all male PWDs have attended Secondary or Higher education compared with 4.1 percent females in the district. There are more female PWDs who have never attended school 69.8 percent compared with their male counterparts who constitute 57.9 percent.

Table 6.3: Population 3 years and older by sex, disability type and level of education

Sex/disability type	Number					Percent				
	Total	Never	Pre-Prim	Basic	Sec/SHS and higher	Total	Never	Pre-Prim	Basic	Sec/SHS and higher
Total	65,860	27,545	4,969	27,987	5,359	100.0	41.8	7.5	42.5	8.1
No disability	61,525	24,771	4,824	26,828	5,102	100.0	40.3	7.8	43.6	8.3
With a disability	4,335	2,774	145	1,159	257	100.0	64.0	3.3	26.7	5.9
Sight	1,921	1,426	39	391	65	100.0	74.2	2.0	20.4	3.4
Hearing	879	603	28	216	32	100.0	68.6	3.2	24.6	3.6
Speech	411	229	29	125	28	100.0	55.7	7.1	30.4	6.8
Physical	826	590	13	177	46	100.0	71.4	1.6	21.4	5.6
Intellectual	441	265	14	131	31	100.0	60.1	3.2	29.7	7.0
Emotional	882	484	31	290	77	100.0	54.9	3.5	32.9	8.7
Other	213	117	13	70	13	100.0	54.9	6.1	32.9	6.1
Male										
Total	32,315	11,626	2,557	14,762	3,370	100.0	36.0	7.9	45.7	10.4
No disability	30,187	10,393	2,473	14,117	3,204	100.0	34.4	8.2	46.8	10.6
With a disability	2,128	1,233	84	645	166	100.0	57.9	3.9	30.3	7.8
Sight	869	597	25	208	39	100.0	68.7	2.9	23.9	4.5
Hearing	377	216	17	127	17	100.0	57.3	4.5	33.7	4.5
Speech	242	123	16	80	23	100.0	50.8	6.6	33.1	9.5
Physical	420	266	8	107	39	100.0	63.3	1.9	25.5	9.3
Intellectual	241	141	9	72	19	100.0	58.5	3.7	29.9	7.9
Emotional	430	220	13	153	44	100.0	51.2	3.0	35.6	10.2
Other	115	57	9	38	11	100.0	49.6	7.8	33.0	9.6
Female										
Total	33,545	15,919	2,412	13,225	1,989	100.0	47.5	7.2	39.4	5.9
No disability	31,338	14,378	2,351	12,711	1,898	100.0	45.9	7.5	40.6	6.1
With a disability	2,207	1,541	61	514	91	100.0	69.8	2.8	23.3	4.1
Sight	1,052	829	14	183	26	100.0	78.8	1.3	17.4	2.5
Hearing	502	387	11	89	15	100.0	77.1	2.2	17.7	3.0
Speech	169	106	13	45	5	100.0	62.7	7.7	26.6	3.0
Physical	406	324	5	70	7	100.0	79.8	1.2	17.2	1.7
Intellectual	200	124	5	59	12	100.0	62.0	2.5	29.5	6.0
Emotional	452	264	18	137	33	100.0	58.4	4.0	30.3	7.3
Other	98	60	4	32	2	100.0	61.2	4.1	32.7	2.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SEVEN

AGRICULTURAL ACTIVITIES

7.1 Introduction

The 2010 PHC covered agriculture as one of the modules for the first time in the history of national censuses in Ghana. Ghana is predominantly an agricultural country with the sector providing major income generating activities for most of the population and contributing to about 30 percent of Gross Domestic Product (GSS, 2013).

Detailed information was collected on the nature and characteristics of the sector and population involved. The census found that overall, 45.8 percent and 83.7 percent of households are engaged in agriculture in Ghana and Upper East Region respectively (GSS, 2013).

This chapter examines the distribution of agricultural population and households in KNWD by agricultural activities namely, crop farming, tree planting, livestock rearing and fish farming.

7.2 Households in Agriculture

Major agricultural activities engaged in by households in the district are crop farming and livestock rearing. Table 7.1 shows the distribution of agricultural households in KNWD by agricultural activity and types of locality (urban-rural residence). Households engaged in agriculture constitute 90.7 percent of total households in the district and non-agricultural households account for only 9.3 percent. The figures suggest the economy of the district is predominantly agrarian. Of the households engaged in agriculture, majority (98.2%) are into crop farming, followed by those into livestock rearing (78.0%). Only a small proportion of the households engaged in agriculture do tree planting (0.9%) and fish farming (aquaculture) (0.1%).

In urban areas, households engaged in agriculture are 75.0 percent and 93.4 percent in rural areas (Table 7.1). Crop farming is done by most households (95.4%) in the urban areas and in rural areas (98.6%), followed by those into livestock rearing accounting for 67.0 percent of households in urban areas and 79.6 percent of rural households. A small proportion of households in urban (2.0%) and rural (0.8%) are involved in tree growing. For fish farming, very few households are into it in both urban and rural areas (0.1% each). Except for fish farming, the rural proportion in all other areas of agricultural households is greater than those of urban areas, indicating that agriculture is predominantly rural in KNWD.

Table 7.1: Households by agricultural activities and locality

Agricultural activity	Total		Urban		Rural	
	Number	Percent	Number	Percent	Number	Percent
Total households	12,813	100.0	1,968	100.0	10,845	100.0
Households engaged in agriculture	11,616	90.7	1,484	75.4	10,132	93.4
Households not engaged in agriculture	1,197	9.3	484	24.6	713	6.6
Crop farming	11,409	98.2	1,416	95.4	9,993	98.6
Tree planting	106	0.9	30	2.0	76	0.8
Livestock rearing	9,057	78.0	995	67.0	8,062	79.6
Fish farming	9	0.1	2	0.1	7	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

7.3 Types of Farming Activities

Crop farming and livestock rearing are the main agricultural activities in the district. Livestock rearing was the second commonest agricultural activity after crop farming. Fish farming and tree growing are uncommon activity in agricultural households. According to the results, only nine households (0.1%) and 106 (0.9%) of the agricultural households are engaged in fish farming and tree growing respectively across the entire district (Table 7.1). The low proportions of fish farming recorded in both urban and rural areas is probably because many households are unaware of fish farming or have not taken interest in the activity.

Table 7.2 shows the types of livestock reared, the numbers and the average number of animals per keeper. Among the traditional livestock (sheep, goats, cattle and pig), most people rear goats (30.7% of keepers) followed by chicken (23.5% of keepers) and sheep (20.4% of keepers). Although most livestock keepers kept goats, the average animal per goat keeper is the same as that for cattle, 9 animals each, but less than that for pigs (11 animals per keeper).

In the birds category, (chicken, turkey, guinea fowl, dove, and duck), the average number per holder ranges from 6 turkeys to 19 chickens. The non-traditional livestock (rabbit, grasscutter, and ostrich) are not reared by many households.

Table 7.2: Distribution of livestock, other animals and keepers

Livestock	Animals		Keepers		Average Animal per Keeper
	Number	Percent	Number	Percent	
All livestock	276,664	100.0	23,331	100.0	12
Beehives	307	0.1	44	0.2	7
Cattle	29,245	10.6	3,084	13.2	9
Chicken	102,350	37.0	5,488	23.5	19
Dove	73	0.0	5	0.0	15
Duck	704	0.3	48	0.2	15
Goat	64,883	23.5	7,155	30.7	9
Grass-cutter	232	0.1	30	0.1	8
Guinea fowl	29,698	10.7	1,670	7.2	18
Ostrich	0	0.0	0	0.0	0
Pig	7,787	2.8	720	3.1	11
Rabbit	497	0.2	51	0.2	10
Sheep	39,002	14.1	4,765	20.4	8
Silk worm	37	0.0	1	0.0	37
Snail	0	0.0	0	0.0	0
Turkey	57	0.0	9	0.0	6
Other	1,088	0.4	253	1.1	4
Fish farming	40	0.0	5	0.0	8
Inland fishing	30	0.0	1	0.0	30
Marine fishing	634	0.2	2	0.0	317
Other	1,088	0.4	253	1.1	4
Marine fishing	634	0.2	2	0.0	317

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER EIGHT

HOUSING CONDITIONS

8.1 Introduction

Shelter constitutes an essential basic need of humankind. The type of dwellings and housing facilities used by a population can be indicative of their general wellbeing and socio-economic status. As a result, the Ghana shared growth and development agenda policy of 2010, recognised the need for increase in access of population to affordable, safe and adequate shelter and housing (NDPC, 2010).

The 2010 population and housing census provided an official count of all structures/dwelling units in the district and collected information on a variety of housing characteristics: the type of dwelling, main house construction materials, occupancy status; waste disposal methods, utilities and household facilities.

The findings of the analyses will help inform housing and human settlement programmes and policy directions, monitor and evaluate housing conditions and needs of the population in the district within the context of MDG7.

8.2 Housing Stock

Table 8.1 shows data on housing stock in Ghana, Upper East Region and KNWD. It further shows the housing stock in the district by type of locality (urban-rural). From the table, there are 69,965 persons living in a total of 7,640 residential dwelling units, giving an average figure of 9.2 persons per house. The dwelling units include any type of shelter used as living quarters, such as flats, apartments, enclosed compound, huts, kiosks, cargo containers, and tents. A total of 12,813 households occupy the 7,640 dwelling units, also giving an average figure of 1.7 households per house with an average household size of 5.5.

Average household size for the region is 5.8, slightly higher than the district figure of 5.5. The district population per house is 9.2 slightly greater than the regional figure of 9.1 and national, 7.1.

In urban areas of the district, there are 9,792 persons living in a total of 1,063 residential dwelling units, giving an average figure of 9.2 persons per house. A total of 1,968 households occupy 1,063 dwelling units. In the rural areas, there are 60,173 persons living in a total of 6,577 residential dwelling units, signifying an average of 9.1 persons per house. A total of 10,845 households occupy the 6,577 dwelling units, averaging 1.9 households per house with an average household size of 5.5.

Table 8.1: Stock of houses and households by type of locality

Categories	Total country	Region	District	Urban	Rural
Total population	24,658,823	1,046,545	70,667	9,875	60,792
Total household population	24,076,327	1,034,704	69,965	9,792	60,173
Number of houses	3,392,745	114,034	7,640	1,063	6,577
Number of households	5,467,054	177,629	12,813	1,968	10,845
Average households per house	1.6	1.6	1.7	1.9	1.6
Population per house*	7.1	9.1	9.2	9.2	9.1
Average household size	4.4	5.8	5.5	5	5.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3 Type of Dwelling, Holding and Tenancy Arrangement

This section examines the type of dwellings used by households and the associated tenancy arrangements. It focuses on the types of occupied dwellings, ownership status of dwelling by sex of household head and type of locality.

8.3.1 Holding and tenancy arrangement

Table 8.2 shows that in KNWD, most households (92.2%) reside in dwellings owned by a household member. Households that live in dwellings owned by non-household member relatives are 3.0 percent and 2.4 percent live in other private individual dwellings. Households in public/government dwellings constitute 1.2 percent and purchased dwelling units constitute 1.0 percent. Less than 1.0 percent lives in dwelling units owned by private employers, other private agencies and other ownership type.

Most male headed households in the district (93.0%) reside in dwelling units owned by a household member. Majority of female headed households (90.2%) also live in dwellings owned by a household member. Less male headed households (2.1%) reside in dwellings owned by relatives who are not household members than female headed households (4.9%). Purchased dwellings have equal proportions of male headed and female headed households residing in them. (1.0 percent).

At least three out of four households (75.2%) in urban areas reside in dwellings owned by a household member whereas in rural areas it is 95.3 percent. In urban areas, 10.5 percent of households live in dwellings owned by other private individuals, followed by 7.7 percent in dwellings owned by relatives who are not household members and 3.9 percent in public/government owned dwelling units. However, in the rural areas 2.1 percent of households reside in dwelling units owned by relatives who not household members.

Table 8.2: Ownership status of dwelling by sex of household head and type of locality

Ownership status	Total		District					
	Country	Region	Total		Male headed	Female headed	Urban	Rural
			Number	Percent				
Total	5,467,054	177,629	12,813	100.0	100.0	100.0	100.0	100.0
Owned by household member	2,883,236	154,016	11,812	92.2	93.0	90.2	75.2	95.3
Being purchased (e.g. mortgage)	45,630	721	128	1.0	1.0	1.0	1.9	0.8
Relative not a household member	851,630	6,035	379	3.0	2.1	4.9	7.7	2.1
Other private individual	1,439,021	12,181	307	2.4	2.4	2.5	10.5	0.9
Private employer	83,610	480	17	0.1	0.1	0.3	0.7	0.0
Other private agency	21,123	267	11	0.1	0.1	0.1	0.2	0.1
Public/Government ownership	118,804	3,686	155	1.2	1.3	1.0	3.9	0.7
Other	24,000	243	4	0.0	0.0	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3.2 Types of occupied dwelling units

In Table 8.3, data from the 2010 Population and Housing Census indicate that majority of houses in KNWD are compound houses (69.2%). The next most common is separate houses (15.9%) and semi-detached houses (6.0%). Huts/buildings (same compound) constitute 5.8 percent whereas hut/buildings (different compound) form 2.0 percent. Such houses/dwellings as flat/apartments, tent, improvised home (kiosk/container), living quarters attached to office/shop and uncompleted buildings are in the least category accounting for 1.0 percent each.

Of all male headed households, 68.6 percent live in compound houses while for female headed households, it is 70.2 percent. Almost equal proportions of male and female headed households (15.9 percent and 15.7 percent) respectively - live in separate houses. Six percent (6.0%) each of male and female headed households live in semi-detached houses.

Further from the table, in both urban and rural areas of KNWD, compound houses are the most common type of dwelling units, accounting for 72.7 percent and 68.6 percent respectively. While separate houses constitute 12.6 percent in urban dwellings, its proportion in rural area is 16.5 percent.

Table 8.3: Type of occupied dwelling unit by sex of household head and type of locality

Type of dwelling	Total		District					
	Country	Region	Total		Male headed	Female headed	Urban	Rural
			Number	Percent				
Total	5,467,054	177,629	12,813	100.0	100.0	100.0	100.0	100.0
Separate house	1,471,391	29,787	2,035	15.9	15.9	15.7	12.6	16.5
Semi-detached house	391,548	6,836	771	6.0	6.0	6.0	11.6	5.0
Flat/apartment	256,355	1,459	72	0.6	0.5	0.7	1.1	0.5
Compound house (rooms)	2,942,147	103,666	8,868	69.2	68.8	70.2	72.7	68.6
Huts/buildings (same compound)	170,957	22,735	745	5.8	6.4	4.5	1.4	6.6
Huts/buildings (different compound)	36,410	11,616	251	2.0	1.9	2.2	0.3	2.3
Tent	10,343	300	26	0.2	0.2	0.3	0.1	0.2
Improvised home (kiosk/container etc)	90,934	183	8	0.1	0.1	0.1	0.1	0.1
Living quarters attached to office/shop	20,499	348	20	0.2	0.2	0.1	0.1	0.2
Uncompleted building	66,624	554	13	0.1	0.1	0.1	0.2	0.1
Other	9,846	145	4	0.0	0.0	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4 Construction Materials

This section presents an analysis of the various materials used for outer wall, floor and roof of dwelling units in KNWD.

8.4.1 Materials for outer wall

Majority of dwelling units (85.3%) in KNWD used mud brick/earth as main construction material for outer wall and 12.1 percent used cement blocks/concrete (Table 8.4). Only 1.0 percent used wood. Metal sheet; stone; burnt bricks; landcrete; bamboo; palm leaf/thatch and others account for only one percent each.

In both urban and rural areas of the district, mud brick/earth is the predominantly used construction material for outer walls of both occupied and vacant dwelling units. It accounts for 90.0 percent of all rural dwelling units and more than half (59.2%) of urban dwelling units. After mud brick/earth, the next most used material for outer wall of dwelling units is cement blocks/concrete, used by 7.1 percent of rural dwellings and 39.7 percent of urban dwelling units. The proportion of dwellings using mud brick/earth as main material for outer wall in rural localities is higher probably because mud compared to cement is relatively cheaper and affordable to the presumably poorer rural population.

Table 8.4: Main construction material for outer wall of dwelling unit by type of locality

Material for outer wall	Total		District			
	Country	Region	Total		Urban	Rural
			Number	Percent		
Total	5,817,607	182,845	12,978	100.0	100.0	100.0
Mud brick/earth	1,991,540	147,624	11,069	85.3	59.2	90.0
Wood	200,594	1,606	134	1.0	0.1	1.2
Metal sheet/slate/asbestos	43,708	855	69	0.5	0.6	0.5
Stone	11,330	372	26	0.2	0.1	0.2
Burnt bricks	38,237	233	9	0.1	0.0	0.1
Cement blocks/concrete	3,342,462	29,321	1,566	12.1	39.7	7.1
Landcrete	104,270	1,890	27	0.2	0.0	0.2
Bamboo	8,206	54	1	0.0	0.1	0.0
Palm leaf/thatch (grass)/raffia	38,054	435	50	0.4	0.3	0.4
Other	39,206	455	27	0.2	0.1	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.2 Materials for floor

Table 8.5 shows the proportions of main construction materials used for the floors of the dwellings in the district. Majority of dwelling units (up to 57.2%) in KNWD use cement/concrete for the construction of the floor of the house, 40.8 percent used earth/mud and very few (0.8%) use ceramic/porcelain/granite/marble tiles. A total of 0.5 percent used stone and only 0.1 percent used burnt brick.

Comparing the urban and rural figures one can see that the highest proportion of urban dwellings (87.9%) used cement/concrete as the main construction material for the floor, 10.1 percent used earth/mud and 1.3 percent used ceramic/porcelain/granite/marble tiles. In the rural areas, more than half (51.6%) of rural dwelling units used cement/concrete as main material to floor, 46.4 percent used earth/mud, and as low as 0.7 percent used ceramic/porcelain/granite/marble tiles.

Table 8.5: Main construction materials for the floor of dwelling unit by type of locality

Materials for the floor	Total		District			
	Country	Region	Total		Urban	Rural
			Number	Percent		
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
Earth/mud	872,161	56,272	5,226	40.8	10.1	46.4
Cement/concrete	4,255,611	116,911	7,323	57.2	87.9	51.6
Stone	32,817	1,623	70	0.5	0.3	0.6
Burnt brick	6,537	89	10	0.1	0.2	0.1
Wood	52,856	49	2	0.0	0.0	0.0
Vinyl tiles	57,032	196	2	0.0	0.0	0.0
Ceramic/porcelain/granite/marble tiles	88,500	1,181	103	0.8	1.3	0.7
Terrazzo/terrazzo tiles	85,973	401	5	0.0	0.2	0.0
Other	15,567	907	72	0.6	0.1	0.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.3 Materials for roof

Table 8.6 presents information on main construction material for roofing of dwelling units in KNWD and also in urban and rural localities. The table reveals that metal sheet is the most common material used for roofing houses/dwelling units in the KNWD constituting 46.7 percent of all dwelling units, followed by mud/mud bricks/earth accounting for 45.3 percent and thatch/palm leaf or raffia accounting for 4.0 percent. Dwelling units roofed with wood constitute 2.9 percent and cement/concrete 0.4 percent. Slate/asbestos and bamboo accounts for less than one percent each 0.2 percent used roofing tiles while other materials used for roofing accounts for 0.3 percent.

In urban areas, as high as 81.9 percent of dwelling units are roofed with metal sheet, followed by mud/mud bricks/earth 13.5 percent and thatch/palm leaf or raffia accounting for 3.2 percent. Unlike urban areas, 51.0 percent of rural dwelling units are roofed with mud/mud bricks/earth followed by metal sheet (40.4%) and thatch/palm leaf or raffia (4.2%). Bamboo and slate/asbestos are hardly used in both urban and rural areas, accounting for approximately 0.1 percent of dwellings in the rural areas.

Table 8.6: Main construction material for roofing of dwelling unit by type of locality

Main roofing material	Total		District			
	Country	Region	Total		Urban	Rural
			Number	Percent		
Total	5,817,607	182,845	12,978	100.0	100.0	100.0
Mud/mud bricks/earth	80,644	22,227	5,875	45.3	13.5	51.0
Wood	45,547	3,085	379	2.9	0.6	3.3
Metal sheet	4,152,259	122,942	6,061	46.7	81.9	40.4
Slate/asbestos	759,039	646	9	0.1	0.0	0.1
Cement/concrete	141,072	879	49	0.4	0.6	0.3
Roofing tile	31,456	162	28	0.2	0.0	0.3
Bamboo	71,049	586	15	0.1	0.1	0.1
Thatch/palm leaf or raffia	500,606	30,722	525	4.0	3.2	4.2
Other	35,935	1,596	37	0.3	0.1	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.5 Room Occupancy

Table 8.7 shows different household sizes and the number of rooms they occupy in dwelling units in KNWD. The table shows that there are a total of 12,813 households in the district. Of the total number 17.0 percent live in single rooms, 27.2 percent in two rooms, 25.3 percent in three rooms and 14.9 percent in four rooms. For one member households, 57.2 percent (highest proportion) occupy one room, 25.2 percent occupy two rooms, and 9.6 percent occupy three rooms and 3.6 percent four rooms. About 30.5 percent of three-member households occupy one room, 37.0 percent live in two rooms and 20.0 percent in three rooms. Generally, the higher the household size, the fewer the number of rooms to as low as 0.2 percent occupancy for single person households living in nine rooms or more.

From the table, households with a size of 10 and above occupying one room are 2.1 and 23.6 percent for four rooms.

Table 8.7: Household size and number of sleeping rooms occupied in dwelling unit

Household size	Number of sleeping rooms										
	Total	Percent	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Total	12,813	100.0	17.0	27.2	25.3	14.9	7.2	4.2	1.8	1.1	1.3
1	836	100.0	57.2	25.2	9.6	3.6	2.2	1.2	0.5	0.4	0.2
2	1,076	100.0	36.1	36.0	17.6	5.5	2.4	1.2	0.7	0.4	0.3
3	1,428	100.0	30.5	37.0	20.0	7.9	2.6	0.7	0.8	0.4	0.2
4	1,703	100.0	20.1	34.4	26.2	11.7	3.6	1.8	0.9	0.2	0.9
5	1,928	100.0	13.3	32.4	29.4	13.6	5.8	3.2	1.3	0.3	0.8
6	1,792	100.0	8.8	28.6	30.8	18.1	7.5	3.5	1.7	0.4	0.5
7	1,346	100.0	4.4	22.7	32.7	21.6	8.5	5.4	2.1	1.5	1.1
8	931	100.0	3.3	17.8	30.1	23.7	12.8	6.6	1.9	2.0	1.7
9	656	100.0	1.7	11.1	29.9	22.7	14.9	10.2	4.1	2.7	2.6
10+	1,117	100.0	2.1	8.0	19.0	23.6	17.6	13.7	5.3	4.8	5.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6 Access to Utilities and Household Facilities

This section analyses household amenities, cooking space and sanitation issues in dwelling units in the district by locality.

8.6.1 Sources of lighting

The source of lighting used by households of a population can be indicative of their quality of life in society. Improvements in the standard of living in a society has a direct effect on the quality of source of lighting for the population; the source of non-natural lighting changes from use of low quality sources such as fuel wood to more efficient ones such as electricity.

In the district, as shown in Table 8.8, the three main sources of non-natural lighting in households are kerosene lamp (57.1%), flashlight/torch (26.8%) and electricity (mains) (12.7%). The table also shows other known sources of lighting and proportion of households using them are firewood (1.0%), electricity (private generator) (0.6%), solar energy (0.5%), crop residue (0.4%) and candle and gas lamp (0.2% each).

A comparison of urban and rural proportions of households using the various main sources of lighting shows that the patterns both in rural and urban areas are similar. Majority, (60.8 percent) use kerosene lamps 28.4 percent use flashlight/torch and only 7.0 percent use electricity from the national grid. These are also the main sources for the urban areas although the proportions are higher than those of the rural areas. The proportion of households using electricity is 44.0 percent while kerosene lamp and flashlight/torch constitute 36.6 percent and 17.9 percent respectively. The rural proportion for Kerosene lamp usage is significantly higher than the urban proportion.

Table 8.8: Main source of lighting of dwelling unit by type of locality

Main source of light	Total		District			
	Country	Region	Total		Urban	Rural
			Number	Percent		
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
Electricity (mains)	3,511,065	42,866	1,628	12.7	44.0	7.0
Electricity (private generator)	36,142	1,009	79	0.6	0.7	0.6
Kerosene lamp	971,807	80,752	7,312	57.1	36.6	60.8
Gas lamp	9,378	412	30	0.2	0.2	0.2
Solar energy	9,194	612	64	0.5	0.3	0.5
Candle	41,214	293	26	0.2	0.1	0.2
Flashlight/torch	858,651	49,068	3,435	26.8	17.9	28.4
Firewood	13,241	1,191	128	1.0	0.3	1.1
Crop residue	4,623	830	52	0.4	0.0	0.5
Other	11,739	596	59	0.5	0.0	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6.2 Sources of energy for cooking

The three main sources of energy of households for cooking in KNWD are wood (73.3%), charcoal (11.9%), and crop residue (10.5%) as shown in Table 8.9 and Fig. 8.1. About 2.5 percent use gas, 0.3 percent use electricity, 0.2 percent use kerosene and 1.3 percent does not cook. Wood dominates probably because of easy access especially to the rural population (which constitutes a larger proportion of the district's population).

Households using wood as source of energy for cooking remained significant for both urban and rural areas with proportions of 45.1 percent and 78.4 percent respectively. About 43.4 percent use charcoal in urban areas and 6.2 percent in rural areas. Although charcoal is usually produced in the rural areas, it is mostly sold to urban households and this may account for the low proportion of households using charcoal in rural areas. Crop residue as a source of fuel for cooking accounts for only 0.9 percent in urban areas and 12.3 percent in rural areas. More urban households (7.6%) use gas as main source of cooking fuel than rural households (1.5%).

8.6.3 Types of cooking space

Table 8.9 shows 41.0 percent of households in KNWD use separate room exclusively for cooking, 32.7 percent use open space in compound, 11.1 percent use veranda, 7.9 percent use enclosure without roof and 1.3 use separate room shared with other households. Very small proportions of households use bedroom/hall/living room (0.2%) and structures with roof but without walls (0.6%) as cooking spaces.

For urban and rural areas, while majority of urban households (39.3%) use open space in compound for cooking, most rural households (44.9%) use separate room for exclusive use of household. The urban population using veranda as cooking space constitutes 33.1 percent and 7.1 percent in rural areas.

Table 8.9: Main source of cooking fuel, and cooking space used by households

Source of cooking fuel/cooking space	Total		District			
	Country	Region	Number	Percent	Urban	Rural
Main source of cooking fuel for household						
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
None no cooking	306,118	3,272	166	1.3	2.6	1.1
Wood	2,197,083	107,310	9,386	73.3	45.1	78.4
Gas	996,518	8,735	314	2.5	7.6	1.5
Electricity	29,794	383	39	0.3	0.2	0.3
Kerosene	29,868	402	26	0.2	0.1	0.2
Charcoal	1,844,290	27,021	1,528	11.9	43.4	6.2
Crop residue	45,292	29,725	1,348	10.5	0.9	12.3
Saw dust	8,000	93	3	0.0	0.1	0.0
Animal waste	2,332	124	3	0.0	0.0	0.0
Other	7,759	564	0	0.0	0.0	0.0
Cooking space used by household						
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
No cooking space	386,883	6,822	629	4.9	4.1	5.1
Separate room for exclusive use of household	1,817,018	75,393	5,258	41.0	19.6	44.9
Separate room shared with other household(s)	410,765	4,664	161	1.3	2.5	1.0
Enclosure without roof	117,614	31,567	1,015	7.9	0.5	9.3
Structure with roof but without walls	349,832	1,788	76	0.6	0.3	0.6
Bedroom/Hall/Living room)	74,525	572	29	0.2	0.1	0.2
Veranda	1,173,946	18,444	1,419	11.1	33.1	7.1
Open space in compound	1,115,464	38,038	4,191	32.7	39.3	31.5
Other	21,007	341	35	0.3	0.6	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.7 Main Sources of Water for Drinking and for Other Domestic Use

8.7.1 Main sources of drinking water

Table 8.10 reveals that 62.7 percent of households use water from bore-hole/pump/tube well as their main drinking water source whereas 12.3 percent and 10.1 percent drunk from pipe-bone outside dwellings and protected wells respectively, with only 0.2 percent using sachet water.

In the rural areas, a larger proportion (64.0%) of households use bore-hole/pump/tube well as their main source of drinking water, followed by pipe-bone outside dwellings 12.8 percent and protected well 9.2 percent. However, in urban areas, whereas bore-hole/pump/tube well remained dominant source of drinking water used by households (55.3%), protected well is the next main source of drinking water used by 15.0 percent of households and only 9.7 percent use pipe-borne outside dwelling.

Table 8.10: Main source of water of dwelling unit for drinking and other domestic purposes

Sources of water	Total		District			
	Country	Region	Total		Urban	Rural
			Number	Percent		
Main source of drinking water for household						
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
Pipe-borne inside dwelling	790,493	11,577	245	1.9	7.6	0.9
Pipe-borne outside dwelling	1,039,667	15,063	1,582	12.3	9.7	12.8
Public tap/standpipe	712,375	5,179	496	3.9	7.0	3.3
Bore-hole/pump/tube well	1,267,688	101,817	8,033	62.7	55.3	64.0
Protected well	321,091	22,805	1,294	10.1	15.0	9.2
Rain water	39,438	223	3	0.0	0.0	0.0
Protected spring	19,345	683	63	0.5	0.3	0.5
Bottled water	20,261	82	4	0.0	0.1	0.0
Sachet water	490,283	694	28	0.2	0.6	0.2
Tanker supply/vendor provided	58,400	267	10	0.1	0.4	0.0
Unprotected well	112,567	11,083	692	5.4	4.2	5.6
Unprotected spring	12,222	378	4	0.0	0.0	0.0
River/stream	502,804	4,452	273	2.1	0.1	2.5
Dugout/pond/lake/dam/canal	76,448	3,175	83	0.6	0.0	0.8
Other	3,972	151	3	0.0	0.0	0.0
Main source of water for other domestic use of household						
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
Pipe-borne inside dwelling	905,566	11,408	209	1.6	5.6	0.9
Pipe-borne outside dwelling	1,089,030	13,957	1,528	11.9	9.1	12.4
Public tap/standpipe	704,293	4,541	442	3.4	5.7	3.0
Bore-hole/pump/tube well	1,280,465	98,487	7,397	57.7	48.7	59.4
Protected well	465,775	24,798	1,593	12.4	22.0	10.7
Rain water	39,916	330	16	0.1	0.5	0.1
Protected spring	18,854	672	56	0.4	0.2	0.5
Tanker supply/vendor provided	100,048	301	14	0.1	0.4	0.1
Unprotected well	152,055	11,607	855	6.7	7.5	6.5
Unprotected spring	15,738	650	8	0.1	0.1	0.1
River/stream	588,590	6,125	356	2.8	0.2	3.2
Dugout/pond/lake/dam/canal	96,422	4,518	334	2.6	0.1	3.1
Other	10,302	235	5	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.7.2 Main sources of water for other domestic use

Apart from information on main sources of drinking water for households, the 2010 PHC also gathered information on main sources of water used for other domestic activities like washing and cooking. The data collected shows that like drinking water, more than half of total households in the KNWD (57.7%) depend on bore-hole/pump/tube well as their main source of water for other domestic activities, followed by protected well 12.4 percent and pipe-borne outside dwelling constituting 11.9 percent.

8.8 Bathing and Toilet Facilities

8.8.1 Toilet facilities

Table 8.11 presents information on the type of toilet facilities used by households in urban and rural areas of KNWD. From the table, 91.0 percent of all households in the KNWD have no toilet facilities and therefore defecate in the bush or open space. About three percent (3.3 percent) use public toilet (WC, KVIP, Pit and Pan), 3.1 percent use KVIPs situated in their dwelling units, and 1.6 percent and 0.8 percent use pit latrine and water closet (WC) respectively. Regarding the localities, the largest proportion of all rural households (93.6%) defecate in the bush, 2.5 percent use public toilet (WC, KVIP, Pit and Pan) and 2.1 percent use KVIP located in their dwelling units. In the urban areas, however, though most households (76.5%) defecate in the bush, the proportion of households with KVIP facilities in their dwelling units (8.6%) is higher than that of rural localities (2.1%).

8.8.2 Bathing facilities

From Table 8.11, households owning bathroom for exclusive use are in the majority constituting 42.6 percent of total households recorded in the district. The next commonly used bathing facility is open space around house (used by 22.3% of households) and private open cubicle (used by 12.7% of households) with few bathing in neighbouring houses (0.2%).

In the urban areas, 26.2 percent of households own bathroom for exclusive use, 25.3 percent use shared separate bathrooms in the same house and 19.4 percent use open space around house. In rural areas, 45.6 percent of households own bathroom for exclusive use, 22.9 percent use open space around house and 13.0 percent use private open cubicle. .

Table 8.11: Type of toilet facility and bathing facility used by household by type of locality

Toilet facility/bathing facility	Total		District			
	Country	Region	Total		Urban	Rural
			Number	Percent		
Toilet facility used by household						
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
No facilities (bush/beach/field)	1,056,382	146,329	11,657	91.0	76.5	93.6
W.C.	839,611	6,050	108	0.8	2.9	0.5
Pit latrine	1,040,883	5,266	201	1.6	4.3	1.1
KVIP	572,824	6,196	396	3.1	8.6	2.1
Bucket/pan	40,678	405	10	0.1	0.1	0.1
Public toilet (WC, KVIP, Pit, Pan etc.)	1,893,291	12,828	417	3.3	7.5	2.5
Other	23,385	555	24	0.2	0.2	0.2
Bathing facility used by household						
Bathing facility	5,467,054	177,629	12,813	100.0	100.0	100.0
Own bathroom for exclusive use	1,535,392	73,345	5,460	42.6	26.2	45.6
Shared separate bathroom in the same house	1,818,522	33,370	1,360	10.6	25.3	8.0
Private open cubicle	381,979	26,114	1,621	12.7	10.9	13.0
Shared open cubicle	1,000,257	21,111	1,101	8.6	9.1	8.5
Public bath house	140,501	2,391	298	2.3	8.4	1.2
Bathroom in another house	187,337	479	26	0.2	0.2	0.2
Open space around house	372,556	19,987	2,863	22.3	19.4	22.9
River/pond/lake/dam	14,234	437	63	0.5	0.2	0.5
Other	16,276	395	21	0.2	0.3	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

The Table also shows the type of toilet facilities used by households in the district. From the table, the most common toilet facility used is Public toilet (WC, KVIP, Pit, Pan etc.) which accounts for 3.3 percent of the total household population in the district, followed by KVIP which also constitutes 3.1 percent. The least used toilet facility in the district is Bucket/Pan, constituting only 0.1 percent. It is clear from the table that majority of households in the Kassena Nankana West District have no toilet facilities and this accounts for as high as 91.0 percent. Unfortunately however, all these people ease themselves in the bushes and open fields without regard for health and environmental consequences.

8.9 Method of Waste Disposal

Managing waste sustainably, being a major component of environmental sanitation has over the years in Ghana been continually a growing problem and therefore has been the bane of successive central governments and local authorities (MMDAs). A good waste management system prevents the spread of certain diseases thus ensuring environmental sanitation sustainability (MDG 7). This indicator seeks to assess the state of both solid and liquid waste disposal methods in the district.

Table 8.12 gives information on the various methods of solid and liquid waste disposal by locality type in KNWD. It is shown from the table that for solid waste, majority of households (42.7%) use public dump (open space), followed by burning (23.1%) and indiscriminate dumping (21.6%). The proportions for the urban areas are dumping in open space 42.1%, followed by burning (30.9%) and indiscriminate dumping (12.9%). For the rural localities, the proportion of households who indiscriminately dumped waste is significantly higher (23.1%) than those burning (21.7%). This means that indiscriminate

dumping of solid waste by households is more prevalent in rural localities than in urban ones in the district.

Methods of liquid waste disposal in the district include throwing onto a compound, onto the street or any available space outside the house. For liquid waste, the method of disposal mostly used by households in the district is throwing onto the street/outside accounting for 58.4% of total households recorded, followed by pit (soak away) (3.5%) and through drainage system into a gutter (3.2%). In urban areas, more than half of the households (57.4%) throw their liquid waste onto the street/outside. The second most used method of liquid waste disposal in urban areas is through drainage system into a gutter (2.8%) which is significantly lower than the proportion of those who throw liquid waste onto the street. The least used method of liquid waste disposal in the district is soak away which accounts for only 1.1 percent. Table 8.13: Method of solid and liquid waste disposal by type of locality.

Table 8.12: Method of solid and liquid waste disposal by type of locality

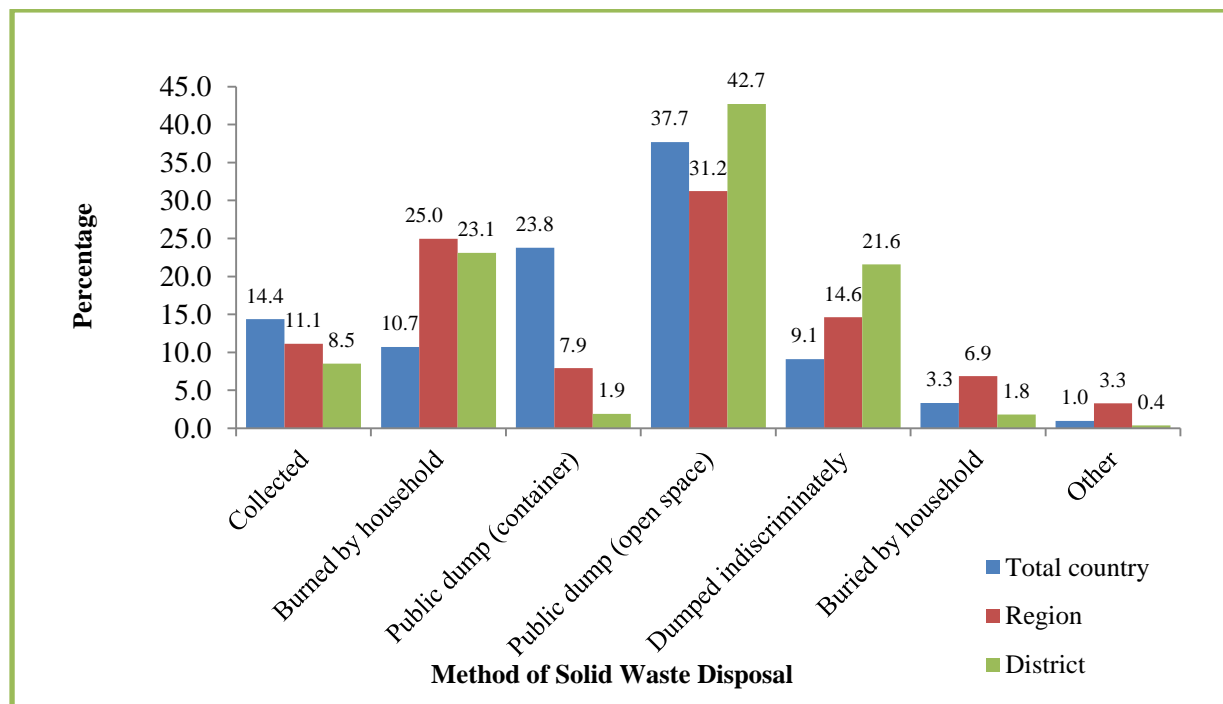
Method of waste disposal	District					
	Total		Total		Urban	Rural
	Country	Region	Number	Percent		
Solid waste						
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
Collected	785,889	19,758	1,093	8.5	6.3	8.9
Burned by household	584,820	44,337	2,958	23.1	30.9	21.7
Public dump (container)	1,299,654	14,057	249	1.9	6.3	1.2
Public dump (open space)	2,061,403	55,459	5,465	42.7	42.1	42.8
Dumped indiscriminately	498,868	25,994	2,762	21.6	12.9	23.1
Buried by household	182,615	12,201	235	1.8	1.0	2.0
Other	53,805	5,823	51	0.4	0.6	0.4
Liquid waste						
Total	5,467,054	177,629	12,813	100.0	100.0	100.0
Through the sewerage system	183,169	4,062	79	0.6	0.4	0.7
Through drainage system into a gutter	594,404	7,676	416	3.2	2.8	3.3
Through drainage into a pit (soak away)	167,555	12,031	452	3.5	1.1	4.0
Thrown onto the street/outside	1,538,550	105,548	7,481	58.4	57.4	58.6
Thrown into gutter	1,020,096	6,029	180	1.4	1.4	1.4
Thrown onto compound	1,924,986	41,258	4,128	32.2	36.7	31.4
Other	38,294	1,025	77	0.6	0.1	0.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

From Table 8.13, it can be deduced that as at 2010, majority of households in Ghana dumped their waste in public open spaces, they accounted for 2,061,403 households. The second commonly used method of household waste disposal in the country was the use of public containers; those who used this were 1,299,654, followed by collected method which recorded 785,889 households.

In the Upper East Region, as shown in Table 8.13 and like the country situation, most households (55,459) disposed their waste in public spaces (public dump). Unlike the national scenario where the second most used method of waste disposal was public containers, the second method used by households in the region was burning which recorded 44,337 households. The computed proportions of households using the various methods of waste disposal in Ghana, Upper East Region and KNWD are shown in Figure 8.4.

Figure 8.4: Proportion of households using the various solid waste disposal methods



Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER NINE

SUMMARY OF FINDINGS, CONCLUSIONS AND POLICY RECOMMENDATIONS

9.1 Demographic Characteristics

Age-sex structure

Age and sex composition form an integral part of population characteristics in any demographic analysis, based on this, so much attention was placed on age and sex. On population age structure by sex, 37.9.0 percent of the total population are below 15 years while the aged form 7.3% of the total population. These characteristics imply the need for the provision of basic social amenities required by the children for their development such as schools, recreational centres, health centres, among others. The females constitute 50.8% of the population of the district; there is therefore the need to actively involve them in decision making processes. Also, it can be seen that a total of 38,542 people are in the working age class representing 55.0 percent of the total population. This clearly indicates that majority of the populace are in the working class.

It is also realised that, the district has a relatively high proportion of its population within the youthful ages (0-24 years). Out of the total population of the district, those between the ages of 0-24 years alone constitute 58.4 percent.

Out of the district total population of 70, 667, it is found that 34,747 are males and 35,920 are females. The sex ratio of the total population is 96.7 implying there are about 97 males for every 100 females and also signifies a larger proportion of females in the population of the district.

The population is not distributed evenly over urban and rural areas. There are more people in rural than urban localities. The rural population is 60,792, about six times that of urban (9,875). This means that majority of the population live in rural area. Also, out of the total population of the district, females constitute the majority (50.8%) and the remaining 49.2 percent were males.

Age-dependency ratio

The age-dependency ratio of the district is 83.35. This implied that every 10 people in the economically active population of KNWD have about 8 people to take care of. In other words every one person within the working age group has about 1 person in the dependent group to cater for.

Also, the male age-dependency ratio (88.12) is greater than that of female (78.96) indicating that, there are more male dependants than female dependants in the population of KNWD. Age-dependency ratio for rural areas (85.2) is also greater than that for urban (72.9). It is greater in the rural areas because the proportions of populations in the dependent age groups, that is, 0-14 (23,303) and 65+ (4,658) in the rural areas are higher than those of the urban areas, constituting 3,514 and 650 respectively.

Migration

On information regarding internal migrants in the district, there are a total of 8,615 migrants in the district. Out of that total number, 5,322 were born elsewhere in the region. The number of migrants who have been residing in the district for 20 years or more constitute the highest percentage of 32.6. The least percentage, 12.5, is for those who have resided in the district for a period of less than one year.

Among those migrants who were born elsewhere in another region other than the Upper East Region, more migrants are born in Ashanti Region (1,621) representing 18.8 percent than any of the other regions. The number of those born in Upper West Region (4.3%) is the second largest while the number born in Volta Region (0.8%) is the least. These migrants born elsewhere in other regions have resided in the district for varying periods of time. Among the migrants who were born in the Western and Central regions for instance, the largest proportions (29.1) and (33.6) respectively have resided in the district for less than one year. It can also be deduced from the table that, 628 people were born outside Ghana and 37.4% have resided in district for 20 or more.

Fertility

The total fertility rate for Kassena Nankana West District is 2.78, which is less than the regional rate (3.45). Garu Tempane District has the highest total fertility rate (3.90) among all the districts in the region.

The other fertility measures presented in the discussion are general fertility rate (GFR) and crude birth rate (CBR). The Kassena Nankana West District has the lowest General Fertility Rate of 77.82 in the region. Builsa district has the highest (25.33) Crude Birth Rate in the region while Kassena Nankana West District has the lowest rate of 18.52.

Mortality

The findings reveal that ASDR for males is higher than that for female. This could be due to inadequate health facilities and personnel. However, while some age groups have almost the same ASDR for both sexes (35-39, 20-24, 25-29, 10-14 and 5-9), some age groups have extremely high ASDR (65-69 and 70 and over). On age group under five, male death rate is higher than that of female. However, within age group 15-19, female death rate is higher than male.

9.2 Social Characteristics

Size, household composition and headship

On household population by composition and sex, household heads are 18.3 percent of the total household population of KNWD. It is further revealed that, majority of the household population (47.9%) are children (son/daughter). More than half (53.8%) of household male population are children (sons), followed by those who were male heads (26.0). A very small proportions of household male population are spouses, son-in-laws, adopted/foster children and non-relative males, each being less than 1.0 percent. Of the household female population, like in the case of males, majority (42.2%) are children while spouses (wives) constitute 19.9%. Households made up of the extended family system are the most common in the district constituting 37.8 percent of the household population.

There is not much difference between the proportion of males (12,983) and females (13,465) in the extended family households. Single parent extended plus non relative recorded the least (0.4%).

Marital status

The findings show that the proportion never married generally decreases with increasing education; whereas with the married, the proportion declines from 71.1 percent of never attended to 4.5 percent of those with secondary education and further decreasing to 2.0 percent among those with post-secondary education. The proportion divorced exhibits some differences by education. The proportion divorced generally declines with increasing level of education such that the proportion divorced among those with higher level of education is about one-third that for their counterparts with no formal education. This pattern is worsened for widows

The data shows that more females than males are currently married (48.0% females compared to 44.2% of males).

There are also more males (49.4%) who have never married than females (32.1%). Also, slightly more females (2.5%) than males (2.3%) are separated. Discussion was also made on persons 12 years and older by sex, marital status and economic activity status. The data indicates that of the total of 48,907 persons, 68.1 percent are employed, 1.6 percent are unemployed and 30.3 percent are economically not active. The total proportion of married persons who are employed is 86.6 percent while the never married who are employed constitute 46.7 percent.

The proportion of the married males who are employed (98.5%) is higher than that of females (84.2%).

Nationality

About 95.5 percent of the of the district population are Ghanaians by birth, Ghanaians by dual nationality constitute 1.7 percent and ECOWAS nationals 1.1 percent.

Religious affiliation

The population by religion and sex reveals that, 28.0 percent of the population in the district are Catholic, 30.0 percent are traditionalist with 12.3 percent belonging to Islam. About four percent of the people in the district have no religion.

Literacy and education

Of the total of 25,353 literates in the district, 38.8 percent are literate in English only and 56.0 percent in English and a Ghanaian language only. There are more male literates (55.2%) than female literates (44.8%). A total of 58.7 percent of males are literate in English and Ghanaian language while the corresponding female proportion is 52.9 percent.

Past school attendance

On the issue of school attendance for persons aged 3 years and older by sex and highest level of school attended, almost 1 out of every 3 educated persons (37.2%) in KNWD has had primary education, followed by JSS/JHS (25.8%), SSS/SHS (14.5%) and middle school education (10.3%). Vocational/technical/commercial (1.8 percent) constitutes the lowest

proportion. The proportion of males who attended JSS/JHS is 22.9 percent while that of females is 29.4 percent.

School attendance

Statistics on school attendance in the district shows that 41.8 percent of persons in the district who are three years and older have never attended school; 42.2 percent are currently in school while 16.0 percent have attended school in the past.

9.3 Economic Activity Status

Out of the total population of 43,850 who are 15 years and older in the district, 72.2 percent are employed, 1.8 percent are unemployed while 26 percent are economically not active. Majority of the employed population falls within age group 40-44. There are more males 73.6 percent than females 70.9 percent who are employed in the district.

Occupation

Majority of the employed population 15 years and older in district the (81.7 percent) are skilled agricultural forestry and fishery workers. The proportion of males in this activity is 85.5 percent while that of females is 78.1 percent. Approximately six percent (5.9 percent) of the population is into raft and related trades workers while only 2.2 percent are professionals.

Industry

Agriculture, including forestry and fishing industry, employs the largest percentage (81.0%) of the work force aged 15 years and older in KNWD. After agriculture is wholesale and retail; repair of motor vehicles and motorcycles employing (5.0%) while manufacturing accounts for (4.9%). All other industries employ approximately two percent each. Almost 57 percent of the population is self-employed without employee(s).

Employment sector

With regard to the sector of employment, over 95 percent work in the private informal sector.

Followed by those employed by government or public sector constituting (3.7%). All other sectors employ less than one percent each. The proportion of males in the private informal sector is 93.2 percent while females in the sector constitute 97.0 percent.

9.4 Information Communication Technology

Ownership of mobile phones (individual)

Out of the total population of 48,907 aged 12 years and over in the KNWD, 9,484 (19.4%) had mobile phones, with the males proportion being 24.1 percent and females proportion 15.0 percent.

Use of internet

Out of the total population of 48,907 aged 12 years and older in the KNWD, only 1.2% uses internet. The proportion of males using the internet is 1.8 percent while that of females is 0.6 percent.

Desktop/laptop/fixed telephone lines

Just 169 households, representing 1.3 percent of the households in the district own desktop/laptops in the entire district. More male headed households (1.5%) own desktop/laptop than female headed households (0.9%).

9.5 Disability

In the district as a whole, 4,444 or 6.3 percent of the total population has disabilities. The commonest type of disability in the district is sight/visual disability, accounting for 43.8 percent of all disability cases followed by emotional disability (20.7%) and hearing (20.1%). Among male and female populations with disability, sight/visual disability remains the most prevalent, although the proportion is higher among females (47.1%) than among males (40.4%).

Persons with disability in rural areas 85.1 percent outnumber those in urban areas 14.9 percent.

Disability and activity

Of the employed population aged 15 years and older with disability in the district, over sixty percent are employed forty percent are unemployed and 34.6 percent are economically not active. The category of persons with disability with the highest proportion of employed is emotional disability accounting for 71.6 percent. The least is those with intellectual disability which constitutes 55.7 percent. There are more male PWDs who are employed 73.6 percent than females 70.9 percent.

9.6 Agriculture

Agricultural households constitute 90.7 percent of households in the district. Of the agricultural households in the district, over 90.0 percent are in rural areas. The four main agricultural activities in the district are crop farming, tree growing, livestock rearing, and fish farming. In the district, livestock rearing is the second most common agricultural activity after crop farming. These two farming activities dominate in both urban and rural areas. The three most reared livestock in the district are, goats, sheep and chickens. Of the traditional livestock, more people rear goats but small numbers are kept per keeper.

9.7 Housing Condition and Facilities

Housing stock

There are 69,965 persons living in 7,640 residential dwelling units, a total of 12,813 households sharing the 7,640 dwelling units yielding a figure of 1.7 households per house. With a household population of 69,965 the average population per house is 9.2 persons and the average household size is 5.5 persons.

Holding and tenancy arrangement

Most households in the district (92.2%) reside in dwellings owned by a household member, followed by those who live in dwellings owned by non-household member relatives (3.0%) and 2.4 percent living in other private individual dwellings.

Most of both male headed households (93.0%) and female headed households (90.2%) reside in dwelling units owned by household members (owner occupied). Less male headed

households (2.1%) reside in dwellings owned by relatives who were not household members than female headed households (4.9%). For purchased dwellings, equal proportions of male headed and female headed households reside in them (1.0 percent) each.

In both urban and rural areas, majority of households occupy dwelling units owned by members (75.2 percent and 95.3 percent) respectively.

Types of occupied dwelling units

Most houses in KNWD are compound houses (69.2%). The next most common is separate houses (15.9%) and semi-detached houses (6.0%). A greater proportion of female headed households (70.2%) live in compound houses than male headed households (68.6%). There are almost equal proportions of male and female headed households (15.9 percent and 15.7 percent) respectively residing in separate houses. In both urban and rural areas of KNWD, compound houses form the majority of dwelling units accounting for 72.7 percent and 68.6 percent respectively. While separate houses constitute 12.6 percent of urban dwellings, their proportion in the rural areas is 16.5 percent.

Materials for outer wall

The main construction materials for outer wall of dwelling units in KNWD is mud brick/earth and cement blocks/concrete. Majority of dwelling units (85.3%) use mud brick/earth as main construction material for outer wall, followed by blocks/concrete (12.1%). Metal sheet, stone, burnt bricks, landcrete, bamboo, palm leaf/thatch and others are rarely used (less than 1.0% each).

Materials for floor

More than half (57.2%) of dwelling units in KNWD have cement/concrete floors. About 40.8 percent have earth/mud floors and very few (0.8%) used ceramic/porcelain/granite/marble tiles. Only 0.1 percent used burnt brick to floor their houses.

Room occupancy

The number of rooms occupied by households ranges from one to more than 10 rooms. The findings reveal that majority of households live in two rooms (27.2%), followed by three rooms (25.3%) and 17.0 percent live in single rooms. The highest proportions of one member household in the district constituting 57.2 percent occupy one room. The proportions of households occupying more rooms consistently reduces to as low as 0.2 percent (for nine rooms or more) for single member households.

Sources of lighting

The three main sources of non-natural lighting in households are kerosene lamp (57.1%), flashlight/torch (26.8%) and electricity (mains) (12.7%). Most households in the rural localities (60.8%) use kerosene lamp. but none in the urban areas majority use electricity main which accounts for 44.0 percent.

Sources of energy for cooking

The three main sources of energy of households for cooking in KNWD are wood (73.3%), charcoal (11.9%), and crop residue (10.5%). About 2.5 percent use gas and less than 1.0 percent uses kerosene.

Types of cooking space

In the district, 41.0 percent of households use separate room exclusively for cooking, 32.7 percent use open space in compound, 11.1 percent used veranda. Very few households use bedroom/hall/living room (0.2%). For urban and rural areas, while majority of urban households (39.3%) use open space in compound for cooking, most rural households (44.9%) have separate rooms for exclusive cooking.

Main sources of drinking water

Majority of households (62.7%) use water from bore-hole/pump/tube well as their main source of drinking water whereas 12.3 percent and 10.1 percent drunk from pipe-bone outside dwellings and protected wells respectively, with only 0.2 percent using sachet water.

Toilet facilities

As high as 91.0 percent of households in the KNWD have no toilet facilities and hence resort to the use of bush/beach/field; 3.3 percent use public toilet (WC, KVIP, Pit and Pan), 3.1 percent used KVIPs situated in their dwelling units and 1.6 percent use pit latrine. Only 0.8 percent use W.C in the district.

Bathing facilities

For bathing facilities, households that own bathroom for exclusive use are in the majority constituting 42.6 percent of total households recorded in the district. The next commonly used bathing facility is open space around house (used by 22.3% of households) and private open cubicle (used by 12.7% of households) with few bathing in neighbouring houses (0.2%).

In the urban areas, most households (26.2%) own bathroom for exclusive use, 25.3 percent use shared separate bathroom in the same house and 19.4 percent use open space around house. In rural areas, 45.6 percent of households own bathroom for exclusive use, 22.9 percent use open space around house and 13.0 percent use private open cubicles.

Method of waste disposal

For solid waste disposal, majority of households (42.7%) uses public dump (open space), followed by burning (23.1%) and indiscriminate dumping (21.6%). The pattern is the same for urban areas with open space dumping dominating (42.1%), followed by burning (30.9%) and indiscriminate dumping (12.9%). However in the rural localities, though open space dumping still dominates, the proportion of households who indiscriminately dump waste is greater (23.1%) than those who burn (21.7%). For liquid waste, the method of disposal mostly used by households in the district is throwing onto the street/outside (58.4%), pit (soak away) (3.5%) and through drainage system into a gutter (3.2

9.8 Policy Recommendations

Age and sex composition form an integral part of population characteristics in any demographic analysis. Based on this, so much attention is placed on age and sex. On population age structure by sex, 41.0 percent of the total population in the district is below 15 years while the aged forms 6.2 percent of the total population. The above characteristics imply the need for Government to provide basic social amenities such as schools, health centers, and recreational centers among others. Females constitute 51.9 percent of the population of the district. There is therefore the need to actively involve women in decision making processes through capacity building in local governance by the District Assembly and

NGOs. Also, it can be seen that a total of 38,542 people are in the working class representing 55.0 percent of the total population. This clearly indicates that majority of the populace are in the working class hence the need to create employment avenues to cater for the youth.

There are eleven Area Councils in the District. However, seven of them are functioning with only two having office accommodation. These Town Area Council offices are in a dilapidated state and therefore need renovation.

Meanwhile, the introduction of District Assembly system and its sub structures is generally accepted as a mechanism through which the objectives of the decentralization programmes of the government can be realized. It is therefore imperative for central Government to operationalize and sustain the effective functioning of the sub-structures and to make them more relevant to the local government process.

There are quite a large number of tourist attractions in the district, among them are the Paga Sacred Crocodile Ponds, the Zenga Pond, Pikworo Slave Camp, Pottery Art Centre at Sirigu, which are all operational. The other tourist sites such as the Caves at Chiana, the sacred pythons at Kayoro, and the remains of the Catholic Church at Kayoro and so many others need to be developed. There is therefore the need for the District Assembly to partner investors in order to develop the sites for maximum economic benefit to the district.

The use of ICTs for communication and interaction among individuals and corporate organisations is critical and relevant to the development of the district. However, their distribution in terms of ownership and usage in the district is very low. There is therefore the need for government to make KNWD a priority district in the distribution of laptops to schools under the Better Ghana Agenda. Also, at the local level, government should take measures to ensure gender parity in the ownership and usage of ICTs since males and male headed households in the district are relatively better off in the area of ICT in the district.

The inclusion of disability in the 2010 PHC has helped in providing relevant data necessary to assess the social, demographic and economic attributes of PWDs in KNWD. The results found herein should inform government the need to make policies that will help mainstream PWDs into the national development agenda and reduce the marginalization of PWDs. The district assembly could for instance come out with programmes targeted at increasing the school enrolment rate of PWDs with the view to achieving Universal Basic Education under (MDG2) for PWDs in the district.

Tree growing and fish farming are uncommon agricultural activities in the district. Government should encourage farmers to go into these activities by providing incentives and making capital and other necessary inputs available since they are capital intensive.

Adequacy, safety and affordability are important in housing delivery. The findings show that these key elements in housing delivery are missing in the housing conditions of the district. Facilities such as toilets and baths are poor in the district. Main sources of energy for cooking and lighting are poor. Government should consider providing alternative sources of electricity such as solar to complement the national grid. It is necessary that central government provides affordable housing schemes for the people. Furthermore, the District Assembly must institute regular monitoring and evaluation of housing conditions and needs of the population in the district within the context of MDG7. This will ensure the enforcement of housing regulation and building code especially district regulations in relation to the provision of toilet facilities by all landlords (house owners) in their houses.

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APPENDICES

Table A1: Household composition by type of locality

Household composition	Total		Urban		Rural	
	Total	Percent	Urban	Percent	Number	Percent
Total	69,965	100.0	9,792	100.0	60,173	100.0
Nuclear family						
Head only	836	1.2	214	2.2	622	1.0
Household with head and a spouse only	534	0.8	130	1.3	404	0.7
Household with head and biological/adopted children only	7,518	10.7	915	9.3	6,603	11.0
Household with head spouse(s) and biological/adopted children only	18,281	26.1	2,242	22.9	16,039	26.7
Extended family						
Household with head spouse(s) biological/adopted children and relatives of the head only	26,448	37.8	3,803	38.8	22,645	37.6
Household with head spouse(s) biological/adopted children relatives and nonrelatives of the head	714	1.0	176	1.8	538	0.9
Household with head spouse(s) and other composition	1,428	2.0	229	2.3	1,199	2.0
Household with head biological/adopted children and relatives of the head only	10,306	14.7	1,559	15.9	8,747	14.5
Household with head biological/adopted children relatives and nonrelatives of the head	252	0.4	47	0.5	205	0.3
Household with head and other composition but no spouse	3,648	5.2	477	4.9	3,171	5.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A2: Population by sex, number of households and houses in the 20 largest communities

S/No.	Community Name	Total	Male	Female	House holds	Houses
1	Paga	9,875	4,670	5,205	1,968	1,063
2	Kandiga Akuka	3,729	1,825	1,904	560	353
3	Kurugu	1,793	866	927	299	178
4	Mirigu Gomongo	1,784	859	925	290	185
5	Nakolo	1,566	751	815	278	188
6	Boania	1,331	646	685	185	109
7	Navio Kasili	1,256	594	662	253	102
8	Mirigu Woligum	1,239	635	604	191	116
9	Ketiu Asasong	1,203	600	603	234	169
10	Nyangania Sabonia	1,202	612	590	201	106
11	Badunu	1,039	478	561	216	98
12	Chiana Asunia	1,038	491	547	219	126
13	Mirigu Tikongo	998	496	502	153	84
14	Bembisi Nambulingo	982	465	517	179	108
15	Mirigu - Kumbusumgu	971	467	504	188	123
16	Nakolo Kasili	950	440	510	213	79
17	Kassaningo (Kassango)	948	463	485	139	95
18	Longo Awerasi	884	444	440	136	50
19	Mirigu Nyongo	859	429	430	133	72
20	Navio Sanwo	842	413	429	185	102

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A3: Population by age group in the 20 largest communities

S/No.	Community Name	All																
		ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
1	Paga	9,875	1,230	1,186	1,098	1,123	992	903	752	550	396	338	283	183	191	135	234	281
2	Kandiga Akuka	3,729	421	458	543	517	334	265	190	158	153	149	126	104	97	49	79	86
3	Kurugu	1,793	200	263	240	252	164	119	93	51	70	65	84	31	46	25	52	38
4	Mirigu Gomongo	1,784	236	283	266	212	113	127	85	79	83	58	58	30	43	18	25	68
5	Nakolo	1,566	199	210	228	174	124	85	92	76	62	62	62	51	35	25	48	33
6	Boania	1,331	165	199	166	148	100	69	77	57	49	31	67	27	25	21	64	66
7	Navio Kasili	1,256	170	159	164	146	92	76	76	55	39	46	41	18	51	16	40	67
8	Mirigu Woligum	1,239	163	187	158	157	78	67	72	49	58	57	23	28	27	19	32	64
9	Ketiu Asasong	1,203	152	164	124	117	100	92	84	54	58	35	41	31	35	22	42	52
10	Nyangania Sabonia	1,202	90	144	163	150	115	106	73	71	61	45	47	35	30	24	25	23
11	Badunu	1,039	125	141	119	132	96	85	66	62	40	29	42	15	23	17	13	34
12	Chiana Asunia	1,038	116	115	147	100	99	81	83	45	55	45	34	20	27	18	20	33
13	Mirigu Tikongo	998	124	171	121	109	81	58	68	40	37	47	33	16	22	13	24	34
14	Bembisi Nambulingo	982	113	132	119	123	99	67	48	49	42	38	38	19	22	20	25	28
15	Mirigu - Kumbusumgu	971	144	141	114	108	76	72	68	58	32	25	33	19	17	20	20	24
16	Nakolo Kasili Kassaningo	950	135	124	102	100	99	78	70	43	41	28	21	17	19	9	16	48
17	(Kassango)	948	135	147	118	97	67	70	64	52	52	22	24	24	21	21	15	19
18	Longo Awerasi	884	107	116	123	116	81	60	47	52	31	35	19	10	22	12	21	32
19	Mirigu Nyongo	859	84	87	116	109	81	63	52	35	43	52	28	16	32	33	13	15
20	Navio Sanwo	842	103	119	102	81	59	61	64	48	43	23	30	11	28	3	38	29

Source: Ghana Statistical Service, 2010 Population and Housing Census

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