2010

POPULATION & HOUSING CENSUS

DISTRICT ANALYTICAL REPORT

KASSENA NANKANA EAST MUNICIPALITY

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 East Municipality 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.

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Government Statistician

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ACRONYMS AND ABBREVIATIONS

AIDS   Acquired Immune Deficiency Syndrome

CHIPS   Community Health Planning Services

CIDA   Canadian International Development Agency

DANIDA   Danish International Development Agency

DPs   Development Partners

ECOWAS   Economic Community of West African States

EU   European Union

GDP   Gross Domestic product

GSS   Ghana Statistical Service

HIV   Human Immune Virus

HND   Higher National Diploma

ICT   Information and Communication Technology

JSS   Junior Secondary School

JHS   Junior High School

KNM   Kassena Nankana Municipal

KNMA   Kassena Nankana Municipal Assembly

LI   Legislative Instrument

MCE   Municipal Chief Executive

MP   Member of Parliament

SHS   Senior High School

SSS   Senior Secondary School

NGOs   Non-governmental Organisations

PHC   Population and Housing Census

PWDs   Persons with disabilities

TLMs   Teaching and Learning Materials

UN   United Nations

UNDP   United Nations Development Programme

WC   Water Closet

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 East Municipality, according to the 2010 Population and Housing Census, is 109,944 representing 10.5 percent of the region's total population. Males constitute 48.8 percent and females represent 51.2 percent. About 72.7 percent of the population live in rural localities. The Municipality has a sex ratio of 95.4. The population of the Municipality is youthful (under 15 years) (39.2%) depicting a broad base population pyramid which tapers off with a small number of elderly persons 60 years and above (8.8%). The total age dependency ratio for the Municipality is 84.0, the age dependency ratio for males is higher (85.3) than that of females (82.8%).

Fertility, mortality and migration

The Municipality has a Total Fertility Rate of 3.4. The General Fertility Rate is 97.9 births per 1000 women aged 15-49 years which is slightly higher than the region's figure of 97.5. The Crude Birth Rate (CBR) is 23.1 per 1000 population. The crude death rate for the Municipality is 11.1 per 1000. The death rate for males is highest for age 70 and above representing 72 deaths per 1000 population while for the females, the highest death rate of 41 deaths per 1000 population is also for age 70 and above. Accidents/violence/homicide/suicide account for 7.1 percent of deaths in households with the rest caused by other causes. The migrant population of the municipality is 17,867. Majority of migrants (56.9%) living in the Municipality were born in elsewhere in another region, while 43.1 percent were born elsewhere in the Upper East Region. For migrants born in another region, those born in Ashanti region constitute 33.1 percent followed by Northern with 22.3 percent and Upper West, 11.6 percent.

Household size, composition and structure

The municipality has a household population of 107,435 with a total number of 19,790 households. The average household size in the Municipality is 5.4 persons per household. Children constitute the largest proportion of the household composition accounting for 44.7 percent. Spouses form about 9.7 percent. Extended households (head, spouse(s), children and heads relative) constitute 40.2 percent of the total number of households in the Municipality and this is followed by nuclear households (head, spouse(s) and children) (20.7%).

Marital status

About 44.8 percent of the populations aged 12 years and older are married and 41.6 percent have never married. By age 25-29 years, more than half of females (71.8%) are married compared to 40.2 percent of males. At age 65 and above, widowed females account for as high as 65.4 percent while widowed males account for only 15.0 percent. . Among the married, 62.9 percent have no education while about 15.3 percent of the never married have never been to school. About 84.1 percent of the married population are employed, 1.9 percent are unemployed and 14.1 percent are economically not active. About half of those who have never married (56.5%) are economically not active with 2.1 percent unemployed.

Nationality

The proportion of Ghanaians by birth in the Municipality is 95.5 percent. Those who have naturalised constitute 0.6 percent and the non-Ghanaian population in the Municipality is 2.0 percent.

Literacy and education

Of the population 11 years and above, 56.3 percent are literate and 43.7 percent are non-literate. The proportion of literate males is higher (64.0 %) than that of females (49.1%). Four out of ten people (46.9%) indicated they could speak and write both English and Ghanaian languages. Of the population aged 3 years and above (101,099) in the Municipality, 37.4 percent has never attended school, 43.0 percent are currently attending and 19.6 percent have attended in the past.

Economic activity status

About 70.2 percent of the populations aged 15 years and older are economically active while 29.8 per cent are economically not active. Of the economically active population, 97.0 percent are employed while 3.0 percent are unemployed. For those who are economically not active, a larger percentage of them are students (50.7%) and 23.2% perform household duties. Again, a little more than half (57.1%) of the unemployed are seeking work for the first time.

Occupation

Of the employed population, about 66.7 percent are engaged as skilled agricultural, forestry and fishery workers, 10.8 percent in craft and related trade and 10.7 percent in service and sales. About 6.3 percent are engaged as managers, professionals, and technicians.

Employment status and sector

Of the employed population 15 years and older 56.9 percent are self-employed without employees, while 27.6 percent are contributing family workers. About 2.0 percent are self-employed with employees. The private informal sector is the largest employer in the municipality, employing 90.4 percent of the population followed by the public sector with 7.3 percent.

Information Communication Technology

Of the population 12 years and above, 28.2 percent have mobile phones. Men who own mobile phones constitute 34.8 percent as compared to 22.1 percent of females. Less than five percent of the population 12 years and older use internet facilities in the Municipality. Only

981 households representing 5.0 percent of the total households in the Municipality have desktop/laptop computers.

Disability

About 3.8 percent of the municipality's total population has one form of disability or the other. The proportion of the male population with disability is slightly lower (3.6%) than females (4.0%). The types of disability in the Municipality include sight, physical, hearing, speech, intellect, and emotion. Persons with sight disability recorded the highest of 44.8 percent followed by physical disability (22.6%). About 20.5 percent of the population with disability are in the urban localities. Of the population disabled, 56.5 percent are employed and 42.0 percent economically not active, while 63.3 percent have never been to school.

Agriculture

In the municipality, 82.7 percent of households are engage in agriculture. In the rural localities, 93.1 percent of households are agricultural households while in the urban localities, 56.8 percent of households are into agriculture. Most households in the Municipality (96.1%) are involved in crop farming with Poultry (chicken) as the dominant animal reared in the municipality

Housing

The housing stock of Kasena Nankana Municipal is 11,503 representing 10.1 percent of the total number of houses in the Upper East Region. The average number of persons per house is 9.3.

Type, tenancy arrangement and ownership of dwelling units

Over half (54.0%) of all dwelling units in the Municipality are compound houses; 18.6 percent are separate houses and 5.9 percent are semi-detached houses. About 83.9 percent of the dwelling units in the Municipality are owned by members of the household; 9.2 percent are owned by private individuals; 2.8 percent are owned by a relative who is not a member of the household and only 2.7 percent are owned by public or government. Less than one percent (0.7%) 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 Municipality is mud/mud bricks or earth accounting for 73.4 percent with cement/concrete constituting 24.3 percent of outer walls of dwelling units in the municipality. Cement (70.9%) and mud/earth (27.3%) are the two main materials used in the construction of floors of dwelling units in the municipality. Metal sheets (62.7%) and mud/mud bricks/earth (26.0%) are the main roofing material for dwelling units in the Municipality.

Room occupancy

Two rooms constitute the highest percentage (24.8%) of sleeping rooms occupied by households in housing units in the municipality. About 11.3 percent of households with 10 or more members occupy two rooms.

Utilities and household facilities

The three main sources of lighting in dwelling units in the municipality are kerosene lamp (51.1%), electricity (28.8%) and flashlight/torch (16.6%). The main source of fuel for cooking for most households in the municipality is wood (59.2%). The proportion for rural (71.3%) is higher than that of urban (29.2%). The four main sources of water in the municipality are river stream, borehole, public tap and pipe borne water. About six out of ten households (64.4%) drink water from Bore-holes.

Majority of households (83.7%) do not have toilet facilities in their homes and therefore resort to bush/beach/field. For the few that use toilet facilities, the commonly used type of toilet facility in the municipality is public toilet (WC, KVIP, Pit, Pan) representing 5.7 percent. About 4 out 10 of households (42.6%) in the municipality have bathrooms for exclusive use of members while another 15.1 percent use shared bathrooms in the same house.

Waste disposal

The most widely method of solid waste disposal is by public dump in the open space accounting for 38.6 percent. About 20.2 percent of households burn their solid waste. House to house waste collection accounts for 11.8 percent. For liquid waste disposal, throwing waste onto the street (69.8%) and onto the compound (18.9%) are the two most common methods used by households in the Municipality.

CHAPTER ONE

INTRODUCTION

1.1   Background

The Kassena Nankana Municipal was upgraded by LI 2106 from the Kassena Nankana District which was established in 1988 by LI 1855. It is one of the thirteen (13) districts/municipalities in the Upper East Region of the Republic of Ghana. The municipality has Navrongo as its political and administrative capital. The municipality lies approximately between latitude 11°10' and 10°3' North and longitude 10°1' West.

The municipality shares boundaries to the north with Kassena-Nankana-West District and Burkina Faso. To the east, it shares boundary with Kassena-Nankana West District and Bolgatanga Municipal, to the west with Builsa District and to the south with the West Mamprusi District in the Northern Region.

1.2   Physical Features

1.2.1   Climatic Conditions

The climatic conditions of the Kassena Nankana Municipality is characterized by the dry and wet seasons, which are influenced mainly by two (2) air masses – the North-East Trade winds and the South-Westerly's (Tropical Maritime). The harmattan air mass (North-East Trade Winds) is usually dry and dusty as it originates from the Sahara Desert. During such periods, rainfall is virtually absent due to low relative humidity, which rarely exceeds 20 percent and low vapour pressure less than 10mb. Day temperatures are high recording 42° Celsius (especially between February and March) and night temperatures could be as low as 18° Celsius.

The Municipality experiences the tropical maritime air mass between May and October. The average annual rainfall is 950mm.

1.2.2   Relief and drainage

The Municipality is generally low-lying. The landscape is generally undulating with isolated hills rising up to about 300 metres above sea level in the western parts of the municipality. Notably among these hills include Fie (280 metres), Busono (350 metres) and Zambao (360 metres) above sea level.

The drainage system of the municipality is constituted mainly around the tributaries of the Sissili River – Asibelika, Afumbeli, Bukpegi and Beeyi. A tributary of the Asibelika River (Tono River) has been dammed to provide irrigation facilities.

1.2.3   Vegetation

The Kassena-Nankana Municipality lies within the Guinea Savannah woodlands. The Municipality is covered mainly by the Sahel and Sudan-Savannah types of vegetation comprising mainly of the savannah grassland with short trees and thumps. Common trees found are Dawadawa, Baobab, Sheanut and Mango.

Figure 1.1: District map of Kassena Nankana East Municipality

DISTRICT MAP OF KASSENA NANKANA EAST
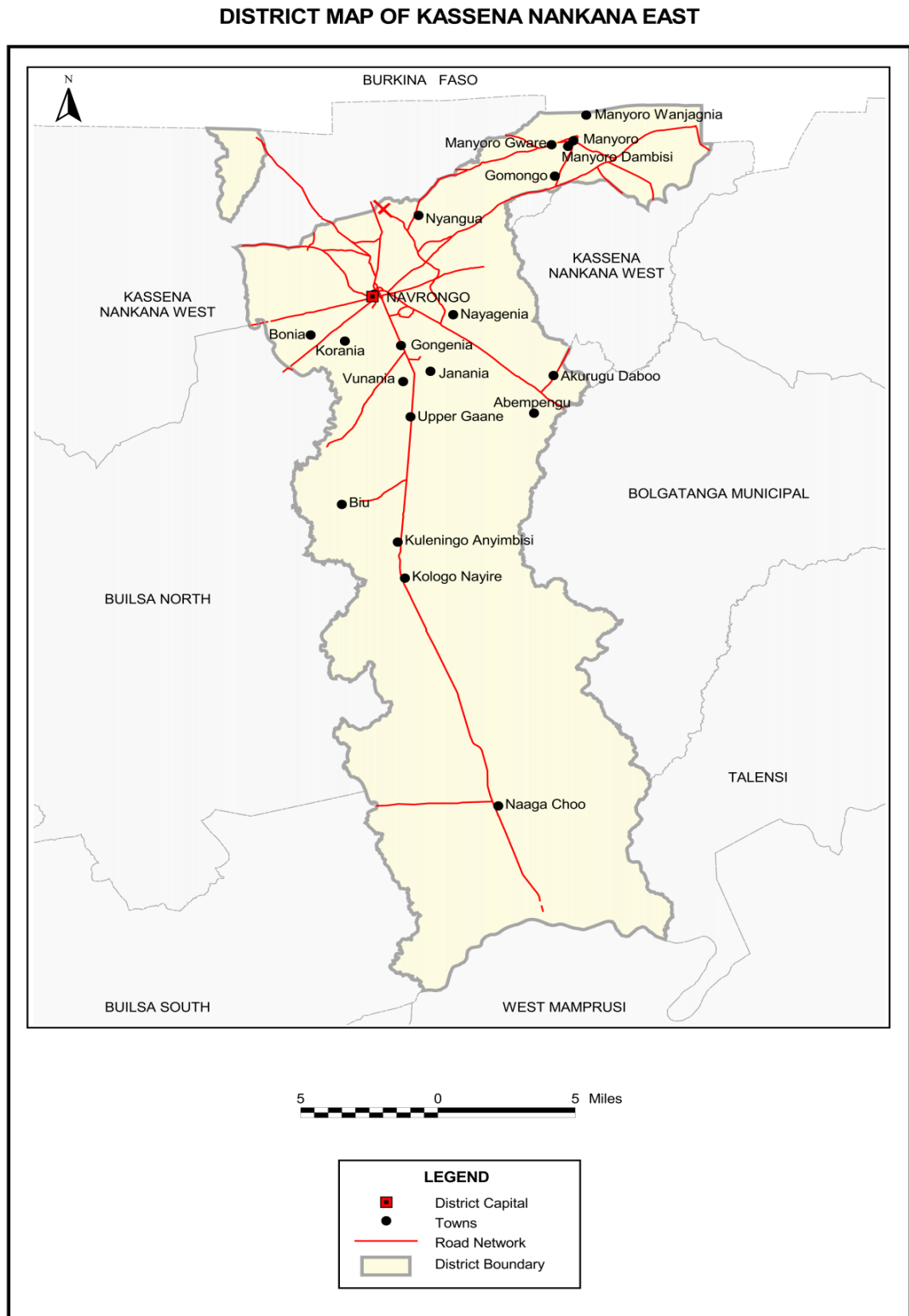
Source: Ghana Statistical Service, GIS

1.2.4 Soil

Two main types of soil are present in the municipality namely the Savannah ochrosols and groundwater laterite. The northern and eastern parts of the municipality are covered by the Savannah ochrosols, while the rest has groundwater laterite

The Savannah ochrosols are porous, well drained, loamy, and mildly acidic and interspersed with patches of black or dark-grey clayey soils. The groundwater laterites are developed mainly over shale and granite and cover approximately sixty percent of the municipality's land area. This soil type is suitable for the cultivation of many crops, especially rice and vegetables and hence accounts for the arable land sites including most parts of the Tono Irrigation Project sites where both wet and dry season farming activities are concentrated (KNMA, 2010).

1.3   Political Administration

The Kassena Nankana Municipal Assembly is the highest administrative and political authority in the municipality and is charged with the responsibility of formulating and implementing development plans, programmes and projects.

The Municipal General Assembly comprises 49 members, 35 elected and 14 appointed in addition to the Municipal Chief Executive (MCE) and a Member of Parliament (MP). The Municipal Chief Executive and the Member of Parliament, however, have no voting rights.

The Executive Committee operates through sub-committees that are statutory or instituted by the assembly itself. There are 9 of such committees in the assembly including; the social services; justice and security; finance and administrative; women and children; works; economic and development planning; climate, environment and agriculture; medium and small scale enterprise and public compliant committees.

There are six (6) areas/urban councils in the municipality. They include, Kologo, Pungu, Pindaa, Naaga, Gia area councils and the Navrongo Urban Council.

There also exist decentralized departments that aid the Municipal Assembly to achieve the overall development in the Municipality. These decentralized departments include: the central administration, works department, physical planning department, department of trade and industry, agriculture department, social welfare and community development, finance department, department of education youth and sports, department of forestry game and wild life, disaster prevention and management, feeder roads department, department of registry of births and deaths and information services department.

1.4   Social and Cultural Structure

1.4.1 Traditional authority

There are chiefs and 'Tindanas/Tigatus' in every community. People with these two titles in the communities wield a considerable power and authority over their people. While the chiefs are the traditional political heads in the communities, the 'Tindanas/Tigatus' are the main custodians of the land relate the ancestral traditions and hold in trust for the people.

In relation to ownership of land, individuals do not own lands but the family heads hold these in trust for the family.   The chiefs oversee the distribution and sale of land.   The

'Tindanas/Tigatus' the original owners of the land, however transfer land to other family heads.

1.4.2 Marriage

The payment of bride price takes the form of cola nuts, tobacco and guinea fowls. In addition, bridegrooms pay seven sheep and a cow together with the aforementioned items. It becomes obligatory for the bridegroom to present a cow upon the death of the bride if initially he did not present one. If one was unable to pay the sheep and the cow, the children would be mandated to provide one before they can pay dowry for their own wives.

1.4.3 Inheritance

The patrilineal system of inheritance is practiced. The eldest son inherits the deceased father in trust of the family. There is no form of ownership of family assets by daughters ascribed by the traditional system.

Funerals constitute another major customary practice of the people. Funerals are mostly organized after the harvest (and especially during the long dry season). Funerals are performed to mark the end of the transition from earth to life after death (The spirit world).

1.4.6 Social organization

Despite the diverse religious groups in the municipality, they co-exist peacefully. The various religious groups assist in the development of the communities in the Municipality. The Catholic Church, for instance, has been assisting in the educational and water infrastructure.

1.5 Economy

1.5.1 Agriculture

Agriculture is the dominant economic activity in the municipality. The major crops grown are millet, sorghum, rice, groundnuts, leafy vegetables, cowpea, bambara beans, okro, cotton, tomatoes and onions. Livestock reared in the municipality include cattle, sheep, goat, pigs, guinea fowls, fowls and other domestic animals like donkeys. Fish farming involving Tilapia and Mudfish are 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 municipality revolves mainly around foodstuffs, semi-processed food and crafts. These commodities are sold in the local markets and outside the municipality. Commodities traded in ranges from foodstuffs and livestock to manufactured goods.

1.5.3 Manufacturing

The Kassena-Nankana Municipality has not much large scale manufacturing industries. It is mostly characterized by small scale food processing, craft and manufacturing industries, examples of which include smock weaving, pottery and blacksmithing.

1.5.4 Agro industry/processing

Processing of foodstuffs, cash crops and other goods are common features of the local economy. The major small scale industrial activities includes, sheabutter extraction, pito brewing, milling or grinding of millet for domestic use, dawadawa processing, weaving and dressmaking, pottery, rice milling and soap making. Most of these small scale industries are one-man businesses and hardly employ people. The sector is dominated by females and needs to be organized into groups and their capacities built to enhance their businesses. There are also varied business types in the municipality which needs to be developed in order to boost the local economy.

1.5.5 Banking and financial services

The Naara Rural Bank Limited, with its head office located at Paga has an agency at Navrongo. There are also non-banking institutions in the municipality 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 Resources for development

The municipality is endowed with both human and natural resources. The siting of one of the campuses of the University for Development Studies in the municipality has also enhanced the easy access to tertiary education to the youth thereby enhancing human capital in the municipality. Sand and clay are the major natural minerals mined in the municipality for construction purposes. The special weather condition has also made it possible for the generation of electricity for national use through a solar plant in Pungu, a suburb of Navrongo. The Tono irrigation facility has also made it possible for all-year round cultivation of crops especially vegetables such as tomato, pepper, cabbage and onion.

1.5.7 Tourism and recreation

The municipality abounds in tourism potentials including various sites, cultural practices and other features of tourists' interests. The major ones among them are: the Unique Catholic Cathedral Edifices and the TONO Irrigation Dam, both in Navrongo. The festivals and funerals of the people are sources of tourist attraction.

Supporting the tourism industry in the municipality is the hospitality industry, offering recreation and avenues for socialization. They include: Mayaga Hotel, Tono Guest and Club Houses, Catholic Social Centres and many new guest houses in the various communities.

1.6 Census Methodology, Concepts and Definitions

1.6.1 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-organized 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

It is internationally recognized that an essential element in census planning is the pre-testing of the questionnaire and related instructions. The objective of the pre-test is to test the questionnaire, the definition of its concepts and the instructions for filling out the questionnaire.

The census questionnaire was pre-tested twice in the course of its development. The first pre-test was carried out in March 2009 to find out the suitability of the questions and the instructions provided. It also tested the adequacy and completeness of the responses and how respondents understood the questions. The second pre-test was done in 10 selected enumeration areas in August, 2009. The objective of the second pre-test was to examine the sequence of the questions, test the new questions, such as, date of birth and migration, and assess how the introduction of 'date of birth' could help to reduce 'age heaping'. With regard to questions on fertility, the pre-tests sought to find out the difference, if any, between proxy responses and responses by the respondents themselves. Both pre-tests were carried in the Greater Accra Region. Experience from the pre-tests was used to improve the final census questionnaire.

A trial census which is a dress rehearsal of all the activities and procedures that are planned for the main census was carried out in October/November 2009. These included recruitment and training, distribution of census materials, administration of the questionnaire and other census forms, enumeration of the various categories of the population (household, institutional and floating population), and data processing. The trial census was held in six selected districts across the country namely; Saboba (Northern Region), Chereponi (Northern Region), Sene (Brong Ahafo Region), Bia (Western Region), Awutu Senya (Central Region), and Osu Klottey Sub-Metro (Greater Accra Region). A number of factors were considered in selecting the trial census districts. These included: administrative boundary issues, ecological zone, and accessibility, enumeration of floating population/outdoor-sleepers, fast growing areas, institutional population, and enumeration areas with scattered settlements.

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, Kasoa 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:

1. 97.0 percent of all household residents who were in the country on Census Night (26th September, 2010) were enumerated.

2. 1.3 percent of the population was erroneously included in the census.

3. 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.

4. 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.

5. 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.

1.7   Concepts and Definitions

Introduction

The 2010 Population and Housing Census of Ghana followed the essential concepts and definitions of a modern Population and Housing Census as recommended by the United Nations (UN). It is important that the concepts, definitions and recommendations are adhered to since they form the basis upon which Ghana could compare her data with 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 recognized 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   Organisation 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 composition of the population of any country or economy has great influence on the kind of policies the authorities put in place to better the lives of the people. The knowledge of the population and its dynamics in an area therefore is crucial for its development. The population structure and distribution for instance indicates certain population parameters such as the labour force, sex ratio, dependence ratio, and total population of an area, which are important factors that can influence policies, and programmes.

This chapter therefore looks at population characteristics such as the population size and its distribution by type of locality, age sex structure, fertility, migration and mortality in the Kassena-Nankana Municipality.

2.2   Population Size and Distribution

Table 2.1, shows the population distribution of the Kassena Nankana Municipality as recorded in the 2010 PHC. The total population of the municipality is 109,944 with females constituting 51.2 percent (56,268) and males 48.8 percent (53,676). Again, the table shows a very young population where 50.4 percent of the population falls between ages 0-19 years. The aged (65+), constitute only 6.5 percent of the total population in the municipality. The age group 0-4 has the highest proportion of 13.8 percent with those 85+ recording the lowest proportion of 0.6 percent.

The sex ratio, which represents the number of males to a 100 females for the municipality is 95.4. It can be seen from Table 2.1 that the male population in the municipality is greater than that of the female population from 0 – 24 years and from age 25years and above females outnumber males. This shows that at birth, there are more males than females and as the population grows older, there are more females than males.

Table 2.1 further looks at the distribution of the population by locality of residence. From the table, about seven in ten people (72.7%) live in rural areas in the municipality.

Table 2.1: Population by age, sex and type of locality

Age group	Both Sexes	Male	Female	Sex ratio	Urban	Rural
	Sex				**Type of locality**	
0 - 4	15,123	7,694	7,429	103.6	4,214	10,909
5 - 9	14,473	7,334	7,139	102.7	3,685	10,788
10 - 14	13,493	6,913	6,580	105.1	3,105	10,388
15 - 19	12,276	6,392	5,884	108.6	3,033	9,243
20 - 24	10,755	5,785	4,970	116.4	3,655	7,100
25 - 29	7,775	3,787	3,988	95	2,731	5,044
30 - 34	6,271	2,923	3,348	87.3	2,086	4,185
35 - 39	5,252	2,448	2,804	87.3	1,578	3,674
40 - 44	4,716	1,963	2,753	71.3	1,313	3,403
45 - 49	3,975	1,781	2,194	81.2	1,024	2,951
50 - 54	3,765	1,646	2,119	77.7	896	2,869
55 - 59	2,342	1,123	1,219	92.1	536	1,806
60 - 64	2,624	1,119	1,505	74.4	576	2,048
65 - 69	1,658	704	954	73.8	341	1,317
70 - 74	2,309	823	1,486	55.4	490	1,819
75 - 79	1,690	635	1,055	60.2	378	1,312
80 - 84	813	327	486	67.3	182	631
85 - 89	367	164	203	80.8	100	267
90 - 94	199	88	111	79.3	48	151
95 - 99	68	27	41	65.9	22	46
All Ages	**109,944**	**53,676**	**56,268**	**95.4**	**29,993**	**79,951**
0-14	43,089	21,941	21,148	103.7	11,004	32,085
15-64	59,751	28,967	30,784	94.1	17,428	42,323
65+	7,104	2,768	4,336	63.8	1,561	5,543
Age-dependency ratio	**84**	**85.3**	**82.8**		**72.1**	**88.9**

Source: Ghana Statistical Service, 2010 Population and Housing Census

The age-dependency ratio for the Municipality is 84.0, which implies that for every 10 persons within the working age bracket 15-64, they have about 8 persons within the dependent population, (0-14 and 65 and above) to cater for. The lower the age dependency ratio of an area it is believed the better the standard of living for the population, therefore from Table 2.2, urban age–dependency is more favourable as compared to rural dependency. That is to say that the rural working class with a dependency ratio of 88.9 will have to cater for more dependents, compared to urban dwellers where the dependency ratio is 72.1. It is however, interesting to note that in the rural areas every 10 people within the working age population have about 9 persons within the dependent population to cater for, making the ratio almost one to one, however, in the urban areas every 10 persons within the working age group have about 7 persons from the dependent population to cater for.

Table 2.2: Age dependency ratio by locality

Age group/ratio	Total	Urban	Rural
All Ages	109,944	29,993	79,951
0-14	43,089	11,004	32,085
15-64	59,751	17,428	42,323
65+	7,104	1,561	5,543
Total dependency ratio	**84**	**72.1**	**88.91**
Child dependency ratio	**72.1**	**63.1**	**75.8**
Old age dependency ratio	**11.9**	**9**	**13.1**

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.3   Age-Sex Structure (Population Pyramid)

The population pyramid shows the graphical representation of the age-sex structure of the population in the municipality. It has a broader base typical of most developing countries with the pyramid signifying a youthful population for the municipality. The municipality has more than half of its population within the ages 0-39 years. Figure 2.1 depicts that there are more males than females from ages 0-24, but the reverse for ages 30 years and above.

Figure 2.1: Population pyramid
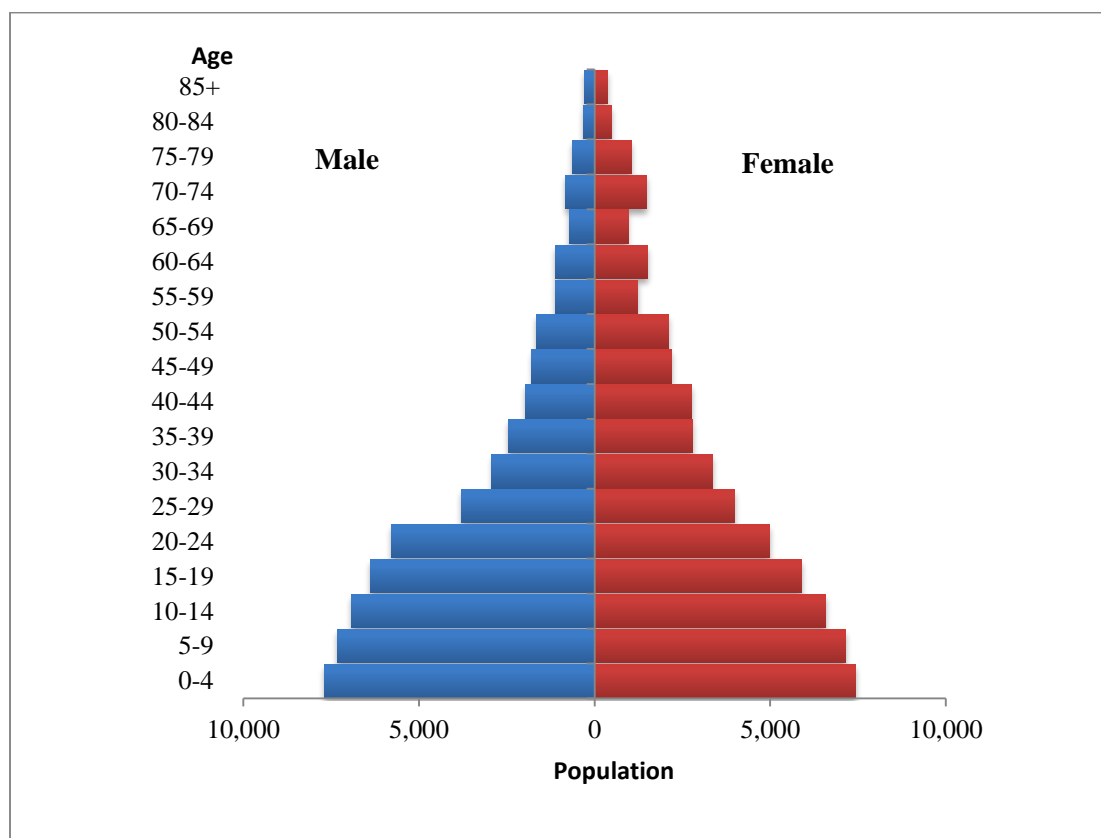
Source: Ghana Statistical Service, 2010 Population and Housing Census

2.4   Fertility, Mortality and Migration

The levels and changes in migration, fertility and mortality are important for socioeconomic planning and policy adoption. In developing countries like Ghana, where population registers are non-existent, censuses provide a more comprehensive data on fertility, mortality and migration in terms of coverage than surveys and other sources.

2.4.1   Fertility

Fertility refers to the number of live births women have. Fertility is directly determined by a number of factors which, in turn, are affected by a great many other factors: social, cultural, environmental, economic, and health. The Total Fertility Rate (TFR) is the average number of live births among 1,000 women exposed throughout their childbearing years (15-49 years) to the schedule of a given set of age specific fertility rates, assuming no women died during the childbearing years. In other words, it is the average number of children a woman will have given birth to by the end of her reproductive years if current fertility rates prevailed.

The general fertility rate (GFR) is the number of births in a given year divided by the mid-year population of women in the age groups 15-49 years. (GSS, 2010 PHC National Analytical Report)

The Kassena-Nankana Municipality has a relatively low fertility rate in the Upper East Region. The TFR of the municipality is 3.4 same as the regional average. This means that a woman living in the municipality would have on the average, three children by the end of her reproductive period if the current age-specific fertility rates continue to prevail. The GFR for the municipality is 97.9 births per 1000 women.

Crude Birth Rate (CBR), which is defined as the number of births in a given year divided by the number of people in the mid-year population is 23.1 per 1000 population in 2010.

Table 2.3: Reported total fertility rate, general fertility rate and crude birth rate

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**	**3.4**	**97.5**	**22.7**
Builsa North	56,477	13,133	1,344	3.6	102.3	23.8
Kassena Nankana West	70,667	16,820	1,309	2.8	77.8	18.5
Kassena Nankana Municipal	**109,944**	**25,941**	**2,539**	**3.4**	**97.9**	**23.1**
Bolgatanga Municipal	131,550	34,909	3,089	3.0	88.5	23.5
Talensi	81,194	17,431	1,820	3.6	104.4	22.4
Bongo	84,545	19,593	1,982	3.6	101.2	23.4
Bawku West	94,034	20,951	2,226	3.7	106.2	23.7
Garu Tempane	130,003	27,784	2,951	3.9	106.2	22.7
Bawku Municipal	98,538	24,496	2,004	2.9	81.8	20.3
Builsa South	36,514	8,438	1,011	4.3	119.8	27.7
Nabdam	33,826	7,355	773	3.6	105.1	22.9
Binduri	61,576	13,367	1,303	3.6	97.5	21.2
Pusiga	57,677	13,159	1,377	3.7	104.6	23.9

Source: Computed from the 2010 Population and Housing Census
*Note: * Number of live births per 1,000 women aged 15-49 years*
*   ** Number of live births per 1,000 populations*

2.4.2   Children ever born, children surviving and sex of child

The total population of females in the Municipality 12 years and older is 38,879, of which the majority are within the ages 15-19 years (5,884) and the least within the ages 55-59 years (1,219).

The total number of children ever born to females aged 12 years and older in the Municipality is 104,754 children, out of which 83,118 children are surviving. On the average therefore, each female 12 years and older ever gave birth to about 3 children as at the time of the census. Also on the average, there are 2 surviving children to each female 12 years and older in the Municipality.

Out of a total of 53,034 male children ever born, 41,602 of them are currently surviving. Similarly, Table 2.4 shows that, out of a total of 51,720 female children ever born by females 12 years and older, 41,516 of them are surviving as at the time of the census, giving a higher survival rate for females compared to males even though more male children are born compared to female children ever born.

Table 2.4: 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	38,879	104,754	53,034	51,720	83,118	41,602	41,516
10-14	3,759	21	11	10	17	9	8
15-19	5,884	656	356	300	587	312	275
20-24	4,970	3,599	1,793	1,806	3,197	1,548	1,649
25-29	3,988	7,270	3,682	3,588	6,596	3,314	3,282
30-34	3,348	10,218	5,128	5,090	9,164	4,555	4,609
35-39	2,804	10,820	5,476	5,344	9,437	4,689	4,748
40-44	2,753	12,851	6,453	6,398	10,766	5,356	5,410
45-49	2,194	10,922	5,604	5,318	8,879	4,526	4,353
50-54	2,119	11,166	5,571	5,595	8,681	4,316	4,365
55-59	1,219	6,465	3,235	3,230	4,949	2,459	2,490
60+	5,841	30,766	15,725	15,041	20,845	10,518	10,327

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.4.3   Migration

Reliable information on migrants is essential to develop evidence-based policies, to inform public opinion, and to combat widely held misconceptions" (UN 2013, page 1). The total number of migrants resident in the Municipality is 17,867. Of this number, 17.3 percent have stayed in the district for less than 1 year with 26.4 percent having lived in the district for more than 20 years or more. Majority (7,703) 43.1 percent of these migrants were born elsewhere in the Upper East but not in the Municipality. The rest were born in other regions in Ghana or outside the country. Most migrants in the district would stay less than five years in the district. Migrants from the Ashanti region outnumber all other migrants not born in the region.

Of migrants from outside Ghana in the municipality, 9.6 percent had lived less than one year, while 32.4 percent have lived in the Municipality between 1-4 years.

Table 2.5: Birthplace by duration of residence of migrants

Birthplace	Number	Duration of residence (Percent)				
		Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years
Total	17,867	17.3	26.3	12.0	14.9	26.4
Born elsewhere in the region	7,703	15.0	18.4	10.1	15.5	41.0
Born elsewhere in another region:						
Western	529	30.1	34.2	7.8	13.4	14.6
Central	216	22.7	37.0	9.7	11.1	19.4
Greater Accra	983	23.2	36.1	11.2	13.5	16.0
Volta	345	22.3	41.7	9.0	14.5	12.5
Eastern	416	25.7	39.2	10.6	12.7	11.8
Ashanti	3,367	20.4	32.8	16.2	15.6	15.1
Brong Ahafo	871	22.7	39.5	14.9	14.2	8.6
Northern	2,262	14.7	28.3	15.1	17.5	24.4
Upper East						
Upper west	1,175	17.4	35.7	14.3	15.1	17.5
Outside Ghana	565	9.6	32.4	19.3	15.4	23.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.4.3   Mortality

Mortality is total number of deaths in a geographical area in a particular period of time. This report looks at mortality in terms of total deaths in households and crude death rate, causes of death and age specific death rate by sex. From Table 2.7 the total number of deaths in households in the region is 11,339 giving a crude death rate of 10.8 deaths per every 1,000 of the population. In the Kassena-Nankana Municipality, there are 1,217 deaths. The municipality had a crude death rate of 11.1 per 1000 of the population, which is higher than the regional average rate of 10.8.

Table 2.6: Total population, death in households and crude death rate by district

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 Municipal	**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 populations*

2.4.4   Causes of death

The 2010 PHC shows that the Kassena Nankana Municipal is less likely to have accident/violence/homicide/suicide related deaths as compared to most districts in the Upper East Region. In Table 2.8, out of the total number of 1,217 deaths recorded in the Municipality, 7.1 percent of the deaths occurred through accident/violence/homicide/suicide is lower than the regional average of 15.2 and 92.9 percent of deaths occurred through other causes.

Table 2.7: Causes of death by district

Region/district	Total deaths	Death due to			
		Accident/ violence/ homicide /suicide		All other causes	
		Number	Percent	Number	Percent
All Districts	**11,339**	**1,720**	**15.2**	**9,619**	**84.8**
Builsa North	478	30	6.3	448	93.7
Kassena Nankana West	566	47	8.3	519	91.7
Kassena Nankana Municipal	**1,217**	**86**	**7.1**	**1,131**	**92.9**
Bolgatanga Municipal	2,269	940	41.4	1,329	58.6
Talensi	1,218	165	13.5	1,053	86.5
Bongo	1,093	61	5.6	1,032	94.4
Bawku West	838	43	5.1	795	94.9
Garu Tempane	1,287	97	7.5	1,190	92.5
Bawku Municipal	691	65	9.4	626	90.6
Builsa South	337	14	4.2	323	95.8
Nabdam	473	79	16.7	394	83.3
Binduri	510	43	8.4	467	91.6
Pusiga	362	50	13.8	312	86.2

Source; Ghana Statistical Service, 2010 Population and Housing Census

2.4.5   Age specific death rate

The death rates for the various age groups differed in terms of sex in the Kassena Nankana Municipality. From Figure 2.2 the age specific death rate is higher among males than females at ages 0-4 years. However, both rates begin to fall sharply to age 5-9 years. It continuous to fall but steadily between age 10-14 years and begins to rise for both sexes until age 39 where the male deaths rises sharply compared to that of females.. From Figure 2.2, more males are likely to die as compared to females at ages 40 and above in the municipality.

Figure 2.2: Reported age specific death rates by sex
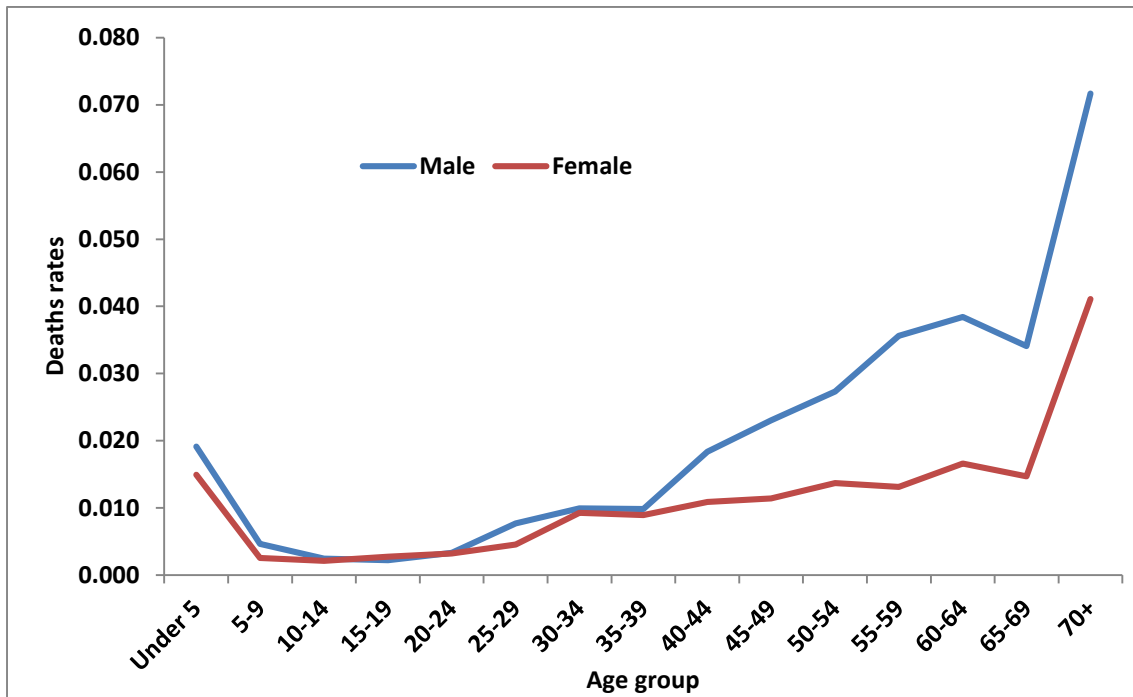
CHAPTER THREE

SOCIAL CHARACTERISTICS

3.1 Introduction

Ghanaian households are reflections of the social structure, in that living arrangements are largely influenced by such socio-cultural factors as marriage, and the types of family and kinship systems existing in a particular society. This chapter focuses on analysis of data on the social characteristics of the population in the Kassena Nankana Municipality. The 2010 PHC defined a household as "a person or group of persons who lived together in the same house or compound and shared the same housekeeping arrangements. Typically, a household consists of a husband, wife, children and other relatives or a house help who may be living with them".

3.2 Size, Household Composition and Headship

3.2.1 Household size

Table 3.1 provides information on household size by locality in the Kassena Nankana Municipality. The municipality has a household population of 107,435 with a total number of 19,790 households. The average household size from the 2010 PHC data in the municipality is 5.4 persons per household. The average household per house is 1.7 with urban dwellers having a higher proportion of households per house than rural dwellers. However, average household size is higher in rural areas (5.6) than in urban areas.

Table 3.1: Household size by locality

Categories	Region	District	Urban	Rural
Total household population	1,034,704	107,435	28,924	78,511
Number of households	177,629	19,790	5,690	14,100
Average households per house	1.6	1.7	2.0	1.6
Average household size	5.8	5.4	5.1	5.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.2 Household composition and sex

The total number of people in households in the Municipality is 107,435 as indicated by Table 3.2. Children constitute the majority of household population with 44.7 percent, followed by heads (18.4%), with the lowest being the adopted/foster child (0.3%). Spouses form 9.7 percent with grandchildren also making up 7.9 percent.

Table 3.2: Household composition by sex

Household composition	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	107,435	100.0	51,883	100.0	55,552	100.0
Head	19,790	18.4	13,249	25.5	6,541	11.8
Spouse (wife/husband)	10,409	9.7	404	0.8	10,005	18.0
Child (son/daughter)	47,990	44.7	26,144	50.4	21,846	39.3
Parent/parent in-law	2,758	2.6	387	0.8	2,371	4.3
Son/daughter in-law	1,820	1.7	125	0.2	1,695	3.1
Grandchild	8,447	7.9	4,317	8.3	4,130	7.4
Brother/sister	4,279	4.0	2,526	4.9	1,753	3.2
Step child	1,372	1.3	730	1.4	642	1.2
Adopted/foster child	325	0.3	119	0.2	206	0.4
Other relative	9,233	8.6	3,265	6.3	5,968	10.7
Non-relative	1,012	0.9	617	1.2	395	0.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.3 Household structure and sex

From Table 3.3, out of the 107,435 households population in the municipality, 40.2 percent of the population are in extended family households (head, spouses, children and head's relatives), 20.7 percent in nuclear (head, spouses and children) households and 17.0 percent are in single parent extended households. This gives the indication that the extended family system is still common with the people in the municipality. Of the total household population in the municipality, 51,883 (48.3%) persons are males and 55,552 (51.7%) persons are females (Table 3.2). It is worth observing that in the municipality females are more likely to be single parents than males, whether in an extended family or nuclear family system. This is evident in Table 3.3 where the percentage household population of males who are in a Single Parent Nuclear and Single Parent Extended family households were 8.4 percent and 15.7 percent respectively, while the percentage household population of females who are in single parent nuclear and single parent extended family households are 10.0 percent and 18.2 percent respectively.

Table 3.3: Household structure by sex

Household structure	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	107,435	100.0	51,883	100.0	55,552	100.0
Head only	1,754	1.6	1,039	2.0	715	1.3
Head and a spouse only	728	0.7	365	0.7	363	0.7
Nuclear (Head, spouse(s) and children)	22,282	20.7	11,590	22.3	10,692	19.3
Extended (Head, spouse(s), children and Head's relatives)	43,195	40.2	21,044	40.6	22,151	39.9
Extended + non relatives	1,525	1.4	721	1.4	804	1.5
Head, spouse(s) and other composition	2,270	2.1	1,054	2.0	1,216	2.2
Single parent Nuclear	9,928	9.2	4,355	8.4	5,573	10.0
Single parent Extended	18,245	17.0	8,130	15.7	10,115	18.2
Single parent Extended + non relative	852	0.8	362	0.7	490	0.9
Head and other composition but no spouse	6,656	6.2	3,223	6.2	3,433	6.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3   Marital Status

Generally, marriage in Ghana is recognized as a union between a man and a woman with the knowledge of both families. In Ghana, the purpose of marriage is to provide companionship for the couple, the means to offer support for each other, and a legitimate avenue for sexual satisfaction and reproduction. Marriage includes formal unions that are legal, traditional or religiously sanctioned, and informal cohabiting unions. The 2010 Census collected information on the marital status of persons from age 12 years and above.

3.3.1   Persons 12 years and older, sex, age-group and marital status

Figure 3.1 shows the marital status of persons 12 years and older in the municipality. About four in ten (44.8%) of the population aged 12 years and older are married, 41.6 percent have never married, and 0.5 percent are in consensual unions whilst 9.4 percent are widowed. The proportion divorced persons is 1.6 percent and those who reported they have separated are 2.0 percent.

Figure 3.1: Marital status of persons 12 years and older
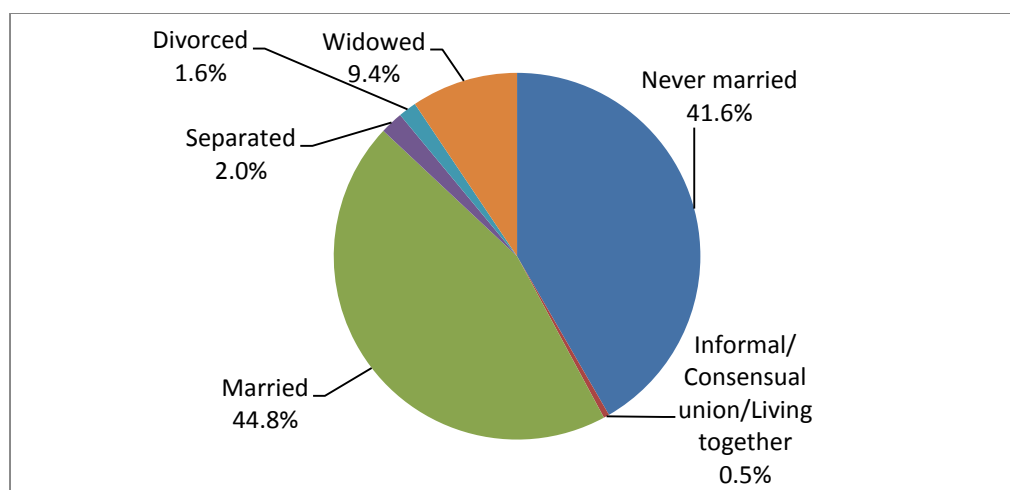
Source: Ghana Statistical Service, 2010 Population and Housing Census

The Kassena Nankana Municipality has a total population of 74,561 aged 12 years and older. Table 3.4 shows the distribution of marital status by sex and age group. From the table, more than half of those aged 25 years and above are married and the never married constitute less than 10.0 percent except in the age group 25-29 and 30-34 which recorded 37.4 and 15.2 percent respectively.

Table 3.4 further shows the distribution of the population 12 years and older by sex. More female (47.1%) are married compared to males (42.4%) who are married. Again, the table shows that more females are widowed (15.9%) compared to the male population where only 2.3 percent are widowed. This is even more pronounced when the age groups are considered. For instance, in the 65 years and above group, 64.5 percent of females are widowed compared to 15.0 percent of males who are widowed.

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	**74,561**	**100.0**	**41.6**	**0.5**	**44.8**	**2.0**	**1.6**	**9.4**
10 - 14	7,706	100.0	95.6	0.1	4.3	0.0	0.0	0.0
15 - 19	12,276	100.0	90.6	0.4	8.3	0.3	0.2	0.2
20 - 24	10,755	100.0	68.5	1.0	28.4	1.2	0.5	0.4
25 - 29	7,775	100.0	37.4	1.2	56.4	2.5	1.4	1.1
30 - 34	6,271	100.0	15.2	0.7	75.3	3.7	2.2	2.9
35 - 39	5,252	100.0	8.4	0.4	78.0	4.6	3.1	5.5
40 - 44	4,716	100.0	4.9	0.2	78.0	4.1	3.5	9.3
45 - 49	3,975	100.0	3.9	0.3	74.6	3.9	3.6	13.7
50 - 54	3,765	100.0	2.5	0.3	70.2	2.9	3.6	20.4
55 - 59	2,342	100.0	2.9	0.2	69.0	2.6	2.6	22.7
60 - 64	2,624	100.0	3.2	0.3	60.3	2.0	2.6	31.5
65+	7,104	100.0	3.4	0.1	47.2	1.4	2.1	45.7
Male								
Total	**35,682**	**100.0**	**51.7**	**0.4**	**42.4**	**1.7**	**1.5**	**2.3**
10 - 14	3,947	100.0	95.7	0.1	4.3	0.0	0.0	0.0
15 - 19	6,392	100.0	94.8	0.1	4.8	0.1	0.1	0.1
20 - 24	5,785	100.0	85.2	0.5	13.2	0.7	0.3	0.2
25 - 29	3,787	100.0	55.5	1.4	40.2	1.6	1.0	0.3
30 - 34	2,923	100.0	24.3	0.8	69.3	2.9	1.8	0.8
35 - 39	2,448	100.0	12.9	0.3	78.6	4.2	3.1	0.8
40 - 44	1,963	100.0	8.5	0.1	80.9	4.3	3.9	2.2
45 - 49	1,781	100.0	6.2	0.3	83.4	3.8	3.4	3.0
50 - 54	1,646	100.0	3.7	0.5	84.1	3.0	3.9	4.7
55 - 59	1,123	100.0	3.4	0.4	85.4	2.7	2.8	5.4
60 - 64	1,119	100.0	4.4	0.5	80.9	2.4	3.5	8.3
65+	2,768	100.0	4.6	0.2	75.6	1.8	2.9	15.0
Female								
Total	**38,879**	**100.0**	**32.4**	**0.6**	**47.1**	**2.3**	**1.7**	**15.9**
10 - 14	3,759	100.0	95.6	0.1	4.3	0.0	0.0	0.0
15 - 19	5,884	100.0	86.1	0.7	12.1	0.5	0.2	0.3
20 - 24	4,970	100.0	49.2	1.6	46.1	1.8	0.6	0.6
25 - 29	3,988	100.0	20.2	1.1	71.8	3.4	1.7	1.8
30 - 34	3,348	100.0	7.3	0.5	80.5	4.4	2.5	4.7
35 - 39	2,804	100.0	4.4	0.5	77.5	4.9	3.1	9.6
40 - 44	2,753	100.0	2.4	0.3	75.9	4.0	3.2	14.3
45 - 49	2,194	100.0	2.1	0.3	67.4	4.0	3.8	22.3
50 - 54	2,119	100.0	1.6	0.2	59.4	2.8	3.4	32.6
55 - 59	1,219	100.0	2.5	0.1	53.8	2.5	2.5	38.6
60 - 64	1,505	100.0	2.4	0.2	45.0	1.7	2.0	48.8
65+	4,336	100.0	2.6	0.1	29.1	1.2	1.7	65.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3.2   Marital status and education

Table 3.5 presents the marital status and level of education for persons 12 years and older in the Kassena Nankana Municipality. About four in ten (44.8%) have no education. Of persons 12 years and older who have some form of education, 38.3 percent have basic education, 8.4

percent have secondary education and those who have tertiary education constitute 3.9 percent. The data further shows that all persons 12 years and older who have obtained vocational/technical/commercial and post middle/secondary certificate/diploma levels of education are less than five percent (4.5%).

From Table 3.5, females in the marriage age who have no education constitute 52.2 percent which is higher than their male counterparts where 36.8 percent are with no education. Also, the proportion of married females with no education (67.2%) is higher compared to the males (57.6%). The widowed in the municipality has the highest proportion of illiterates (86.3%). The level of education of married male at all levels is higher than their female counterpart. For instance, at the basic level, 25.6 percent of males are married whereas 23.6 percent of female are in the same category.

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]	Secon-dary[2]	Voc./ Tech./ Comm	Post middle/ secondary certificate/ diploma[3]	Tertiary[4]
Both Sexes								
Total	74,561	100.0	44.8	38.3	8.4	1.2	3.3	3.9
Never married	31,051	100.0	15.3	59.9	13.5	1.0	3.4	6.9
Informal/consensual union/living together	389	100.0	27.8	36.5	16.2	2.6	9.8	7.2
Married	33,439	100.0	62.9	24.5	5.4	1.4	3.7	2.1
Separated	1,510	100.0	53.4	34.7	5.8	2.4	2.6	1.1
Divorced	1,198	100.0	59.7	30.4	4.8	1.3	2.8	1.0
Widowed	6,974	100.0	86.3	11.1	0.6	0.4	1.2	0.3
Male								
Total	35,682	100.0	36.8	41.2	9.7	1.3	4.0	7.0
Never married	18,444	100.0	16.5	56.0	13.0	1.0	3.4	10.1
Informal/consensual union living together	158	100.0	27.2	29.7	14.6	1.9	11.4	15.2
Married	15,123	100.0	57.6	25.6	6.4	1.7	4.9	3.8
Separated	606	100.0	55.6	31.0	6.3	2.5	3.0	1.7
Divorced	540	100.0	61.9	28.9	5.0	0.7	2.8	0.7
Widowed	811	100.0	82.7	13.2	1.1	0.4	1.7	0.9
Female								
Total	38,879	100.0	52.2	35.8	7.1	1.1	2.7	1.2
Never married	12,607	100.0	13.6	65.6	14.2	1.1	3.3	2.2
Informal/consensual union/living together	231	100.0	28.1	41.1	17.3	3.0	8.7	1.7
Married	18,316	100.0	67.2	23.6	4.6	1.2	2.7	0.7
Separated	904	100.0	51.9	37.2	5.5	2.3	2.4	0.7
Divorced	658	100.0	57.9	31.6	4.7	1.7	2.9	1.2
Widowed	6,163	100.0	86.8	10.8	0.5	0.4	1.2	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census
Basic: Primary, Middle and JSS/JHS
Secondary: SSS/SHS and Secondary
Post Middle/ Sec. Cert./ Diploma: Teacher training/ College of education, Agric, Nursing , University Diploma, HND, etc.
Tertiary: Bachelor's Degree and Post Graduate or higher

3.3.3 Persons 12 years and older, sex, marital status and economic activity status

Table 3.6 indicates the economic activity status of persons 12 years and older by sex and marital status. Out of a total of 74,561 persons 12 years and older in the municipality, 64.2 percent are employed, 1.9 unemployed and 33.9 percent economically not active. Of the population12 years and older who are married, the employed form 84.1 percent with 1.9 percent unemployed, and 27.2 percent economically not active. Those in the informal/consensual union who are employed form 67.6 percent with those unemployed being 5.1 percent. The never married category has 41.3 percent employed with only 2.1 percent unemployed while 56.5 percent in the economically not active group.

Among the male population 12 years and older, those employed are 64.2 percent with the unemployed constituting 2.0 percent. Of this male population, those married who are employed forms 87.0 percent and the never married male who are employed also constitute 44.2 percent. Of the female population 12 years and older, 64.2 are employed, 1.9 percent unemployed and 33.9 percent are economically not active. Of the married, those who are employed constitute 81.7 percent while those unemployed form 2.1 percent and 16.2 percent are economically not active.

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

Sex/marital status	Total		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	**74,561**	**100.0**	**47,866**	**64.2**	**1,430**	**1.9**	**25,265**	**33.9**
Never married	31,051	100.0	12,832	41.3	661	2.1	17,558	56.5
Informal/consensual union/living together	389	100.0	263	67.6	20	5.1	106	27.2
Married	33,439	100.0	28,113	84.1	622	1.9	4,704	14.1
Separated	1,510	100.0	1,237	81.9	53	3.5	220	14.6
Divorced	1,198	100.0	966	80.6	28	2.3	204	17.0
Widowed	6,974	100.0	4,455	63.9	46	0.7	2,473	35.5
Male								
Total	**35,682**	**100.0**	**22,902**	**64.2**	**706**	**2.0**	**12,074**	**33.8**
Never married	18,444	100.0	8,147	44.2	415	2.3	9,882	53.6
Informal/consensual union/living together	158	100.0	117	74.1	10	6.3	31	19.6
Married	15,123	100.0	13,153	87.0	239	1.6	1,731	11.4
Separated	606	100.0	505	83.3	23	3.8	78	12.9
Divorced	540	100.0	444	82.2	11	2.0	85	15.7
Widowed	811	100.0	536	66.1	8	1.0	267	32.9
Female								
Total	**38,879**	**100.0**	**24,964**	**64.2**	**724**	**1.9**	**13,191**	**33.9**
Never married	12,607	100.0	4,685	37.2	246	2.0	7,676	60.9
Informal/consensual union/living together	231	100.0	146	63.2	10	4.3	75	32.5
Married	18,316	100.0	14,960	81.7	383	2.1	2,973	16.2
Separated	904	100.0	732	81.0	30	3.3	142	15.7
Divorced	658	100.0	522	79.3	17	2.6	119	18.1
Widowed	6,163	100.0	3,919	63.6	38	0.6	2,206	35.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.4   Nationality

Table 3.7 shows the nationality of residents in the municipality. Ninety-eight percent of the population in the municipality are Ghanaians and other African nationals constituting 1.6 percent of which residents from ECOWAS countries is 1.1 percent. Only 0.4 percent are from countries outside Africa. There is not much difference in nationality by sex, except that there is a slight difference among persons with dual nationality where 2.0 percent of females are in this category compared to 1.8 percent of males.

Table 3.7: Population by nationality and sex

Nationality	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	109,944	100.0	53,676	100.0	56,268	100.0
Ghanaian by birth	104,999	95.5	51,250	95.5	53,749	95.5
Dual Nationality	2,059	1.9	952	1.8	1,107	2.0
Ghanaian by naturalization	658	0.6	327	0.6	331	0.6
ECOWAS	1,171	1.1	646	1.2	525	0.9
Africa other than ECOWAS	564	0.5	268	0.5	296	0.5
Other	493	0.4	233	0.4	260	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.5   Religious Affiliation

From Table 3.8, out of the total population of 109,944 in the municipality, 24.2 percent are Traditionalists, 14.5 percent adhere to the Islamic faith, 4.3 percent do not belong to any religion at all, while the rest (56.0%) of the population are Christians. Only 1.1 percent of the population in the municipality are affiliated to other religions not mentioned. Table 3.8 further shows that, there are more females who adhere to the Christian faith compared to other religious practices classified where males dominate.

Table 3.8: Population by religion and sex

Religion	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	109,944	100.0	53,676	100.0	56,268	100.0
No Religion	4,760	4.3	2,592	4.8	2,168	3.9
Catholic	36,574	33.3	16,907	31.5	19,667	35.0
Protestant (Anglican Lutheran etc.)	6,934	6.3	3,269	6.1	3,665	6.5
Pentecostal/Charismatic	12,424	11.3	5,564	10.4	6,860	12.2
Other Christians	5,603	5.1	2,414	4.5	3,189	5.7
Islam	15,924	14.5	8,096	15.1	7,828	13.9
Traditionalist	26,560	24.2	14,326	26.7	12,234	21.7
Other (Specify)	1,165	1.1	508	0.9	657	1.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6   Literacy and Education

3.6.1   Literacy by language of persons 11 years and older

Literacy is defined as the ability to read and write a simple statement in any language with understanding. Literacy is key to the development of every economy. The more literate a country is, the more likely it is to plan and implement its development programmes. In the Kassena Nankana Municipality, out of the total population of 76,975 who are 11 years and above, 43,313 (56.3%) are literate. Of the population literate, 49.2 percent can read and write in English only, 46.9 percent can read and write in English and Ghanaian language and 3.1 percent able to read and write in Ghanaian language only. Less than one percent (0.8%) is literate in French with other languages. while a smaller percentage of 0.2percent were literates in English and French this is presented in Figure 3.2.

Figure 3.2: Population 11 years and older by language of literacy
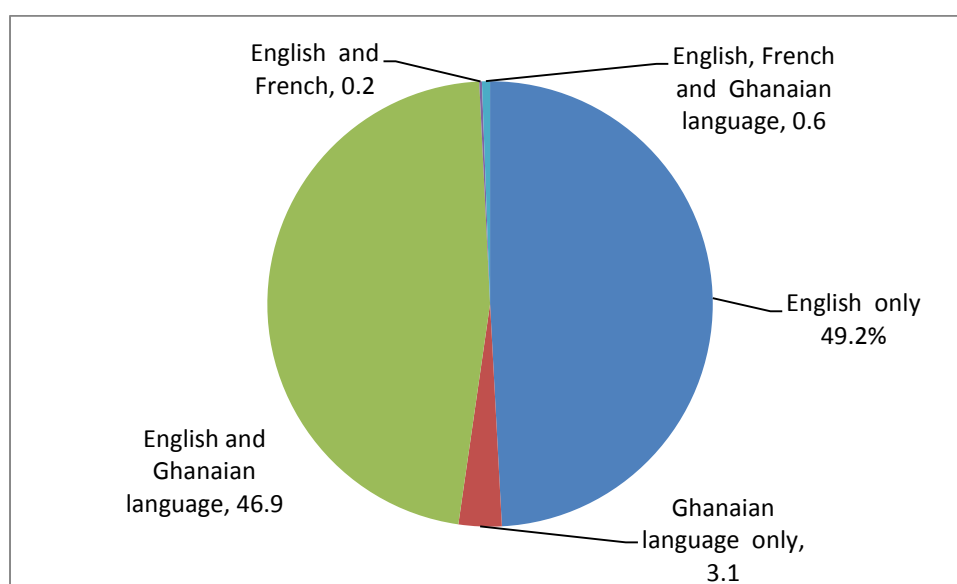
Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6.2   Population 11 years and older by sex, age and literacy status

Table 3.9 further shows that majority of the literate population in the Municipality are within the ages 15-19 years, with the least literate within the ages of 60-64 years. Majority of those who are literate in English only or Ghanaian language only are within the ages of 11-14 years and the least number of literates for both literacy statuses is found within the ages of 60-64 years, with 39.6 percent being literate in English only and 2.4 percent in Ghanaian language only. It is also worth noting that in the municipality, literacy is higher among the male population compared to that of females. For example, of the population literate, 23,650 (54.6%) are males. However, females are more likely to be literate in English only than males whereas males are more literate in English and Ghanaian language only than females. For English, French and Ghanaian Language only, males who are able to use these languages are slightly higher compared to the females.

Table3.9: 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	33,662	43,313	100.0	49.2	3.1	46.9	0.2	0.6
11-14	1,012	9,108	100.0	63.8	3.7	32.4	0.1	0.1
15-19	1,705	10,571	100.0	53.6	2.7	43.2	0.2	0.4
20-24	2,574	8,181	100.0	39.0	2.5	56.9	0.2	1.5
25-29	3,086	4,689	100.0	40.3	3.1	55.7	0.3	0.6
30-34	3,288	2,983	100.0	42.4	3.3	53.7	0.3	0.3
35-39	3,132	2,120	100.0	48.3	3.7	47.2	0.4	0.5
40-44	3,174	1,542	100.0	46.2	4.4	48.2	0.3	0.8
45-49	2,807	1,168	100.0	45.2	3.4	50.8	0.1	0.5
50-54	2,699	1,066	100.0	41.5	3.0	54.4	0.4	0.8
55-59	1,656	686	100.0	38.3	2.3	58.5	0.3	0.6
60-64	2,157	467	100.0	39.6	2.4	57.4	0.0	0.6
65+	6,372	732	100.0	41.8	6.0	51.4	0.3	0.5
Male								
Total	13,277	23,650	100.0	45.7	3.1	50.2	0.2	0.8
11-14	564	4,628	100.0	62.5	4.0	33.3	0.0	0.1
15-19	893	5,499	100.0	53.1	2.9	43.4	0.1	0.4
20-24	1,033	4,752	100.0	34.2	2.4	61.1	0.2	2.0
25-29	1,168	2,619	100.0	35.4	2.9	60.4	0.3	0.9
30-34	1,239	1,684	100.0	38.1	3.3	57.9	0.1	0.5
35-39	1,209	1,239	100.0	43.7	3.4	51.8	0.4	0.7
40-44	1,161	802	100.0	39.9	3.5	54.7	0.4	1.5
45-49	1,116	665	100.0	42.4	3.3	53.4	0.0	0.9
50-54	1,022	624	100.0	39.4	2.4	56.7	0.3	1.1
55-59	693	430	100.0	35.8	1.4	61.6	0.2	0.9
60-64	819	300	100.0	33.3	2.0	64.0	0.0	0.7
65+	2,360	408	100.0	37.3	6.1	55.4	0.5	0.7
Female								
Total	20,385	19,663	100.0	53.3	3.1	43.1	0.2	0.3
11-14	448	4,480	100.0	65.2	3.3	31.3	0.1	0.1
15-19	812	5,072	100.0	54.2	2.4	42.8	0.2	0.3
20-24	1,541	3,429	100.0	45.6	2.6	50.9	0.2	0.7
25-29	1,918	2,070	100.0	46.6	3.3	49.6	0.2	0.2
30-34	2,049	1,299	100.0	47.9	3.3	48.3	0.5	0.0
35-39	1,923	881	100.0	54.7	4.1	40.7	0.3	0.1
40-44	2,013	740	100.0	53.1	5.4	41.2	0.1	0.1
45-49	1,691	503	100.0	48.9	3.6	47.3	0.2	0.0
50-54	1,677	442	100.0	44.3	3.8	51.1	0.5	0.2
55-59	963	256	100.0	42.6	3.9	53.1	0.4	0.0
60-64	1,338	167	100.0	50.9	3.0	45.5	0.0	0.6
65+	4,012	324	100.0	47.5	5.9	46.3	0.0	0.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

Education

3.6.3   Population 3 years and older, level of education, school attendance and sex

The school attendance profile for the municipality's population 3 years and older is presented in Figure 3.3. Of the 101,099 persons aged 3 years and above in the municipality, 37.4 percent has never attended school, 43.0 percent are currently attending and 19.6 percent have attended in the past. From the chart, females have a lower level of school attendance compared to males.

Figure 3.3: Population 3 years and older by level of education, school attendance and sex
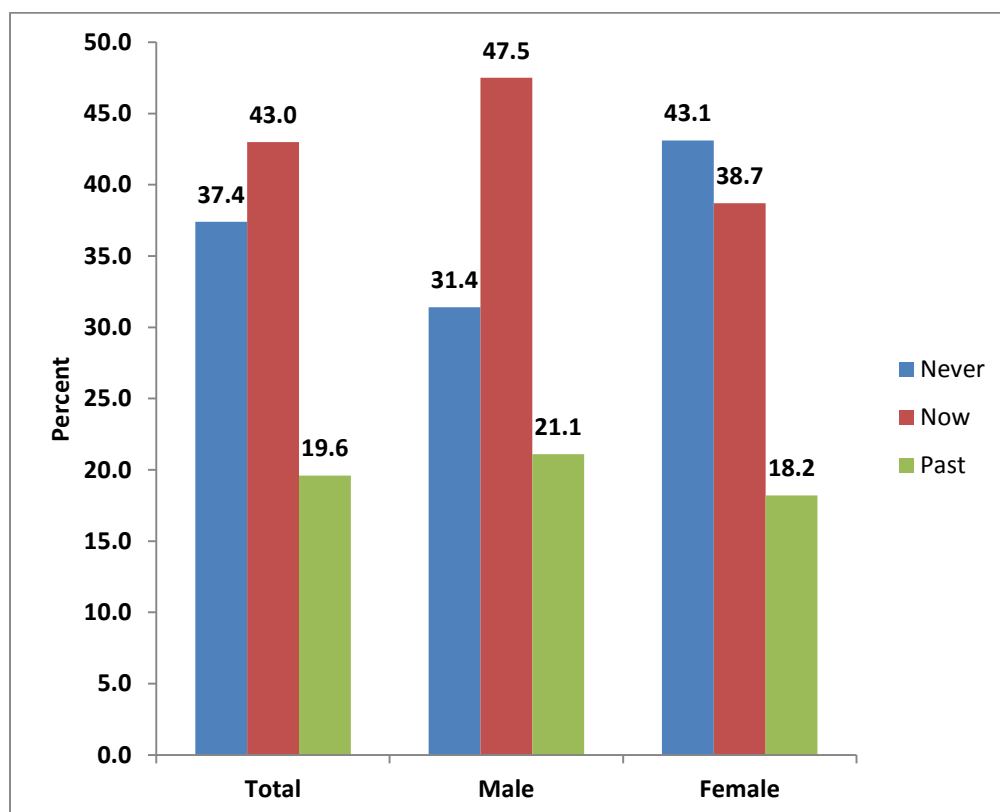
Source: Ghana Statistical Service, 2010 Population and Housing Census

As at 2010, 43,447 persons aged three years and older are attending school and 19,833 had been to school in the past. Of those who are currently attending school, nearly half (49.6%) are in primary school, 18.3 percent are in JSS/SHS and the least proportion of 0.4 percent are in vocational/technical/commercial education (Table 3.10).

Table 3.10 further present data on the population 3 years and older who attended school in the past. The table shows that 34.4 percent have primary school as their highest level of education and 20.4 percent reached JSS/JHS levels. In all cases of school attendance, the proportion of males who are currently attending or has attended in the past is higher than that of females.

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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	43,447	100.0	23,343	100.0	20,104	100.0	19,833	100.0	10,380	100.0	9,453	100.0
Nursery	4,606	10.6	2,354	10.1	2,252	11.2	-	-	-	-	-	-
Kindergarten	3,377	7.8	1,678	7.2	1,699	8.5	-	-	-	-	-	-
Primary	21,566	49.6	11,238	48.1	10,328	51.4	6,818	34.4	3,340	32.2	3,478	36.8
JSS/JHS	7,935	18.3	4,093	17.5	3,842	19.1	4,041	20.4	1,837	17.7	2,204	23.3
Middle	-	-	-	-	-	-	2,401	12.1	1,341	12.9	1,060	11.2
SSS/SHS	2,836	6.5	1,581	6.8	1,255	6.2	2,877	14.5	1,517	14.6	1,360	14.4
Secondary	-	-	-	-	-	-	529	2.7	367	3.5	162	1.7
Voc/Tech/Commercial	156	0.4	84	0.4	72	0.4	725	3.7	378	3.6	347	3.7
Post middle/secondary certificate	397	0.9	178	0.8	219	1.1	851	4.3	472	4.5	379	4.0
Tertiary	2,574	5.9	2,137	9.2	437	2.2	1,591	8.0	1,128	10.9	463	4.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FOUR

ECONOMIC CHARACTERISTICS

4.1   Introduction

The 2010 Population and Housing Census results provide data on the economic characteristics of the population in Kassena Nankana Municipality. This data provides information on how persons enumerated in the municipality are economically engaged and the sectors of economic activity. The data is useful for the computation of economic indicators and the determination of the level of development of the district. Factors contributing to employment opportunities in the municipality include the structure of the population, proportion of the economically active population and the labour market. A careful study of the dynamics of the population and the labour market helps to identify the employment opportunities available and the structure of the economy. This chapter analyses the economic characteristics of the population 15 years and older in the municipality in respect of economic activity status, occupation, industry, employment status and sector of employment.

4.2   Economic Activity Status

Figure 4.1 presents the economy activity status of the population 15 years and older of Kassena Nankana Municipality. The figure shows that, 70.2 percent of the population aged 15 years and older is economically active within the seven days preceding the census night, and 29.8 percent are economically not active. Figure 4.1 shows that of the economically active population, 97.0 percent of persons aged 15 years and older are employed while 3.0 percent are unemployed within the seven days preceding the census night.

Figure 4.1: Economic activity status of population 15 years and older
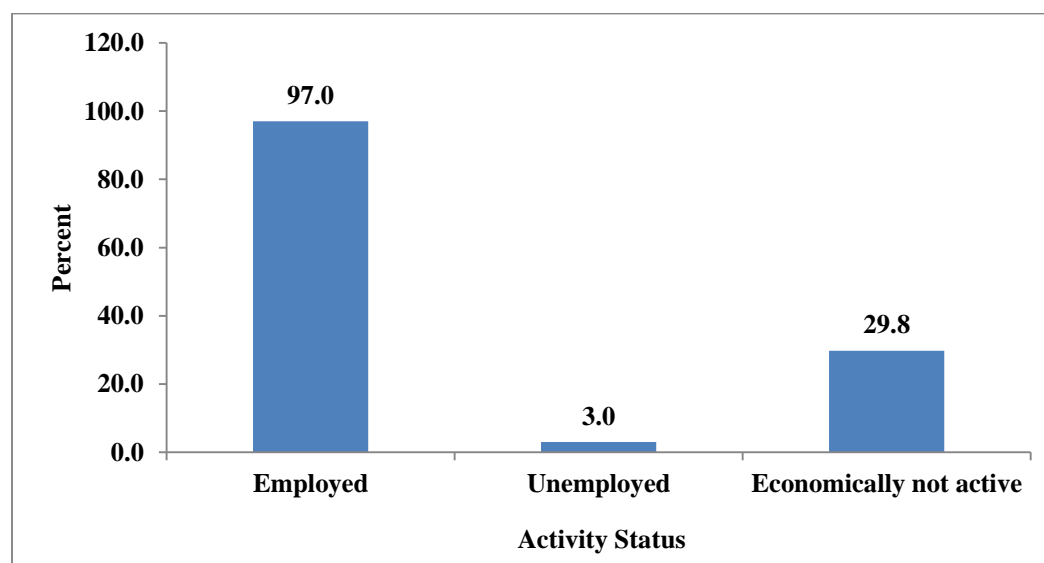
Source: Ghana Statistical Service, 2010 Population and Housing Census

4.2.1 Population 15 years and older by activity status and sex

From Table 4.1, out of a total number of 66,855 persons who are 15 years and older, 31,735 (47.5%) are males and 35,120 (52.5%) are females. From the table, 70.2 percent of the population 15 years and older are economically active, while 29.8 percent are economically not active. Out of those who are economically active, 97.0 percent are employed and 3.0 percent unemployed. About 70.3 percent of the males aged 15 years and older in the municipality are economically active, out of which 96.9 percent are employed, while 3.1 percent are unemployed. On the other hand, 97.1 percent of females aged 15 years and older who are economically active are employed, with 2.9 percent unemployed (Table 4.1). For the economically not active group, a little over half (50.7%) are in full time education with nearly a quarter (23.2%) doing home duties.

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

	Total		Male		Female	
Activity status	Number	Percent	Number	Percent	Number	Percent
Total	66,855	100.0	31,735	100.0	35,120	100.0
Economically active	**46,948**	**70.2**	**22,322**	**70.3**	**24,626**	**70.1**
Employed	**45,533**	**97.0**	21,625	96.9	23,908	97.1
Worked	44,114	96.9	20,886	96.6	23,228	97.2
Did not work but had job to go back to	1,283	2.8	677	3.1	606	2.5
Did voluntary work without pay	136	0.3	62	0.3	74	0.3
Unemployed	**1,415**	**3.0**	**697**	**3.1**	**718**	**2.9**
Worked before, seeking work and available	607	42.9	298	42.8	309	43.0
Seeking work for the first time and available	808	57.1	399	57.2	409	57.0
Economically not active	**19,907**	**29.8**	**9,413**	**29.7**	**10,494**	**29.9**
Did home duties (household chore)	4,615	23.2	1,225	13.0	3,390	32.3
Full time education	10,102	50.7	6,199	65.9	3,903	37.2
Pensioner/Retired	317	1.6	221	2.3	96	0.9
Disabled/Sick	922	4.6	455	4.8	467	4.5
Too old/young	2,900	14.6	762	8.1	2,138	20.4
Other	1,051	5.3	551	5.9	500	4.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.2.2 Employed population 15 years and older by sex, age and activity status

The economic activity status of the population 15 years and older by age and sex is presented in Table 4.2. Of the age groups 15-19 years, the employed constitute 25.6 percent, the unemployed, 3.3 percent with the economically not active forming 71.1 percent. Of the age groups 25-59 years, more than seventy-five percent are employed. For the same age group under discussion, less than five percent are unemployed and for the economically not active, except for the age group 25-29 years who have 20.1 percent, all others within the 25-59 year age groups have proportions below twenty percent. As expected persons in younger age groups are expected to have a larger proportion of the population in the economically not active group as most of them are normally in school or may be too young to work. It is normally expected that as age increases, the proportion of the population who are economically not active decreases whereas those in the employed category increases which the data from the table supports.

For the male and female distribution, not much difference exists between the sexes with respect to their economic activity status in the municipality. For almost all the age groups,

the proportion of total employed males is higher than that of the females except for the age groups 20-29 years where females reported slightly higher figures.

Table 4.2: Employed population 15 years and older by sex, age and activity status

Age group	All Status		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both sexes								
Total	**66,855**	**100.0**	**45,533**	**68.10**	**1,415**	**2.1**	**19,907**	**29.8**
15 - 19	12,276	100.0	4,811	39.20	165	1.3	7,300	59.5
20 - 24	10,755	100.0	5,567	51.80	400	3.7	4,788	44.5
25 - 29	7,775	100.0	5,857	75.30	356	4.6	1,562	20.1
30 - 34	6,271	100.0	5,397	86.10	176	2.8	698	11.1
35 - 39	5,252	100.0	4,759	90.60	85	1.6	408	7.8
40 - 44	4,716	100.0	4,301	91.20	76	1.6	339	7.2
45 - 49	3,975	100.0	3,610	90.80	36	0.9	329	8.3
50 - 54	3,765	100.0	3,329	88.40	35	0.9	401	10.7
55 - 59	2,342	100.0	2,052	87.60	21	0.9	269	11.5
60 - 64	2,624	100.0	1,970	75.10	42	1.6	612	23.3
65+	7,104	100.0	3,880	54.60	23	0.3	3,201	45.1
Male								
Total	**31,735**	**100.0**	**21,625**	**68.10**	**697**	**2.2**	**9,413**	**29.7**
15 - 19	6,392	100.0	2,611	40.80	80	1.3	3,701	57.9
20 - 24	5,785	100.0	2,726	47.10	168	2.9	2,891	50.0
25 - 29	3,787	100.0	2,748	72.60	173	4.6	866	22.9
30 - 34	2,923	100.0	2,526	86.40	97	3.3	300	10.3
35 - 39	2,448	100.0	2,252	92.00	57	2.3	139	5.7
40 - 44	1,963	100.0	1,824	92.90	37	1.9	102	5.2
45 - 49	1,781	100.0	1,656	93.00	20	1.1	105	5.9
50 - 54	1,646	100.0	1,521	92.40	16	1.0	109	6.6
55 - 59	1,123	100.0	1,031	91.80	12	1.1	80	7.1
60 - 64	1,119	100.0	906	81.00	22	2.0	191	17.1
65+	2,768	100.0	1,824	65.90	15	0.5	929	33.6
Female								
Total	**35,120**	**100.0**	**23,908**	**68.10**	**718**	**2.0**	**10,494**	**29.9**
15 - 19	5,884	100.0	2,200	37.40	85	1.4	3,599	61.2
20 - 24	4,970	100.0	2,841	57.20	232	4.7	1,897	38.2
25 - 29	3,988	100.0	3,109	78.00	183	4.6	696	17.5
30 - 34	3,348	100.0	2,871	85.80	79	2.4	398	11.9
35 - 39	2,804	100.0	2,507	89.40	28	1.0	269	9.6
40 - 44	2,753	100.0	2,477	90.00	39	1.4	237	8.6
45 - 49	2,194	100.0	1,954	89.10	16	0.7	224	10.2
50 - 54	2,119	100.0	1,808	85.30	19	0.9	292	13.8
55 - 59	1,219	100.0	1,021	83.80	9	0.7	189	15.5
60 - 64	1,505	100.0	1,064	70.70	20	1.3	421	28.0
65+	4,336	100.0	2,056	47.4	8	0.2	2,272	52.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.3   Occupation

Table 4.3 categorizes the employed population 15 years and older by their occupation and sex. From the table, 66.7 percent are into skilled agriculture, forestry and fishery while craft and related trades workers are 10.8 percent. Managers, Professionals, Technical and Associate Professionals constitute less than ten percent of the employed population in the municipality. Occupational distributions are however varied based on sex. Proportionately, there are more males (71.8%) aged 15 years and older in skilled agriculture, forestry and the fishery sector as compared to females (62.2%) of females 15 years and older. Again, whiles there are 2.3 percent of males 15 years and older as plant and machine operators and assemblers, there is a lesser proportion of females (0.5%) in the same sector. On the other hand, there is a higher percentage of female workers (15.3%) in the service and sales sector compared to the percentage of males (5.6%) in the same sector.

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	45,533	100.0	21,625	100.0	23,908	100.0
Managers	513	1.1	248	1.1	265	1.1
Professionals	1,908	4.2	1,132	5.2	776	3.2
Technicians and associate professionals	444	1.0	290	1.3	154	0.6
Clerical support workers	400	0.9	226	1.0	174	0.7
Service and sales workers	4,877	10.7	1,220	5.6	3,657	15.3
Skilled agricultural forestry and fishery workers	30,380	66.7	15,517	71.8	14,863	62.2
Craft and related trades workers	4,937	10.8	1,729	8.0	3,208	13.4
Plant and machine operators and assemblers	624	1.4	507	2.3	117	0.5
Elementary occupations	1,432	3.1	744	3.4	688	2.9
Other occupations	18	0.0	12	0.1	6	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.4   Industry

Agriculture still remains the backbone of the local economy of the municipality. The agricultural sector employs 65.4 percent of the employed population. For the male population, 70.3 percent are in the agriculture, forestry and fishing industry with 61.0 percent of females in the same category.

Employment by industry varied by sex in the municipality as shown in Table 4.4. It can be seen that more females (12.0%) are engaged in wholesale and retail business as compared to males (5.9%). Also in Table 4.4, accommodation and food services industries employed more females (4.4%) than their male counterpart (0.6%). It is also worth noting from Table 4.4 that in the Municipality, males are less likely to be employed in the manufacturing industry as only 4.4 percent compared to 12.8 percent of females who are into manufacturing.

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	**45,533**	**100.0**	**21,625**	**100.0**	**23,908**	**100.0**
Agriculture forestry and fishing	29,787	65.4	15,200	70.3	14,587	61.0
Mining and quarrying	104	0.2	63	0.3	41	0.2
Manufacturing	4,021	8.8	959	4.4	3,062	12.8
Electricity gas stream and air conditioning supply	35	0.1	33	0.2	2	0.0
Water supply; sewerage waste management and remediation activities	157	0.3	115	0.5	42	0.2
Construction	611	1.3	585	2.7	26	0.1
Wholesale and retail; repair of motor vehicles and motorcycles	4,140	9.1	1,266	5.9	2,874	12.0
Transportation and storage	318	0.7	293	1.4	25	0.1
Accommodation and food service activities	1,176	2.6	122	0.6	1,054	4.4
Information and communication	62	0.1	45	0.2	17	0.1
Financial and insurance activities	78	0.2	46	0.2	32	0.1
Real estate activities	1	0.0	1	0.0	0	0.0
Professional scientific and technical activities	275	0.6	168	0.8	107	0.4
Administrative and support service activities	150	0.3	124	0.6	26	0.1
Public administration and defence; compulsory social security	592	1.3	444	2.1	148	0.6
Education	1,868	4.1	1,165	5.4	703	2.9
Human health and social work activities	581	1.3	249	1.2	332	1.4
Arts entertainment and recreation	56	0.1	49	0.2	7	0.0
Other service activities	797	1.8	333	1.5	464	1.9
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	714	1.6	359	1.7	355	1.5
Activities of extraterritorial organizations and bodies	10	0.0	6	0.0	4	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.5   Employment Status

Table 4.5 depicts the employment status of the population 15 years and older in the Kassena Nankana Municipality. 25,919 of the municipality's employed population, representing 56.9 percent are self-employed without employees, with 27.6 percent being contributing family workers and 1.3 percent being casual workers. Domestic employees (house help) have the lowest proportion of 0.5 percent. The table further shows that the majority of the workforce for both males and females are self-employed without employees representing 57.7 percent and 56.2 percent respectively. Females who are contributing family workers constitute 31.7 percent compared to 23.1 percent of males. Domestic employees (house help) had the lowest proportion for both sexes reporting 0.5 percent each. Overall, men constitute the highest proportion of all the categories with the exception of the contributing family workers and apprentices where females dominate.

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

4.6.1   Employed population 15 years and older by employment sector

Out of the total persons who were employed, 90.5 percent of them are in the private informal sector, 7.3 percent are in the public sector, while 1.5 percent is in the private formal. All other sectors combined constitute less than 1 percent (0.8%). This is illustrated in figure 4.3.

Figure 4.3: Employed population 15 years and older by employment sector
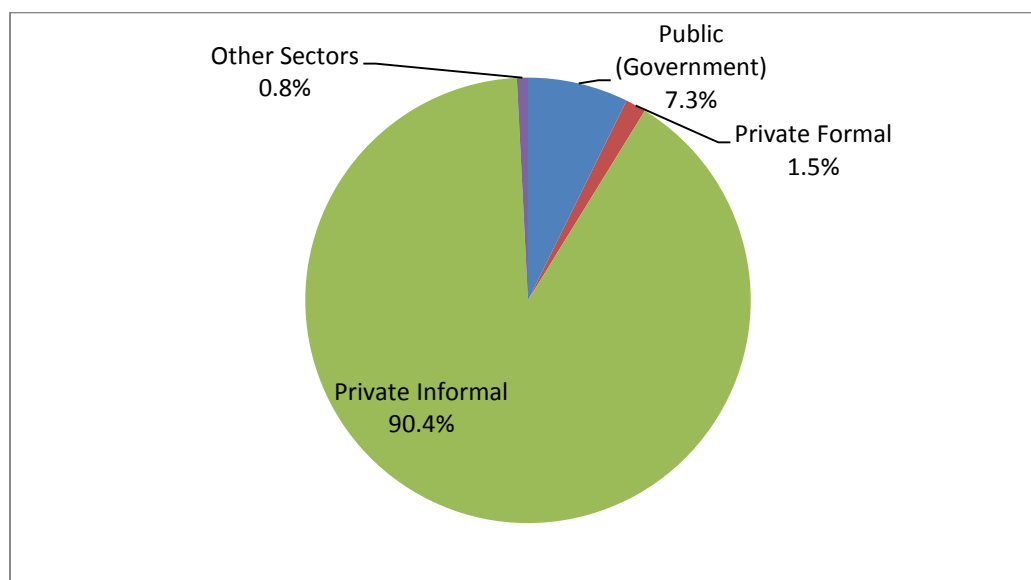
Source: Ghana Statistical Service, 2010 Population and Housing Census

4.6.2   Employed population 15 years and older by employment sector and sex

Table 4.6 further shows the sex distribution by sector of employment in the municipality. For the male population employed, those in the public sector constitute 9.9 percent and of the females it is 4.9 percent. In the private informal sector, 93.2 percent of females are in this category compared to 87.4 percent who are in the private informal sector.

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	45,533	100.0	21,625	100.0	23,908	100.0
Public (government)	3,311	7.3	2,136	9.9	1,175	4.9
Private/formal	685	1.5	400	1.8	285	1.2
Private/informal	41,185	90.5	18,892	87.4	22,293	93.2
Semi-public/parastatal	80	0.2	52	0.2	28	0.1
NGOs (local and international)	256	0.6	137	0.6	119	0.5
Other international organisations	16	0.0	8	0.0	8	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FIVE

INFORMATION COMMUNICATIONTECHNOLOGY

5.1   Introduction

A century and more after the industrial revolution, we are in the process of another major shift in human civilization: the information revolution that has given birth to the information society. Information Communication Technology (ICT), especially the internet, have been seen as ushering in a new age. As participants in this information age, many of us experience exciting changes in the way our lives are organised today" (Anita, 2004 page 5)**.**The role of Information Communication Technology (ICT) as a tool for development cannot be over emphasized (UN, 2005). By implication, the more a society's usage of ICT, the more opportunities are opened for the society's development.

This chapter looks at ICT in the municipality with reference to ownership of mobile phones, use of the internet, household ownership of fixed telephone lines as well as desktop or laptop computers. For mobile phone ownership and internet usage, the information was asked of persons 12 years and older.

5.2   Ownership of Mobile Phones and Internet Usage

Table 5.1 shows persons aged 12 years and older in the Municipality who own mobile phones and uses the internet. Out of 74,561 persons 12 years and older, 28.2 percent own mobile phones. Of the male population 12 years and older, 34.8 percent own phones. Even though there are more females aged 12 years and older, the proportion who own mobile phones (22.1%) is less compared to their male counterparts. Again, Table 5.1 further presents data on persons 12 years and older using the internet. Only 4.7 percent of this population uses the internet in the municipality. It is interesting to know that female usage of the internet is low as only 2.1 percent compared to 7.5 percent of males who uses the facility.

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	74,561	100.0	21,029	28.2	3,496	4.7
Male	35,682	100.0	12,433	34.8	2,671	7.5
Female	38,879	100.0	8,596	22.1	825	2.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.3 Household Ownership of Desktop/Laptop Computers

5.3.1 Fixed telephone lines

The total number of households in the municipality is 19,790 of which 13,249 are male headed and 6,541are female headed. As shown in Table 5.2, out of the total number of households, only 205 households representing one percent has fixed telephone lines in the municipality. With regards to the sexes there are no differences as both male and female headed households have one percent each of fixed telephone lines.

Table 5.3 again, shows the proportion of households with desktop/laptop computers by sex of the household head. It shows that the total number of households with laptop/desktop computers is 981 forming just 5.0 percent of the total number of households in the Municipality. For households with male heads, only 5.9 percent own desktop/laptop computers and for female headed households only 3.1 percent own desktop/laptop computers. The overall use of these ICT facilities in the municipality is generally very poor.

Table 5.2: Households having fixed telephone lines and sex of head

Sex	Number of households		Households having fixed telephone lines		Households having desktop/laptop computers	
	Number	Percent	Number	Percent	Number	Percent
Total	19,790	100.0	205	1.0	981	5.0
Male	13,249	100.0	138	1.0	778	5.9
Female	6,541	100.0	67	1.0	203	3.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SIX

DISABILITY

6.1   Introduction

Persons with disabilities (PWD) have been defined as those who are unable to, or are 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 (Ghana Statistical Service, 2012). PWD is now one of the social development issues considered topical because of its link to deprivation and standard of living. In recent times there are growing numbers of PWDs and no nation can afford to neglect this group of people in the development process. This is because the development of a nation depends on the important contributions of not only a segment of the population but on the collective contributions of every individual. This chapter therefore looks at disability in terms of population with disability, distribution by type of locality, disability and activity status and sex and disability, education and literacy.

It is however, worthy to note that an individual can have more than one form of disability, hence multiple responses in the data presented

6.2   Population with Disability

In the 2010 PHC, questions were asked of six major types of disability namely; sight, hearing, speech, physical, intellect, and emotional disabilities. Out of the total population of 109,944 in the municipality 105,742 did not have any form of disability, while 4,202 (3.8%) have one form of disability or the other. From Table 6.1, it can be said that females are more prone to disability in the municipality than males as 4.0 percent out of the female population are disabled in one form or the other compared to 3.6 percent of males. Out of 29,993 urban dwellers in the municipality, 2.9 percent are disabled and 97.6 percent are without any form of disability compared to the rural population where 4.2 percent are disabled in one way or the other.

6.3   Type of Disability

With a total of 4,202 persons with disabilities (PWDs) in the municipality, 44.8 percent had disability relating to sight, while 22.6 percent are physically (mobility) challenged. About two in ten (22.0%) have disability relating to hearing. Again, those with intellect related disability form 9.0 percent and emotional disability constitute 9.8 percent. Those suffering from other forms of disability not classified constitute 7.9 percent as depicted in Figure 6.1.

Figure 6.1: Type of disability
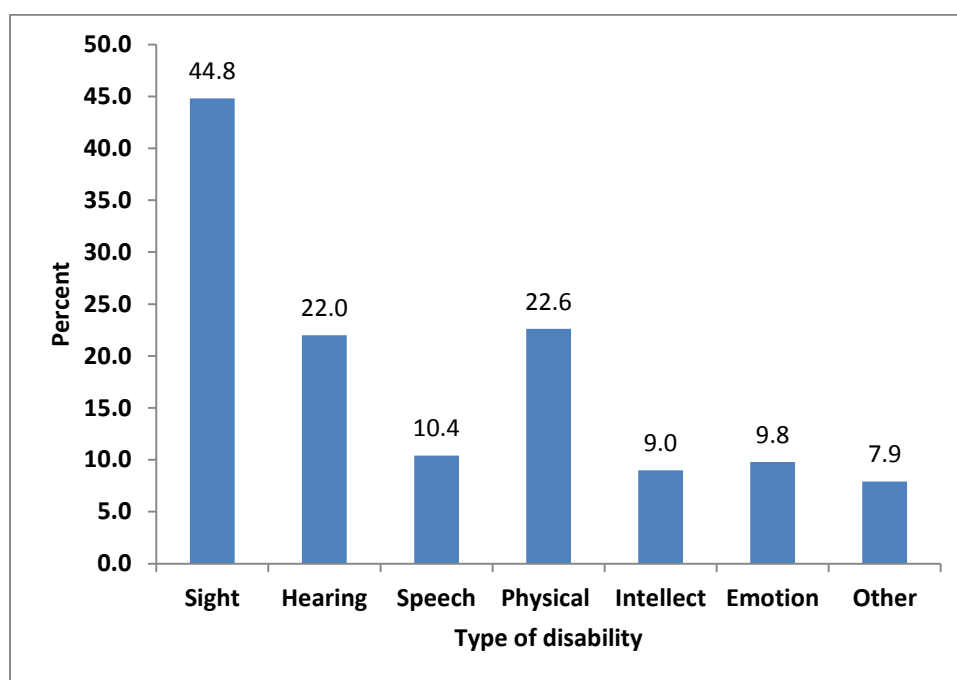
Source: Ghana Statistical Service, 2010 Population and Housing Census

6.4   Disability and Type of Locality

The distribution of disability by type of locality shows that the urban population in the municipality has a lower disability rate compared with the rural population. Out of the 29,993 urban population, 2.9 percent are disabled compared to 4.2 percent of the rural population of 79,951.

In the urban areas, the most predominant type of disability is sight related (40.9%) followed by physical or mobility related disability with 22.5 percent. Other forms of disability not classified recorded the least of 5.1 percent. In Table 6.1, among the females with disabilities, it is more likely for a female to have sight related disability (45.4%) compared to males (35.8%) who have sight disability. It is also clear from Table 6.1 that higher percentage of females are exposed to hearing related disability (21.1%) as compared to the proportion of males (17.8%), Also, in the urban areas, it is more likely for males to have emotional related disability (14.6%) compared to 9.2 percent of females .

Generally, observing from Table 6.1, females suffer from sight and hearing related disabilities more than the males and this situation is seen in the urban-rural divide.

Table 6.1: Population by type of locality, disability type and sex

Disability type	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All localities						
Total	109,944	100.0	53,676	100.0	56,268	100.0
Without disability	105,742	96.2	51,720	96.4	54,022	96.0
With disability	4,202	3.8	1,956	3.6	2,246	4.0
Sight	1,881	44.8	784	40.1	1,097	48.8
Hearing	926	22.0	385	19.7	541	24.1
Speech	436	10.4	243	12.4	193	8.6
Physical	949	22.6	475	24.3	474	21.1
Intellect	380	9.0	186	9.5	194	8.6
Emotion	411	9.8	216	11.0	195	8.7
Other	333	7.9	182	9.3	151	6.7
Urban						
Total	29,993	100.0	14,949	100.0	15,044	100.0
Without disability	29,132	97.1	14,544	97.3	14,588	97.0
With disability	861	2.9	405	2.7	456	3.0
Sight	352	40.9	145	35.8	207	45.4
Hearing	168	19.5	72	17.8	96	21.1
Speech	109	12.7	59	14.6	50	11.0
Physical	194	22.5	96	23.7	98	21.5
Intellect	81	9.4	34	8.4	47	10.3
Emotion	101	11.7	59	14.6	42	9.2
Other	44	5.1	31	7.7	13	2.9
Rural						
Total	79,951	100.0	38,727	100.0	41,224	100.0
Without disability	76,610	95.8	37,176	96.0	39,434	95.7
With disability	3,341	4.2	1,551	4.0	1,790	4.3
Sight	1,529	45.8	639	41.2	890	49.7
Hearing	758	22.7	313	20.2	445	24.9
Speech	327	9.8	184	11.9	143	8.0
Physical	755	22.6	379	24.4	376	21.0
Intellect	299	8.9	152	9.8	147	8.2
Emotion	310	9.3	157	10.1	153	8.5
Other	289	8.7	151	9.7	138	7.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.5   Disability and Activity Status and Sex

The economic activity status of persons 15 years and older with disability is displayed in Table 6.2. The data shows that of persons with disability in the municipality, 56.5 percent are employed, 1.5 percent unemployed and 42.0 percent are economically not active. The data shows that but for physical (46.8%) and intellect (46.2%), the percentage employed is higher compared to those who are economically not active. For all the disability types reported in the table, those unemployed constitute less than five percent.

Table 6.2 further illustrate that there are varying differences in the data relating to male and female distribution. For the male population disabled, 61.0 percent are employed, 1.8 percent unemployed and 37.2 percent economically not active. Of the various categories of disability, sight, physical, hearing, speech and other forms of disability not elsewhere classified has more than fifty percent of their population employed, and only people with intellect has more than fifty percent of their population in the economically not active group. For the female

population disabled, 52.8 percent are employed, 1.3 percent unemployed and 45.9 percent being economically not active. Of the various disability categories, apart from speech, physical and intellect which has less than fifty percent of their population employed all other categories has more than fifty percent employed.

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	66,855	100.0	45,533	68.1	1,415	2.1	19,907	29.8
Without disability	63,250	100.0	43,495	68.8	1,361	2.2	18,394	29.1
With disability	3,605	100.0	2,038	56.5	54	1.5	1,513	42.0
Sight	1,719	100.0	961	55.9	16	0.9	742	43.2
Hearing	729	100.0	399	54.7	12	1.6	318	43.6
Speech	298	100.0	152	51.0	4	1.3	142	47.7
Physical	846	100.0	396	46.8	14	1.7	436	51.5
Intellect	318	100.0	147	46.2	2	0.6	169	53.1
Emotion	346	100.0	199	57.5	8	2.3	139	40.2
Other	274	100.0	172	62.8	3	1.1	99	36.1
Male								
Total	31,735	100.0	21,625	68.1	697	2.2	9,413	29.7
Without disability	30,102	100.0	20,629	68.5	668	2.2	8,805	29.3
With disability	1,633	100.0	996	61.0	29	1.8	608	37.2
Sight	703	100.0	440	62.6	9	1.3	254	36.1
Hearing	278	100.0	168	60.4	4	1.4	106	38.1
Speech	161	100.0	87	54.0	3	1.9	71	44.1
Physical	419	100.0	211	50.4	9	2.1	199	47.5
Intellect	157	100.0	73	46.5	2	1.3	82	52.2
Emotion	184	100.0	114	62.0	4	2.2	66	35.9
Other	144	100.0	86	59.7	2	1.4	56	38.9
Female								
Total	35,120	100.0	23,908	68.1	718	2.0	10,494	29.9
Without disability	33,148	100.0	22,866	69.0	693	2.1	9,589	28.9
With disability	1,972	100.0	1,042	52.8	25	1.3	905	45.9
Sight	1,016	100.0	521	51.3	7	0.7	488	48.0
Hearing	451	100.0	231	51.2	8	1.8	212	47.0
Speech	137	100.0	65	47.4	1	0.7	71	51.8
Physical	427	100.0	185	43.3	5	1.2	237	55.5
Intellect	161	100.0	74	46.0	0	0.0	87	54.0
Emotion	162	100.0	85	52.5	4	2.5	73	45.1
Other	130	100.0	86	66.2	1	0.8	43	33.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.6   Disability, Education and Literacy

Table 6.3 presents data on population 3 years and older by sex, disability type and level of education in the municipality. Of the population disabled, 63.3 percent have never been to school. Those in pre-primary constitute only 2.3 percent with 26.9 percent in basic school. From the table, people with disability who have attended secondary or higher levels of education constitute 7.5 percent.

For the male and female distribution, more females (71.2%) have never attended school compared to their male counterpart where only 54.1 percent have never attended school. On the other hand, there are more males (32.8%) in basic school compared to females (21.8%) who have basic education. From the table, it could be said that more disabled males are in school compared to their female counterparts.

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

Sex/Disability type	Total		Never		Pre-Prim		Basic		Sec/SHS and higher	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes										
Total	101,099	100.0	37,819	37.4	7,983	7.9	42,761	42.3	12,536	12.4
No disability	96,984	100.0	35,216	36.3	7,887	8.1	41,653	42.9	12,228	12.6
With a disability	4,115	100.0	2,603	63.3	96	2.3	1,108	26.9	308	7.5
Sight	1,850	100.0	1,335	72.2	35	1.9	362	19.6	118	6.4
Hearing	912	100.0	573	62.8	39	4.3	267	29.3	33	3.6
Speech	416	100.0	234	56.3	21	5.0	141	33.9	20	4.8
Physical	935	100.0	620	66.3	13	1.4	220	23.5	82	8.8
Intellectual	370	100.0	227	61.4	9	2.4	102	27.6	32	8.6
Emotional	403	100.0	225	55.8	10	2.5	123	30.5	45	11.2
Other	315	100.0	177	56.2	7	2.2	105	33.3	26	8.3
Male										
Total	49,153	100.0	15,430	31.4	4,032	8.2	21,849	44.5	7,842	16.0
No disability	47,246	100.0	14,399	30.5	3,989	8.4	21,223	44.9	7,635	16.2
With a disability	1,907	100.0	1,031	54.1	43	2.3	626	32.8	207	10.9
Sight	767	100.0	497	64.8	15	2.0	180	23.5	75	9.8
Hearing	378	100.0	202	53.4	14	3.7	142	37.6	20	5.3
Speech	232	100.0	113	48.7	7	3.0	98	42.2	14	6.0
Physical	467	100.0	270	57.8	7	1.5	128	27.4	62	13.3
Intellectual	181	100.0	96	53.0	4	2.2	57	31.5	24	13.3
Emotional	212	100.0	104	49.1	1	0.5	77	36.3	30	14.2
Other	170	100.0	76	44.7	2	1.2	73	42.9	19	11.2

Table 6.3: Population 3 years and older by sex, disability type and level of education (Cont'd)

| Sex/Disability type | Total | | Level of Education | | | | | | | |
| | | | Never | | Pre-Prim | | Basic | | Sec/SHS and higher | |
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Female										
Total	51,946	100.0	22,389	43.1	3,951	7.6	20,912	40.3	4,694	9.0
No disability	49,738	100.0	20,817	41.9	3,898	7.8	20,430	41.1	4,593	9.2
With a disability	2,208	100.0	1,572	71.2	53	2.4	482	21.8	101	4.6
Sight	1,083	100.0	838	77.4	20	1.8	182	16.8	43	4.0
Hearing	534	100.0	371	69.5	25	4.7	125	23.4	13	2.4
Speech	184	100.0	121	65.8	14	7.6	43	23.4	6	3.3
Physical	468	100.0	350	74.8	6	1.3	92	19.7	20	4.3
Intellectual	189	100.0	131	69.3	5	2.6	45	23.8	8	4.2
Emotional	191	100.0	121	63.4	9	4.7	46	24.1	15	7.9
Other	145	100.0	101	69.7	5	3.4	32	22.1	7	4.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SEVEN

AGRICULTURAL ACTIVITIES

7.1 Introduction

In the 2010 PHC, an agricultural household is defined as one in which at least one person in the household is engaged in farming/fishing/animal husbandry. Questions were asked on four types of agricultural activities: crop farming, tree growing, livestock rearing and fish farming. Ghana's economy is regarded as agrarian, largely due to the sector's contribution to Gross Domestic Product (GDP), general labour absorption, and to foreign exchange earnings. This is no different in the Kassena Nankana Municipality. Agriculture is the main occupation of many local economies and Ghana is no exception. For the first time in the history of the country's Population and Housing Census, questions were asked on whether members of households are engaged in some agricultural activities.

7.2 Households by Agricultural Activities and Locality

In the Kassena Nankana Municipality, majority of household depend on agriculture for their livelihood. From Table 7.1, out of the total number of 19,790 households in the municipality, 16,363 households are engaged in agriculture. This represents 82.7 percent of the households. Of this number, 96.1 percent of those engaged in agriculture are into crop faming, and 83.2 percent are engaged in livestock rearing. Also a small number of agricultural households in the municipality are engaged in fish farming (0.1%) and tree planting (0.3%).

The distribution of agricultural households in the Municipality varies greatly by the type of locality. While 93.1 percent of rural households are engaged in agriculture, in the urban area, a little above half (56.8%) of households are engaged in agriculture. In both localities of residence, crop farming is the most agricultural activity practiced.

Table 7.1: Households by agricultural activities and locality

Agricultural activity	Total		Urban		Rural	
	Number	Percent	Number	Percent	Number	Percent
Total Households	19,790	100.0	5,690	100.0	14,100	100.0
Households engaged in agriculture	16,363	82.7	3,234	56.8	13,129	93.1
Households not engaged in Agriculture	3,427	17.3	2,456	43.2	971	6.9
Crop farming	15,724	96.1	2,845	88.0	12,879	98.1
Tree planting	43	0.3	6	0.2	37	0.3
Livestock rearing	13,616	83.2	2,543	78.6	11,073	84.3
Fish farming	23	0.1	1	0.0	22	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 7.1: Households in agriculture
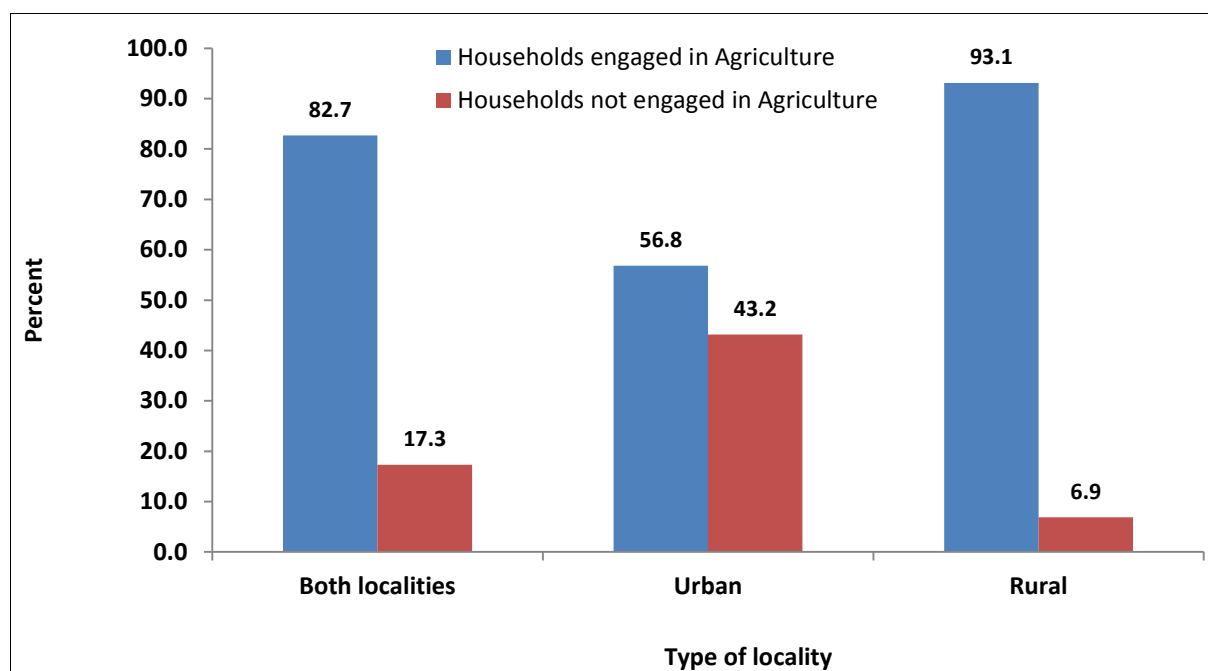
Source: Ghana Statistical Service, 2010 Population and Housing Census

7.3   Types of Livestock and Other Animals Reared

The total number of all livestock reared at the time of the census in the municipality is 358,999. This number of livestock was kept by 34,905 persons, implying that, on the average each keeper is taking care of about 10 livestock.

From Table 7.2 farmers in the municipality keep more of chicken (37.2%) than any animal. Nearly two in ten (19.6%) rear goat and 16.7 percent takes care of guinea fowls, with 13.3 percent rearing sheep. On the contrary, livestock such as snails, rabbit, fish and silk worm that can yield the best result only when they are intensively kept, are not easily reared by farmers in the Municipality hence their low numbers.

With regards to average livestock per keeper, ostrich has the highest average of 33 birds per keeper, with grass-cutter and guinea fowls following with 18 and 17 keepers respectively.

Table 7.2: Distribution of livestock and other animals and keepers

Type	Animals		Keepers		Average Animal per Keeper
	Number	Percent	Number	Percent	
Total	359,076	100.0	34,907	100.0	10.3
Beehives	252	0.1	41	0.1	6.1
Cattle	26,837	7.5	3,830	11.0	7.0
Chicken	133,666	37.2	8,651	24.8	15.5
Dove	892	0.2	64	0.2	13.9
Duck	1,915	0.5	157	0.4	12.2
Goat	70,525	19.6	10,073	28.9	7.0
Grass-cutter	1,104	0.3	62	0.2	17.8
Guinea fowl	58,753	16.4	3,369	9.7	17.4
Ostrich	1,363	0.4	41	0.1	33.2
Pig	10,044	2.8	1,213	3.5	8.3
Rabbit	631	0.2	72	0.2	8.8
Sheep	47,826	13.3	6,507	18.6	7.3
Silk worm	244	0.1	28	0.1	8.7
Snail	0	0.0	0	0.0	0.0
Turkey	148	0.0	23	0.1	6.4
Other (specify)	4,094	1.1	753	2.2	5.4
Fish farming	176	0.0	6	0.0	29.3
Inland fishing	582	0.2	15	0.0	38.8
Marine fishing	24	0.0	2	0.0	12.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER EIGHT

HOUSING CONDITIONS

8.1   Introduction

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

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

8.2   Housing Stock

Table 8.1 represents stock of houses and households by type of locality in the municipality. The results indicate that, the total population of Ghana is 24,658,823 of which 24,076,327 live in households occupying a total of 3,392,745 houses. The total number of households in the country is also reported as 5,467,054 with average number of household per house as 1.6 and population per house as 7.1 persons. The mean household size is 4.4 persons.

At the regional level, total population is 1,046,545 with total household population as 1,034,704 and 114,034 houses. There are 177,629 households with an average household per house of 1.6 and population per house of 9.1 persons. The average household size is 5.8 persons.

The Kassena Nankana Municipality as stated earlier, reported a total population of 109,944, with rural and urban distribution of 72.7 percent and 27.3 percent respectively. The Municipality has a total household population of 107,435 with 28,924 (26.9%) in the urban centres and 78,511 (73.1%) in the rural areas of the municipality. There are 11,503 houses in the municipality of which 2,844 (24.7%) are found in the urban localities and 8,659 (75.3%) in the rural settings. According to the 2010 Population and Housing Census, there are 19,790 households in the municipality comprising 5,690 (28.8%) urban households and 14,100 (71.2%) rural households. The average number of households per house is 1.7 and the average population per house is 9.3 persons. The average household size in the municipality is 5.4 persons which is lower than the regional rate of 5.8 persons but higher than the national rate of 4.4 persons.

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

Categories	Total County	Total Region	Municipality	Urban	Rural
Total population	24,658,823	1,046,545	109,944	29,993	79,951
Total household population	24,076,327	1,034,704	107,435	28,924	78,511
Number of houses	3,392,745	114,034	11,503	2,844	8,659
Number of households	5,467,054	177,629	19,790	5,690	14,100
Average households per house	1.6	1.6	1.7	2	1.6
Population per house*	7.1	9.1	9.3	10.2	9.1
Average household size	4.4	5.8	5.4	5.1	5.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3   Type of Dwelling, Holding and Tenancy Arrangement

8.3.1   House ownership

In Ghana, as in many other countries, owning a house is the dream of many citizens. Table 8.2 shows the ownership status of dwelling units by sex of household head and type of locality. Table 8.2 shows that the total numbers of dwellings in the country 5,467,054 of which 2,883,236 are owned by a member of the household, 1,439,021 by other private individuals and 118,804 by public/Government. At the regional level, there are a total of 177,629 dwellings of which 154,016 is owned by a household member, 12,118 by other private individuals and 3,686 by public/government. In the municipality, a total of 19,790 dwellings are reported. Out of this number 83.9 percent is owned by a household member, 9.7 percent by other private individual and 2.7 percent by public/government.

Again, in Table 8.2, the proportion of male headed households in which a household member owned the dwelling unit is 84.6 percent and other private individual owns 9.2 percent of dwelling units occupied by male headed households. Dwelling units owned by public/Government constitute 3.1 percent with dwelling units own by a relative not a household member being 2.2 percent. The ownership status of dwelling units by female-headed households follows the same pattern as male-headed households. About 82.4 percent of dwelling units are owned by a household member followed by other private individual (10.9%). It is therefore clear from the result that more dwelling units are owned by household members in the municipality.

 In the urban areas, the proportion of household members owning dwelling units is 60.2 percent while ownership by other private individual is 27.4 percent. On the other hand, ownership of dwelling units by a household member is 93.5 percent in rural areas.

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

| Ownership status | Total | | Municipal | | | | | |
| | Country | Region | Total | | Male headed | Female headed | Urban | Rural |
			Number	Percent				
Total	5,467,054	177,629	19,790	100.0	100.0	100.0	100.0	100.0
Owned by household member	2,883,236	154,016	16,603	83.9	84.6	82.4	60.2	93.5
Being purchased (e.g. mortgage)	45,630	721	44	0.2	0.2	0.3	0.6	0.1
Relative not a household member	851,630	6,035	548	2.8	2.2	3.9	4.4	2.1
Other private individual	1,439,021	12,181	1,922	9.7	9.2	10.9	27.4	2.6
Private employer	83,610	480	79	0.4	0.5	0.2	1.1	0.1
Other private agency	21,123	267	43	0.2	0.2	0.2	0.7	0.0
Public/Government ownership	118,804	3,686	540	2.7	3.1	2.0	5.5	1.6
Other	24,000	243	11	0.1	0.0	0.1	0.1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3.2 Type of dwelling units

Table 8.3 shows that, the most common type of dwelling unit occupied by households in the municipality is the compound house (54.0%). The proportion of households occupying the other type of dwelling units are separate house (18.6%), huts/buildings (same compound) (14.4%), semi-detached house (5.9%), huts/buildings (different compound) (5.5%) and flat/apartment (1.0%). The other type of dwelling units in the municipality which are not common is tent and improvised home (kiosk/container etc.) consisting of 0.1 percent each.

For the entire municipality, the proportion of male-headed and female-headed households living in the different type of dwelling units are almost the same. For instance, male-headed households living in compound house (rooms) is 52.9 percent and female-headed in the same type of dwelling unit is 56.2 percent. Table 8.3 further reveals that 19.0 percent of male-headed households live in separate houses while for female heads who live in separate houses are 17.8 percent. Makeshift dwelling units such as tents, kiosks and containers, attachments to shops or offices together constitute less than 1.0 percent of dwelling units among both male and female-headed households in the municipality.

The most dominant type of dwelling units in the urban area is compound house which constitute 64.6 percent. Separate houses constitute 12.8 percent, with huts/building (same compound) forming 7.5 percent of the total housing stock in the municipality Of the rural localities, 49.7 percent of households lived in compound houses, with 21.0 percent in separate houses. Tent, improvised home (kiosk/container etc.) and living quarters attached to office/shop constitute 0.3 percent.

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

| Type of dwelling | Total | | Municipality | | | | | |
| | Country | Region | Total | | Male headed | Female headed | Urban | Rural |
			Number	Percent				
Total	5,467,054	177,629	19,790	100.0	100.0	100.0	100.0	100.0
Separate house	1,471,391	29,787	3,684	18.6	19.0	17.8	12.8	21.0
Semi-detached house	391,548	6,836	1,163	5.9	5.9	5.8	6.5	5.6
Flat/Apartment	256,355	1,459	203	1.1	1.1	0.8	2.1	0.6
Compound house (rooms)	2,942,147	103,666	10,680	54.0	52.9	56.2	64.6	49.7
Huts/Buildings (same compound)	170,957	22,735	2,858	14.4	14.9	13.5	7.5	17.2
Huts/Buildings (different compound)	36,410	11,616	1,090	5.5	5.6	5.4	5.8	5.4
Tent	10,343	300	27	0.1	0.2	0.1	0.1	0.1
Improvised home (kiosk/container etc.)	90,934	183	28	0.1	0.1	0.2	0.1	0.1
Living quarters attached to office/shop	20,499	348	31	0.2	0.2	0.1	0.2	0.1
Uncompleted building	66,624	554	14	0.1	0.1	0.0	0.1	0.1
Other	9,846	145	12	0.1	0.1	0.1	0.1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4   Construction Materials

This section discusses the main material for the construction of outer walls, floor and the roofing of dwelling units in the district.

8.4.1   Materials for outer walls

Table 8.4 shows that in Ghana, outer walls of dwelling units are made of two main construction materials: cement block/concrete (57.5%) and mud brick/earth (34.2%). Outer walls made of palm leaf/ thatch (grass)/raffia, (0.7%), stone (0.2%) and bamboo (0.1%) are not common.

In the Upper East Region 80.7 percent of the outer walls of dwellings units are made with mud brick/earth and16.0 percent with cement blocks/concrete. The pattern in the region is not different from the municipality where the proportion of outer walls with mud brick/earth is 73.4 percent and 24.3 percent for cement blocks/concrete. This means that in the Upper East Region as well as within the Kassena Nankana Municipality, there are more dwelling units with outer walls made of mud brick/earth than any other construction materials. Most outer walls of dwelling units in the rural localities are also made of mud brick/earth (86.4%) with other construction materials constituting 13.6 percent. The urban areas as expected has cement blocks/concrete walls dominating (55.5%) followed by mud brick/earth (41.9%) with bamboo being the least.

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

| Material for outer wall | Total | | Municipality | | | |
| | | | Total | | | |
	Country	Region	Number	Percent	Urban	Rural
Total	5,817,607	182,845	20,538	100.0	100.0	100.0
Mud brick/earth	1,991,540	147,624	15,085	73.4	41.9	86.4
Wood	200,594	1,606	123	0.6	0.3	0.7
Metal sheet/slate/asbestos	43,708	855	81	0.4	0.5	0.4
Stone	11,330	372	51	0.2	0.3	0.2
Burnt bricks	38,237	233	7	0.0	0.1	0.0
Cement blocks/concrete	3,342,462	29,321	4,990	24.3	55.5	11.5
Landcrete	104,270	1,890	94	0.5	1.2	0.2
Bamboo	8,206	54	4	0.0	0.0	0.0
Palm leaf/thatch (grass)/raffia	38,054	435	31	0.2	0.1	0.2
Other	39,206	455	72	0.4	0.2	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.2   Materials for floor

Type of materials used for the floor of a house affects the appearance, quality and health status of household members within the house. Some floors are easily contaminated and are difficult to clean or disinfect. The results in Table 8.5 indicate that floors of dwelling units in the region are largely made of cement or concrete (65.8%) and earth or mud (31.7%). The proportion of floors made of burnt brick, wood, vinyl tiles, ceramic/porcelain/granite/marble tiles and terrazzo/terrazzo tiles put together is 1.1 percent.

The pattern in the municipality follows that of the region. The proportion of houses with cement or concrete floors is 70.9 percent while earth or mud is 27.3 percent. Floors with burnt brick and wood each recorded less than 0.1 percent, whilst vinyl tiles and Terrazzo/Terrazzo tiles recorded (0.1%) each indicating that they are not common with the people in the municipality. Cement/concrete floor is very common in urban areas (88.0%) than in rural localities (64.0%). On the other hand, earth/mud floors are more common in rural localities (34.1%) than in urban localities (10.4%).

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

| Materials for the floor | Total | | Municipality | | | |
| | | | Total | | | |
	Country	Region	Number	Percent	Urban	Rural
Total	5,467,054	177,629	19,790	100.0	100.0	100.0
Earth/mud	872,161	56,272	5,402	27.3	10.4	34.1
Cement/concrete	4,255,611	116,911	14,025	70.9	88.0	64.0
Stone	32,817	1,623	156	0.8	0.4	1.0
Burnt brick	6,537	89	4	0.0	0.0	0.0
Wood	52,856	49	3	0.0	0.0	0.0
Vinyl tiles	57,032	196	22	0.1	0.2	0.1
Ceramic/porcelain/granite/marble tiles	88,500	1,181	81	0.4	0.7	0.3
Terrazzo/terrazzo tiles	85,973	401	19	0.1	0.2	0.1
Other	15,567	907	78	0.4	0.2	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.3 Materials for roof

The results in Table 8.6 show that in 2010, there are three main construction materials in the region used for roofing dwelling units. The most common one is metal sheets (67.2%). The other two main materials used for roofing are thatch/palm leaf or raffia (16.8%) and mud/mud brick/earth (12.2%). The municipality also has 62.7 percent of dwelling units roofed with metal sheets, 26.0 percent roofed with mud/mud brick/earth and 7.7 percent roofed with thatch/palm leaf or raffia. Mud/mud brick/earth is the third most common roofing material in the region but is the second roofing material in the municipality. A little over one percent (1.3%) of roofs are made of wood in the municipality. Roofing with metal sheets dominated in the urban localities with 80.6 percent but in the rural areas, it constitutes 55.4 percent. Mud/mud bricks/earth roof is more common in the rural than in urban localities, with 34.2 percent and 6.1 percent respectively.

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

| Main Roofing material | Total | | Municipality | | | |
| | | | Total | | | |
	Country	Region	Number	Percent	Urban	Rural
Total	5,817,607	182,845	20,538	100.0	100.0	100.0
Mud/Mud bricks/earth	80,644	22,227	5,346	26.0	6.1	34.2
Wood	45,547	3,085	258	1.3	0.8	1.4
Metal sheet	4,152,259	122,942	12,877	62.7	80.6	55.4
Slate/asbestos	759,039	646	87	0.4	1.1	0.1
Cement/concrete	141,072	879	71	0.3	0.6	0.3
Roofing tile	31,456	162	9	0.0	0.1	0.0
Bamboo	71,049	586	43	0.2	0.2	0.2
Thatch/palm leaf or raffia	500,606	30,722	1,572	7.7	10.1	6.7
Other	35,935	1,596	275	1.3	0.5	1.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.5 Room Occupancy

8.5.1 Number of sleeping rooms

The number of sleeping rooms provides an indication of the extent of crowding in the households. Overcrowded rooms have health implications. More importantly, crowded living conditions increase the risk of the spread of infectious diseases, such as meningococcal disease, tuberculosis and other respiratory infections.

The results from Table 8.7 indicate that 20.1 percent of households in the municipality sleeps in one room, 24.8 percent in two rooms and 23.1 are in three rooms. Less than a fifth (17.6%) of households sleeps in five or more rooms. About 6 in 10 (64.8%) of single member households in the municipality has one sleeping room, 20.2 percent occupied two rooms while 0.4 percent occupied ten or more rooms. The distribution of sleeping rooms for two member households are 43.0 percent for one room, 29.2 percent for two rooms, 16.3 percent for three rooms and 0.4 percent for ten or more rooms. The proportion of three member households in the municipality who occupied one sleeping room was 29.4 percent.

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

House-hold size	Total		One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Total	19,790	100.0	20.1	24.8	23.1	14.4	7.2	4.4	2.3	1.4	2.3
1	1,754	100.0	64.8	20.2	8.6	3.0	1.2	0.7	0.9	0.2	0.4
2	1,840	100.0	43.0	29.2	16.3	6.4	2.4	0.7	1.2	0.5	0.4
3	2,313	100.0	29.4	32.1	22.3	8.6	3.1	1.8	1.1	0.5	1.1
4	2,648	100.0	21.1	33.1	24.6	11.9	3.9	2.6	1.2	0.7	0.9
5	2,709	100.0	12.8	30.7	28.5	16.1	6.1	3.3	0.9	0.7	1.0
6	2,393	100.0	7.8	26.7	29.5	20.6	7.9	3.9	1.8	0.8	1.1
7	1,865	100.0	5.0	19.6	32.3	20.9	11.3	5.5	2.1	1.5	1.8
8	1,326	100.0	4.0	16.7	26.8	22.6	14.6	7.5	3.2	1.7	2.9
9	865	100.0	3.7	13.3	20.9	23.0	17.6	9.6	4.3	3.5	4.2
10+	2,077	100.0	4.8	11.3	16.1	16.7	13.1	12.7	8.8	5.2	11.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6   Access to Utilities and Household Facilities

8.6.1   Main source of lighting

The nature of the source of lighting for the dwelling units of households is one of the indicators of the quality of life. As source of lighting of dwelling units improve, the quality of life changes for the better.

The results in Table 8.8 show that, the most common source of light in the country is electricity (main) (64.2%) from the national grid. In the region 45.5 percent of households use kerosene lamp as their source of lighting, 27.6 percent use flashlight/torch, 24.1 percent have access to electricity (national grid) and about three percent (2.8%) use other source of lighting.

Over half (51.1%) of households in the municipality use kerosene lamps as their main source of lighting, with 28.8 percent having access to national electricity grid and 16.6 percent use flashlight/torch. The usage of gas lamp, candle and firewood is the least with 0.3 percent each.

More than half (65.6%) of urban dwelling units use electricity (national grid) as their main source of lighting, while 22.9 percent use kerosene lamp as their main source. Dwelling units in the urban area using other sources of lighting constitute 11.5 percent. In the rural areas however, the proportion of households using kerosene lamp as the main source of lighting is the highest (62.5%), followed by flashlight/torch (19.7%) and the least is candle which constitute 0.2 percent.

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

| Main source of light | Total | | Municipality | | | |
| | Country | Region | Total | | Urban | Rural |
			Number	Percent		
Total	5,467,054	177,629	19,790	100.0	100.0	100.0
Electricity (mains)	3,511,065	42,866	5,692	28.8	65.6	13.9
Electricity (private generator)	36,142	1,009	166	0.8	0.6	1.0
Kerosene lamp	971,807	80,752	10,122	51.1	22.9	62.5
Gas lamp	9,378	412	59	0.3	0.2	0.3
Solar energy	9,194	612	78	0.4	0.2	0.5
Candle	41,214	293	57	0.3	0.5	0.2
Flashlight/torch	858,651	49,068	3,284	16.6	9.0	19.7
Firewood	13,241	1,191	66	0.3	0.1	0.4
Crop residue	4,623	830	82	0.4	0.2	0.5
Other	11,739	596	184	0.9	0.7	1.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6.2   Main source of cooking fuel

Table 8.9 presents the main sources of cooking fuel for households in the municipality. The highest proportions of households use wood as their main source of cooking fuel (59.2%), followed by charcoal constituting 18.7 percent, then crop residue, 10.2 percent, and gas, 8.9 percent. The use of the other sources such as kerosene, sawdust, animal waste and electricity is negligible, recording less than one percent for each source.

The results also indicate that wood remains the main source of cooking fuel in rural localities (71.3%), followed by crop residue (13.9%). However, in the urban areas charcoal is the main source of cooking fuel (41.7%), followed by wood (29.2 %) and gas (24.3 %).

8.6.3   Cooking space

Table 8.9 shows the distribution of cooking space use by households in the municipality. The highest proportion of cooking space use by households in dwelling units is separate room for exclusive use of household. This constitutes 34.5 percent and those who cook in the open space in compound are 30.0 percent. In urban localities, the most common space for cooking is the veranda (43.6%). Separate room for exclusive use of household constitute 26.0 percent while open space in compound is 20.8 percent. In the rural localities, about one in three dwelling units (33.8%) has an open cooking space in the compound, 38.0 percent has separate room for exclusive use of household and 15.7 percent has enclosure without roof as cooking space.

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

Source of cooking fuel/cooking space	Total Country	Total Region	Municipality Total Number	Municipality Total Percent	Urban	Rural
Main source of cooking fuel for household						
Total	**5,467,054**	**177,629**	**19,790**	**100.0**	**100.0**	**100.0**
None no cooking	306,118	3,272	365	1.8	2.7	1.5
Wood	2,197,083	107,310	11,708	59.2	29.2	71.3
Gas	996,518	8,735	1,759	8.9	24.3	2.7
Electricity	29,794	383	61	0.3	0.4	0.3
Kerosene	29,868	402	50	0.3	0.4	0.2
Charcoal	1,844,290	27,021	3,691	18.7	41.7	9.4
Crop residue	45,292	29,725	2,024	10.2	1.1	13.9
Saw dust	8,000	93	11	0.1	0.1	0.0
Animal waste	2,332	124	5	0.0	0.0	0.0
Other	7,759	564	116	0.6	0.1	0.8
Cooking space used by household						
Total	**5,467,054**	**177,629**	**19,790**	**100.0**	**100.0**	**100.0**
No cooking space	386,883	6,822	740	3.7	4.2	3.6
Separate room for exclusive use of household	1,817,018	75,393	6,835	34.5	26.0	38.0
Separate room shared with other household(s)	410,765	4,664	231	1.2	1.5	1.0
Enclosure without roof	117,614	31,567	2,314	11.7	1.9	15.7
Structure with roof but without walls	349,832	1,788	145	0.7	0.5	0.8
Bedroom/hall/living room)	74,525	572	121	0.6	1.3	0.3
Veranda	1,173,946	18,444	3,425	17.3	43.6	6.7
Open space in compound	1,115,464	38,038	5,944	30.0	20.8	33.8
Other	21,007	341	35	0.2	0.3	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

8.7.1   Main source of drinking water

The availability of and accessibility to improved drinking water is an important aspect of the health of household members. The UN Millennium Development Goal (MDG) Seven is aimed at reducing by half the proportion of people without sustainable access to safe drinking water by 2015 based on 1990 levels. The source of water supply particularly for drinking has a serious effect on burden of diseases. For instance, one of the main health benefits of clean drinking water supply is a reduction in diarrhoea cases.

Table 8.10 presents the main source of drinking water for households in the municipality. The most common source of drinking water for households in the municipality is bore-hole/pump/tube well (64.6%), followed by protected well (9.9%), pip-borne inside dwelling (7.8%), with pipe-borne outside dwelling constituting 7.4 percent. The results also identified four main sources of drinking water commonly used in the urban localities. These are bore-hole/pump/tube well (35.2%), pipe-borne inside dwelling (21.1%), protected well (18.8%) and pipe-borne outside dwelling (12.3%). However, three in every four (76.5%) households in rural localities in the municipality use bore-hole/pump/tube well as their main source of drinking water.

8.7.2   Main source of water for other domestic use

Table 8.10 further shows that the same sources of water use for drinking in the municipality are also use for other domestic activities. The use of bore-hole/pump/tube well for other domestic purposes constitutes 62.4 percent of households in the municipality. Less people use other sources such as protected well (11.3%), pipe-borne inside dwelling (7.5%), pipe-borne outside dwelling (6.7%) for other domestic purposes.

The same pattern is seen in the urban and rural localities. The use of bore-hole/pump/tube well for other domestic purposes in urban localities is 34.4 percent, protected well (22.1%), pipe-borne inside dwelling (20.4%), pipe-borne outside dwelling (10.7%) and the rest have percentages less than four. In the rural localities on the other hand, 73.7 percent use bore-hole/pump/tube well for other domestic purpose. The others are protected well (6.9%), pipe-borne outside dwelling (5.1%) and unprotected well (4.2%). The rest of the sources have less than four percent each.

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

			Municipality			
	Total		Total			
Sources of water	Country	Region	Number	Percent	Urban	Rural
Main source of drinking water for household						
Total	5,467,054	177,629	19,790	100.0	100.0	100.0
Pipe-borne inside dwelling	790,493	11,577	1,550	7.8	21.1	2.5
Pipe-borne outside dwelling	1,039,667	15,063	1,464	7.4	12.3	5.4
Public tap/standpipe	712,375	5,179	500	2.5	4.0	1.9
Bore-hole/pump/tube well	1,267,688	101,817	12,788	64.6	35.2	76.5
Protected well	321,091	22,805	1,953	9.9	18.8	6.3
Rain water	39,438	223	53	0.3	0.2	0.3
Protected spring	19,345	683	49	0.2	0.2	0.3
Bottled water	20,261	82	7	0.0	0.1	0.0
Sachet water	490,283	694	78	0.4	1.1	0.1
Tanker supply/vendor provided	58,400	267	14	0.1	0.1	0.1
Unprotected well	112,567	11,083	633	3.2	1.6	3.9
Unprotected spring	12,222	378	21	0.1	0.0	0.1
River/stream	502,804	4,452	365	1.8	2.3	1.7
Dugout/pond/lake/dam/canal	76,448	3,175	313	1.6	3.2	0.9
Other	3,972	151	2	0.0	0.0	0.0
Main source of water for other domestic use of household						
Total	5,467,054	177,629	19,790	100.0	100.0	100.0
Pipe-borne inside dwelling	905,566	11,408	1,493	7.5	20.4	2.3
Pipe-borne outside dwelling	1,089,030	13,957	1,328	6.7	10.7	5.1
Public tap/standpipe	704,293	4,541	474	2.4	3.8	1.8
Bore-hole/pump/tube well	1,280,465	98,487	12,349	62.4	34.4	73.7
Protected well	465,775	24,798	2,230	11.3	22.1	6.9
Rain water	39,916	330	51	0.3	0.1	0.3
Protected spring	18,854	672	56	0.3	0.3	0.3
Tanker supply/vendor provided	100,048	301	28	0.1	0.2	0.1
Unprotected well	152,055	11,607	719	3.6	2.2	4.2
Unprotected spring	15,738	650	32	0.2	0.1	0.2
River/Stream	588,590	6,125	406	2.1	2.3	2.0
Dugout/pond/lake/dam/canal	96,422	4,518	616	3.1	3.3	3.0
Other	10,302	235	8	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.8 Bathroom and Toilet Facilities

8.8.1 Toilet facilities

An efficient and hygienic method of human waste disposal available in a dwelling unit is a critical indicator of the sanitary condition of the unit and is an indirect measure of the socio-economic status of a household. Table 8.11 presents the type of toilet and bathing facilities use by households by type of locality in the municipality. The 2010 PHC revealed that, four in every five (83.7%) households in the municipality has no toilet facility. They therefore resort to the use of the bush/beach/field. The other sources of toilet facilities all together constituted 16.3 percent including 4.4 percent for households using W.C.

The proportion of households in urban and rural localities without toilet facilities and resort to the bush/beach/field as an option are 63.6 percent and 91.8 percent respectively. Other types of toilet facilities in the urban localities with significant proportions are W.C (11.7%), public toilet (11.3%), pit latrine (7.5%) and KVIP with 4.9 percent.

8.8.2 Bathroom facilities

As shown in Table 8.11, the proportion of dwelling units with bathrooms exclusively used by the household members in the municipality is 42.6 percent. The data also indicate that 15.0 percent of households shared separate bathroom in the same house with other non-household members. About 11.8 percent of households share an open cubicle as a bathroom with other households. Households in the municipality using open space around house for bathing is 16.8 percent and 10.9 percent use private open cubicle.

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

| Toilet facility/bathing facility | Total | | Municipality | | | |
| | | | Total | | | |
	Country	Region	Number	Percent	Urban	Rural
Toilet facility used by household						
Total	5,467,054	177,629	19,790	100.0	100.0	100.0
No facilities (bush/beach/field)	1,056,382	146,329	16,566	83.7	63.6	91.8
W.C.	839,611	6,050	868	4.4	11.7	1.4
Pit latrine	1,040,883	5,266	594	3.0	7.5	1.2
KVIP	572,824	6,196	551	2.8	4.9	2.0
Bucket/Pan	40,678	405	43	0.2	0.7	0.0
Public toilet (WC, KVIP Pit and Pan etc)	1,893,291	12,828	1,120	5.7	11.3	3.4
Other	23,385	555	48	0.2	0.4	0.2
Bathing facility used by household						
Total	5,467,054	177,629	19,790	100.0	100.0	100.0
Own bathroom for exclusive use	1,535,392	73,345	8,434	42.6	26.8	49.0
Shared separate bathroom in the same house	1,818,522	33,370	2,995	15.1	28.1	9.9
Private open cubicle	381,979	26,114	2,164	10.9	6.4	12.8
Shared open cubicle	1,000,257	21,111	2,344	11.8	27.4	5.6
Public bath house	140,501	2,391	342	1.7	5.3	0.3
Bathroom in another house	187,337	479	83	0.4	0.4	0.4
Open space around house	372,556	19,987	3,325	16.8	5.3	21.4
River/Pond/Lake/Dam	14,234	437	62	0.3	0.2	0.4
Other	16,276	395	41	0.2	0.2	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

In the urban localities, the three most commonly use facilities for bathing are shared separate bathroom in the same house (28.1%), shared open cubicle (27.4%) and own bathroom for exclusive use by household members constituting 26.8 percent. In the rural localities, 49.0 percent of households have bathrooms use exclusively by household members, 21.4 percent have open space around house, 12.8 percent use private open cubicle, 9.9 percent share separate bathroom in the same house and 5.6 percent share open cubicle.

8.9   Method of Waste Disposal

8.9.1   Solid waste disposal

Table 8.12 presents different methods of solid waste disposal by households in the municipality. The most common method of disposal of solid waste is the public dump (open space) where 38.6 percent of household dump their refuse. Burning of solid waste by households constitute 20.2 percent of means of disposing waste in the municipality. Dependence on companies that collect waste from homes is11.8 percent, while 17.4 percent dumped waste indiscriminately.

Dumping solid waste in open space is the common practice in urban areas where 43.6 practice this method of waste disposal. Other methods that have significant proportion are burning by household (20.0%), collected (15.6%) and dumping in public container (12.1%). In rural set ups, the main methods of solid waste disposal are dumping in open space (36.6%), dumped indiscriminately (21.8%), burned by household (20.3%), collected (10.4%) and the least is dumping into public container (2.6%). The low proportion of collected and dumped public container in the rural areas could be due to unavailability of public containers for waste disposal.

8.9.2   Liquid waste disposal

The various methods by which liquid waste is disposed of by households are also presented in Table 8.12**.** The data indicates that 69.8 percent of all households in the municipality throw their liquid waste onto the street or outside their houses, 18.9 percent throw waste onto compounds and the other methods of disposal of waste recorded less than five percent each. The most common method of liquid waste disposal in both urban and rural localities is throwing waste onto the street/outside, thus 70.6 and 69.5 percent respectively. The second most common method is throwing liquid waste onto compounds of which urban localities recorded 13.1 percent and rural areas recorded 21.2 percent.

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

Method of waste disposal	Total		Municipality			
			Total			
	Country	Region	Number	Percent	Urban	Rural
Solid Waste						
Total	5,467,054	177,629	19,790	100.0	100.0	100.0
Collected	785,889	19,758	2,345	11.8	15.6	10.4
Burned by household	584,820	44,337	4,000	20.2	20.0	20.3
Public dump (container)	1,299,654	14,057	1,055	5.3	12.1	2.6
Public dump (open space)	2,061,403	55,459	7,635	38.6	43.6	36.6
Dumped indiscriminately	498,868	25,994	3,438	17.4	6.3	21.8
Buried by household	182,615	12,201	940	4.7	1.8	5.9
Other	53,805	5,823	377	1.9	0.7	2.4
Liquid waste						
Total	5,467,054	177,629	19,790	100.0	100.0	100.0
Through the sewerage system	183,169	4,062	422	2.1	4.0	1.4
Through drainage system into a gutter	594,404	7,676	488	2.5	3.5	2.0
Through drainage into a pit (soak away)	167,555	12,031	868	4.4	4.8	4.2
Thrown onto the street/outside	1,538,550	105,548	13,821	69.8	70.6	69.5
Thrown into gutter	1,020,096	6,029	384	1.9	3.8	1.2
Thrown onto compound	1,924,986	41,258	3,731	18.9	13.1	21.2
Other	38,294	1,025	76	0.4	0.2	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER NINE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

9.1   Introduction

In Ghana, the protection and enhancement of the welfare of the population is the Government's first responsibility. An understanding of the characteristics and dynamics of the population cannot be overemphasised in achieving a realistic economic and development planning for the nation. It is against this background that the Government of Ghana conducted the 2010 Population and Housing Census. The foregoing discussion has provided analysis of various aspects of the 2010 Census data in the municipality. This chapter provides a summary of findings and some suggested policy recommendations.

9.2   Demographic Characteristics

Population size and distribution

The total population in the Municipality is 109,944, out of which over half, 56,268 (51.2%), are females and 53,676 (48.8%) are males. The age cohort with the highest proportion of the population is the 0-4 age group (13.8%), with age 0-24 contributing about 60.1 percent of the total population.

The sex ratio for the Municipality is 95.4 percent. This means that for every 100 females there are approximately 95 corresponding males in the Municipality. It can be seen, however that the male population in the Municipality was greater than that of the female population for 0 – 24 years. As a result, the sex ratios in those age categories between 0-24 years are all above 100 percent.

The urban population stood at 29, 993 (27.3%) while the rural population (79,951) is 72.7 percent of the municipality's population.

Age dependency ratio

The population of children (0-14 years) in the municipality constitute 39.2percent, the working class (15-64 years) 54.3 percent and the aged (65+ years) 6.5%. The Age-dependency ratio for the municipality is 84.0 percent. The rural working class (aged, 15-64 years) would have to cater for more dependants with a dependency ratio of 88.9 percent as compared to urban dependency ratio of 72.1 percent.

Fertility, mortality and migration

The total number of children ever born to females aged 12 years and older (38,879) in the Municipality is 104,754 children, out of which 83,118 children are surviving. On the average therefore, each female 12 years and older gave birth to about 3 children at the time of the census. Also on the average, there are 2 surviving children to each female 12 years and older as at 2010 in the municipality.

The municipality has relatively low fertility rates: TFR (3.4), GFR (97.9) and CBR 23.1) as compared to most of the districts/municipalities in the region. In the Kassena Nankana Municipality, there are 1,217 deaths in all households. The municipality had 11.1 crude death

rates per every 1000 population, which is higher than the regional rate of 10.8 per 1000 population.

The total number of persons who are living in the Kassena Nankana Municipality but were not born in the municipality as at time of the census is 17,867,in other words they are the total number of migrants resident in the Municipality. This represents 16.3 percent of the municipal's population.

9.3   Social Characteristics

Size, household composition and headship

The total household population within the municipality is 107,435. There are more male household heads, 13,249, (66.9%) as compared to female household heads, 6,541(33.1%).Females were more likely to be single parents than males, whether in an extended family or nuclear family.

Marital status

The Kassena Nankana Municipality in 2010 PHC recorded a total of 74,561 persons aged 12 years and older who responded to questions on marital status. The data revealed that across all ages, 45.3 percent of the population 12 years and older are in some form of union, consisting of 44.8 percent married and 0.5 percent in consensual union. The never married constituted 41.6 percent. In addition, 13 percent are divorced, separated, or widowed. For persons 12 years and older, the proportion of females married (47.1%) is higher than their male counterpart (42.4%). The high proportion observed in the female age group could be due to the polygamous marriage in the municipality.

The difference in the level of education for all persons 12 years and older indicates females with no education (52.2%) dominate their male counterparts (36.8%). Also the proportion of married females with no education (67.2%) exceeds that of males (57.6%).

Nationality

Out of the total population, 95.5 percent of the populations in the municipality are Ghanaians by birth and only 0.4 percent are from other countries not classified. ECOWAS nationals constitute 0.5 percent and 1.1 percent are from African countries either than ECOWAS.

Religious affiliation

Out of total population in the municipality, 24.2 percent are traditionalists, 14.5 percent adhere to the Islamic faith, and 4.3 percent did not belong to any religion at all, whereas the rest 56.0 percent of the population are Christians. A smaller proportion (1.1%) of the population in the municipality is affiliated to other religions not mentioned. What is more interesting is that they co-exist peacefully.

Literacy and education

In the Kassena Nankana Municipality, out of the total population of 76,975 who are 11 years and above, 43,313 (56.3%) are literates and 33,662 (43.7%) not able to read and write. Of those who are literates, 49.2 percent could read and write in English only, 46.9percent could read and write in English and Ghanaian language, and 3.1 percent could read and write in Ghanaian language only, while very few people (0.2%) are literate in English and French.

For the population three years and older 37.4 percent have never been to school, 43.0 are currently attending school with 19.6 percent attending school in the past. Of those who are currently attending school, almost half (49.6%) are in primary school, 18.3 percent in JSS/SHS and the least proportion (0.4%) of those currently attending in vocational/technical/commercial education.

9.4 Economic Characteristics

Economic activity status

It is realised that 70.2 percent of the population 15 years and older are economically active, while 29.8 percent are economically not active. Out of those who are economically active, 97.0 percent are currently employed leaving 3.0 percent as the population unemployed in the municipality. About 70.3 percent of males aged 15 years and older in the municipality are economically active, out of which 96.9 percent are currently employed, while 3.1 percent are not engaged in any economically productive activity. On the other hand 97.1 percent of females 15 years and older who are economically active are employed with 2.9 percent unemployed.

Occupation

Out of 45,553 persons aged 15 years and older those who are engaged in primary related occupations such as skilled agriculture, forestry and fishery are 66.7 percent; craft related trades workers are 10.8 percent with Technical and Associate Professionals accounting for 1.0 percent.

Generally, occupational distribution is not proportionately balanced in terms of sex in the municipality except among managers where both sexes have 1.1 percent of their population aged 15 years and older as managers.

Industry

Agriculture still remains the backbone of the local economy and employs 65.4 percent of persons aged 15years and older. It also employs 70.0 percent of males 15 years and older who are employed and 61.0 percent of females in the same category. Employment by industry varied variously by sex in the municipality. For instance, more females (12.0%) are engaged in wholesale and retail business as compared to males (5.9%).

Employment status

The biggest employment category in the Kassena Nankana Municipality is the self-employed without employee(s) who constitute 56.9 percent of those 15 years and older. The second category is contributing family worker making up 27.6 percent while 10.3 percent are employees.

Employment sector

Out of 45,533 persons who are employed, 90.5 percent of them are in the private informal sector, while 7.3 percent are in the public sector and 1.5 percent in the private formal sector.

9.5   Information Communication Technology

Ownership of mobile phones

Out of the total of 74,561 persons who were aged 12 years and older in the municipality, 21,029 (28.2%) persons owned mobile phones. Of the male population 12 years and older, 34.8 percent own mobile phones in the municipality whilst of the females 22.1 percent own the device.

Use of internet

About 3,496 persons who are 12 years and older used internet facility and this constitutes only 4.7 percent of the population 12 and above in the municipality. The proportion of male who use internet (7.5%) in the municipality is more than three times of females who access the facility.

Household ownership of fixed telephone lines

The total number of households in the municipality is 19,790 of which 13,249 are male headed and 6,541are female headed. Out of this, only 205 households which forms only one percent of household have fixed telephone lines in the municipality.

Household ownership of desktop or laptop computer

It was found that the total number of households with laptops/desktop computers was 981 forming just 5.0 percent of the total number of households in the municipality. Female-headed households with laptops/desk tops computers is 3.1 compared to male heads who constitute 5.9 percent of the total male headed households in the municipality.

9.6   Disability

Out of the total population of 109,944 in the municipality 105,742 persons did not have any form of disability, while 4,202 (3.8%) has one form of disability. Females are more prone to disabilities in the municipality than males as 4.0 percent out of the female population of 56,268 are disabled in one form or the other compared to 3.6 percent of males.

Of the 4,202 persons with disability (PWDs) in the municipality, 44.8 percent have disability relating to sight, with 22.6 percent being physically (mobility) challenged and 22.0 percent having hearing related disability.

9.7   Agricultural Activities

Majority of the households in the municipality depend on agriculture for their livelihood. Out of the total households in the municipality, 82.7 percent are engaged in agriculture. Of the agricultural households, 96.1 percent are engaged in crop farming while 83.2 percent are engaged in livestock keeping. In the urban areas, 56.8 percent of households are engaged in agriculture, this is relatively low compared to the proportion of rural households in agriculture (93.1%). Again, eighty-eight percent of households in the urban area engage in crop farming while 98.1 percent are into crop farming in the rural areas. On the other hand, 78.6 percent of households in the urban localities engaged in livestock rearing while 84.3 percent of keepers' are in the rural localities.

In the 2010 population and housing census, the municipality recorded a total of 358,999 livestock reared. This number of livestock is kept by 34,905 persons, given an average of 10

livestock per keeper. The most common livestock in the municipality is chicken (133,666) (37.2%), followed by goats (70,525) (19.6%), guinea fowls (58,753) (16.7%), sheep (47,826) (13.3%) and cattle (26,837) (7.5%). Tree planting and fish farming are not common agricultural activities among households in the municipality.

9.8   Housing Conditions

The Kassena Nankana Municipality reported a total population of 109,944 during the 2010 PHC with rural and urban distribution of 72.7 percent and 27.3 percent respectively. The municipality has a total household population of 107,435 with 28,924 (26.9%) in the urban centres and 78,511(73.1%) in the rural areas of the municipality. There are a total of 11,503 houses in the municipality of which 2,844 (24.7%) are found in the urban localities and 8,659 (75.3%) in the rural settings. According to the 2010 Population and Housing Census, there are 19,790 households in the municipality comprising 5,690 (28.8%) urban households and 14,100 (71.2%) rural households. The average number of households per house is 1.7 and an average population per house of 9.3 persons. The average household size in the municipality is 5.4 persons which is lower than the regional rate of 5.8 persons.

Type of dwelling, holding and tenancy arrangement

The municipality recorded a total of 19,790 dwelling units. Out of this number 16,603 (83.9%) are owned by a household member; 1,922 (9.7%) by other private individual; and 540 (2.7%) by public/government. The proportion of the male-headed households in which a household member owned the dwelling units is 84.6percent and of female-headed households, ownership of dwelling units by a household member is 82.4percent. In the urban areas, the proportion of household members owning dwelling units is 60.2 percent while 93.5 percent of dwelling units in the rural localities are owned by a household member. It is therefore clear from the result that more dwelling units are owned by household members in the municipality.

There are three main types of dwelling units occupied by 87.0 percent of households in the municipality, namely; compound houses (54.0%), separate house (18.6%) and huts/buildings (same compound) (14.4%). The most dominant type of dwelling unit in the urban and rural areas was compound house

Construction materials

The 2010 PHC indicated that 97.7 percent of outer walls of dwelling units in the municipality are made of two main construction materials: cement block/concrete (24.3%) and mud brick/earth (73.4%). The pattern in the region is not different from the municipality where the proportion of outer walls with mud brick/earth is 73.4 percent and 24.3 percent for cement blocks/concrete. This means that in the Upper East Region as well as within the Kassena Nankana municipality, there are more dwelling units with outer walls made of mud brick/earth than any other construction materials. The most dominant construction material used for outer wall of dwelling units in the rural localities is mud brick/earth (86.4%) while in the urban areas cement blocks/concrete outer walls (55.5%) is the highest.

 The proportion of houses in the municipality with cement or concrete floors is 70.9 percent while earth or mud is 27.3 percent. Cement/concrete floor is common in urban areas (88.0%) than in rural localities (64.0%). On the other hand, earth/mud floor is more common in rural localities (34.1%) than in urban localities (10.4%).

The municipality recorded 62.7 percent of dwelling units roofed with metal sheets, 26.0 percent roofed with mud/mud brick/earth and 7.7 percent roofed with thatch/palm leaf or raffia. Roofing with metal sheet is higher in the urban localities (80.6%) than in the rural areas (55.4%). Mud/mud bricks/earth roof is more common in the rural localities than in the urban localities, as they recorded 34.2 percent and 6.1percent respectively.

Room occupancy

The number of 'sleeping rooms' provides an indication of the extent of crowding in the households. The results indicate that as household size increases, the number of sleeping rooms occupied by households does not increase as one would have expected that increase in household size will go along with an increase number of sleeping rooms.

Access to utilities and household facilities

Nature of the source of lighting for   dwelling units of households is one of the indicators of the quality of life. The most common source of light in the municipality is kerosene lamp with electricity (national grid) constituting 28.8 percent and flashlight/torch (16.6%). About 65.6% of dwelling units in the urban areas use electricity while 13.9 percent in the rural localities use electricity. On the other hand, 62.5 percent of dwelling units in the rural areas use kerosene lamps whiles 22.9 percent use kerosene lamps in the urban areas.

 The highest proportions of households in the municipality use wood as the main source of cooking fuel (59.2%), followed by charcoal (18.7%), crop residue (10.2%), and gas (8.9%). The use of the other sources such as kerosene, sawdust, animal waste and electricity is negligible, recording less than one percent for each source.

Firewood remains the main source of cooking fuel in rural localities (71.3%) while charcoal recorded the highest in the urban areas.

 The highest proportion of cooking space used by households in dwelling units is separate room for exclusive use of household (34.5%), followed by open space in compound (30.0%), veranda (17.3%) and enclosure without roof (11.7%). The most common space for cooking in urban localities is veranda (43.6%) while in the rural localities separate room for exclusive use of household is the highest with 38 percent.

Main source of water for drinking and for other domestic use

The most common source of drinking water for households in the municipality is bore-hole/pump/tube well (64.6%), followed by protected well (9.9%), pipe-borne inside dwelling (7.8%), pipe-borne outside dwelling (7.4%) and about 1 in 10 (10.3%) t of households use the remaining sources. The results also identified four main sources of drinking water commonly used in urban localities. These are bore-hole/pump/tube well (35.2%), pipe-borne inside dwelling (21.1%), protected well (18.8%) and pipe-borne outside dwelling (12.3%). However, three in every four (76.5%) households in rural localities used bore-hole/pump/tube well as main source of drinking water.

Bathroom and toilet facilities

The 2010 PHC revealed that four in every five households (83.7%) in the municipality had no toilet facility. They therefore resort to the use of the bush/field as toilets. The other sources of toilet facilities all together constitute 16.3 percent including 4.4 percent for households using

W.C. The proportion of households that had no toilet but resort to the use of bush is higher in rural areas (91.8%) than in the urban areas (63.6%).

The proportion of dwelling units with bathrooms exclusively used by the household members is 42.6 percent. The data also indicates that 15 percent of households share separate bathroom in the same house, with other non-household members. About 1 in 10 (11.8%) of households share an open cubicle as a bathroom with others. Households in the municipality using open space around house for bathing is 16.8 percent and 10.9 percent use private open cubicle.

Method of waste disposal

The most common method of solid waste disposal is the public dump (open space) 38.6 percent, followed by burning of solid waste by households (20.2%). Dependence on companies that collect waste is 11.8 percent, 17.4 percent dumped waste indiscriminately, with 5.3 percent using public containers. Dumping solid waste in open space is the common practice in both the urban areas (43.6%) and the rural areas (36.6%). However, dumping solid waste indiscriminately is higher in the rural areas (21.8%) than in the urban areas (6.3%).

About a quarter (69.8%) percent of all the households in the municipality throw their liquid waste onto the street or outside their houses. While 18.9 percent throw waste onto compounds, all other methods of waste disposal are less than five percent each.

9.9   Conclusion

The 2010 PHC data for the Kassena Nankana Municipality has come with interesting revelations for policy makers in the municipality which when taken seriously can enhance the development of the area. The census results provide adequate grounds for the planning of the socio-economic development of the municipality.

The Kassena Nankana Municipality is mostly rural and has a youthful population. The large proportion of the population aged 0-14 years would affect the level of dependency, which means less people working to cater for more people, thereby reducing savings amongst the population. New jobs would have to be created for the ever-increasing number of new entrants into the labour force, putting a severe strain on the economy, and the development of the municipality. It is also realized that most of the people 65 years and over are widowed. This would have implications on the well-being of the population if they do not have the means to cater for the family.

It is also realized that literacy among the population 11 years and older, is higher among the females than males. The use of internet facility is low in the district and this could be due to the lack of access to telecommunication networks to access the internet facility. In this era of technological reform, private sectors in ICT should be encourage to extend their services to the district to enable them enjoy the benefits that comes with using the internet facility.

In terms of main material for construction of outer wall, floor and roofing, the people in urban areas use more quality material for their floors. However, in the rural areas, there is more room for improvement. People still live in poor housing conditions and slums, leading to congestion, sanitation and health issues.

Indiscriminate dumping of solid and liquid waste, especially onto compounds, gutters, streets and outside has implications for the health, sanitation and development of the municipality. Some of these wastes get trapped in the gutters and this causes flooding in the municipality. This further causes damage to lives and properties and sometimes result in the death.

9.10 Policy Recommendations

The population characteristics in the KNM (Kassena Nankana Municipality) suggest certain policy interventions that need to be taken to ensure the general wellbeing of the people. The population in the Municipality shows a youthful population. This means that the Municipality will have enough labour for its development purposes. It will therefore be necessary for the Municipality to put programmes and policies in place to ensure that this youthful population would be skilled enough to meet the labour needs of the Municipality. This can be achieved by strengthening the educational infrastructure.

Despite the fact that the fertility rate in the Municipality is lower as compared to many districts/municipality in the region, it is important to note that if not checked, it can lead to major population problems in the future. As it stands now, (3.4), the Municipality has one of the highest population densities in the region, which implies that many major lands used currently for activities such as agriculture and afforestation will have to give way for settlements and residential activities. There is therefore the need for the Municipality to revamp the family planning programmes and projects. The high mortality rate in the Municipality also needs a conscious policy intervention to protect the lives of the citizens. The government and local authorities should therefore put the necessary policies in place to reduce child mortality thus, by making health care more accessible to the people through building of more CHPs compounds in the communities and improved staffing of health facilities.

The literate population is just a little over half of people 11 years and older in the Municipality. Unfortunately, only a small proportion of persons 3 years and older can read and write in Ghanaian language only. It is therefore recommended that as government, local authorities and development partners, there is the need to put up more classrooms, train more teaching staff and motivate them to teach, provide adequate teaching and learning materials (TLMs) as well as motivate parents to send their wards to school. To enhance high quality of formal education, enough attention should be given to the non-formal education to reduce the level of illiteracy in the Municipality.

In the Municipality, over 50 percent of those who are economically active and employed are in the agricultural sector, but in recent times the rainfall pattern in the country as a whole is not reliable. The gravity of this challenge can be lessened through the use of irrigation method of farming. Though, there exist the TONO irrigation dam in the Municipality, it is not enough to cover all agriculturalists, hence the need for the Municipal Assembly and government to expand irrigation facilities in the Municipality.

In the Municipality, only five percent of households have desktop/laptop computers and only 4.7 percent have access to internet facility. It is therefore recommended that the local authority should work with government to expand the distribution of the government laptops in the municipality. In the meantime the Assembly should establish ICT centers in the communities to enhance people's access to ICT.

In the 2010 PHC, 86.1 percent of households in the rural localities of the municipality had no access to electricity hence resort to other sources of light in their dwelling units. There is therefore the need for Government to intensify the rural electrification programme in the municipality.

The forest cover in the municipality is depleting very fast due to the over reliance of households on firewood and charcoal for cooking (86.1%). To save the forest, gas should be made available, accessible and affordable to households in the municipality.

Many households in the municipality have no access to toilet facilities and therefore resort to the use of the bush. It is therefore recommended that more toilet facilities should be provided in order to prevent the outbreak of epidemics. Also, more containers should be provided for collection of solid waste to avoid the indiscriminate dumping of refuse.

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APPENDICES

Table A1: Population by sex, number of houses in the 20 largest communities

S/No	Community name	Total	Male	Female	House holds	Houses
1	Navrongo	29,993	14,949	15,044	5,690	2,844
2	Manyoro	4,624	2,118	2,506	809	558
3	Gomongo	3,663	1,716	1,947	620	417
4	Biu	3,299	1,623	1,676	652	392
5	Nayagenia	2,895	1,399	1,496	559	286
6	Vunania	2,784	1,323	1,461	535	333
7	Upper Gaane	2,617	1,293	1,324	449	265
8	Nyangua	2,520	1,213	1,307	374	174
9	Korania	2,435	1,197	1,238	397	202
10	Manyoro Gware	2,321	1,121	1,200	431	302
11	Gongenia	2,282	1,422	860	250	160
12	Naaga Choo	2,084	1,024	1,060	373	221
13	Janania	1,930	915	1,015	359	239
14	Manyoro Dambisa	1,880	841	1,039	303	209
15	Kuleningo Anyimbisi	1,850	903	947	358	214
16	Akurugu Daboo	1,781	846	935	291	173
17	Manyoro Wanjagnia	1,771	831	940	284	181
18	Kologo Nayire	1,599	755	844	282	159
19	Bonia	1,529	745	784	272	158
20	Abempengu	1,467	687	780	221	145

Sources: Ghana Statistical Service, 2010 Population and Housing Census

Table A2: 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	Navrongo	29,993	4,214	3,685	3,105	3,033	3,655	2,731	2,086	1,578	1,313	1,024	896	536	576	341	490	730
2	Manyoro	4,624	568	530	591	563	384	391	302	247	182	155	172	148	113	74	80	124
3	Gomongo	3,663	509	513	523	461	287	184	187	163	166	125	113	76	90	66	106	94
4	Biu	3,299	438	436	454	378	266	194	163	150	175	129	122	64	95	37	99	99
5	Nayagenia	2,895	342	298	352	347	272	204	154	150	139	123	101	68	90	56	71	128
6	Vunania	2,784	361	353	354	325	264	177	133	125	126	95	108	67	94	50	59	93
7	Upper Gaane	2,617	345	388	375	316	204	131	136	120	92	90	104	65	75	45	62	69
8	Nyangua	2,520	424	365	335	269	187	158	119	111	100	70	62	49	48	53	62	108
9	Korania	2,435	370	368	314	296	215	168	126	98	92	78	96	49	42	34	38	51
10	Manyoro Gware	2,321	274	345	308	277	174	166	118	113	99	92	103	50	56	30	57	59
11	Gongenia	2,282	297	201	163	260	681	207	106	65	69	51	55	22	26	13	31	35
12	Naaga Choo	2,084	276	292	267	220	175	136	124	86	92	89	72	40	53	33	45	84
13	Janania	1,930	257	277	251	207	153	115	100	82	71	78	75	49	51	44	51	69
14	Manyoro Dambisa	1,880	236	290	274	230	128	92	63	84	79	60	65	63	63	51	45	57
15	Kuleningo Anyimbisi	1,850	265	285	263	214	123	98	70	97	67	60	61	57	46	26	57	61
16	Akurugu Daboo	1,781	279	278	266	195	130	87	77	96	70	62	60	35	44	23	21	58
17	Manyoro Wanjagnia	1,771	247	286	252	210	151	89	83	67	56	83	66	42	39	37	28	35
18	Kologo Nayire	1,599	254	215	224	168	108	103	54	60	55	56	70	49	49	21	50	63
19	Bonia	1,529	213	198	191	193	139	90	73	72	74	56	56	29	26	28	39	52
20	Abempengu	1,467	221	207	213	206	106	69	57	64	77	64	50	29	30	17	23	34

Sources: Ghana Statistical Service, 2010 Population and Housing Census

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