2010

POPULATION & HOUSING CENSUS

DISTRICT ANALYTICAL REPORT

NANDOM DISTRICT

MINISTRY OF FOREIGN AFFAIRS OF DENMARK
DANIDA | INTERNATIONAL DEVELOPMENT COOPERATION

GHANA STATISTICAL SERVICE, OCTOBER, 2014

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

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

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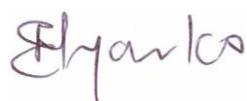
Dr. Philomena Nyarko
Government Statistician

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

ASDR	Age Specific Death Rate
CBR	Crude Birth Rate
CEB	Children Ever Born
CDR	Crude Death Rate
CIDA	Canadian International Development Agency
CS	Children Surviving
DACF	District Assembly Common Fund
DANIDA	Danish International Development Agency
ECOWAS	Economic Community of West African States
EA	Enumeration Area
EU	European Union
GET-Fund	Ghana Education Trust Fund
GDP	Gross Domestic product
GFR	General Fertility Rate
TFR	Total Fertility Rate
GHS	Ghana Health Service
GSS	Ghana Statistical Service
ICT	Information Communication Technology
ISSER	Institute of Statistical Social and Economic Research
JSS	Junior Secondary School
JHS	Junior High School
KVIP	Kumasi Ventilated Improved Pit
SSS	Senior Secondary School
SHS	Senior High School
MMDAs	Metropolitan, Municipal and District Assemblies
MDGs	Millennium Development Goals
MTDP	District Medium Term Development Plan
NCCE	National Commission for Civic Education
NGOs	Non-governmental Organizations
OIC	Opportunities Industrialization Centre
PHC	Population and Housing Census
PWDs	Persons with disabilities
UNICEF	United Nations International Children's Education Fund

UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UK-DFID	UK Department for International Development
WHO	World Health Organization
W.C	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 Nandom District, according to the 2010 Population and Housing Census, is 46,040 representing 6.6 percent of the region's total population. Males constitute 48.4 percent and females represent 51.6 percent. About 85.0 percent of the population live in rural localities. The district has a sex ratio of 93.9. The population of the district is youthful (under 15 years) (37.3%) depicting a broad base population pyramid which tapers off with a small number of elderly persons 60 years and above (10.7%). The total age dependency ratio for the District is 82.8, the dependency ratio for males is higher (87.0) than that of the dependency ratio for females (79.0).

Fertility, mortality and migration

The District has a Total Fertility Rate of 3.2. The General Fertility Rate is 88.2 births per 1000 women aged 15-49 years which is the sixth highest for the region. The Crude Birth Rate (CBR) is 20.7 per 1000 population. The crude death rate for the district is 9.4 per 1000. The death rate for males is highest for age 70 and above representing 64 deaths per 1000 population while for the females, the highest death rate of 43 deaths per 1000 population is also for age 70 and above. Accident/violence/homicide/suicide accounts for 7.9 percent of deaths, while 92.1 percent is by other causes. The district has a migrant population of 2,050. Majority of migrants (55.4%) living in the district were born in elsewhere in another region, while 41.2 percent were born elsewhere in the Upper West Region. For migrants born in another region, those born in Ashanti region constitute 41.9 percent followed by Brong Ahafo with 25.5 percent and Western and Greater Accra both constituting 7.4 percent each.

Household size, composition and structure

The district has a household population of 44,827 with a total number of 7,417 households. The average household size in the district is 6.0 persons per household. Children constitute the largest proportion of the household composition accounting for 44.4 percent. Spouses form about 11.2 percent while other relatives constitute 7.3 percent. Extended households (head, spouse(s), children and heads relative) constitute 49.5 percent of the total number of households in the district and this is followed by nuclear households (head, spouse(s) and children) (23.4%).

Marital status

About 48.3 percent of the population aged 12 years and older are married and 40.2 percent have never married. By age 25-29 years, about two thirds of females (65.0%) are married

compared to 38.6 percent of males. At age 65 and above, widowed females account for as high as 57.6 percent while widowed males account for only 7.6 percent. . Among the married, 69.4 percent have no education while about 19.2 percent of the never married have never been to school. About 80.3 percent of the married population are employed, 1.2 percent are unemployed and 18.5 percent are economically not active. A little over half of those who have never married (55.9%) are economically not active with 2.1 percent unemployed.

Nationality

The proportion of Ghanaians by birth in the district is 95.0 percent. Those who have naturalised constitute 0.7 percent and the non-Ghanaian population in the district is 2.1 percent.

Literacy and education

Of the population 11 years and above, 50.2 percent are literate and 49.2 percent are non-literate. The proportion of literate males is higher (57.4 %) than that of females (45.0%). About five out of ten people (56.1%) indicated they could speak and write both English and Ghanaian languages. Of the population aged 3 years and above (42,004) in the district, 42.5 percent has never attended school, 39.8 percent are currently attending and 17.8 percent have attended in the past.

Economic activity status

About 67.5 percent of the population aged 15 years and older are economically active while 32.5 per cent are economically not active. Of the economically active population, 97.3 percent are employed while 2.7 percent are unemployed. For those who are economically not active, a larger percentage of them are students (41.7%) and 21.4% perform household duties. Again, about 54.9 percent of the unemployed are seeking work for the first time and available for work.

Occupation

Of the employed population, about 78.3 percent are engaged as skilled agricultural, forestry and fishery workers, 9.6 percent in craft and related trade and 4.1 percent in service and sales. About 5 percent are engaged as managers, professionals, and technicians.

Employment status and sector

Of the employed population 15 years and older 46.1 percent are self-employed without employees, while 43.4 percent are contributing family workers. About 1.7 percent are self-employed with employees. The private informal sector is the largest employer in the district, employing 93.2 percent of the population followed by the public sector with 6.3 percent.

Information Communication Technology

Of the population 12 years and above, 21 percent have mobile phones. Men who own mobile phones constitute 28.2 percent as compared to 14.6 percent of females. About 1.7 percent of the population 12 years and older use internet facilities in the district. Only 149 households representing 2 percent of the total households in the district have desktop/laptop computers.

Disability

About 3.3 percent of the district's total population has one form of disability or the other. The proportion of the male population with disability (3.3%) is the same as their female counterparts (3.3%). The types of disability in the district include sight, physical, hearing,

speech, intellect, and emotion. Persons with sight disability recorded the highest of 49.9 percent followed by hearing (25.3%), and physical disability (22.0%). Of the population disabled, 49.1 percent are employed and 49.4 percent economically not active. About 66.4 percent of the population with disability have never attended school.

Agriculture

In the district, 85.3 percent of households are engage in agriculture. In the rural localities, 93.2 percent of households are agricultural households while in the urban localities, 46.4 percent of households are into agriculture. Most households in the district (98.0%) are involved in crop farming with goat as the dominant animal reared in the district.

Housing

The housing stock of Nandom District is 5,081 representing 14.8 percent of the total number of houses in the Upper West Region. The average number of persons per house is 6.1.

Type, tenancy arrangement and ownership of dwelling units

About 5 out of 10 (49.5%) of all dwelling units in the district are compound houses; 30.4 percent are separate houses and 12.2 percent are semi-detached houses. About 87.6 percent of the dwelling units in the district are owned by members of the household; 8.1 percent are owned by private individuals; 2.3 percent are owned by a relative who is not a member of the household and only 1.1 percent are owned by public or government. About 0.2 percent of the dwelling units is owned through mortgage schemes.

Material for construction of outer wall, floor and roof

The main construction material for outer walls of dwelling units in the district is mud/mud bricks or earth accounting for 77.4 percent with cement/concrete constituting 19.6 percent of outer walls of dwelling units in the district. Mud/earth (56.7%) and cement/concrete (41.8%) are the two main materials used in the construction of floors of dwelling units in the district. Metal sheets are the main roofing material (73.1%) for dwelling units in the district, while 18.7 percent of dwelling used mud/mud bricks/earth and 4.4 percent using Thatch/Raffia to roof their dwellings.

Room occupancy

Two rooms constitutes the highest percentage (31.4%) of sleeping rooms occupied by households in housing units in the district. About 11.1 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 district are kerosene lamp (41.4%), flashlight/torch (27.0%) and electricity (27.0%). The main source of fuel for cooking for most households in the district is wood (80.2%). The proportion for rural is higher (92.7%) than that of urban (18.6%). The four main sources of water in the district are borehole, pipe borne water and public standpipe. About three quarters of households (72.1%) drink water from bore holes.

Majority of households (70.5%) do not have toilet facilities in their homes and therefore resort to bush/beach/field. For the few households that uses toilet facilities, the commonly used type of toilet facility in the district is Pit latrine representing 15 percent and 6.9 percent of households have KVIP for use by household members. About half of households (50.9%) in the district have bathrooms for exclusive use of members while another 14 percent use private open cubicles.

Waste disposal

Most households (49.7%) dump their solid waste indiscriminately. Another 21 percent dispose their solid waste by public dump in the open space. House to house waste collection accounts for 8.8 percent. For liquid waste disposal, throwing waste onto the street (64.2%) and onto the compound (28.0%) are the two most common methods used by households in the district.

CHAPTER ONE
INTRODUCTION

1.1   Background

The District is one of the eleven Districts that make up the Upper West Region. The Nandom District Assembly was established by LI 2102, with Nandom as the district capital. The District was carved from Lawra and forms part of the new districts and municipalities created in the year 2012. The District however was inaugurated on the 28th June, 2012.

1.2   Physical features

1.2.1   Location and size

The District lies in the north western corner of the Upper West Region of Ghana between Longitude 2°25 W and 2°45W and Latitude 10°20 N and 11°00 S. It is bounded to the East and South by the Lambussie and Lawra Districts respectively and to the North and West by the Republic of Burkina Faso. The total area of the District is put at 404.6 square km. This constitutes about 3.1% of the Region's total land area. The District is constituted by 84 communities with 86% of the inhabitants living in rural areas. The population density is approximately 114 per square kilometer. It is the most densely populated District in the region. Below is a map showing location of the District in Ghana. Its closeness to Burkina Faso offers it a strategic location for international interactions and exchanges. It however poses a challenge related to the influx of Fulani herdsmen into the district from the Sahel.

1.2.2   Climate and vegetation

The district falls within the Guinea Savannah vegetation belt. The vegetation consists of short grasses with scattered fire resistant trees such as the Shea trees, acacia and Baobab trees. The vegetation is very congenial for livestock production, which contributes significantly to household incomes in the district.

The greatest influence on the vegetation is the prolonged dry season. During this period, the grass becomes dry and subsequent bush burning leaves the area patchy and almost bare of vegetation.

Human activities particularly indiscriminate tree felling for fuel wood, charcoal and other purposes, early torrential rain and poor animal husbandry practices have continuously decreased the vegetation cover and increasing soil erosion and depletion of soil fertility. Moreover, inappropriate farming practices such as shifting cultivation, road construction, sand and gravel winning increase land degradation.

Climatically, the District is tropical continental as experienced in the northern regions of Ghana. Throughout the year, temperatures are high with a minimum of 23^0C at night and a maximum of 42^0C during the day. This favours plant growth. The mean monthly temperature ranges between 21^0C and 32^0C. The highest monthly maximum temperature rises up to 40^0C before the rainy season usually in May with lowest minimum temperature falling to about 12^0C in December when the Harmattan winds from the Sahara dry up the vegetation.

As a result of the single maximum rainfall season prevailing in the district, crop production is mostly done during the rainy season (May to September/October). The dry season is a

potential for the preservation industry that could use the sunshine as a natural preservative. By implication, however, since farming is the major occupation of the people, it means that their major sources of livelihood and income are limited during the dry season apparently resulting in the migration of the youth to the south in search of greener pastures. There is thus, the need to have adequate irrigation facilities to promote and enhance agricultural activities in the dry season.

1.2.3   Relief and drainage

The topography of the district could be described as gently undulating. Generally, the district is located about 180 meters above sea level with a few isolated hills. The rock formation in the District is essentially birimian with dotted outcrops of granite. Some research work done indicates the presence of minor occurrences of manganese, traces of gold and diamond, Iron ore and clay. As a result of a well- developed fracture pattern in the rocks, the potential for obtaining ground water in the District is very high which makes it suitable for all year farming. The relative plain topography is suitable for road construction, distribution of utility lines and general construction works.

The District is poorly endowed with water bodies. The only natural water bodies are a few interconnected streams flow into the Black Volta which cuts through the district. The Black Volta River is considered by the district as a potential for aquaculture.

There are a number of dams and dugouts which provide water for irrigation, domestic chores, construction, and animals on graze. The interconnected water bodies in the district facilitate storm water drainage, thus making the district less floodable, except in few low lying areas.

A significant characteristic of most of these rivers and streams is the perennial nature of their flows. Many of these water bodies are reduced to intermittent pools in the dry season while others completely dry up. Many of these streams could be developed to support dry season farming.

1.2.4   Geology minerals and soils

With a gently undulating topography, the district is bound with fresh granite. The main soil types in the District are sandstone, gravel, mudstone, alluviam, granite and shale that have weathered into different soil grades. Due to seasonal erosion, soil types emanating from this phenomenon are sand, clay and laterite ochroslols. The availability of these soil types have contributed to housing development which have resorted to the use of local building materials such as sand, gravel and clay.

These soil types are better suited for the cultivation of cereals and root tuber crops including millet, maize, sorghum and yam. They respond well to the application of organic manure and commercial fertilizers to give high yield. With adequate rains and good farming practices, these soils have the potentials of improving agriculture production.

1.3   Political and Administration

The Nandom District Assembly, which is the highest political and administrative body in the District, is charged with the responsibility of formulating and executing plans, programme, projects and strategies for the overall sustainable development of the people in the District.

Figure 1.1: Map of Nandom District

DISTRICT MAP OF NANDOM
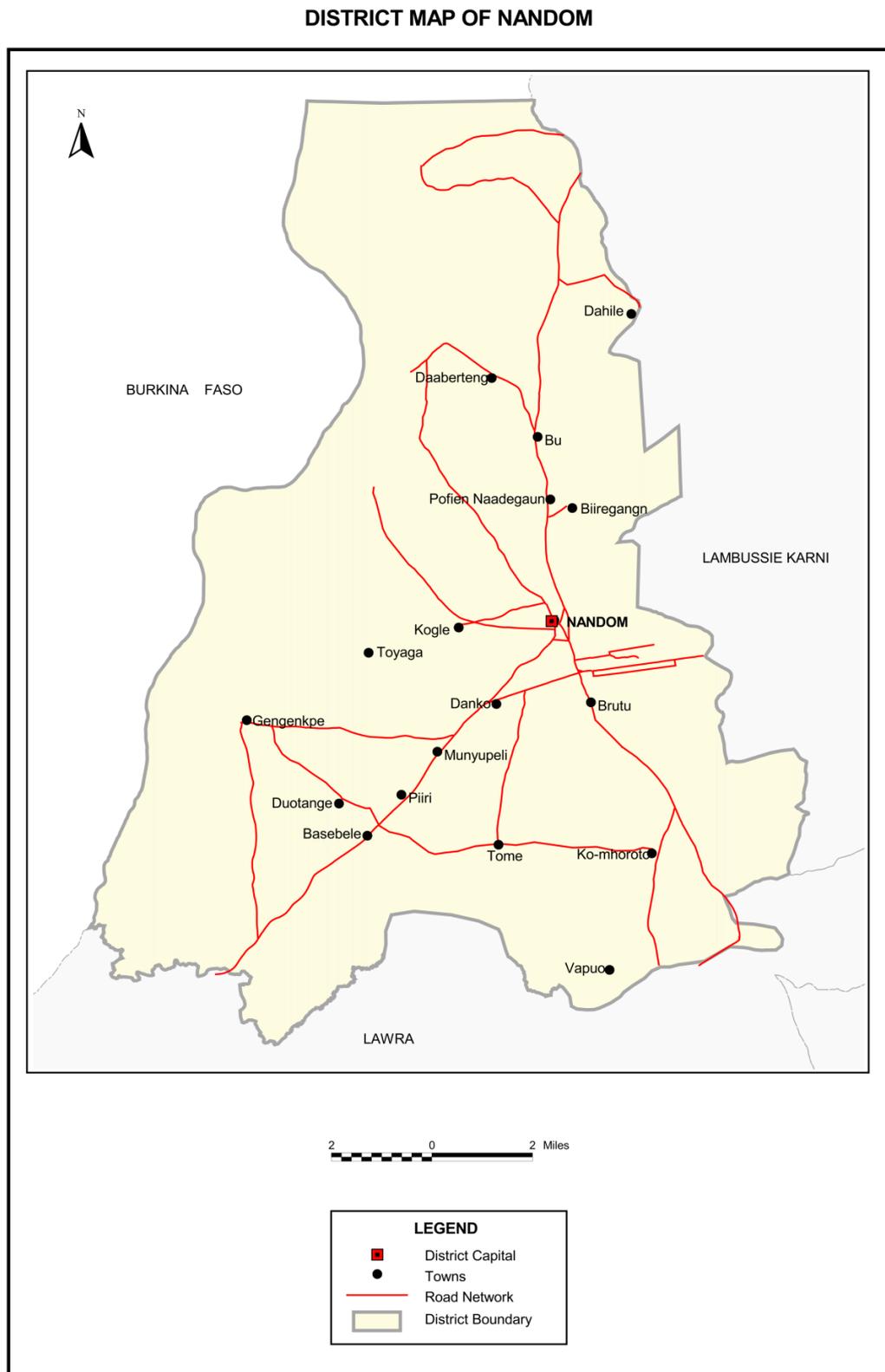
Source: Ghana Statistical Service, GIS

The Nandom District is made up of Thirty eight (38) Assembly persons. Out of this total, twenty seven (27) of them are elected members while sixteen (16) are government appointees. This together with the Honourable District Chief Executive and the Member of Parliament, who are ex-officio members, gives a total of thirty eight members. Out of this figure, there are only six (6) females and thirty two (32) males. The Nandom District, administratively, is made up of 0ne (1) Town Council, Three (3) Area Councils and Twenty-two (22) Unit Committees.

1.4 Cultural and Social Structure

1.4.1 Religion and ethnicity

A greater majority of the population (46,040) persons in the Nandom district profess the Christian faith (85.7%) with only a small proportion of the population being Muslims (6.6%). On the other hand, Traditionalist constitutes (1.0%) of the while 2.0 percent of the population of Nandom belonged to no religion at all. Generally, more females (86.4%) than males (85%) are reported Christians.

The most predominant tribe in the District is the Dagaabas. There are other minor tribes such as the Hausa, Mossi, Sissala, Asante etc.

1.4.2 Traditional authorities

Alongside the decentralized governance system is a supportive traditional governance system which appears to be in harmony with the District Assembly System thereby promoting development in the local area. The District has one paramountcy, that is, the Nandom Paramountcy headed by the Nandom Naa. He is supported by Seventeen Divisional Chiefs and several Sub-Division Chiefs.

1.5 Economy

1.5.1 Tourism

The most significant tourism potential in the Nandom District is the *Kakube* Festival .The rich cultural heritage of the people exhibited during this festival (*Kakube*) has the potential to bring in a lot of foreigners and investors. The proposed restoration of the Slave Centre located at Gengenkpe and Zimuopare has been selected for construction. This when completed will also boast both local and international tourism investments into the District. The Assembly in collaboration with the church is also looking forward to maintaining the Church Stone which can also attract both local and foreign tourist into the District. The Church which prides itself as the largest stone building in West Africa and among the three Minor Basilicas in West Africa has the potential of attracting tourists including spiritual pilgrims.

1.5.2 Industry and commerce

Agriculture, which is the major activity that engages about 80 percent of the population, is centered on crops and livestock production. The crops mainly grown by the farmers are corn, millet, maize, cowpea and groundnut; of these the District has comparative advantage in groundnuts and cowpea production.

Agriculture is the chief activity in the Nandom District and as such the private sector of the economy would only assert itself with the existence of an industry that is closely linked to the agricultural potentials of the District. The growth of these industries is therefore intimately

linked to the development of the agricultural sector of the District. As a result, more often than not, a lot of these industries in the private economy of the District are agro-based and small in size.

These small scaled industries serve as outlets of raw materials from the agricultural sector. In addition to this, it absorb surplus labour in the District, help farm-based households to spread risks, offer more remunerative activities to supplement or replace agricultural income, offer income potential during the agricultural off-season and also provide a means to cope or survive when farming fails.

1.5.3   Social infrastructure and amenities

The Energy sector in the district has received a tremendous transformation as many more communities have been connected to the national grid while others are currently being hooked on. An estimated percentage of households which have access to electricity currently stand at 30.5.

The massive extension works in the area of electricity has greatly improved the quality of life of the people as the facility is being used for other industrial works such as carpentry shop, blacksmithing, welding, vulcanizing, and fitting shops and agro processing (Shea butter and groundnut extraction).

It is however also worth that, most people in the District still resort to the use of fuel wood for the domestic chores due to their inability to afford electricity resulting in a further degradation of the land.

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.

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

A number of census committees are 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 are 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 are the Regional Census Implementation Committee and the District Census Implementation Committee, respectively.

The Regional and District Census Implementation Committees are inter-sectoral in their composition. Members of the Committees are 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 are 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 are included in the census.

Some topics that are not considered core by the UN recommendations but which are found to be of great interest and importance to Ghana and are, 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 are 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 are given the opportunity to indicate the type of questions they wanted to be included in the census questionnaire.

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

Pre-tests and trial census

The 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. 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 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 are 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 are 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 fieldwork

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 are 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 are 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 are 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 are absent from the institutions on Census Night. Out-door sleepers (floating population) are 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 are listed and where the members of the household are 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 are 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 are mobilized to assist in the enumeration of localities that are yet to be enumerated in some regional capitals and other fast growing areas. Flooded areas and other inaccessible localities are 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 are not properly demarcated and some are characterized by large EAs, some enumerators are 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 are that:

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

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

- Regional differentials are observed. Upper East region recorded the highest coverage rate of 98.2 percent while the Volta region had the lowest coverage rate of 95.7 percent.

- Males (3.3%) are more likely than females (2.8%) to be omitted in the census. The coverage rate for males was 96.7 percent and the coverage rate for females was 97.2 percent. Also, the coverage rates (94.1%) for those within the 20-29 and 30-39 age groups are relatively lower compared to the coverage rates of the other age groups.

- There was a high rate of agreement between the 2010 PHC data and the PES data for sex (98.8%), marital status (94.6%), relationship to head of household (90.5%) and age (83.0%).

1.6.5   Release and dissemination of results

The provisional results of the census are 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 are prepared and disseminated in 2013.

1.6.6   Concepts and definitions

Introduction

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

The concepts and definitions in this report cover all sections of the 2010 Population and Housing Census questionnaires (PHC1A and PHC1B). The sections are: geographical location of the population, Household and Non-household population, Literacy and Education, Emigration, Demographic and Economic Characteristics, Disability, Information 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 are ten (10) administrative regions in Ghana during the 2010 Population and Housing Census as they are 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 are demarcated into 110 districts. In 2004, 28 new districts are created; this increased the number of districts in the country to 138. In 2008, 32 additional districts are 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 are 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 are 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 are classified as urban while localities with less than 5,000 persons are classified as rural.

Population

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

Household

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

Head of household

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

Household and non-household population

Household population comprised of all persons who spent the census night in a household setting. All persons who did not spend the census night in a household setting (except otherwise stated) are classified as non-household population. Persons who spent census night in any of the under listed institutions and locations are 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 are in paid employment or self-employment or contributing family workers.

b. Did not work, but had jobs to return to.

c. Are unemployed.

The economically not active are persons who did not work and are not seeking for work. They are classified by reasons for not being economically active. Economically not active persons included homemakers, students, retired persons, the disabled and persons who are 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 are classified by the kind of work they are 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 are 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 are 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 are classified as "other".

Employment sector

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

Disability

Persons with disability are 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. 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)

Information Communication Technology (ICT) questions are 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 are 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 are collected on pregnancy-related deaths of females 12-54 years.

Agriculture

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

Housing conditions and facilities

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

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

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

1.7   Organization of 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 analysed 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

Demography is the study of human population dynamics. It encompasses the study of the size, structure and distribution of populations, and how populations change over time due to births, deaths, migration, fertility and aging. Demographic characteristics can therefore relate to whole societies or to smaller groups defined by criteria such as age, sex, marital composition, ethnicity, education, occupation, religion, or ethnicity. Demographic data is very relevant in development planning since planning is concerned with the future needs and wellbeing of the people. Policy makers and planners demographic data such as population size, structure and distribution of population to enable them come out with informed decisions.

The objective of this chapter is to analyse the population size, composition, age-sex structure, and changes in the District's population based on the 2010 Population and Housing Census. This chapter also discusses these characteristics in terms of size and distribution, sex ratio, fertility, migration and deaths of persons enumerated in the district during the census.

2.2   Population Size and Distribution

Table 2.1 as illustrated below presents data on the population by age, sex and type of locality. The Nandom District has a total population of 46,040 and this consist of a greater majority (39,142) living in the rural areas and just a few (6,898) in the urban area. The distribution of the population by sex reveals that, 22,295(48.4%) are males and 23,745(51.6%) of the population are females.

 The sex ratio in the district is approximately 94 males for per every 100 females. This means that for every 100 females in the district, there are approximately 94 males. This figure is greater than the regional sex ratio of 91.3. The sex ratio increased from age group (0-4) to age group (15-19) and started to decline from age group (20-24) to age group (85-89), with fluctuations up to age group (85+). This indicates that on average there are more females than males in the district as shown in the Table.

2.3   Age Dependency ratio

Age dependency ratio is the ratio of dependents (people younger than 15 or older than 64 years) to the working-age population (those aged 15-64 years). Table 2.1 shows that, out of the total population of 46,040, 54.7 percent of the population represent persons aged 15-64 where as 37.2 percent and 8.1 percent represent the populations aged 15-64 and 65 + respectively. Unlike the population aged 0-14 where males form majority, the table generally reveals that females form the predominant population among persons within the age groups 15-64 and 65+. This attest to the fact that more males die in their advancing ages than females.

The district has an age dependency ratio of 82.8. This implies that for every 100 working population, 83 people are dependants. It is interesting to note that, there are more males (87.0) dependants than females (79.0) in the district. This implies that, a greater majority of the female population is found in the working age (15-64) than males. The rural population

with a dependency ratio of 87.2 however remains the highest dependent group in the district as compared to the urban population.

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

Age Group	Both Sexes	Male	Female	Sex ratio	Urban	Rural
All Ages	46,040	22,295	23,745	93.9	6,898	39,142
0 - 4	5,848	3,036	2,812	108.0	758	5,090
5 - 9	5,802	2,967	2,835	104.7	746	5,056
10 - 14	5,522	2,894	2,628	110.1	727	4,795
15 - 19	4,876	2,564	2,312	110.9	790	4,086
20 - 24	3,720	1,733	1,987	87.2	714	3,006
25 - 29	3,087	1,385	1,702	81.4	618	2,469
30 - 34	2,830	1,378	1,452	94.9	547	2,283
35 - 39	2,309	1,111	1,198	92.7	458	1,851
40 - 44	2,150	1,000	1,150	87.0	345	1,805
45 - 49	1,931	878	1,053	83.4	324	1,607
50 - 54	1,760	751	1,009	74.4	241	1,519
55 - 59	1,265	605	660	91.7	132	1,133
60 - 64	1,258	515	743	69.3	132	1,126
65 - 69	963	414	549	75.4	84	879
70 - 74	963	353	610	57.9	95	868
75 - 79	977	364	613	59.4	107	870
80 - 84	472	209	263	79.5	49	423
85 - 89	183	74	109	67.9	16	167
90 - 94	72	37	35	105.7	10	62
95 - 99	52	27	25	108.0	5	47
All Ages	46,040	22,295	23,745	93.9	6,898	39,142
0- 14	17,172	8,897	8,275	107.5	2,231	14,941
15-64	25,186	11,920	13,266	89.9	4,301	20,885
65+	3,682	1,478	2,204	67.1	366	3,316
Age-dependency ratio	**82.8**	**87**	**79**			**87.4**

Source: Ghana Statistical Service, 2010 Population and Housing Census

2.4   Age-Sex Structure

Figure 2.1 indicates the age structure for both male and female in the Nandom District. The district's population generally has a youthful structure, with a broad base, typical of a developing country, consisting of greater proportion of children and an apex of a small number of aged persons (Figure 2.1).The youthful population has variations within the various age groups. For example, there are more males than females in the age groups from 0 to 19 years. There are, however, more females than males for the age groups 20-59 years. This probably may be due to more males moving to the southern sector for farming activities than females. The proportion aged 60 years and older is 10.7 percent. It can be realized from the population pyramid (Figure 2.1) that there are again more females than males aged 60 years and older; indicating high mortality in aged males than females. The population reduces as ageing advances. However, programmes that will improve the wellbeing of the aged population should be enhanced.

The rapid growth of the adolescent and youth populations exerts increased pressure to expand education, health services and employment opportunities.

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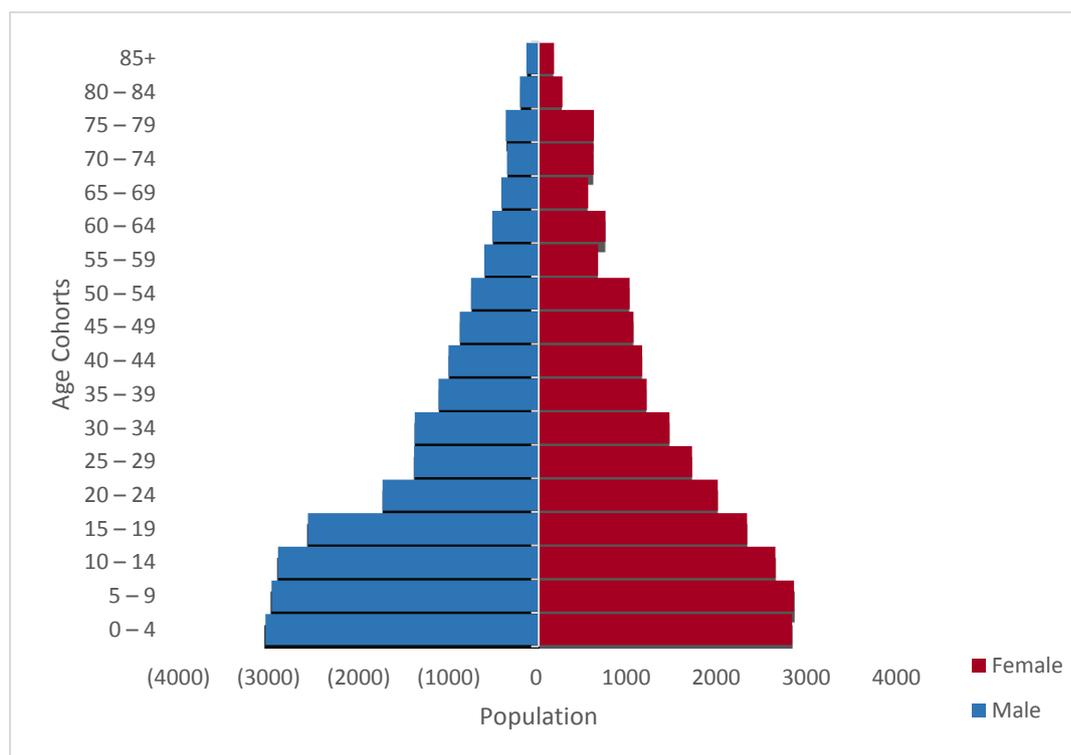
Source: Ghana Statistical Service, 2010 Population and Housing Census

2.5 Fertility, Mortality and Migration

Fertility analysis is of central importance in demographic analysis as births are a vital component of population growth. Fertility provides important information about the probable development of the age structure which possible effects on population growth of economic and social changes public health measures. Data on mortality are needed for analysis of past and current population changes and are required for making projections of demographic change and its characteristics in order to facilitate better development planning. Migration is the third basic factor affecting change in population distribution, growth and decline. It also modifies the demographic characteristics of areas of origin and of destination.

2.5.1 Fertility

Fertility refers to the actual birth performance i.e. frequency of childbearing among a population and the 2010 Population and Housing Census (PHC) collected both current and lifetime fertility data from females aged 12 years and older.

Table 2.2 shows, data on female population 12 years and older by their total fertility rate, general fertility rate and crude birth rate for the Nandom District.

Total fertility rate (TFR) is the average number of children a woman will have given birth by the end of her reproductive years at the prevailing age-specific fertility rate.The TFR for the district is 3.2 slightly lower than that of the region (3.5) and the national figures which is also 4.12.

There are other fertility measures such as crude birth rate (CBR) and general fertility rate (GFR). The crude birth rate (CBR) is defined as the number of births in a given year divided

by the population in the middle of that year. 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 group 15-49. General fertility rate (GFR) for Nandom District is 88.0 lower than the Regional rate of 97.4 and the crude birth rate in the district is 20.7 lower than the Regional rate of 23.1.

Table 2.2: Reported total fertility rate, general fertility rate and crude birth rate by district

District	Population	Number of women 15-49 years	Number of births in last 12 months	Total Fertility Rate	*General Fertility Rate	**Crude Birth Rate
All Districts	702,110	166,230	16,193	3.5	97.4	23.1
Wa Municipal	107,214	29,396	2,429	3.3	82.6	22.7
Jirapa	88,402	20,604	2,064	3.5	100.2	23.3
Wa West	81,348	17,796	1,978	4.1	111.1	24.3
Wa East	72,074	15,523	1,776	3.9	114.4	24.6
Nadowli-Kaleo	61,561	14,432	1,238	3.2	85.8	20.1
Sissala East	56,528	14,216	1,219	2.9	85.7	21.6
Lawra	54,889	12,692	1,038	2.9	81.8	18.9
Lambussie Karni	51,654	11,990	1,339	3.9	111.7	25.9
Sissala West	49,573	11,264	1,397	4.3	124	28.2
Nandom	**46,040**	**10,854**	**955**	**3.2**	**88**	**20.7**
Daffiama Bussie	32,827	7,463	760	3.7	101.8	23.2

Source: Ghana Statistical Service, 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 population

Children ever born and surviving

Table 2.3 reveals that 16,979 females are aged 12 years and older. Out of the total number of 48,292 children ever born to these women, 24,769 are males while 23,523 are females. This indicates that the male children ever born are slightly higher than that of the female children ever born. Data from Table 2.2 further reveals that, there is a tremendous increase in the number of children ever born as one ages. There are more births within the age group of 30-54 as compared to that of the age group 12-24.

Children who survived after birth constitute 39660(82.1%) of the children ever born (48,292). Of this 82.1 percent of surviving children, 20012(50.4%) are males while 19,648(49.6%) of the remaining are females. This indicates that men are more likely to survive than their female counterparts.

2.5.2 Mortality

Mortality rate is a measure of the number of deaths in general, or due to a specific cause in a population, scaled to the size of that population, per unit of time. The 2010 PHC measured mortality rates on the responses to questions on "births and deaths in the last 12 months. Mortality rate is typically expressed in units of deaths per 1000 individuals per year (UN Medium Variant, 2008). The United Nations (UN) estimate and that of the Population Reference Bureau (PBR) for Ghana for 2010 was 8 deaths per 1,000 populations (UN, 2010; PBR, 2011).

Table 2.3: Female population 12 years and older by age, children ever born, children surviving and sex of child

Age	Number of Females	Children Ever Born			Children Surviving		
		Both sexes	Male	Female	Both sexes	Male	Female
All ages	16,979	48,292	24,769	23,523	39,660	20,012	19,648
12 - 14	1,509	3	1	2	3	1	2
15 - 19	2,312	126	71	55	99	55	44
20 - 24	1,987	1,058	542	516	956	475	481
25 - 29	1,702	2,712	1,369	1,343	2,417	1,208	1,209
30 - 34	1,452	4,067	2,116	1,951	3,551	1,817	1,734
35 - 39	1,198	4,443	2,254	2,189	3,952	1,994	1,958
40 - 44	1,150	5,352	2,814	2,538	4,644	2,430	2,214
45 - 49	1,053	5,354	2,782	2,572	4,535	2,308	2,227
50 - 54	1,009	5,381	2,703	2,678	4,517	2,207	2,310
55 - 59	660	3,578	1,848	1,730	2,918	1,513	1,405
60 +	2,947	16,218	8,269	7,949	12,068	6,004	6,064

Source: Ghana Statistical Service, 2010 Population and Housing Census

Mortality therefore plays a significant role in determining the growth of a population. The level and pattern of mortality is a reflection of the health status of a population. Thus, indices of mortality have been used as indicators of socio-economic development.

In the Upper West Region, there are 6,346 household deaths with a Crude Death Rate (CDR) of 9.0. In Nandom District, the household deaths are 431 with a CDR of (9.4). This is slightly higher than the regional figure (9.0) indicated in Table 2.4.

Table 2.4: Total population, deaths in households and crude death rate by district

District	Total Population	Deaths in households	*Crude death rate
All Districts	702,110	6,346	9
Wa Municipal	107,214	538	5
Jirapa	88,402	938	10.6
Wa West	81,348	738	9.1
Wa East	72,074	761	10.6
Nadowli-Kaleo	61,561	732	11.9
Sissala East	56,528	346	6.1
Lawra	54,889	523	9.5
Lambussie Karni	51,654	590	11.4
Sissala West	49,573	373	7.5
Nandom	**46,040**	**431**	**9.4**
Daffiama Bussie	32,827	376	11.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

Note: * Number of deaths per 1,000 population

Causes of death

Out of the total deaths (6,346) in the region, 6.6 percent were caused by accidents/homicides or suicide and 93.4 percent were caused by other forms of death. With respect to Nandom District, out of the total household deaths of 420, 7.9 percent were caused by accidents/ homicides or suicide and 92.1 percent were by other forms of death. (Table 2.5).

Table 2.5: Cause of death by district

District	Total deaths	Death due to Accident/ violence/ homicide/ suicide	Percent	All other causes	Percent
Total	6,346	422	6.6	5,924	93.4
Jirapa	938	73	7.8	865	92.2
Wa East	761	42	5.5	719	94.5
Wa West	738	75	10.2	663	89.8
Nadowli-Kaleo	734	41	5.6	693	94.4
Lambussie Karni	590	32	5.4	558	94.6
Wa Municipal	538	40	7.4	498	92.6
Lawra	534	16	3	518	97
Nandom	**420**	**33**	**7.9**	**387**	**92.1**
Daffiama Bussie	374	41	11	333	89
Sissala West	373	14	3.8	359	96.2
Sissala East	346	15	4.3	331	95.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

Age specific mortality rate

Figure 2.2 shows the reported age specific death rate by sex in the District. From figure 2.2, death rates are higher at birth and at older ages of 65 years with males having a higher death rate than females. From ages 15 to 49, the death rate is random with females having a higher death rate than males. This is due to the fact that during this time. Females are in their child bearing ages.

Death rates turn to rise for both sexes after age50 years and rises slightly from age 65 years with male having a high death rate than females.

Figure 2.2: Reported age specific death rate by sex
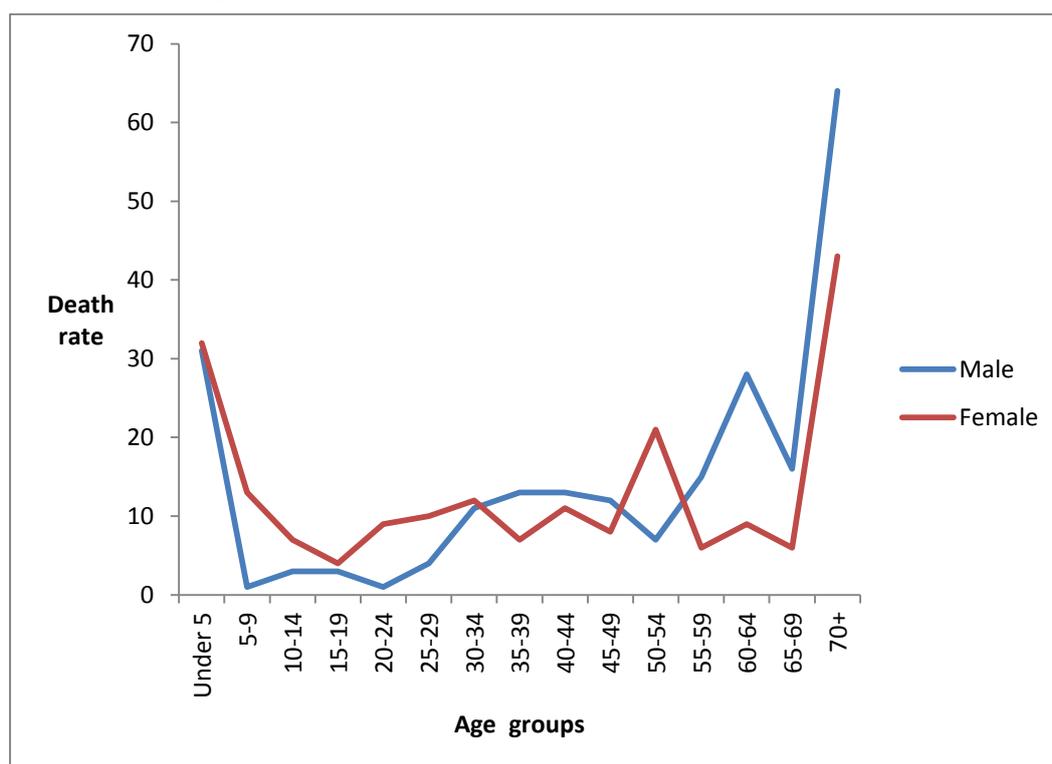
Source: Ghana Statistical Service, 2010 Population and Housing Census

2.5.3   Migration

Migration is defined as a geographical movement involving a change from a usual place of residence over a defined territory beyond a defined period (United Nations, 2012). According to the 2010 PHC, migrants are classified as persons who were enumerated in a place different from where they were born, while non-migrants were persons who were enumerated in the place they were born.

Table 2.6 presents the population classified by birthplace and number of duration of residence migrants. Out of the total population of 46,040 in the Nandom District, 2,050 people are migrants. Of the total number of migrants, 845 (21.9%) were born elsewhere in the Upper West Region while 1,135 (55.3%) were born elsewhere in other regions of Ghana.

There are however variations in the number of migrants from other regions of Ghana. The proportion of migrants born elsewhere in other regions ranges from a high 476 (23.3%) in Ashanti Region to a low 29 (1.4%) in Volta Region. Out of the total migrants of 2,050 persons, 21.1 percent have lived in the Nandom District for 1-4 years while 24.0 percent have resided in the district for 20 years and above. The table again indicates that 12.2 percent have lived in the district for 5-9 years, 13.4 percent have been living in the district for 10-19 years and 29.3 percent have also lived in the district for less than one (1) year.

Table 2.6: Birthplace by duration of residence of migrants

Birthplace	Number	Less than 1 year	1-4 years	5-9 years	10-19 years	20+ years
		Duration of residence (%)				
Total	2,050	29.3	21.1	12.2	13.4	24.0
Born elsewhere in the region	845	22.4	20.8	11.0	13.3	32.5
Born elsewhere in another region:						
Western	84	34.5	16.7	17.9	13.1	17.9
Central	39	35.9	20.5	2.6	12.8	28.2
Greater Accra	84	33.3	21.4	9.5	8.3	27.4
Volta	29	58.6	17.2	3.4	10.3	10.3
Eastern	32	46.9	3.1	18.8	3.1	28.1
Ashanti	476	33.2	20.6	11.8	16.0	18.5
Brong Ahafo	289	34.6	23.9	15.6	15.6	10.4
Northern	40	30.0	27.5	0.0	7.5	35.0
Upper East	62	40.3	27.4	17.7	1.6	12.9
Upper west						
Outside Ghana	70	18.6	22.9	21.4	15.7	21.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER THREE
SOCIAL CHARACTERISTICS

3.1   Introduction

The type of family one belongs, to a very large extent determines the identity of individuals. Two major types of family ties that inform household formation are the nuclear and the extended family systems. The nuclear family is made up of the father, mother and the children (adopted and or biological children). The extended family, on the hand, consists of the nuclear family, parents, siblings, and other relatives (Nukunya, 2003). Closely linked to the family is the formation of households in which members are not necessarily related by blood but live together and belong to a single consumption unit.

3.2   Size, Household Composition and Headship

The size of a nation's population is mainly an aggregation of individual household members in the nation. The size, composition and structure of households are influenced by socio-economic and demographic factors such as age at first marriage and birth, length of time spent in school, cultural practices, occupation, capabilities of parents and couples. The social characteristics of a population consist of the size of a household, composition and headship, marital status, nationality, religious affiliation, literacy and education.

3.2.1   Household size

Table 3.1 shows household size by type of locality. The district has a household population of 44,827 and an average household size of 6.2, which is lower as compared to the region's which 6.4 is. The table further reveals that, the average household size of a typically rural area in the district is 6.3 slightly higher than that of the urban (5.5).

Table 3.1: Household size by locality

Categories	Total country	Region	District	Urban	Rural
Total household population	24,076,327	688,333	44,827	6,616	38,211
Number of households	5,467,054	110,174	7,417	1,251	6,166
Average households per house	4.5	6.4	6.2	5.5	6.3
Average household size	4.4	6.2	6	5.3	6.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.2   Household composition

Table 3.2 shows household population by composition and sex. Table 3.2 shows that children (sons/daughters) form 44.4 percent of the total members of the household. Headships of household constitute 16.5 percent of household population, 26.7 percent of males are household's heads and 7.0 percent of females are households' heads. The proportions of household who are spouse (wife/husband) is 11.2 percent with 0.6 percent of males being spouses and 21.2 percent of females been spouses. Adopted children constitute the least proportion (0.4%) of household members.

Table 3.2: Household population by composition and sex

Household composition	Total Number	Total Percent	Male Number	Male Percent	Female Number	Female Percent
Total	44,827	100.0	21,714	100.0	23,113	100.0
Head	7,417	16.5	5,796	26.7	1,621	7.0
Spouse (wife/husband)	5,037	11.2	129	0.6	4,908	21.2
Child (son/daughter)	19,925	44.4	10,867	50.0	9,058	39.2
Parent/parent in-law	1,617	3.6	252	1.2	1,365	5.9
Son/daughter in-law	953	2.1	44	0.2	909	3.9
Grandchild	3,726	8.3	1,967	9.1	1,759	7.6
Brother/sister	1,965	4.4	1,124	5.2	841	3.6
Step child	543	1.2	286	1.3	257	1.1
Adopted/foster child	201	0.4	112	0.5	89	0.4
Other relative	3,264	7.3	1,049	4.8	2,215	9.6
Non-relative	179	0.4	88	0.4	91	0.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.3 Household population by structure and sex

Table 3.3 shows household population by structure and sex. The table reveals that 23.4 percent of the household population live in a nuclear family system (Head, spouse(s) and children). Other nuclear family system comprised of the single parent nuclear, head only and head and spouse only, also represent 5 percent, 1 percent and 0.6 percent respectively. Of the total household population (13,488) of persons that live in the nuclear family system, 6,734(50.1%) are males while 6714(49.9%) are females. This indicates that there is no much difference in the male population in a nuclear family system as compared to that of the females.

The table again indicates that the proportion of households who live in an extended family system (Head, spouse(s), children and head relatives) in the district is 49.5 percent. Other extended family systems such as the single parent extended head spouse(s) and other composition constitute 11.2 and 3.2 percent respectively.

Table 3.3: Household population by structure and sex

Household structure	Total Number	Total Percent	Male Number	Male Percent	Female Number	Female Percent
Total	44,827	100.0	21,714	100.0	23,113	100.0
Nuclear Family						
Head only	443	1.0	220	1.0	223	1.0
Head and spouse only	280	0.6	138	0.6	142	0.6
Nuclear (Head, spouse(s) and children	10,472	23.4	5,438	25.0	5,034	21.8
Single parent Nuclear	2,253	5.0	938	4.3	1,315	5.7
Extended Family						
Extended + Non relatives	659	1.5	304	1.4	355	1.5
Head spouse(s) and other composition	1,413	3.2	662	3.0	751	3.2
single parent extended	5,022	11.2	2,214	10.2	2,808	12.1
single parent extended + Non relative	224	0.5	109	0.5	115	0.5
Head spouse(s) and other composition but no spouse	1,884	4.2	840	3.9	1,044	4.5
Extended (Head spouse(s) children Head's relatives	22,177	49.5	10,851	50.0	11,326	49.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3   Marital Status

Marital status is an important factor that influences population growth. Information on marital status is important for the planning of housing development as well as understanding the problems of dependency and the supply of labour.

Figure 3.1 shows the distribution of persons 12years and older by their marital status. Greater proportion of the population (48.3%) is in the married category, followed by those who have never married (40.2%). From the figure below, it is again observed that1.5 percent of the population belongs to the category of informal/consensual union/living together.   The widowed, divorced and separated population constitutes 8.6, 0.7, and 0.7 percent respectively.

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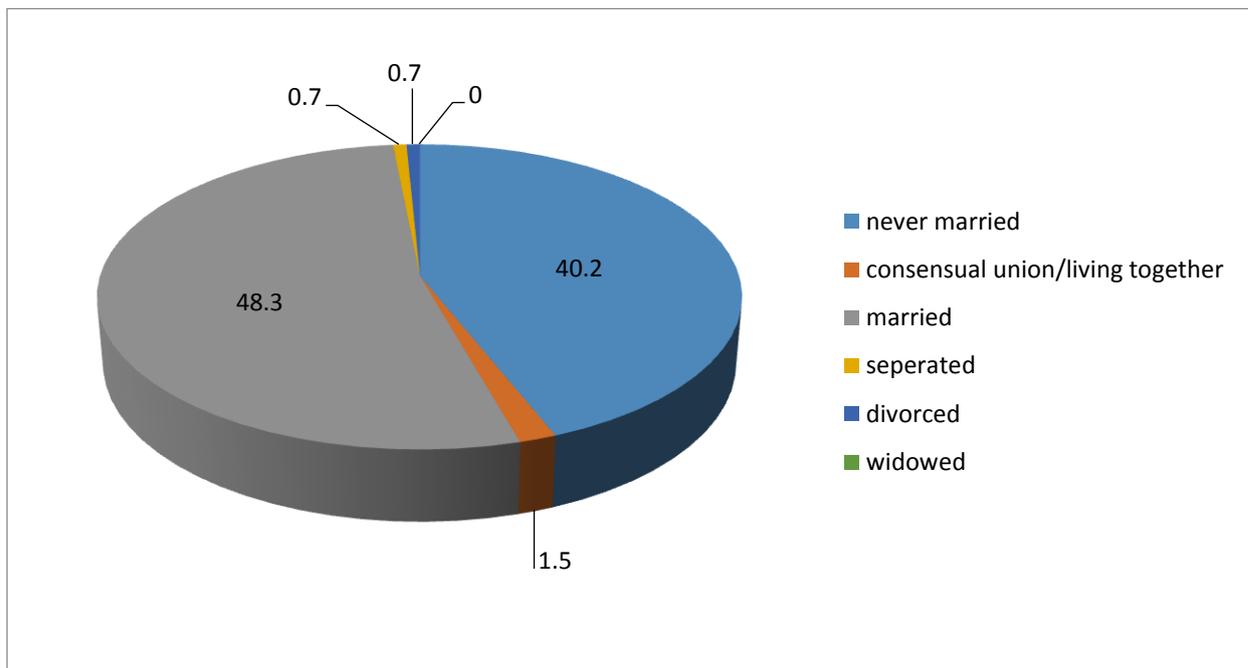
Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3.1   Marital status by age and sex

Table 3.4 further shows that a higher proportion of males (47.3%) than females (33.9%) have never been married. Again the proportion of females who are divorced, (0.9%) or widowed, (14.2%) is higher than that of those who are separated (0.7%) and in informal/consensual union/living together. There is higher proportion of females (1.7%) in informal/consensual union/living together than their male counterparts (1.3%).

A larger proportion of the youth within the age groups of 12 to19 years in the district are married. Of this age group, 10.5 percent of the males are married as compared to 14.4 percent of the females. This indicates that, there are more females going into early marriage than males in the district. It is interesting to note also that, females at the early age of 15 to19 years represent 0.4 percent of the married population who are widows.

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	32,052	100.0	40.2	1.5	48.3	0.7	0.7	8.6
10 - 14	3,184	100.0	94.3	0.1	5.6	0.0	0.0	0.0
15 - 19	4,876	100.0	92.4	0.6	6.7	0.0	0.0	0.2
20 - 24	3,720	100.0	72.7	3.4	23.1	0.2	0.2	0.2
25 - 29	3,087	100.0	39.9	5.0	53.2	1.0	0.3	0.7
30 - 34	2,830	100.0	19.5	2.7	73.6	1.4	0.5	2.3
35 - 39	2,309	100.0	10.9	1.4	82.0	1.4	1.3	3.0
40 - 44	2,150	100.0	7.2	0.9	81.9	1.3	1.7	7.0
45 - 49	1,931	100.0	6.5	0.8	81.8	1.0	1.3	8.5
50 - 54	1,760	100.0	4.8	0.4	77.8	1.3	1.9	13.9
55 - 59	1,265	100.0	3.9	0.2	76.8	0.9	1.1	17.2
60 - 64	1,258	100.0	4.4	0.5	66.5	1.0	1.4	26.3
65+	3,682	100.0	4.6	0.3	53.4	0.5	1.0	40.2
Male								
Total	15,073	100.0	47.3	1.3	48.1	0.5	0.5	2.3
10 - 14	1,675	100.0	95.1	0.0	4.9	0.0	0.0	0.0
15 - 19	2,564	100.0	94.1	0.3	5.6	0.1	0.0	0.0
20 - 24	1,733	100.0	87.5	1.6	10.6	0.2	0.0	0.1
25 - 29	1,385	100.0	55.7	4.6	38.6	0.6	0.3	0.1
30 - 34	1,378	100.0	25.3	3.6	68.1	1.0	0.6	1.4
35 - 39	1,111	100.0	13.2	1.4	83.3	0.7	1.0	0.4
40 - 44	1,000	100.0	8.7	0.6	86.3	1.2	1.3	1.9
45 - 49	878	100.0	8.4	0.9	87.2	0.9	0.6	1.9
50 - 54	751	100.0	4.4	0.7	89.1	1.2	1.6	3.1
55 - 59	605	100.0	5.6	0.2	89.6	0.5	0.8	3.3
60 - 64	515	100.0	4.9	0.2	85.2	1.0	1.2	7.6
65+	1,478	100.0	5.9	0.5	78.3	0.5	0.7	14.2
Female								
Total	16,979	100.0	33.9	1.7	48.4	0.8	0.9	14.2
10 - 14	1,509	100.0	93.4	0.2	6.4	0.0	0.0	0.0
15 - 19	2,312	100.0	90.6	1.0	8.0	0.0	0.0	0.4
20 - 24	1,987	100.0	59.8	5.0	34.0	0.3	0.5	0.4
25 - 29	1,702	100.0	27.1	5.2	65.0	1.3	0.2	1.2
30 - 34	1,452	100.0	14.1	1.7	78.7	1.8	0.4	3.2
35 - 39	1,198	100.0	8.7	1.5	80.7	2.0	1.7	5.4
40 - 44	1,150	100.0	5.9	1.1	78.1	1.4	2.1	11.4
45 - 49	1,053	100.0	4.9	0.8	77.3	1.0	1.9	14.1
50 - 54	1,009	100.0	5.1	0.2	69.4	1.3	2.2	21.9
55 - 59	660	100.0	2.3	0.2	65.0	1.4	1.4	29.8
60 - 64	743	100.0	4.0	0.7	53.4	1.1	1.5	39.3
65+	2,204	100.0	3.7	0.2	36.8	0.5	1.2	57.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.3.2 Marital status and level of education

Table 3.5 provides information on persons 12 years and older by sex, marital status and level of education. Data from the table below reveals that, the never married category of the married population had the highest attained basic education of 58.7 percent followed by those in informal/consensual union/Living together (28.9%). Only 0.8 percent of the population who never married had tertiary education.

Informal/consensual union/living together was common with people who had no education (41.7%) and those with basic education (28.9%) and less common with those who had tertiary education (1.0%). More than half (69.4%) of the population married have no education while 20.2 percent of them have basic education.

Of the widowed population of 2,762, 354(12.8%) of them are males while the remaining 87.2 percent females. This clearly indicates that there are more widows than widowers in the district. About 88.6 percent of the widowed had no education. However, only 0.1 percent had tertiary education.

Table 3.5: Marital status and level of education of persons 12 years and older

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	32,052	100.0	50.3	34.9	7.0	3.2	3.8	0.8
Never married	12,888	100.0	19.2	58.7	12.7	4.4	4.3	0.8
Informal/consensual union/living together	484	100.0	41.7	28.9	9.3	9.3	9.7	1.0
Married	15,468	100.0	69.4	20.2	3.2	2.5	3.6	1.0
Separated	225	100.0	52.9	25.3	10.7	3.1	6.7	1.3
Divorced	225	100.0	69.8	18.2	2.2	3.1	6.2	0.4
Widowed	2,762	100.0	88.6	9.1	0.4	0.8	1.1	0.1
Male								
Total	15,073	100.0	43.5	38.3	8.4	3.3	5.0	1.4
Never married	7,128	100.0	20.4	56.6	13.0	4.2	4.8	1.0
Informal/consensual union/living together	192	100.0	35.4	27.6	10.9	6.8	17.7	1.6
Married	7,244	100.0	64.3	22.3	4.1	2.5	5.0	1.8
Separated	81	100.0	46.9	25.9	17.3	1.2	7.4	1.2
Divorced	74	100.0	67.6	17.6	1.4	5.4	8.1	0.0
Widowed	354	100.0	83.6	10.2	0.8	2.0	2.8	0.6
Female								
Total	16,979	100.0	56.4	31.9	5.7	3.1	2.6	0.3
Never married	5,760	100.0	17.6	61.4	12.4	4.6	3.6	0.4
Informal/consensual union/living together	292	100.0	45.9	29.8	8.2	11.0	4.5	0.7
Married	8,224	100.0	74.0	18.4	2.5	2.5	2.3	0.3
Separated	144	100.0	56.3	25.0	6.9	4.2	6.3	1.4
Divorced	151	100.0	70.9	18.5	2.6	2.0	5.3	0.7
Widowed	2,408	100.0	89.3	8.9	0.4	0.6	0.8	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

1 Basic: Primary, Middle and JSS/JHS
2 Secondary: SSS/SHS and Secondary
3 Post Middle/ Sec. Cert./Diploma: Teacher training/ College of education, Agric., Nursing , University Diploma, HND, etc.
4 Tertiary: Bachelor's Degree and Post Graduate or higher

3.3.3 Marital status and economic activity

Employment is the primary channel through which economic growth reduces poverty. According to Hull (2009) the type of economic activity pursued is influenced by the nature of the economic and the socio economic activity among the population.

Table 3.6 shows the population 12 years and older by sex, marital status and economic activity status. Table 3.6 shows that, of the population 12 years and older in the district, 62.5

percent are employed, and 1.2 percent are not employed, whilst 35.9 percent are economically not active. Among the never married 41.9 percent are employed and 2.1 percent are unemployed, whist 55.9 are economically not active. The married have 80.3 percent of them being employed and 1.2 percent being unemployed and 18.5 percent being economically not active. Similarly those who widowed and employed are 55.4 percent and this could be as a result of majority of them being above the working age and are in retirement. Slight differences do exist between the sexes.

Table 3.6: Marital status by activity status

Sex/Marital status	Total		Employed		Unemployed		Economically not active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes								
Total	32,052	100.0	20,037	62.5	520	1.6	11,495	35.9
Never married	12,888	100.0	5,401	41.9	277	2.1	7,210	55.9
Informal/consensual union/living together	484	100.0	346	71.5	22	4.5	116	24.0
Married	15,468	100.0	12,424	80.3	184	1.2	2,860	18.5
Separated	225	100.0	184	81.8	8	3.6	33	14.7
Divorced	225	100.0	152	67.6	2	0.9	71	31.6
Widowed	2,762	100.0	1,530	55.4	27	1.0	1,205	43.6
Male								
Total	15,073	100.0	9,792	65.0	230	1.5	5,051	33.5
Never married	7,128	100.0	3,109	43.6	151	2.1	3,868	54.3
Informal/consensual union/living together	192	100.0	152	79.2	8	4.2	32	16.7
Married	7,244	100.0	6,208	85.7	68	0.9	968	13.4
Separated	81	100.0	65	80.2	2	2.5	14	17.3
Divorced	74	100.0	54	73.0	0	0.0	20	27.0
Widowed	354	100.0	204	57.6	1	0.3	149	42.1
Female								
Total	16,979	100.0	10,245	60.3	290	1.7	6,444	38.0
Informal/consensual union/living together	292	100.0	194	66.4	14	4.8	84	28.8
Married	8,224	100.0	6,216	75.6	116	1.4	1,892	23.0
Separated	144	100.0	119	82.6	6	4.2	19	13.2
Divorced	151	100.0	98	64.9	2	1.3	51	33.8
Widowed	2,408	100.0	1,326	55.1	26	1.1	1,056	43.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.4   Nationality

Table 3.7 shows population by nationality and sex. The data shows that majority of the population is made up of Ghanaian by birth (95.0%). Persons with dual nationality constitute 2.2 percent. Ghanaian by naturalization makes up 0.7 percent. The proportion of female Ghanaian by birth (97.5%) is marginally higher than the proportion of male Ghanaian by birth (97.3%). ECOWAS nationals constitute 1.1 percent, while Africa other than ECOWAS makes up 0.5 percent as indicated in Table 3.6.

Table 3.7: Population by nationality and sex

Nationality	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	46,040	100.0	22,295	100.0	23,745	100.0
Ghanaian by birth	43,721	95.0	21,167	94.9	22,554	95.0
Dual nationality (Ghanaian and Other)	1,023	2.2	515	2.3	508	2.1
Ghanaian by naturalization	345	0.7	155	0.7	190	0.8
ECOWAS	509	1.1	254	1.1	255	1.1
African other than ECOWAS	227	0.5	104	0.5	123	0.5
Other	215	0.5	100	0.4	115	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.5   Religious Affiliation

Table 3.8 shows that a greater majority of the population profess the Christian faith (85.7%) with only a small proportion of the population being Muslims (6.6%) and traditionalist (1.0%). Also about 2.0 percent of the population of Nandom district belonged to no religious category. Generally, more females (86.4%) than males (85%) are Christians. On the other hand, there is no much difference between the males (6.7%) and females (6.6%) belonging to the Islamic religion. Again more males (2.1%) than females (1.8%) professed to have no religion.

Table 3.8: Population by religion and sex

Religion	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	46,040	100.0	22,295	100.0	23,745	100.0
No religion	900	2.0	478	2.1	422	1.8
Catholic	39,041	84.8	18,749	84.1	20,292	85.5
Protestants (Anglican Lutheran etc.)	134	0.3	73	0.3	61	0.3
Pentecostal/Charismatic	220	0.5	105	0.5	115	0.5
Other Christian	42	0.1	24	0.1	18	0.1
Islam	3,051	6.6	1,483	6.7	1,568	6.6
Traditionalist	2,640	5.7	1,376	6.2	1,264	5.3
Other	12	0.3	7	0.0	5	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6   Literacy and Education

3.6.1   Literacy

According to the 2010 Population and Housing Census a person is considered literate if he/she can read and write at least in one language with understanding.

From Table 3.9, almost half (49.2%) of the population aged 11years and older in the municipality are not literate. Of the literate population, the majority (56.1%) are literate in English and Ghanaian language. While more than half (57.4%) of the male population is literate, only 45 percent of females in the given age bracket are literate. Persons in age group 11-14 have the highest literacy rate (47.0%) in English language only. The least is recorded for those who are literate in English language only is for persons in age group 65 years and older (29.3%). Population age group 60-64 has the highest literacy rate (8.0%) in Ghanaian language only. Age group 65+ recorded the highest literacy rate (63.8%) in English and Ghanaian language with the least (52.9%) recorded in age group 11-14.

With reference to the sexes, males have the highest literacy status (58.7%) in English and Ghanaian Language as compare to female (53.0%) in the same category. The proportion of female who are literate in Ghanaian language (9.7%) within the age group 60-64 is slightly higher than the male (6.8) population who are literate in Ghanaian language only. The male has the lowest proportion of literacy status in English and French (0.0%) in age group 50-64 and females also have the lowest proportion of literacy status in English and French (0.0%) in age group 20-34, 40-44 and 50-65+ respectively. Male population 11years and older who are literate in English, French, and Ghanaian language (1.9%) in age group 40-44 is higher than female literate (1.3%) in the same category and age group 50-54.

Table 3.9: Population 11 years and older by language literacy

Sex/Age group	None (Not literate)	Literate	Total	English only	Ghanaian language only	English and Ghanaian language	English and French	English, French and Ghanaian language
Total	16,246	16,804	100.0	39.0	4.4	56.1	0.1	0.4
10-14	491	3,691	100.0	47.0	5.8	46.9	0.1	0.2
15-19	701	4,175	100.0	40.2	3.2	56.2	0.1	0.3
20-24	1,108	2,612	100.0	34.8	3.0	61.9	0.0	0.2
25-29	1,460	1,627	100.0	34.9	4.5	59.8	0.1	0.7
30-34	1,639	1,191	100.0	35.5	5.0	58.9	0.1	0.5
35-39	1,518	791	100.0	37.7	3.7	57.8	0.4	0.5
40-44	1,573	577	100.0	39.2	4.5	54.6	0.2	1.6
45-49	1,363	568	100.0	34.9	6.7	57.4	0.4	0.7
50-54	1,226	534	100.0	33.9	5.4	59.7	0.0	0.9
55-59	852	413	100.0	34.9	4.4	60.0	0.0	0.7
60-64	1,033	225	100.0	32.0	8.0	58.7	0.0	1.3
65+	3,282	400	100.0	29.5	5.8	63.8	0.3	0.8
Male								
Total	6,632	8,950	100.0	36.5	4.2	58.7	0.1	0.5
10-14	304	1,880	100.0	45.2	5.3	49.4	0.2	0.0
15-19	367	2,197	100.0	38.6	3.8	57.2	0.1	0.4
20-24	416	1,317	100.0	32.3	2.8	64.6	0.1	0.2
25-29	539	846	100.0	31.7	4.0	63.4	0.1	0.8
30-34	708	670	100.0	31.6	4.3	63.0	0.1	0.9
35-39	651	460	100.0	34.3	3.7	60.9	0.4	0.7
40-44	685	315	100.0	37.1	1.9	58.7	0.3	1.9
45-49	545	333	100.0	33.9	6.0	58.9	0.3	0.9
50-54	456	295	100.0	28.1	5.4	65.8	0.0	0.7
55-59	346	259	100.0	34.7	3.5	60.6	0.0	1.2
60-64	383	132	100.0	25.0	6.8	66.7	0.0	1.5
65+	1,232	246	100.0	27.2	5.7	65.4	0.4	1.2
Female								
Total	9,614	7,854	100.0	41.9	4.7	53.0	0.1	0.4
10-14	187	1,811	100.0	49.0	6.3	44.2	0.1	0.4
15-19	334	1,978	100.0	41.9	2.6	55.2	0.1	0.3
20-24	692	1,295	100.0	37.4	3.2	59.2	0.0	0.2
25-29	921	781	100.0	38.4	5.1	56.0	0.0	0.5
30-34	931	521	100.0	40.5	6.0	53.6	0.0	0.0
35-39	867	331	100.0	42.3	3.6	53.5	0.3	0.3
40-44	888	262	100.0	41.6	7.6	49.6	0.0	1.1
45-49	818	235	100.0	36.2	7.7	55.3	0.4	0.4
50-54	770	239	100.0	41.0	5.4	52.3	0.0	1.3
55-59	506	154	100.0	35.1	5.8	59.1	0.0	0.0
60-64	650	93	100.0	41.9	9.7	47.3	0.0	1.1
65+	2,050	154	100.0	33.1	5.8	61.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.6.2 Education

Table 3.10 shows population 3 years and older by educational level and school attendance. The data shows that the population who are currently in primary, JSS/JHS, and Nursery represent 47.8, 22.1 and 11.1 percent respectively. In addition to those currently in schools, 1.0 percent is in tertiary level while a little over 7.0 percent of children currently in school are in SSS/SHS.

There is no much difference among the sexes at the various level of education except those in vocational/technical and tertiary institutions where the proportions of males are considerable higher than females as shown in the table. The data further reveals that about 30.3 percent of the population who attended school in the past completed primary while 19.6 percent also completed JHS. Only 5.2 percent completed tertiary education.

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	16,972	100.0	8,808	100.0	8,164	100.0	7,563	100.0	4,065	100.0	3,498	100.0
Nursery	1,878	11.1	928	10.5	950	11.6	-	0.0	-	0.0	-	0.0
Kindergarten	1,207	7.1	630	7.2	577	7.1	-	0.0	-	0.0	-	0.0
Primary	8,117	47.8	4,182	47.5	3,935	48.2	2,291	30.3	1,139	28.0	1,152	32.9
JSS/JHS	3,744	22.1	1,910	21.7	1,834	22.5	1,479	19.6	681	16.8	798	22.8
Middle	-	0.0	-	0.0	-	0.0	1,086	14.4	664	16.3	422	12.1
SSS/SHS	1,268	7.5	701	8.0	567	6.9	712	9.4	413	10.2	299	8.5
Secondary	-	0.0	-	0.0	-	0.0	250	3.3	150	3.7	100	2.9
Vocational/technical/ commercial	387	2.3	230	2.6	157	1.9	644	8.5	272	6.7	372	10.6
Post middle/secondary certificate	128	0.8	73	0.8	55	0.7	517	6.8	305	7.5	212	6.1
Tertiary	166	1.0	97	1.1	69	0.8	393	5.2	285	7.0	108	3.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FOUR
ECONOMIC CHARACTERISTICS

4.1   Introduction

The overall development of a country is grounded on the production of goods and services. Critical to the production process is the human capital of the country. Although all persons regardless of age and sex consume goods and services produced but merely a small section of the populace produces them. This group of working population is referred to as the employed population or the work force. The type of economic activity pursued is influenced by nature of the economy and level of socio-economic development (Hull, 2009). All things being equal, the larger the employed population, the more wealth is created leading to the improved standard of living of the general populace.

This chapter presents information on the activity status, size and structure of the labour force, and its distribution by occupation and industry. Also the employment status and employment sector of the population is analyzed. This section also looks at the economically active and economically not active population. Each of these population characteristics are analyzed by age and sex.

4.2   Economic Activity Status

The question on economic activity used for this report was asked of all persons fifteen years and older who engaged in any activity for pay (cash or kind) or profit or family gain for at least one hour during the seven days preceding census night irrespective of whether the person was attending school or not. Nevertheless, the International labour regulations stipulate 15 years as the minimum working age (ILO, 1973, Children's Act, 1989).

Figure 4.1 shows that, of the total population 28,868 aged 15 years and older, 67.5 percent is economically active (employed and unemployed) while the economically not active population (not employed, not seeking nor available for work) constitutes 32.5 percent. Of the economically active male population, 70.5 percent of the males are economically active where as that of the females are 64.9. The table again shows that of the economically not active population, 29.5 of them are males which is slightly lower than the female of 35.1. This clearly indicates that, there are more women who are economically not active than men.

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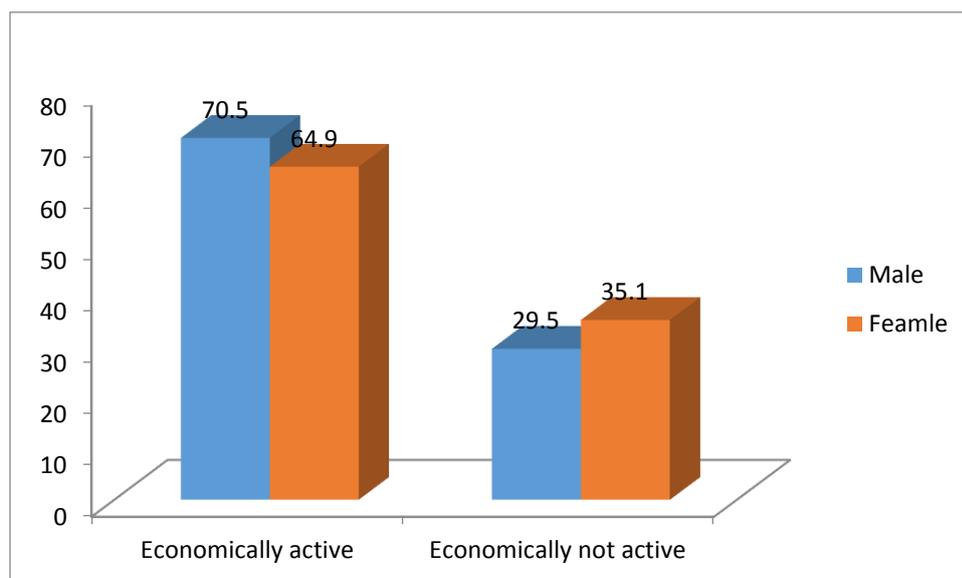
Source: Ghana Statistical Service, 2010 Population and Housing Census

4.2.1 Activity status by sex

Table 4.1 shows population 15 years and older by activity status and sex. Out of the total population of 28,868, 67.5 are economically active while 32.5 are economically not active. Moreover, 97.3 percent of the economically active populations are employed while the unemployed make up 2.7 percent.

Among the employed, majority (96.3%) worked seven days preceding the census night while 3.5 percent did not work but had job to go back to. Only 0.2 percent did voluntary work without pay. Among the unemployed, majority (54.9%) are first time job seekers with 45.1 percent representing those who worked before, seeking work and are available.

Table 4.1 further shows that, students form a large proportion of the economically not active population (41.7%). From the table, it is again observed that those who are Disabled/sick, too old or young and those who did home duties (household chore) constitute 5.2, 18.9 and 21.4 percent of the economically not active population. In addition to this, 1.5 percent of the economically not active population is pensioners/retired. A little over eleven percent represents other categories of economically not active populations.

More females (27.0%) than males (13.8%) are homemakers. Sick or disabled among the economically not active population constitute (5.2%) of which (5.9%) are males and (4.7%) are females. Pensioners or retired persons account for only 1.5 percent. The population that is too young or too old to work accounts for 18.9 percent with the greater proportion being females (23.0%).

The employed males constitute 97.6 percent and females 97.1 percent while the unemployed population is made up of 2.9 percent females slightly higher than that of males (2.4%).

There are more unemployed females (2.9%) than males (2.4%). More so, those who have worked before but because of some reasons and are now unemployed constitute 45.3 percent. Males in this category account for 36.7 percent and females 51.7 percent.

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

Activity status	Total Number	Total Percent	Male Number	Male Percent	Female Number	Female Percent
Total	28,868	100	13,398	100	15,470	100
Economically active	19,485	67.5	9,450	70.5	10,035	64.9
Employed	18,966	97.3	9,221	97.6	9,745	97.1
Worked	18,262	96.3	8,855	96	9,407	96.5
Did not work but had job to go back to	671	3.5	348	3.8	323	3.3
Did voluntary work without pay	33	0.2	18	0.2	15	0.2
Unemployed	519	2.7	229	2.4	290	2.9
Worked before, seeking work and available	234	45.1	84	36.7	150	51.7
Seeking work for the first time and available	285	54.9	145	63.3	140	48.3
Economically not active	9,383	32.5	3,948	29.5	5,435	35.1
Did home duties (household chore)	2,012	21.4	543	13.8	1,469	27
Full time education	3,912	41.7	2,100	53.2	1,812	33.3
Pensioner/retired	140	1.5	79	2	61	1.1
Disabled/sick	488	5.2	231	5.9	257	4.7
Too old/young	1,769	18.9	519	13.1	1,250	23
Other	1,062	11.3	476	12.1	586	10.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.2.2 Sex, age and activity status

Table 4.2 shows population aged 15 years and older by sex, age and activity status. The total population aged 15 years and older is 28,868. Out of this, 13, 398 (46.4%) are male and 15,470 (53.6%) are female. The working force, aged 15-64 constitutes 25,186 (87.2%) with females 13,266 (52.6%) slightly higher than males 11,920 (47.3%).

Table 4.2 shows that, there is a sharp increase in the level of employment of persons within the age group of 15-49 as compared to the age group of 50-65+ where is a tremendous decline.

Also, majority of the unemployed population fall between the age range of 25-29 while the least employed are within the age group of 65 years and older. Moreover, from the table, it can be realized that the age groups 15-19 years and 65+ form the majority of the economically not active group in the district.

In comparison with the male and female sex, the trend looks similar to that discussed above.

Table 4.2: 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
Total								
Total	28,868	100.0	18,966	65.7	519	1.8	9,383	32.5
15-19	4,876	100.0	1,796	36.8	53	1.1	3,027	62.1
20-24	3,720	100.0	1,920	51.6	129	3.5	1,671	44.9
25-29	3,087	100.0	2,159	69.9	113	3.7	815	26.4
30-34	2,830	100.0	2,295	81.1	74	2.6	461	16.3
35-39	2,309	100.0	1,944	84.2	26	1.1	339	14.7
40-44	2,150	100.0	1,830	85.1	30	1.4	290	13.5
45-49	1,931	100.0	1,663	86.1	15	0.8	253	13.1
50-54	1,760	100.0	1,474	83.8	14	0.8	272	15.5
55-59	1,265	100.0	1,033	81.7	13	1	219	17.3
60-64	1,258	100.0	899	71.5	33	2.6	326	25.9
65+	3,682	100.0	1,953	53	19	0.5	1,710	46.4
Male								
Total	13,398	100.0	9,221	68.8	229	1.7	3,948	29.5
15-19	2,564	100.0	969	37.8	24	0.9	1,571	61.3
20-24	1,733	100.0	859	49.6	64	3.7	810	46.7
25-29	1,385	100.0	996	71.9	55	4	334	24.1
30-34	1,378	100.0	1,139	82.7	40	2.9	199	14.4
35-39	1,111	100.0	985	88.7	6	0.5	120	10.8
40-44	1,000	100.0	906	90.6	11	1.1	83	8.3
45-49	878	100.0	794	90.4	4	0.5	80	9.1
50-54	751	100.0	670	89.2	6	0.8	75	10
55-59	605	100.0	530	87.6	3	0.5	72	11.9
60-64	515	100.0	404	78.4	12	2.3	99	19.2
65+	1,478	100.0	969	65.6	4	0.3	505	34.2
Female								
Total	15,470	100.0	9,745	63	290	1.9	5,435	35.1
15-19	2,312	100.0	827	35.8	29	1.3	1,456	63
20-24	1,987	100.0	1,061	53.4	65	3.3	861	43.3
25-29	1,702	100.0	1,163	68.3	58	3.4	481	28.3
30-34	1,452	100.0	1,156	79.6	34	2.3	262	18
35-39	1,198	100.0	959	80.1	20	1.7	219	18.3
40-44	1,150	100.0	924	80.3	19	1.7	207	18
45-49	1,053	100.0	869	82.5	11	1	173	16.4
50-54	1,009	100.0	804	79.7	8	0.8	197	19.5
55-59	660	100.0	503	76.2	10	1.5	147	22.3
60-64	743	100.0	495	66.6	21	2.8	227	30.6
65+	2,204	100.0	984	44.6	15	0.7	1,205	54.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.3   Occupation

Occupation refers to the type of work the person is engaged in at the establishment were the person works, this includes persons who worked for at least one hour during the seven days before the census night, those who did not work but had a job to return to as well as those who were unemployed but had worked before. All persons who worked during the seven days before the census night were classified by the kind of work they were engaged in.

Table 4.3 shows that, Out of the employed population of 19,966, 14,844 (78.3%) of them are engaged in skilled agricultural, forestry and fishery work. In addition to this, 9.6 percent, 4.1 percent and 3.5 percent represent workers engaged in crafts and other related trades, service and sales and professional respectively.

Out of the male population the proportion in agriculture is 81.9 percent. The table further reveals that, 74.8 percent of the female population are also engaged in skilled agricultural, forestry and fishery work. This indicates that the livelihood of the population depends mainly on the agricultural sector. The proportion of males in most of the occupational categories is higher than that of females. This is however not true in the service and sales category where females dominate with 5.8 percent and males 2.5 percent. Also, craft and other related trades are being dominated by females (13.6%) as compared to their male (5.3%) counterparts.

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	18,966	100.0	9,221	100.0	9,745	100.0
Managers	165	0.9	89	1.0	76	0.8
Professionals	665	3.5	406	4.4	259	2.7
Technicians and associate professionals	113	0.6	70	0.8	43	0.4
Clerical support workers	132	0.7	85	0.9	47	0.5
Service and sales workers	775	4.1	228	2.5	547	5.6
Skilled agricultural forestry and fishery workers	14,844	78.3	7,552	81.9	7,292	74.8
Craft and related trades workers	1,815	9.6	493	5.3	1,322	13.6
Plant and machine operators and assemblers	123	0.6	115	1.2	8	0.1
Elementary occupations	330	1.7	180	2.0	150	1.5
Other occupations	4	0.0	3	0.0	1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.4 Industry

Industry referred to the type of product produced or services rendered at the respondent's workplace.

Table 4.4 shows employed population 15 years and older by industry and sex. Agriculture forestry and fishing, constitutes the largest industry employing 78.2 percent of the workforce aged 15 years and older. Other major industrial activities include; wholesale and retail; repair of motor vehicles and motorcycles (3.9%), manufacturing (8.3%), construction (1.1%), and education (2.9%) the rest accounting for 7.2 percent indicated in Table 4.5.

A little more males (81.7%) than females (74.9%) of the employed population are into agriculture, forestry and fishing. The table again reveals that there are more females (13.3%) into manufacturing as compared to their male (3.1%) counterparts. Also, more males (2.1%) than females (0.2%) are into construction.

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	18,966	100.0	9,221	100.0	9,745	100.0
Agriculture forestry and fishing	14,836	78.2	7,533	81.7	7,303	74.9
Mining and quarrying	3	0.0	1	0.0	2	0.0
Manufacturing	1,578	8.3	286	3.1	1,292	13.3
Electricity gas stream and air conditioning supply	12	0.1	12	0.1	0	0.0
Water supply; sewerage waste management and remediation activities	16	0.1	11	0.1	5	0.1
Construction	214	1.1	194	2.1	20	0.2
Wholesale and retail; repair of motor vehicles and motorcycles	736	3.9	300	3.3	436	4.5
Transportation and storage	107	0.6	99	1.1	8	0.1
Accommodation and food service activities	177	0.9	27	0.3	150	1.5
Information and communication	20	0.1	14	0.2	6	0.1
Financial and insurance activities	44	0.2	27	0.3	17	0.2
Real estate activities	0	0.0	0	0.0	0	0.0
Professional scientific and technical activities	61	0.3	33	0.4	28	0.3
Administrative and support service activities	22	0.1	12	0.1	10	0.1
Public administration and defence; compulsory social security	123	0.6	102	1.1	21	0.2
Education	555	2.9	345	3.7	210	2.2
Human health and social work activities	211	1.1	99	1.1	112	1.1
Arts entertainment and recreation	16	0.1	15	0.2	1	0.0
Other service activities	187	1.0	92	1.0	95	1.0
Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use	48	0.3	19	0.2	29	0.3
Activities of extraterritorial organizations and bodies	0	0.0	0	0.0	0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.5 Employment Status

Employment status referred to the position of a person in the establishment where he or she currently works or previously worked.

The employment status data presented in Figure 4.2 shows that 46.1 percent of the workforce are self-employed without employees while those with employees account for only a little over one percent. The corresponding proportions for females are 36.1 percent and 56.7 percent for male in the self-employed without employees. This confirms the normal

observation that males are more likely to be self-employed without employees than females in the District.

Figure 4.2: Employed population 15 years and older by employment status
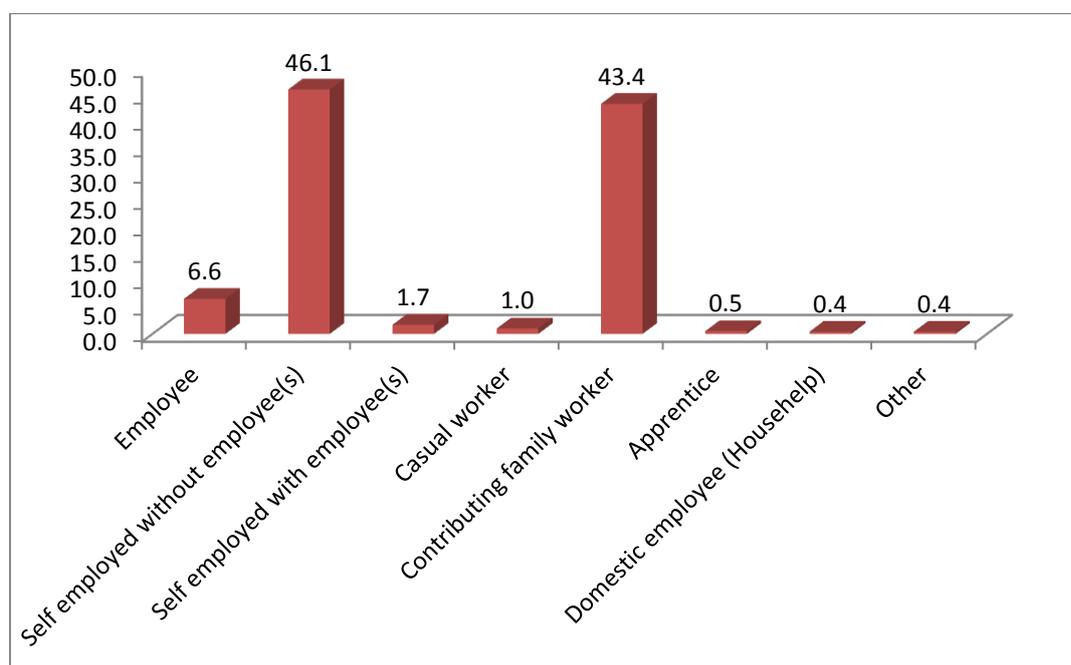
Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 4.5 shows that, relatively large proportions of males (8.5%) are employees compared to females (4.8%). Contributing family workers comprise of 43.4 percent. There are more female contributing family workers (55.7%) than males (30.5%).

Out of the 46.1 percent self-employed population with employees, males constitute 2.3 percent and this is slightly higher than females (1.2%). The table again indicates that, those employed with employee(s) constitute 2.3 percent of the male population with just 1.2 percent for females.

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

	Both sexes		Male		Female	
Employment Status	Number	Percent	Number	Percent	Number	Percent
Total	18,966	100.0	9,221	100.0	9,745	100.0
Employee	1,249	6.6	784	8.5	465	4.8
Self-employed without employee(s)	8,742	46.1	5,228	56.7	3,514	36.1
Self-employed with employee(s)	330	1.7	214	2.3	116	1.2
Casual worker	181	1.0	92	1.0	89	0.9
Contributing family worker	8,233	43.4	2,809	30.5	5,424	55.7
Apprentice	89	0.5	32	0.3	57	0.6
Domestic employee (House help)	75	0.4	39	0.4	36	0.4
Other	67	0.4	23	0.2	44	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

4.6   Employment Sector

Employment sector refers to the sector in which a person works. The sectors covered in the census are Public, Private formal, Private informal, Semi-public or parastatal, NGOs and International organizations.

The results indicated in Figure 4.3 show that, the private sector is the largest employer in the district accounting for 94.6 percent. Out of this the private informal constitutes 93.2 percent while the private formal make up 1.4 percent. The proportions of employed females working in the private informal sector are 94.6 percent while that of males are 91.9 percent. This makes the private informal sector the dominant employer of the workforce and employing more women.

This increase in the employment of more women than men in the informal sector is because such jobs do not require high level of formal education. The public sector, consisting of Government Ministries, Departments and Agencies, employed 4.9 percent of the total employed population. Here, there are more males compared to females. The proportion of males and females employed in the public sector are 6.2 percent and 3.6 percent respectively.

However, those who are employed by NGOs make a relatively small proportion (0.4%) indicating the small number of NGOs in the district with no International Organization in the district. This may retard development in the district taking the contributions of NGOs and International Organizations to socio-economic development.

Figure 4.3: Proportion of sex composition in the employment sector
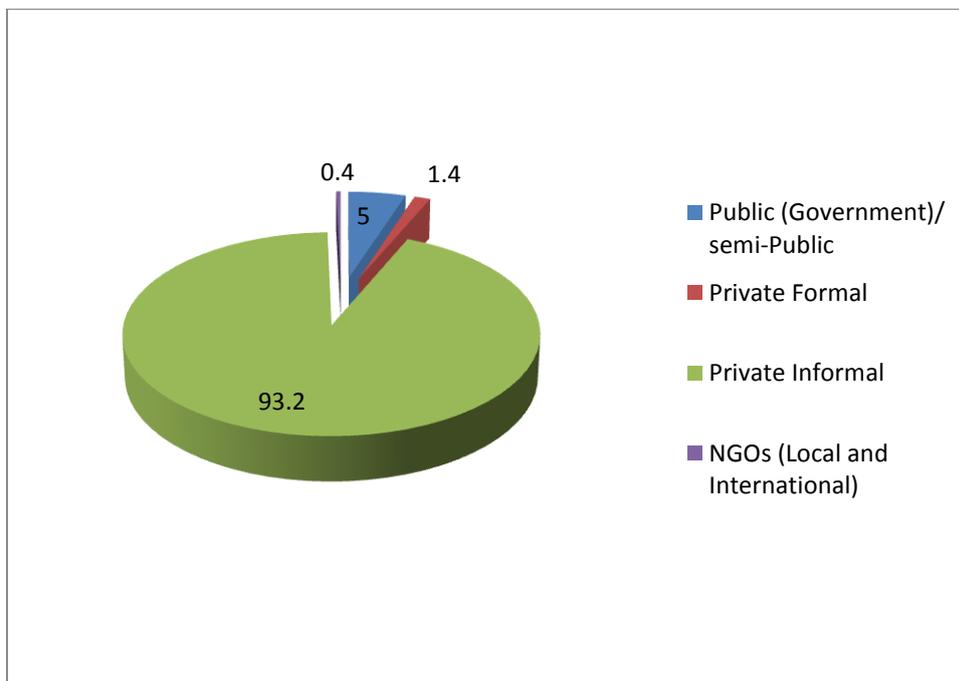
Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER FIVE
INFORMATION COMMUNICATION TECHNOLOGY

5.1   Introduction

Information Communication Technology (ICT) have become important tools in today's knowledge based information society and economy. The role of ICT in an emerging economy such as Ghana has been widely recognized. This recognition is reflected in promoting the use of ICT in all sectors of the economy.   This chapter analyses access to the ICT technologies/facilities in the form of ownership of mobile phones, use of internet, household ownership of fixed telephone lines and household ownership of desktop or laptop computers.

5.2   Ownership of Mobile Phones

Table 5.1 shows that out of the total population of 32052, 21.0 percent of them have mobile phones with 1.7 also having access to internet facility. The data further shows that, out of the population of males, 28.2 percent have mobile phones while just a few (2.3%) have access to internet facility.

From the table, it is again observed that, of the total female population, 14.6 percent have mobile phones with just a few of them using internet facility. More males of the male population own mobile phones (28.2%) as compared to the females (14.6%).

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

Sex	Population 12 years and older		Population having mobile phone		Population using internet facility	
	Number	Percent	Number	Percent	Number	Percent
Total	32,052	100.0	6,718	21.0	545	1.7
Male	15,073	100.0	4,246	28.2	350	2.3
Female	16,979	100.0	2,472	14.6	195	1.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

5.3   Use of Internet

The proportion of the population 12 years and older using internet facility is 1.7 percent. Even though most mobile have internet facility on them, the proportion that use the internet is far less than the ownership of mobile phones. From the table more than half of the population (64.2%) using internet facilities are males as compared to females 35.8 percent even though females population are higher than that of males.

5.4   Household Ownership of Desktop or Laptop Computer

Desktop and laptop computers are useful for accessing and processing information, including the use of the Internet, electronic mail and other services. For Nandom District, only 2.0 percent of total household number of 7,417 owns a desktop or laptop computers. This is lower than the regional figure of 3.7 percent. Moreover, just a few households (1.0%) have fixed telephone lines (Table 5.2).

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

Sex	Number of households		Households having desktop/ laptop computers	
	Number	Percent	Number	Percent
Both Sexes	7,417	100.0	149	2.0
Male	5.796	100.0	125	2.2
Female	1,621	100.0	24	1.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SIX
DISABILITY

6.1   Introduction

Persons with disability (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 parts of the body as a result of impairment or malformation (Ghana Statistical Service, 2012).

 Disability can limit an individual's full participation in a number of activities in life. Estimates from the World Health Organization (WHO) has it that more than 600million PWDs in the world, of which approximately (80%) live in low-income countries (Ayiku, 2012). In Ghana, PWDs in general are marginalized and suffer from discrimination on account of their disability status. They are often seen as burden on society and their unfortunate circumstances are viewed sometimes as a curse or punishment.

Furthermore, they have poorer health status and lower educational achievements. In Ghana, the 1992 Constitution provide for the guarantee of the fundamental human rights of all persons including PWDs, but with this, PWDs continue to experience various hindrances that prevent their full participation in society. Currently activities concerning PWDs are allocated (3%) share of the District Assembly Common Fund. This has brought some relief especially those not in the formal sector of employment. This chapter discusses Population with disability, type of disability, disability by type of locality, disability and activity and disability, education and literacy.

6.2   Population with Disability by type of locality

Table 6.1 shows population by disability status and sex. The 2010 population and housing census (PHC) indicates that out of a total of 46,040 people in the District 44,524 (96.7%) are without disability and 1,516 (3.3%) are with disability. Out of a male population of 22,295 in the district 21,559 (96.7%) are without disability, and 736 (3.3%) are with disability. On the part of a female population of 23,745 in the district 22,965 (96.7%) are without disability and 780 (3.3%) are with disability. In terms of percentages by sex, males and females, the district equal disability status representing 3.3% of the population of that of males and females.

The total urban population in the district is 6, 898, out of which 6,774 (98.2%) are without disability and 124 (1.8%) are with disability. The male population in the urban localities is 3,266 of that population 3,207 (98.2%) are without disability while 59 (1.8%) are with. With a female population of 3,632, the number of the population with no disability is 3,567 (98.2%), and that with disability is 65 (1.8%).

The rural localities has a population of 39,142 of which 37,750 (96.4%) are without disability while 1,392 (3.6%) are with disability. With a male population of 19,029 in the rural localities, 18,352 (96.4%) are with no disability. Those with disability are 677 (3.6%).

On the part of the female, out of a population of 20, 113, the population with no disability is 19,398 (96.4%) and that with disability is 715 (3.6%).

Table 6.1: Persons with disability by type of locality and sex

Disability Type	Both sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Both Sexes	46,040	100.0	22,295	100.0	23,745	100.0
No disability	44,524	96.7	21,559	96.7	22,965	96.7
With a disability	1,516	3.3	736	3.3	780	3.3
Sight	756	49.9	340	46.2	416	53.3
Hearing	384	25.3	163	22.1	221	28.3
Speech	182	12.0	107	14.5	75	9.6
Physical	333	22.0	168	22.8	165	21.2
Intellectual	168	11.1	94	0.4	74	0.3
Emotional	169	11.1	85	11.5	84	10.8
Other	110	7.3	53	7.2	57	7.3
Urban						
Total	6,898	100.0	3,266	100.0	3,632	100.0
No disability	6,774	98.2	3,207	98.2	3,567	98.2
With a disability	124	1.8	59	1.8	65	1.8
Sight	58	46.8	24	40.7	34	52.3
Hearing	26	21.0	10	16.9	16	24.6
Speech	12	9.7	8	13.6	4	6.2
Physical	24	19.4	15	25.4	9	13.8
Intellectual	4	3.2	2	0.1	2	0.1
Emotional	15	12.1	3	5.1	12	18.5
Other	7	5.6	4	6.8	3	4.6
Rural						
Total	39,142	100.0	19,029	100.0	20,113	100.0
No disability	37,750	96.4	18,352	96.4	19,398	96.4
With a disability	1,392	3.6	677	3.6	715	3.6
Sight	698	50.1	316	46.7	382	53.4
Hearing	358	25.7	153	22.6	205	28.7
Speech	170	12.2	99	14.6	71	9.9
Physical	309	22.2	153	22.6	156	21.8
Intellectual	164	11.8	92	0.5	72	0.4
Emotional	154	11.1	82	12.1	72	10.1
Other	103	7.4	49	7.2	54	7.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.3 Types of Disability

Figure 6.1 describes the proportional distribution of the number of times a specific disability is reported by individuals in the district. The Table shows that Sight impairment is the main type of disability from which most of the disabled suffer accounting for 49.9 percent in the District. Also, 25.3 percent of PWDs suffer from hearing impairment while 22.0 suffer from physical disability. Speech impairment ranks fourth accounting for 12.0 percent followed by Emotional disability (11.1%) in the Nandom District. The least impairment is the other form of disability which cannot be classified under any form of disability or has not been well identified and this forms about seven percent (7.3%).

Figure 6.1: Populations with disability by type
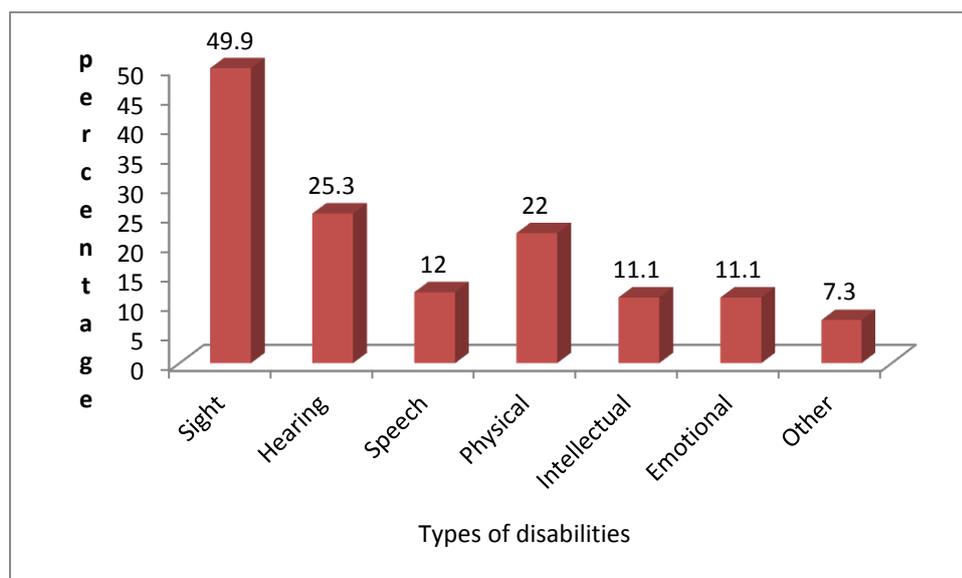
Source: Ghana Statistical Service, 2010 Population and Housing Census

6.4 Disability and Economic Activity

The 2010 population and Housing Census collected data on persons age 15 years and older with disability by economic activity status who are economically active or economically not active.

It also collected data on the various types of disability by sex, male and female. The economically active include employed and unemployed.

Table 6.2 shows that the district has 28,868 persons age 15 years and older with disability by economic activity status who are economically active or economically not active. Out of this, 65.7 percent are employed, 1.8 percent are unemployed and 32.5 percent are economically not active.

From the 28,868 persons age 15 years and older with disability by economic activity status, 27,595 (95.6%) has no disability and 1,273 (4.4%) are with disability. Furthermore, 18,341 (66.5%) of the employed are without or has no disability and 625 (49.1%) has disabilities. The unemployed with no disabilities is 500(1.8%) and that with disability is 19 (1.5%). Finally those who are economically not active and are without disability is 8,754 (31.7%), while those with disabilities are 629 (49.4%).

Out of the various types of disabilities, sight is the highest disability in the district with 661 (51.9%). Those with sight disability who are employed is 330 (49.9%), the unemployed is 15 (2.3%) and those who are economically not active is 316 (47.8%).

Hearing which is the second largest among the disability types, constitute 320 (25.1%). Those with hearing disability who are employed is 148 (46.3%), the unemployed is 4 (1.3%), and the economically not active with hearing disorders is 168 (52.5%).

 The trend of persons with disability and without disability who are employed, unemployed and economically not active among both male and female looks similar to that discussed above.

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

Sexes/Disability type	All Status		Employed		Unemployed		Economically Not Active	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Both Sexes	28,868	100.0	18,966	65.7	519	1.8	9,383	32.5
No disability	27,595	100.0	18,341	66.5	500	1.8	8,754	31.7
With a disability	1,273	100.0	625	49.1	19	1.5	629	49.4
Sight	661	100.0	330	49.9	15	2.3	316	47.8
Hearing	320	100.0	148	46.3	4	1.3	168	52.5
Speech	114	100.0	67	58.8	2	1.8	45	39.5
Physical	289	100.0	131	45.3	0	0.0	158	54.7
Intellectual	130	100.0	50	38.5	1	0.8	79	60.8
Emotional	132	100.0	72	54.5	1	0.8	59	44.7
Other	89	100.0	40	44.9	0	0.0	49	55.1
Male								
Total	13,398	100.0	9,221	68.8	229	1.7	3,948	29.5
No disability	12,800	100.0	8,893	69.5	219	1.7	3,688	28.8
With a disability	598	100.0	328	54.8	10	1.7	260	43.5
Sight	283	100.0	163	57.6	7	2.5	113	39.9
Hearing	128	100.0	71	55.5	0	0.0	57	44.5
Speech	65	100.0	37	56.9	2	3.1	26	40.0
Physical	140	100.0	66	47.1	0	0.0	74	52.9
Intellectual	73	100.0	26	35.6	1	1.4	46	63.0
Emotional	65	100.0	36	55.4	1	1.5	28	43.1
Other	46	100.0	25	54.3	0	0.0	21	45.7
Female								
Total	15,470	100.0	9,745	63.0	290	1.9	5,435	35.1
No disability	14,795	100.0	9,448	63.9	281	1.9	5,066	34.2
With a disability	675	100.0	297	44.0	9	1.3	369	54.7
Sight	378	100.0	167	44.2	8	2.1	203	53.7
Hearing	192	100.0	77	40.1	4	2.1	111	57.8
Speech	49	100.0	30	61.2	0	0.0	19	38.8
Physical	149	100.0	65	43.6	0	0.0	84	56.4
Intellectual	57	100.0	24	42.1	0	0.0	33	57.9
Emotional	67	100.0	36	53.7	0	0.0	31	46.3
Other	43	100.0	15	34.9	0	0.0	28	65.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

6.5   Disability, Education and Literacy

Education is normally used to determine the wealth of a nation. A country with few numbers of educated persons lack development. Persons with Disability are those unable to or are restricted in the performance of specific tasks/activities due to loss of some part of the body as a result of impairment of malformation (Ghana Statistical Service, 2012).

From Table 6.3, more than two thirds of the population with disability (PWDs) aged three years and older have never attended school. of 1,486, three (3) years and older, (987) representing 66.4 percent have never attended school before, 246 PWDs representing 16.6 percent have attained basic education while (102) which is 6.9 percent have attained higher education from the SHS level to the tertiary level. Only (4), 0.3 percent PWD has attained Bachelor degree.

Males PWDs who have not attended school constitute 29.5 percent and females who have not attended school account for 37.0 percent. There are (140) male PWDs representing 9.4 percent who have attained basic education and 106 females PWDs (7.1%) who have also

attained basic education. Males PWDs who have attended JHS to a higher education constitute 138 (9.3%) as compared to their female counterparts of 97 (6.5%).

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

Sex/Disability type	Total	Never	Percent	Pre-Prim	Percent	Basic	Percent	Sec/SHS and higher	Percent
Both Sexes	42,004	17,841	42.5	3,044	7.2	16,416	39.1	4,703	11.2
No disability	40,532	16,864	41.6	3,012	7.4	16,054	39.6	4,602	11.4
With a disability	1,472	977	66.4	32	2.2	362	24.6	101	6.9
Sight	746	514	68.9	11	1.5	178	23.9	43	5.8
Hearing	379	263	69.4	4	1.1	94	24.8	18	4.7
Speech	175	88	50.3	9	5.1	62	35.4	16	9.1
Physical	322	205	63.7	4	1.2	83	25.8	30	9.3
Intellectual	164	102	62.2	4	2.4	46	28.0	12	7.3
Emotional	159	95	59.7	4	2.5	47	29.6	13	8.2
Other	105	61	58.1	4	3.8	29	27.6	11	10.5
Male									
Total	20,226	7,555	37.4	1,543	7.6	8,408	41.6	2,720	13.4
No disability	19,512	7,123	36.5	1,526	7.8	8,209	42.1	2,654	13.6
With a disability	714	432	60.5	17	2.4	199	27.9	66	9.2
Sight	334	209	62.6	6	1.8	96	28.7	23	6.9
Hearing	161	106	65.8	1	0.6	42	26.1	12	7.5
Speech	102	51	50.0	7	6.9	31	30.4	13	12.7
Physical	161	97	60.2	4	2.5	42	26.1	18	11.2
Intellectual	94	61	64.9	3	3.2	21	22.3	9	9.6
Emotional	81	54	66.7	3	3.7	18	22.2	6	7.4
Other	53	31	58.5	1	1.9	13	24.5	8	15.1
Female									
Total	21,778	10,286	47.2	1,501	6.9	8,008	36.8	1,983	9.1
No disability	21,020	9,741	46.3	1,486	7.1	7,845	37.3	1,948	9.3
With a disability	758	545	71.9	15	2.0	163	21.5	35	4.6
Sight	412	305	74.0	5	1.2	82	19.9	20	4.9
Hearing	218	157	72.0	3	1.4	52	23.9	6	2.8
Speech	73	37	50.7	2	2.7	31	42.5	3	4.1
Physical	161	108	67.1	0	0.0	41	25.5	12	7.5
Intellectual	70	41	58.6	1	1.4	25	35.7	3	4.3
Emotional	78	41	52.6	1	1.3	29	37.2	7	9.0
Other	52	30	57.7	3	5.8	16	30.8	3	100.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER SEVEN
AGRICULTURE ACTIVITIES

7.1   Introduction

Ghana's economy is basically agrarian, largely due to its enormous contributions to Gross Domestic Product (GDP), general labour preoccupation, its foreign exchange earnings, food for local consumption and raw materials for the agro-based industry. The sector's contribution to GDP is about 30 percent in the 2000s (ISSER, 2011).

The objective of this chapter is to analyze agricultural households and non-agriculture households and the types of farming activities by the agricultural households.

7.2   Households in Agriculture

A greater proportion of households are into agricultural activities such as the cultivation of crops, planting of trees, rearing of animals or breeding of fish for sale and family consumption. There is a greater proportion (85.3%) of households engaged in agriculture in the district, out of which (83.7%) are into crop farming with just a few households (0.1%) engaged in fish farming. Other households are also engaged in livestock rearing and this constitutes less than 1 percent of the households in Agric.

7.2.1   Households in agriculture and non-agriculture

Out of 7,417 total households in the Nandom District, 85.3 percent are agricultural households while 14.7 percent are non-agricultural households (Figure 7.1). Out of 18,966 employed populations, persons aged 15 years and older 78.2 percent are into agriculture representing 32.2 percent (14,836) of the total population in the district. There are 50.8 percent males and 49.2 percent females employed in agriculture respectively.

The high proportion of agricultural households may be due to the fact that agriculture is the predominant occupation of the people of Nandom.

7.2.2   Households in agriculture by type of locality

Table 7.1 as indicated below shows that a greater proportion (85.3%) of households are engaged in agriculture in the district, out of which (46.4%) are in urban areas and (93.2%) rural. It is revealed from the table that more households in the rural than urban are into crop farming, tree planting, livestock rearing and fish farming.

Table 7.1: Households by agricultural activities and locality

	Total		Urban		Rural	
Type of activity	Number	Percent	Number	Percent	Number	Percent
Total Households	7,417	100.0	1,251	100.0	6,166	100.0
Households engages in Agriculture	6,329	85.3	580	46.4	5,749	93.2
Crop farming	6,205	98.0	511	88.1	5,694	99.0
Tree planting	17	0.3	1	0.2	16	0.3
Livestock rearing	3,527	55.7	295	50.9	3,232	56.2
Fish farming	9	0.1	0	0.0	9	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

7.3   Types of Farming Activities

Farming activities in the district are mainly crop farming, tree planting, fish farming and livestock rearing including poultry.

Figure 7.2 shows that a higher proportion is engaged in crop farming (98.0%), followed by livestock rearing (55.7%). Among the households, significantly low proportions are engaged in tree planting (0.3%) and fish farming (0.1%)

7.4   Types of livestock, other animals reared and keepers

Table 7.2 shows the distribution of livestock reared, number of keepers and average animal per keeper. There are 76,523 livestock with 7,107 keepers with an average of 4 animals per keeper. Among the livestock, the ruminant's category (Goat, cattle, pig, rabbit, sheep) is the highest with 57.9 percent followed by poultry (chicken, doves, ducks, guinea fowls, ostrich, turkey) 40.0 percent.

In the poultry category, out of 76,523 animals, 30.2 percent are chickens with 1,714 keepers with an average number of 11 animals per keeper, followed by Guinea fowls (8.9%) with 431 keepers and an average number of 8 animals per keeper. Other forms of poultry kept in the district all constitute (0.9%) which includes: Ducks (0.5%), Ostrich (0.1%), Doves (0.1) and Turkey 0.2 percent (Table 7.2).

Among the ruminants, the highest comprise of goats (32.9%), sheep (7.6%) and pigs (7.2%) in that order. There are 25,151 goats with 2,459 keepers and an average number of thirteen (13) animals per keeper, followed by sheep, 5,826 with 672 keepers with an average number of seven (7) animals per keeper. There are 5,542 pigs with 921 keepers with an average number of 8 animals per keeper.

Other livestock's kept in the district are grass-cutters (78), rabbits (100) and silk worm. Bee keepers are only four (4) in the district.

Fish farming is not a common activity among agricultural households in the Nandom District. According to the 2010 PHC results, only 0.1 percent of the agricultural households engage in fish farming. There are about 361 and 2 persons engaged in inland fishing and marine fishing respectively.

Fish farming is not developed or encouraging in the Nandom District despite the fact that some communities in the district lies directly on the shores of the Black Volta and other water bodies. This resource needs to be harnessed to diversify the agricultural activity in the district.

Table 7.2: Distribution of livestock, other animals and keepers

| Type of livestock | Animals | | Keepers | | Average |
	Number of Animals	Percent	Number of Keepers	Percent	Animal per Keeper
Total	76,523	100.0	7,107	100.0	4
Beehives	15	0.0	4	0.1	10
Cattle	7,801	10.2	751	10.6	13
Chicken	23,121	30.2	1,714	24.1	11
Dove	80	0.1	7	0.1	11
Duck	342	0.5	32	0.5	10
Goat	25,151	32.9	2,459	34.6	13
Grass cutter	78	0.1	6	0.1	16
Guinea Fowl	6,783	8.9	431	6.1	8
Ostrich	93	0.1	11	0.2	6
Pig	5,542	7.2	921	13.0	8
Rabbit	100	0.1	13	0.2	9
Sheep	5,826	7.6	672	9.5	7
Silk worm	13	0.0	2	0.0	0
Snail	0	0.0	0	0.0	12
Turkey	117	0.2	10	0.1	7
Other	462	0.6	65	0.9	212
Fish farming	636	0.8	3	0.0	72
Inland farming	361	0.5	5	0.1	2
Marine fishing	2	0.0	1	0.0	

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER EIGHT
HOUSING CONDITIONS

8.1   Introduction

The realization of the general wellbeing of individuals is greatly linked to the provision of safe water supply and sewerage, improved housing conditions as well as living in a conducive environment. Housing information enables planners and policy makers to formulate realistic and appropriate housing policies and design suitable programmes to meet Ghana's housing needs to reduce housing problems of quantity and quality.

Among the issues covered in this chapter includes; the stock of houses both occupied and unoccupied dwelling units, ownership or occupancy status, types of occupied dwelling units and the main materials used for the construction of the houses. The number of occupied sleeping rooms, the main source of lighting, cooking fuel and cooking spaces used by households is also analyzed. This chapter also looks at the sources of water for drinking and for other domestic purposes, type of toilet and bathing facilities for households and methods of solid and liquid waste disposal. The presence of these utilities and household facilities are essential for the survival and well-being of households. The analysis is based on occupied dwelling units only.

8.2   Housing Stock

The housing stock refers to the total number of houses in the district both occupied and vacant housing units. Out of total population of 46,040 in the Nandom District, 97.4 percent represents the total household population as illustrated in the Table 8.1 below. Out of the total number of houses (5,081) counted in the District, a greater majority (83.0%) of the houses were found in the rural areas with just a few (17.0%) of them found in the urban areas. Average household per house for the district is 6.2 which is lower than the regional (6.4) but higher than the national 4.5 respectively. Population per house in the district is 9.1 which is higher than the 8.5 at the regional level and 7.3 at the national level. The district has an average household size of 6.0 which is lower than the regional average household size of 6.2 but then higher than the national figure of 4.4 (Table 8.1).

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

Categories	Total country	Region	District	Urban	Rural
Total population	24,658,823	702,110	46,040	6,898	39,142
Total household population	24,076,327	688,333	44,827	6,616	38,211
Number of houses	3,392,745	82,293	5,081	866	4,215
Number of households	5,467,054	110,174	7,417	1,251	6,166
Average households per house	4.5	6.4	6.2	5.5	6.3
Population per house	7.3	8.5	9.1	8	9.3
Average household size	4.4	6.2	6	5.3	6.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

Differences exist between the rural and urban localities. For all indicators discussed above, namely; Average household per house, population per house and average household size, figures for the rural areas are higher than the urban area.

8.3   Type of Dwelling, Holding and Tenancy Arrangement

This section looks at the type of dwelling and security of tenancy in the Nandom District.

8.3.1   Type of dwelling

Table 8.2 shows types of occupied dwelling unit by sex of household head and type of locality. The Table shows that most households (49.5%) reside in compound houses, followed by separate houses (30.4 percent). The proportion of households dwelling in Semi-detached houses constitutes 12.2 percent and Flat/Apartments (0.4%). Dwelling units such as huts, tents, kiosks, containers and attachment to shops or offices and uncompleted buildings together constitute 7.6 percent of the total dwelling units for households.

Out of the male headed households, 50.1 percent of them live in compound houses. This is slightly higher than the female headed households (47.3%) living in compound houses. The table again reveals that there is no difference in the male and female headed household living in a flats/apartment and an improvised home (kiosk/container).

The proportion of female headed household (34.3%) living in a separate house according to the table is slightly higher than that of the male headed households (29.3%) in the same category.

From the table, it can again be observed that the proportion of household heads living in compound houses in the urban areas (59.7%) is higher than that living in the rural areas (47.4%). In addition to this, 14.3 percent of household heads live in semi-detached houses in the rural areas while that in the urban area constitute 2.2 percent. This indicates that a greater proportion of household heads in rural areas live in semi-detached houses as compared to those in urban areas.

Table 8.2:   Type of occupied dwelling unit by sex of household head and type of locality

Type of dwelling	Total country	Region	Type of Locality					
			Total		Male headed	Female headed	Urban	Rural
			Number	Percent				
Total	5,467,054	110,174	7,417	100.0	100.0	100.0	100.0	100.0
Separate house	1,471,391	33,704	2,252	30.4	29.3	34.3	31.0	30.2
Semi-detached house	391,548	9,993	907	12.2	12.9	9.9	2.2	14.3
Flat/apartment	256,355	1,400	31	0.4	0.4	0.4	1.0	0.3
Compound house (rooms)	2,942,147	58,161	3,669	49.5	50.1	47.3	59.7	47.4
Huts/buildings (same compound)	170,957	3,715	271	3.7	3.5	4.4	3.6	3.7
Huts/buildings (different compound)	36,410	1,853	234	3.2	3.2	2.9	0.2	3.7
Tent	10,343	283	24	0.3	0.3	0.4	0.1	0.4
Improvised home (kiosk/container etc.)	90,934	39	1	0.0	0.0	0.0	0.0	0.0
Living quarters attached to office/shop	20,499	261	21	0.3	0.3	0.2	1.6	0.0
Uncompleted building	66,624	611	6	0.1	0.1	0.0	0.4	0.0
Other	9,846	154	1	0.0	0.0	0.1	0.1	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.3.2 Holding and tenancy arrangement

Table 8.3 as illustrated below, shows the ownership status of dwelling by sex of household head and type of locality. Out of the total households of 7,417, 6, 501 are owned by a household member. Of this, 5,278 are male headed with 1,233 being female headed.

In addition to this, 608 households are being purchased of which 8 are male headed and 6 female headed. Three hundred and Fifty Three (353) households are owned by a private employer and of this, 336 are male headed while the remaining is being headed by females.

From the table, it can be realised that, more houses are owned by a household member in the rural areas (5,771) than there are in the urban areas (730) in the district. Also more houses are being purchased in the rural areas (9) as compared to that of the urban areas (5).

Table 8.3: Ownership status of dwelling by sex of household head and type of locality

Categories	Total Country	Region	Total Number	Total Percent	Male headed	Female headed	Urban	Rural
Total	5,467,054	110,174	7,417	100.0	5,796	1,621	100.0	100.0
Owned by household member	2,883,236	91,264	6,501	87.6	5,278	1,223	58.4	93.6
Being purchased (e.g. mortgage)	45,630	608	14	0.2	8	6	0.4	0.2
Relative not a household member	851,630	5,362	171	2.3	85	86	1.2	2.5
Other private individual	1,439,021	9,534	601	8.1	336	265	34.9	2.7
Private employer	83,610	353	28	0.4	17	11	1.0	0.2
Other private agency	21,123	273	5	0.1	4	1	0.2	0.0
Public/Government ownership	118,804	2,410	85	1.1	64	21	3.8	0.6
Other	24,000	370	12	0.2	4	8	0.2	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4   Construction Materials

This section looks at the main materials use for the construction of outer walls, roofing and floors of dwelling units in the Nandom District.

8.4.1   Main construction materials for the outer walls

The main construction materials use for outer walls are cement, concrete and mud/mud bricks or earth. As shown in Table 8.4, the main construction material of greater use for the outer walls of dwelling units in the district are mud bricks or earth representing 77.4 percent and cement blocks or concrete 19.6 percent. The situation in terms of the main construction material for the district remains same for that of the region. Also 4 and 2 houses in the district used Bamboo and palm leaf/thatch grass (raffia) as the main construction material for the outer wall of dwelling units.

Moreover, the usage of mud brick/earth and cement blocks/concrete as the main construction material for the outer wall of dwelling units in the district is higher in the rural areas (85.1%) compared to the urban areas (48.1%) as illustrated in Table 8.4. On the other hand, dwelling units with outer walls constructed with cement block/concrete is higher in urban (54.2%) localities than rural areas (12.2%).

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

Material for Outer wall	Total country	Region	Type of Locality		Urban	Rural
			Total			
			Number	Percent		
Total	5,817,607	118,292	7,841	100.0	100.0	100.0
Mud brick/earth	1,991,540	88,739	6,070	77.4	41.8	85.1
Wood	200,594	883	45	0.6	0.4	0.6
Metal sheet/slate/asbestos	43,708	568	53	0.7	1.7	0.5
Stone	11,330	230	29	0.4	0.7	0.3
Burnt bricks	38,237	408	27	0.3	0.5	0.3
Cement blocks/concrete	3,342,462	24,924	1,538	19.6	54.2	12.2
Landcrete	104,270	1,159	38	0.5	0.6	0.5
Bamboo	8,206	87	4	0.1	0.0	0.1
Palm leaf/thatch (grass)/raffia	38,054	888	2	0.0	0.0	0.0
Other	39,206	406	35	0.4	0.1	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.2   Main construction material for floor

Materials used for the floor of a house affect the general appearance, quality and health status of a house. Some floors are easily contaminated and others are difficult to clean or disinfect. As shown in Table 8.5, the main construction material used for the floors in the district are largely made of earth/mud (56.7%), followed by cement or concrete (41.8%). Floors made of Stone (0.4%), Ceramic/Porcelain/Granite/Marble tiles (0.4%) and others (0.5). The use of vinyl and terrazzo tiles as construction material for the floor in the district recorded 0.0%.

In the urban areas, the use of cement/concrete as main materials for floor is higher than in the rural areas, with earth/mud been the preferred main material for the floor of dwelling units in rural areas.

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

Materials for the floor	Total country	Region	Type of Locality		Urban	Rural
			Total			
			Number	Percent		
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
Earth/mud	872,161	42,447	4,209	56.7	17.7	64.7
Cement/concrete	4,255,611	65,714	3,104	41.8	78.8	34.3
Stone	32,817	310	31	0.4	1.7	0.2
Burnt brick	6,537	67	6	0.1	0.2	0.1
Wood	52,856	8	0	0.0	0.0	0.0
Vinyl tiles	57,032	176	3	0.0	0.2	0.0
Ceramic/porcelain/granite/marble tiles	88,500	700	29	0.4	1.1	0.2
Terrazzo/terrazzo tiles	85,973	238	1	0.0	0.1	0.0
Other	15,567	514	34	0.5	0.2	0.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.4.3   Main material for roofing

The distribution of construction materials for roofing shows in Table 8.6 that metal sheets is the main material used for roofing constituting 73.1 percent. The other two main materials used for roofing are thatch/palm leaf or raffia (4.4%) and wood (1.6%). From the table, it can again be realized that the use of metal sheets for roofing is higher in the urban (92.9%) areas compared to the rural areas (68.8%). However, the use of mud/mud bricks/earth for roofing is slightly higher in the rural areas (21.8%) than in the urban areas (4.0%).

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

Main Roofing material	Total country	Region	Type of Locality Total Number	Type of Locality Total Percent	Urban	Rural
Total	5,817,607	118,292	7,841	100.0	100.0	100.0
Mud/Mud bricks/earth	80,644	14,910	1,464	18.7	4.0	21.8
Wood	45,547	1,399	123	1.6	1.0	1.7
Metal sheet	4,152,259	91,046	5,733	73.1	92.9	68.8
Slate/asbestos	759,039	245	8	0.1	0.1	0.1
Cement/concrete	141,072	717	48	0.6	1.3	0.5
Roofing tile	31,456	362	29	0.4	0.2	0.4
Bamboo	71,049	283	26	0.3	0.1	0.4
Thatch/palm leaf or raffia	500,606	8,394	342	4.4	0.1	5.3
Other	35,935	936	68	0.9	0.3	1.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.5   Room Occupancy

The number of sleeping rooms a household has provides an indication of the extent of crowding in household. More importantly, crowded living conditions may increase the risk of the spread of infectious diseases. As indicated earlier, the average household size for the district is 6.2 persons.

Table 8.7 indicates that, out of the total households, 18.7 percent occupy one sleeping room, 31.4 percent occupy two sleeping rooms, 25.4 percent occupy three sleeping rooms and the rest occupy four to over nine sleeping rooms. Of the single member households, 84.0 percent occupy one sleeping room, 11.7 percent occupy two sleeping rooms, and 2.5 percent occupy three sleeping rooms while the rest occupy four to over nine sleeping rooms. Also, of the two member household size, 50.1 percent occupy one sleeping room, 40.2 percent occupy two sleeping rooms and 8.0 percent use three sleeping rooms. Also with regards to a three member household, 32.2 percent occupy one sleeping room, 46.0 percent occupy two sleeping rooms and 14.5 percent occupy three sleeping rooms. Households with members ten and above, 2.7 percent occupy one sleeping room, 11.1 percent occupy two sleeping rooms, and 21.4 occupy three sleeping rooms while 25.1 percent occupy four sleeping rooms. Greater proportion of household members occupies one, two or three sleeping rooms in the district.

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

House-hold size	Total Number	Total Percent	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms	Seven rooms	Eight rooms	Nine rooms or more
Total	7,417	100.0	18.7	31.4	25.4	12.8	5.2	3.0	1.3	1.0	1.2
1	443	100.0	84.0	11.7	2.5	0.7	0.5	0.5	0.0	0.0	0.2
2	487	100.0	50.1	40.2	8.0	1.2	0.2	0.0	0.2	0.0	0.0
3	661	100.0	32.2	46.0	14.5	3.8	1.8	0.9	0.3	0.2	0.3
4	797	100.0	25.2	41.8	22.2	7.8	1.6	0.6	0.5	0.1	0.1
5	1,002	100.0	14.2	40.1	29.8	10.2	2.6	1.0	0.8	1.2	0.1
6	942	100.0	10.8	36.8	32.6	12.7	3.7	2.1	0.5	0.4	0.2
7	992	100.0	4.1	33.6	34.6	15.7	6.7	2.4	1.5	1.0	0.4
8	721	100.0	4.6	24.4	34.3	19.8	9.3	3.5	1.7	1.4	1.1
9	506	100.0	2.6	18.2	35.4	23.5	8.3	5.3	2.2	2.8	1.8
10+	866	100.0	2.7	11.1	21.4	25.1	13.7	12.1	4.7	2.5	6.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6 Access to Utilities and Household Facilities

The presence of household utilities and facilities promotes the general wellbeing of the members of the households. It creates convenience, safety and makes household's expenditure economical. This section looks at the sources of lighting, cooking fuel and cooking space in the Nandom District.

8.6.1 Main source of lighting

The importance of lighting in man's life can never be over-emphasized due to its demand and usage. The main sources of lighting as provided in the 2010 PHC are electricity (mains and private generator), kerosene lamp, gas lamp, solar energy and candle.

Table 8.8 as indicated below shows that more dwellings in the urban areas (75.9%) than rural areas (17.1%) are being connected to electricity from the mains. In addition to this, a greater proportion of dwellings in the rural areas use kerosene lamp and torch light as source of light as compared to that in the urban areas.

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

| Main source of light | Total country | Region | Type of Locality | | | |
| | | | Total | | | |
			Number	Percent	Urban	Rural
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
Electricity (mains)	3,511,065	34,044	2,002	27.0	75.9	17.1
Electricity (private generator)	36,142	613	38	0.5	0.7	0.5
Kerosene lamp	971,807	21,455	3,074	41.4	19.7	45.9
Gas lamp	9,378	303	21	0.3	0.1	0.3
Solar energy	9,194	804	52	0.7	0.2	0.8
Candle	41,214	333	9	0.1	0.2	0.1
Flashlight/torch	858,651	49,606	1,999	27.0	2.7	31.9
Firewood	13,241	1,332	175	2.4	0.3	2.8
Crop residue	4,623	361	41	0.6	0.0	0.7
Other	11,739	1,323	6	0.1	0.1	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 8.1 indicates the sources of lighting used by dwelling units in the district. Greater proportion of dwelling units use kerosene lamp as their main source of lighting which constitutes 41.4 percent, followed by electricity (mains) and flashlight/torch which both constitute 27.0 percent each and firewood with 2.4 percent. It is interesting to note from the table that some people use crop residues as source of lighting and this constitutes 0.6 percent in terms of usage in the district.

8.6.2 Main source of cooking fuel

Table 8.9 indicates that, of the total households, 66 households (0.9%) do not cook. Among the households that cook, 80.2 percent households use wood as the major source of fuel for cooking followed by charcoal (16.3%) and gas (1.4%). Electricity, kerosene, crop residue, animal waste and other sources together make up 1.2 percent. There are more people in the rural (92.7%) than the urban (18.6%) areas using wood as their main source of cooking fuel. It is interesting to note however from the table that, a greater proportion of households in the urban areas still use charcoal (72.4%) as their main source of cooking fuel instead of gas (5.2%).

Table 8.9: Main source of cooking fuel

Source of cooking fuel	Total country	Region	Type of Locality Total Number	Type of Locality Total Percent	Urban	Rural
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
None, no cooking	306,118	2,269	66	0.9	2.5	0.6
Wood	2,197,083	80,916	5,949	80.2	18.6	92.7
Gas	996,518	4,553	103	1.4	5.2	0.6
Electricity	29,794	400	24	0.3	0.3	0.3
Kerosene	29,868	278	10	0.1	0.6	0.0
Charcoal	1,844,290	20,921	1,208	16.3	72.4	4.9
Crop residue	45,292	720	56	0.8	0.2	0.9
Saw dust	8,000	63	1	0.0	0.1	0.0
Animal waste	2,332	20	0	0.0	0.0	0.0
Other	7,759	34	0	0	0	0

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.6.3   Cooking space used by household

Cooking space is among the important facilities of a household. This section reveals whether households do cook in the separate space, shared cooking space; cook in the opening or in their rooms. The distribution of cooking spaces is presented in Table 8.10 below. Of the 7,417 households in the Nandom District, 52.7 percent declared having a cooking space that is separate for exclusive use of the household while 27.2 percent cooked in the open space of their compounds. Households who cooked on the veranda (11.4%) is higher than those who shared separate rooms with other households (2.4%). Of the cooking spaces used by households, 2.8 percent households did not have any cooking space.

The table further indicates that there more rural households having a separate room for exclusive use of household (57.7%) compared to urban households (28.1%). In addition to this, a greater majority of rural households cook in the open space of their compounds as compared to their urban counterparts.

Table 8.10: Cooking space used by households

Source of cooking space	Total country	Region	Type of Locality Total Number	Type of Locality Total Percent	Urban	Rural
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
No cooking space	386,883	4,511	207	2.8	3.0	2.7
Separate room for exclusive use of household	1,817,018	46,063	3,910	52.7	28.1	57.7
Separate room shared with other household(s)	410,765	2,849	176	2.4	1.0	2.6
Enclosure without roof	117,614	1,967	139	1.9	0.5	2.2
Structure with roof but without walls	349,832	1,440	99	1.3	0.0	1.6
Bedroom/hall/living room)	74,525	1,190	21	0.3	0.8	0.2
Verandah	1,173,946	19,012	842	11.4	39.2	5.7
Open space in compound	1,115,464	32,914	2,015	27.2	27.3	27.1
Other	21,007	228	8	0.1	0.0	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

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

Safe water is life and its importance in health and sanitation cannot be over-emphasized. The affordability and accessibility to potable drinking water is an important aspect of the health of household members.

8.7.1   Main source of drinking water for household

The main sources of water for drinking in the district are boreholes representing 72.1 percent, followed by pipe borne outside dwelling (9.8%). About 6.7 percent of households use pipe borne inside dwelling water for drinking and 4.5 percent of households use public taps/stand pipes for drinking as indicated in Table 8.11.

The table shows that majority of the households in the rural areas (80.6%) depend on boreholes/pump/tube wells as their source of drinking water with just a few in the urban sector (30.7%). Comparatively, there are more households in the urban areas than that of the rural areas who depend on pipe borne inside dwelling and pipe borne outside dwelling as source of drinking water.

8.7.2   Main source of water for other domestic use of household

The pattern of sources of water for other domestic uses by households is similar to their sources of drinking water with the exception of sachet water. A sizable proportion of households depend on boreholes (71.3%), pipe water (20.5%) and protected well (3.2%) as source of water for other domestic use. Most communities along the river/stream (2.2%) use it as their major source of water for other domestic uses. Households that depend on rain water, protected spring and unprotected well for other domestic uses represents 0.1, 0.2 and 2.2 percent respectively.

Table 8.11: Main source of drinking water for household

| | | | Type of Locality | | | |
| | | | Total | | | |
Sources of water	Total country	Region	Number	Percent	Urban	Rural
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
Pipe-borne inside dwelling	790,493	5,933	497	6.7	33.3	1.3
Pipe-borne outside dwelling	1,039,667	12,542	727	9.8	22.1	7.3
Public tap/standpipe	712,375	4,807	337	4.5	9.3	3.6
Bore-hole/pump/tube well	1,267,688	70,759	5,351	72.1	30.7	80.6
Protected well	321,091	4,011	232	3.1	3.4	3.1
Rain water	39,438	172	0	0.0	0.0	0.0
Protected spring	19,345	368	18	0.2	0.2	0.2
Bottled water	20,261	50	2	0.0	0.1	0.0
Sachet water	490,283	823	2	0.0	0.0	0.0
Tanker supply/vendor provided	58,400	302	4	0.1	0.0	0.1
Unprotected well	112,567	1,719	139	1.9	0.3	2.2
Unprotected spring	12,222	287	9	0.1	0.0	0.1
River/stream	502,804	7,037	92	1.2	0.6	1.4
Dugout/pond/lake/dam/canal	76,448	1,344	7	0.1	0.0	0.1
Other	3,972	20	0	0.0	0.0	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

From the table, it can further be observed that a greater proportion of households in the rural areas (79.5%) of the district use borehole/pump/tube well for other domestic purposes as compared to the urban areas (30,8%). Majority of households in the urban sector use pipe borne inside dwelling for their other domestic purposes as compared to that of the rural areas.

Table 8.12: Main source of water for other domestic use of household

Sources of water	Total country	Region	Type of Locality Total Number	Type of Locality Total Percent	Urban	Rural
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
Pipe-borne inside dwelling	905,566	5,864	511	6.9	33.7	1.4
Pipe-borne outside dwelling	1,089,030	12,144	696	9.4	21.7	6.9
Public tap/standpipe	704,293	4,314	312	4.2	8.6	3.3
Bore-hole/pump/tube well	1,280,465	68,035	5,287	71.3	30.8	79.5
Protected well	465,775	5,057	238	3.2	3.8	3.1
Rain water	39,916	360	5	0.1	0.0	0.1
Protected spring	18,854	301	18	0.2	0.2	0.2
Tanker supply/vendor provided	100,048	316	3	0.0	0.0	0.0
Unprotected well	152,055	1,897	163	2.2	0.6	2.5
Unprotected spring	15,738	330	9	0.1	0.0	0.1
River/stream	588,590	8,759	162	2.2	0.6	2.5
Dugout/pond/lake/dam/canal	96,422	2,546	9	0.1	0.0	0.1
Other	10,302	251	4	0.1	0.0	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.8 Toilet and bathing facilities

Access to toilet and bathing facilities enhances the livelihood of people and also improves upon good sanitation and hygiene practices in various households in the district and the country as a whole.

8.8.1 Toilet facilities used by households

Table 8.13 indicates that out of the total households, 15.0 percent of the households use Pit Latrine, 6.9 percent use KVIP and 1.9 percent depend on WC. However, comparatively high proportions (70.5%) of households have no toilet facilities and defecate in the bush. This can be dangerous especially in the night as people venture into the bush and during rainy season as the residue may be washed by run offs into the main streams which are sources of water supply for some households.

From the table below, it can be realized that, 75.7 percent of the households in the rural areas have no toilet facilities and thus defecate in the bush/beach/field as compared to that of 45.2 in the urban areas. Furthermore, 15.5 percent of the households in the rural areas use pit latrines while that of the urban areas is 12.5 percent.

Table 8.13: Toilet facilities used by households by locality

Toilet facility	Total country	Region	Type of Locality Total Number	Type of Locality Total Percent	Urban	Rural
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
No facilities (bush/beach/field)	1,056,382	80,321	5,232	70.5	45.2	75.7
W.C.	839,611	3,440	140	1.9	6.1	1.0
Pit latrine	1,040,883	6,853	1,114	15.0	12.5	15.5
KVIP	572,824	4,929	509	6.9	23.4	3.5
Bucket/pan	40,678	112	4	0.1	0.0	0.1
Public toilet WC/KVIP/Pit Pan etc.)	1,893,291	14,016	405	5.5	12.6	4.0
Other	23,385	503	13	0.2	0.2	0.2

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.8.2 Bathing facility used by household

Bathing facilities, indicated in Table 8.14, shows that 50.9 percent of households own bathrooms for exclusive use, followed by 16.2 percent of households who share separate bathrooms in the same house. It is again shown in the table that 0.6 percent of households use bath rooms in other houses. Households using private open cubicles, open space around house and those who share open cubicles are 14.1, 6.9 and 10.8 percent respectively. A relatively low proportion of households use public bath house (0.4%).

A greater proportion of the households in the rural areas (53.2%) have bathrooms for exclusive use as compared to those in the urban areas (39.4%). There are more private open cubicles used for bathing by households in the rural areas as compared to that of the urban areas.

Table 8.14: Bathing facility used by household by locality

Bathing facility	Total country	Region	Type of Locality Total Number	Total Percent	Urban	Rural
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
Own bathroom for exclusive use	1,535,392	47,176	3,775	50.9	39.4	53.2
Shared separate bathroom in the same house	1,818,522	23,638	1,198	16.2	31.3	13.1
Private open cubicle	381,979	11,927	1,039	14.0	7.0	15.4
Shared open cubicle	1,000,257	11,561	802	10.8	13.9	10.2
Public bath house	140,501	1,643	30	0.4	0.2	0.5
Bathroom in another house	187,337	898	46	0.6	1.6	0.4
Open space around house	372,556	12,856	513	6.9	6.3	7.0
River/pond/lake/dam	14,234	180	8	0.1	0.2	0.1
Other	16,276	295	6	0.1	0.2	0.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.9 Method of Waste Disposal

8.9.1 Method of solid waste disposal

Table 8.15 shows that in the Nandom District, most households 49.7 percent dispose of their solid waste indiscriminately while 21.0 percent households dispose their solid waste in open space at public dumps. The proportions of households that have their solid waste collected or burned are 8.8 and 6.2 percent. Households that buried their solid waste constitute 8.1 percent.

A greater proportion of households in the rural than urban areas dispose of their solid indiscriminately. This is to say that, there are more urban households (36.5%) that dispose of their solid waste into a public dump as compared to that of the rural, 17.8 percent.

Table 8.15: Method of rubbish disposal by household by locality

Method of solid waste disposal	Total country	Region	District Total Number	District Total Percent	Urban	Rural
Solid Waste						
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
Collected	785,889	5,123	656	8.8	2.5	10.1
Burned by household	584,820	6,518	464	6.3	13.4	4.8
Public dump (container)	1,299,654	13,969	313	4.2	2.1	0.8
Public dump (open space)	2,061,403	40,538	1,554	21.0	36.5	17.8
Dumped indiscriminately	498,868	39,635	3,689	49.7	24.1	54.9
Buried by household	182,615	3,515	598	8.1	2.1	9.3
Other	53,805	876	143	1.9	0.2	2.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

8.9.2 Method of liquid waste disposal by household

Table 8.16 again shows that, more than half of the households (55%) throw their liquid waste onto the street/outside of their homes. Another 30.1 percent of households throw their liquid waste onto the compounds of their homes, while 8.4 percent throw their liquid waste through drainage systems into a gutter. Households that dispose their liquid wastes through sewerage systems and drainage systems into a pit are 1.1 percent and 2.9 percent respectively.

From the table, it can be revealed that, the predominant method of liquid waste disposal in the rural (64.4%) and urban (64.2%) areas is by throwing the liquid waste onto the street/ outside. However, just a few urban (5.4%) than rural (1.4) households throw their liquid waste through a drainage system into the gutter.

Table 8.16: Method of liquid waste disposal by household by locality

Method of liquid waste disposal	Total country	Region	Type of locality Total Number	Type of locality Total Percent	Urban	Rural
Liquid Waste						
Total	5,467,054	110,174	7,417	100.0	100.0	100.0
Through the sewerage system	183,169	1,746	82	1.1	1.3	1.1
Through drainage system into a gutter	594,404	3,573	154	2.1	5.4	1.4
Through drainage into a pit (soak away)	167,555	3,633	216	2.9	6.3	2.2
Thrown onto the street/outside	1,538,550	71,344	4,764	64.2	64.4	64.2
Thrown into gutter	1,020,096	3,958	82	1.1	2.8	0.8
Thrown onto compound	1,924,986	25,348	2,076	28.0	19.6	29.7
Other	38,294	572	43	0.6	0.2	0.7

Source: Ghana Statistical Service, 2010 Population and Housing Census

CHAPTER NINE
SUMMARY OF FINDINGS, CONCLUSIONS AND POLICY IMPLICATIONS

9.1 Introduction

As far back as 1969, the Government of Ghana recognized that the "population of Ghana is the nation's greatest resource". It is both the instrument and objective of national development. Government also explicitly recognized the reciprocal relationship between population and development (ISSER, 2011).

An understanding of the population, its characteristics and dynamics, is therefore crucial for realistic development planning. It supports public and private sector planning and policy formulation, particularly in areas such as education, housing, transport, medical and social services.

This chapter presents a summary of the findings, conclusion and policy implications of the previous 8 chapters based on analysis of selected topics of the 2010 Population and Housing Census for Nandom District.

9.2 Summary of Findings

Population size, composition and age-sex structure

Population, size and composition

The population of Nandom District is 46,040 in 2010. There are 22,295 male population representing 48.4 percent and 23,745 females constituting 51.6 percent.

Of the 11 MMDAs in Upper West Region, Nandom District has 6.5 percent share of the regional population. The population density of Nandom District is 114 persons per square kilometer.

Age-sex structure

The age structure of the district follows the regional and the national pattern. It is skewed towards the youth. The highest proportion of the population is in the 0-4 year age group constituting 12.7 percent and declines with age such that the oldest age group 95-99 years is the smallest proportion (0.1%) of the population.

Nandom District's population has a youthful structure, with a broad base consisting of large numbers of children and an apex of a small number of elderly persons.

The total age dependency ratio of the district is 82.8 lower than that of the Region but higher than the national dependency ratio of 75.6.

Fertility

The total fertility rate for the district is 3.2 lower than the regional figure of 3.5. General Fertility Rate of the district is 88.0 per 100 females (15-49) lower than the region (97.4) and the Crude Birth Rate is 20.7 per hundred females which are also lower than the regional figure of 23.1.

Mortality

Out of the total number of 48,292 children ever born to women 12 years and older, 82.1 percent children survived while 17.9 percent children died.

In Nandom District, the household death accounted 420 with a CDR of 9.0 lower than the regional figure (9.4). Out of the total household deaths of 420, 7.9 Percent were caused by accidents/homicides or suicide and 92.1percent were by other forms of death.

Migration

Out of the total population of 46,040 in the Nandom District, 2,050 people are migrants, of this total 21.9 percent were born elsewhere in the Upper West Region while 55.3 percent were born elsewhere in other regions of Ghana. Moreover, 21.1 percent of migrants have lived in the Nandom District for 1-4 years while 24.0 percent have resided in the district for 20 years and above. Migrants born elsewhere in other are more in the Ashanti Region (23.3%) as compared to the Volta Region (1.4%).

Household size, structure and composition

There are 7,417 households in the district. 16.5 percent of household members in the Nandom District are heads of households; with 26.7percent male and 7.0 percent females. Average household size in the district is 6.2 lower than the region (6.4).

Extended family system which is routed in cultural beliefs is gradually giving way to the nuclear family system in Nandom district. The proportion of households in a typical nuclear family system in the district is 23.4 percent lower than that of the extended family system of 49.5 percent. This indicate that there more households in the District still living in an extended family system than the nuclear family system.

Marital status

Greater proportion of the population 12 years and older are married (48.3%) while those who have never married constitute 40.2 percent. In addition, 10.0 percent have married before but at the time of the census were separated, divorced or widowed. Higher proportion of females 48.4 percent than males 48.1 percent are married.

The analysis indicates that 74.8 percent of the population in the marriage group has attained some level of education from basic to higher level whereas 25.2 percent have no education.

People who are never married forms the highest proportion in both economically active (62.8%) and economically not active (72.1%) population. Furthermore, those who are married and are economically active constitute 61.2 percent and the economically not active married persons 31.8 percent.

Nationality

About nine out of every ten persons in Nandom District are Ghanaian by birth, 2.2 percent has dual nationality, 0.7 percent is Ghanaian by naturalization, 0.5 percent is from Africa and 0.5 percent is the other parts of the world.

Religious affiliations

A greater proportion of the populations profess the Christian faith (85.7%) with Islam (6.6%) and then traditionalists (1.0%). Among the Christians, the Catholics form the largest group

with 84.1 percent. However, 2.0 percent of the population indicated they did not subscribe to any religion.

Literacy

In relation to literacy, 49.02 percent of the district's population 11 years and older are literate whiles 50.9 percent are not literate. Majority of the population are literates in English and Ghanaian language (56.1%) and English only (39.0%)

Education

Again, 55.3 percent are currently attending basic school, higher than 32.9 percent who have attended basic school in the past. There is a tremendous decline in the proportion of people who are currently attending JHS (22.1%) in the District as compared to those now in SSS/SHS (7.5%).

In addition to this, 1.0 percent is currently attending tertiary level of education while 5.2 have attended tertiary level of education in the past. The populations of males (1.1%) who are currently having Tertiary education are more than females 0.8 percent. Also the proportion of males (7.0%) who attained tertiary education in the past is again more than that of the females 3.1 percent.

Economic characteristics

About 67.5 percent of the population is economically active whilst 32.5 are economically not active. The proportion of males (70.5%) is slightly higher than females (64.9%) who are economically active. Moreover, 97.3 percent of the economically active populations are employed while the unemployed make up 2.7 percent.

The highest proportion of economically not active persons is in the 15-19 (62.1%) year age category, and that of the economically active falls within the age groups of 20-34.

A very high proportion (78.3%) of employed persons are engaged in skilled agricultural, forestry and fishery work with just a few into crafts and trade (9.6%) and service and sales (4.1%). Agriculture forestry and fishing, constitutes the largest industry employing 78.2 percent of the workforce aged 15 years and older.

Information communication technology

There is a little or limited usage of mobile phones, internet, household fixed telephone lines and desktop or laptop computers in the Nandom District.

Out of the total population of 32,052, 21.0 percent of the population 12 years and older own mobile phones while 1.7 percent uses internet facility. Furthermore, 2.0 percent of total household own a desktop or laptop computers with just 1.0 percent of households also having fixed telephone lines.

Disability

There are 1,516 persons with some form of disability representing 3.3 percent of the total population in the Nandom District. Out of the male as well as that of the female population in the district, both sexes have a disability of 3.3 percent indicating that there is no difference between those with disability who are male and that which are females. Also, With reference to the type of disability, sight impairment is the most common constituting 49.9 percent, followed by hearing impairment (25.3%) and physical disability 22.0 percent.

The economically active PWDs constitute 50.6 percent whilst 49.4 percent are economically not active. Out of the total population of persons with disabilities, 65.7 percent are employed, 1.8 percent are unemployed and 32.5 percent are economically not active.

About 66.4 percent of PWDs have never attained any educational level. 16.6 percent have attained basic education and 0.9 percent has attained SSS/SHS education. Only 0.3 percent has Bachelor's Degree.

Agriculture

Out of 12,923 total households in the Nandom District, 85.3 percent are agricultural households while 14.7 percent are none-agricultural households.

A higher proportion is engaged in crop farming (98.0%), followed by livestock rearing (55.7%). Among the households, significantly low proportions engaged in tree planting and fish farming with 0.3 percent and 0.1 percent respectively.

Housing conditions

Housing stock

There are 44,827 dwelling units in Nandom District, constituting 6.5percent of total houses in the region.

Average household per house is 6.2 lower than the regional figure (6.4) and higher than the national figure (4.5). Population per house in the district is 9.1 higher than the regional figure of 8.5 and the national level (7.3).

The majority (49.5%) of the population in Nandom District lives in compound houses and this is typical of most rural areas. This is followed by separate houses with 30.4 percent, Semi-detached houses constitute (12.2%) and Flat/Apartments 0.4 percent.

Out of the 7,417 households in the district, 87.6 percent are owner occupied, followed by dwelling units owned by other private individuals accounting for 8.1 percent and the rest accounting for 4.3 percent.

Materials for housing construction

The quality of dwellings in the district and access to amenities are low. The main construction material used for the outer walls of dwelling units is mud bricks or earth (77.4%), followed by cement blocks or concrete (19.6%) and the others accounting for 3.0 percent.

The distribution of construction materials for roofing shows that metal sheets is the main material used constituting 73.1 percent. Mud/mud bricks/earth is also widely used in roofing in the district and this constitutes 18.7 percent.

The main construction material used for the floors in the District are largely made of earth or mud (56.7%) followed by cement/concrete (41.8%). There is little use of floors made of Stones (0.4%), burnt bricks (0.1%) and Ceramic/Porcelain/Granite/Marble tiles (0.4%).

Number of rooms

The average household size for the district is 6.2 persons. Out of the total households, 18.7 percent occupies one sleeping room, 31.4 percent occupy two sleeping rooms, 25.4 percent occupy three sleeping rooms and the rest occupy four to over nine sleeping rooms.

Main source of lighting

Majority of the households in the district use Kerosene lamp (44.4%) and flashlight/torch (27.0%) as their main source of lighting. Furthermore, 27.0 percent of the households in the district use electricity (mains) with just a few households using firewood (2.4%) and crop residues (0.6%) as their source of light.

Main source of cooking fuel

Wood is the main source of fuel for cooking in District (80.2%), followed by charcoal (16.3%) and gas (1.4%). Electricity, kerosene, crop residue, animal waste and other sources together constitute 1.2 percent. Nevertheless, 0.9 percent of the households do not cook.

Cooking space for households

A little above half (52.7%) of the 7,417 households has a cooking space that is separate for exclusive use of the household. The rest of the households either cook in the open space in the compound, share separate rooms with other households or use the verandah.

Main source of drinking water and for domestic purposes

A greater proportion of households (72.1 %) depend on borehole/pump/tub well as their main source of drinking water followed by pipe-borne(inside dwelling and outside dwelling), 16.5 percent. Households that drink from unprotected wells constitute 1.9 percent.

 Sources of water for other domestic purposes are not quite different from that for drinking.

Toilet facilities

Majority of households, 23.8 percent use public toilet (WC, KVIP, and Pit Latrine). However, comparatively high proportions, 70.5 percent of the households have no toilet facilities and thus defecate in the bush/open space.

Bathing facilities

About 50.9 percent of households own bathrooms for exclusive use whereas 16.2 percent of households who share separate bathrooms in the same house. Furthermore, 0.1 percent of households located along the Lake use it for bathing.

Method of solid and liquid waste disposal

In the District, most households (49.7%) dispose their solid waste indiscriminately with just a few (21.0%) disposing them in a public dump (open space). The proportions of households having their solid waste collected are (8.8%), burned (6.3%) and buried (8.1 %).

Significant proportions of households throw their liquid waste onto the street/outside (64.2%) and the compound (28.0%) of their homes. Another 2.9 percent of households throw their liquid waste through a drainage system into a pit (soak away), while 2.1 percent throw their liquid waste into gutters.

9.3   Conclusion and Policy Implications

Ghana's current economic status as a lower middle-income country needs people with the relevant skills to manage its affairs.

The high proportion of non-literate population (50.9%) in the District impedes the dissemination of information through the print media and therefore hinders socio-economic

development in the District. It further worsens the poverty situation in the district since most households are unable to meet their basic needs due to low income levels. Therefore, there should be increase in the numbers of people who attend secondary and tertiary education. Conscious effort must be made to bridge the gender gap at the higher levels of education. Girl child education should be given the necessary attention especially at the higher levels of education in the district. Moreover, functional literacy, through the Non-Formal Education under the Ministry of Education should be enforced in the district and resources provided to reduce the high illiteracy rate in the district.

Nandom District shares borders with Burkina Faso, However very low proportion of the population are literate in French and English only (0.1%) and then French and any Ghanaian Language (0.4%). The compulsory teaching of French in basic schools should be enforced to produce more literates in French to enhance effective communication with their neighbouring countries.

The era of social change and economic development has an impact on marital status and the attitude of persons to marriage. The fact that 5.6 percent of the populations aged 12-14 years are already married is an indication that early marriage is still being practiced in the Nandom District. The consequence of this early marriage is child and maternal mortality since mothers are not physiological matured to bring forth children.

ICT access and usage is very low in the district. It is recommended that the District Assembly should increase investment in ICT infrastructure and services. In order to increase the use of internet, the District Assemblies in collaboration with community organizations and development partners should set up internet centers in communities, schools, and the Assembly's premises to increase access and usage. This will make it possible for the populations to be linked with the rest of the region, Ghana and beyond, and tap into the enormous developmental opportunities that internet usage brings.

Skills development training centers should be built and equipped by the government in the district to train PWDs in various skills that will make them more employable and reduce their vulnerability and enable them to live equally higher quality lives. The Ghana Education Trust Fund (GETFund) and various non-governmental organizations (NGOs) in addition to the Disability Common Fund could be funding sources for such support services for PWDs

The Nandom District being a border District has significant proportion of foreigners, mainly Fulani Nomads, who take advantage of the fertile land in the district to graze their animals. Their activities should be monitored to preserve the fast degrading environment resulting from their activities. Deforestation and its negative effects on climate change require that tree growing be encouraged. Also, livestock rearing and fish farming in the district require effective promotion beyond what currently exists in order to improve the nutritional status of people in the district. The youth should be trained and encouraged to go into agriculture and not migrate to cities.

There is the need to introduce technologies (mechanization) that would reduce the difficulty in farming on a large scale. The youth should be educated and in particular assured of marketing outlets for farm produce and profitability in taking up farming as a business. The district Assembly should create the enabling environment for private individuals to set up agro-based industries to take advantage of the crops produced in the district. Fish farming should also be given the needed attention by taking advantage of the Black Volta as it is under-utilized.

There is the need to connect the national grid to other areas in the district that do not have electricity. Moreover, there is the need to continue exploring non-traditional sources of energy such as solar energy and supporting initiatives aimed at addressing the lighting needs of the people.

On main construction materials for the outer walls, roofing, and floors, more research work needs to be undertaken by the Ministry of Water Resource, Works and Housing and other constructional firms to produce improved locally building materials at subsidized prices to make housing construction less expensive and improve quality.

More improved sources of water such as boreholes and pipe-borne water should be provided in the district in the form of small water community projects to stop people from resulting to the use of unimproved sources of water for drinking and for other domestic purposes. This can also be done through community self-help programs with the help of NGOs. There is the need to monitor the quality of the different brands of sachet water available in the country.

The over dependent on wood (80.2%) and charcoal (16.3%) for cooking fuel is a predisposing factor for environmental degradation in the District. Measures should be put in place to encourage tree planting and the use of Liquefied Petroleum Gas (LPG).

Health is wealth as the saying goes and good sanitation enhances good health. However, about 70.5 percent of the households have No toilet facilities and thus resort to the bush. This can lead to outbreak of communicable diseases.

Furthermore, the disposal of both solid and liquid household waste is very poor in the district. Sewage disposal should be planned as a major health intervention. The District Assembly in collaboration with Zoomlion should provide refuse bins in various towns and collect the refuse at regular intervals. To manage the waste collection properly, policies like pay-as-you dump can be adopted. To prevent indiscriminate dumping of waste, the sanitary inspection team needs to be strengthened and logistics provided to help them properly execute their duties. More education on sanitation should be given by the health directorate, environmental department and the NCCE in the district.

The proportion using public toilets is also quite high. The District Assemblies should construct them as revenue-generating units to help generate some revenue for the Assembly. Laws requiring landlords to provide toilet and bathing facilities in houses should be enforced. Building permits regulations should be enforced to make sure that new development conforms to the building regulations. Furthermore, some households still use bucket/pan toilet facilities, even though its use has been declared very unhygienic. It is important that local authorities enforce the ban on the use of pan toilets

It is in anticipation that if these policy implications are adhered to, the vision and mission statements of Nandom District will be realized.

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APPENDICES

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

S/No.	Community Name	Sex			House holds	Houses
		Total	Male	Female		
1	Nandom	6,890	3,246	3,644	1,287	906
2	Bu	1,712	863	849	250	134
3	Kogle	1,496	754	742	198	163
4	Vapuo	1,459	700	759	244	167
5	Pofien Naadegaun	1,241	624	617	193	59
6	Brutu	1,212	609	603	202	137
7	Piiri	1,120	567	553	150	107
8	Beduor Gangn	1,110	579	531	164	115
9	Zumuopare-Up	963	447	516	133	90
10	Inalateng	882	436	446	139	96
11	Tome	882	418	464	144	88
12	Basebele	813	388	425	136	97
13	Gengenkpe	779	400	379	135	110
14	Munyupeli	756	369	387	112	67
15	Danko	754	362	392	119	80
16	Daaberteng	732	363	369	103	35
17	Biiregangn	710	344	366	113	64
18	Ko - Mhoroto	710	309	401	158	161
19	Duotange	678	338	340	122	96
20	Toyaga	646	350	296	86	56

Source: Ghana Statistical Service, 2010 Population and Housing Census

71

Table A2: Population by age group in the 20 largest communities

S/No.	Community Name	All ages	Age Group															
			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	Nandom	6,890	751	740	708	776	732	597	538	466	340	322	244	132	148	98	112	186
2	Bu	1,712	230	190	194	212	138	125	105	84	52	66	68	35	43	40	48	82
3	Kogle	1,496	173	170	199	168	119	96	92	63	86	60	52	45	45	37	29	62
4	Vapuo	1,459	196	182	195	150	100	85	76	53	62	68	66	41	57	36	40	52
5	Pofien Naadegaun	1,241	166	145	130	123	133	96	79	65	53	43	46	40	41	16	29	36
6	Brutu	1,212	181	142	135	124	94	89	78	52	46	38	58	48	43	21	39	24
7	Piiri	1,120	99	105	143	113	109	103	75	55	54	52	41	41	26	30	22	52
8	Beduor Gangn	1,110	134	183	142	141	83	55	52	52	75	45	32	27	17	10	11	51
9	Zumuopare-Up	963	145	115	156	76	72	61	76	35	35	25	29	28	29	21	28	32
10	Inalateng	882	84	103	90	108	81	53	44	40	57	43	48	28	24	20	25	34
11	Tome	882	108	112	114	95	62	53	56	56	36	45	28	34	22	13	14	34
12	Basebele	813	110	114	90	80	54	31	53	30	48	35	35	22	24	21	23	43
13	Gengenkpe	779	95	139	94	74	36	61	35	36	31	30	25	23	27	20	7	46
14	Munyupeli	756	120	113	82	66	37	44	47	29	38	37	22	28	23	15	12	43
15	Danko	754	84	71	106	83	69	29	44	24	30	38	27	36	26	28	16	43
16	Daaberteng	732	87	96	84	77	63	55	36	47	31	35	25	21	24	20	6	25
17	Biiregangn	710	96	91	92	80	43	59	41	27	27	22	23	19	15	14	15	46
18	Ko - Mhoroto	710	84	84	70	63	75	58	42	44	23	38	29	18	15	23	18	26
19	Duotange	678	67	98	104	84	43	30	35	36	24	33	20	33	13	18	19	21
20	Toyaga	646	86	92	73	55	64	45	43	46	26	27	15	11	20	12	13	18

Source: Ghana Statistical Service, 2010 Population and Housing Census

72

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