2022 Liberia Population and Housing Census

Thematic Report on
Population Size, Distribution and Structure

June 2024

Liberia Institute of Statistics & Geo-Information Services

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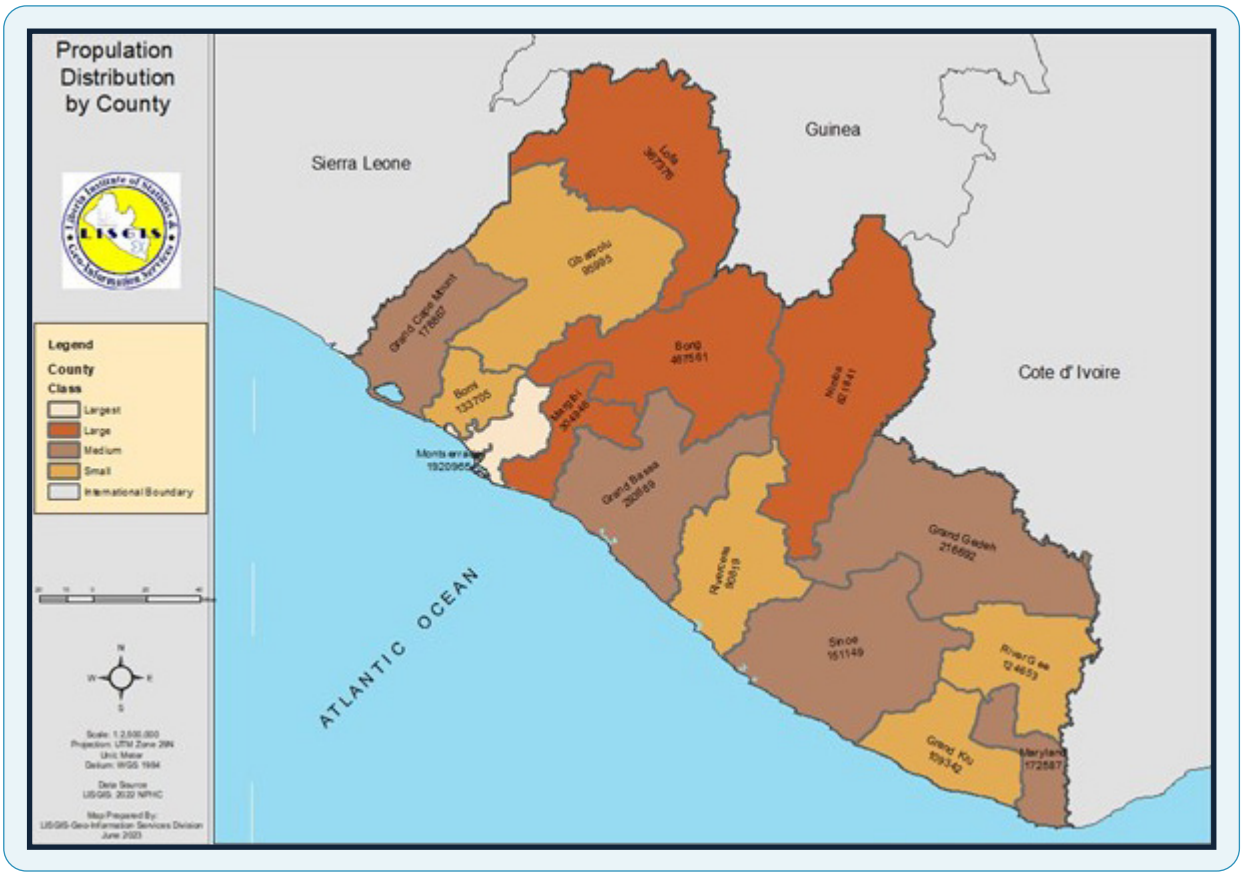
Administrative map of Liberia



Foreword

The 2022 National Population and Housing Census is the fifth and first digital census with the full deployment of ICT techniques and followed the UN Recommended Principles for the 2020 round of censuses. The basis for the conduct of the census is Article 39 of the 1986 Constitution of the Republic of Liberia. On October 10, 2022, the Government of Liberia initiated "an Act Authorizing the Executive Branch of Government to conduct the 2022 Liberia Population and Housing Census".

Hence, following the successful implementation of the 2022 Liberia Population and Housing Census, the Liberia Institute of Statistics & Geo-Information Services (LISGIS) produced 14 thematic reports. These reports summarized the country's demographic, social, and economic sectors. The publication of the thematic reports is consistent with the United Nations (UN) International Standards of releasing National Census results and thematic reports.

The 14 thematic reports form a primary source of socio-economic and demographic data at various levels and provide relevant information to foster national development, good governance, and resource distribution. The results presented in this thematic report will form a solid basis for the successes and challenges in the implementation of the Sustainable Development Goals (SDGs) as well as support the implementation of the development of the Africa Union Agenda 2063: The Africa We Want; Transforming Our World and other national and international programs.

I am pleased that the thematic reports helped to guide our national development plan. I would like to appreciate the support received from development partners and individuals during the entire process of writing the thematic report.

On behalf of the Census Commission and Board of Directors of LISGIS, I thank the Government of Liberia and our development partners for providing the required resources for conducting the census. Thanks also go to the national and international experts who worked very hard to complete these thematic reports.

Special appreciation for the success of the census goes to Hon. Samuel D. Tweah, Jr., former Chairman of the Census Commission, the Census Commission, the Steering Committee, the Census Secretariat, other national and international experts, census staff, and all respondents who provided the required information as well as all stakeholders for their commitment, motivation, and support to the National Population and Housing Census process.

I look forward to the continued support and guidance of development partners to engender sustainable development in our country.

Hon. Dehpue Y. Zuo
Deputy Minister for Economic Management
& Chairman of the Board
Ministry of Finance and Development Planning

Preface

The Liberia Institute of Statistics & Geo-Information Services (LISGIS) conducted the fifth and first fully digital census in November 2022. The 2022 National Population and Housing Census data was collected using Computer Assisted Personal Interviewing (CAPI) technology. Data were collected using tablets and later transmitted to LISGIS's server electronically.

The 14 thematic areas identified provide a comprehensive understanding of the population. These thematic areas are a) Population Distribution and Size b) Children, Adolescents, and Youth c) People with disabilities and older people d) Migration and Urbanization e) Labor force and Employment, f) Education, and Literacy g) Agricultural Population, h) Non-monetary poverty i) Housing conditions and facilities j) Mortality, k) Fertility, l) Marriages/Nuptiality, m) Gender Dimensions, and n) Population Projections. I would also like to thank the national and international experts for preparing the thematic reports.

Though the Government contributed immense resources to the 2022 National Census exercise, the requirements were enormous and beyond the capacity of the Government and LISGIS. It is with pleasure that we recognize and appreciate the support of the United Nations Population Fund (UNFPA), the Swedish Government, the World Bank, the United States Aid for International Development (USAID), the Irish Government, the Government of Ghana, Economic Community of West African States (ECOWAS) and the United Nations Children's Fund (UNICEF) and other partners whose timely and continuous interventions gave stimulus to the execution of the 2022 Liberia Population and Housing Census including the preparation of the reports.

Special gratitude goes to the general public for their cooperation and support. We are indebted to personnel and the management of LISGIS, national and international experts, supervisors, and enumerators for successfully conducting the 2022 National Population and Housing Census.

Richard F. Ngafuan
Director General
LISGIS

Contents

List of figures

List of tables

List of abbreviations

CAPI	Computer Assisted Personal Interviewing
DQM	Data Quality Management
EA	Enumeration Area
LDHS	Liberia Demographic and Health Survey
LISGIS	Liberia Institute of Statistics and Geo-Information Services
LNPP	Liberia National Population Policy
NPC	National Population Commission
PHC	Population and Housing Census
SA	Supervision Area

Executive Summary

Population size and growth

Over a period of 60 years, the population of has increased more than five times; it was a little over a million in 1962, and by 2022, it has increased to about 5.3 million. Males constitutes 50.4 per cent (2,644,027) and females are 49.6 per cent (2,606,160). The higher number of males than females is reflected in all the censuses except in 1962, where the number females was higher than males. The annual intercensal population growth rate between 2008 and 2022 was 2.8 per cent and the highest population growth rates were of 3.3 and 3.4 recorded between 1962-1974 and 1974 and 1984, respectively. The policy target of annual intercensal growth rate of 2.7 per cent by 2020 had been missed.

Population distribution

The highest proportion of Liberia's population come from Montserrado, and this has been consistent in all the last three census years. There are marked variations in the growth of population across the counties. For instance, while the proportions of the total population in Montserrado increased from 23.3 per cent in 1984, 32.8 in 2008 and 36.6 in 2022, that of Nimba decrease from 14.9 in 1984, 13.4 in 2008 and 11.8 in 2022.

Population density and concentration

The population density increased steadily from 56 in 1984 to 93 in 2008 and 2022 which is a reflection of population increase over the years and concentration of population. At the county level, population density in Montserrado County had increased from 666 persons per square mile in 1984, 1553 in 2008 to 2,606 in 2022.

In 2022, 36 per cent of the Liberian population was resident on only 2 per cent of its territory in Montserrado. Four counties – Montserrado, Margibi, Maryland and Bomi – account for nearly half (48.2 per cent) of the population but covering only 9.0 per cent of the total land size of Liberia. The huge concentration of the population in these four counties may result in the stretching of goods and services. Gbarpolu county has the lowest population share of 1.8 per cent but with the fifth largest land size of 10.0 square miles, an indication of a dispersed population. The unevenness distribution of the population has been attributed to disparities in resource endowment and the history of Liberia

Urban and rural populations

More than half 54.5 per cent of the country's population now live in urban areas and this is the first time a higher proportion of the population of Liberia live in urban areas. Three counties – Montserrado (91.7 per cent), Maryland (61.5 per cent) and Margibi (55.9 per cent) – have more than 50 per cent of their population living in urban areas. In Gbarpolu and Grand Kru, more than 9 in 10 of the population live in rural areas.

Data quality

The use of tablets with a CAPI programme to collect data and check electronically the inconsistencies that may occur during the capture of responses and to avoid mandatory data gaps. Data quality assurance mechanisms were established at all levels (national, county, SA, and EA) involving various actors and the logical validation rules found in the CAPI. A dashboard was developed to monitor the quality of data that was synched onto the cloud server. Several quality indicators were developed by the Technical Team and were incorporated into the dashboard to monitor the quality of data at the EA and district levels as sent to the servers.

Measurement of accuracy indices

The age-sex accuracy index increased from 31.8 in 2008 to 46.6 in 2022, accounting for a difference of 15. Although the age reporting in 2008 was inaccurate, the situation in 2022 has worsened to have a highly inaccurate age reporting by the United Nations' Standards. Male age ratio score has increased by more than four times between 2008 (4.1) and 2022 (17.6). On the other hand, female age ratio scores also increased from 8.8 in 2008 to 15.1 in 2022.

Sex composition

Apart from 1962 where the sex ratio shows that there were more females than males, the situation changed to have more males in 1974, 1984, 2008 and 2022.

Age structure

In 2008, the age structure of the population is broad base which indicates the youthful nature of the population. However, the 2022 population pyramid, unlike 2008 does not have a pronounced broad base as characteristic of developing country. Two younger age groups (0-4 and 5-9 years) were bit narrowed which seemed to be underreported.

Dependency ratio

There has been a steady decline in the total age-dependency ratios from 90.0 in 1984 to 82.9 in 2008 and with a sharp decline to 58.8 by 2022. The sudden decline in the age-dependency ratio in 2022 compared with 1984 and 2008 could be attributed to the underreporting of the population aged 0-9 years.

Dependency ratios across counties varies as some counties exhibit a much dependency ratio than others. In particular, the dependency ratio for the Nimba County is 75.3, the highest while Grand Gedeh recorded the lowest dependency ratio of 45.4 accounting for a dependency ratio of 29.

Ethnicity

The largest ethnic group in Liberia is the Kpelle (20.2 per cent), followed by Bassa (13.6 per cent) and Grebo (9.9 %). These three ethnic groups constitute about 44 per cent of the population.

Religion

The Christian religion has been the most dominant religion in Liberia, accounting for 85.6 per cent in 2008 and 84.9 per cent in 2022. The religion with the second highest proportion of the population in both 2008 (12.2 per cent) and 2022 (12.0 per cent) is Islam. Christianity dominates in 15 counties while Islam dominates in Grand Cape County.

Nationality

A higher proportion of Liberians who live in rural areas (99.2 per cent) is higher than those in urban (97.1 per cent). On the other hand, non-Liberians in urban areas (2.9 per cent) is about three times higher than their counterparts in rural (0.8 per cent). The bulk of the foreign nationals originate from West Africa with nearly six in 10 (59.0 per cent) of them living in the Montserrado County.

Household and non-household population

About 99 per cent of the population is household population while just 1.4 per cent are non-household population. The population in households living in rural areas (99.1 per cent) is slightly higher than those in urban (98.3 per cent).

Household size

The average household size in Liberia increased from 5.7 persons per household in 1974 to 6.2 persons per household in 1984 but fell to 5.1 persons in 2008 and it continued to a low of 4.4 persons in 2022. Average household size in rural areas (4.4) while in urban areas is 4.3. Bomi County recorded the largest average household size of 5.2 while Bomi County is 3.4, the smallest. Households containing 2-4 persons constitute the largest proportion 45.4 per cent of households.

Household composition

Households comprising of the head, spouse and son/daughter has been increasing since 1984 to 2022, while during the same period, other relative and non-relative have fallen; an indication that that households are moving more to nuclear family type of household than extended family type of household.

Household headship

Households headed by males in Liberia fell from 72.9 per cent in 2008 to 64.4 per cent in 2022 while in contrast, female-headed households increased from 27.1 per cent in 2008 to 35.6 per cent in 2022.

1. Introduction

1.1 Introduction

A population and housing census (PHC) is a most comprehensive and reliable national data resource that provides critical input into national development planning and programmes. It further provides data to monitor various development programmes embarked on by governments, NGOs and other stakeholders. The Liberian 2022 PHC is the basis for this report which primarily provides a layout of the analysis of the population size and distribution (National Population Council, 2005). Before this, Liberia had conducted four censuses (1962, 1974, 1984, and 2008) in the past 60 years and over. The outcome of the census is important in informing Government, development cooperating partners, civil society organizations and the general public on the population size, distribution and composition. It also provides information on population and household related variables such as household composition, age and sex distribution and, on the geographic distribution of the population. It further deliberates on emerging issues such as age-sex structure, household composition, population distribution and policy implications.

Basically, the population consists of descendants of freed American slaves, commonly referred to as Americo-Liberians which make up about 10 per cent of the population (Huberich, 1947). These settlers arrived in Liberia in the early 19th century and established themselves as a dominant political and social class. In addition to indigenous groups and Americo-Liberians, Liberia is also home to smaller communities of Lebanese, Indians, Europeans, Africans and other immigrant groups. These communities making up about 5 per cent of the population (Huberich, 1947) have contributed to the country's cultural diversity and economic development, particularly in areas such as trade, commerce and entrepreneurship. The Liberian population is characterized by diversity, reflecting the country's complex history and cultural heritage. It is home to different ethnic groups, each contributing to the country's rich traditions, languages, and customs (Liberia Institute of Statistics & Geo-Information Services [LISGIS], 2023). These groups include the Kpelle, Bassa, Gio, Mano and Loma, among others (Gerdes, 2013). The Kpelle is the largest among them. Each ethnic group has its own distinct language, cultural practices and socioeconomic characteristics, contributing to the country's cultural mosaic.

Since independence in 1847, Liberia has seen rapid and continuous population growth due to its high fertility levels (Liberia National Population Council, 2005), fertility preferences and family planning practices. According to the Liberia Demographic and Health Survey (LDHS) 2019-2020, the total fertility rate in Liberia is estimated at 4.3 births per woman. This indicates that fertility rates remain relatively high in the country. The LDHS also reveals that modern contraceptive prevalence among married women aged 15-49 is 36.9 per cent, indicating moderate utilization of family planning services. However, this varies by region and socioeconomic status. The combined effect of relatively high fertility levels and reduced infant mortality rate led to a surging young population during the post-independence period and led to changes in its age structure. The fertility levels, however, dropped considerably from 7.1 in 1984 to 5.2 in 2008 (World Bank, 2015) accompanied by a decrease in infant mortality, which was halved between 1984 and 1988.

Liberia's population has increased by more than three folds between 1962 (1,016,443) and 2008 (3,476,608). The increase in population resulted in high population growth rates of 3.3 per cent from 1962 to 1974 which remained almost unchanged at 3.4 per cent between 1974 and 1984. The increase in the population size may be fuelled by the high fertility rates experienced in 2008 () and 2022 (3.9), coupled with an increasing life expectancy at birth in 2008 () and 2022 (). Again, in examining the age structure of 1984, 2008 and 2022, it was found that the population is still youthful and will continue to fuel further population growth for many years to come. Similarly, the return of the population following the end of the civil war may also increase the population momentum. However, by 2008, the growth rate had reduced to 2.1 per cent, an indication of Liberia's population growing at a decreasing rate. The high population growth rate will continue to impact Liberia's urban settlements and fundamentally determine its urbanization features. The composition of the Liberian population is further shaped by urbanization trends, with about 50 per cent of the population residing in urban areas by 2008 (Karnley et al, 2011) in search of better economic

opportunities, resulting in diverse urban populations with varying socioeconomic backgrounds.

Christianity has maintained a dominant foothold, growing from about 67.8 per cent in 1984 to 85.6 per cent 2008. This urban Christian majority, with slightly higher female participation, reflects historical settlement trends where urban areas have served as nodes for Christian missionary activities and Western educational institutions. The Islamic faith, brought to Liberia through trading and migration from neighbouring West African countries, found its place in both urban and rural landscapes.

Urbanization has had a deep impact on the Liberian population by reshaping the demographics dynamics and livelihoods. The drifting of a higher proportion of the population migrating from rural to urban areas with the aim of searching for better opportunities, urbanization has become a defining feature of Liberia's development trajectory. One of the most visible impacts of urbanization is the demographic movement within the Liberian population. The result of the rural-to-urban migration is the rapid growth in urban areas, particularly Monrovia, the capital of Liberia. This arrival of people has led to the expansion of urban areas, increased population density and the emergence of informal settlements or slums on the peripherals of cities. Insecurity from the civil war also contributed to urbanization as the violence in rural areas forced the population to move to urban centres where the Economic Community of West African States Monitoring Group and other international bodies offered protection (Gilgen and Nowak, 2011; Hutson et al., 2009).

Liberia's historical trajectory, from its pre-colonial indigenous settlements through to its foundation as a free state for repatriated individuals of African descent and the subsequent integration of these groups, has been reflected in the country's religious makeup. Initially, the region that is now Liberia was a patchwork of various ethnic groups, each with its traditional spiritual systems. These were deeply rooted practices aligned with the land and the history of the people. The practice of Traditional African Religions in Liberia is less than 1 per cent (0.6 per cent) in 2008. The smaller size could be attributed to the spread of Christianity through rural development initiatives and the establishment of schools and clinics, often affiliated with Christian denominations, which may have led to a gradual assimilation and a move away from indigenous spiritual systems. However, the adherence to Traditional African Religion, though minimal, persists, suggesting that historical settlement patterns, where ethnic groups have maintained their ancestral practices, continue to harbour traditional beliefs.

Apart from agriculture, the pull of the mining industry on the youth fuel additional migration towards these mining communities. In 2017, gold was a key driver of growth, as a new mining project began its first full year of production; iron ore exports also increased as Arcelor Mittal opened new mines at Mount Gangra (Alert, 2023). This has revitalized the economy and expanded road networks and infrastructural developments towards these communities.

Liberia's administrative structure in the pre-colonial era was characterized by autonomous ethnic groups and chiefdoms, each with its system of governance, often led by tribal chiefs and councils of elders. These indigenous forms of administration managed local affairs, land disputes and community justice according to tribal laws and customs. The establishment of Liberia in 1847 by the American Colonization Society, as a homeland for freed African American slaves, marked a pivotal shift in the administrative landscape. The Americo-Liberian settlers instituted a system modelled after the United States Government, with a strong central government characterized by an executive branch led by a President, a bicameral legislature and a judicial system.

Over the years, the governance structure of Liberia has been influenced by various factors, including the need to integrate the indigenous populations, economic imperatives and external pressures. Americo-Liberians, who dominated politics and the economy, faced challenges in extending their control over the indigenous majority. This tension led to a dual system of governance, with Americo-Liberian rule in coastal settlements and indigenous authority in the hinterlands. Following independence, the consolidation of state power led to the extension of the central government's influence throughout the country. However, the political landscape remained largely exclusionary until the 1980 coup, which brought indigenous leaders to power. The subsequent civil wars caused a breakdown of administrative structures, with significant consequences for governance and territorial control.

In the post-conflict period, Liberia has worked to rebuild its administrative system, focusing on democratic governance, decentralization and the rule of law. The present administrative structure comprises 15 counties, each headed by a superintendent appointed by the President. The counties are further divided into districts,

clans and chiefdoms, which echo the indigenous governance units, maintaining local governance traditions within the modern state framework. Liberia currently operates under a unitary system, though there are efforts towards decentralization to promote local autonomy and development. County and municipal governments are increasingly taking on responsibilities for service delivery and local development, reflecting a gradual shift from a centralized unitary system to a more devolved administrative framework. The current administrative setup of Liberia is a product of its layered history, integrating aspects of Americo-Liberian governance, traditional indigenous structures and contemporary efforts towards decentralization. From a historical perspective, the evolution of Liberia's administration reflects its ongoing journey to reconcile the past with present-day realities, striving to create an inclusive, efficient and responsive governance system that serves all its citizens.

Generally, several policies have influenced the population dynamics of Liberia. The American Colonization Society, founded in 1816 with the aim of resettling freed American slaves in Africa, which led to the establishment of Liberia as a colony for African American settlers. This initiative has impacted on Liberia's demographic composition by introducing a population of Americo-Liberians, who played prominent roles in shaping the country's governance system. Another policy that stood out during the period of William Tubman years was the National Unification Policy. The main aim of this policy was to bridge the gap that existed between the Americo-Liberians and the Native-Liberians, and to integrate all Liberians into the body politics of the state (Dolo, 2016). Even though the policy came under criticism for not seeking the interest of the natives, it was meant to unify the country for national development.

The 2005 Revised Edition of the Liberia National Population Policy for Social and Economic Development aimed at contributing towards the improvement in the quality of life of the people of Liberia. The rationale of this policy document was given the post-war of Liberia for rehabilitation, post-conflict reconstruction and poverty reduction. Furthermore, this goal is to be achieved through the establishment of a balance between population factors and national capacity. In the National Population Policy document, Liberia has a target of reducing the overall growth rate of the population from 6.1 per cent in 2000 to 2.7 per cent in 2020. On fertility, there was a target of reducing the total fertility rate from the 2000 level of 6.1 to 5.0 in 2010, then to 3.0 in 2020. The policy also intended to reduce infant mortality rate from 117 deaths per 1,000 live births in 2000 to 50 deaths per 1,000 live births in 2020. This population policy has also targeted an increase in life expectancy at birth from 48 years in 2000 to 55 years in 2010 and to 65 years in 2020.

The implementation of the Interim Poverty Reduction Strategy 2007 (iPRS) and the Poverty Reduction Strategy (2008-2011) as well as the Liberian National Action Plan between 2009 and 2013 which provided a framework to expand the economy and infrastructure, and strengthen and develop protection, response and prevention policies to guarantee security for women and girls personally and promote their human rights. In December 2012, Liberia also launched the Agenda for Transformation (AfT), its second poverty reduction strategy (Government of Liberia, 2012a; IMF, 2021). The AfT intended to remove key infrastructure constraints in energy, roads, and ports and to support youth and capacity-building. The AfT is also intended to raise the economic status of Liberians to middle-income level by 2030. The Pro-Poor Agenda for Prosperity and Development which began in 2018 to 2023 (PAPD) is the second in the series of 5-year National Development Plans fashioned under the Liberia Vision 2030 framework. It follows the AfT 2012-2017. The fundamentals underpinning the PAPD is to build human capital to transform the natural resources into wealth

Specifically, direct policies have made a direct impact on population structures and patterns in Liberia. Liberia's National Health Policy was established in 2007, outlining strategies for improving healthcare access, disease prevention and health system strengthening. This policy framework guided various health programmes, including immunization campaigns, maternal health services and efforts to combat infectious diseases like Ebola, contributing to improvements in population health and demographic outcomes. The Education Reform Act of 2011 introduced significant changes to Liberia's education system, focusing on expanding access to high-quality education, promoting literacy and improving educational outcomes. This legislation aimed to increase school enrolment, enhance teacher training, and build educational infrastructure, influencing population dynamics by empowering individuals through education and shaping human capital development. In addition, the Liberian National Migration Policy was adopted in 2016, aiming to manage internal and international migration flows, address refugee crises and promote socioeconomic development. This policy framework guided initiatives related to citizenship, residency and labour migration,

shaping population distribution, urbanization trends and demographic composition in the country.

These policies and programmes, among others, have played a crucial role in shaping Liberia's population growth and structure over time, with varying degrees of success and challenges. Continuous evaluation, adaptation, and improvement in population-related policies and programmes are essential for promoting sustainable development and positive demographic outcomes in Liberia.

1.2 Objectives

The specific objectives are to:

i. examine information on the size, spatial distribution of the population at all levels.

ii. examine the age-sex distribution, housing characteristics and cultural composition of Liberia's population.

iii. provide information on the demographic and socioeconomic characteristics of the population of Liberia.

iv. suggest policy recommendations which would enable stakeholders to incorporate demographic factors in planning for social and economic development.

1.3 Definition of concepts

Household: This refers to a person or a group of two or more persons (related or unrelated) who live together in the same house or compound, share the same housekeeping arrangements (eating and sleeping), are catered for as one unit, and recognize one person as the head.

Household Population: These are persons who are usual members of households and visitors to the households present on Census Night

Household Size: Household size is the number of persons recorded in a household on Census Night.

Non-Household Population: This is made up of: persons who spent the Census Night in an institutional facility (i.e., schools, training centres, prisons, hospitals, camps, faith-based facilities, hotels and guest houses, etc.), who will be referred to as institutional population; and persons who spent the Census Night at locations such as ships, harbours, airports, railway stations, lorry parks, etc. within the country's territorial borders, other than in their usual place of residence or homes, who will be referred to as floating population. During the enumeration period, a screening question was asked to determine the type of population. Each population type was assigned a unique code of identification with separate questions for the Enumerator to ask for the classification of the population as household or non-household population.

Population Density: It is the number of persons per square kilometre or mile of land. This is a crude measure of how people are spread over a given surface area, such as a region or a district

Locality: A locality refers to an inhabited geographical area with a distinct name and defined or perceived boundaries. It could be a hamlet, mining camp, ranch, farm, village, town, city or part of a town or city.

Age: Age refers to how old a person was at his or her last birthday as of Census Night and is recorded in completed years.

Age-Dependency Ratio: It is the ratio of the population 0-14 years and 65 years and older to the population 15-64 years. The ratio depicts the relationship between the populations. that is likely to be economically dependent on the working-age population of the country.

Population Pyramid: It is a graphical representation of the age and sex structure of a population. It depicts at a glance the population dynamics, including the youthfulness or ageing of a country's population.

Age-Sex Ratio: This is the ratio between the number of males and the number of females, expressed as the number of males per 100 females.

Nationality

Non-Liberian: This relates to all persons not originating from Liberia. These persons may have citizenship of a country other than Liberia or have dual citizenship of other countries, none of which is Liberia.

Ethnicity: It is a grouping defined by a common language, culture, and history with which a person identifies, or by mother tongue.

Place of Birth: It is the usual place of residence (town/village or locality) of a person's mother at the time of the person's birth. Place of birth within the country is defined by locality, district, and region and outside Liberia by the country of birth.

1.4 Source of data

The main source of data for this report is the 2022 Liberia PHC and previous censuses. In addition, information from sample survey such as the different round of DHS and MICS were used.

1.5 Data limitations

There were a various challenges and limitations associated with collecting and analysing population size data, such as underreporting, limited resources and capacity, data accessibility and transparency issues, and geographic and demographic disparities.

Some of the many limitations of the census data could be attributed to but not limited to the following:

1.6 Organization of report

Chapter 1 will deal with introduction of the report by providing background information on Liberia, with emphasizes the importance of population size data. It will present a contextual background, objectives, definition of concepts, sources of data and organization of report. Chapter 2 will look at data evaluation where all the analysis of the integrity of the data will be done using multiple technical processes and tools. Chapter 3 addresses issues on population size and distribution. It will analyse the current population size, trends over time and geographic distribution of the population. In Chapter 4, emerging issues on the socio-cultural composition of the population were discussed. Chapter 5 examines the household size, structure and cultural composition. Finally, Chapter 6 draws conclusions, scrutinizes some of the policy implications to be reflected by the Government and other stakeholders and recommendations.

2. Population size and distribution

2.1 Introduction

The population dynamics of a country are mainly affected through fertility, mortality and migration levels, which are basically influenced by age and sex composition and structure. The basic objective of every census is to provide information on the number, distribution and socio-demographic characteristics of the population to guide for policies and planning. The 2022 Liberia PHC was a "de facto" count persons present in Liberia on the Census Night. This section of the report discusses the socio-demographic characteristics of the population such as the population size, growth rate, density, spatial distribution, age-sex composition, sex ratio and dependency ratio.

2.2 Population size

Over a period of 60 years, the population of Liberia according to the 2022 PHC has increased more than five times. The population was a little over a million, and by 2022, it has increased to about 5.3 million. Males constitutes 50.4 per cent (2,644,027) and females are 49.6 per cent (2,606,160). The higher number of males than females is reflected in all the censuses except in 1962 where the number females (512,855) is higher than males (503,588).

Table 2.1: Population by size, 1962–2022

Year of Census	Number			Per cent	
	Total	Male	Female	Male	Female
1962	1,016,443	503,588	512,855	49.5	50.5
1974	1,503,368	759,109	744,259	50.5	49.5
1984	2,101,628	1,063,127	1,038,501	50.6	49.4
2008	3,489,072	1,764,555	1,724,517	50.6	49.4
2022	5,250,187	2,644,027	2,606,160	50.4	49.6

Compiled from 1984, 2008 and 2021 PHC reports, LISGIS

Over a period of 62 years, the population of Liberia has increased by 4,233,744 persons; from 1,016,443 persons in 1962 to 5,250,187 persons in 2022. Between1962 and 1974, the population of Liberia increased by 47.9 per cent, and it further increased by about 40 per cent between 1974 and 1984. The annual intercensal population growth rate between 2008 and 2022 was 2.8 per cent. The highest population growth rates were of 3.3 and 3.4 recorded between 1962-1974 and 1974 and 1984, respectively. The 2005 Revised Edition of the Liberia National Population Policy had targeted a reduction of annual population growth rate from 3.4 in 2000 to 2.7 per cent in 2020. This means that even with extended policy period of 2022, the growth rate target was not achieved in 2022. Across all the intercensal periods, the population increased with the largest being 1984-2008 (66.0 per cent), with 2008-2022 (50.5 per cent) being the second largest population increase. high percentage increase in population size and high growth rates can be attributed to the youthful nature of Liberia's population. The continuous return of Liberians after the war can also be attributed the growth of the population.

The period 2000-2010 recorded a 30.7 per cent increase. The highest increase between censuses over the 50-year period was 53.8 per cent and this occurred between 1984 and 2000.

Table 2.2: Percentage change, annual intercensal growth rates and doubling time

Period	Percentage change	Annual intercensal growth rate	Doubling time
1962-1974	47.9	3.3	21
1974-1984	39.8	3.4	21
1984-2008	66.0	2.1	34
2008-2022	50.5	2.8	25

Compiled from 1984, 2008 and 2021 PHC reports, LISGIS

2.3 Geographical distribution of population size and growth

Table 2.3 provides information on the distribution of the population in the counties and the changes that have occurred in the population over the years. Montserrado has the highest share of the country's population, and with the highest percentage increase (133.1) between 1984 and 2008. Grand Gedeh recorded the second highest percentage increase of 100.1. per cent. All the counties recorded an increase in population between 1984-2008 and 2008-2022 except Grand Kru where- there was a decrease in between 1984 and 2008.

Table 2.3: Population distribution by county, percentage change and annual growth rates

County	Population			Percentage change		Annual growth rate (%)	
	1984	2008	2022	1984-2008	2008-2022	1984-2008	2008-2022
Liberia	**2,101,628**	**3,489,072**	**5,250,187**	66.0	50.5	2.1	2.8
Bomi	66,420	82,036	133,705	23.5	63.0	0.9	3.3
Bong	255,813	328,919	467,561	28.6	42.2	1.0	2.4
Gbarpolu	48,399	83,758	95,995	73.1	14.6	2.3	0.9
Grand Bassa	159,648	224,839	293,689	40.8	30.6	1.4	1.8
Grand Cape Mount	79,322	129,055	178,867	62.7	38.6	2.0	2.2
Grand Gedeh	63,028	126,146	216,692	100.1	71.8	2.9	3.7
Grand Kru	62,791	57,106	109,342	-9.1	91.5	-0.4	4.4
Lofa	199,242	270,114	367,376	35.6	36.0	1.3	2.1
Margibi	151,792	199,689	304,946	31.6	52.7	1.1	2.9
Maryland	69,267	136,404	172,587	96.9	26.5	2.8	1.6
Montserrado	491,078	1,144,806	1,920,965	133.1	67.8	3.5	3.5
Nimba	313,050	468,088	621,841	49.5	32.8	1.7	1.9
River Cess	37,849	65,862	90,819	74.0	37.9	2.3	2.2
River Gee	39,782	67,318	124,653	69.2	85.2	2.2	4.2
Sinoe	64,147	104,932	151,149	63.6	44.0	2.1	2.5

Compiled from 1984, 2008 and 2021 PHC reports, LISGIS

2.4 Regional share of population

The data presented in Table 2.4 offers a comprehensive overview of the population distribution and its respective shares across the counties of Liberia from 1984 to 2022. The highest proportion of Liberia's population come from Montserrado, and this has been consistent in all the last three census years followed by Nimba. There are marked variations in the growth of population across the counties. While the proportions of the total population in Montserrado increased from 23.3 per cent in 1984, 32.8 in 2008 and 36.6 in 2022, that of Nimba decrease from 14.9 in 1984, 13.4 in 2008 and 11.8 in 2022. The continuous increase in the population share of Montserrado County can attributed to the fact it is hosting the administrative capital of Liberia, Monrovia city, is largely affected by rural-urban migration for employment, education, social amenities, etc. River Cess (1.8) and River Gee (1.9 per cent) on the other hand recorded the lowest population in 1984 while that of Grand Kru recorded the lowest (1.6 per cent) in 2008 with River Cess recording the lowest (1.7 per cent) again in 2022. The low size of population in River Cess and Gbarpolu could be attributed to people migrating to other counties such as Montserrado County for job opportunities and education. For instance, the Grand Bassa County, with its mining resources attracts migrants, especially the youth from River Cess for jobs. Both River Cess and River Gee are areas being underserved with social amenities.

Nimba and Bong counties saw increase in population but decrease in their share of the national total, indicating that while they grew in population size, their population share decline compared to the rapid expansion observed in Montserrado. Grand Gedeh exhibited a significant increase in both population and its percentage share, rising from 3.0 per cent to 4.1 per cent, which could be due to regional developmental policies or natural resource exploitation attracting more residents.

Table 2.4: Population distribution by county and share, 1984 to 2022

County	Population			Share of population		
	1984	2008	2022	1984	2008	2022
Liberia	**2,101,628**	**3,489,072**	**5,250,187**	100.0	100.0	100.0
Bomi	66,420	82,036	133,705	3.2	2.4	2.5
Bong	255,813	328,919	467,561	12.2	9.4	8.9
Gbarpolu	48,399	83,758	95,995	2.3	2.4	1.8
Grand Bassa	159,648	224,839	293,689	7.6	6.4	5.6
Grand Cape Mount	79,322	129,055	178,867	3.8	3.7	3.4
Grand Gedeh	63,028	126,146	216,692	3.0	3.6	4.1
Grand Kru	62,791	57,106	109,342	3.0	1.6	2.1
Lofa	199,242	270,114	367,376	9.5	7.7	7.0
Margibi	151,792	199,689	304,946	7.2	5.7	5.8
Maryland	69,267	136,404	172,587	3.3	3.9	3.3
Montserrado	491,078	1,144,806	1,920,965	23.4	32.8	36.6
Nimba	313,050	468,088	621,841	14.9	13.4	11.8
River Cess	37,849	65,862	90,819	1.8	1.9	1.7
River Gee	39,782	67,318	124,653	1.9	1.9	2.4
Sinoe	64,147	104,932	151,149	3.1	3.0	2.9

2.5 Population density

Population density measures the number of people per square mile and this measure assumes equal distribution within any given area, hence it is known as crude density. The population density increased steadily from 56 in 1984 to 93 in 2008 and 2022. The increase in the population density reflects population increase over the years. At the county level, Montserrado had a population density of 666 persons per square mile in 1984, 1553 in 2008 and 2,606 in 2022 persons per square miles. Montserrado has been recording the highest population density in the country since 1984 though it has the smallest land size of 737 square miles making it the most densely populated county in Liberia. The county represents the more developed part of Liberia and attraction for job avenues. The other counties can be said to be sparsely populated considering their land size which ranges from 750 to 3,194 square miles.

The data reveals significant population increases across all counties from 1984 to 2022, with Montserrado showing the most dramatic rise. The population of Montserrado is more than tripled from 491,078 in 1984 to 1,920,965 in 2022. This substantial increase is indicative of urban migration, likely due to Montserrado's status as a commercial and political hub featuring Monrovia, the capital city of Liberia. Counties such as Bomi, Bong and Grand Cape Mount also exhibited notable increases in population density, suggesting a trend of rural-urban migration or regional development stimulating population growth.

Table 2.5: Population, land area and population density by country, 1984 to 2022

	Population			Area (SQ.M)	Population Density		
County	1984	2008	2022		1984	2008	2022
Liberia	**2,101,628**	**3,489,072**	**5,250,187**	**37,483**	**56**	**93**	**140**
Bomi	66,420	82,036	133,705	750	89	109	178
Bong	255,813	328,919	467,561	3,387	76	97	138
Gbarpolu	48,399	83,758	95,995	3,741	13	22	26
Grand Bassa	159,648	224,839	293,689	3,064	52	73	96
Grand Cape Mount	79,322	129,055	178,867	1,993	40	65	90
Grand Gedeh	63,028	126,146	216,692	4,048	16	31	54
Grand Kru	62,791	57,106	109,342	1,504	42	38	73
Lofa	199,242	270,114	367,376	3,854	52	70	95
Margibi	151,792	199,689	304,946	1,010	150	198	302
Maryland	69,267	136,404	172,587	887	78	154	195
Montserrado	491,078	1,144,806	1,920,965	737	666	1,553	2,606
Nimba	313,050	468,088	621,841	4,460	70	105	139
River Cess	37,849	65,862	90,819	2,160	18	30	42
River Gee	39,782	67,318	124,653	1,974	20	34	63
Sinoe	64,147	104,932	151,149	3,914	16	27	39

Compiled from 1984, 2008 and 2021 PHC reports, LISGIS

2.6 Spatial concentration and dispersion of the population

The concentration or dispersion of the population provides information about environmental associations and social interactions among individuals in the population (Chen et al, 2013). Areas with desirable amenity characteristics continue to attract people. It is so interesting to note that in 2022, 36 per cent of the Liberian population was resident in

2 per cent of its territory in Montserrado and overall, over 48 per cent was settled on only 9 per cent of national territory. Four counties – Montserrado, Margibi, Maryland and Bomi – account for nearly half (48.2 per cent) of the population but covering only 9.0 per cent of the total land size of Liberia. The huge concentration of the population in these four counties may result in the stretching of goods and services. Margibi county is the second most densely populated area, accounting for about 302 persons per square mile but with one of the least land sizes of the least land area of 2.7 per cent.

Gbarpolu county has the lowest population share of 1.8 per cent but with the fifth largest land size of 10.0 square miles, an indication of a dispersed population. Grand Gedeh has a population share of about 4 per cent but covers 10.8 per cent of the land size. Also, Sinoe County's share of the population was only 2.9 per cent but with a land share of about a tenth of the total land size of Liberia. The unevenness distribution of the population has been attributed to disparities in resource endowment and the history of Liberia (National Population Commission, 2005)

Table 2.6: Distribution of population and land area by county

County	Population	Area	Density	% Distribution		Cumulated distribution	
				Population	Area	Population	Area
Montserrado	1,920,965	737	2,606.5	36.6	2.0	36.6	2.0
Margibi	304,946	1,010	301.9	5.8	2.7	42.4	4.7
Maryland	172,587	887	194.6	3.3	2.4	45.7	7.0
Bomi	133,705	750	178.3	2.5	2.0	48.2	9.0
Nimba	621,841	4,460	139.4	11.8	11.9	60.1	20.9
Bong	467,561	3,387	138.0	8.9	9.0	69.0	30.0
Grand Bassa	293,689	3,064	95.9	5.6	8.2	74.6	38.1
Lofa	367,376	3,854	95.3	7.0	10.3	81.6	48.4
Grand Cape Mount	178,867	1,993	89.7	3.4	5.3	85.0	53.7
Grand Kru	109,342	1,504	72.7	2.1	4.0	87.1	57.8
River Gee	124,653	1,974	63.1	2.4	5.3	89.4	63.0
Grand Gedeh	216,692	4,048	53.5	4.1	10.8	93.6	73.8
River Cess	90,819	2,160	42.0	1.7	5.8	95.3	79.6
Sinoe	151,149	3,914	38.6	2.9	10.4	98.2	90.0
Gbarpolu	95,995	3,741	25.7	1.8	10.0	100.0	100.0
Liberia	5,250,187	37,482	140.1	100.0	100.0		

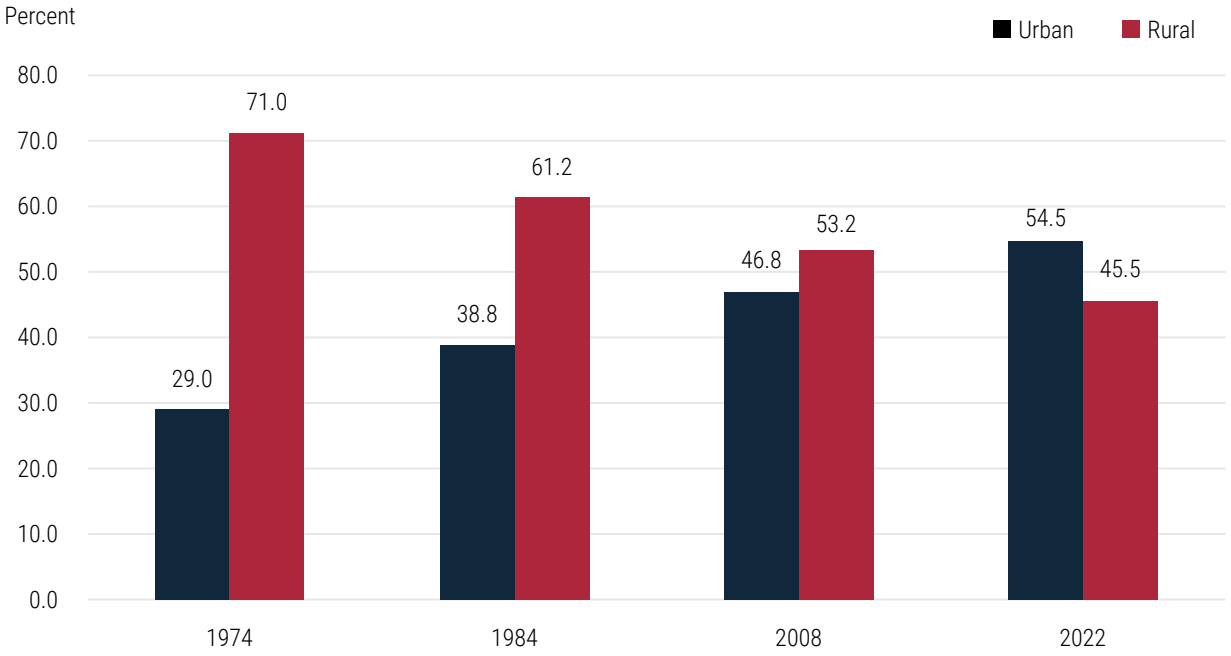
2.7 Urban and rural populations

Industrialization and commercialization generate a demand for jobs and create opportunities for people to move from rural areas to urban areas. As economic and social development take place, localities grow since they are economically more efficient. These towns bring together both the producers and consumers of a variety of goods and services. Urbanization can play a part in sustainable growth through increased productivity and innovation if managed well. Classifying a locality as an urban or rural is based on the population size and other socioeconomic factors. Localities with a population of 5,000 or more are classified as urban.

Figure 2.1 shows that more than half 54.5 per cent of the country's population live in urban areas. This is the first time a higher proportion of the population live in urban areas. In 1974, the proportion of the

urban population was 29.0 per cent in and increased to 38.8 in 1984. In 2008, there was further increase in the urban population to a point of 46.8 per cent. The intensification of the population growth in cities and urban areas is primarily due to rural to urban migration. This trend of movement of the population was most pronounced during the civil war, when limited resources were only available in urban areas, especially in Monrovia (UN Habitat et al, 2017).

Figure 2.1: Urban and rural populations, 1974 to 2022

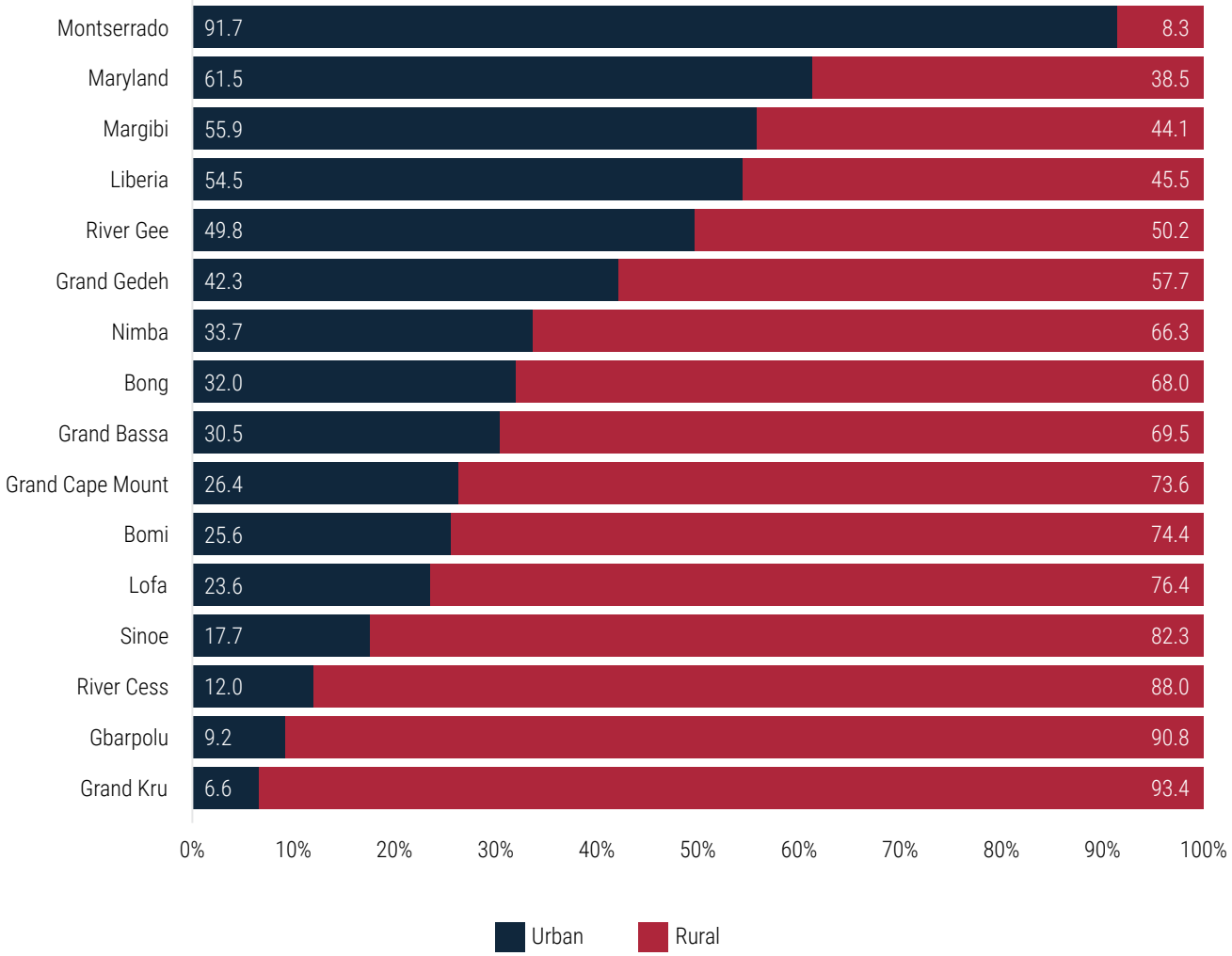


Compiled from 1984, 2008 and 2021 PHC reports, LISGIS

Three counties have urban populations which are above the national average with Montserrado recording the highest proportion of 91.7 per cent. Montserrado hosts the capital city of Liberia, Monrovia, serving as attraction to many people in search of jobs. Furthermore, Monrovia is endowed with social amenities, the business hub, better communication and transport connections and presence of physical infrastructure. Apart from Montserrado County, there are other counties – Maryland (61.5 per cent), Margibi (55.9 per cent) and River Gee (49.8 per cent) – with about 50 per cent or more of the population living in urban areas.

These are counties with primary and secondary cities which are also experiencing rising urbanization. Urban areas especially Monrovia were used as safety areas by rural migrants during the civil war which led to a high carrying capacity for Montserrado County. Five counties have less than a quarter of their populations living in urban areas with Grand Kru and Gbarpolu recording the lowest proportions of 6.6 per cent and 9.2 per cent respectively. Twelve counties have more than half of their population living in rural areas. The rapid rate of urbanization in the country is driven by the three highly urbanized counties (Figure 2.2).

Figure 2.2: Distribution of population by county and residence, 2022



3. Population Composition

3.1 Introduction

The composition of the population in terms of age and sex structure have broad ranging implications on demographic, socio and economic indicators. The population growth of a country is mainly through fertility, mortality and migration levels, which to a large extent, are affected by age-sex composition. This chapter seeks to analyse the size, composition, age and sex structure of the 2022 Population and Census exercise of Liberia. Furthermore, historical data from previous censuses (1964, 1974, 1984 and 2008) are used for trend analysis to highlight changes that have occurred in the population composition over the period.

3.2 Data quality through computer assisted personal interviewing

The use of CAPI allows for real-time data quality checks during field data collection, quick data processing and timely release of the results. There was a programme dedicated to an accurate editing of the functions which was incorporated into the development of the CAPI application. The function of the programme was to check electronically the inconsistencies that may occur during the capture of responses and to avoid mandatory data gaps. All enumeration Areas (EAs) were monitored and checked that there was data in every EA and ensured that every household identified during the listing phase was accounted for in the enumeration phase. In view of this, data quality assurance mechanisms were established at all levels (national, county, SA, and EA) involving various actors and the logical validation rules found in the CAPI application. Also, these mechanisms are put in place to direct the enumerators to collect complete and accurate data through real-time monitoring. A computer programme was developed for monitoring and assessing the quality of the data being collected on the field and providing reports (i.e. feedback) to the teams on the field for prompt correction. Data Quality Management (DQM) covers planning field work, data collection, processing, evaluation.

The work of enumerators was validated continuously editing of data collected during fieldwork were edited and cleaned immediately and feedback is provided promptly. Any inconsistencies and errors observed in the course of the exercise are rectified immediately by field staff.

A dashboard was developed to monitor the quality of data that was synched onto the cloud server. Several quality indicators were developed by the Technical Team and were incorporated into the dashboard to monitor the quality of data at the EA and district levels as sent to the servers. As part of the data quality assurance, all enumerators have to sync data to the Head Quarters server daily. Error messages were sent to the respective enumerators for correction on the field and this process was repeated by running checks to ensure errors identified have been corrected. Daily reports were generated to track progress of work for each enumerator with field visits to validate enumerators' work and to resolve issues pertaining to field data collection.

3.3 Data evaluation

Accurate and reliable information about a country's population is important to determine its size, age, sex, composition, residence, education, economic activity status and other attributes (Spoorenberg, 2020). It is also very useful for policy formulation and evidence-based decision-making and to monitor progress made in national and international goals. Evaluation of data in any demographic analysis such as population projections is very crucial. In view of this, assessing the quality of the input data by subjecting to rigorous evaluation to determine the extent of error in reporting to serve as a way of establishing the reliability and validity (GSS, 2012) of the data being used. Again, evaluating the 2022 Liberia PHC provides basic information for dealing with some errors and the basis for adjusting or correcting the raw data.

3.3.1 Detecting age misreporting

Age and sex are critical variables in understanding population change of all kinds. Errors in age-sex distribution have strong effect on other characteristics of a population. Age-sex distribution of a population is determined by fertility, mortality and migration; therefore, it is expected to follow fairly predictable pattern. The evaluation of the

reasonableness of the distribution of the population by age and sex can provide considerable insight into the quality of the census enumeration. The following factors which could account for age misreporting in census data:

- misreporting of age because of digit preference, which comes a high tendency to report ages ending with zero or five
- not knowing actual age
- proxy reporting i.e. reporting on behalf of household members
- deliberate attempt to increase or decrease age for one reason or the other (e.g. to skip questions based on age eligibility)
- exaggeration of age, especially by the elderly
- misreporting of age by the enumerator
- inaccurate estimation of age for respondents who do not know their ages

Field Officers were trained and provided guidelines to assist respondents who do not know their ages. In order to facilitate estimation of ages for those who do not know their ages, a list of national historical events was provided. In many cases, however, this list may not be sufficient, or the events listed may not be known to all the people in your area so the Field Officers were to supplement with appropriate "Local Historical Events" in the area.

Preferences for ages zero and five usually occur in censuses where household members do not know the exact ages of their members, they often guess ages that end in 0 or 5. The age heaping challenge may be due to proxy responses offered to household members. The use of historical events was used to estimate age of respondents who could not remember their ages which could introduce age misreporting.

Another method of detecting errors in age is graphing data which is a visual method to identify age misreporting. Figures 3.1, 3.2 and 3.3 show the population distribution by single years of age for males and females respectively. All the graphs reveal preferences for ages but differs across different ages. For instance, at younger ages (less than 20 years), age heaping is pronounced at ages 4, 10 and 12 while those at ages 20 to 50, it is higher at ages 22, 32 and 42.. Inspecting the figures also suggests age errors are noticeable which may be due to preferences for certain ages. Figure 3.1 shows irregular patterns for both males and females which may be attributed to age misstatement. For instance, ages 0-9 recorded lower figures.

Figure 3.1: Population distribution by age and sex

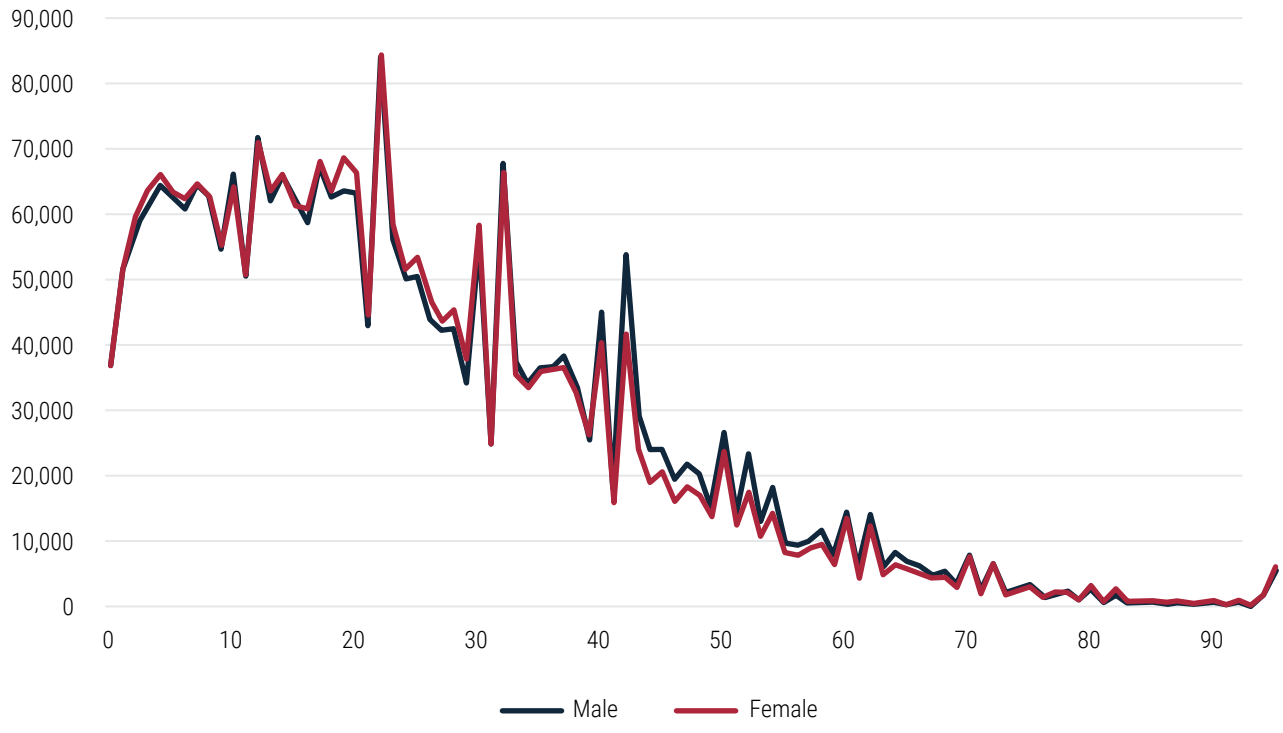


Figure 3.2: Male population by age

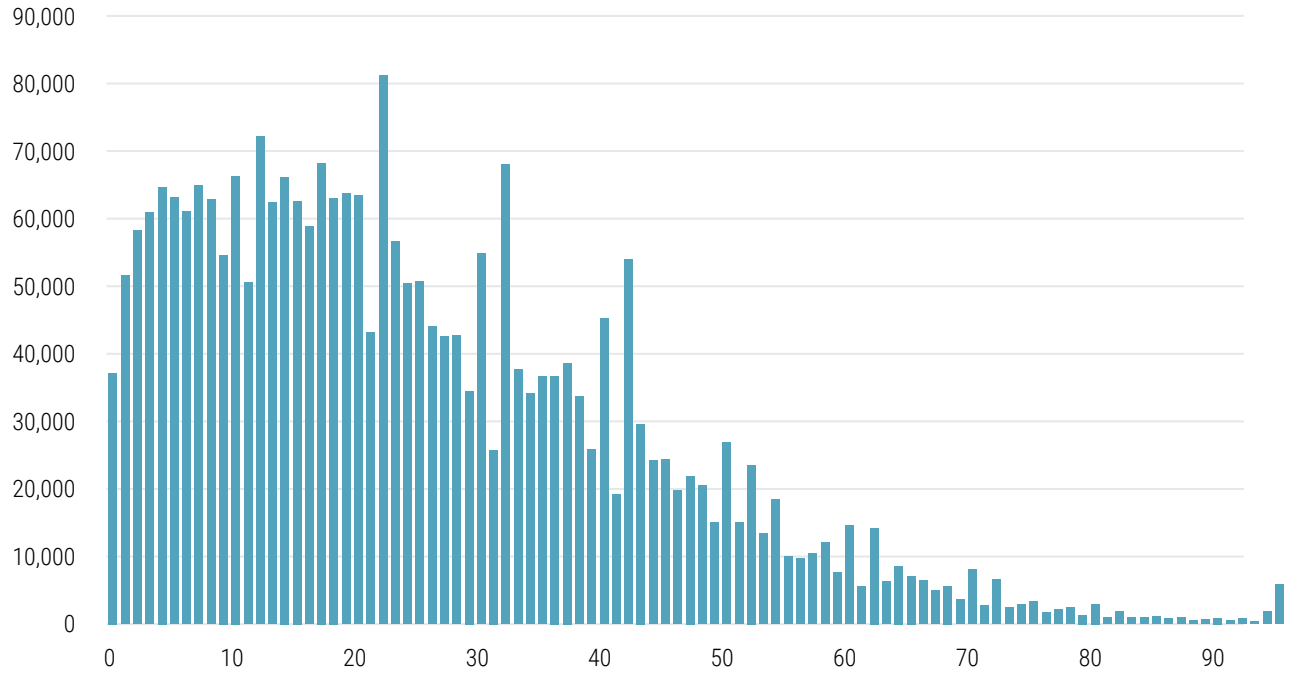
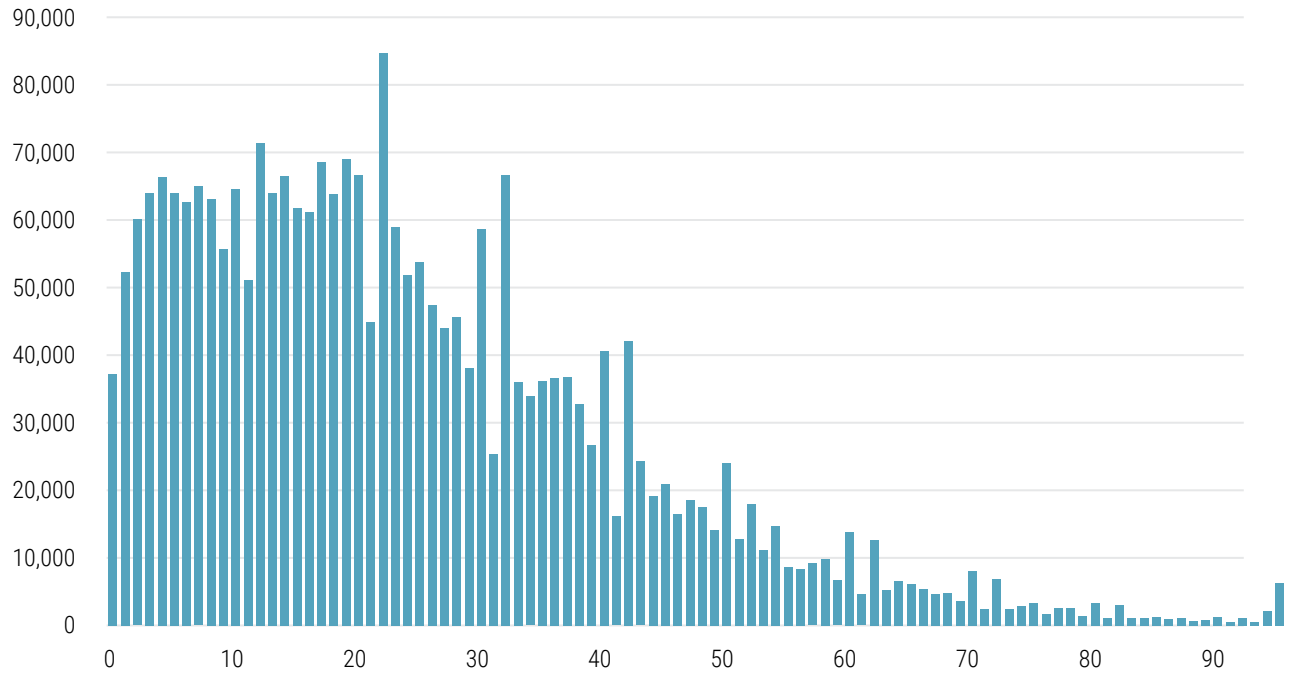


Figure 3.3: Female population by age



3.3.2 Measuring age misreporting

Age heaping is an issue in decennial census and household survey data, the 2022 LPHC shows patterns of age heaping that are more pronounced than in previous censuses. This age heaping seems to be a result of more proxy responses which in most situations, persons responding are not able to provide accurate information on their household members. There are several approaches for measuring age heaping in population data. The Whipple's index is one of the most common methods used in measuring

age heaping. US Bureau of Census has developed a spreadsheet programme, SINGAGE that calculates the Myers, Whipple, and Bachi indexes of digit preference (Shryock et al, 1975). The Mathematical methods have been used to evaluate and measure the extent of digit preferences and other errors and some of the methods used are the Whipple's index, Myer's blended index and Bachi's index. The preference for and avoidance of specific digits are graphically presented in Figures 3.4 and 3.5.

The Whipple's index detects preference for or avoidance of a particular digit. The values of index range from 100 to 500. An index of 100 means that there is no preference for either 0 or 5; an index of 500 implies a preference for only 0 or 5; and an index below 100 means that digits 0 and 5 are avoided. The Whipple's index of 245 for the total country in 2022 indicates that reporting of age data was acceptable. Also, males tended to report their ages better than females, as reflected in the indices by sex (155 for males and 163 for females). The Bachi method involves applying the Whipple method repeatedly to determine the extent of preference for each final digit. Similar to the Myers index, the Bachi index equals the sum of the positive deviations from 10 per cent. It has a theoretical range from 0 to 90, and 10 per cent is the expected value for each digit. Using the Bachi method, … of the ages in the population were underreported or were shifted to other age groups.

Table 3.1: Summary indices of age misreporting, 2022

Index	Male	Female	Both sexes
Whipples	2.34	2.55	2.45
Myers	47.5	52.5	50.1
Bachi	29.0	33.0	31.0

Figure 3.4: Bachi preference by digit

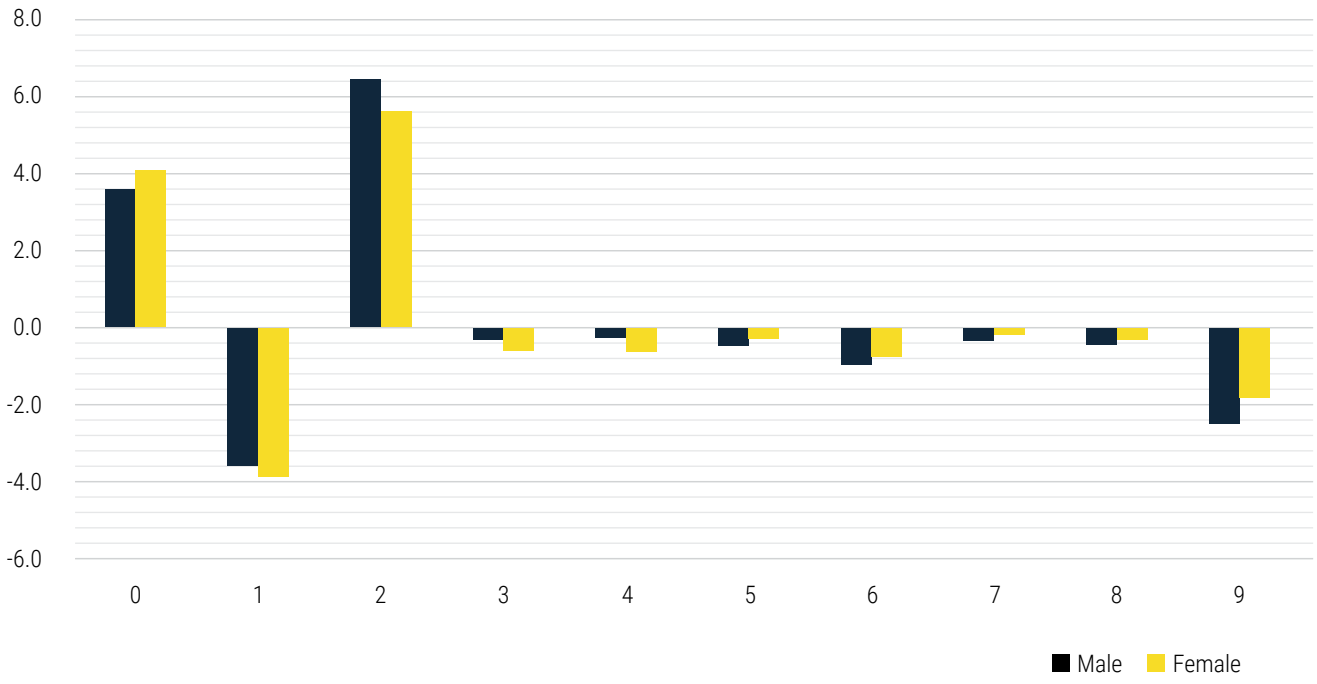
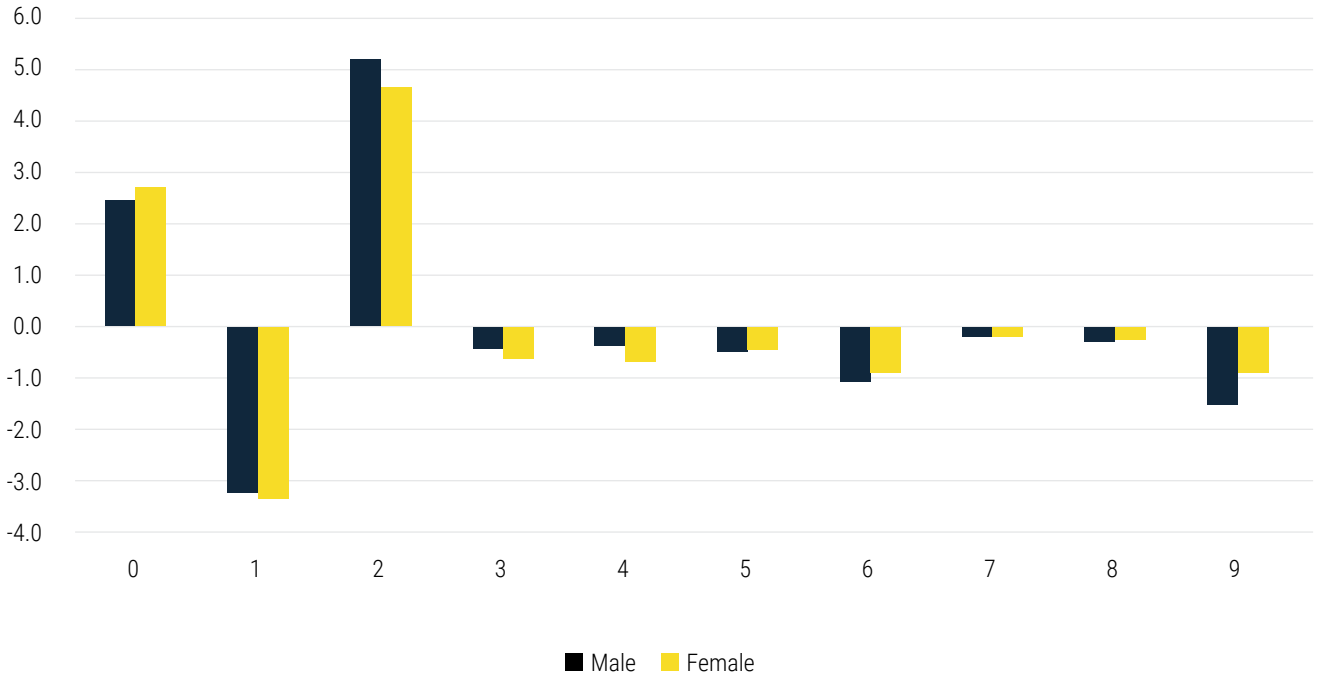


Figure 3.5: Myers preference by digit



3.3.3 Measurement of accuracy indices

The sex ratio scores have fallen from 6.3 in 2008 to 4.6 in 2022. This is an indication of better reporting for the 2022 population data than the 2008 data.

The age accuracy index as the sum of the male and female age ratio scores plus three times the sex ratio scores calculated using data for ages 0-14 through 65-69. The United Nations (1952) suggests that the age and sex structure of a population will be:

- Accurate if the joint score index is under 20,
- Inaccurate if the index is between 20 and 40; and
- Highly inaccurate if the index is over 40.

Table 3.2 provides summary measures of the accuracy of age and sex reporting in the 2008 and 2022 censuses. The age-sex accuracy index increased from 31.8 in 2008 to 46.6 in 2022, accounting for a difference of 15. Although the age reporting in 2008 is inaccurate, the situation in 2022 has worsened to have a highly inaccurate age reporting by the United Nations' Standard. Age ratios is also used to evaluate the accuracy of age reporting in a census. The age ratio score is defined as the mean deviations of the age ratios from 100 per cent, irrespective of sign. Male age ratio score has increased by more than four times between 2008 (4.1) and 2022 (17.6). On the other hand, female age ratio scores also increased from 8.8 in 2008 to 15.1 in 2022

Table 3.2: Summary of indices measuring the accuracy of data, 2008 and 2022

Index	2008	2022
Sex ratio score	6.3	4.6
Male age ratio score	4.1	17.6
Female age ratio score	8.8	15.1
Accuracy index	31.8	46.6

3.3.4 Sex ratios

Sex is an important characteristic in demographic analysis. Data classified by sex can serve as an evaluation tool. At birth, it is biologically expected to have more males than females. It is also expected that mortality rates at various ages for males would be higher for females. Thus, the sex ratio(s) for a population should decline from age one throughout the higher ages. The 2008 Census shows that the expected gradual decline was shown from age groups 0-4 and 15-19. There was a sharp decline for age group 20-24 before rising at age group 40-44 (sex ratio of 110.3) to 55-59 (sex ratio of 121.5). At age group 60-64, there was a sharp decline and erratic pattern in the subsequent age groups. The fluctuating and inconsistent patterns of sex ratios are indication of migration and age misreporting. The 2022 census data also depict irregularities and the normal patterns of steady and gradual declines not observed. For instance, sex ratio for ages 0-4 and 5-9 were 97.7 and 99.0, respectively. The observation could be undercounting of children less than five years and age shifting for the age group 5-9 years. At age group 10-14, it moved to 100.0, then fell at 15-19 years (97.8) to 25-29 years (93.9). A phenomenon of higher sex ratios was observed between age groups 30-34 and 70-74 which could be attributed to return migration or over counting of males.

Table 3.3: Sex ratios by age, 2008 and 2022

Age	2008	2022
0-4	102.5	97.7
5-9	100.4	99.0
10-14	103.9	100.0
15 - 19	101.7	97.8
20 - 24	89.5	96.2
25 - 29	93.5	93.9
30 - 34	95.6	100.2
35 - 39	95.0	101.7
40 - 44	110.3	121.2
45 - 49	116.1	116.8
50 - 54	117.9	121.7
55 - 59	121.5	118.0
60 - 64	93.1	116.2
65 - 69	93.6	116.9
70 - 74	92.1	103.6
75 - 79	102.2	97.2
80+	93.2	83.3

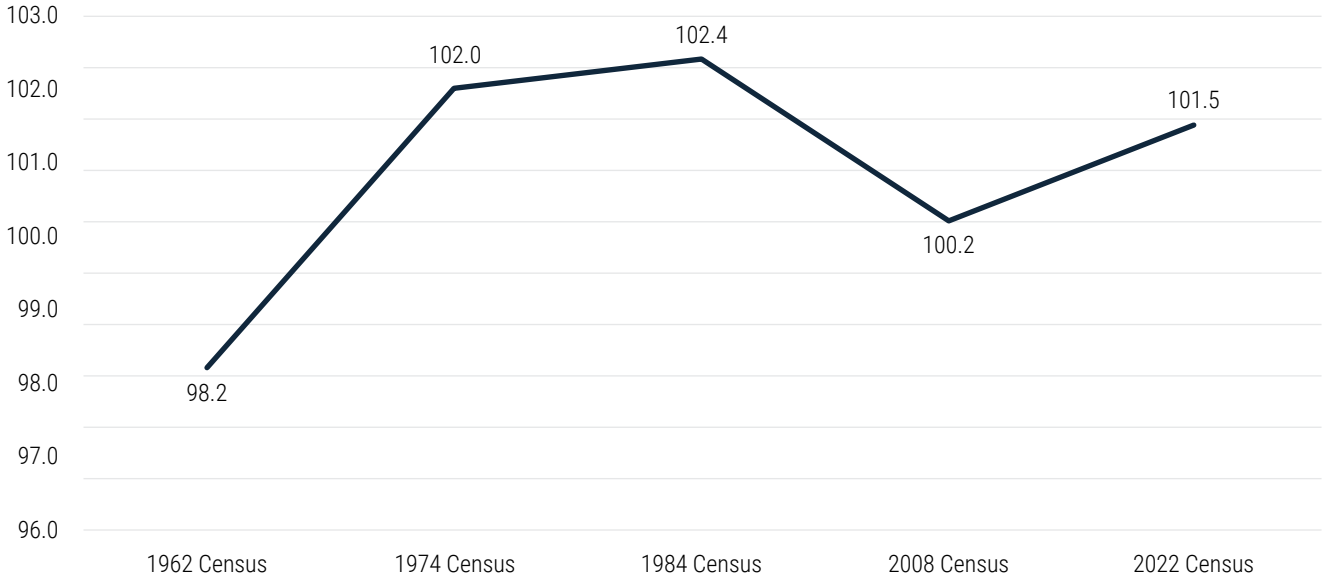
3.4 Sex composition

The sex ratio which is expressed as the number of males per 100 females represent the sex composition of a given population within a specified period. A sex ratio of above 100 means there are more males than females in that population and vice versa. Figure 3.6 shows there have been variations in the sex composition of the population from 1962 to 2022. For instance, a sex ratio of 98. 2 recorded in 1962 meant there were more males than females at the time. However, the reverse happened in the subsequent years as the country recorded a sex ratio of 102.0 in 1974 and 102.4 in 19 84 indicating more males than females. A sex ratio of 100.2 was also recorded in 2008 which almost brought about equal

representation of both population subgroups, but the decline could not be sustained as the 2022 census recorded a sex ratio of 101.2 males per 100 females.

The high sex ratio of 2022 has been attributed to the relatively large number of males returning after the Liberia civil war.

Figure 3.6: Sex ratios by region, 1962–2022



At the county level, Table 3.4 indicates remarkable variations in sex ratios in all the counties across the three census years. Counties such as Montserrado (117.8), Lofa (108.0), whose sex ratios exceeded 100 in 1984 also recorded lower sex ratios in 2008 (96.7, 93.3) and 2022 (96.3, 99.4) respectively indicating more females than males. Eleven counties recorded sex ratios which exceeded 100 in 2008 with Sinoe recording the highest sex ratio of 115.0. With exception of Montserrado (93.3) and Lofa (99.4) which recorded sex ratios below 100 in 2022, all the other counties recorded sex ratios above 100 with Grand Cape Mount recording highest sex ratio of 117.8.

Table 3.4: Sex ratio by county, 1984 to 2022

County	1984	2008	2022
Liberia	102.0	100.2	101.5
Bomi	108.0	104.3	105.3
Bong	96.3	97.8	101.2
Gbarpolu	101.7	111.2	113.9
Grand Bassa	109.6	100.1	104.8
Grand Cape Mount	89.2	105.7	117.8
Grand Gedeh	96.3	107.8	113.7
Grand Kru	91.8	104.9	108.9
Lofa	107.8	93.3	99.4
Margibi	100.9	101.7	100.3
Maryland	98.9	108.9	101.3
Montserrado	117.8	96.7	96.3

County	1984	2008	2022
Nimba	95.9	99.2	100.7
River Cess	99.0	108.6	110.7
River Gee	96.2	109.2	110.6
Sinoe	103.1	115.0	110.6

3.5 Age ratio

The quality of age data can be measured by age and sex ratios. The age ratio is defined as the ratio of the population in a given age group to an average of the sum of the populations in the adjacent age groups, is usually computed for each sex. It is a tool for measuring age misreporting which is supposed to form a linear series in the absence of instability in fertility, mortality and migration and they are, therefore, not expected to deviate far from 100. Basically, age ratios are expected to be the same throughout the age distribution, and all of them should be close to a value of 100 where fertility and mortality have not fluctuated much in the past and international migration has not been significant. Deviation from this "expected" ratio shows that either the presence of content or other errors in the census enumeration: the larger the deviation of the age ratio from 100, the higher the possibility of errors in the census data.

The formula for calculating the age ratio is as follows:

$$ {}_5AR_x = \frac{{}_5P_x}{\frac{1}{2}({}_5P_{x-5} + {}_5P_{x+5})} \times 100 $$

Age ratio for the age category x to x+4 is

${}_5AR_x$ = The age ratio for the age group x to x+4

${}_5P_x$ =The enumerated population in the age category x to x+4

${}_5P_{x-5}$ = The enumerated population in the adjacent lower age category

${}_5P_{x+5}$ =The enumerated population in the adjacent higher age category

Table 3.5: Population and age ratios by age

	Population						Age ratio		
	Number			Proportion					
Age	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
0-4	271,732	278,220	549,952	10.3	10.7	10.5			
5-9	305,694	308,910	614,604	11.6	11.9	11.7	103.9	104.0	103.9
10-14	316,719	315,903	632,622	12.0	12.1	12.0	102.0	100.0	101.0
15-19	315,619	322,844	638,463	11.9	12.4	12.2	103.4	103.9	103.6
20-24	293,896	305,640	599,536	11.1	11.7	11.4	111.1	111.1	111.1
25-29	213,502	227,432	440,934	8.1	8.7	8.4	83.2	86.7	85.0
30-34	219,223	218,837	438,060	8.3	8.4	8.3	114.2	110.8	112.5
35-39	170,298	167,434	337,732	6.4	6.4	6.4	87.3	93.1	90.1
40-44	170,868	140,960	311,828	6.5	5.4	5.9	126.3	111.3	119.1
45-49	100,206	85,783	185,989	3.8	3.3	3.5	75.1	78.1	76.5
50-54	95,866	78,708	174,574	3.6	3.0	3.3	129.1	124.2	126.9

	Population						Age ratio		
	Number			Proportion					
Age	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
55-59	48,307	40,942	89,249	1.8	1.6	1.7	67.2	68.3	67.7
60-64	47,888	41,159	89,047	1.8	1.6	1.7	128.4	129.8	129.0
65-69	26,288	22,497	48,785	1.0	0.9	0.9	76.2	73.2	74.8
70-74	21,094	20,341	41,435	0.8	0.8	0.8	117.5	125.6	121.4
75-79	9,611	9,888	19,499	0.4	0.4	0.4			
80+	17,216	20,662	37,878	0.7	0.8	0.7			
Total	2,644,027	2,606,160	5,250,187	100.0	100.0	100.0			

3.6 Age structure

Figures 3.7 and 3.8 present information on the age structure of Liberia's population as of 2008 and 2022, respectively. The pyramids depict graphical representation of the population. In 2008, the age structure of the population is broad base which indicates the youthful nature of the population and rapid population even after replacement level fertility has been reached. The narrowing nature of the pyramid on the on other hand, shows that population decreases with increasing age due to mortality, which is typical of a developing country. However, the 2022 population pyramid, unlike 2008 does not have a pronounced broad base as characteristic of developing country. Instead, the two younger age groups (0-4 and 5-9 years) are a bit narrowed while there seems to be a bulge at ages 10-14, 15-19 and 20-24. The structure turns to narrow from age 25-29 upwards.

Figure 3.7: Population pyramid of Liberia, 2022

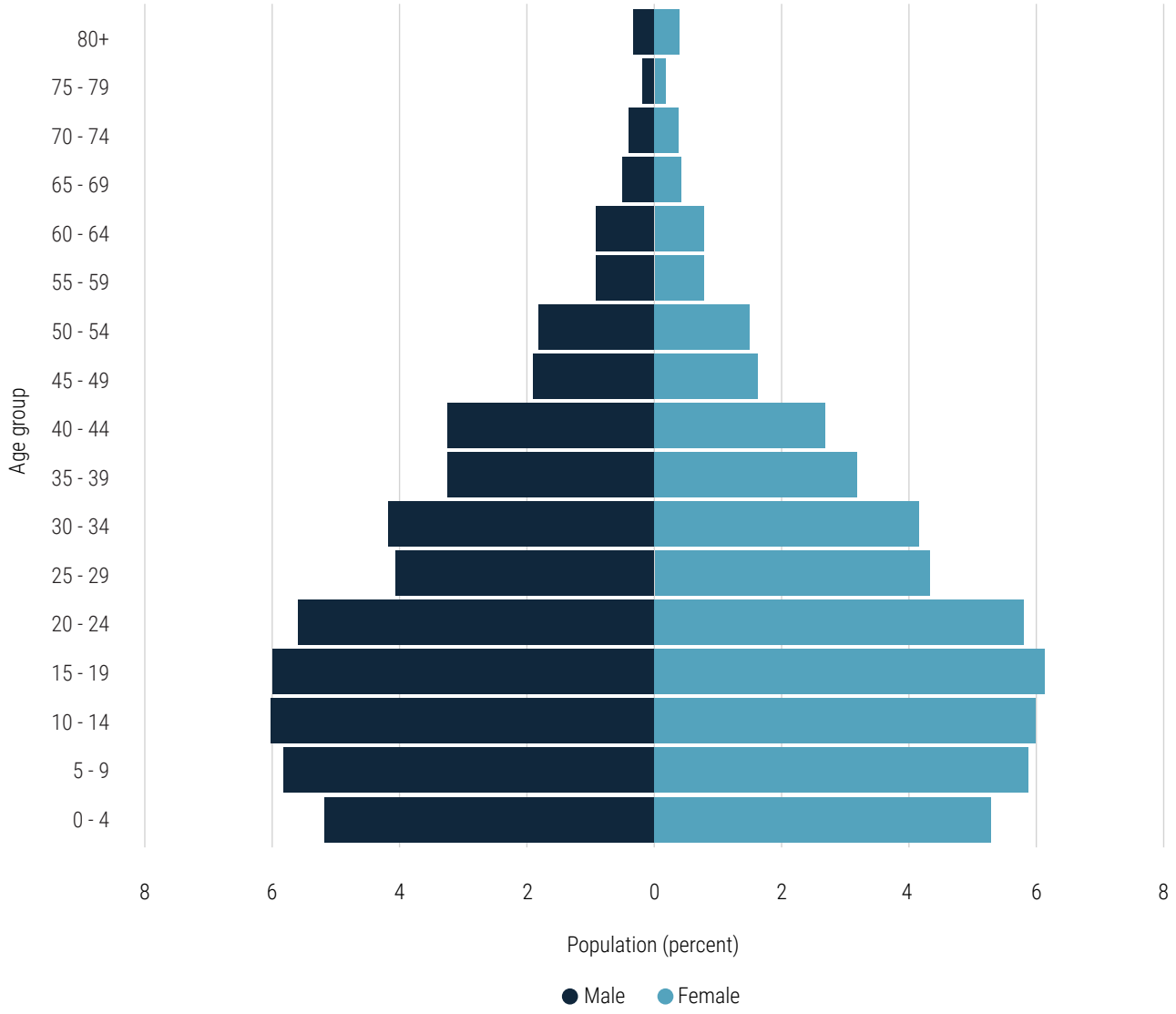
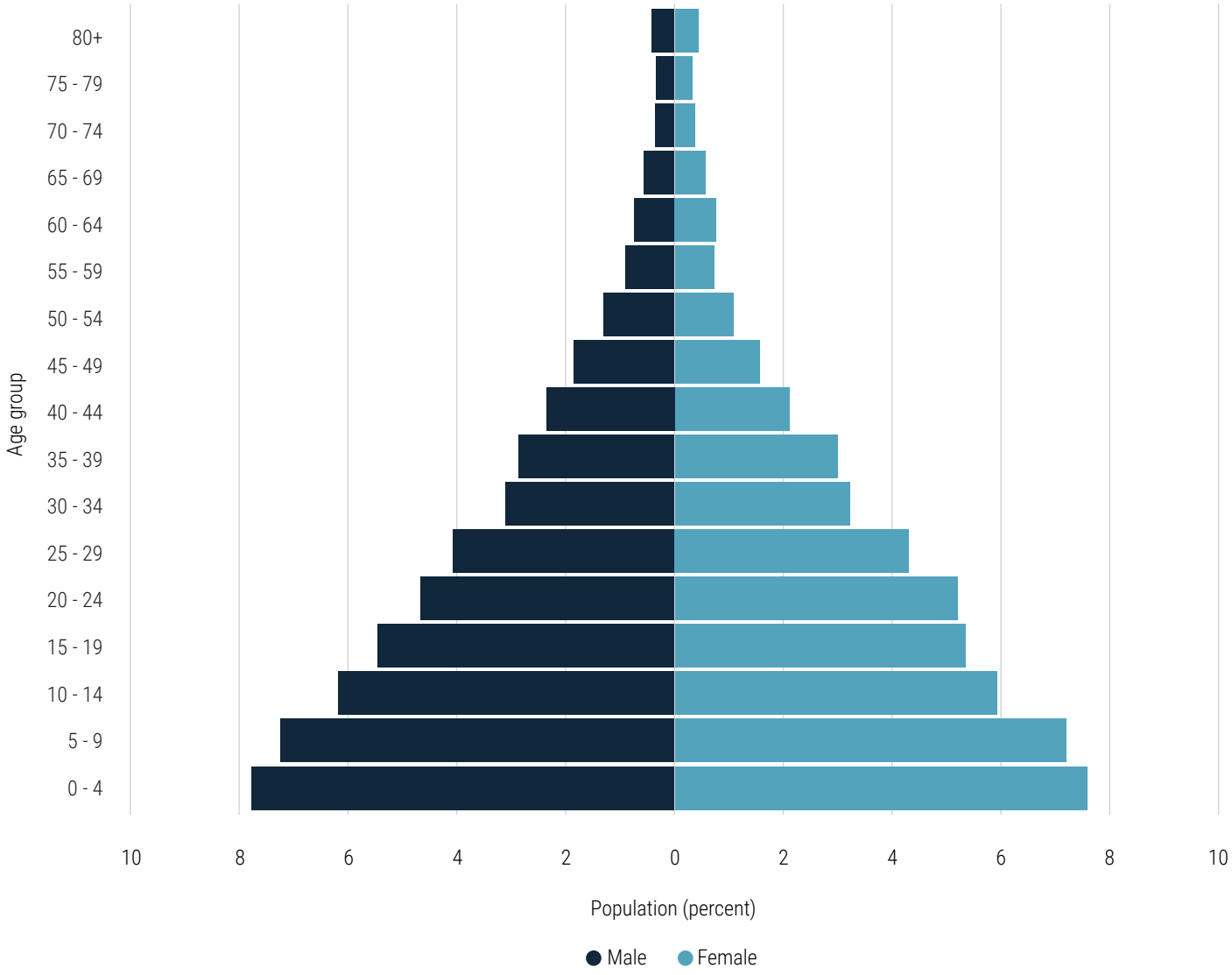


Figure 3.8: Population pyramid of Liberia, 2008



3.7 Broad age group

The proportion of the population aged 0 -14 years has been decreasing from 43.1percent in 1984 to 34.2 per cent in 2022 while those within the working-age group (15-64) has been increasing since 1984, from 52.7 per cent to 63.0 per cent in 2022. The proportion of the population 65 years and older has also been decreasing from 4.2 in 1984 to 2.8 in 2022 which is an indication of low life expectancy. Table 3.6 also shows that the share of the active working-age (15-64) population has increased about 10 percentage points in size between 1984 and 2022. The increasing proportion of the working-age population will mean the need to create job opportunities to absorb the labour force.

Table 3.6: Broad age group by sex, 1984, 2008 and 2022

Age group	Sex	1984	2008	2022
0-14 years	Males	43.7	42.3	33.8
	Females	42.6	41.5	34.6
	Both sexes	43.1	41.9	34.2
15-64 years	Males	51.5	54.3	63.4
	Females	53.9	55.0	62.5
	Both sexes	52.7	54.7	63.0
65+ years	Males	4.8	3.3	2.8
	Females	3.5	3.5	2.8
	Both sexes	4.2	3.4	2.8

Table 3.7 shows the county distribution of the broad age group of the population in 2022. Generally, the pattern of the age distribution of the population is similar in all counties although some counties show a much stronger working-age structure than others. Grand Gedeh has the least proportion of 28.8 per cent of the population 0-14 years and the highest proportion of the working-age group (68.8 per cent). On the other hand, Nimba County has the highest proportion of the population aged 0-14 (39.6 per cent) and the least proportion of the working-age group (57.4 per cent). Montserrado, a host to the national capital and a destination for most migrants, has the third highest working-age group, accounting for 64.8 per cent.

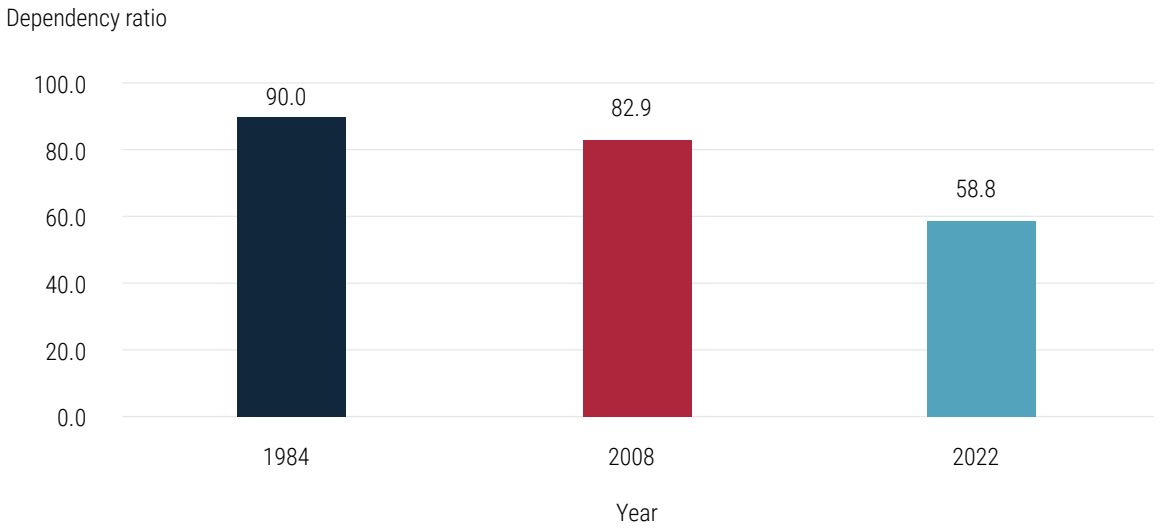
Table 3.7: Broad age group by county, 2022

	Number				Per cent		
County	0-14	15-64	65+	Total	0-14	15-64	65+
Liberia	1,797,178	3,305,412	147,597	5,250,187	34.2	63.0	2.8
Bomi	46,018	82,469	5,218	133,705	34.4	61.7	3.9
Bong	161,711	289,072	16,778	467,561	34.6	61.8	3.6
Gbarpolu	31,702	60,894	3,399	95,995	33.0	63.4	3.5
Grand Bassa	104,130	179,444	10,115	293,689	35.5	61.1	3.4
Grand Cape Mount	54,861	118,322	5,684	178,867	30.7	66.2	3.2
Grand Gedeh	62,427	149,028	5,237	216,692	28.8	68.8	2.4
Grand Kru	37,719	69,137	2,486	109,342	34.5	63.2	2.3
Lofa	128,234	226,772	12,370	367,376	34.9	61.7	3.4
Margibi	105,435	190,168	9,343	304,946	34.6	62.4	3.1
Maryland	61,217	107,099	4,271	172,587	35.5	62.1	2.5
Montserrado	630,956	1,245,637	44,372	1,920,965	32.8	64.8	2.3
Nimba	245,969	356,789	19,083	621,841	39.6	57.4	3.1
River Cess	33,854	54,236	2,729	90,819	37.3	59.7	3.0
River Gee	41,948	79,527	3,178	124,653	33.7	63.8	2.5
Sinoe	50,997	96,818	3,334	151,149	33.7	64.1	2.2

3.8 Dependency ratio

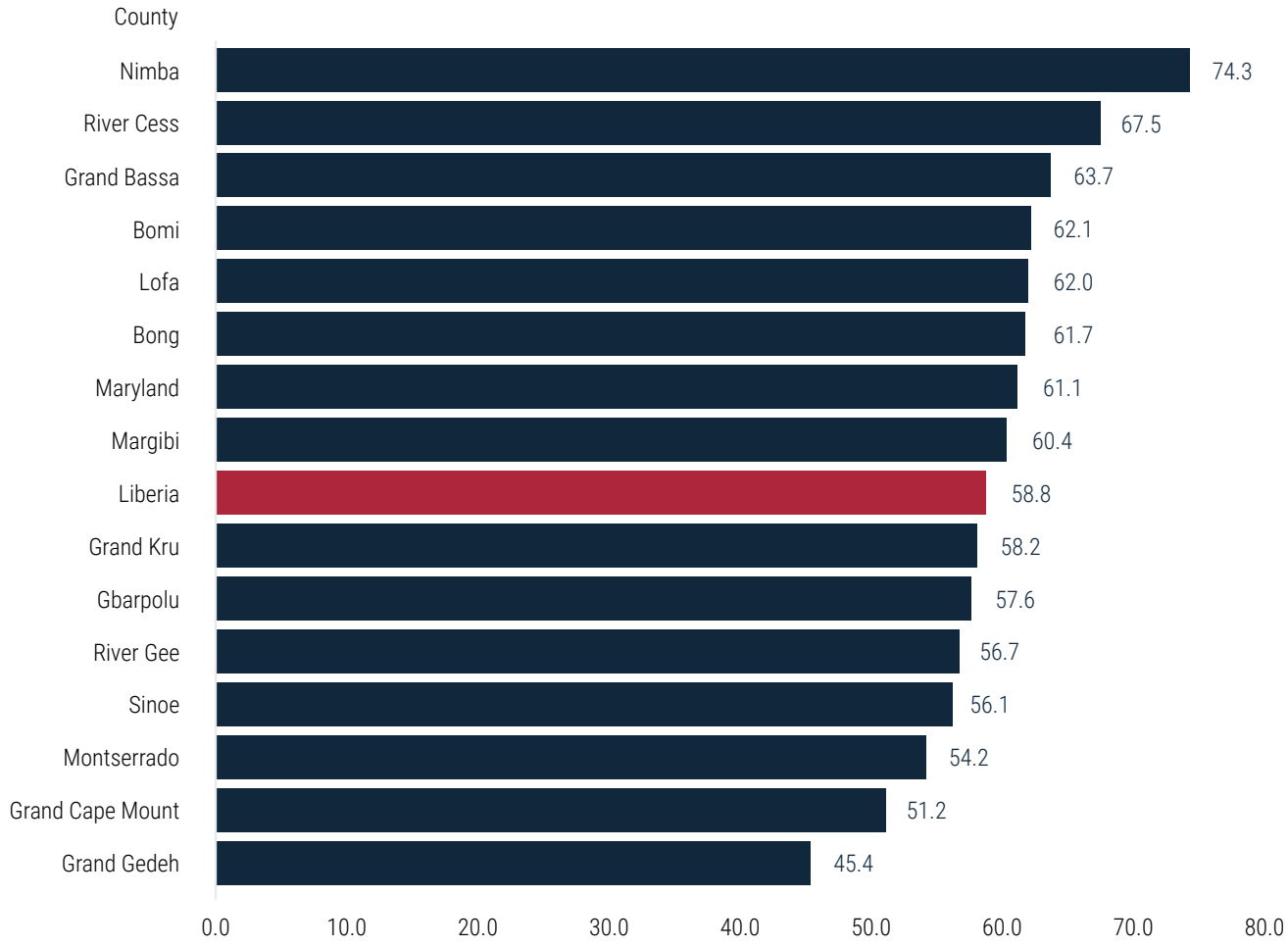
Age-dependency ratio is the population in the dependent age group (0-14 and 65 years) to those in the working-age group (15-64 years) measured per 100 population. The dependency ratio is used as an indicator to measure the economic burden of the working population. Figure 3.9 shows a decline in age-dependency ratio from 1984 (90), 2008 (82.9) to 58.8 in 2022. There has been a steady decline in the total age-dependency ratios from 90.0 in 1984 to 82.9 in 2008 and with a sharp decline to 58.8 by 2022. The sudden decline in the age-dependency ratio in 2022 compared with 1984 and 2008 could be attributed to the underreporting of the population aged 0-9 years. This low dependency ratio indicates that there is a sufficient number of people in the working-age group that can support the dependent population. 0-9.

Figure 3.9: Dependency ratio



In general, the pattern of the dependency across counties as some counties exhibit a much dependency ratio than others. In particular, the dependency ratio for the Nimba County is 75.3, the highest while Grand Gedeh recorded the lowest dependency ratio of 45.4 accounting for a dependency ratio of 29. The county with the second highest dependency ratio is River Cess (67.5) and the third highest is Grand Bassa (62.1)

Figure 3.10: Dependency ratio by county, 2022



4. Socio-cultural composition of the population

4.1 Introduction

Liberia, a nation with a rich wall-hanging of history and culture, stands as a vibrant example of Africa's complex social fabric. Established in 1847 by freed American and Caribbean slaves, Liberia is the first African republic to proclaim its independence, and it is distinguished by its historical ties to the United States. This unique origin has profoundly influenced its socio-cultural composition, creating a diverse mixture of ethnic groups and cultures. Today, Liberia is home to approximately 5.2 million people, comprising of 16 ethnic groups, each with its own language and cultural customs. These groups include but are not limited to the Kpelle, Bassa, Grebo, Gio and Mano, among others. The Kpelle, in both urban and rural environs, represent the largest ethnic group, playing a pivotal role in the sociopolitical landscape of the country. In contrast, smaller groups such as the Gola and Kissi inhabit more localized geographic areas, maintaining cultural practices that are often distinct from the mainstream Liberian culture.

The socio-cultural composition of Liberia is not only pivotal due to its intrinsic cultural diversity but also because of the significant role it plays in shaping national policies and community life. This diversity is further enriched by the return of the diaspora, who bring different cultural influences from the United States, Europe and other parts of West Africa, thereby adding layers to the already complex social multi-layered. This chapter examines size and distribution of population by ethnicity, citizenship status and religious composition of the population.

4.2 Ethnic Distribution Across Counties in Liberia

Counties in Liberia are diverse in their ethnic composition. In Bomi County, the Dey and Gola ethnic groups stand out prominently, constituting 38.1 per cent and 31.9 per cent of the population, respectively, which influences the local cultural and governance landscape significantly. Bong County is predominantly inhabited by the Kpelle, who make up 36.6 per cent of the county's population, indicating a central role in the region's socio-cultural and agricultural activities.

Gbarpolu County sees a major presence of the Belle ethnic group, comprising 32.4 per cent of its population, emphasizing the county's unique cultural identity.

Grand Bassa County is a stronghold for the Bassa group, which represent 31.9 per cent of the population, potentially impacting local traditions and economic policies. In contrast, Grand Cape Mount County is predominantly Vai, with 34.5 per cent, reflecting significant cultural influences on local affairs. Grand Gedeh County is characterized by a large Krahn population at 69.2 per cent, dominating the sociopolitical and cultural framework of the county.

Grand Kru County has a noticeable percentage of Kru, 11.4 per cent, linked to historical and current coastal activities. Lofa County features a diverse composition with Lorma and Gbandi being major groups, influencing the local ethos with percentages of 33.0 per cent and 55.2 per cent, respectively. Margibi County shows a substantial 12.6 per cent Kpelle presence, integral to the county's socioeconomic dynamics.

Maryland County's demography is significantly shaped by the Grebo, who make up 27.4 per cent of its population, affecting cultural and educational policies. Montserrado County, Liberia's political and economic hub, is notably diverse, with substantial populations of Bassa and Mandingo, 41.4 per cent, and 60.6 per cent respectively, reflecting a multicultural dynamism.

The Nimba County is predominately occupied by the Gio and Mano, with 70.8 per cent and 69.2 per cent respectively, which is central to the county's governance and resource management. River Cess County and River Gee County are influenced by the Bassa and Grebo groups, with their respective shares of 10.8 per cent and 21.2 per cent, playing key roles in local governance and cultural preservation. Lastly, Sinoe County sees a significant Kru population.

Table 4.1: Population by ethnic groups and county, 2022

Ethnic group	Bomi	Bong	Gbarpolu	Grand Bassa	Grand Cape Mount	Grand Gedeh	Grand Kru	Lofa	Margibi	Maryland	Montserrado	Nimba	River Cess	River Gee	Sinoe	Total
Bassa	0.6	2.3	0.2	31.9	0.6	0.5	0.1	0.1	9.7	0.3	41.4	0.9	10.8	0.1	0.7	100.0
Belle	2.1	5.1	32.4	3.5	1.8	1.5	0.4	0.8	5.9	0.4	43.4	1.0	0.6	0.3	1.0	100.0
Dey	38.1	0.9	1.2	0.9	3.0	1.3	0.3	1.0	3.8	0.3	46.6	1.3	0.1	0.2	1.0	100.0
Gbandi	1.0	1.0	1.8	0.4	1.0	0.3	0.1	55.2	4.6	0.1	33.3	0.8	0.1	0.1	0.2	100.0
Gio	0.4	0.6	0.6	0.4	0.5	0.8	0.5	0.1	2.5	0.1	21.4	70.8	0.3	0.5	0.5	100.0
Gola	31.9	0.7	6.6	0.3	21.7	0.3	0.3	0.1	2.0	0.3	34.5	0.6	0.1	0.4	0.2	100.0
Grebo	0.5	0.8	0.2	0.6	0.3	2.3	12.8	0.1	1.6	27.4	29.0	0.6	0.1	21.2	2.5	100.0
Kpelle	1.9	36.6	4.4	3.3	0.8	0.4	0.1	3.0	12.6	0.2	35.0	1.1	0.2	0.1	0.4	100.0
Kissi	3.2	1.5	0.8	1.3	1.7	1.0	0.2	42.0	6.2	0.2	40.4	0.7	0.2	0.1	0.4	100.0
Krahn	0.2	0.2	0.2	0.2	0.2	69.2	0.3	0.1	1.7	0.4	20.4	5.3	0.1	0.4	1.0	100.0
Kru	0.5	0.5	0.1	1.1	0.8	0.7	11.4	0.3	1.7	5.2	48.6	0.4	1.3	0.5	26.8	100.0
Lorma	1.2	3.5	1.0	0.8	0.8	0.5	0.1	33.0	6.3	0.2	50.9	1.1	0.2	0.1	0.4	100.0
Mandingo	1.5	5.4	1.5	1.2	2.3	2.8	0.3	16.0	2.9	0.9	60.6	2.8	0.2	0.6	1.0	100.0
Mano	0.3	3.7	0.2	0.8	0.3	0.4	0.2	0.1	2.5	0.1	21.6	69.2	0.2	0.1	0.3	100.0
Mende	2.3	1.0	3.1	0.8	27.7	0.3	0.1	28.1	2.9	0.1	31.8	1.0	0.2	0.1	0.5	100.0
Sapo	0.2	0.1	0.1	0.2	1.2	5.2	0.1	0.1	0.7	0.4	27.0	0.2	0.1	0.1	64.2	100.0
Vai	5.8	1.2	0.6	0.6	34.5	0.2	0.1	0.2	2.7	0.1	52.9	0.4	0.2	0.1	0.4	100.0
Other Liberian ethnic group	0.3	0.6	0.4	3.0	1.2	1.2	0.2	0.9	1.9	1.5	55.5	32.3	0.2	0.2	0.7	100.0
Other African tribe	1.6	5.0	1.9	4.3	4.0	5.8	1.5	4.8	3.5	3.6	50.3	6.7	1.3	2.9	2.7	100.0

4.3 Ethnic composition

The 2022 PHC indicates that the Kpelle (20.2 per cent) was the largest ethnic group in Liberia, followed by Bassa (13.6 per cent) and Grebo (9.9 %). These three ethnic groups constitute about 44 per cent of the population and also dominated in the population sizes in 1984 and 2008. The ethnic group with the least population is the Dey (0.3 per cent). In the urban areas, the three dominant ethnic groups are the Kpelle (17.7 per cent), Bassa (14.2 per cent) and Grebo (10.8 per cent). However, in rural areas, the Kpelle (23.3 per cent), Bassa (12.9 per cent) and Gio (9.6 per cent) are the three dominant ethnic groups in the rural areas.

Table 4.2: Major ethnic groups by type of residence, 1984, 2008 and 2022

	2022				
Ethnic group	**Urban**	**Rural**	**Total**	**2008**	**1984**
Bassa	14.2	12.9	13.6	13.4	13.8
Belle	0.8	0.6	0.7	0.8	0.5
Dey	0.2	0.4	0.3	0.3	0.4
Gbandi	2.6	3.4	2.9	3.0	2.8
Gio	6.4	9.6	7.9	8.0	7.8
Gola	2.9	4.8	3.8	4.4	4.0
Grebo	10.8	8.8	9.9	10.0	9.0
Kpelle	17.7	23.3	20.2	20.3	19.4
Kissi	4.5	4.1	4.3	4.8	4.0
Krahn	4.1	5.1	4.5	4.0	3.8
Kru	6.3	4.5	5.5	6.0	7.3
Lorma	5.6	3.9	4.8	5.1	5.6
Mandingo	6.2	1.8	4.2	3.3	5.1
Mano	6.5	8.0	7.2	7.9	7.1
Mende	1.6	1.7	1.7	1.3	0.8
Sapo	0.7	1.4	1.0	1.3	-
Vai	4.3	3.3	3.8	4.0	3.6
Other Liberian ethnic group	0.5	0.3	0.4	0.6	1.2
Other African tribe	3.7	2.1	3.0	1.4	1.6
Non-African	0.3	0.1	0.2	0.1	2.2
Total	100.0	100.0	100.0	100.0	100.0

4.4 Religious affiliation

The Christian religion has been the most dominant religion in Liberia, accounting for 85.6 per cent in 2008 and 84.9 per cent in 2022. The religion with the second highest proportion of the population in both 2008 (12.2 per cent) and 2022 (12.0 per cent) is Islam. The Traditional African Religion constitute about 1 per cent in both 2008 (0.6 per cent) and 2022 (0.5 per cent). The population who indicated that they do not have any religion almost doubled from 1.5 per cent in 2008 to 2.6 per cent in 2022.

Figure 4.1: Religious affiliation, 2008 and 2022

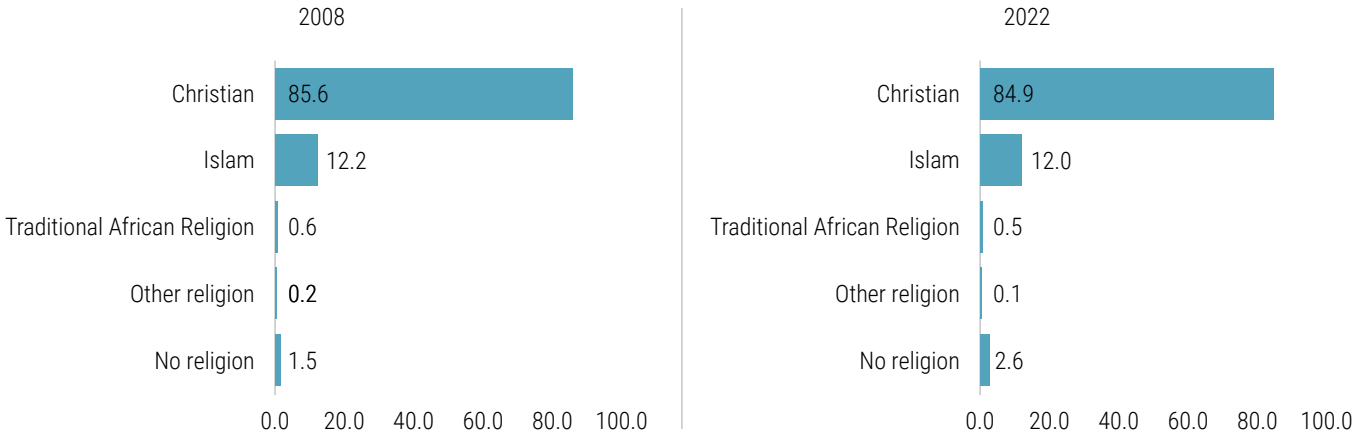


Table 4.3 shows that the proportion of the population which practice the Christian religion in urban areas (85.5 per cent) is higher than those in rural (84.2 per cent) by 1.3 percentage points. Similarly, the proportions of Muslims in urban areas (12.3 per cent) are higher than those in rural areas (11.6 per cent). The population which indicated to have no religion is higher in rural areas (3.2 per cent) than urban areas (2.0 per cent). In 15 out of the 16 counties, Christianity dominates the religious groups. The proportion ranges from 96.5 per cent in River Cess County to 58.5 per cent in Bomi County. The only exception county was the Grand Cape, where a higher proportion of the population were Muslims (73.1 per cent).

Table 4.3: Religious affiliation by type of residence and county, 2022

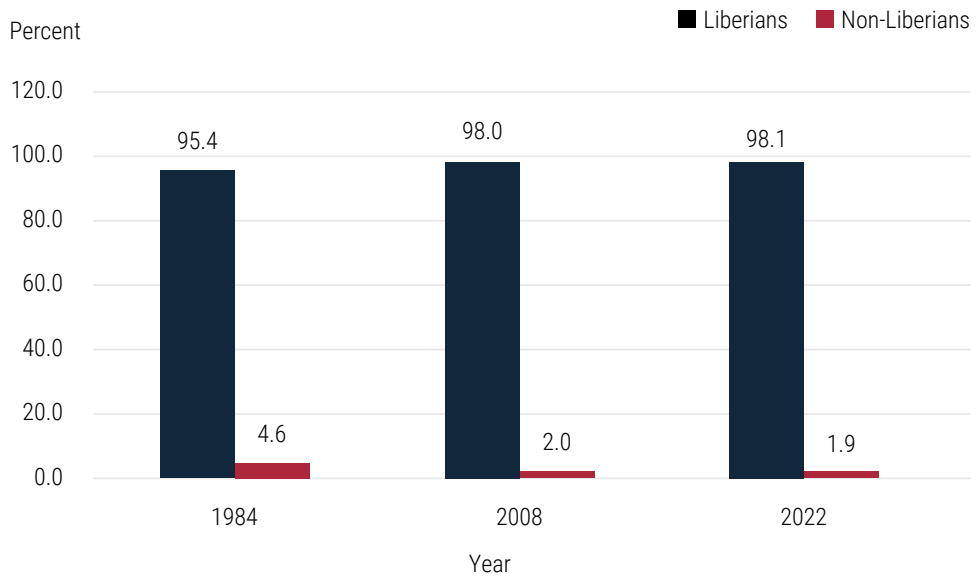
County	Christian	Muslim	Traditional African Religion	Other religion	No religion	Total
Total Country	84.9	12.0	0.5	0.1	2.6	100.0
Urban	*85.5*	*12.3*	*0.1*	*0.1*	*2.0*	*100.0*
Rural	*84.2*	*11.6*	*0.9*	*0.1*	*3.2*	*100.0*
Bomi	58.5	39.4	0.1	0.0	2.0	100.0
Bong	93.8	3.3	0.4	0.0	2.4	100.0
Grand Bassa	95.9	1.4	0.4	0.1	2.2	100.0
Grand Cape Mount	24.6	73.1	0.1	0.1	2.2	100.0
Grand Gedeh	91.1	5.0	0.7	0.2	3.0	100.0
Grand Kru	94.6	1.3	0.9	0.1	3.1	100.0
Lofa	64.6	30.3	1.8	0.0	3.2	100.0
Margibi	94.7	3.5	0.1	0.0	1.6	100.0
Maryland	94.8	1.9	0.6	0.0	2.7	100.0
Montserrado	84.6	13.3	0.1	0.1	2.0	100.0
Nimba	92.7	1.2	1.5	0.1	4.6	100.0
River Cess	96.5	1.1	0.1	0.0	2.3	100.0

County	Christian	Muslim	Traditional African Religion	Other religion	No religion	Total
Sinoe	95.0	2.3	0.3	0.1	2.4	100.0
River Gee	94.3	2.1	0.4	0.0	3.2	100.0
Gbarpolu	78.9	18.4	0.3	0.0	2.4	100.0
Total	84.9	12.0	0.5	0.1	2.6	100.0

4.5 Nationality

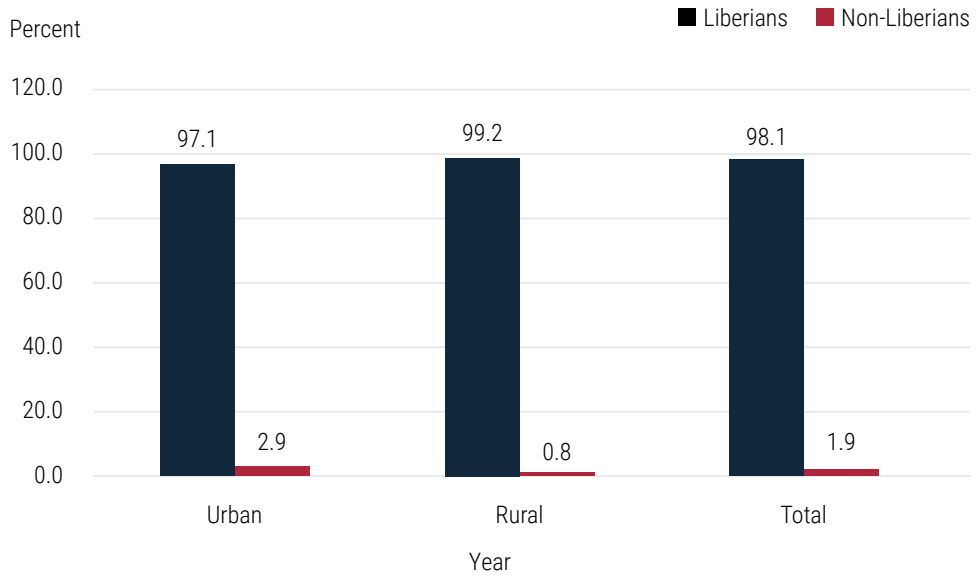
Figure 4.2 shows that the proportion of Liberians increased from 95.4 per cent in 1984 to 98.0 per cent in 2008. Furthermore, it slightly increased to a peak of 98.1 per cent in 2022. The proportion of the non-Liberians has fallen to 2.7 percentage points between 1984 and 2022. By 2008, the percentage of non-Liberians had decreased significantly. This decline may be due to improved stability and economic conditions in neighbouring countries, leading to the return of many migrants to their home countries. The 2022 data shows a further slight decrease in the proportion of non-Liberians. This continued decline suggests that Liberia has become more homogenous in terms of nationality over the past few decades.

Figure 4.2: Population by nationality, 1984, 2008 and 2022



The proportions of the Liberian population increased from 95.4 per cent in 1984 to 98 per cent in 2008, before hitting a peak of 98.1 per cent in 2022. The non-Liberian population in 2022 constitute about 2 per cent. The proportion of non-Liberians in urban areas (2.9 per cent) is more than three times (3.2) higher than their counterparts in rural (0.8 per cent), The higher proportions of non-Liberians residing in urban areas may be for employment, easy access to facilities such as education, health, transport, etc.

Figure 4.3: Population distribution by nationality and place of residence, 2022



There are 102,074 foreign nationals living in Liberia with 94,897 (93.0 per cent) being nationals from West Africa. The bulk of the foreigners originating from West Africa confirms the statement that most migrants move only a short distance i.e. move to a nearby place, especially in their first move, instead of a place very far away. In relation to the county distribution of the non-Liberians, nearly six in 10 (59.0 per cent) live in the Montserrado County. This may be foreign nationals working in Monrovia, the capital for international organization, investors and also the attraction of social amenities available. Grand Gedeh is also accommodating 9.1 per cent of the non-Liberian population with another 5.5 per cent living in Grand Cape Mount. Two counties – Bomi (0.9 per cent) and River Cess (0.9 per cent) – had the least foreign nationals.

Table 4.4: Non-Liberians population by county of residence and continent of origin

	Number							
County	West Africa	Other Africa	Asia	Europe	The Americas	Other	Total	Per cent
Bomi	902	2	12	0	9	28	953	0.9
Bong	2,358	30	13	52	10	187	2,650	2.6
Gbarpolu	1,580	2	15	1	1	35	1,634	1.6
Grand Bassa	3,231	26	110	8	9	101	3,485	3.4
Grand Cape Mount	5,010	21	63	185	2	297	5,578	5.5
Grand Gedeh	8,976	4	41	4	7	242	9,274	9.1
Grand Kru	1,064	3	8	0	0	56	1,131	1.1
Lofa	2,014	7	3	0	6	38	2,068	2.0
Margibi	2,823	21	72	6	16	109	3,047	3.0
Maryland	3,296	41	28	2	2	88	3,457	3.4
Montserrado	55,472	278	1,803	89	309	2,248	60,199	59.0
Nimba	3,159	51	34	6	17	68	3,335	3.3

	Number							
County	West Africa	Other Africa	Asia	Europe	The Americas	Other	Total	Per cent
River Cess	947	3	1	0	2	14	967	0.9
River Gee	1,989	8	9	0	0	57	2,063	2.0
Sinoe	2,076	7	67	1	4	78	2,233	2.2
Total	94,897	504	2,279	354	394	3,646	102,074	100.0

5. Household size, structure and composition

5.1 Introduction

Households constitute one of the most basic units of interaction among communities and have profound implications for the demographic, social and economic. The analysis of households provides insight into the processes that shape societies, including decision-making, resource provision, consumption and socialization. A clear understanding of the household dynamics is key to the understanding of the characteristics of a country's population. The household size represents the ratio of the population to the number of households. The household size, structure and composition may be influenced by patterns of marriage and fertility, norms surrounding intergenerational support, employment, cultural practices among other factors.

Knowledge of household structure, composition and headship provides important statistical tool for social and economic planning. A study of households also provides the basis for a reasonable projection of the future size of population and planning of housing needs. A study on households indirectly uncovers the dynamics of household formation and disintegration. The demographic trends of Liberia which is marked by transitions to decreasing levels of fertility, increase in life expectancy and increasing nuclear family system, as well as increasing urbanization and return migration are most likely to change the household contexts.

The chapter covers key areas such as population (household and non-household populations) and household related variables such as household and cultural composition, age and sex distribution, population growth and, on the geographic distribution of the population. In addition, the report discusses emerging issues from the age – sex structure, household composition.

5.2 HoUsehold and non-household Population

Out of a total population of 5,270,187 in Liberia, 98.6 per cent are household population while just a little over 1 per cent (1.4 per cent) are non-household population. Comparing the proportions of the population in households by type of residence, those living in rural areas (99.1 per cent) is slightly higher than those in urban (98.3 per cent) by about 1 percentage point. With regards to the population not in households, the proportion of the males (1.7 per cent) is higher than females (1.1 per cent). The proportion of the population not in households in urban areas is twice (2.2 per cent) as higher than the population in rural areas (1.1 per cent).

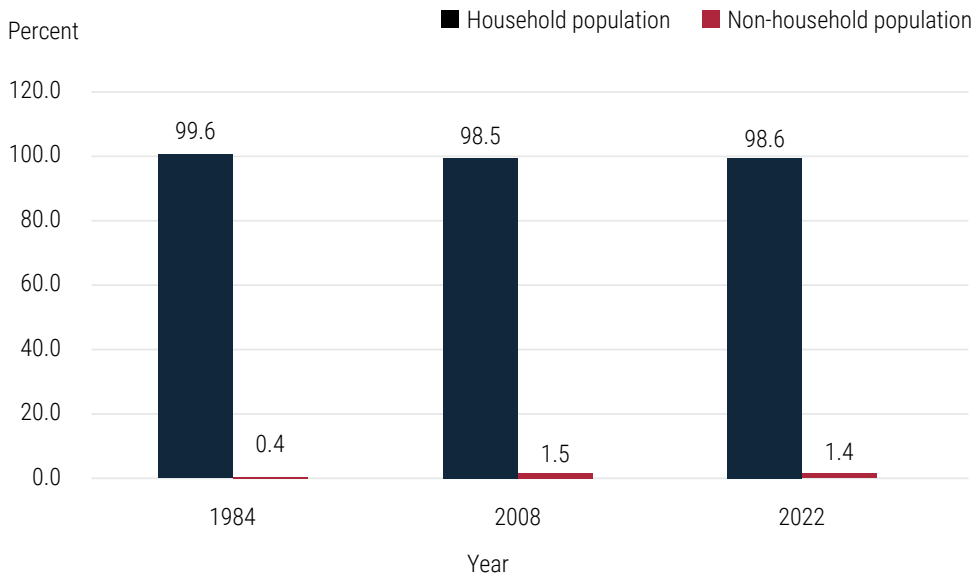
Table 5.1: Population in households and not in household sex and type of residence

	Number			Per cent	
	Total	Population in households	Population not in households	Population in households	Population not in households
Total					
Male	2,644,027	2,599,721	44,306	98.3	1.7
Female	2,606,160	2,578,763	27,397	98.9	1.1
Total	5,250,187	5,178,484	71,703	98.6	1.4
Urban					
Male	1,409,188	1,377,991	31,197	97.8	2.2
Female	1,452,966	1,434,955	18,011	98.8	1.2

	Number			Per cent	
	Total	Population in households	Population not in households	Population in households	Population not in households
Total	2,862,154	2,812,946	49,208	98.3	1.7
Rural					
Male	1,234,839	1,221,730	13,109	98.9	1.1
Female	1,153,194	1,143,808	9,386	99.2	0.8
Total	2,388,033	2,365,538	22,495	99.1	0.9

For a period of 38 years (1984 to 2022), the household population has remained at a peak of about 99 per cent. The proportion of household population was almost universal in 1984 (99.6 per cent), then declining slightly in 2008 (98.5 per cent) before moving to 98.6 per cent in 2022. In 1984, non-household population was less than 1 per cent. However, this population increased to 1.5 per cent in 2008 before declining to 1.4 per cent in 2022.

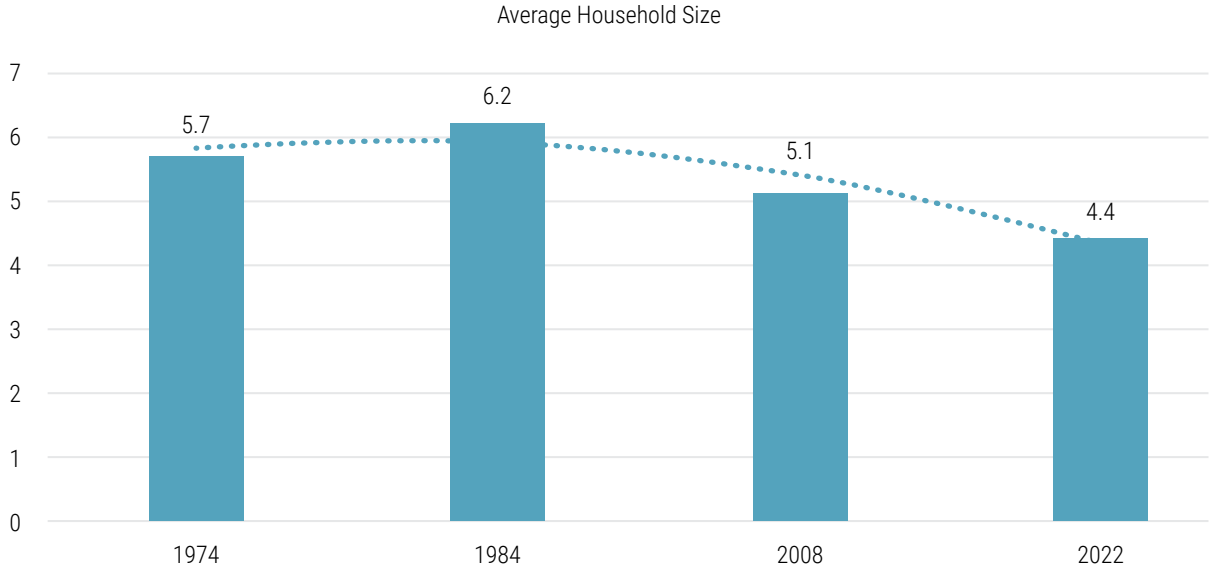
Figure 5.1: Household and non-household population, 1984 to 2022



5.3 Average household size

This section deals with information on the population who are living in households. People who reside together in a household in general share not only a dwelling, but also housekeeping arrangements and responsibilities for supporting and maintaining the household unit (UN DESA, 2019). The average household size may be affected by patterns of marriage and fertility, norms in the communities, kinship, intergenerational support system and patterns of economic activities among other factors. It may also be affected by the availability of housing units, ease of access to landed property and ease of access and prices of construction materials. The average household size in Liberia increased from 5.7 persons per household in 1974 to 6.2 persons per household in 1984 but fell to 5.1 persons in 2008 and to a low of 4.4 persons in 2022. Across the years, the highest average household size of 6.2 persons per household was recorded in 1984.

Figure 5.2: Average household size, 1974 to 2022



Household population, households and average household size by county

Table 5.2 provides information on household population, the number of households, and the average household size across various counties in the country provides valuable insights into regional disparities and influencing factors. It shows that comparing the geographical counties of Liberia, households in Grand Kru (5.3), River Gee (5.2) and Sinoe (5.0 per cent) tend to be larger whiles those in Bomi (3.4) and Grand Cape Mount (3.9) tend to be low. Grand Kru and River Gee with higher household sizes, are predominantly rural, often have extended family members where multiple generations cohabit. This cultural practice, coupled with an agricultural lifestyle requiring larger family units for labour, significantly contributes to larger household sizes.

In the urban areas, the two regions which recorded the highest average household size are River Gee (5.2) and Grand Kru (5.0) with Grand Cape Mount (3.6) and Bomi (3.9), accounting for the least average household sizes. In these counties where household sizes are large, both urban and rural areas show similar patterns, indicating uniform living patterns with extended family structures. Additionally, economic factors play a role, as larger families may share economic burdens and resources more effectively. Migration to urban areas for employment opportunities, often result in smaller, nuclear family units. In Grand Cape Mount, economic conditions might limit family sizes, while proximity to more developed areas influence a shift towards nuclear family structures. Margibi, influenced by the presence of industries and urban localities, also sees smaller, nuclear families, driven by higher living costs and different lifestyle and economic pressures.

In the rural settings, four regions – Grand Gedeh (5.3), Grand Kru (5.3), River Gee (5.2) and Sinoe (5.1) – recorded averages household size of more than five persons per household while Bomi (3.3) had the least average household size. In most cases, household sizes in rural areas tend to be larger than those in urban areas. However, there is a contrast, as the average household sizes in nine out of the 15 counties – Bomi, Bong, Gbarpolu, Grand Cape Mount, Lofa, Margibi, Montserrado, Nimba and River Cess – tend to have smaller household sizes than those in the urban areas. It is plausible that these counties with smaller household sizes, show higher urban populations with possibly more nuclear families compared to extended families.

The variation in household sizes across counties can be attributed to several factors. Cultural practices play a significant role, with extended family living arrangements more common in rural areas and certain counties, leading to larger household sizes. Conversely, urban areas tend to have more nuclear families due to changing cultural norms and economic factors. Economic conditions also contribute, as less economically developed areas may have larger households to pool resources and share economic burdens, while higher economic opportunities and living costs in urban areas result in smaller family units.

Table 5.2: Household population, households and average household size by county

	Household population			Households			Average household size		
County	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Total Country	2,812,946	2,365,538	5,178,484	650,678	536,594	1,187,272	4.3	4.4	4.4
Bomi	33,838	98,184	132,022	8,656	29,926	38,582	3.9	3.3	3.4
Bong	148,250	314,575	462,825	33,025	77,067	110,092	4.5	4.1	4.2
Gbarpolu	8,686	86,188	94,874	1,798	20,609	22,407	4.8	4.2	4.2
Grand Bassa	88,821	202,064	290,885	19,632	49,653	69,285	4.5	4.1	4.2
Grand Cape Mount	46,668	129,305	175,973	13,051	32,119	45,170	3.6	4.0	3.9
Grand Gedeh	89,974	123,357	213,331	20,362	23,308	43,670	4.4	5.3	4.9
Grand Kru	7,178	101,583	108,761	1,433	19,177	20,610	5.0	5.3	5.3
Lofa	85,944	279,218	365,162	17,580	57,667	75,247	4.9	4.8	4.9
Margibi	168,479	133,101	301,580	39,015	33,273	72,288	4.3	4.0	4.2
Maryland	105,441	65,943	171,384	23,498	13,725	37,223	4.5	4.8	4.6
Montserrado	1,723,529	158,289	1,881,818	410,506	39,398	449,904	4.2	4.0	4.2
Nimba	207,746	409,254	617,000	42,335	85,625	127,960	4.9	4.8	4.8
River Cess	10,775	79,151	89,926	2,335	18,751	21,086	4.6	4.2	4.3
River Gee	61,341	62,109	123,450	11,876	12,024	23,900	5.2	5.2	5.2
Sinoe	26,276	123,217	149,493	5,576	24,272	29,848	4.7	5.1	5.0

Table 5.3 shows that households comprising of 2-4 persons have dominated households since 1962: from about 52 per cent in 1962 to 37.0 per cent in 1974, there was a further decline in 1984 (32.4 per cent) before rising to 45.2 per cent in 2022. About one in 10 of households constitute a one-member household: 1962 (12.8 per cent), 1974 (10.8 per cent), 1984 (9.9 per cent) and 2022 (13.8 per cent). Over the years, the 2-4 persons and eight persons and more constitute over 50 per cent of all households in Liberia. Larger household sizes contain a larger proportion of the household population.

Table 5.3: Distribution of households and household population by size: 1962, 1974, 1984 and 2022

Household size	1962	1974	1984	2022
Households				
1 person	12.8	10.8	9.9	13.8
2-4 persons	51.7	37	32.4	45.4
5-7 persons	25.2	26.6	26.9	28.1
8+ persons	10.3	25.6	30.8	12.7
Total	232,522	263,333	338,953	1,187,272
Percentage change	-	11.7	22.3	71.5
Household Population				
1 person	3.1	1.9	1.6	3.2

Household size	1962	1974	1984	2022
2-4 persons	34.9	19.6	15.8	31.4
5-7 persons	34.4	27.7	25.8	37.2
8+ persons	27.6	50.8	56.8	28.2
Total	982,290	1,484,682	2,094,252	5,178,484
Percentage change	-	33.8	29.1	59.6

Households containing three persons (15.8 per cent) and four persons (15.0 per cent) constitute about a third of all households in Liberia. The household size of seven persons is about 6 per cent of households, the least. In urban areas, about one-third of households are more likely to live in household sizes of three persons (15.5 per cent) and one person (15.2 per cent). The household size of eight or more persons (28.2 per cent) constitutes the largest proportion of the population in households and this is followed by households of five persons (14.2 per cent) and four persons (13.8 per cent). The least share of the population is the single member (3.2 per cent) and two-person (6.7 per cent). Similar to the national level, household size of eight or more persons in the urban areas (29.4 per cent) constitutes the highest proportion of household population and this is followed by household sizes of five persons (13.6 per cent) and four persons (13.4 per cent). In the rural areas, households with eight or more persons constitute 29.4 per cent of the household population, the highest, while the share of a single-member household to the population in households is about 3 per cent.

Table 5.4: Distribution of households by size, household population and type of residence

	Households		Population in households	
Household size	Number	Per cent	Number	Per cent
Total Country				
1 person	164,034	13.8	164,034	3.2
2 persons	173,706	14.6	347,412	6.7
3 persons	187,312	15.8	561,936	10.9
4 persons	178,198	15.0	712,792	13.8
5 persons	147,311	12.4	736,555	14.2
6 persons	109,843	9.3	659,058	12.7
7 persons	76,273	6.4	533,911	10.3
8 or more persons	150,595	12.7	1,462,786	28.2
Total	1,187,272	100.0	5,178,484	100.0
Urban				
1 person	99,152	15.2	99,152	3.5
2 persons	97,061	14.9	194,122	6.9
3 persons	101,111	15.5	303,333	10.8
4 persons	94,097	14.5	376,388	13.4
5 persons	76,751	11.8	383,755	13.6
6 persons	57,806	8.9	346,836	12.3
7 persons	40,448	6.2	283,136	10.1

	Households		Population in households	
Household size	**Number**	**Per cent**	**Number**	**Per cent**
8 or more persons	84,253	12.9	826,224	29.4
Total	650,679	100.0	2,812,946	100.0
Rural				
1 person	64,882	12.1	64,882	2.7
2 persons	76,645	14.3	153,290	6.5
3 persons	86,201	16.1	258,603	10.9
4 persons	84,101	15.7	336,404	14.2
5 persons	70,560	13.1	352,800	14.9
6 persons	52,037	9.7	312,222	13.2
7 persons	35,825	6.7	250,775	10.6
8 or more persons	66,342	12.4	636,562	26.9
Total	536,593	100.0	2,365,538	100.0

5.4 Household composition

5.4.1 Relationship to head of household

The proportion of household head increased 16.1 per cent in 1984 to about a fifth in 2008 before reaching a peak of 22.6 per cent in 2022. Similarly, the population share of son/daughter also increased from 41.5 per cent in 1984, 44.0 per cent in 2008 to 46.8 per cent in 2022. However, the proportion of other relative fell from 16.9 per cent in 1984 to 14.6 per cent in 2008 and it further fell to 11.9 per cent in 2022. Again, the proportion of non-relative in households also fell by 7.3 percentage points between 1984 (10.1 per cent) and 2022 (2.8 per cent). The changes witnessed in the population composition over the years are indications of moving away from extended family to nuclear family structure.

Table 5.5: Distribution of household population by relationship, 1984, 2008 and 2022

Relationship	1984	2008	2022
Head	16.1	19.6	22.6
Spouse	10.6	11.1	9.8
Son/Daughter	41.5	44.0	46.8
Other spouse	2.1	0.6	0.4
Parent	0.9	0.9	0.6
Grandchild	**	6.0	4.7
Servant	1.5	0.2	0.2
Ward	0.4	0.6	0.2
Other relative	16.9	14.6	11.9
Non-relative	10.1	2.5	2.8
Total	100.0	100.0	100.0

Source: Compiled from 1984, 2008 and 2022 Population Censuses of Liberia
Note: ** No data collected separately on grandchildren in 1984

Table 5.6 shows that the highest proportion of the household population in both urban (45.1 per cent) and rural areas (48.8 per cent) are children, followed by heads (urban – 22.7 per cent, rural – 22.5 per cent). The third highest proportion of the household population in urban areas is the other relative (14.2 per cent), while in rural areas it is the spouse, accounting for 11.7 per cent. There are variations in the in the composition of males and females who are heads of households. For instance, at the national level, the proportion of males who are heads is 28.9 per cent, while females constitute 16.2 per cent. In urban areas, the difference between males (28.3 per cent) who are heads and female (17.3 per cent) is 11 percentage points. Furthermore, the proportion of males (29.7 per cent) who are heads is two times higher than their female (14.8 per cent).

Table 5.6: Household composition by relationship to head of household, sex and type of residence

Relationship	Total Country			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Head	28.9	16.2	22.6	28.3	17.3	22.7	29.7	14.8	22.5
Spouse	3.2	16.6	9.8	3.0	13.4	8.3	3.3	20.6	11.7
Son/Daughter	47.1	46.4	46.8	44.9	45.2	45.1	49.6	47.9	48.8
Other spouse	0.2	0.6	0.4	0.3	0.7	0.5	0.2	0.5	0.4
Parent	0.3	0.9	0.6	0.3	0.9	0.6	0.3	1.0	0.7
Grandchild	4.7	4.7	4.7	5.0	5.0	5.0	4.4	4.3	4.3
Servant	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.2
Ward	0.2	0.3	0.2	0.2	0.3	0.3	0.1	0.2	0.1
Other relative	12.0	11.7	11.9	14.2	14.1	14.2	9.5	8.7	9.1
Non-relative	3.2	2.3	2.8	3.7	2.7	3.2	2.6	1.8	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

5.4.2 Household headship

The number of households in Liberia increased by 94,627 households between 2008 (670,295 households) and 2022 (764,922 households). Households headed by males in Liberia fell from 72.9 per cent in 2008 to 64.4 per cent in 2022 while in contrast, female-headed households have increased from 27.1 per cent in 2008 to 35.6 per cent in 2022. The rise in the proportion of households headed by females could be attributed females migrating to urban areas and thereby forming households and assuming headship roles. There are slight variations in the decline of male heads in urban and rural areas between 2008 and 2022 – in urban areas, the decline is 8.4 per cent while it is 7.8 per cent in rural areas.

Across counties, there are variation in households headed by males and females. In 2008, households headed by males in highest in Gbarpolu (80.5 per cent), followed by River Cess (79.5 per cent) and Grand Bassa (79.2 per cent) with the least being Lofa (67.0 per cent). With regards to households headed by females in 2008, only Lofa County had about a third (33.0 per cent) of the households headed by females with all the other 14 counties having less than 30 per cent. Similar to the national level, the proportion of male-headed households across the counties in 2022 have reduced compared to 2008 while households headed by females have increased.

Table 5.7: Household heads by sex, type of residence and county, 2008 and 2022

	2008			2022		
		Household Heads			Household Heads	
County	Households	Male	Female	Households	Male	Female
Total Country	670,295	72.9	27.1	764,922	64.4	35.6
Urban	327,022	69.7	30.3	*398,619*	*61.3*	*38.7*
Rural	343,273	76.1	23.9	*366,303*	*68.3*	*31.7*
Bomi	20,508	70.8	29.2	23,004	59.6	40.4
Bong	69,810	72.7	27.3	71,005	64.5	35.5
Gbarpolu	14,533	80.5	19.5	15,701	70.1	29.9
Grand Bassa	47,440	79.2	20.8	49,570	71.5	28.5
Grand Cape Mount	23,950	73.4	26.6	30,775	68.1	31.9
Grand Gedeh	18,143	75.2	24.8	30,425	69.7	30.3
Grand Kru	8,969	74.2	25.8	12,644	61.3	38.7
Lofa	49,642	67.0	33.0	44,658	59.3	40.7
Margibi	45,095	76.1	23.9	47,584	65.8	34.2
Maryland	19,254	73.9	26.1	21,975	59.0	41.0
Montserrado	232,585	71.1	28.9	283,623	63.0	37.0
Nimba	80,734	72.3	27.7	84,000	65.6	34.4
River Cess	13,981	79.5	20.5	15,186	72.0	28.0
River Gee	9,822	74.8	25.2	14,432	60.4	39.6
Sinoe	15,829	78.6	21.4	20,340	68.1	31.9

6. Conclusions, policy, implications and recommendation

6.1 Introduction

This chapter synthesizes the key findings from the 2022 National PHC to provide a comprehensive overview of the population size, distribution and composition. It outlines the implications of these findings on current policies and suggests recommendations to address the demographic challenges and opportunities identified.

Furthermore, the chapter examines the composition of the population, focusing on age structure, gender distribution and other key demographic variables. The youth and elderly dependency ratios are analysed to illustrate the economic pressures on the working-age population and the implications for social services and infrastructure. These insights are vital for policymakers to design targeted interventions that address the needs of different demographic groups.

Finally, the chapter offers a set of recommendations to address the demographic challenges and opportunities identified. These recommendations are aimed at enhancing policy effectiveness, improving service delivery and fostering inclusive development. By addressing the demographic realities revealed by the census, Liberia can better navigate its path towards a prosperous and equitable future.

6.2 Conclusion

The 2022 Liberia PHC reveals significant trends and patterns in the demographic landscape of Liberia. Over the past six decades, Liberia's population has grown more than fivefold, reaching approximately 5.3 million in 2022. The population is characterized by a slightly higher proportion of males (50.4 per cent) compared to females (49.6 per cent); a consistent trend observed since 1974.

The highest population growth is concentrated in Montserrado County, which has seen its population share increase from 23.3 per cent in 1984 to 36.6 per cent in 2022. Conversely, Nimba County's share has fallen. Population density has also increased, particularly in Montserrado County, highlighting significant urbanization trends with 54.5 per cent of the population now residing in urban areas.

The use of Computer Assisted Personal Interviewing (CAPI) has improved data collection processes, though challenges remain in age reporting accuracy, with an increased age-sex accuracy index indicating higher inaccuracies in the 2022 data.

Average household size has decreased from 5.7 persons in 1974 to 4.4 persons in 2022, with a trend towards nuclear families. The proportion of female-headed households has increased, reflecting broader socioeconomic shifts.

6.3 Policy Implications

The findings from the 2022 census have several critical implications for policymaking in Liberia:

Urbanization and Infrastructure: The rapid urbanization, particularly in Montserrado County, necessitates significant investment in infrastructure, housing and public services to accommodate the growing urban population. Policies should focus on sustainable urban planning to mitigate the strain on resources and services.

Population Distribution: The uneven distribution of the population, with high concentrations in a number of counties, underscores the need for regional development policies to balance population growth and resource allocation. Investments in rural development can help to reduce migration pressures on urban areas.

Data Quality Improvement: The inaccuracies in age reporting highlight the need for continuous improvements in data collection and validation processes. Strengthening the capacity of LISGIS to ensure high-quality data is essential for informed policymaking.

Household Dynamics: The shift towards smaller, nuclear households and the increase in female-headed households indicate changing social

structures that require tailored social and economic policies. Support for single-parent households and initiatives to empower female heads of households are crucial.

6.4 Recommendations

Based on the conclusions and policy implications, the following recommendations are proposed:

Enhance Urban Infrastructure and Services: There should be a development of comprehensive urban development plans that include the expansion of housing, healthcare, education, transportation infrastructure and other basic socioeconomic amenities. This may further lead to the implementation of policies to improve living conditions in informal settlements and provide affordable housing options.

Promote Regional Development: Formulate tangible investment in rural development projects to create economic opportunities and reduce rural-urban migration. This may impact enhanced agricultural productivity and provide support for rural enterprises to stimulate local economies.

Strengthen Data Collection and Quality: Improve training for enumerators and supervisors in data collection techniques, with a focus on minimizing age reporting inaccuracies. There should be reasons to accelerate exploring advanced data collection technologies and methodologies to enhance the accuracy and reliability of census data.

Support Household Stability: Develop social welfare programmes targeting single-parent and female-headed households that may facilitate the provision of financial and social support systems. Strive to implement policies that promote gender equality and empower women through education, employment and entrepreneurship opportunities.

Address Population Health and Education: Endeavor to expand access to healthcare services, particularly in densely populated urban areas, to improve health outcomes. Policymakers should prioritize investment in educational infrastructure and programmes to enhance educational attainment and address the needs of the growing young population.

These recommendations aim to address the demographic challenges highlighted by the 2022 census and promote sustainable development in Liberia. By focusing on these key areas, policymakers can better manage population growth, improve living standards and ensure a balanced and inclusive development trajectory for the country.

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Appendices

Appendix 1: Population by sex, residence and county, 2022

County	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Liberia	1,409,188	1,452,966	2,862,154	1,234,839	1,153,194	2,388,033	2,644,027	2,606,160	5,250,187
Bomi	17,398	16,768	34,166	51,176	48,363	99,539	68,574	65,131	133,705
Bong	73,466	76,306	149,772	161,742	156,047	317,789	235,208	232,353	467,561
Gbarpolu	4,657	4,170	8,827	46,464	40,704	87,168	51,121	44,874	95,995
Grand Bassa	43,851	45,755	89,606	106,429	97,654	204,083	150,280	143,409	293,689
Grand Cape Mount	25,581	21,706	47,287	71,176	60,404	131,580	96,757	82,110	178,867
Grand Gedeh	46,581	45,067	91,648	68,714	56,330	125,044	115,295	101,397	216,692
Grand Kru	3,629	3,629	7,258	53,370	48,714	102,084	56,999	52,343	109,342
Lofa	43,320	43,256	86,576	139,780	141,020	280,800	183,100	184,276	367,376
Margibi	83,711	86,866	170,577	68,988	65,381	134,369	152,699	152,247	304,946
Maryland	52,515	53,578	106,093	34,352	32,142	66,494	86,867	85,720	172,587
Montserrado	861,168	899,864	1,761,032	81,391	78,542	159,933	942,559	978,406	1,920,965
Nimba	102,278	107,328	209,606	209,740	202,495	412,235	312,018	309,823	621,841
River Cess	5,571	5,324	10,895	42,146	37,778	79,924	47,717	43,102	90,819
River Gee	32,007	30,101	62,108	33,464	29,081	62,545	65,471	59,182	124,653
Sinoe	13,455	13,248	26,703	65,907	58,539	124,446	79,362	71,787	151,149

Appendix 2: Household and non-household population by county and residence

County	Household population						Non-household population					
	Urban			Rural			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bomi	17,191	16,647	33,838	50,703	47,481	98,184	207	121	328	473	882	1,355
Bong	72,569	75,681	148,250	159,901	154,674	314,575	897	625	1,522	1,841	1,373	3,214
Grand Bassa	43,357	45,464	88,821	105,173	96,891	202,064	494	291	785	1,256	763	2,019
Grand Cape Mount	25,179	21,489	46,668	69,707	59,598	129,305	402	217	619	1,469	806	2,275
Grand Gedeh	45,520	44,454	89,974	67,576	55,781	123,357	1,061	613	1,674	1,138	549	1,687
Grand Kru	3,579	3,599	7,178	53,047	48,536	101,583	50	30	80	323	178	501
Lofa	42,913	43,031	85,944	138,847	140,371	279,218	407	225	632	933	649	1,582
Margibi	82,508	85,971	168,479	68,124	64,977	133,101	1,203	895	2,098	864	404	1,268
Maryland	52,171	53,270	105,441	34,080	31,863	65,943	344	308	652	272	279	551
Montserrado	837,000	886,529	1,723,529	80,447	77,842	158,289	24,168	13,335	37,503	944	700	1,644
Nimba	101,245	106,501	207,746	208,083	201,171	409,254	1,033	827	1,860	1,657	1,324	2,981
River Cess	5,496	5,279	10,775	41,638	37,513	79,151	75	45	120	508	265	773
Sinoe	13,188	13,088	26,276	65,153	58,064	123,217	267	160	427	754	475	1,229
River Gee	31,525	29,816	61,341	33,202	28,907	62,109	482	285	767	262	174	436
Gbarpolu	4,550	4,136	8,686	46,049	40,139	86,188	107	34	141	415	565	980
Total	1,377,991	1,434,955	2,812,946	1,221,730	1,143,808	2,365,538	31,197	18,011	49,208	13,109	9,386	22,495

Appendix 3: Population by age, sex and residence, 2022 – Total Country

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	135,578	140,528	276,106	136,225	137,697	273,922	271,803	278,225	550,028
5-9	130,124	139,266	269,390	124,456	117,778	242,234	254,580	257,044	511,624
10-14	196,763	217,862	414,625	171,087	149,905	320,992	367,850	367,767	735,617
15-19	179,816	191,710	371,526	135,822	131,134	266,956	315,638	322,844	638,482
20-24	167,522	178,560	346,082	126,378	127,079	253,457	293,900	305,639	599,539
25-29	123,253	137,180	260,433	90,260	90,254	180,514	213,513	227,434	440,947
30-34	121,887	124,566	246,453	97,340	94,270	191,610	219,227	218,836	438,063
35-39	92,594	92,084	184,678	77,738	75,348	153,086	170,332	167,432	337,764
40-44	87,084	72,198	159,282	83,697	68,763	152,460	170,781	140,961	311,742
45-49	50,352	44,257	94,609	49,876	41,526	91,402	100,228	85,783	186,011
50-54	45,898	39,087	84,985	49,912	39,619	89,531	95,810	78,706	174,516
55-59	23,974	21,799	45,773	24,354	19,143	43,497	48,328	40,942	89,270
60-64	22,205	20,020	42,225	25,642	21,140	46,782	47,847	41,160	89,007
65-69	12,640	11,248	23,888	13,654	11,248	24,902	26,294	22,496	48,790
70-74	8,920	9,366	18,286	12,160	10,975	23,135	21,080	20,341	41,421
75-79	3,971	4,400	8,371	5,643	5,488	11,131	9,614	9,888	19,502
80+	6,607	8,835	15,442	10,595	11,827	22,422	17,202	20,662	37,864
Total	1,409,188	1,452,966	2,862,154	1,234,839	1,153,194	2,388,033	2,644,027	2,606,160	5,250,187

Appendix 4a: Distribution of population by age, sex and residence - Bomi

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	1,874	1,730	3,604	5,677	5,644	11,321	7,551	7,374	14,925
5-9	2,040	1,949	3,989	6,407	5,459	11,866	8,447	7,408	15,855
10-14	2,181	2,243	4,424	6,075	4,739	10,814	8,256	6,982	15,238
15-19	2,295	2,195	4,490	5,134	5,259	10,393	7,429	7,454	14,883
20-24	1,882	2,002	3,884	4,347	5,387	9,734	6,229	7,389	13,618
25-29	1,313	1,449	2,762	3,275	3,623	6,898	4,588	5,072	9,660
30-34	1,359	1,371	2,730	4,052	4,168	8,220	5,411	5,539	10,950
35-39	1,031	1,066	2,097	2,945	3,213	6,158	3,976	4,279	8,255
40-44	1,150	907	2,057	3,791	3,246	7,037	4,941	4,153	9,094
45-49	623	559	1,182	2,111	1,902	4,013	2,734	2,461	5,195
50-54	593	441	1,034	2,522	1,831	4,353	3,115	2,272	5,387
55-59	284	187	471	1,217	812	2,029	1,501	999	2,500
60-64	309	253	562	1,295	1,070	2,365	1,604	1,323	2,927
65-69	164	132	296	745	591	1,336	909	723	1,632
70-74	111	127	238	765	556	1,321	876	683	1,559
75-79	63	42	105	306	317	623	369	359	728
80+	126	115	241	512	546	1,058	638	661	1,299
Total	17,398	16,768	34,166	51,176	48,363	99,539	68,574	65,131	133,705

Appendix 4b: Distribution of population by age, sex and residence - Bong

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	7,437	7,753	15,190	18,726	19,444	38,170	26,163	27,197	53,360
5-9	8,554	9,140	17,694	19,850	18,345	38,195	28,404	27,485	55,889
10-14	9,590	9,857	19,447	18,063	14,952	33,015	27,653	24,809	52,462
15-19	9,792	9,996	19,788	15,888	15,813	31,701	25,680	25,809	51,489
20-24	8,932	9,735	18,667	15,574	16,357	31,931	24,506	26,092	50,598
25-29	5,949	6,911	12,860	11,171	12,399	23,570	17,120	19,310	36,430
30-34	5,808	6,435	12,243	12,538	13,948	26,486	18,346	20,383	38,729
35-39	4,111	4,563	8,674	10,220	11,012	21,232	14,331	15,575	29,906
40-44	4,133	3,637	7,770	11,838	10,229	22,067	15,971	13,866	29,837
45-49	2,468	2,199	4,667	6,441	5,695	12,136	8,909	7,894	16,803
50-54	2,352	2,035	4,387	7,026	5,774	12,800	9,378	7,809	17,187
55-59	1,189	985	2,174	3,461	2,652	6,113	4,650	3,637	8,287
60-64	1,300	1,222	2,522	4,021	3,263	7,284	5,321	4,485	9,806
65-69	665	587	1,252	2,020	1,664	3,684	2,685	2,251	4,936
70-74	542	518	1,060	1,924	1,716	3,640	2,466	2,234	4,700
75-79	262	245	507	932	832	1,764	1,194	1,077	2,271
80+	382	488	870	2,049	1,952	4,001	2,431	2,440	4,871
Total	73,466	76,306	149,772	161,742	156,047	317,789	235,208	232,353	467,561

Appendix 4c: Distribution of population by age, sex and residence - Gbarpolu

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	491	456	947	4,783	4,721	9,504	5,274	5,177	10,451
5-9	546	539	1,085	5,173	4,843	10,016	5,719	5,382	11,101
10-14	573	539	1,112	4,699	4,339	9,038	5,272	4,878	10,150
15-19	555	545	1,100	4,568	4,339	8,907	5,123	4,884	10,007
20-24	547	488	1,035	4,449	4,574	9,023	4,996	5,062	10,058
25-29	332	285	617	3,586	3,203	6,789	3,918	3,488	7,406
30-34	313	288	601	4,244	3,579	7,823	4,557	3,867	8,424
35-39	280	253	533	3,388	2,732	6,120	3,668	2,985	6,653
40-44	351	270	621	3,788	2,598	6,386	4,139	2,868	7,007
45-49	218	141	359	2,111	1,449	3,560	2,329	1,590	3,919
50-54	199	106	305	2,020	1,431	3,451	2,219	1,537	3,756
55-59	60	57	117	957	614	1,571	1,017	671	1,688
60-64	79	74	153	1,037	786	1,823	1,116	860	1,976
65-69	36	44	80	515	404	919	551	448	999
70-74	28	33	61	523	413	936	551	446	997
75-79	23	23	46	224	219	443	247	242	489
80+	26	29	55	399	460	859	425	489	914
Total	4,657	4,170	8,827	46,464	40,704	87,168	51,121	44,874	95,995

Appendix 4d: Distribution of population by age, sex and residence - Grand Bassa

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	4,417	4,938	9,355	13,043	13,123	26,166	17,460	18,061	35,521
5-9	5,094	5,601	10,695	12,879	11,611	24,490	17,973	17,212	35,185
10-14	5,638	5,882	11,520	12,061	9,843	21,904	17,699	15,725	33,424
15-19	5,720	5,899	11,619	10,676	10,457	21,133	16,396	16,356	32,752
20-24	5,105	5,585	10,690	10,199	10,169	20,368	15,304	15,754	31,058
25-29	3,515	4,170	7,685	7,298	7,413	14,711	10,813	11,583	22,396
30-34	3,421	3,549	6,970	7,712	7,846	15,558	11,133	11,395	22,528
35-39	2,408	2,508	4,916	6,672	6,481	13,153	9,080	8,989	18,069
40-44	2,508	2,200	4,708	7,263	6,080	13,343	9,771	8,280	18,051
45-49	1,547	1,427	2,974	4,496	3,626	8,122	6,043	5,053	11,096
50-54	1,722	1,476	3,198	4,934	3,599	8,533	6,656	5,075	11,731
55-59	877	667	1,544	2,453	1,775	4,228	3,330	2,442	5,772
60-64	772	679	1,451	2,601	1,939	4,540	3,373	2,618	5,991
65-69	428	419	847	1,368	1,030	2,398	1,796	1,449	3,245
70-74	330	388	718	1,245	1,011	2,256	1,575	1,399	2,974
75-79	189	140	329	532	504	1,036	721	644	1,365
80+	160	227	387	997	1,147	2,144	1,157	1,374	2,531
Total	43,851	45,755	89,606	106,429	97,654	204,083	150,280	143,409	293,689

Appendix 8a: Distribution of population by age, sex and residence - Grand Cape Mount

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	1,959	2,062	4,021	6,680	6,418	13,098	8,639	8,480	17,119
5-9	2,466	2,444	4,910	7,897	6,796	14,693	10,363	9,240	19,603
10-14	2,405	2,410	4,815	7,419	5,905	13,324	9,824	8,315	18,139
15-19	2,561	2,450	5,011	7,672	7,091	14,763	10,233	9,541	19,774
20-24	3,025	2,976	6,001	8,206	8,197	16,403	11,231	11,173	22,404
25-29	2,287	2,315	4,602	5,516	5,492	11,008	7,803	7,807	15,610
30-34	2,961	2,424	5,385	6,748	5,996	12,744	9,709	8,420	18,129
35-39	2,128	1,511	3,639	4,804	3,882	8,686	6,932	5,393	12,325
40-44	2,363	1,157	3,520	5,479	3,331	8,810	7,842	4,488	12,330
45-49	1,053	663	1,716	2,987	1,887	4,874	4,040	2,550	6,590
50-54	862	458	1,320	2,573	1,654	4,227	3,435	2,112	5,547
55-59	357	192	549	1,248	838	2,086	1,605	1,030	2,635
60-64	388	213	601	1,407	970	2,377	1,795	1,183	2,978
65-69	204	107	311	771	556	1,327	975	663	1,638
70-74	200	105	305	669	496	1,165	869	601	1,470
75-79	84	31	115	344	265	609	428	296	724
80+	278	188	466	756	630	1,386	1,034	818	1,852
Total	25,581	21,706	47,287	71,176	60,404	131,580	96,757	82,110	178,867

Appendix 9a: Distribution of population by age, sex and residence - Grand Gedeh

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	4,193	4,285	8,478	4,523	4,585	9,108	8,716	8,870	17,586
5-9	4,589	5,073	9,662	5,479	5,564	11,043	10,068	10,637	20,705
10-14	5,440	5,650	11,090	6,583	6,463	13,046	12,023	12,113	24,136
15-19	6,286	6,002	12,288	7,727	7,247	14,974	14,013	13,249	27,262
20-24	6,144	5,801	11,945	9,521	7,169	16,690	15,665	12,970	28,635
25-29	3,428	3,504	6,932	6,486	4,783	11,269	9,914	8,287	18,201
30-34	3,890	3,747	7,637	7,382	5,174	12,556	11,272	8,921	20,193
35-39	3,127	3,167	6,294	5,712	4,295	10,007	8,839	7,462	16,301
40-44	3,376	2,555	5,931	5,661	3,791	9,452	9,037	6,346	15,383
45-49	1,827	1,542	3,369	2,989	2,159	5,148	4,816	3,701	8,517
50-54	1,697	1,362	3,059	2,611	1,906	4,517	4,308	3,268	7,576
55-59	718	694	1,412	1,115	903	2,018	1,833	1,597	3,430
60-64	811	621	1,432	1,205	893	2,098	2,016	1,514	3,530
65-69	368	270	638	560	463	1,023	928	733	1,661
70-74	281	278	559	501	365	866	782	643	1,425
75-79	135	182	317	294	244	538	429	426	855
80+	271	334	605	365	326	691	636	660	1,296
Total	46,581	45,067	91,648	68,714	56,330	125,044	115,295	101,397	216,692

Appendix 10a: Distribution of population by age, sex and residence - Grand Kru

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	290	294	584	4,913	5,233	10,146	5,203	5,527	10,730
5-9	414	422	836	6,144	5,990	12,134	6,558	6,412	12,970
10-14	490	515	1,005	6,856	6,158	13,014	7,346	6,673	14,019
15-19	541	517	1,058	6,709	6,261	12,970	7,250	6,778	14,028
20-24	413	447	860	6,283	5,914	12,197	6,696	6,361	13,057
25-29	244	316	560	3,960	3,841	7,801	4,204	4,157	8,361
30-34	307	258	565	4,680	4,031	8,711	4,987	4,289	9,276
35-39	254	241	495	3,560	3,136	6,696	3,814	3,377	7,191
40-44	229	173	402	3,488	2,653	6,141	3,717	2,826	6,543
45-49	110	125	235	2,144	1,592	3,736	2,254	1,717	3,971
50-54	112	96	208	1,870	1,354	3,224	1,982	1,450	3,432
55-59	63	85	148	826	761	1,587	889	846	1,735
60-64	57	54	111	760	672	1,432	817	726	1,543
65-69	53	37	90	474	381	855	527	418	945
70-74	24	19	43	341	405	746	365	424	789
75-79	18	16	34	227	188	415	245	204	449
80+	10	14	24	135	144	279	145	158	303
Total	3,629	3,629	7,258	53,370	48,714	102,084	56,999	52,343	109,342

Appendix 11a: Distribution of population by age, sex and residence - Lofa

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	3,710	3,975	7,685	14,228	15,032	29,260	17,938	19,007	36,945
5-9	5,364	5,360	10,724	18,499	18,046	36,545	23,863	23,406	47,269
10-14	5,514	5,284	10,798	17,422	15,800	33,222	22,936	21,084	44,020
15-19	6,518	6,498	13,016	17,816	17,620	35,436	24,334	24,118	48,452
20-24	5,645	5,562	11,207	14,995	16,327	31,322	20,640	21,889	42,529
25-29	3,669	4,014	7,683	10,536	11,682	22,218	14,205	15,696	29,901
30-34	3,106	3,276	6,382	10,752	12,035	22,787	13,858	15,311	29,169
35-39	2,251	2,529	4,780	8,076	8,903	16,979	10,327	11,432	21,759
40-44	2,223	2,105	4,328	8,449	7,766	16,215	10,672	9,871	20,543
45-49	1,463	1,214	2,677	5,132	4,387	9,519	6,595	5,601	12,196
50-54	1,297	917	2,214	4,799	4,172	8,971	6,096	5,089	11,185
55-59	593	507	1,100	2,239	1,731	3,970	2,832	2,238	5,070
60-64	627	544	1,171	2,441	2,356	4,797	3,068	2,900	5,968
65-69	369	309	678	1,264	1,329	2,593	1,633	1,638	3,271
70-74	305	345	650	1,063	1,329	2,392	1,368	1,674	3,042
75-79	142	171	313	604	610	1,214	746	781	1,527
80+	524	646	1,170	1,465	1,895	3,360	1,989	2,541	4,530
Total	43,320	43,256	86,576	139,780	141,020	280,800	183,100	184,276	367,376

Appendix 12a: Distribution of population by age, sex and residence – Margibi

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	8,111	8,166	16,277	7,893	7,762	15,655	16,004	15,928	31,932
5-9	9,323	10,145	19,468	8,056	7,868	15,924	17,379	18,013	35,392
10-14	10,709	11,734	22,443	8,221	7,447	15,668	18,930	19,181	38,111
15-19	11,053	11,685	22,738	7,537	7,765	15,302	18,590	19,450	38,040
20-24	9,843	10,721	20,564	6,680	7,006	13,686	16,523	17,727	34,250
25-29	6,541	7,588	14,129	4,664	4,774	9,438	11,205	12,362	23,567
30-34	6,426	7,081	13,507	4,590	4,869	9,459	11,016	11,950	22,966
35-39	5,209	5,578	10,787	3,936	4,284	8,220	9,145	9,862	19,007
40-44	5,595	4,680	10,275	4,961	4,094	9,055	10,556	8,774	19,330
45-49	3,023	2,711	5,734	3,030	2,338	5,368	6,053	5,049	11,102
50-54	2,813	2,428	5,241	3,216	2,403	5,619	6,029	4,831	10,860
55-59	1,533	1,214	2,747	1,647	1,106	2,753	3,180	2,320	5,500
60-64	1,483	1,205	2,688	1,698	1,160	2,858	3,181	2,365	5,546
65-69	750	647	1,397	826	617	1,443	1,576	1,264	2,840
70-74	624	566	1,190	744	626	1,370	1,368	1,192	2,560
75-79	258	236	494	324	292	616	582	528	1,110
80+	417	481	898	965	970	1,935	1,382	1,451	2,833
Total	83,711	86,866	170,577	68,988	65,381	134,369	152,699	152,247	304,946

Appendix 13a: Distribution of population by age, sex and residence – Maryland

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	4,580	4,722	9,302	3,529	3,558	7,087	8,109	8,280	16,389
5-9	6,334	6,656	12,990	4,435	4,269	8,704	10,769	10,925	21,694
10-14	6,994	7,494	14,488	4,627	4,019	8,646	11,621	11,513	23,134
15-19	7,461	8,300	15,761	4,128	3,682	7,810	11,589	11,982	23,571
20-24	6,609	6,608	13,217	3,156	3,063	6,219	9,765	9,671	19,436
25-29	4,755	4,991	9,746	2,233	2,282	4,515	6,988	7,273	14,261
30-34	4,121	3,833	7,954	2,296	2,228	4,524	6,417	6,061	12,478
35-39	3,072	3,145	6,217	2,161	2,053	4,214	5,233	5,198	10,431
40-44	2,682	2,415	5,097	2,183	1,951	4,134	4,865	4,366	9,231
45-49	1,670	1,526	3,196	1,477	1,356	2,833	3,147	2,882	6,029
50-54	1,676	1,377	3,053	1,596	1,268	2,864	3,272	2,645	5,917
55-59	759	749	1,508	836	681	1,517	1,595	1,430	3,025
60-64	784	613	1,397	673	650	1,323	1,457	1,263	2,720
65-69	407	388	795	380	401	781	787	789	1,576
70-74	273	352	625	334	291	625	607	643	1,250
75-79	171	199	370	148	192	340	319	391	710
80+	167	210	377	160	198	358	327	408	735
Total	52,515	53,578	106,093	34,352	32,142	66,494	86,867	85,720	172,587

Appendix 14a: Distribution of population by age, sex and residence - Montserrado

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	81,377	84,216	165,593	9,003	8,979	17,982	90,380	93,195	183,575
5-9	92,563	100,570	193,133	9,640	9,706	19,346	102,203	110,276	212,479
10-14	99,654	115,591	215,245	10,088	9,569	19,657	109,742	125,160	234,902
15-19	105,766	115,822	221,588	9,601	9,746	19,347	115,367	125,568	240,935
20-24	101,629	110,161	211,790	8,130	8,897	17,027	109,759	119,058	228,817
25-29	79,440	89,163	168,603	6,085	6,187	12,272	85,525	95,350	180,875
30-34	78,992	81,330	160,322	5,882	6,142	12,024	84,874	87,472	172,346
35-39	60,337	58,939	119,276	4,787	4,753	9,540	65,124	63,692	128,816
40-44	54,755	45,231	99,986	5,458	4,429	9,887	60,213	49,660	109,873
45-49	31,459	27,469	58,928	3,170	2,640	5,810	34,629	30,109	64,738
50-54	27,978	24,440	52,418	3,556	2,615	6,171	31,534	27,055	58,589
55-59	15,086	14,114	29,200	1,538	1,179	2,717	16,624	15,293	31,917
60-64	13,239	12,441	25,680	1,738	1,313	3,051	14,977	13,754	28,731
65-69	7,910	7,165	15,075	996	660	1,656	8,906	7,825	16,731
70-74	5,274	5,609	10,883	859	752	1,611	6,133	6,361	12,494
75-79	2,203	2,609	4,812	334	364	698	2,537	2,973	5,510
80+	3,506	4,994	8,500	526	611	1,137	4,032	5,605	9,637
Total	861,168	899,864	1,761,032	81,391	78,542	159,933	942,559	978,406	1,920,965

Appendix 15a: Distribution of population by age, sex and residence – Nimba

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	12,059	12,762	24,821	28,572	28,225	56,797	40,631	40,987	81,618
5-9	13,493	14,412	27,905	28,834	27,625	56,459	42,327	42,037	84,364
10-14	14,283	15,219	29,502	27,485	23,000	50,485	41,768	38,219	79,987
15-19	14,338	14,940	29,278	22,208	21,056	43,264	36,546	35,996	72,542
20-24	11,347	12,377	23,724	18,840	19,441	38,281	30,187	31,818	62,005
25-29	7,784	8,855	16,639	14,584	14,823	29,407	22,368	23,678	46,046
30-34	7,331	7,519	14,850	14,840	14,717	29,557	22,171	22,236	44,407
35-39	5,427	5,693	11,120	11,832	12,346	24,178	17,259	18,039	35,298
40-44	4,907	4,454	9,361	11,693	11,100	22,793	16,600	15,554	32,154
45-49	3,022	2,955	5,977	7,740	7,647	15,387	10,762	10,602	21,364
50-54	2,891	2,525	5,416	7,547	7,252	14,799	10,438	9,777	20,215
55-59	1,586	1,568	3,154	4,170	3,947	8,117	5,756	5,515	11,271
60-64	1,573	1,436	3,009	4,415	4,063	8,478	5,988	5,499	11,487
65-69	888	769	1,657	2,449	2,106	4,555	3,337	2,875	6,212
70-74	633	701	1,334	2,125	2,099	4,224	2,758	2,800	5,558
75-79	233	318	551	836	915	1,751	1,069	1,233	2,302
80+	483	825	1,308	1,570	2,133	3,703	2,053	2,958	5,011
Total	102,278	107,328	209,606	209,740	202,495	412,235	312,018	309,823	621,841

Appendix 16a: Distribution of population by age, sex and residence - River Cess

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	524	631	1,155	5,170	5,134	10,304	5,694	5,765	11,459
5-9	594	649	1,243	5,543	4,851	10,394	6,137	5,500	11,637
10-14	693	643	1,336	5,269	4,153	9,422	5,962	4,796	10,758
15-19	719	698	1,417	4,343	3,926	8,269	5,062	4,624	9,686
20-24	630	566	1,196	3,847	3,834	7,681	4,477	4,400	8,877
25-29	464	427	891	2,827	2,781	5,608	3,291	3,208	6,499
30-34	435	413	848	3,063	2,622	5,685	3,498	3,035	6,533
35-39	415	406	821	2,690	2,480	5,170	3,105	2,886	5,991
40-44	366	257	623	2,691	2,203	4,894	3,057	2,460	5,517
45-49	203	221	424	1,797	1,634	3,431	2,000	1,855	3,855
50-54	215	151	366	1,893	1,454	3,347	2,108	1,605	3,713
55-59	105	75	180	969	746	1,715	1,074	821	1,895
60-64	95	72	167	797	706	1,503	892	778	1,670
65-69	50	40	90	447	366	813	497	406	903
70-74	28	36	64	402	350	752	430	386	816
75-79	19	24	43	192	194	386	211	218	429
80+	16	15	31	206	344	550	222	359	581
Total	5,571	5,324	10,895	42,146	37,778	79,924	47,717	43,102	90,819

Appendix 17a: Distribution of population by age, sex and residence - River Gee

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	3,152	3,164	6,316	2,845	3,123	5,968	5,997	6,287	12,284
5-9	3,527	3,650	7,177	3,459	3,186	6,645	6,986	6,836	13,822
10-14	4,385	4,094	8,479	3,868	3,495	7,363	8,253	7,589	15,842
15-19	4,253	4,153	8,406	3,919	3,472	7,391	8,172	7,625	15,797
20-24	4,123	3,766	7,889	4,124	3,531	7,655	8,247	7,297	15,544
25-29	2,503	2,277	4,780	2,866	2,387	5,253	5,369	4,664	10,033
30-34	2,531	2,141	4,672	2,887	2,182	5,069	5,418	4,323	9,741
35-39	1,837	1,763	3,600	2,290	1,887	4,177	4,127	3,650	7,777
40-44	1,743	1,487	3,230	2,217	1,738	3,955	3,960	3,225	7,185
45-49	1,182	1,103	2,285	1,516	1,135	2,651	2,698	2,238	4,936
50-54	1,068	924	1,992	1,335	1,013	2,348	2,403	1,937	4,340
55-59	535	481	1,016	636	566	1,202	1,171	1,047	2,218
60-64	480	402	882	542	532	1,074	1,022	934	1,956
65-69	241	224	465	364	301	665	605	525	1,130
70-74	190	190	380	271	241	512	461	431	892
75-79	114	106	220	162	140	302	276	246	522
80+	143	176	319	163	152	315	306	328	634
Total	32,007	30,101	62,108	33,464	29,081	62,545	65,471	59,182	124,653

Appendix 18a: Distribution of population by age, sex and residence - Sinoe

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	1,375	1,374	2,749	6,598	6,711	13,309	7,973	8,085	16,058
5-9	1,585	1,611	3,196	6,913	6,530	13,443	8,498	8,141	16,639
10-14	1,849	1,751	3,600	7,585	7,115	14,700	9,434	8,866	18,300
15-19	1,944	2,010	3,954	7,891	7,400	15,291	9,835	9,410	19,245
20-24	1,644	1,765	3,409	8,027	7,214	15,241	9,671	8,979	18,650
25-29	1,004	913	1,917	5,187	4,584	9,771	6,191	5,497	11,688
30-34	870	903	1,773	5,686	4,732	10,418	6,556	5,635	12,191
35-39	724	723	1,447	4,614	3,892	8,506	5,338	4,615	9,953
40-44	739	670	1,409	4,788	3,553	8,341	5,527	4,223	9,750
45-49	485	401	886	2,712	2,080	4,792	3,197	2,481	5,678
50-54	444	352	796	2,449	1,894	4,343	2,893	2,246	5,139
55-59	223	224	447	1,027	832	1,859	1,250	1,056	2,306
60-64	223	191	414	1,038	766	1,804	1,261	957	2,218
65-69	100	110	210	476	380	856	576	490	1,066
70-74	87	99	186	398	325	723	485	424	909
75-79	53	58	111	185	212	397	238	270	508
80+	106	93	199	333	319	652	439	412	851
Total	13,455	13,248	26,703	65,907	58,539	124,446	79,362	71,787	151,149

Table 19a: Population by relationship to head of household and type of residence, 2022

Relationship	Total Country			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Head	764,922	422,350	1,187,272	398,619	252,059	650,678	366,303	170,291	536,594
Spouse	83,933	433,108	517,041	42,823	195,404	238,227	41,110	237,704	278,814
Son/Daughter	1,245,570	1,209,026	2,454,596	632,854	657,075	1,289,929	612,716	551,951	1,164,667
Other Spouse	6,023	15,488	21,511	3,533	9,571	13,104	2,490	5,917	8,407
Parent	7,517	24,722	32,239	3,673	12,958	16,631	3,844	11,764	15,608
Grand Child	124,447	122,009	246,456	70,525	72,767	143,292	53,922	49,242	103,164
Servant	4,336	6,014	10,350	1,768	3,065	4,833	2,568	2,949	5,517
Ward	4,445	7,003	11,448	2,859	5,034	7,893	1,586	1,969	3,555
Other relative	318,309	305,615	623,924	200,716	205,286	406,002	117,593	100,329	217,922
Non relative	84,525	60,825	145,350	51,818	39,747	91,565	32,707	21,078	53,785
Total	2,644,027	2,606,160	5,250,187	1,409,188	1,452,966	2,862,154	1,234,839	1,153,194	2,388,033