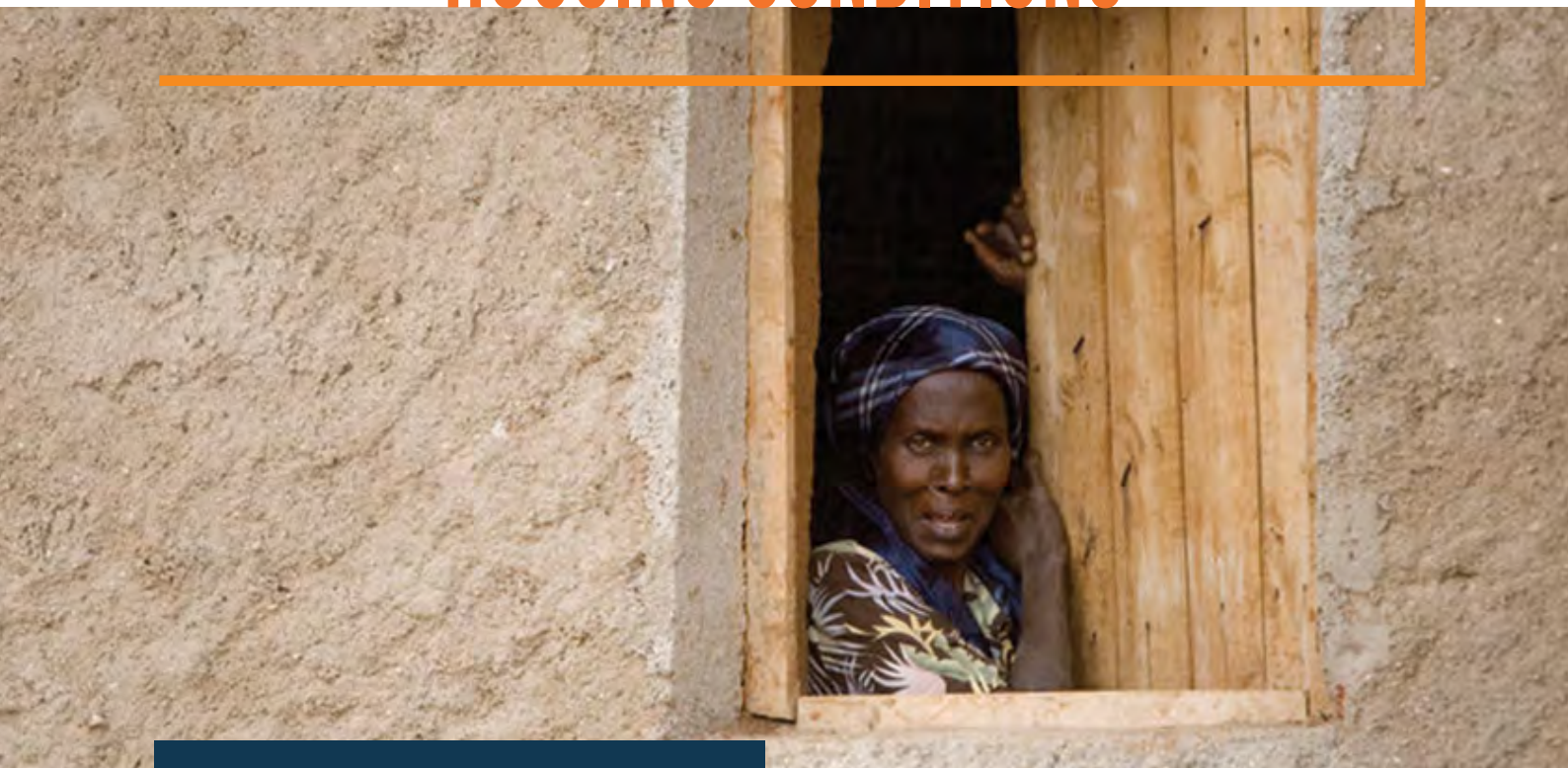




# SIERRA LEONE 2015 POPULATION AND HOUSING CENSUS

## THEMATIC REPORT ON HOUSING CONDITIONS



**STATISTICS SIERRA LEONE (SSL)  
OCTOBER 2017**






**SIERRA LEONE 2015  
POPULATION AND HOUSING CENSUS**

**THEMATIC REPORT ON  
HOUSING CONDITIONS**

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# EXECUTIVE SUMMARY

This report presents analyses of available statistics on housing conditions from the 2015 National Population and Housing Census.

The quality of housing has been a long-standing problem in Sierra Leone and the situation worsened during the civil war (1991 to 2002). People were forced to flee their homes and buildings were built indiscriminately without regards to safety.

The increase in the country's population since the war ended has already presented a major challenge to the country's economic growth, with profound implications on housing availability and access, especially by the poor and other vulnerable groups.

**801,417 HOUSES IN THE COUNTRY WITH 1,265,468 HOUSEHOLDS LIVING IN THEM.**



**71%** of Sierra Leoneans get their information from radio

**63%** of households owned mobile phones

As housing in Sierra Leone is now a major public issue, having a clear understanding about the present housing condition with reliable data collected from the 2015 Census, is timely. It provides guidance to the Government in improving on the existing housing policy as well as in the formation of programmes to improve on housing quantity and quality.

The 2015 Census, undertaken by Statistics Sierra Leone, collected a range of pertinent variables regarding housing. This thematic report is based on a descriptive analysis of the raw data on the related variables, which was received in the form of Microsoft Excel tables. The analysis was based on the use of a range of indicators to measure the variables. The analysis was carried out at different scales from the level of the country to the regions, districts and place of residence (rural and urban).

The study found that the total household population of Sierra Leone in 2015 was 7,076,119. However, there were only 801,417 houses in the country with 1,265,468 households living in them. The findings show that population increases were already presenting a major challenge to the country's housing sector, with housing availability and access being a major problem faced by many households.

The findings show there was a huge regional disparity in the housing stock. Moreover, the majority of houses in the country were inadequate<sup>1</sup> with many households in such poor housing conditions that they were constantly living under threat. Housing inadequacy is exacerbated by overcrowded conditions with a national average of 1.6 households per house; an average of 8.8 people per household countrywide, and over half of these households (55 per cent) living in just one or two rooms.

A key finding was that while nine types of dwelling are found in Sierra Leone, only two types: separate houses (54.4 per cent) and flat/apartments (20.2 per cent) were common. Most people lived in a house which was owner-constructed (48.7 per cent) with an almost equal number of people renting a privately-owned property (20.9 per cent) or living in a property they inherited (20.3 per cent). The high preference for private renting in urban areas seems to suggest that most urban households were not financially stable since many are unable to invest in their own homes.

The study found additionally that nationwide, the main material used for the construction of roof was zinc (81.0 per cent). However, thatch was also used by a few households (13.2 per cent) especially in the Southern region and some areas in the North of the country. Similarly, the study found that three main materials were used for making more than three quarters of dwellings occupied by households in Sierra Leone. These included mud bricks (42.8 per cent), cement bricks (24.9 per cent), and mud and wattle (15 per cent). Mud bricks were more widely used in rural areas, with the use of cement more common in urban areas.

Mud and cement were also the most dominant construction material used for floors. As in construction, mud was more likely to be found in the rural areas. Another key finding was that 81 per cent of all houses required some form of repair, rehabilitation or reconstruction, although 49.0 per cent of these only required minor repairs. The findings also show more than three-quarters of households used bed nets, although usage was more common in the Northern region. Wood and charcoal were most commonly used as the main source of fuel for cooking, with rural

households overwhelmingly using wood (81.6 per cent). Urban areas used a mix of electricity, charcoal and gas sources. The study also found that more than three-quarters of households (76.4 per cent) used battery or rechargeable light as the main source of fuel for lighting with only 17.8 per cent of households using electricity, especially in urban areas.

The study identified three main sources of drinking water for households: public tap (28.9 per cent), protected ordinary well (21.2 per cent) and bush/river bed/stream (19.2 per cent). The share of households with access to safe water (piped in door, protected ordinary well and public tap) in urban areas far outweighed those in rural areas. In a related way, the study found that water for household use is sourced mostly from bush/river bed/stream (24.6 per cent), public tap (23.8 per cent), and Protected well (23.8 per cent). Rural households were most likely to get their water from a bush/river bed/stream (91.5 per cent) but those in urban areas, got their water mainly from a protected ordinary well (70.8 per cent) or public tap (52.6 per cent).

There are three main types of toilet facilities in Sierra Leone: communal pit, private pit and communal bush/river bed. The most common was a communal pit (53.4 per cent) which, when combined with private pit (20.4 per cent), accounted for nearly three-quarters of all the toilet facilities used by households in the country. Similarly, three main types of bathing facilities were found to be commonly used by households as follows: bathing facilities that exist inside the home (7.7 per cent), facilities that were outside built (56.1 per cent) and outside makeshifts (31.8 per cent).

The report found additionally that the country's refuse disposal facilities were largely inadequate. The main refuse disposal method in the country was the depositing of refuse in a bin (55 per cent) followed by dumping and burning which accounted for similar amounts (14.7 per cent each). Dumping and depositing refuse were most common in rural areas while urban households were more likely to burn of refuse (68.7 per cent).

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1 The UN Habitat (2011: 19-23) identifies five key shelter deprivations as measures of housing inadequacy.

The analysis shows further that most of the essential services (health facility, primary school and source of water) used by households were located less than one mile from their homes. However, for more than one quarter of rural households, such facilities were located quite some distance away, ranging often between one to more than five miles. Improving access to these services for such households would be critical to improving their living conditions.

A large share of households (71.1 per cent) in Sierra Leone (especially outside the Western regions get their information from radio followed by word of mouth (18.8 per cent). More than a three-quarters of Western households, on the other hand, had access to a television (76.4 per cent). The study also found that while households had a variety of assets, three main assets were commonly owned by households. These included beds (81.17 per cent), radios (65.95 per cent) and mobile phones (62.94 per cent). However, ownership of these assets were more dominant in both the Western and Northern regions.

These findings show that housing in Sierra Leone is not only substandard but highly inadequate, with housing needs ranked among the major developmental problems in the country.

However, improving the housing conditions as well as meeting the housing needs of households should take into account more than simply doing repairs to the houses or adding to the country's total housing stock. It should be about understanding the impacts which such factors as population growth; urbanization rates; the share of income households devote to housing; the state of the existing housing policies, regulations and codes; and, crucially, the amount of available vacant land exerts on housing availability and quality.

For that reason, the policy implications for housing should be looked at from a wider context because several technical issues may work together to produce much wider positive social, economic and environmental outcomes than narrowly conceiving a response.

The key point is that a deliberate strategy would need to be taken by both the Housing Department of the Ministry of Works, Housing and Infrastructure and the Sierra Leone Housing Corporation in playing a central role in ensuring the delivery of more new 'reasonable' and quality housing units, in addition to using a variety of financial incentives and alternative tenure arrangements to increase housing stock in the medium to long term.

The study recommends that the Ministry of Works, Housing and Infrastructure and the Sierra Leone Housing Corporation use projected population figures for Sierra Leone (based on the 2015 Census), as a guide to clearly determine the scale of housing needs in the medium and long term and to start putting appropriate actions in place for meeting such needs per year.

It is also recommended that the Government maintain a detailed register of all existing houses including the construction of any new housing stock.

To ensure that households live in improved housing conditions, deliberate efforts should also be made by the Ministry of Works, Housing and Infrastructure, together with other relevant ministries, to provide the necessary essential services (health centres, water, school etc.) within shorter distances from homes, including investment in roads and drains, especially in deprived and unstable areas. The ministry should also put in place a profound housing policy in which the quality of housing construction and the extent of provision of the needed services (for example, water supply, sanitation, drainage, electricity) are clearly highlighted.

# CHAPTER 1: INTRODUCTION

## 1.1 Background and Context

This report presents analyses of available statistics on housing conditions from the 2015 National Population and Housing Census (NPHC) in Sierra Leone. The volume and quality of housing is key to living standards and well-being; thus, shortage of adequate housing is a major contributor to the widespread poverty and deprivation of the people.

While housing conditions are a long-standing problem in Sierra Leone, the situation was worsened during the civil war (1991 to 2002). People were forced to flee their homes and to put up buildings indiscriminately, without regards to their safety. In the last two decades, the worsening housing conditions in most places, coupled with problems of accessibility and affordability and the new forms of housing deprivations which these have caused have led to an increasing concern for public policy.

According to the 2015 Census, the total population of Sierra Leone is 7,076,119. It also revealed that overall, there are 801,417 houses in the country with 1,265,468 households living in them.

Based on the United Nations Development Programme's (UNDP) assessment, Sierra Leone is among the list of countries at the bottom of the United Nations human development index. The 2015 Census also shows that population increase is already presenting a major challenge to the country's economic growth, with profound implications for housing availability and access, especially by the poor and other vulnerable groups.

Since most of this population have a high preference for urban areas, it has created a classic problem of housing demand, affordability and adequacy in cities and towns. Coupled with the high poverty and inequality in the country, most households are increasingly faced with a number of other challenges, including housing and living conditions.

Constructing a good house is a long, arduous process, riddled with difficulties such as acquiring land and raising capital. This has exacerbated the acute housing deficit and led to exorbitant rents in urban areas as well as chaotic development, including the construction of sub-standard housing.

In Sierra Leone, the majority of houses are below international standards and many lack adequate provision of water, electricity, bathing and toilet facilities, putting the lives of those living in them under constant threat.

As the number of people living in such conditions continues to grow, there is the risk that unless major improvements are undertaken, they may contribute to the spread of infectious diseases which can severely impair human health.

Unsurprisingly, housing in Sierra Leone is now a major public issue since housing conditions (for example, stock, type) is a key indicator of the country's progress in attaining socio-economic development. For that reason, having a clear understanding about the present housing condition with reliable data collected from the 2015 Census is timely, since it provides guidance to the Government in improving on the existing housing policy as well as in the formation of programmes to improve on housing quantity and quality.

The report found additionally that the country's refuse disposal facilities were largely inadequate. The main refuse disposal method in the country was the depositing of refuse in a bin (55 per cent) followed by dumping and burning which accounted for similar amounts (14.7 per cent each). Dumping and depositing refuse were most common in rural areas while urban households were more likely to burn of refuse (68.7 per cent).

## 1.2 Source of Data

The main source of data for this report is the 2015 Census undertaken by Statistics Sierra Leone (SSL). The census carried out a detailed investigation of the population and housing situation in Sierra Leone with data collected on all the most relevant attributes. Data collection involved house-to-house visits by trained enumerators using pretested questionnaires.

With regards to housing, data was collected issues including the type of building, the type of construction materials used and the type of essential amenities (for example, water, light, toilet) available to households.

The data was later processed and captured by SSL staff ahead of the analytical writing. This report is based, therefore, on a descriptive analysis of the 2015 Census for which raw data was received on a range of housing variables in the form of Microsoft Excel tables. The analysis was carried out at different scales, from the level of the country to the regions, districts and place of residence (rural and urban). The purpose is to provide clear understanding on the housing situation in the country.

## 1.3 Definition of Indicators

In this study, a range of indicators were used to measure variables selected from data collected on housing conditions during the 2015 Census. A full list of the variables, the related indicator and the indicator description/definition is provided in Table 1.1 below. The methodology for selecting and estimating the indicators is discussed in Section 2.3.



Table 1.1: List of Indicators and their description

Variable	Indicator	Indicator Description/Definition
Housing stock	Persons/households per house	Total number of dwelling units (houses, apartments, flats etc.) in the country, region, district or area
Type of dwelling unit	Dwelling type	Measure of the predominant style of housing in the country, region, district or area
Tenure Status	Housing tenure type	Type of arrangements under which the household occupies all or part of a housing unit
Repair needs of dwelling	Proportion/ percentage dwellings in poor conditions	Measure of the share of dwelling units with inadequate facilities for human existence
Number of rooms per household	Households per dwelling	Ratio between the total number of households and the total number of occupied dwelling units of all types in the country
Number of beds with mosquito nets	Proportion/ percentage of households using mosquito nets	Measures the number of households reporting owning and using mosquito nets
Roof	Construction materials of roofs of dwellings	Measure of the type of roofing material used to cover the uppermost part of the dwelling units (houses, apartments etc.) in the country, region, district or area
Wall	Construction materials of walls of dwellings	Measure of the type of material used for the construction of walls of dwelling units (houses, apartments etc.) in the country, region, district or area
Floor	Construction materials of floors of dwellings	Measure of the type of materials used to cover the floors of dwelling units (houses, apartments etc.) in the country, region, district or area



Table 1.1: List of Indicators and their description (continued)

Variable	Indicator	Indicator Description/Definition
Means of refuse disposal	Proportion/ percentage households with safe refuse disposal services	Measures the number of households disposing of waste safely in the country, region, district or area
Source of fuel for cooking and lighting	Proportion/ percentage of households with connection to electricity	Measure of the type of substance burned by households as a source of energy for either cooking or lighting
Source of water for drinking and household use	Proportion/ percentage of households with access to clean water	Total number of dwelling units (houses, apartments etc.) with inadequate access to improved water for drinking/household use
Type of toilet and bathing facilities	Proportion/ percentage of households with access to sanitation	Total number of households with improved sanitation facilities
Source of information	Proportion/ percentage of households with access to information	Total number of households accessing information including the types of sources of the information
Distance to closest health facilities	Average travel distance from dwellings to closest health facility in miles	Measures the distance travelled by households for visiting the nearest health facility
Distance to closest primary schools	Average travel distance from dwellings to closest primary school in miles	Measures the distance travelled by households for visiting the nearest primary school
Distance to closest source of water	Average travel distance from dwellings to closest source of water in miles	Measures the distance travelled by households for visiting the nearest source of water
Ownership of durables	Proportion/ percentage households with durable assets	Measures households ownership of durable assets

Source: Statistics Sierra Leone, 2015  
Population and Housing Census

## 1.4 Report Format

The report is organised in five chapters. The first chapter provides a brief introduction to housing in Sierra Leone with discussion on the source of information for the study. The second chapter describes the housing condition (for example, type of housing, number of rooms, construction materials) while the third and fourth chapters discuss the general housing characteristics (main housing facilities such as energy, water, toilet). The final chapter concludes the report by presenting a discussion of the findings and the recommendations.



# CHAPTER 2: METHODOLOGY/METHODS OF ANALYSIS

## 2.1 Introduction

This chapter presents an overview of the key sources of data on housing conditions that informed this study. More specifically, the chapter provides information on the survey instruments and the data collection procedures used. This relates primarily to data on the housing component of the 2015 Census which was used to prepare the report. The chapter additionally describes the statistical tests for estimating data that corresponds to each of the indicators used. The inferences drawn in each case allowed the communication of research findings

## 2.2 Data Collection

The data collection process for this study was carried out by SSL as part of its official mandate to undertake the 2015 Census. Data collection involved house-to-house visits by trained enumerators using questionnaires prepared and tested during the census preparatory phase.

The aim was to obtain information on whole households as well as on each household member, by interviewing the household head or any responsible adult knowledgeable about the affairs of the household.

With regards to housing, the questionnaires focused on obtaining information on the general housing conditions, in addition to access to basic facilities by households. The specific variables on which data was collected included housing stock and type; number of bedrooms per dwelling; occupancy level; materials for construction of wall, roof and floor; housing repair needs; housing tenure status; sources energy and drinking water; sources of information; access to basic facilities (primary school, health services and water supply); and, households main assets. The coverage of the population was done on a de facto basis. Once the data was collected, the editing and processing was done at SSL's headquarters. Moreover, analysis and evaluation of the census data was done in accordance with SSL's data analysis and evaluation plans prepared during the Census preparatory phase.

## 2.3 Estimation of Indicators

Using indicators to gauge housing conditions is critical, since it provide state authorities and other policy makers with the knowledge they require to make effective decisions about tackling housing inadequacies in the country. As Sierra Leone's total population continues to grow with urbanization rates expected to rise in the future, the need to examine the housing conditions offers the Government and other policy makers a great opportunity to plan and make more targeted and informed decisions in dealing with the housing challenge.

The evaluation is limited to data on housing conditions derived from the 2015 Census. The scale of measurement ranges from the national, through to regional, district and up to the place of residence. In particular, the focus of the evaluation at the district and place of residence level is in view of the spatial differentiation in the quantity, type, and quality of housing conditions in such places and how these affect the wellbeing of residents.

The methodological approach used in the choice of indicators was the inductive approach whereby indicators were developed from the 2015 Census data. Data corresponding to each indicator were computed statistically using Microsoft Excel to produce statistical tables on a range of housing characteristics involving housing conditions, housing tenure status and households access to facilities. The data was reported either as percentages or rates depending on the indicator that was assessed. Inferences and conclusions were later drawn based on the results.

# CHAPTER 3: DISCUSSION OF RESULTS

## 3.1 Introduction

This chapter discusses findings from an analysis of the 2015 Census data on housing conditions. As pointed out in Section 2.1, the analysis was carried out at different scales from the national to the regional, district, and place of residence (rural and urban). These levels were prioritized, since they provide a clear portrayal of the housing situation that reflects the realities of much of the lower levels (chiefdom and ward) left out in the analysis.

## 3.2 Housing stock

The 2015 Census shows that the stock of houses in Sierra Leone is 801,417 with 1,265,468 households living in these houses. The Northern region had the greatest proportion of the country's housing stock (34 per cent), with the rest spread more among the other three regions (Table 3.1). In terms of districts, the Western Area Urban had the highest number of houses, but elsewhere, a significant proportion of the housing stock (60.6 per cent) was in the rural areas. The 2004 Census did not record the total number of housing stock at the time, so it is difficult to determine whether the proportion of housing stock in the country has changed significantly. At the national level, the average number of persons per house is 8.8, with little variation from region to region.



Table 3.1: Housing stock, distribution and occupancy by region, district and place of residence

	Household Population	Per cent distribu. of H/holds	Per cent distribution of Houses	Population per house	H/holds per house	Average H/hold Size
Total Country	7,076,119	1,265,468	801,417	8.8	1.6	5.6
Region						
Eastern	1,640,592	22.0	22.0	9.4	1.6	5.8
Northern	2,502,583	33.0	34.0	9.1	1.5	6.1
Southern	1,439,165	20.0	23.0	7.9	1.4	5.8
Western	1,493,779	25.0	21.0	8.8	1.9	4.7
District						
Kailahun	525,674	6.6	6.6	9.9	1.6	6.3
Kenema	609,427	8.8	8.1	9.4	1.7	5.5
Kono	505,491	6.8	7.1	8.9	1.5	5.9
Bombali	605,741	8.4	8.9	8.5	1.5	5.7
Kambia	344,095	4.3	4.7	9.1	1.4	6.4
Koinadugu	408,687	4.4	5.2	9.7	1.3	7.3



Table 3.1: Housing stock, distribution and occupancy by region, district and place of residence (continued)

	Household Population	Per cent distribu. of H/holds	Per cent distribution of Houses	Population per house	H/holds per house	Average H/hold Size
District						
Port Loko	612,920	8.8	8.7	8.8	1.6	5.5
Tonkolili	531,140	6.9	6.8	9.7	1.6	6.1
Bo	574,026	8.1	8.6	8.3	1.5	5.6
Bonthe	200,771	2.6	3.4	7.4	1.2	6.2
Moyamba	318,002	4.9	6.7	5.9	1.2	5.1
Pujehun	346,366	4.1	4.0	10.7	1.6	6.7
Western Area Rural	443,068	7.1	7.9	7.0	1.5	4.9
Western Area Urban	1,050,711	18.2	13.3	9.9	2.2	4.6
Place of Residence						
Rural	4,182,612	55.1	60.6	8.6	1.4	6.0
Urban	2,893,507	44.9	39.4	9.2	1.8	4.6

Source: Statistics Sierra Leone, 2015  
Population and Housing Census

Table 3.1 also shows that on average, Sierra Leone has 1.6 households per house ranging from a low of 1.4 in the Southern region to a high of 1.9 in the Western Area. Moreover, the table shows that the average household size in Sierra Leone was 5.6 people even though this size varies broadly according to region, district and place of residence.

As household size and the number of rooms are two key elements used to measure the overcrowding<sup>2</sup> rate - a key indicator of the quality of housing conditions - there is no doubt that some places in Sierra Leone are already grappling with the challenges presented by overcrowding.

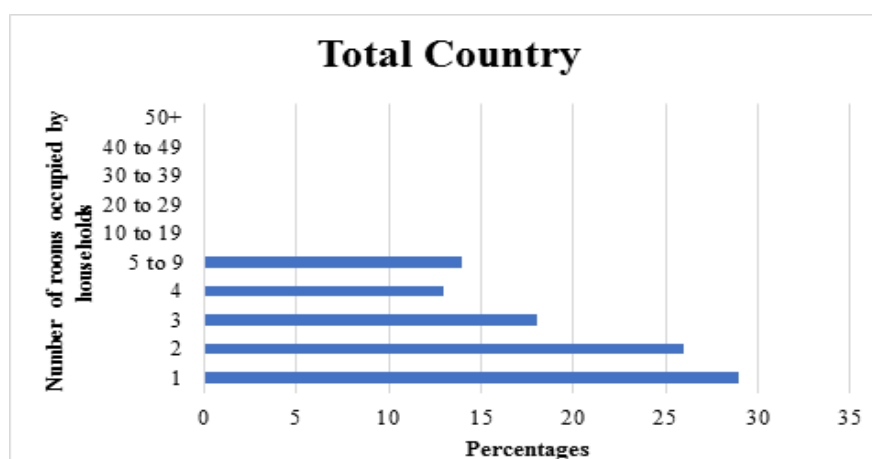
As Table 3.1 shows, urban areas (9.2 people per house) seemed to be more at risk of overcrowding especially in such districts as Pujehun (10.7), Western Area Urban (9.9), Kailahun (9.9), Koinadugu (9.7) and Tonkolili (9.7). The high values associated with urban areas in these districts was directly linked to the limited stock of houses which forces households to share their housing units. This is likely to have implications for the country's demography owing to the effects it may have on individual decisions to form families, marry and to give birth.

<sup>2</sup> While there can be a variety of ways to define overcrowding, we define overcrowding as more than two persons per room.

### 3.3 Number of rooms occupied by household

According to the 2015 Census, the number of rooms commonly occupied by households ranged from one to nine. More specifically, at the national level, 29 per cent of households lived in single rooms (Figure 3.1) while 26, 18, 13 and 14 per cent of households occupied rooms ranging from two, three, four and five to nine respectively. Nevertheless, more than half of households in Sierra Leone (55 per cent) lived in houses with between one and two rooms.

**Figure 3.1: Percentage distribution of number of rooms occupied by households**



Source: Statistics Sierra Leone, 2015 Population and Housing Census

With an average household size of 5.6 people nationwide, this suggests that overcrowding was a major feature of housing in Sierra Leone with slightly over five out of every ten households living in overcrowded conditions. However the problem was more pronounced in urban than rural areas. More than half of urban households (57.5 per cent) lived in overcrowded single rooms while the rural area had a high share of households living in houses with between two to nine rooms.

### 3.4 Type of Housing

Nine dwelling types were identified by the 2015 Census. These include separate house, semi-detached house, flat/apartment, compound house (rooms), huts/building (same compound), huts/buildings (different compound), tent, impoverished home (kiosk, container, board, pan body) and uncompleted buildings.

Separate houses (54.4 per cent) were the main dwelling type countrywide, followed by flat/apartment (20.2 per cent) and compound house (9.9 per cent) (Table 3.2). Again there were differences between urban and rural with urban households mostly found in flat/apartment and compound houses and rural households mostly living in separate houses.

At the regional level, the Northern region (37.4 per cent) had more households living in separate houses with Port Loko district registering the highest (11.3 per cent). The Western Region had the most number of households living in flat/apartments (38.2 per cent) and compound houses (45.5 per cent) with much of these two dwelling types (28.6 per cent and 34.6 per cent respectively) located in Western Area Urban (see Annex 3).



Table 3.2: Percentage distribution of households by type of dwelling

	Total country	Region			
		Eastern	Northern	Southern	Western
Separate house	54.4	26.5	37.4	24.0	12.1
Semi-detached house	6.8	20.8	23.3	15.9	40.0
Flats/Apartments	20.2	15.4	29.7	16.7	38.2
Compound house (rooms)	9.9	17.6	22.7	14.2	45.5
Hut/Buildings (same)	2.5	16.7	42.7	17.6	23.0
Hut/Buildings (different)	1.5	24.4	52.7	18.7	4.2
Tent	0.8	15.8	61.4	15.3	7.5
Improvised home	2.3	3.6	8.9	4.1	83.4
Uncompleted building	1.3	13.0	28.6	16.2	42.2
Other	0.3	26.9	26.8	25.7	20.6

Source: Statistics Sierra Leone, 2015  
Population and Housing Census

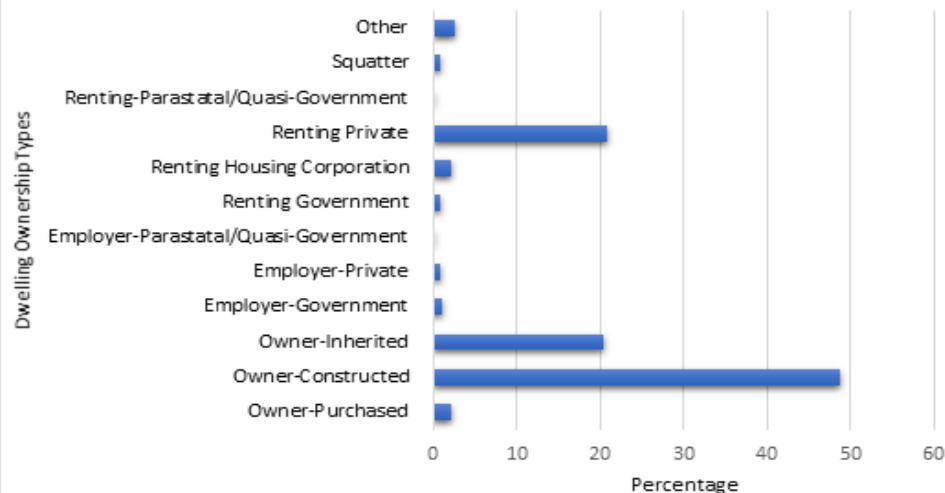
## 3.5 Ownership of Dwelling by Age and Sex

### 3.5.1 Ownership of Dwelling

The census identified three main ownership types of the dwellings in Sierra Leone. The most common was owner-constructed (48.7 per cent) followed by renting private (20.9 per cent) and owner inherited (20.3 per cent).

Private renting (59.3 per cent) seems to have been the more common ownership type in the Western Region but owner constructed (42.0 per cent) and owner inherited (33.0 per cent) were more dominant in the Northern Region (see Annex 4). Despite this, owner-inherited was more widely practised in both Kenema and Bo Districts (11.9 and 11.7 per cent respectively) while owner constructed seemed to be more dominant in Bombali Districts (9.6 per cent) followed by Tonkolili District (9.4 per cent).

**Figure 3.2: Percent distribution of households by ownership of dwellings**



Source: Statistics Sierra Leone, 2015 Population and Housing Census

In Western Urban however, private renting (11.4 per cent) was the main form of ownership. Moreover, while owner constructed (73.1 per cent) and owner inherited (66.2 per cent) were the main type of ownership of dwellings in rural areas, private renting (88.6 per cent) was more common in urban areas. The high preference for private renting in urban areas seems to suggest that most urban households were not financially stable, since many are unable to invest on their own homes.

### 3.5.2 Ownership by Sex of Household Heads

The dwelling ownership type was further analysed in relation to the sex of the household heads. As Table 3.3 shows, there were marked differences between male and female household heads in the ownership of dwellings. More than two-thirds of all houses at the different levels (national, regional, district and place of residence) were owned by men.



**Table 3.3: Percentage distribution of household heads by sex**

	Male Headed	Female Headed
Percent Country	71.9	28.1
Region		
Eastern	74.7	25.3
Northern	69.5	30.5
Southern	70.2	29.8
Western	73.8	26.2



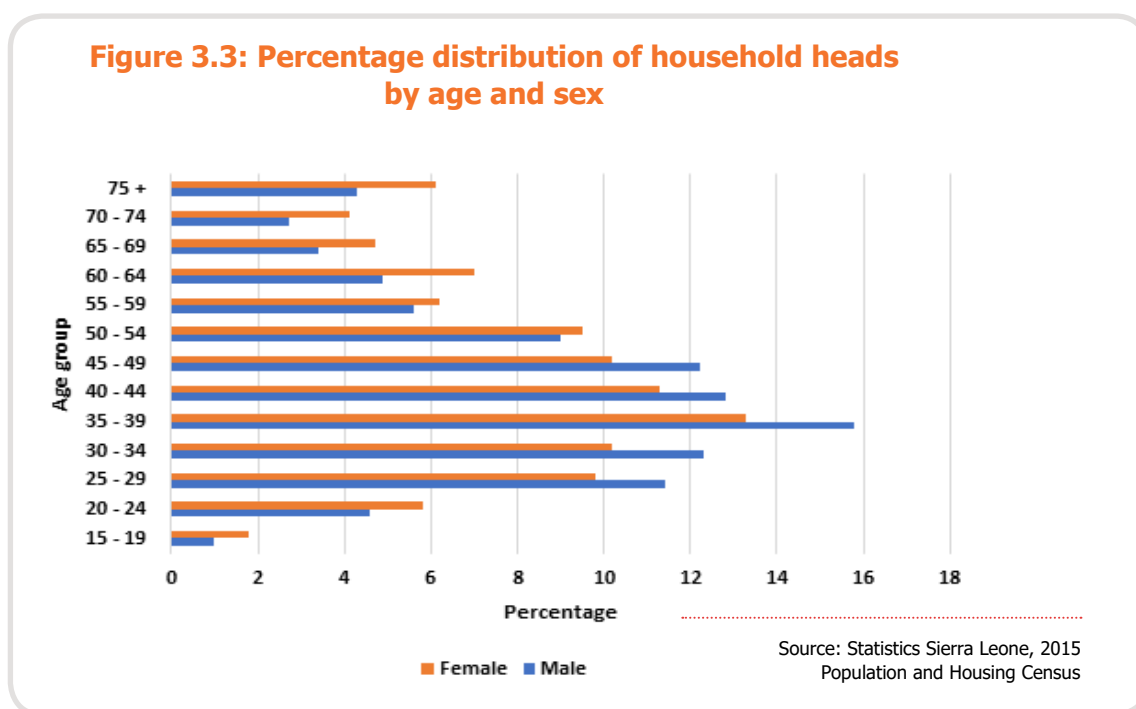
Table 3.3: Percentage distribution of household heads by sex  
(continued)

	Male Headed	Female Headed
Percent Country	71.9	28.1
<b>District</b>		
Total	71.9	28.1
Kailahun	72.0	28.0
Kenema	74.9	25.1
Kono	76.9	23.1
Bombali	69.0	31.0
Kambia	70.4	29.6
Koinadugu	69.4	30.6
Port Loko	69.0	31.0
Tonkolili	70.2	29.8
Bo	68.4	31.6
Bonthe	74.5	25.5
Moyamba	70.2	29.8
Pujehun	71.1	28.9
Western Area Rural	74.4	25.6
Western Area Urban	73.5	26.5
<b>Place of residence</b>		
Total	71.9	28.1
Rural	72.4	27.6
Urban	71.3	28.7

Source: Statistics Sierra Leone, 2015  
Population and Housing Census

### 3.5.3 Ownership by Age and Sex of Household Head

A cross-tabulation was carried out of the sex and age of household heads by type of ownership of dwelling. The findings (Figure 3.3) shows that for both males (73.4 per cent) and females (64.3 per cent), more dwellings were owned by household heads aged between 25 and 54 years. Nevertheless, it was found that more dwellings were owned by household heads aged 35 to 39 years (15.8 per cent males and 13.3 per cent females) than any other age group (see Annex 5). Moreover, whereas more male household heads owned dwellings between the ages of 25 and 49 years (64.4 per cent), the ownership of dwellings by female household heads was more dominant at the earlier (19 to 24 years) and latter (55 years and above) stages in life. Since the life expectancy for males is lower than females in Sierra Leone, this may account for the significant number of owner-inherited type of dwelling ownership in the country.



## 3.6 Type of Building Materials used for Construction

### 3.6.1 Dominant roofing material of main unit

Six main materials are identified in the 2015 Census as being used for the construction of roofs. These include concrete, zinc, thatch, asbestos, tarpaulin and tiles.

Zinc (81.0 per cent) is the major material used for constructing the roofs of dwellings in Sierra Leone followed by thatch (13.2 per cent). Whereas the share of dwellings using zinc for roof construction is highest in the Northern region, more households actually use thatch (even though households also use thatch), the share of households who use thatch is much higher in the Southern region, where households in Moyamba district (13.9 per cent) use it the most. In the Western Area urban, a large proportion of the roofs were constructed of zinc (19.4 per cent). The high values in the use of zinc in the Western Area urban is indicative of the huge disparity in the lifestyle lived by households in this area compared to residents in other parts of the country. However, even though the use of thatch for the construction of roof was more prevalent in rural areas (97.4 per cent) than urban areas, there was no significant difference between urban and rural areas in the use of zinc (50.2 per cent and 49.8 per cent respectively).





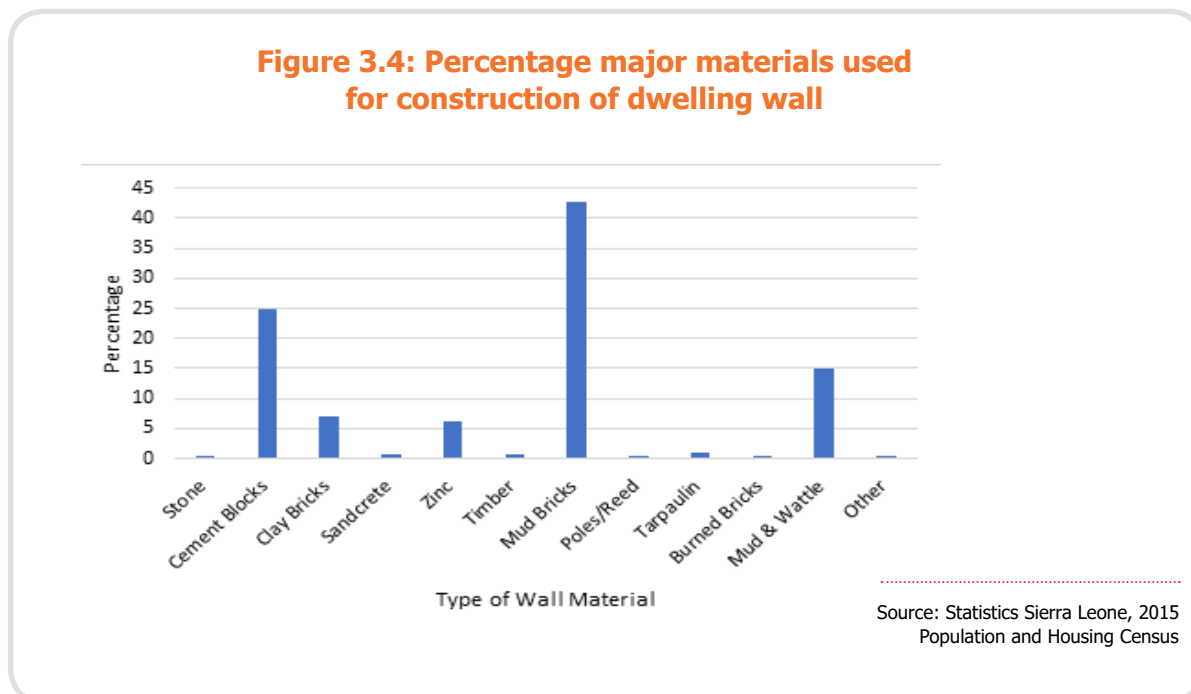
Table 3.4: Percentage major materials used for construction of dwelling roof

Major material for construction of roof by region, district and place of residence								
	Total	Concrete	Asbestos	Zinc	Thatch	Tarpaulin	Tiles	Other
Total Country	1,346,282	1.6	2.0	81.0	13.2	1.5	0	0.7
<b>Region</b>								
Eastern	294,851	6.6	21.0	23.1	17.4	17.8	28.8	13.6
Northern	446,797	10.9	30.0	32.5	39.0	47.0	27.0	33.2
Southern	270,893	5.5	15.4	16.9	42.9	15.4	15.4	27.1
Western	333,741	77.0	33.6	27.5	0.7	19.8	28.8	26.1
<b>District</b>								
Kailahun	87,148	1.7	5.8	7.0	4.1	6.4	17.2	3.7
Kenema	117,485	2.7	8.3	9.0	8.4	5.5	7.5	5.3
Kono	90,218	2.3	6.9	7.1	4.9	6.0	4.1	4.6
Bombali	115,103	2.9	7.4	8.5	9.3	13.4	3.5	10.8
Kambia	58,207	1.2	5.1	4.6	2.8	6.3	8.1	4.6
Koinadugu	59,223	0.8	2.8	3.3	11.0	12.8	2.7	5.1
Port Loko	120,866	4.1	8.8	9.9	4.4	8.2	4.4	6.3
Tonkolili	93,398	1.8	6.0	6.2	11.5	6.3	8.3	6.4
Bo	110,976	3.3	7.7	8.2	9.2	7.0	5.6	5.0
Bonthe	35,340	0.5	1.7	1.5	9.6	1.1	1.4	7.2
Moyamba	69,954	0.8	3.7	3.9	13.9	4.8	3.7	6.4
Pujehun	54,623	0.9	2.4	3.2	10.2	2.4	4.7	8.5
Western Area Rural	98,794	11.5	8.6	8.2	0.7	14.0	8.9	13.8
Western Area Urban	234,947	65.5	24.8	19.4	0.2	5.8	19.9	12.3
<b>Place of residence</b>								
Rural	748,673	12.1	44.2	49.8	97.4	63.8	58.9	57.9
Urban	597,609	87.9	55.8	50.2	2.6	36.2	41.1	42.1

Source: Statistics Sierra Leone, 2015  
Population and Housing Census

### 3.6.2 Dominant wall material of main dwelling unit

Three main materials make up the dominant material used for making more than three quarters of dwellings occupied by households in Sierra Leone. These include cement blocks, mud bricks and mud and wattle. Mud brick (42.8 per cent) was the leading material used for the construction of wall followed by cement blocks (24.9 per cent) and mud and wattle (15.0 per cent), as shown in Figure 3.4.



At the regional level, whereas the Western region (55.2 per cent) had the highest number of dwelling walls constructed of cement blocks, the Northern region had more constructed of mud bricks (48.9 per cent) with the Southern region dominating in dwelling walls constructed of mud and wattle (see Annex 6). This pattern was clearly reflected at the district level with Western Area Urban having the most dwellings with walls constructed of cement blocks; Tonkolili district (14.0 per cent) leading in terms of dwellings with walls made of mud bricks and, Bo district having most of its dwelling walls constructed of mud and wattle.

Additionally, while urban areas (84.4 per cent) concentrated dwellings with walls made of cement blocks, the wall of dwellings in rural areas are mostly made with materials other than cement blocks. These included mud and wattle (92.7 per cent), mud bricks (70.6 per cent) and clay bricks (51.1 per cent) among others. The high preference for cement bricks in urban areas suggests the differences in the socio-economic standing of people in urban areas compared to their rural counterparts.

### 3.6.3 Dominant floor material of main dwelling unit

Five main materials are used for constructing the floor of dwellings in Sierra Leone. These include stones, tiles, cement, wood and mud. As shown in Table 3.5, cement and mud were the principal materials for construction of floors making up 90 per cent of the share of materials used overall. At the national level, the major materials used for floor construction were mud (46 per cent) followed by cement (44 per cent). Only six per cent of dwellings had their floors constructed with tile materials. The majority of the stone, tiled and cement floors were to be found in the Western region with the rest of the country favouring mud floors.



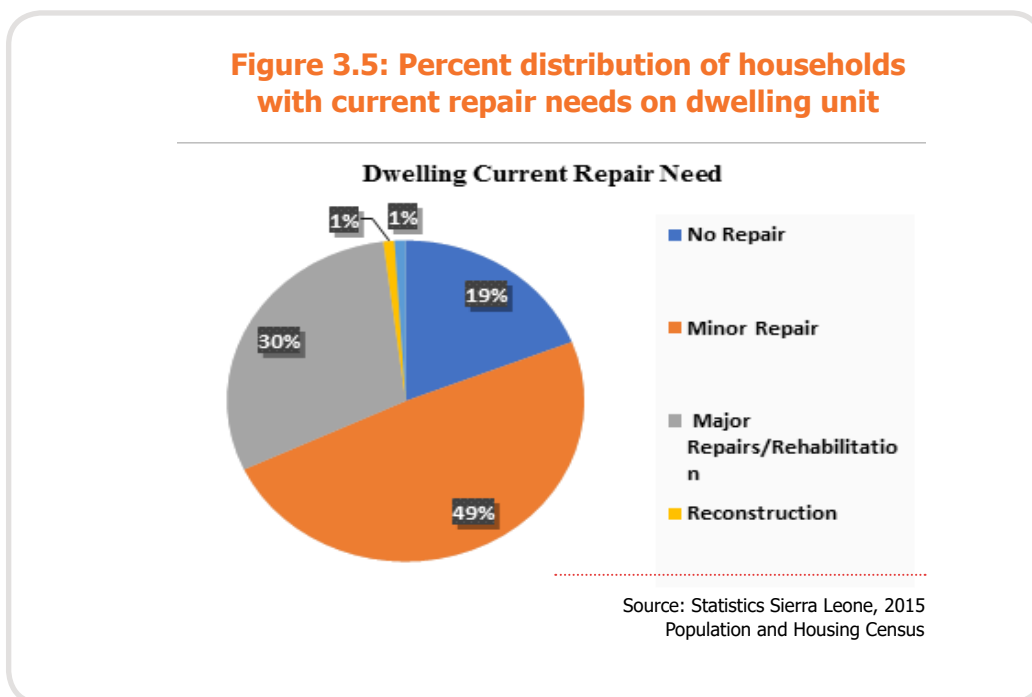
Table 3.5: Percentage major materials used for construction of floor of dwellings

Major material for construction of floor							
	Total	Stone	Tiles	Cement	Wood	Mud	Other
Total Country	1,265,468	1.0	6.0	44.0	2.0	46.0	1.0
<b>Region</b>							
Eastern	281,201	7.9	6.2	17.7	21.3	29.1	14.0
Northern	414,377	32.9	10.9	25.2	43.3	42.5	27.0
Southern	248,655	10.7	7.8	15.0	22.4	25.7	15.0
Western	321,235	48.5	75.1	42.1	13.0	2.7	44.0
<b>District</b>							
Kailahun	83,348	2.2	0.5	3.9	6.2	10.0	5.7
Kenema	111,734	4.4	4.2	8.4	7.9	10.0	3.8
Kono	86,119	1.3	1.5	5.3	7.1	9.0	4.6
Bombali	105,902	6.9	4.6	8.0	8.4	9.3	4.9
Kambia	53,826	4.3	0.8	2.8	5.2	6.0	6.2
Koinadugu	56,108	1.3	0.8	2.2	9.3	6.9	6.0
Port Loko	111,701	13.4	3.7	7.9	9.9	10.3	5.7
Tonkolili	86,840	7.1	1.0	4.3	10.5	10.0	4.2
Bo	102,723	6.4	6.2	8.4	7.0	8.3	6.2
Bonthe	32,538	0.6	0.3	1.6	4.1	3.8	2.6
Moyamba	61,880	1.7	0.8	2.7	5.8	7.5	2.7
Pujehun	51,514	2.0	0.5	2.4	5.6	6.3	3.4
Western Area Rural	91,284	10.6	14.7	11.9	3.2	1.8	8.7
Western Area Urban	229,951	37.8	60.4	30.2	9.8	0.8	35.3
<b>Place of residence</b>							
Rural	697,734	37.4	6.9	26.5	76.0	88.4	44.5
Urban	567,734	62.6	93.1	73.5	24.0	11.6	55.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

### 3.7 Repair Needs of Dwellings

As shown in Figure 3.5, over three-quarters of houses (79 per cent) in Sierra Leone need repairs with only 19 per cent not requiring any repair, rehabilitation or reconstruction. However, while nearly eight out of every ten dwellings in Sierra Leone required repair, 49 per cent of all such houses only required minor repairs. At the regional level, most of the houses not requiring repairs (44.1 per cent) were in the Western region with the Western Area Urban accounting for 34.6 per cent of such houses.



Moreover, while the Northern Region had the most number of houses needing repairs (33.4 per cent minor and 35.9 per cent major respectively), it is in Western Area urban that such houses concentrated (16.1 per cent minor and 11.1 per cent major) followed by Port Loko (8.5 per cent minor and 10.7 per cent major) and Kenema (9.3 per cent minor and 9.0 per cent major).

Similarly, whereas a large share of the houses not requiring repairs (67.4 per cent) were in urban areas, a similar proportion of houses needing repairs (56.4 per cent minor and 67.2 per cent major respectively) were in rural areas (see Annex 7).

These large number of properties needing repair point to the high levels of deprivation of the people who live in them.

### 3.8 Number of beds with mosquito nets

The results show there was a broad usage of bed nets (76.6 per cent) in Sierra Leone. However, in several homes, only one bed (24.3 per cent) had a bed net, while in others, two (21.9 per cent), three (12.3 per cent) or more beds were attached with bed nets.

At the regional level, the use of bed nets was most common in the Northern region, although 25 per cent of the total no bed net users lived here. The Western area had the lowest use of bed nets, with most living in Western Area Urban. In terms of the place of residence, more rural dwellers used bed nets than urban dwellers.



**Table 3.6: Percentage distribution of households using beds with bed nets**

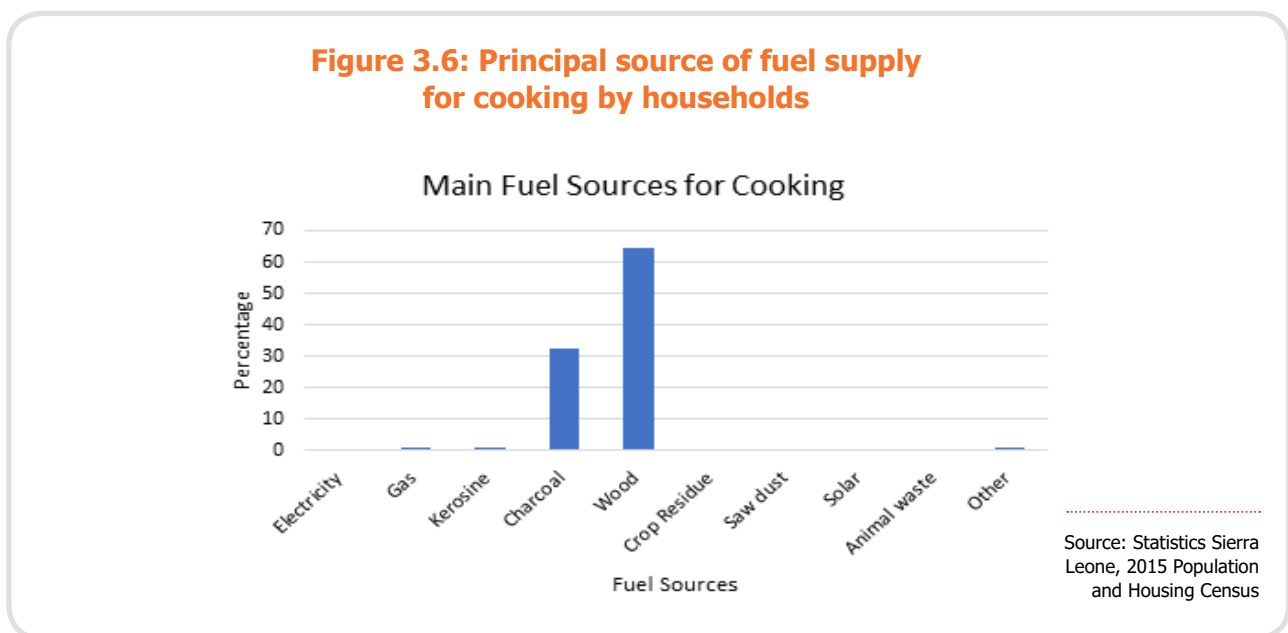
Number of beds with bed nets by region, district and place of residence										
	Total	0	1	2	3	4	5-9	10-19	20-29	30+
Total Country	1,265,468	23.4	24.3	21.9	12.3	9	8.1	0.9	0.1	0
<b>Region</b>										
Eastern	281,201	14.0	25.8	26.5	24.7	23.9	18.7	17.1	13.8	15.4
Northern	414,377	25.0	27.8	33.1	36.6	40.1	52.0	56.6	38.2	31.7
Southern	248,655	8.1	21.5	23.0	27.7	24.8	20.9	17.3	19.6	21.2
Western	321,235	52.9	24.9	17.4	11.0	11.2	8.4	9.0	28.4	31.7
<b>District</b>										
Kailahun	83,348	2.7	6.6	8.5	9.8	8.4	5.9	4.4	1.7	4.8
Kenema	111,734	4.6	12.4	10.7	8.4	8.3	7.0	6.3	7.8	4.8
Kono	86,119	6.7	6.8	7.2	6.7	7.3	5.8	6.4	4.3	5.9
Bombali	105,902	5.3	8.4	8.7	9.3	10.0	12.6	11.3	5.7	6.5
Kambia	53,826	2.2	3.0	4.5	5.9	6.1	8.5	7.4	3.3	2.2
Koinadugu	56,108	2.1	3.3	4.7	5.7	6.7	8.6	11.9	12.6	5.9
Port Loko	111,701	8.9	7.8	8.5	8.2	9.7	12.1	12.7	11.0	9.3
Tonkolili	86,840	6.6	5.3	6.8	7.4	7.6	10.1	13.4	5.5	7.9
Bo	102,723	4.5	10.1	8.9	8.6	9.4	8.3	9.7	7.5	8.4
Bonthe	32,538	0.6	2.2	3.1	5.3	3.9	2.5	0.8	0.7	2.8
Moyamba	61,880	1.8	5.1	5.6	8.0	6.3	5.2	2.6	1.5	7.0
Pujehun	51,514	1.1	4.1	5.4	5.8	5.2	5.0	4.2	9.9	2.8
Western Area Rural	91,284	13.8	7.6	5.3	3.9	3.3	2.2	2.0	8.4	5.3
Western Area Urban	229,951	39.1	17.3	12.1	7.0	7.8	6.2	6.9	20.1	26.4
<b>Place of residence</b>										
Rural	697,734	31.2	52.2	62.2	71.1	69.7	72.3	65.3	56.8	50.6
Urban	567,734	68.8	47.8	37.8	28.9	30.3	27.7	34.7	43.2	49.4

Source: Statistics Sierra Leone, 2015  
Population and Housing Census

## 3.9 Energy and Water Supply in Dwelling

### 3.9.1 Main Source of Fuel for Cooking by Households

The principle source of fuel for cooking by most households in Sierra Leone was wood (64.7 per cent) followed by charcoal (32.2 per cent), see Figure 3.6. Wood for cooking was most common in the Northern region (42.0 per cent), while in the Western region, charcoal (65.8 per cent) was the main source of fuel. Gas and electricity were also used in this region, fuel sources which were almost unknown in all the other three regions.



Whereas more households use wood (81.6 per cent) for cooking in rural areas, electricity (96.5 per cent), charcoal (89.7 per cent) and gas (90.6 per cent) are the main sources of fuel for cooking in urban areas.

### 3.9.2 Main Source of Fuel for Lighting by Households

Eight main sources of fuel for lighting were identified in the 2015 Census (Table 3.7). These included electricity, gas, kerosene, generator, battery/ rechargeable light, candle, wood and solar.

It found that more than three-quarters of households used battery/ rechargeable lighting. This was most common in the Northern (36.7 per cent) and Eastern (26.1 per cent) regions with more than a quarter of households in each region using it as the main energy source for lighting. While a significant proportion of households also used electricity (17.8 per cent), its use was more widespread in the Western region (73.6 per cent).



Table 3.7: Principal source of fuel supply for lighting by type and region

Principal source of fuel for Lighting	Total country	Region			
		Eastern	Northern	Southern	Western
Electricity	17.8	7.3	12.2	6.9	73.6
Gas	0.3	12.0	43.3	11.5	33.2
Kerosene	1.2	7.0	53.1	16.9	23.0
Generator	0.9	15.1	19.9	16.2	48.8
Battery/ Rechargeable Light	76.4	26.1	36.7	22.9	14.3
Candle	0.2	24.6	21.5	11.6	42.3
Wood	1.6	15.3	64.3	17.9	2.5
Solar	0.8	26.7	36.9	12.8	23.6
Other	0.8	29.1	29.8	16.5	24.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

### 3.9.3 Main Source of Drinking Water by households

Households in Sierra Leone source drinking water from a variety of sources, the three main sources being public tap (28.9 per cent), protected ordinary well (21.2 per cent) and bush/river bed/stream (19.2 per cent).

Getting drinking water from a public tap was more prevalent in the Western (33.7 per cent) and Eastern regions (27.2 per cent) where households have some level of access to safe drinking water. While accessing drinking water from protected ordinary well was more common in the Northern region (37.1 per cent), the data showed marked regional disparity in the use of bush/river bed/stream as a major source of drinking water with half of all such users living in the Northern region.

At the district level, there was also variation in the source of drinking water with the use of public tap more common in Western Area Urban (25.1 per cent) followed by Kenema district (11.8 per cent) unlike Tonkolili (14.9 per cent) and Port Loko (12.4 per cent) districts where bush/river bed/stream was the main source (see Annex 9). Similarly, protected ordinary wells were a major source of drinking water both in Western Area Urban (13.3 per cent) and Bombali district (13.1 per cent).

While there is no significant difference between rural (48.1 per cent) and urban (51.9 per cent) areas in the use of public tap as a major source of drinking water, the use of bush/river bed/stream for sourcing drinking water was most common in rural areas (93.8 per cent) and almost unknown in urban areas. The share of households with access to safe water in urban areas far outweighed those in rural areas with drinking water in urban areas sourced mostly from piped in door (92.9 per cent), protected ordinary well (63.6 per cent) and public tap (51.9 per cent).



Table 3.8: Principal source of drinking water by type and region

Principal source of Drinking water	Total country	Region			
		Eastern	Northern	Southern	Western
Piped indoors	0.9	11.3	5.0	3.1	80.6
Piped in compound	4.3	15.8	6.3	3.3	74.6
Public tap	28.9	27.1	21.3	17.9	33.7
Protected ordinary well	21.2	20.6	37.1	18.8	23.5
Protected spring	3.6	16.6	29.5	14.1	39.8
Unprotected ordinary well	5.1	20.3	46.0	24.0	9.7
Unprotected spring	3.5	25.5	43.6	24.1	6.8
Mechanical well	7.8	27.9	39.8	26.7	5.6
Bush/ River bed/ Stream	19.2	19.4	50.8	26.9	2.9
Neighbour's tap	2.1	28.8	8.9	10.4	51.9
Sachets/Bottled water	2.8	3.7	8.6	5.9	81.8
Water Vendor/Bowser	0.4	7.1	30.2	13.7	49.0
Other	0.2	11.2	37.7	13.4	37.7

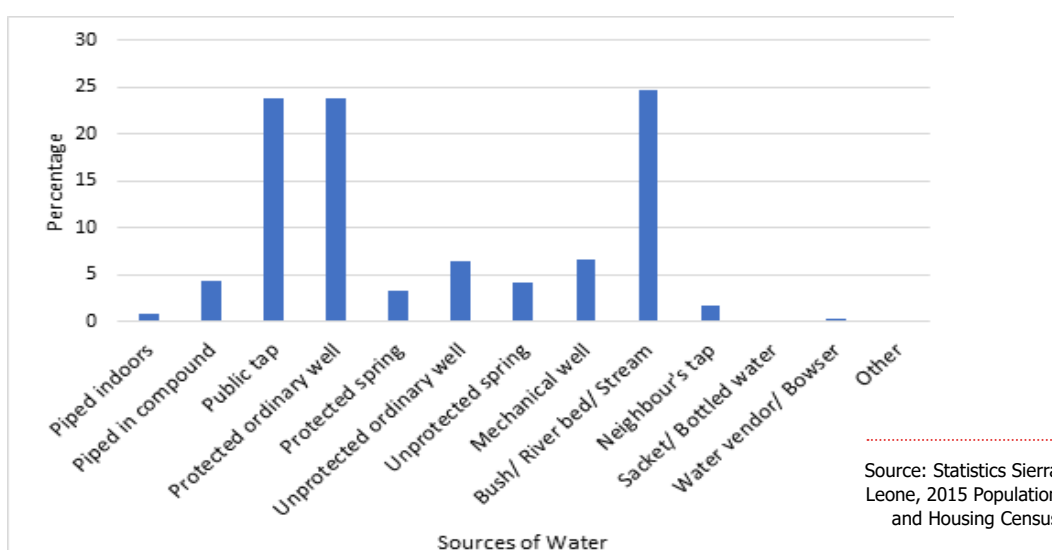
Source: Statistics Sierra Leone, 2015 Population and Housing Census

### 3.9.4 Main Source of Water for Household use

Similar to the sources of drinking water, three main sources were identified from a variety of water sources used by households in Sierra Leone (see Figure 3.7). These include bush/river bed/stream (24.6 per cent), public tap (23.8 per cent), and protected well (23.8 per cent).



**Figure 3.7: Principal source of water for household use**



The use of bush/river bed/stream was more common in the Northern (46.9 per cent) and Southern (26.7 per cent) regions unlike public tap which was more widely used in the Western (36.8 per cent) and Eastern (25.6 per cent) regions. Protected ordinary well was also common in both the Northern (32.2 per cent) and Western (29.3 per cent) regions (see Annex 10).

Whereas households in Western Area Urban obtained water from two key water sources in the form of public tap (27.2 per cent) and protected ordinary well (19.3 per cent), most households in the other districts accessed water from three main sources. These included public tap in the case of Kenema (11.2 per cent), protected ordinary well in both Bombali (12.2 per cent) and Bo (11.1 per cent) districts, and river/river bed/stream in Tonkolili district (13.0 per cent).

As the share of households in rural areas that sourced water from public taps (47.4 per cent) for household use was slightly less compared to their urban counterparts (52.6 per cent), sourcing water from river/river bed/stream (91.5 per cent) was more common among the rural households. In urban areas however, water for household use was sourced from safe water sources mainly in the form of protected ordinary well (70.8 per cent) and public tap (52.6 per cent).

## 3.10 Sanitation of Dwelling Units

### 3.10.1 Type of Toilet Facilities

As Table 3.9 shows, a variety of toilet facilities exist in Sierra Leone. However, only three types were common. These included communal pit (53.4 per cent), private pit (20.4 per cent) and communal bush/river bed (12.9 per cent). Whereas communal pit (36.7 per cent) and private pit (38.9 per cent) were more common in the Northern region, the use of communal bush/river bed as a toilet was more widespread in the Southern region (47.0 per cent). The three districts where community pits were more broadly used were Western Area Urban (18.4 per cent), Port Loko (11.1 per cent) and Kenema (10.3 per cent). However, despite not being situated in the Southern region, more households in Kailahun district used communal bush/river bed as a means of toilet (see Annex 11). Although almost insignificant at the national level, about 63.5 per cent of households in Western Area Urban used communal flushed inside while another 53.2 per cent used communal flushed outside.

The use of communal pits was slightly higher in rural areas (54.3 per cent) where it was used alongside communal bush/river bed (89.1 per cent). In urban areas however, the use of communal pit (45.7 per cent) is combined with various other toilet types in the form of private flushed inside (93.3 per cent), communal flushed outside (87.4 per cent), and communal bucket (70.8 per cent).



Table 3.9: Toilet facility by type and region

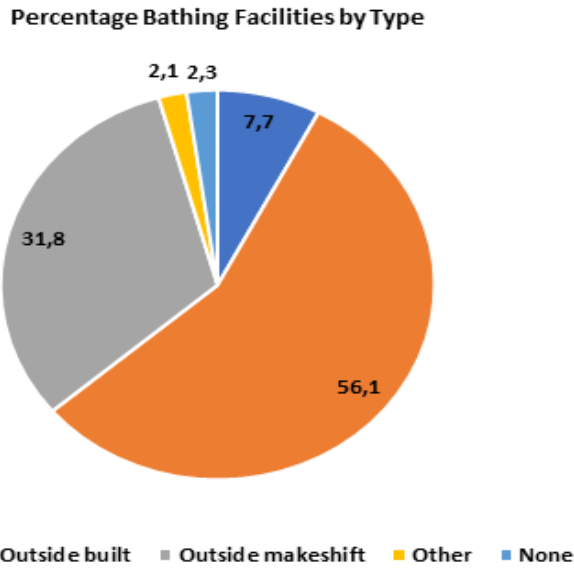
Type of Toilet facilities	Total country	Region			
		Eastern	Northern	Southern	Western
Communal VIP	1.5	23.0	25.0	23.6	28.4
Communal Flushed Inside	2.7	7.1	10.7	5.7	76.5
Communal Flushed Outside	2.2	8.8	20.6	4.6	66.0
Communal pit	53.4	24.1	36.7	14.0	25.2
Communal Bucket	0.3	11.9	15.0	12.2	60.9
Communal bush/ River bed	12.9	23.1	21.8	47.0	8.1
Communal other	0.7	23.8	31.4	26.0	18.8
Private VIP	1.1	22.4	19.4	16.7	41.5
Private Flushed Inside	2.9	6.1	10.9	10.2	72.8
Private Flushed Outside	0.7	11.1	20.5	8.9	59.5
Private Pit	20.4	23.0	38.9	21.3	16.8
Private Bucket	0.1	20.8	27.8	22.2	29.2
Private Other	1.0	21.5	28.6	38.4	11.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

### 3.10.2 Type of Bathing Facilities

Three main types of bathing facilities were commonly used by households in Sierra Leone (Figure 3.8). These included bathing facilities that existed inside the home (7.7 per cent), facilities that were outside built (56.1 per cent) as well as outside makeshifts (31.8 per cent). Thus, while over three-quarters (87.9 per cent) of all households used bathing facilities that were located outside, only 7.7 per cent had inside bathing facilities.

**Figure 3.8: Type of bathing facility**



Source: Statistics Sierra Leone, 2015 Population and Housing Census

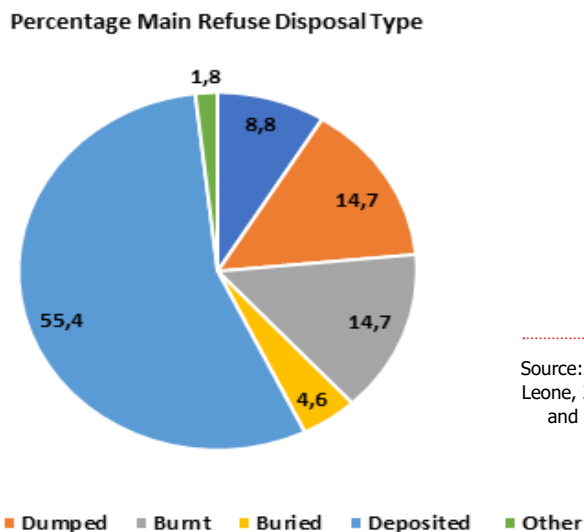
Whereas the Northern region had more households with outside bathing facilities (34.0 per cent outside built and 34.6 per cent outside makeshift), the Western region had more bathing facilities that were located inside the home (65.6 per cent).

At the district level, while Western Area Urban had more inside (51.5 per cent) and outside built (19.5 per cent) bathing facilities, outside makeshift was more common in Bo district (10.2 per cent) followed by Port Loko district (9.8 per cent) and Western Area Urban (9.8 per cent). Moreover, whereas rural (50.3 per cent) and urban (49.7 per cent) households had a similar amount of outside built bathing facilities, more households in rural areas used outside makeshifts (69.5 per cent). Inside bathing facilities (87.0 per cent) were more common in urban areas (see Annex 12).

### 3.10.3 Refuse disposal Methods

Inadequate collection and unmanaged disposal of refuse present a number of challenges to human health and the environment. As shown in Figure 3.9, depositing refuse (55 per cent) was the most common means of refuse disposal in Sierra Leone. This was followed by dumping and burning which accounted for a similar amount (14.7 per cent each) of refuse disposal method.

**Figure 3.9: Main refuse disposal methods by type**



Source: Statistics Sierra Leone, 2015 Population and Housing Census

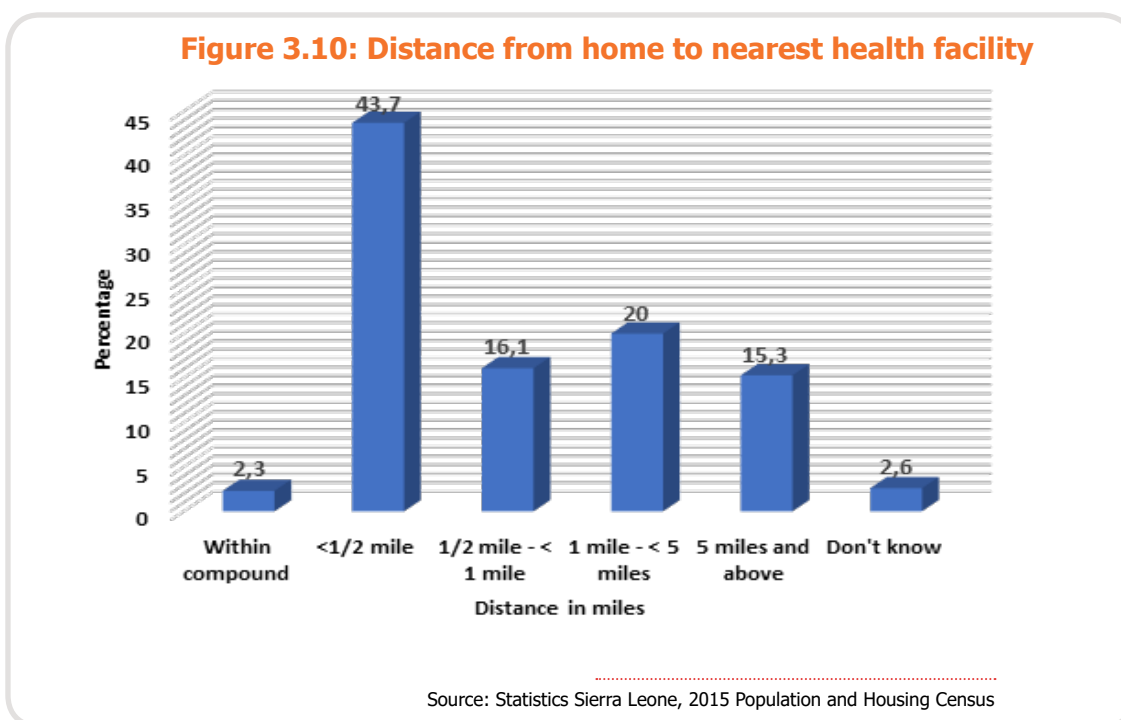
Whereas in the Northern Region, refuse deposition (30.3 per cent), dumping (46.0 per cent) and burning (33.7 per cent) were the most widely practised means of refuse disposal, in the Eastern Region, depositing of refuse (29.8 per cent) seemed to be more common. Although at national level, regular refuse collection was not popular, it was the most common refuse disposal method (61 per cent) in the Western Region where it was combined with burning (43.9 per cent) of the waste and other (43.6 per cent) related refuse disposal methods.

At the district level, while the Western Area Urban carried out a mix of refuse disposal methods involving mainly burning (25.1 per cent), depositing (12.3 per cent) and dumping (11.1 per cent), most of the other districts showed significant variations in the way they disposed refuse, with burning more widely practised in Western Area Rural (18.8 per cent), but almost less in the other districts, while Port Loko district and Kenema district took the lead in the dumping (12.7 per cent) and depositing (11.4 per cent) of refuse respectively (see Annex 13). Moreover, unlike rural areas where dumping (74.6 per cent) and depositing (63.0 per cent) of refuse were more common, the burning of refuse (68.7 per cent) was more widely practiced in urban areas.

### 3.11 Access to Community Service

#### 3.11.1 Distance to closest health facilities

The distance to the nearest health facility is very important in determining the extent to which households can gain access to health services.



As Figure 3.10 shows most households (62.1 per cent) in Sierra Leone lived less than one mile to the nearest health facility with 43.7 per cent living less than half a mile to the closest health facility. Nevertheless, there was a wide regional disparity with more households in the Northern (31.2 per cent) and Western region (27.7 per cent) either having health facilities within their compound or less than half a mile off (33.7 per cent and 26.8 per cent for Western and Northern regions respectively) unlike the Eastern and Southern regions (see Annex 14). Moreover, apart from Western Area Urban where more households had health facilities either less than half a mile (24.7 per cent) or less than one mile off (22.2 per cent), households in several of the other districts (for example, Port Loko, Bombali) had health facilities between more than half a mile to five miles and above (see annex 6). Moreover, unlike a few households in both rural (48.1 per cent) and urban (51.9 per cent) areas who had health facilities located within their compound, more households in rural areas accessed health facilities between more than half a mile to more than five miles, unlike their urban counterparts who accessed health facilities less than half a mile to one mile from their home.

### 3.11.2 Distance to closest primary schools

Access to educational opportunities is an essential requirement for promoting national development. It is also a major determinant for assessing housing quality in residential areas. As shown in Table 3.10, a little over three-quarters of households (78.1 per cent) in Sierra Leone had the nearest primary school between less than half a mile (64.1 per cent) and less than one mile (14.0 per cent) from their home. A significant proportion of this population<sup>3</sup> lived in both the Northern and Western regions. At the district level, while more households in Western Area Urban lived less than a mile to the nearest primary school, the share of households living between one to more than five miles was greatest in Bombali, Port Loko, Kailahun and Moyamba districts. Although more households in rural areas had primary schools within their compound (57.8 per cent), the distance from most homes to the nearest primary school varied from more than half a mile to above five miles. This is however different from urban areas where the nearest primary school for most homes was less than one mile away.

<sup>3</sup> In the Northern region, 30.5 percent of households live less than half a mile away from the nearest primary school while 34.9 per cent live between more than half a mile to less than one mile from the nearest primary school. This is similarly the case in the Western region where 28.4 per cent of households live less than half a mile and another 26.0 per cent living between half a mile and less than one mile from the nearest primary school.



**Table 3.10: Distance to nearest primary school by region, district and place of residence**

	Within compound	< ½ mile	½mile - < 1 mile	1mile - < 5miles	5 miles and above	Don't Know
Total Country	4.7	64.1	14.0	9.9	5.1	2.3
<b>Region</b>						
Eastern	20.8	22.0	21.6	25.1	25.7	14.7
Northern	38.5	30.5	34.9	37.4	41.8	30.2
Southern	17.4	19.1	17.5	26.0	25.7	11.0
Western	23.3	28.4	26.0	11.5	6.8	44.1



**Table 3.10: Distance to nearest primary school by region, district and place of residence (continued)**

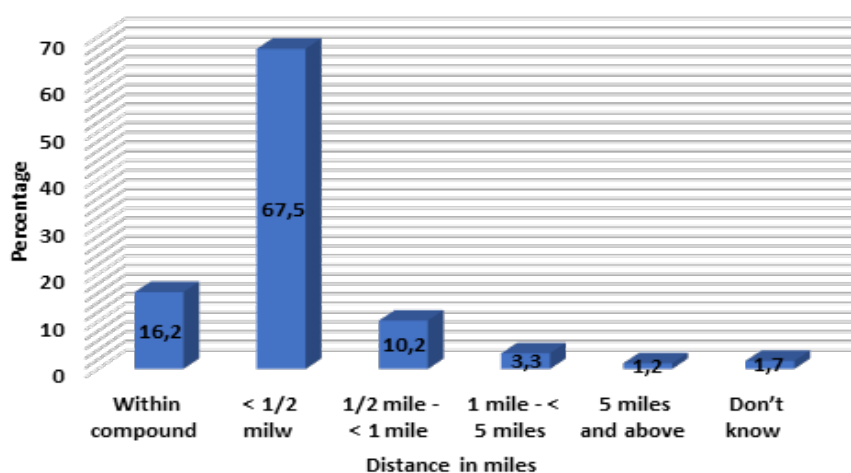
	Within compound	< ½ mile	½mile - < 1 mile	1mile - < 5miles	5 miles and above	Don't Know
Total Country	1,265,468	1.0	6.0	44.0	2.0	46.0
<b>District</b>						
Kailahun	3.7	6.2	7.6	8.5	8.4	4.2
Kenema	8.2	9.8	6.8	6.9	7.9	5.1
Kono	8.9	6.0	7.2	9.7	9.4	5.5
Bombali	9.6	8.0	7.9	10.5	9.9	7.7
Kambia	3.6	4.2	5.1	4.8	3.4	1.8
Koinadugu	5.1	4.0	3.8	3.1	11.6	9.1
Port Loko	10.8	7.7	11.7	11.6	9.5	4.6
Tonkolili	9.4	6.6	6.4	7.4	7.4	7.0
Bo	6.4	9.0	6.1	7.4	6.4	5.3
Bonthe	2.0	2.3	2.4	3.6	5.5	1.6
Moyamba	4.8	4.2	5.4	8.4	7.3	2.1
Pujehun	4.2	3.6	3.7	6.6	6.5	2.0
Western Area Rural	7.6	8.0	7.5	4.4	2.1	5.7
Western Area Urban	15.7	20.4	18.4	7.1	4.7	38.3
<b>Place of residence</b>						
Rural	57.8	48.8	53.6	81.2	92.1	41.1
Urban	42.2	51.2	46.4	18.8	7.9	58.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

### 3.11.3 Distance to closest source of water

Distance to source of water is very critical in ensuring that households live more hygienic lives and, is therefore a major health determinant of households.

**Figure 3.11: Distance to nearest source of water**



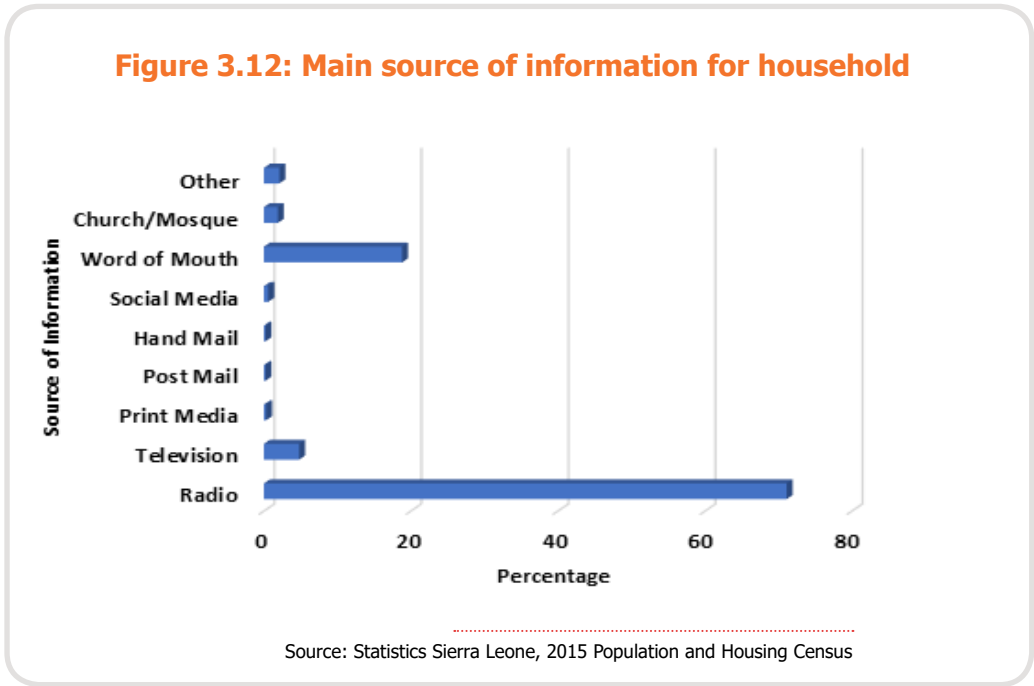
Source: Statistics Sierra Leone, 2015 Population and Housing Census

As shown in Figure 3.11, a large share of households (93.9 per cent) sourced water less than one mile from their homes. While less than one quarter of households within this category sourced water from their compound (16.2 per cent), more than two-thirds of households (67.5 per cent) sourced water less than half a mile from their homes. This was similarly the case at the regional level, with most households accessing water less than one mile from their dwellings (see Annex 15). The district level however, showed some disparity with a high share of households from Western Area Urban (22.5 per cent) and the provincial headquarter districts of Bombali (11.1 per cent) and Bo (10.5 per cent) sourcing much of their water either within their compound or less than half a mile from their homes (see Annex 7). Additionally, while more rural households sourced water over long distances, usually spanning between less than half a mile to five miles and over, most urban households sourced water either within their compound (62.4 per cent) or less than one mile from their homes.

## **3.12 Household Assets and Main Source of Information**

### **3.12.1 Main Source of Information by Region, District and Place of Residence**

More than half of the households (71.1 per cent) in Sierra Leone sourced information from radio, followed by word of mouth (18.8 per cent). The two sources makes up the main source of information for more than three-quarters of all households (see Table 3.12). Both information sources were more widely used among households in the Northern region. However, in the Western region, the use of television (76.4 per cent) as a source of information was more common.



At the district level, sourcing information by word of mouth was more common in the Northern districts of Bombali and Port Loko (10.8 per cent each) followed closely by Koinadugu (10.4 per cent) and Tonkolili (10.0 per cent) (see Annex 16). In the Western Area Urban however, television was the main source of information. While a similar number of households in rural (50.8 per cent) and urban areas (49.2 per cent) used radio as their main source of information, sourcing information by word of mouth was more widespread in rural areas (80.8 per cent) than in urban areas, where the use of television (88.3 per cent) was more common.

**3.12.2 Ownership of Household Assets by Region, District and Place of residence**

Household assets mirror the wellbeing and socio-economic status of households. It usually refers to the range of personal properties owned by households, irrespective of use. The most common assets owned by households in Sierra Leone were a bed (81.17 per cent) followed by radio (65.95 per cent) and mobile phone (62.94 per cent). However, and as Table 3.13 shows, the ownership of these assets was more dominant in both the Western and Northern regions, with households in the Western area region having the largest share (20.13 per cent bed, 22.36 per cent radio, and 26.61 per cent mobile phone). Whereas more households in urban areas owned a radio (54.52 per cent) and mobile phone (61.97 per cent), there was no significant difference in the ownership of bed between rural (51.75 per cent) and urban (48.25 per cent) areas. Even though only a small proportion of households owned televisions (19.76 per cent) in the country, they were found to be more commonly owned by households in the Western region (69.29 per cent), more especially the Western Area Urban (59.57 per cent) as well as in urban areas (92.87 per cent).





**Table 3.11: Ownership of Household Assets by Region, District and Place of Residence**

	Electric iron	Charcoal iron	Generator	Fridge/freezer	TV	Computer	Radio
Total Country	5.49	8.22	8.22	10.33	19.76	5.80	65.95
<b>Region</b>							
Eastern	4.2	16.8	12.2	6.0	8.3	9.2	22.2
Northern	10.8	22.4	16.9	11.8	13.5	15.0	29.0
Southern	6.4	13.1	13.8	7.6	8.9	9.9	18.1
Western	78.6	47.7	57.2	74.6	69.3	65.9	30.7
<b>District</b>							
Kailahun	0.4	4.0	1.9	0.4	0.7	1.5	6.8
Kenema	3.0	7.8	6.5	4.3	5.8	5.1	9.3
Kono	0.9	4.9	3.8	1.3	1.9	2.7	6.1
Bombali	7.2	6.4	3.7	6.5	6.3	6.4	7.5
Kambia	0.4	3.3	2.8	0.7	1.2	1.4	4.5
Koinadugu	0.2	2.7	1.6	0.4	0.7	1.1	3.5
Port Loko	2.3	6.9	6.5	3.3	4.0	4.2	8.0
Tonkolili	0.7	3.1	2.2	0.9	1.4	1.9	5.5
Bo	5.3	7.6	8.4	6.3	6.8	6.9	8.1
Bonthe	0.2	1.4	1.5	0.3	0.5	0.8	2.4
Moyamba	0.5	2.3	2.4	0.6	0.9	1.3	4.1
Pujehun	0.3	1.9	1.5	0.4	0.6	0.9	3.4
Western Area Rural	9.7	10.9	16.0	9.2	9.7	11.0	8.4
Western Area Urban	68.9	36.8	41.2	65.4	59.6	54.8	22.4
<b>Place of residence</b>							
Rural	4.14	20.67	16.24	4.40	7.13	9.62	45.48
Urban	95.86	79.33	83.76	95.60	92.87	90.38	54.52



**Table 3.11: Ownership of Household Assets by Region, District and Place of Residence (continued)**

	Mobile phone	Modern stove	Bed	Sofa	Bicycle	Motor cycle	Car	Boat
Total Country	62.94	6.31	81.17	14.57	6.43	7.62	3.65	2.40
<b>Region</b>								
Eastern	19.9	11.3	22.5	21.5	17.5	23.4	8.3	5.4
Northern	27.2	16.5	30.0	14.6	37.7	37.4	15.0	29.6
Southern	16.6	10.0	20.5	14.6	16.9	17.7	9.1	51.6
Western	36.3	62.2	27.0	49.3	27.9	21.5	67.6	13.4
<b>District</b>								
Kailahun	5.5	2.4	6.6	11.0	5.6	6.2	1.2	1.5
Kenema	8.6	4.7	9.5	6.8	7.9	10.6	4.7	2.5
Kono	5.8	4.2	6.4	3.7	4.1	6.7	2.4	1.5
Bombali	7.5	5.1	7.6	4.2	10.3	10.1	5.4	2.1
Kambia	4.5	2.1	4.4	1.3	5.9	6.1	2.0	11.5
Koinadugu	2.6	1.6	4.3	1.2	4.0	6.5	1.2	1.0
Port Loko	7.8	4.0	8.3	3.9	11.7	9.2	4.6	12.9
Tonkolili	4.8	2.7	5.5	4.0	5.7	5.4	1.9	2.1
Bo	7.8	5.3	8.4	9.9	8.7	9.3	6.6	3.7
Bonthe	2.2	1.1	2.8	1.2	2.3	1.9	0.5	25.8
Moyamba	3.6	2.1	5.0	1.7	3.6	3.3	1.1	9.1
Pujehun	3.1	1.5	4.2	1.8	2.3	3.2	0.9	13.0
Western Area Rural	9.6	10.9	6.9	8.5	7.8	6.6	15.0	5.5
Western Area Urban	26.6	51.3	20.1	40.8	20.1	14.9	52.5	7.8
<b>Place of residence</b>								
Rural	38.03	17.66	51.75	33.65	39.04	39.15	9.88	77.39
Urban	61.97	82.34	48.25	66.35	60.96	60.85	90.12	22.61

Source: Statistics Sierra Leone, 2015  
Population and Housing Census

## CHAPTER 4: POLICY IMPLICATIONS

These main findings about the housing situation in Sierra Leone show that housing conditions in 2015 were generally substandard. In addition, there was a huge disparity across the regions, districts and places of residence (rural and urban) in terms of the stock of houses, the quality and the housing need.

The scale of housing needs reflect the extent of problems which should be urgently addressed. However, improving the housing conditions as well as meeting the housing needs of households should take into account more than simply doing repairs to the houses or adding to the total housing stock in the country.

It should be about understanding the impacts on housing availability and quality of a range of factors. These include population growth, urbanization rates, the share of income households devoted to housing, the aptness or otherwise of existing housing policies, regulations and building codes and, more importantly, the amount of vacant land available for housing.

For that reason, the policy implications for housing should be looked at from a wider context (Doherty, 1985:159) because several technical issues (for example, reducing plot sizes and/or reducing the type and standard of infrastructure in the neighbourhood) may work to produce much wider positive social, economic and environmental outcomes than narrowly conceiving the response.

The key point is that a deliberate strategy would need to be taken by both the Ministry of Works, Housing and Infrastructure (MWH&I) and the Sierra Leone Housing Corporation (SALHOC) by playing a more central role in ensuring the delivery of more new 'reasonable' and quality housing units, in addition to using a variety of financial incentives and alternative tenure arrangements to increase housing supply in the medium to long term.

While subsidies are a viable financial incentive for reducing rental costs on households in addition to inspiring households to invest in housing, they may not be a popular means to tackle the current housing challenge in the country, owing largely to the incessant pressures on governments by both the World Bank and the IMF for fiscal austerity. This suggests the need for the Government to adopt housing policies that are economically realistic, specifically policies that allow households meet their housing needs within the country's available resources. It also suggests the need to meet housing needs with minimal government contribution.

Evidence shows that a number of countries have successfully addressed acute challenges relating to housing needs and improvements with little or no subsidy. In Sierra Leone, this will require the country to adopt appropriate low-cost building standards along with progressive building approaches. It will also involve reducing plot sizes for housing including the standards for infrastructure to make them cheaper and affordable so that more residents (especially in urban areas) are able to incrementally build their own houses.

However, lowering the minimum acceptable standard to enable more households to invest in their own house would require amending relevant applicable laws and building codes in the country.

Moreover, whilst the findings show that the majority of housing in Sierra Leone is privately owned by households, with much of the houses produced through the formal sector, it is found that in some urban areas, formal sector provision is riddled with supply bottlenecks with huge unmet housing needs. Because the informal sector has been absorbing a large portion of this new housing demand (especially from the urban poor), it is important to support this sector.

Informal housing supply systems can be enhanced through policies that either rely on individual initiatives, through promoting self-help or through the provision of low interests or rotating credits in the form of cash or material. Organizing poor communities around self-help housing initiatives, as well as assisting such category with building materials while they meet their labour costs, has the potential to markedly reduce housing costs. However, providing households with cash or material support would need to be targeted.

Since, so far, there is no statistics on exactly how many housing units are being produced in the informal sector in Sierra Leone (Macarthy and Koroma 2016), with barely any existing framework to assist households in the delivery of informal housing, it will be important for local councils to not only maintain a comprehensive register of all such housing units in their administrative areas but to also develop schemes for supporting informal housing delivery. Maintaining data on informal housing units can enable understanding on the housing needs of poor households including information on other important social attributes relevant for programming.

Furthermore, since the findings show that the health and sanitary conditions of most rural areas are poor, including a few deprived urban locations, it will be critical to give attention to improving the lives of such people and their living environment. The lives and living environment of poor communities (both rural and urban) can be substantially improved at relatively low cost through the provision of basic infrastructure such as piped water supply and sanitation systems. This can be done by either connecting them to existing networks in the neighbourhood where they exist or through mutual-help basis.

This will be in addition to improving other services such as garbage collection and primary health care. Ensuring this will, however, require strengthening local councils to undertake accommodation assessments to allow them to identify not only the local housing needs in their respective areas but to also determine the number of plots that would be required for housing, other amenities, and the scale of

improvements needed in the living environment now and in the future.

Additionally, promoting sectoral coordination of the various service providers including building institutional capacity at different levels of the state (national and local) and in the communities to support their effective provision will be critical to this process. Undoubtedly, improving housing conditions can enable the Government to not only reduce the risks of communicable diseases and home injuries but it will also enable it to meet the growing housing needs of a rapidly urbanizing population, including the prevention of slum growth in Freetown and the other cities.

## 5.1 Conclusion

This report has examined data collected on housing conditions and their characteristics during the 2015 Census in Sierra Leone. The analyses of the data have brought to light the general housing situation in Sierra Leone which, in general, can be described as inadequate. The analysis showed that at the country level, a high share (73 per cent) of households occupied between one to three rooms. However, there was a wide regional disparity with the Western area having more households occupying single rooms (36.0 per cent) than the other three regions. This was similarly the case with urban areas where more households (57.5 per cent) lived in single rooms. Considering that the average number of people per bedroom at the national level was about 6 persons, it can be argued that the existing housing stock in Sierra Leone is very limited with many households forced to share single rooms. In most urban areas, the housing stock was limited either because the formal land market does not provide affordable residential land for housing or because construction costs were far higher than the earning income of most households.

The analysis showed further that at country level, more than half of households lived in separate houses (54 per cent). However, while more separate houses were found in rural areas (68.9 per cent), more flat/apartment (58.9 per cent) and compound house (rooms) (70.4 per cent) were found in urban centres. There was also a high preference for private renting (88.6 per cent) in urban areas mainly because most urban households were not financially stable and were therefore, unable to invest in their own homes.

The data showed additionally that most households lived in dwellings made of poor walls consisting mainly of mud bricks (43 per cent) and wattle (15 per cent) which have a relatively shorter life span given the tropical conditions in the country. Only one-quarter of households lived in dwellings with walls made of cement with a significant share (55.2 per cent) found in the Western region.

With regards to refuse disposal, the most common practice in Sierra Leone was the depositing of refuse (55 per cent). In much of the urban areas, the uncollected refuse degraded much of the living environment, ending up often in drains and causing blockages which result in flooding and insanitary conditions.

Analysis of the living conditions with regard to essential services showed that in terms of source of energy, the principal source of fuel for cooking by more than half of all households was wood whilst battery/rechargeable light was the main source of fuel for lighting by slightly more than three-quarters of households. Moreover, whereas the majority of households secured water both for drinking and household use from safe water sources, over one quarter of households sourced water from unprotected sources consisting mainly of unprotected stream, unprotected ordinary well as well as bush/river bed/ stream.

The analysis showed further that most of the essential services (health facility, primary school and source of water) used by households were located less than one mile from their homes. However, for more than one quarter of rural households, such facilities were located quite some distance away, ranging often between one to more than five miles. Improving access to these services for such households will be critical in improving their living conditions.

Based on these findings, it can be concluded that the housing condition in Sierra Leone is largely inadequate with much of the dwellings qualifying as unsatisfactory according to international standards.

## 5.2 Recommendations

The following recommendations are made:

- 01** Since housing scarcity is a major problem for most households, resulting often in rising prices and overcrowding across the country, both the MWH&I and SALHOC should take urgent action to increase the housing stock in the country. The objective should be to reduce the average number of people per bedroom to one or at most three persons per bedroom. The population projection figures for Sierra Leone (based on the 2015 Census) can be used as a guide to allow the two institutions to clearly determine the scale of housing demand and the appropriate actions to take in putting more new housing units on the market per year to meet supply. Attracting private capital especially from real estate agencies as well as mobilizing smaller savings of private citizens to be invested in their own homes will be critical in ensuring this. To be more effective, the MWH&I should create not only the enabling investment climate for private capital but also the needed regulatory oversight of the entire process.
- 02** The MWH&I should also work together with local councils to maintain a detailed register of all existing houses including the construction of any new ones that are added to the existing housing stock. To ensure that households live in improved living conditions, deliberate efforts should be made by the Government (the MWH&I, in collaboration with other relevant government ministries and agencies) to provide the needed essential services (for example, health centres, water, schools) within shorter distances from their homes. Government investment in infrastructure services within such new locations will be critical in ensuring improved housing and living conditions of the people.
- 03** Vigorous efforts should be made by the Ministry of Finance and Economic Planning (MFEP) to increase household's access to construction materials by subsidizing the cost. This will not only have the immediate effect of enhancing their capacity to build and own their own houses but it will also work to decrease spatial disparities in the quality of housing as well as between the rich and the poor. Substantial actions are also needed to create the enabling conditions for house owners to improve the existing housing conditions so as to reduce the overall proportion of houses requiring repair.
- 04** The MWH&I should also put in place a profound housing policy in which the quality of housing construction and the extent of provision of the needed services (for example, water supply, sanitation, drainage, electricity) is clearly highlighted. The policy should give due attention to the country's capital, Freetown, and all the other cities that serve as provincial capitals as well as the district headquarter towns.
- 05** The Ministry of Lands, Country Planning and the Environment (MLCP&E) should ensure that the new land policy and the ensuing programmes ensure the strengthening of tenure security in ways that facilitate higher levels of housing investment. Additionally, the land policy should ensure the unhindered functioning of the formal land market to increase access to land by interested citizens.

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## Annex 1: Definition of Terms

To set this work into context, it is vital to provide definitions to the key terms/concepts used in the report. This report draws from Adegbehingbe (2016), Abelti et al (2001), Heath (2014) and Raymond et al (2011) to define the following terms/concepts as follows:

**Housing** - refers to buildings or other kinds of shelter in which people live. As used here, housing is seen as one of the basic human needs.

Housing unit - refers to a house, an apartment, a flat, a manufactured (mobile) home, or any other kind of shelter with one or more rooms occupied or intended for occupancy as separate living quarters.

**Housing condition** - is a description of the "state of the physical, environmental and the satisfactory level of a particular housing unit measured against some variables" developed from the census data. Viewed in this sense, housing condition considers the totality of the environment rather than merely the housing unit.

**Housing need** - refers to "the number of households that do not have access to accommodation that meets some prescribed standard". Housing need is indicative of the degree of housing deficit in the country.

**Housing demand** - refers to a desire for a housing unit backed up with the willingness and capacity to pay the price.

**Inadequate housing** - refers to an occupied housing unit that has moderate or severe physical problems (for example, deficiencies in plumbing, heating, electricity, hallways or upkeep).



## Annex 2: Percentage distribution of number of rooms occupied by households

Number of rooms occupied by household by region, district and place of residence											
	Total	1	2	3	4	5-9	10-19	20-29	30-39	40-49	50+
Total Country	1,265,468	29	26	18	13	14	0	0	0	0	0
<b>Region</b>											
Eastern	281,201	22.6	23.8	23.3	23.2	16.4	14.8	24.9	28.9	12.4	40.0
Northern	414,377	21.4	29.3	32.5	38.6	57.5	56.9	44.9	34.2	21.9	30.0
Southern	248,655	19.1	19.2	23.6	21.5	15.0	9.8	9.9	17.6	8.6	20.0
Western	321,235	36.9	27.7	20.6	16.7	11.1	18.5	20.3	19.3	57.1	10.0
<b>District</b>											
Kailahun	83,348	5.2	7.5	8.3	7.8	4.6	2.3	1.9	4.3	3.8	0.0
Kenema	111,734	11.3	9.5	7.5	7.1	5.7	7.8	13.1	6.4	5.7	10.0
Kono	86,119	6.1	6.9	7.5	8.2	6.1	4.6	9.9	18.2	2.9	30.0
Bombali	105,902	6.5	7.2	7.6	8.7	15.1	11.5	10.2	11.8	5.7	0.0
Kambia	53,826	1.8	3.5	4.4	5.8	9.0	10.5	5.3	1.6	1.0	0.0
Koinadugu	56,108	2.3	3.7	4.8	6.0	8.5	3.6	5.1	0.5	3.8	10.0
Port Loko	111,701	7.5	8.6	8.1	9.8	12.1	16.9	14.7	11.8	3.8	20.0
Tonkolili	86,840	3.3	6.4	7.5	8.4	12.8	14.4	9.6	8.6	7.6	0.0
Bo	102,723	9.5	7.4	8.0	8.2	6.7	6.2	7.0	5.9	2.9	10.0
Bonthe	32,538	1.8	2.5	4.0	3.4	1.7	0.9	0.5	0.5	3.8	0.0
Moyamba	61,880	4.0	4.4	6.6	6.1	4.4	1.8	1.3	6.4	1.9	10.0
Pujehun	51,514	3.8	4.9	5.0	3.3	2.2	1.0	1.1	4.8	0.0	0.0
Western Area Rural	91,284	10.3	7.2	6.6	5.3	3.3	4.3	4.8	5.3	1.9	0.0
Western Area Urban	229,951	26.6	20.4	14.1	11.4	7.8	14.2	15.5	13.9	55.2	10.0
<b>Place of residence</b>											
Rural	697,734	42.5	53.6	61.9	64.8	67.5	45.2	35.0	53.5	31.4	80.0
Urban	567,734	57.5	46.4	38.1	35.2	32.5	54.8	65.0	46.5	68.6	20.0



### Annex 3: Percentage distribution of households by type of dwelling

Type of Dwelling						
	Total	Separate House	Semi-detached house	Flat/ Apartment	Compound house (rooms)	Huts/ Buildings (same compound)
Total Country	1,346,282	54.4	6.8	20.2	9.9	2.5
<b>Region</b>						
Eastern	294,851	26.5	20.8	15.4	17.6	16.7
Northern	446,797	37.4	23.3	29.7	22.7	42.8
Southern	270,893	24.0	15.8	16.8	14.1	17.5
Western	333,741	12.1	40.1	38.1	45.6	23.0
<b>District</b>						
Kailahun	87,148	8.6	4.2	3.6	4.5	5.3
Kenema	117,485	10.1	11.9	6.6	6.3	6.1
Kono	90,218	7.8	4.7	5.3	6.8	5.3
Bombali	115,103	7.8	5.8	10.8	7.7	13.8
Kambia	58,207	5.1	3.5	3.8	2.3	4.0
Koinadugu	59,223	5.1	1.8	2.5	2.5	11.1
Port Loko	120,866	11.3	7.1	6.7	5.9	4.8
Tonkolili	93,398	8.1	5.1	5.9	4.3	9.1
Bo	110,976	9.5	7.8	6.5	7.5	7.0
Bonthe	35,340	3.6	1.7	1.2	1.4	1.7
Moyamba	69,954	5.7	3.5	6.4	2.2	4.6
Pujehun	54,623	5.1	2.9	2.6	3.0	4.3
Western Area Rural	98,794	4.9	7.6	9.5	11.0	5.6
Western Area Urban	234,947	7.3	32.4	28.6	34.6	17.3
<b>Place of residence</b>						
Rural	748,673	68.9	35.7	41.1	29.6	64.0
Urban	597,609	31.1	64.3	58.9	70.4	36.0



### Annex 3: Percentage distribution of households by type of dwelling (continued)

Type of Dwelling						
	Total	Huts/ Buildings (different compound)	Tent	Impoverished home (Kiosk container board pan body)	Uncompleted building	Other
Total Country	1,346,282	1.5	0.8	2.3	1.3	0.3
<b>Region</b>						
Eastern	294,851	24.4	15.8	3.6	13.0	26.9
Northern	446,797	52.7	61.4	8.9	28.7	26.8
Southern	270,893	18.7	15.3	4.1	16.1	25.6
Western	333,741	4.2	7.5	83.4	42.2	20.7
<b>District</b>						
Kailahun	87,148	5.8	5.9	1.0	3.2	9.1
Kenema	117,485	7.9	5.0	1.5	5.2	9.6
Kono	90,218	10.7	4.9	1.1	4.6	8.2
Bombali	115,103	16.8	22.6	2.6	7.7	9.3
Kambia	58,207	3.7	7.9	1.2	2.4	2.6
Koinadugu	59,223	18.6	21.4	0.6	2.5	2.9
Port Loko	120,866	3.9	4.0	3.0	10.3	7.4
Tonkolili	93,398	9.7	5.5	1.4	5.8	4.6
Bo	110,976	4.6	5.8	2.7	7.8	10.9
Bonthe	35,340	3.2	0.8	0.2	1.4	2.3
Moyamba	69,954	6.1	5.8	0.9	3.9	7.0
Pujehun	54,623	4.9	3.0	0.4	3.1	5.5
Western Area Rural	98,794	1.8	4.5	26.7	24.5	6.0
Western Area Urban	234,947	2.3	2.9	56.7	17.6	14.6
<b>Place of residence</b>						
Rural	748,673	93.1	74.2	9.6	40.5	60.1
Urban	597,609	6.9	25.8	90.4	59.5	39.9



## Annex 4: Percentage distribution of Dwelling ownership by households

	Owner purchased	Owner constructed	Owner inherited	Employer -Government	Employer - private	Employer- para-statal/ Quasi-government
Total Country	2.1	48.7	20.3	1.1	0.7	0.1
<b>Region</b>						
Eastern	15.2	24.3	25.8	16.0	17.8	17.5
Northern	24.0	42.0	33.0	28.8	28.5	35.6
Southern	15.8	21.6	26.2	20.0	13.5	15.8
Western	45.0	12.1	15.0	35.2	40.2	31.1
<b>District</b>						
Kailahun	2.8	8.5	8.2	4.7	3.7	3.2
Kenema	6.6	8.1	11.9	7.7	8.5	6.3
Kono	5.8	7.8	5.8	3.5	5.6	7.9
Bombali	5.0	9.6	9.1	10.1	9.0	9.8
Kambia	2.9	5.6	4.9	2.6	2.9	3.5
Koinadugu	2.4	6.8	2.7	1.8	5.5	5.9
Port Loko	7.2	10.6	10.0	10.3	6.0	8.7
Tonkolili	6.6	9.4	6.2	4.2	5.2	7.7
Bo	7.4	7.0	11.7	8.3	6.1	5.4
Bonthe	2.4	3.5	2.5	1.4	0.7	1.5
Moyamba	3.3	6.0	6.2	4.8	2.9	4.2
Pujehun	2.7	5.0	5.8	5.4	3.7	4.7
Western Area Rural	15.8	5.3	3.7	8.2	15.1	6.0
Western Area Urban	29.1	6.8	11.3	27.0	25.1	25.2
<b>Place of residence</b>						
Rural	36.3	73.1	66.2	32.1	39.7	42.7
Urban	63.7	26.9	33.8	67.9	60.3	57.3



## Annex 4: Percentage distribution of Dwelling ownership by households (continued)

	Renting Government	Renting Housing Corporation	Renting private	Renting- Parastatal /Quasi Government	Squatter	Other
Total Country	0.7	2.1	20.9	0.1	0.7	2.5
<b>Region</b>						
Eastern	13.9	19.8	16.2	24.3	15.7	18.4
Northern	21.3	24.6	13.7	14.1	34.0	30.8
Southern	10.2	13.7	10.8	8.2	15.1	16.4
Western	54.6	41.9	59.3	53.4	35.2	34.4
<b>District</b>						
Kailahun	3.1	4.4	2.1	2.6	1.1	3.5
Kenema	5.4	9.5	8.2	10.8	6.5	7.9
Kono	5.4	5.9	5.9	10.8	8.2	7.0
Bombali	3.1	8.2	5.4	4.4	7.2	7.3
Kambia	2.6	1.7	1.2	1.3	4.8	3.1
Koinadugu	5.5	1.4	1.6	2.0	1.1	2.2
Port Loko	6.4	6.5	3.6	4.4	8.6	12.0
Tonkolili	3.7	6.8	1.8	2.0	12.3	6.2
Bo	6.1	7.2	7.4	4.0	8.9	8.6
Bonthe	1.0	1.4	0.9	1.6	0.6	1.4
Moyamba	1.6	1.9	1.8	1.5	2.8	3.2
Pujehun	1.4	3.1	0.8	1.2	2.8	3.2
Western Area Rural	23.3	11.5	11.4	20.6	15.2	18.6
Western Area Urban	31.4	30.5	47.9	32.8	19.9	15.8
<b>Place of residence</b>						
Rural	26.9	26.4	11.4	28.5	42.6	48.2
Urban	73.1	73.6	88.6	71.5	57.4	51.8



## Annex 5: Percentage distribution of household heads by age and sex

% sex of H/hold Heads sex	Total	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44
Percent Total	100	1.2	5.0	11.0	11.7	15.1	12.4
Male	71.9	1.0	4.6	11.4	12.3	15.8	12.8
Female	28.1	1.8	5.8	9.8	10.2	13.3	11.3
<b>Region</b>							
Percent total	100	1.0	5.1	11.0	11.7	15.1	12.4
Eastern	22.2	1.0	3.9	9.3	10.9	15.6	12.8
Northern	32.7	1.1	4.4	10.2	10.9	14.8	12.4
Southern	19.6	1.5	5.1	10.0	11.0	14.4	12.1
Western	25.4	1.3	6.5	14.1	14.2	15.7	12.3
<b>District</b>							
Total		1.2	5.0	11.0	11.7	15.1	12.4
Kailahun	6.6	0.7	3.2	8.0	10.3	15.1	13.0
Kenema	8.8	1.1	4.4	10.0	11.4	15.3	12.8
Kono	6.8	1.2	4.1	9.6	10.7	16.4	12.6
Bombali	8.4	1.2	4.8	10.5	10.7	14.2	12.0
Kambia	4.3	1.1	3.8	9.0	10.1	14.0	12.4
Koinadugu	4.4	0.9	3.0	8.2	11.0	15.2	14.4
Port Loko	8.8	1.3	4.8	10.7	10.9	14.7	12.1
Tonkolili	6.9	1.2	4.5	11.3	11.3	15.6	12.1
Bo	8.1	1.9	5.9	10.7	11.2	14.7	11.8
Bonthe	2.6	1.1	4.5	9.7	11.7	13.7	12.5
Moyamba	4.9	1.6	5.1	10.0	10.2	13.8	11.7
Pujehun	4.1	0.9	3.6	9.0	10.9	15.1	13.1
Western Area Rural	7.2	1.5	7.1	14.0	13.5	15.9	12.6
Western Area Urban	18.2	1.2	6.3	14.1	14.5	15.7	12.1
<b>Place of residence</b>							
Total		1.2	5.0	11.0	11.7	15.1	12.4
Rural	55.1	1.0	3.8	9.2	10.6	14.9	12.6
Urban	44.9	1.6	6.3	13.1	13.1	15.4	12.2





## Annex 5: Percentage distribution of household heads by age and sex (continued)

% sex of H/hold Heads sex	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 +
Percent Total	11.6	9.1	5.7	5.5	3.8	3.1	4.8
Male	12.2	9.0	5.6	4.9	3.4	2.7	4.3
Female	10.2	9.5	6.2	7.0	4.7	4.1	6.1
<b>Region</b>							
Percent total	11.6	9.2	5.7	5.5	3.8	3.1	4.8
Eastern	12.9	9.4	5.7	5.9	4.1	3.4	5.1
Northern	11.9	9.5	5.9	6.0	3.9	3.5	5.5
Southern	11.5	9.3	5.8	5.8	4.1	3.5	5.9
Western	10.0	8.3	5.4	4.3	3.1	2.1	2.7
<b>District</b>							
Total	11.6	9.1	5.7	5.5	3.8	3.1	4.8
Kailahun	13.3	9.7	5.9	6.7	4.3	3.9	5.9
Kenema	12.1	9.4	5.7	5.8	4.0	3.3	4.7
Kono	13.3	9.3	5.7	5.2	4.1	2.9	4.9
Bombali	11.8	9.3	6.2	6.0	4.2	3.4	5.7
Kambia	11.6	9.8	6.3	6.8	4.4	4.1	6.6
Koinadugu	13.5	10.4	5.6	6.4	3.7	3.4	4.3
Port Loko	11.2	9.3	5.9	5.9	3.8	3.7	5.7
Tonkolili	12.1	9.4	5.5	5.3	3.4	3.0	5.3
Bo	11.4	9.0	5.8	5.3	3.9	3.1	5.3
Bonthe	11.0	9.3	5.8	6.4	4.0	3.7	6.6
Moyamba	11.6	9.3	6.3	6.0	4.2	3.7	6.5
Pujehun	12.2	9.7	5.5	6.3	4.0	3.8	5.9
Western Area Rural	10.6	8.2	5.0	4.0	3.0	2.0	2.6
Western Area Urban	9.9	8.3	5.6	4.4	3.0	2.1	2.8
<b>Place of residence</b>							
Total	11.6	9.1	5.7	5.5	3.8	3.1	4.8
Rural	12.3	9.6	5.9	6.2	4.1	3.7	6.1
Urban	10.7	8.5	5.5	4.7	3.3	2.4	3.2



## Annex 6: Percentage major material used for construction of wall by households

	Total	Stone	Cement blocks	Clay Bricks	Concrete	Zinc
Total Country	1,346,282	0.2	24.9	7.1	0.8	6.1
<b>Region</b>						
Eastern	294,851	15.5	14.1	27.5	21.4	8.9
Northern	446,797	34.5	19.5	26.2	22.5	16.2
Southern	270,893	17.5	11.2	23.0	26.7	4.5
Western	333,741	32.5	55.2	23.3	29.4	70.4
<b>District</b>						
Kailahun	87,148	3.9	2.0	6.9	5.6	3.0
Kenema	117,485	8.1	7.8	12.9	10.5	2.9
Kono	90,218	3.5	4.1	7.8	5.3	3.0
Bombali	115,103	9.6	7.9	7.5	8.7	3.2
Kambia	58,207	2.1	1.9	2.0	1.8	2.7
Koinadugu	59,223	1.9	0.9	5.2	2.5	2.0
Port Loko	120,866	12.2	6.4	6.3	6.5	4.7
Tonkolili	93,398	8.7	2.5	5.1	3.0	3.5
Bo	110,976	7.3	7.9	10.0	16.1	1.9
Bonthe	35,340	1.3	0.8	4.2	1.6	0.5
Moyamba	69,954	4.8	1.6	5.5	2.6	1.3
Pujehun	54,623	4.0	1.0	3.3	6.3	0.9
Western Area Rural	98,794	9.4	12.3	9.2	9.3	13.6
Western Area Urban	234,947	23.2	42.9	14.1	20.2	56.8
<b>Place of residence</b>						
Rural	748,673	54.5	15.6	51.1	46.5	24.1
Urban	597,609	45.5	84.4	48.9	53.5	75.9



## Annex 6: Percentage major material used for construction of wall by households (continued)

	Timber	Mud Bricks	Poles/ Reed	Tarpaulin	Burned Bricks	Mud & Wattle	Other
Total Country	0.8	42.8	0.5	0.9	0.4	15.0	0.5
<b>Region</b>							
Eastern	17.0	26.4	22.6	15.1	38.0	25.4	17.6
Northern	24.7	48.9	37.6	57.2	28.2	20.5	31.7
Southern	17.8	15.3	36.8	15.4	29.0	53.0	22.1
Western	40.5	9.4	3.0	12.3	4.8	1.1	28.6
<b>District</b>							
Kailahun	5.6	10.0	6.1	5.3	12.3	5.3	2.7
Kenema	6.1	7.1	12.4	4.9	16.6	15.3	8.2
Kono	5.3	9.3	4.1	5.0	9.1	4.8	6.7
Bombali	5.4	11.7	4.1	20.0	5.1	2.9	5.8
Kambia	3.7	7.6	1.5	8.4	1.2	0.8	4.0
Koinadugu	2.2	7.2	4.7	18.6	4.6	2.2	7.4
Port Loko	4.1	14.0	12.7	5.0	6.5	2.5	5.6
Tonkolili	9.3	8.4	14.5	5.2	10.7	12.1	8.9
Bo	7.1	5.8	9.4	5.5	7.3	17.4	5.1
Bonthe	2.0	2.4	2.4	1.6	4.3	6.7	6.1
Moyamba	4.1	4.4	7.7	5.3	9.1	14.7	5.9
Pujehun	4.6	2.7	17.4	3.0	8.4	14.2	5.0
Western Area Rural	10.5	5.6	1.3	7.7	2.0	0.6	7.8
Western Area Urban	30.0	3.8	1.7	4.5	2.8	0.5	20.8
<b>Place of residence</b>							
Rural	37.2	70.6	91	71.3	76.9	92.7	62.6
Urban	62.8	29.4	9	28.7	23.1	7.3	37.4



## Annex 7: Percentage distribution of households with current repair needs on dwelling unit

Dwelling current repair need						
	Total	No Repairs	Minor Repairs	Major Repairs/ Rehabilitation	Reconstruction	Not stated
Total Country	1,265,468	19	49	30	1	1
<b>Region</b>						
Eastern	281,201	15.4	23.5	24.8	17.0	15.5
Northern	414,377	25.8	33.4	35.9	34.9	41.8
Southern	248,655	14.7	20.2	22.0	16.4	17.0
Western	321,235	44.1	22.9	17.3	31.7	25.7
<b>District</b>						
Kailahun	83,348	3.8	7.3	7.3	4.7	3.7
Kenema	111,734	7.6	9.3	9.0	6.5	5.8
Kono	86,119	4.0	6.9	8.5	5.7	6.1
Bombali	105,902	7.8	8.6	8.2	10.4	8.4
Kambia	53,826	2.4	4.4	5.3	4.0	5.3
Koinadugu	56,108	4.6	5.1	3.3	3.3	3.5
Port Loko	111,701	6.8	8.5	10.7	7.9	11.1
Tonkolili	86,840	4.2	6.8	8.5	9.3	13.5
Bo	102,723	7.5	8.5	7.9	6.7	7.8
Bonthe	32,538	2.2	2.8	2.5	0.9	2.1
Moyamba	61,880	3.2	5.0	5.8	4.6	3.8
Pujehun	51,514	1.7	4.0	5.7	4.2	3.2
Western Area Rural	91,284	9.6	6.7	6.2	13.1	8.4
Western Area Urban	229,951	34.6	16.1	11.1	18.7	17.3
<b>Place of residence</b>						
Rural	697,734	32.6	56.4	67.2	58.4	53.1
Urban	567,734	67.4	43.6	32.8	41.6	46.9



## Annex 8: Percentage source of fuel supply for cooking by households

	Electricity	Gas	Kerosine	Charcoal	Wood	Crop Residue	Saw dust	Solar	Animal Waste	Other
Total Country	0.5	0.8	0.7	32.2	64.7	0.1	0.1	0.1	0.1	0.7
Region										
Eastern	7.8	4.2	10.5	11.8	28.0	19.7	24.2	18.0	16.2	9.3
Northern	9.6	9.6	28.4	15.5	42.0	41.7	43.1	34.5	37.0	12.1
Southern	6.5	5.7	12.4	6.9	26.4	25.4	13.4	18.9	18.1	11.8
Western	76.1	80.5	48.7	65.8	3.6	13.2	19.3	28.6	28.7	66.8
District										
Kailahun	0.3	0.7	2.7	0.8	9.7	7.7	9.0	4.5	2.0	0.7
Kenema	6.0	2.3	4.6	6.0	10.4	6.8	4.7	4.6	5.2	4.9
Kono	1.5	1.2	3.3	5.0	7.9	5.2	10.5	9.0	9.1	3.7
Bombali	7.2	3.3	5.9	6.2	9.5	10.3	9.4	11.9	6.4	6.4
Kambia	0.3	1.0	2.6	1.5	5.7	6.5	5.8	2.7	3.5	1.0
Koinadugu	0.2	1.2	1.5	1.1	6.2	5.4	6.3	3.6	7.9	1.1
Port Loko	1.1	2.8	10.7	5.4	10.7	9.3	11.7	10.8	7.9	2.3
Tonkolili	0.7	1.3	7.6	1.3	9.8	10.2	9.9	5.5	11.1	1.3
Bo	5.9	2.9	5.7	5.3	9.6	10.0	6.0	9.5	2.0	9.3
Bonthe	0.1	0.2	1.4	0.5	3.8	3.3	1.8	3.5	4.2	0.5
Moyamba	0.3	1.3	3.9	0.6	7.2	6.4	2.9	1.8	7.8	0.9
Pujehun	0.2	1.3	1.4	0.5	6.0	5.7	2.7	4.0	4.2	1.1
Western Area Rural	7.0	12.6	10.2	16.4	2.5	5.7	9.9	19.1	5.7	10.0
Western Area Urban	69.2	67.9	38.5	49.4	1.0	7.5	9.4	9.5	23.0	56.8
Place of residence										
Rural	3.5	9.4	31.1	5.2	81.6	72.5	68.4	57.7	61.3	10.3
Urban	96.5	90.6	68.9	94.8	18.4	27.5	31.6	42.3	38.7	89.7



## Annex 9: Percentage main Source of Drinking Water by households

	Piped in doors	Piped in compound	Public tap	Protected Ordinary well	Protected spring	Unprotected ordinary well
Total Country	0.9	4.3	28.9	21.2	3.6	5.1
<b>Region</b>						
Eastern	11.3	15.8	27.2	20.6	16.6	20.4
Northern	5.0	6.3	21.3	37.1	29.5	46.0
Southern	3.1	3.3	17.8	18.8	14.1	24.0
Western	80.6	74.6	33.7	23.5	39.8	9.6
<b>District</b>						
Kailahun	2.4	2.2	7.8	4.8	5.1	12.5
Kenema	6.8	10.1	11.8	8.7	4.7	4.3
Kono	2.0	3.4	7.6	7.1	6.8	3.6
Bombali	1.9	1.5	7.0	13.1	5.5	7.9
Kambia	0.3	0.5	2.1	4.8	5.2	15.0
Koinadugu	0.4	0.5	2.3	4.3	5.4	2.2
Port Loko	1.2	2.0	4.7	9.5	7.9	12.1
Tonkolili	1.2	1.8	5.1	5.4	5.6	8.6
Bo	1.8	1.9	9.4	10.5	5.8	4.3
Bonthe	0.2	0.2	1.5	2.2	1.4	6.4
Moyamba	0.8	0.8	2.0	4.2	5.2	9.7
Pujehun	0.4	0.5	5.1	1.9	1.6	3.7
Western Area Rural	15.0	12.1	8.5	10.2	8.6	4.4
Western Area Urban	65.6	62.5	25.1	13.3	31.2	5.3
<b>Place of residence</b>						
Rural	7.1	10.1	48.1	36.4	52.1	76.7
Urban	92.9	89.9	51.9	63.6	47.9	23.3



## Annex 9: Percentage main Source of Drinking Water by households (continued)

	Unprotected spring	Mechanical well	River/ River bed/ stream	Neighbour's tap	Sachet/ Bottled water	Water vendor/ bowser	Other
Total Country	3.5	7.8	19.2	2.1	2.7	0.4	0.3
<b>Region</b>							
Eastern	25.5	27.9	19.4	28.8	3.7	7.1	11.2
Northern	43.6	39.8	50.8	8.9	8.6	30.2	37.7
Southern	24.1	26.8	26.9	10.4	5.9	13.7	13.4
Western	6.8	5.5	2.9	51.9	81.8	49.0	37.7
<b>District</b>							
Kailahun	9.5	13.9	4.7	1.7	0.2	1.6	1.0
Kenema	5.0	10.3	6.1	22.5	1.7	2.6	5.7
Kono	11.0	3.7	8.6	4.6	1.8	2.9	4.6
Bombali	8.1	10.6	7.8	3.7	5.0	10.3	8.7
Kambia	5.7	3.4	5.8	0.4	0.4	8.3	13.7
Koinadugu	8.5	3.5	9.9	0.6	0.7	0.2	2.2
Port Loko	10.9	19.3	12.4	3.0	2.0	7.2	7.4
Tonkolili	10.4	2.8	14.9	1.1	0.4	4.2	5.5
Bo	8.0	11.2	5.9	6.9	4.9	11.2	8.6
Bonthe	2.8	2.5	5.1	0.4	0.2	0.1	2.4
Moyamba	8.5	4.7	10.2	2.8	0.7	2.0	1.5
Pujehun	4.7	8.5	5.7	0.3	0.2	0.4	0.9
Western Area Rural	3.2	3.5	1.8	14.6	11.0	11.5	11.0
Western Area Urban	3.7	2.1	1.1	37.4	70.8	37.5	26.8
<b>Place of residence</b>							
Rural	89.2	71.6	93.8	10.2	2.9	21	31.1
Urban	10.8	28.4	6.2	89.8	97.1	23.3	68.9



## Annex 10: Percentage principal source of water for household use

	Piped indoors	Piped in compound	Public tap	Protected ordinary well	Protected spring	Unprotected ordinary well
Total Country	0.9	4.4	23.8	23.8	3.3	6.5
<b>Region</b>						
Eastern	9.8	13.8	25.6	20.6	17.6	19.8
Northern	3.4	5.6	21.1	32.2	29.8	41.3
Southern	2.3	2.5	16.5	17.9	13.8	22.9
Western	84.5	78.1	36.8	29.3	38.8	16.0
<b>District</b>						
Kailahun	1.9	1.9	6.9	4.1	5.6	9.4
Kenema	6.1	8.9	11.2	10.0	5.1	4.7
Kono	1.7	3.0	7.5	6.4	7.0	5.7
Bombali	1.3	1.3	7.1	12.2	5.3	7.7
Kambia	0.2	0.5	2.2	4.0	5.0	13.1
Koinadugu	0.3	0.4	2.4	3.0	5.3	2.2
Port Loko	0.8	1.8	4.5	8.4	8.2	11.1
Tonkolili	0.8	1.6	4.9	4.7	6.0	7.2
Bo	1.3	1.2	8.7	11.1	5.2	5.7
Bonthe	0.1	0.3	1.5	1.9	1.5	5.6
Moyamba	0.6	0.7	1.8	3.4	5.3	8.0
Pujehun	0.4	0.4	4.5	1.5	1.7	3.6
Western Area Rural	15.8	12.3	9.6	10.0	9.0	4.8
Western Area Urban	68.7	65.7	27.2	19.3	29.8	11.2
<b>Place of residence</b>						
Rural	5.4	8.8	47.4	29.2	52.5	64.8
Urban	94.6	91.2	52.6	70.8	47.5	35.2





## Annex 10: Percentage principal source of water for household use (continued)

	Unprotected spring	Mechanical well	River/ River bed/ Stream	Neighbour's tap	Sacket/ Bottled water	Water vendor/ Bowser	Other
Total Country	4	6.6	24.6	1.7	0	0.3	0.1
<b>Region</b>							
Eastern	26.0	24.4	22.6	24.5	25.0	9.6	14.6
Northern	40.6	40.4	46.9	8.8	0.0	25.5	39.7
Southern	23.9	24.8	26.7	9.5	0.0	13.5	10.6
Western	9.5	10.4	3.8	57.2	75.0	51.4	35.1
<b>District</b>							
Kailahun	9.8	11.5	7.6	1.7	0.0	2.7	3.2
Kenema	5.2	9.5	7.0	17.6	0.0	2.7	5.7
Kono	11.0	3.4	8.0	5.1	25.0	4.1	5.8
Bombali	7.5	11.3	7.7	3.3	0.0	5.2	15.3
Kambia	5.4	3.2	5.4	0.5	0.0	5.4	4.9
Koinadugu	7.5	3.2	9.3	0.6	0.0	0.3	2.1
Port Loko	10.6	19.6	11.6	3.1	0.0	9.0	10.2
Tonkolili	9.6	3.0	13.0	1.3	0.0	5.6	7.1
Bo	8.0	10.5	6.7	5.5	0.0	9.4	6.5
Bonthe	2.9	2.6	4.2	0.4	0.0	0.2	2.0
Moyamba	8.1	4.1	9.2	3.3	0.0	3.4	1.1
Pujehun	4.9	7.7	6.5	0.4	0.0	0.5	1.0
Western Area Rural	4.3	4.3	2.0	16.4	0.0	10.7	8.6
Western Area Urban	5.2	6.1	1.8	40.8	75.0	40.8	26.5
<b>Place of residence</b>							
Rural	85.6	64.7	91.5	10.9	0	30.4	45.8
Urban	14.4	35.3	8.5	89.1	100	69.6	54.2



## Annex 11: Percentage type of Toilet facilities used by households

	Communal VIP	Communal Flushed inside	Communal Flushed outside	Communal pit	Communal bucket	Communal bush/ river bed
Total Country	1.5	2.7	2.2	53.4	0.3	12.9
<b>District</b>						
Kailahun	8.6	0.8	1.3	5.7	4.6	15.4
Kenema	8.7	4.2	6.0	10.3	5.8	5.9
Kono	5.8	2.0	1.5	8.1	1.6	1.8
Bombali	10.7	4.5	9.0	9.4	3.1	3.1
Kambia	2.8	0.8	3.2	4.3	1.5	3.3
Koinadugu	2.3	0.5	0.5	4.3	2.0	3.3
Port Loko	4.3	3.5	5.7	11.1	4.2	6.3
Tonkolili	4.9	1.5	2.3	7.6	4.1	5.8
Bo	7.7	4.2	3.0	6.2	5.2	15.2
Bonthe	3.9	0.3	0.5	1.2	0.6	11.6
Moyamba	2.6	0.4	0.4	3.2	5.0	10.6
Pujehun	9.4	0.7	0.6	3.4	1.5	9.6
Western Area Rural	6.7	13.1	12.8	6.8	11.0	4.1
Western Area Urban	21.6	63.5	53.2	18.4	49.8	4.0
<b>Place of residence</b>						
Rural	49.5	6.7	12.6	54.3	29.2	89.1
Urban	50.5	93.3	87.4	45.7	70.8	10.9



## Annex 11: Percentage type of Toilet facilities used by households (continued)

	Communal other	Private VIP	Private Flushed inside	Private Flushed outside	Private pit	Private bucket	Private other
Total Country	0.7	1.1	2.9	0.7	20.4	0.1	1.1
<b>District</b>							
Kailahun	11.5	9.4	0.7	2.5	5.0	5.0	9.8
Kenema	9.6	8.2	3.8	6.0	8.7	9.5	6.6
Kono	2.6	4.9	1.7	2.5	9.2	6.3	5.2
Bombali	8.9	6.2	4.5	11.6	9.9	4.2	5.3
Kambia	4.9	2.0	1.1	1.4	6.1	3.4	4.4
Koinadugu	3.5	2.5	0.7	1.1	7.6	1.2	4.2
Port Loko	9.4	5.2	3.7	3.6	7.3	4.2	6.6
Tonkolili	4.7	3.3	0.8	2.7	8.1	14.8	8.0
Bo	11.0	8.8	7.3	7.0	9.5	9.3	15.9
Bonthe	1.4	1.3	0.6	0.4	1.3	0.3	2.4
Moyamba	3.7	3.8	1.7	1.3	7.3	7.7	13.8
Pujehun	9.9	2.8	0.6	0.3	3.2	4.9	6.3
Western Area Rural	9.7	15.0	16.5	17.7	6.5	12.2	7.6
Western Area Urban	9.2	26.6	56.3	41.9	10.3	17.0	3.9
<b>Place of residence</b>							
Rural	65.9	32.2	6.7	16.9	55.9	52.9	76.8
Urban	34.1	67.8	93.3	83.1	44.1	47.1	23.2



## Annex 12: Percentage type of bathing facilities used by households

	Inside	Outside built	Outside makeshift	Other	None
Total Country	7.7	56.1	31.8	2.1	2.3
<b>Region</b>					
Eastern	10.2	21.9	24.8	28.8	26.9
Northern	15.3	34	34.6	40	29.6
Southern	8.9	16.7	25.9	24.5	35.9
Western	65.6	27.4	14.7	6.7	7.6
<b>District</b>					
Kailahun	1.4	5.5	9.2	8.9	12.8
Kenema	5.8	9.5	8.7	4.6	7
Kono	3	6.9	6.9	15.3	7.1
Bombali	5.4	9.5	6.9	14.2	5.6
Kambia	1.9	4.2	5.2	2.3	2.5
Koinadugu	0.9	4.1	5.6	7.3	5.6
Port Loko	5	8.9	9.8	7.8	8.1
Tonkolili	2	7.3	7.1	8.4	7.8
Bo	5.9	6.8	10.2	11.9	15.9
Bonthe	0.5	2	4	2.2	3.8
Moyamba	1.4	4.4	6.3	6.9	8.1
Pujehun	1.2	3.5	5.5	3.5	8
Western Area Rural	14.1	7.9	4.8	3.7	4.1
Western Area Urban	51.5	19.5	9.8	3	3.6
<b>Place of residence</b>					
Rural	13	50.3	69.5	88.2	86.1
Urban	87	49.7	30.5	11.8	13.9



## Annex 13: Percentage main refuse disposal method used by households

	Collected	Dumped	Burnt	Buried	Deposited	Other
Total Country	8.8	14.7	14.7	4.6	55.4	1.8
<b>Region</b>						
Eastern	7.7	16.4	11.0	14.2	29.8	17.5
Northern	18.8	46.0	33.7	46.8	30.3	24.3
Southern	12.5	21.8	11.4	16.5	22.8	14.6
Western	61.0	15.8	43.9	22.5	17.1	43.6
<b>District</b>						
Kailahun	2.0	5.6	1.5	2.9	9.3	5.4
Kenema	4.2	4.4	7.1	7.0	11.4	6.3
Kono	1.5	6.3	2.5	4.3	9.1	5.8
Bombali	7.6	9.4	10.7	11.5	7.5	3.2
Kambia	2.1	7.5	4.0	4.7	3.7	6.1
Koinadugu	2.1	7.4	4.6	5.2	4.0	2.1
Port Loko	4.2	12.7	9.8	15.0	7.7	8.5
Tonkolili	2.8	9.1	4.5	10.3	7.4	4.3
Bo	9.2	6.7	6.2	7.9	8.9	5.9
Bonthe	0.3	3.5	0.7	1.9	3.4	1.5
Moyamba	1.0	7.4	3.3	4.2	5.4	3.3
Pujehun	2.1	4.2	1.2	2.5	5.2	4.0
Western Area Rural	4.6	4.7	18.8	12.0	4.7	9.4
Western Area Urban	56.3	11.1	25.1	10.6	12.3	34.2
<b>Place of residence</b>						
Rural	16.8	74.6	31.3	52.3	63	43.3
Urban	83.2	25.4	68.7	47.7	37	56.7



## Annex 14: Distance from home to nearest health facility by households

	Within compound	<1/2 mile	1/2 mile - < 1 mile	1 mile - < 5 miles	5 miles and above	Don't know
Total Country	2.3	43.7	16.1	20	15.3	2.6
<b>Region</b>						
Eastern	22.6	21.8	20.4	23.6	24.9	14.9
Northern	31.2	26.8	32.9	36.2	44.8	35.1
Southern	18.5	17.7	15.7	24.9	24.2	11.0
Western	27.7	33.7	31.0	15.3	6.1	39.0
<b>District</b>						
Kailahun	5.1	6.1	6.0	7.9	7.6	3.6
Kenema	8.3	9.8	8.0	8.3	8.7	4.4
Kono	9.3	6.0	6.3	7.4	8.6	6.9
Bombali	7.4	6.6	8.6	10.6	10.6	7.8
Kambia	3.1	3.5	5.5	5.9	3.4	2.2
Koinadugu	3.8	3.1	2.8	2.3	11.5	10.1
Port Loko	10.3	7.5	10.0	9.9	10.3	6.1
Tonkolili	6.6	6.0	6.0	7.5	9.0	8.9
Bo	7.8	9.0	6.6	9.1	6.4	5.7
Bonthe	1.5	2.1	2.2	3.0	4.4	1.0
Moyamba	4.0	3.5	3.7	7.3	7.4	2.7
Pujehun	5.2	3.1	3.3	5.5	6.0	1.6
Western Area Rural	8.7	9.0	8.8	6.0	1.8	6.0
Western Area Urban	18.9	24.7	22.2	9.3	4.3	33
<b>Place of residence</b>						
Rural	48.1	39	43.4	73.1	92.6	47.1
Urban	51.9	61	56.6	26.9	7.4	52.9



## Annex 15: Distance to nearest source of water by households

	Within compound	< 1/2 mile	1/2 mile - < 1 mile	1 mile - < 5 miles	5 miles and above	Don't know
Total Country	16.2	67.5	10.2	3.3	1.1	1.7
<b>Region</b>						
Eastern	20.0	23.4	20.0	19.0	20.9	16.1
Northern	30.2	32.3	38.0	39.8	36.9	25.4
Southern	18.9	20.7	16.4	17.5	15.4	11.9
Western	30.9	23.6	25.6	23.7	26.8	46.6
<b>District</b>						
Kailahun	3.6	7.2	7.6	5.6	7.8	4.6
Kenema	9.6	9.7	5.1	3.8	3.3	4.3
Kono	6.8	6.5	7.3	9.5	9.8	7.3
Bombali	11.1	8.0	7.6	7.6	6.3	4.9
Kambia	3.2	4.2	5.7	6.6	5.8	2.0
Koinadugu	3.2	4.3	5.5	5.8	8.6	7.9
Port Loko	7.4	8.7	11.2	12.5	7.8	5.3
Tonkolili	5.3	7.1	8.0	7.3	8.4	5.3
Bo	10.5	8.4	4.6	4.5	1.8	6.8
Bonthe	1.8	2.7	2.9	3.4	3.4	0.4
Moyamba	3.3	5.2	5.7	5.5	6.7	1.4
Pujehun	3.3	4.4	3.3	4.2	3.5	3.2
Western Area Rural	8.4	7.2	6.0	7.0	5.8	5.8
Western Area Urban	22.5	16.4	19.5	16.7	21	40.8
<b>Place of residence</b>						
Rural	37.6	58.3	59.3	66.2	70.7	38.9
Urban	62.4	41.7	40.7	33.8	29.3	61.1



## Annex 16: Main source of information for household by region, district and place of residence

	Radio	TV	Print media	Post mail	Hand mail	Social media	Word of mouth	Church/Mosque	Other
Total Country	71.1	4.8	0.4	0.2	0.2	0.6	18.8	1.9	2.0
<b>Region</b>									
Eastern	23.7	5.6	17.5	21.7	20.4	9.9	21.2	21.6	25.0
Northern	30.4	12.6	24.6	37.5	32.2	13.9	45.7	52.4	32.0
Southern	19.8	5.4	11.7	20.8	23.2	15.7	22.1	18.3	25.0
Western	26.1	76.4	46.2	20.0	24.2	60.5	11.0	7.7	18.0
<b>District</b>									
Kailahun	7.2	1.2	4.8	8.1	6.7	3.0	5.8	7.6	6.0
Kenema	9.8	2.7	5.6	6.5	8.0	4.8	6.7	8.9	9.0
Kono	6.7	1.8	7.1	7.1	5.7	2.2	8.6	5.1	11.0
Bombali	7.8	5.7	7.1	9.1	10.3	5.4	10.8	11.6	10.0
Kambia	4.6	1.1	2.8	4.2	2.0	0.9	3.7	7.5	4.0
Koinadugu	3.0	0.8	2.5	3.2	5.1	1.9	10.4	9.5	3.0
Port Loko	8.6	3.0	7.7	11.1	5.8	2.8	10.8	14.1	9.0
Tonkolili	6.4	2.0	4.5	10.0	9.1	2.9	10.0	9.8	6.0
Bo	8.8	3.1	6.0	8.4	10.1	8.4	7.2	4.2	8.0
Bonthe	2.6	0.4	1.1	1.8	2.4	2.1	2.9	2.3	3.0
Moyamba	4.5	1.1	2.8	6.4	4.8	1.7	7.1	5.8	6.0
Pujehun	3.9	0.7	1.8	4.2	5.8	3.4	5.0	6.0	8.0
Western Area Rural	8.1	7.6	8.3	6.1	6.2	8.0	4.5	2.2	5.0
Western Area Urban	18.0	68.8	37.9	13.8	18.0	52.5	6.5	5.4	12.0
<b>Place of residence</b>									
Rural	50.8	11.7	36.1	67.0	63.5	20.6	80.0	79.4	70.0
Urban	49.2	88.3	63.9	33.0	36.5	79.4	20.0	20.6	30.0





