Namibia Household Income and Expenditure Survey (NHIES) 2015/2016 Report

Namibia Statistics Agency

Mission Statement

"Leveraging on partnerships and innovative technologies, to produce and disseminate relevant, quality, timely statistics and spatial data that are fit-for-purpose in accordance with international standards and best practice"

Vision Statement

"To be a high performance institution in quality statistics delivery"

Core Values

- ☑ Integrity
- ☑ Excellent Performance
- ☑ Accuracy
- ☑ Team Work
- ☑ Accountability
- ☑ Transparency

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Foreword

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Relevant, quality and timely data are required from surveys such as the Namibia Household Income and Expenditure Survey (NHIES) as a specialised study that can provide crucial statistics.

Namibia has adopted a five-year development cycle called National Development Plans simply known as NDPs as well as a long-term goal of Vision 2030. However, for any effective and meaningful planning to take place, the Government and other developmental stakeholders need to have appropriate and correct information on the socio-economic status of the country. Relevant, quality and timely data are required from surveys such as the Namibia Household Income and Expenditure Survey (NHIES) as a specialised study that can provide crucial statistics. In 2003/2004 it was decided to align the undertaking of NHIES with the planning process of NDPs and conduct the survey at five-year regular intervals.

Therefore, information from NHIES 2015/2016 will be used to evaluate and assess national development plans to so see if the government is achieving the intended developmental objectives. Similarly, NHIES data is needed to provide baseline data for poverty and income indicators for the, monitoring and evaluation of NDP5. The survey also serves as one of the main sources of indicators for the Sustainable Development Goals (SDGs).

The NHIES 2015/2016 was fully financed by the Namibian Government through the Ministry of Economic Planning.

I would like to thank all our stakeholders, the media and all participating households whose co-operations were vital to the success of the survey. My gratitude also goes to our international partners, particularly the United States Census Bureau through the USAID and the World Bank (WB) for their technical inputs to the survey.

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Acronyms

APCI	Adjusted Per Capita Income
AU	African Union
CAPI	Computer Assisted Personal Interviewing
COICOP	Classification of Individual Consumption by Purpose
DRB	Daily Record Book
EA	Enumeration areas
HPP	Harambee Prosperity Plan
NDP	National Development Plans (NDPs)
NDP4	Fourth National Development Plan
NDP5	Fifth National Development Plan
NHIES	Namibia Household Income and Expenditure Survey
NSA	Namibia Statistics Agency
PPS	Probability Proposal to Size
PSU	Primary Sampling Unit
SADC	Southern African Development Countries
SDGs	Sustainable Development Good(s)
TV	Television
USAID	United States Agency for International Development
WB	World Bank

Executive Summary

Background and Overview (Chapter 1)

The main objective of the Namibia Household Income and Expenditure Survey (NHIES 2015/2016) is to provide data to measure the levels of living conditions of the Namibian population, for example, using actual patterns of consumption and income, as well as a range of other socio-economic indicators. Statistical information from this survey will inform planning and policy making processes at national, regional and international levels in particular the implementation of Fifth National Development Plan, SADC agenda, AU Agenda 2063 and Sustainable Development Goals (SDGs). The NHIES was designed to provide policy makers with reliable, up to date and quality statistics at national, regional levels as well as rural urban disaggregated statistics for planning and decision making purposes.

A representative sample of 10368 households from 864 Primary Sampling Units (PSUs) was selected for the survey. Data was collected over a twelve months period consisting of thirteen survey rounds.

Two questionnaires (Form 1 and Form 2) were administered to sampled households. While the data collection methodology of the NHIES 2003/2004 and 2009/2010 has remained basically the same, new questions were added to the questionnaire for 2009/2010 and 2015/2016 surveys in response to users' needs. Survey methodology is discussed in Chapter 1 of this report. Furthermore, key summary highlights of each chapter are provided under the following sections.

Demographic Characteristics (Chapter 2)

There were an estimated 544 655 private households during the survey, with an estimated household population of 2 280 716. The majority of the population (53.1 percent) live in rural areas, while 46.9 percent live in urban areas. A shift in the households from rural to urban areas has been observed since 2009/2010. Khomas is the most populated region with 17.5 percent of the total population, whereas Omaheke is the least populated with 3.2 percent of the population.

The estimated average household size in Namibia is 4.2 persons. On average rural households are bigger than urban households, 4.9 compared to 3.6 persons per household respectively. The national average household size has decreased from 4.7 persons in 2009/2010 to 4.2 in 2015/2016.

Housing and Utilities (Chapter 3)

The NHIES collected information on type of dwelling categorised as follows: traditional dwelling, detached house, semi-detached house, improvised house and flat as well as on type of tenure or ownership. Overall, 33 percent of households reported that they live in a traditional dwelling, compared to 31 percent in 2009/2010. Of all households 31 percent live in a detached house, 6 percent in a semi-detached house and 3 percent in a flat. These three categories together can be considered as modern housing. In rural areas, 66 percent of households live in traditional dwellings compared to 5 percent in urban areas. At national level 20 percent of households live in improvised housing, which is a decrease from 24 percent in 2009/2010.Improvised housing in urban areas (30%) has not changed since 2009/2010. The proportion has almost doubled in rural areas between 2003/2004 and 2009/2010.

Households were classified according to the type of tenure or ownership of the dwelling. Land right certificate ownership accounted for a large proportion of traditional dwellings, followed by leasehold certificate with 72.7 and 61.5 percent respectively. The tittle deed type of ownership accounted for a high proportion of detached and semi-detached dwellings with 64 and 12.6 percent respectively, compared to other types of ownership.

The survey also collected data on main source of drinking water. Piped water is the main source of drinking water for 84 percent of all households, 8 percent reported a borehole or protected well, less than 1 percent stagnant water and 2 percent flowing water. A larger proportion of urban households, 98 percent, use piped water compared to rural households that accounted for 69 per cent.

The type of toilet at the disposal of households is one of the important indicators of sanitation. The survey reported that 45 percent of households use flush toilet, 10 percent use pit latrine, less than 1 percent use bucket toilet and 45 percent use bush/no toilet. A large proportion of urban households use flush toilet (70 percent), compared to rural households (15 percent). The availability of modern toilet facilities has improved only modestly over the past years. The percentage of households using bush/no toilet has decreased slightly in both urban and rural areas since 1993/1994.

Access to Services (Chapter 4)

A majority of households in Namibia or 66 percent reported that they have access to drinking water inside their yard. Among urban households, more than three quarters have access to drinking water in their yard, compared to 53.5 per cent of rural households. In rural areas, 4.5 percent of households cover more than 60 minutes to and from their drinking water sources.

About 33 per cent of households in Namibia are less than 1 kilometre to the nearest hospital or clinic and 32 per cent are between 2 and 5 kilometres. However, 4.6 percent have to travel more than 40 kilometres to reach a hospital or clinic. Urban households travel shorter distances: 48.4 percent within 1 km compared to rural households with 15 percent.

About 19 per cent of households in Namibia have access to banks within 1 km or less. However, almost the same proportion have to travel more than 40 km to reach a bank. In urban areas, 34.8 per cent of households have access to banks within 1 km or less compared to rural areas where 40.7 percent of the households have to travel more than 40 km to a bank.

The distance to the nearest primary school is less than 2 kilometres for 53 percent of households in Namibia. For about 2 percent of households in Namibia it is more than 40 kilometres. Among urban households, 67 percent are within 1 kilometre to a primary school compared to 37 percent of rural households.

Out of all rural households 9 percent have more than 10 kilometres to the nearest primary school. In Omaheke, 35 percent have more than 10 kilometres to the nearest primary school and in Kunene 29 percent have more than 10 kilometres.

Education (Chapter 5)

Literate persons in the population aged 15 years and over are 87 percent. The difference in literacy rates between males and females at national level are insignificant.

An estimated 83.4 percent of the school going population indicated that they walk to school, followed by 8 percent that take a taxi.

The results show that most of the children started school at an early age of 6 or 7. The highest enrolment rate are at the age of 7 with 52.8 percent followed by those aged 6 with 37.4 percent.

Expenditure on education is mostly higher for tuition fees (N$1136.40 per year) compared to other school expense categories. Households on average in Khomas region spent more money on education compared to other regions, especially on tuition fees and transport with N$3333.0 and N$892.4 respectively per year.

Health (Chapter 6)

High blood pressure illness is the most prevalent disease in the population compared to other diseases with 6.1 percent of the population having this condition. The results shows that high blood pressure is slightly high in urban than rural areas. Respiratory diseases which includes asthma is the second most common illness that affects 1 percent of the population.

Omaheke has the highest cases of high blood pressure with 9.1 percent of the population reporting this condition, followed by Hardap region, 8.1 percent. Omaheke region also reported more cases of respiratory diseases (2.2 percent) than other regions followed by Erongo with 1.9 percent.

Eye problems affect the population the most in the whole country compared to other disabilities such as hearing, walking, recalling or concentrating, self-care and communicating. Close to 9 percent of the people have reported some eye disabilities.

Main Source of Income (Chapter 7)

Households were asked for their main source of income, including salaries and/or wages, subsistence farming, commercial farming, pensions, cash remittances, maintenance grants, drought relief, in kind receipts, etc. More than half of all households in Namibia reported salaries/wages as their main source of income, followed by pension with 11 percent and subsistence farming with 10.6 percent.

There is a large difference between urban and rural households. In rural areas 22 percent reported subsistence farming as their main source of income, as compared to only 1 percent of urban households.

In urban areas, 72 percent of the households reported salaries and wages as the main source of income, followed by business income with 11.3 percent. On the other hand, 72 percent of urban households reported salaries/wages as their main source of income compared to 32 percent of rural households.

Household Indebtedness (Chapter 8)

Respondents were asked if they had any outstanding debts. Results show that 23 percent which amounts to 125,425 households owed outstanding balances in one form of debt or another.

There were more incidences of households with debts in urban areas with 30 percent than in rural areas which have 15 percent households with debts. Kavango West and Hardap regions have the highest percent of households which have debts with 42 percent each respectively. Otjozondjupa and !Karas have 34 percent and 33 percent respectively.

Cash loan debt from sources in Namibia was the most prevalent with 29 percent of households which is equal to 35,975 households, followed by car loan debts with 12 percent and furniture and appliances with 7 percent of households.

Ownership and Access to Assets (Chapter 9)

In order to gauge changes in welfare status of households in terms of access to assets, the survey collected information on three broad categories of ownership or access to assets, namely: owning, not owning but have access and neither owning nor having access to assets.

The results show that 93 percent of households reported that they own cell phones, 31 percent reported access to a motor vehicle and 96 percent did not have access to a telephone (landline). The proportions of households that own cell phones are also high in both urban and rural areas with approximately 97 and 89 percent of households in urban and rural areas respectively.

Access to a radio was higher in urban areas where 26 percent of households owned a radio compared to 21 percent in rural areas. In urban areas, 64 percent of the households owned a TV set compared to only 17.4 percent of households in rural areas. It is worth noting that 31.4 percent of households in rural areas owned a plough and 35.1 percent reported they have access to a motor vehicle.

The proportion of households that owned a radio had increased from 65 percent in 1993/1994, to 71 percent in 2003/2004 and 72 percent in 2009/2010, however dropped to 42 percent in 2015/2016. On the other hand over the period 2009/2010 to 2015/2016, the proportion of households that owned a telephone lines (landline) had dropped tremendously, from 56 percent to 4.9 percent. Similarly, the proportion of households owning motor vehicles had also declined between 1993/1994 and 2015/2016 from 20 percent to 16 percent respectively.

Annual Consumption (Chapter 10)

The estimated total household consumption during the survey period was N$64 849 million. The average annual consumption per household is N$119 065 while the consumption per capita is N$28 434. Annual consumption is significantly higher in urban areas. For example, while rural areas account for 46 percent of all households in the country, they only account for 32 percent of total consumption. Average consumption per capita is N$16 848 in rural areas compared to N$41 575 in urban areas, a factor of close to more than three times as high.

Female-headed households which constituted 44 percent of all households consumed 37 percent of total consumption. The average consumption in male headed households is N$134 580 compared to N$99 343 in female headed households. Similarly, consumption per capita in male headed households is N$34 085 as compared to N$22 119 in households headed by females. In other words, consumption per capita is 42 percent lower in female-headed households compared to male-headed households.

Household consumption varies greatly across language groups. Consumption per capita in households where Khoisan is the main language spoken, is N$7 088 compared to N$199 330 in households, which speaks German. In other words, German-speaking households on average have a level of consumption that is 28 times higher than the Khoisan-speaking households. There seemed to be, however, a slight improvement from 2009/2010 when it was 23 times higher. In 2003/2004, Khoisan speaking households had the lowest consumption per capita in Namibia. In 2009/2010, Rukavango speaking households had the lowest per capita income in Namibia (N$5 777) and in 2015/2016 again, Khoisan speaking households had the lowest consumption per capita in Namibia (N$7 088).

The GINI coefficient for Namibia is 0.56 according to the results from NHIES 2015/2016 compared to 0.5971 in 2009/2010, 0.603 in 2003/2004 and 0.701 in 1993/1994. Thus, this survey shows that the overall inequality in the distribution of income has gradually reduced. The level of inequality in Namibia remains among the highest in the world. In the Scandinavian countries the level of inequality is lowest where the GINI is around 0.25.

Distribution of Annual Consumption (Chapter 11)

Most consumption in Namibia is on food and beverages with 36 percent, followed by housing, 32 percent and "Other Consumption", 11 percent, which includes recreation and culture, accommodation services and miscellaneous goods and services. Close to 8 percent of the share of consumption is spent on transport and communications. In urban areas the largest share of consumption is allocated to housing (35%), while in rural areas most of the consumption is on food (57%).

Female headed households have a higher share of consumption on food/beverages than male headed households, which also have a higher share of consumption on food and beverages.

In the 2003/2004 survey Namibia has introduced a paradigm shift from the conventional food consumption ratio as a measure for poverty level to the cost of basic needs approach. Thus in 2009/2010 and 2015/2016 poverty is measured by this approach.

Each household is classified as poor or severely poor based on their costs of basic needs compared to the poverty lines. Out of all households in Namibia 17 percent are classified as poor and 11 percent as severely poor. In 2009/2010 the corresponding percentages were 19 and 10, while in 2003/2004 the corresponding percentages were 28 and 14. This means that the poverty in Namibia has decreased significantly since 2003/2004. On average those poor people were just 6.0% percent below the poverty line, meaning that they were N$31.2 on average below the upper bound poverty line. In other words, they needed just N$31.2 each to be removed from poverty.

Selected Indicators, 1993/1994-2015/2016

	1993/1994	2003/2004	2009/2010	2015/2016
Average household size				
Namibia	5.7	4.9	4.7	4.2
Urban	4.8	4.2	4.1	3.6
Rural	6.1	5.4	5.2	4.9
Proportion of Households Cooking Without Electricity or Gas				
Namibia	73%	65%	61%	52%
Urban	28%	28%	23%	23%
Rural	95%	91%	90%	87%
Proportion of households with no toilet/use bush				
Namibia	57%	53%	50%	45%
Urban	8%	16%	14%	23%
Rural	81%	79%	77%	71%
Proportion of households that own a radio				
Namibia	65%	71%	72%	46%
Urban	80%	79%	77%	38%
Rural	57%	66%	68%	55%
Average annual per capita consumption (N$)				
Namibia	3 031	8 839	14 559	28 434
Female headed	1 804	6 320	9 908	22 119
Male headed	3 783	10 570	18 223	34 085
Proportion of households that are "poor" or "severely poor"				
Poor households (incl. severely poor) -	-	27.6%	19.5%	17.4%
Severely poor households -	-	13.8%	9.6%	10.7%
GINI-coefficient	0.701	0.600	0.597	0.560

1.   Survey Methodology

1.1   Introduction

The Namibia Household Income and Expenditure Survey (NHIES) 2015/2016 edition is the fourth of its kind to be executed in Namibia and the first to be carried out by the Namibia Statistics Agency (NSA) as per its first Strategic plan for the period of 2012/2013 to 2016/2017.

The NHIES is a household based survey, designed to collect data on income and expenditure patterns of households and the sole source of information on income and expenditure in the country. Therefore, institutions did not form part of this survey. Data from the NHIES is used to compute poverty indicators at household and individual levels. The survey also serves as a statistical framework for compiling the national basket items for the compilation of price indices used in the calculation of inflation. It also forms the basis for updating prices or rebasing of national accounts.

The implementation of NHIES 2015/2016 was financed by the Government of the Republic of Namibia through the Ministry of Economic Planning sectoral budget. Technical support in the area of data processing, for example, the development of data entry and listing applications was provided by experts from the United States Census Bureau through funding by USAID. In addition, experts from the World Bank (WB) provided technical expertise for during data analysis and sampling.

1.2   Survey Objectives

The NHIES 2015/2016 provide data to measure the levels of living of the population of Namibia, for example, using actual patterns of consumption and income, as well as a range of other socio-economic indicators. Statistical information from this survey will inform planning and policy making processes at national, regional and international levels in particular the implementation, monitoring and evaluation of national development plans such as the Harambee Prosperity Plan (HPP) and the Fifth National Development Plan (NDP5) in support of monitoring and evaluation of the Namibia's Vision 2030.

The information is also further used in the monitoring and reporting towards Namibia's regional and international commitments and obligations such as the SADC agenda, AU Agenda 2063 and Sustainable Development Goals (SDGs). The NHIES was therefore designed to provide policy makers with reliable, up to date and quality statistics at national, regional levels as well as rural urban disaggregated statistics for planning and decision making purposes.

The specific survey objectives were among others to:
1. Provide information for poverty indicators and profiles
2. Provide data on income distribution and differentials
3. Provide data toward monitoring and evaluation of development programmes and processes
4. Provide data on consumption and expenditure patterns and other data for the construction of a revised basket and weights for consumer price indices
5. Provide data for the compilation of the National Accounts as well as for regional and international reporting.
6. Provide basic information on the transformations of the economy following trends and shifts in the consumption patterns of the population.

1.3   Sample Design

The sample

The design of the NHIES 2015/2016 differs in comparison to previous NHIES undertakings. One such variation appears in the reduction of the number of households selected from the sampled primary sampling units (PSUs). This was done to increase the geographical coverage and by so doing increase the precision level of survey estimates.

The number of households to be covered in each PSU have been reduced from 20 in previous NHIES to 12. This procedure increased the total number of PSUs sampled, from 500 in previous NHIES to 864 while keeping the overall sample households fixed. Similarly, the collection period of food transactions such as tobacco, beverage and food items in the households has also been reduced from 28 days in previous NHIES to 7 days.

This new survey methodology was adopted to increase the precision of indicators without significant impact on costs as well as to reduce the time interviewers spend in households thereby reducing the burden of response fatigue.

Target population and the survey population

The target population for the NHIES 2015/2016 was the non-institutional population residing in private households in Namibia. The Institutional population were out of scope for NHIES 2015/2016, however private households found within institutions were included in the target population. In addition, people who were homeless or those who usually reside in those private households, but were in hospital, prison and school hostels during the time of data collection were not eligible for NHIES 2015/2016. Table 2.1 below presents the list of institutional population, which were excluded, from the NHIES 2015/2016.

Table 1.3.1 Institutions and population not covered by the NHIES 2015/2016

Homeless
Prison/correctional institutions/police cells
Boarding School hostels
Old age homes
Army and Police barracks/Camp/Ships in harbor
Child care institutions/ Orphanages
Hospital
Hotels
Church centre/Convent/Monastery/Religious retreats

Sampling frame

The primary sampling frame used for this survey is a list of Primary sampling Units (PSUs) based on the 2011 Population and Housing Census Enumeration Areas (EAs). A PSU can be one EA, part of an EA or more than one EA. A secondary sampling frame for each of the selected PSUs was created for the purpose of selecting the sample households through a listing procedure.

The sampling design

The sample design for the survey was a stratified two-stage cluster sample, where the first stage units were geographical areas designated as the Primary Sampling Units (PSUs) and the second stage units were the households. The up-to-date list of households in the selected PSU were prepared during the listing stage of fieldwork, and 12 households were systematically selected in each PSUs.

The primary sample frame was stratified first by region followed by urban and rural areas within region. The Urban/rural strata were further stratified implicitly by constituencies.

The rural strata were also further stratified implicitly taking into consideration the proclaimed villages, settlements within the rural strata. Once this step was carried out the remaining PSUs in rural strata were implicitly stratified into communal and commercial farming areas. The PSUs within each of these areas were also geographically arranged.

The households in the secondary frame constitute a list of all households for each selected PSU were listed generally following a geographic order. Additional information was collected from the PSUs in the commercial farming areas for the purpose of carrying out further stratification before selecting sample households.

Sample selection

The first stage sample of PSUs was selected from the sampling frame using the probability proportional to size (PPS) sampling together with systematic sampling procedure. Once the PSUs were selected a listing operation was carried out to prepare a fresh list of households then 12 households were selected from the list of households (implicitly stratified) using a systematic sampling procedure. Selection of the sample households were carried out using a CSPro based sampling application.

Substitution of non-responding households

The survey was divided into four quarters and each quarter was further divided into survey rounds. During each survey round, some selected households did not respond to the survey as a result of non-contacts and/or refusals. If one household did not respond in a PSU this case was accepted as non-response. On the other hand if two or more non-responding households were encountered, then such households were replaced with households from a fresh selection in the same PSU. The replacement households were randomly selected using the CSPro based sampling application, designed to consider households with similar characteristics to the original selected households.

The NHIES sample distribution

The overall sample size was calculated to give reliable estimates of different characteristics at regional level as the lowest domain of estimation. The estimates of the characteristics for all other domains above the regional level will have better precision than the regions. The total sample size was 10368 households. A sample of 12 households were selected within each selected PSU from a freshly prepared list of households just before the interview. The total number of sampled PSUs was 864.

The survey needed to cover seasonal variations in different characteristics and therefore was carried out throughout the year. The survey year consists of four quarters, divided into survey rounds, which were 24 in total. Each survey round was made up of 15 days that a household was required to participate in the survey. The 864 PSUs were randomly allocated to the 24 survey rounds so that the sample selected for each round yield a representative sample at national level. Some adjustments were done when the allocated PSUs were drawn from the same stratum. Hence each survey round covered 36 PSUs that consisted of 432 households.

Sample Realization

The data collection process was followed by the verification of the number of households and PSUs received against the actual sample. This was then followed by structural editing process to ensure completeness of information and once this exercise was completed, the household file and person file was made available for weighting. The household file received had 10090 records, while the individual file had 41581 records, which were used for the weights calculation.

1.4   Definitions

Definitions of some basic concepts and/or indicators, used in the report, are given below. Other definitions are provided in each chapter.

Urban area

Urban areas were defined as all proclaimed municipalities and towns in Namibia.

Household

A household is a person or group of persons, related or unrelated, who live together in the same homestead/compound, but not necessarily in the same dwelling unit. They have a common catering arrangement (cook and eat together) and are answerable to the same head.

Household member

To qualify as a household member, a person must have stayed in the household and not absent for a period six months or more in the past 12 months.

Responding household

A few households refused to take part in the survey and some other households were absent during the survey round (refusals and non-contacts respectively). These households are part of the non-response together with households from which the questionnaires were too incomplete. To qualify as a responding household a household must have at least one household member (see above), recorded transactions in the DRB for at least one of the 7 days period of a survey round and at least some expenditures recorded in Form 1. Only responding households are included in the results from the survey.

Head of household

The head of household is a person of either sex who is looked upon by other members of the household as their leader or main decision maker. If she/he was absent on the survey reference night, the next responsible adult member should be entered as head.

Household composition

The composition is based on household members' relation to head of household. The households have been classified into five groups:
With only head or head and spouse (1)
With 1 child, no relatives/ non-relative (2)
With 2+ children, no relatives/ non-relatives (3)
With relatives, no non-relatives (4)
With non-relatives (5)

Interpretation of household composition:

1 Only a head or a head and spouse in household, no children, no relatives or no non-relatives
2 Persons under 1 + 1 child in household
3 Persons under 1 + more than 1 child in household
4 Persons under 1 or 2 or 3 plus relatives in household
5 Persons under 1 or 2 or 3 or 4 plus non-relatives in household
By children means children in relation to head of household (son/daughter/stepchild/adopted child).

Orphan hood

An orphan is defined as a child 0-17 years with only one parent or no parents alive. Households with orphans have at least 1 orphan living in the household. Households without orphans have no orphans living in the household.

Main source of income

Main source of income is based on the answer given by the households to the question in Form 1 "What is the main source of income for this household?" The response is the household's own perception at the time of interview of which source of income contributes most to the household.

Primary sampling unit

A primary sampling unit (PSU) is a geographical area, which was formed on the basis of the population in enumeration areas (EAs) as reported in the 2001 Population and Housing Census of Namibia.

Survey round

A survey round was a period of four weeks, during which each interviewer was expected to complete Form 1 and administer Daily Record Books for 20 households selected from each sample PSU.

COICOP

This is the acronym for Classification of Individual Consumption by Purpose. It is an international standard classification of individual consumption expenditures, which is also used by Price Statistics for collection of price data for construction of price indices.

Transaction

A transaction includes all payments made, gifts given out and all payments and gifts received by the household. Receipts are treated as incomes and payments made or gifts given out as expenditures. Transactions also included consumption of/or gifts given out from own production or from nature. A transaction can either be in cash or in kind. Cash transactions include payments either cash or cheque or through a bank transfer. In kind transaction is where no cash or cheque or bank transfer is involved. Barter and consumption of own produce is also considered as in kind transactions.

Amount

All amounts in this report are in current prices at the time of data collection.

Consumption

Consumption in this report is composed of annualised daily transactions from the daily record book (DRB) and annual or annualised expenditures from the Form 1. The part from the DRB covers mainly frequent transactions. All consumption of food and beverages are from the DRB. The part from Form 1 includes mainly infrequent expenditures, which have a better coverage in Form 1 than in the DRB. Expenditures from Form1 are cash except for imputed rent (estimated value of rent for free occupied or owned dwelling units), which is included in consumption in kind.

Non-consumption

Non-consumption in this report is composed of annualised daily transactions from the daily record book (DRB) and annual expenditures from the Form 1. Expenditure such as fines, gifts given away, etc. have been included in this category.

1.5   Response Rate

The response rate is defined as the proportion (expressed in percentage) of the households, which have responded to the survey questionnaires out of the total expected households in the survey. During the course of the interviewing phase, it was not possible to interview some of the sampled households due to refusals or non-contacts. Therefore, if such households were found to be more than two per PSU, they were replaced[1] with households of similar characteristics from the same PSU. The response rate (RR) was calculated using the following equation:

(1)

$$RR = \frac{Responding\ Households}{Sampled\ Households} \times 100$$

After data processing, 10090 out of 10368 sampled households were successfully interviewed, resulting in a 97.3 percent response rate which exceeds the NSA acceptable standard for response rate for social statistics of 80 percent. The lowest response rate of 94.1% was recorded in Khomas region.

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[1] *A total of 180 households were substituted in the sample*

Table 1.5.1 Response rate by region

Region	Expected households	Responding households	Response rate
!Karas	576	559	97.0
Erongo	864	828	95.8
Hardap	576	561	97.4
Kavango East	576	554	96.2
Kavango West	576	568	98.6
Khomas	1 152	1 084	94.1
Kunene	576	570	99.0
Ohangwena	864	854	98.8
Omaheke	576	557	96.7
Omusati	864	854	98.8
Oshana	864	846	97.9
Oshikoto	864	852	98.6
Otjozondjupa	864	837	96.9
Zambezi	576	566	98.3
Namibia	**10 368**	**10 090**	**97.3**

1.6   Consultation With Stakeholders

Consultation with statistics users and producers is essential to achieve consistency and respond to user needs. This is one of the reasons why NSA makes an effort to consult all relevant stakeholders before embarking on any national survey. The NHIES 2015/2016 is a national endeavour that needed inputs from and support of various stakeholders in order to ensure that user needs are considered during the development of survey instruments, especially the questionnaire. The technical committee consisting of 10 major stakeholders was established and consulted for inputs to ensure data relevance. In addition, a user producer workshop was convened and brought major users and producers of data from various stakeholders at national and regional levels to provide input to the survey questionnaire and other instruments. To ensure cooperation from respondents, local and traditional authorities at national, regional and local levels were engaged and regional council meetings in all 14 regions where undertaken as part of the advocacy exercise.

1.7   The Questionnaires

The two questionnaires, Form 1 and the Daily Record Book (DRB) or diary, were developed and designed using inputs and recommendations from the previous NHIES 2009/2010. The DRB had inputs from a similar document used in East Timor.

Furthermore, to ensure best practices, experiences from other countries were used to improve the survey instruments (questionnaires, data collection applications, fieldwork approach and logistics) for data collection. The questionnaires were developed with expanded modules and technical assistance was provided by an international expert in questionnaire design, from Canada, through joint funding from the World Bank and the NSA.

The main questionnaire consisted of 21 sections, namely: household roster, where household members are record; housing and food adequacy, containing the dwelling characteristics, house costs, domestic workers in the household, access to services and languages spoken by household members; food adequacy captures information on meals consumed in the household and the frequency it is available.

The section on education in which the level of education and literacy status of household members from age 6 and above are captured. Health is an addition to the previous NHIES and collected information about various health conditions with the focus on chronic illnesses and disabilities. Durable assets captured a selected number of close to 40 durable items possessed by the households.

The section on labour force collected information about the size, characteristics and composition and other rates of interest. After looking at the data it was found not prudent to analyse it since another survey – the Annual Labour Force Survey 2016 results were already released. Therefore, no results on labour force are presented in this report.

The section on agricultural activities of households was also incorporated and collected information on crop production and animal rearing. A caveat is to be mentioned in the way information was collected and it was the questions on ownership of and keeping animals that were interchanged for the first three quarters of the survey. The question about ownership was asked after the question about keeping animals. This resulted in under-counting and under-estimation because households that owned animals but did not keep them were skipped if they answered "no" to keeping animals.

Another section was on remittances of cash or items between households. Some persons do support other households besides their own, either as a social responsibility or otherwise. In that case the receiving household would be reporting the received goods as income while remitting household would report it as expenditure.

The section on income sources and debts collected information about main and other sources of individual and household income. It also captured information about household debts

The section on expenditure collected information on expenses and were categorized according to the type of commodities or services purchased. They were grouped as: food and beverages, clothing and foot wear, household equipment, health, leisure, child care, ICT equipment, transport and holidays and other expenditures such as tax, financial charges, fines and insurances. These were subcategorized in accordance with frequency they were acquired by households.

The section on savings and investments collected information on savings and investments that households did in the last 12 months prior to the survey. The final section was about anthropometric measurement information of children below 5 years old.

The expansion of the questionnaire was necessitated by the demand emanated from various stakeholder's consultations.

1.8   Pilot Survey

A pilot survey was conducted from the 23rd of February to the 10th of March 2015 and the purpose was to test the readiness of the survey instruments and tools including completion time of survey round before the commencement of the main survey. The pilot survey was conducted in Erongo, Khomas, Kunene, Hardap, Omaheke, Omusati and Zambezi regions where seven (7) PSUs were selected covering areas such as urban, rural communal and rural commercial areas. The fieldwork was conducted by 25 field staff.

Overall, the pilot survey went well in all regions and no major challenges were encountered. The listing and interviewing processes went well as all regions were able to complete the pilot survey on time in line with the survey round period of 14 days. The survey questionnaire was administered on time by field staff and the DRB was recorded smoothly by the selected households for seven (7) consecutive days. Most selected households cooperated with the field team during the interviewing and DRB recording except for those who travelled during the survey round.

The evaluation of the pilot survey including experience and lesson learned during fieldwork were used to revise and finalize the survey instruments and tools before the main fieldwork. Similarly, specific areas that needed more training were identified and were emphasized during the main training. Furthermore, the outcome of the pilot survey was used to inform areas that should be improved in terms of quality control, while recommendations on how to improve publicity and advocacy were also made with the inputs from local and traditional leadership.

1.9   Field Organization

The main survey consisted of regional field teams managed by the Regional Supervisor (statistician). There were **9 x Information Technology Field Technicians (ITFT)** who provided IT support to the regions. Two (2) ITFTs were allocated for each region except for the Zambezi region which was allocated one (1) ITFT because of its long distance from other regions. The ITFTs worked closely with the Regional Supervisors. Each field team consisted of a team supervisor and 2 interviewers. Each interviewer was responsible for 6 of the 12 selected households in each PSU. Field personnel were recruited from their own areas since they were familiar with the local terrain/locality and to facilitate interviews in local languages. In total, 54 teams comprising of 162 field staff were in the field during first quarter of the data collection. This number was further reduced from quarter 2 to 4 to a total of 36 teams and 108 field staff (Table 1.9.1).

Table 1.9.1 Number of Field staff by regions and quarters

Region	Quarter 1				Quarter 2 to 4			
	Number of Teams	Number of Team Supervisor	Number of Interviewer	Total Field staff	Number of Teams	Number of Team Supervisor	Number of Interviewer	Total Field staff
!Karas	3	3	6	9	2	2	4	6
Erongo	4	4	8	12	3	3	6	9
Hardap	3	3	6	9	2	2	4	6
Okavango East	3	3	6	9	2	2	4	6
Kavango West	3	3	6	9	2	2	4	6
Khomas	6	6	12	18	4	4	8	12
Kunene	3	3	6	9	2	2	4	6
Ohangwena	5	5	10	15	3	3	6	9
Omaheke	3	3	6	9	2	2	4	6
Omusati	4	4	8	12	3	3	6	9
Oshana	5	5	10	15	3	3	6	9
Oshikoto	4	4	8	12	3	3	6	9
Otjozondjupa	5	5	10	15	3	3	6	9
Zambezi	3	3	6	9	2	2	4	6
Namibia	**54**	**54**	**108**	**162**	**36**	**36**	**72**	**108**

The work plan implied that the team remains in the PSU for 15 days. During that period, 10 days were allocated to interviewing and 5 days to activities such as household listing, quality control, travelling and resting. Each household was visited at least 5 times (every other day) during a 9 day-period, of which 7 days were devoted to the DRB recording and management.

1.10   Training

All field staff involved with the survey went first through an intensive training before deployed to their regions of operation. Before the pilot training, a group of staff from the NSA head office were identified and taken through the first stage of the training termed the master- trainers-training for a period of one week. The second stage of training comprised a large number of staff from the NSA head office, regional statisticians, ITFTs and field staff who were to be involved in the pilot survey and this training was termed the pilot training. In preparation of the main training a group of staff who were involved in the pilot survey (except the field staff) attended a one-week refresher training termed the training of trainers (TOT) and were thereafter deployed at different training centres. The main training was meant to train all field staff and was conducted at three (3) different centres namely Okahandja, Otjiwarongo and Ondangwa. This was done in order to avoid having a high number of trainees congregated at one training center. Regions were then assigned to the training canter's based on proximity. The field staff were trained for a period of four weeks and this was done to ensure sufficient training was provided to facilitate the collection of quality data.

1.11   Survey Publicity and Advocacy

High impact methods of communication strategies were utilized for advocacy and publicity during this survey to ensure that all key stakeholders were informed. The most convenient method used was the handing out of flyers and pasting of posters to create awareness. During this activity, the Regional Statisticians organised community meetings and had the opportunity to elaborate on the objectives of the survey. These activities were done in each selected PSU before commencement of data collection and also during the listing exercise. This was done to ensure that the local people were aware of the survey and what was expected from them.

In the Khomas and Erongo regions which have the most high income areas, pamphlets about the survey (handouts) were handed out at traffic light intersections around in these areas. This was necessitated by high refusals and non-contacts experienced from these areas during the previous surveys. Furthermore, school visits were used to educate learners, who took the survey messages to their respective households. The use of constituency and local councillors to make radio announcements and to inform their communities during community meetings was effective. In addition, road shows in various towns to create awareness in urban and surrounding areas were held in partnership with the Namibia Broadcasting Corporation (NBC) outside broadcasting initiative. This approach was very effective in creating awareness about the survey. Furthermore, radio announcements complimented by newspaper articles and few newspaper adverts were placed in the local newspapers to inform the general public about the survey and its approach. Television (TV) strips were also run on the national broadcaster before the main News Bulletin and specific talk shows to announce the commencement of the survey was arranged with NBC Business Today programme. A round table discussion was also held on Talk of the Nation regarding the use of NHIES data and its importance to development and planning. This platform was used to clarify the roles of the NSA and its contribution to national development in collaboration with other government institutions. Finally, the NSA made use of Community Watch groups in Khomas region to seek their cooperation and support in creating survey awareness. Suh approach proved to be very effective in informing our respondents living in high income areas about the survey to minimize non-response rates. The communities who lived in rural areas and did not have access to both radio and TV were informed by the field staff during the listing stage of the survey.

1.12   Data Collection

The NHIES 2015/2016 was conducted within the provisions of the Statistics Act No.9 of 2011. There were two major fieldwork activities: the pilot survey that was undertaken from February 2015 to March 2015 and the main survey that was undertaken from April 2015 to March 2016. The survey cycle was divided into 22 survey rounds that were further dived into four survey quarters. The survey equipment and materials provided included digital food portion scales (for measuring weights of food items consumed), jugs (to measure liquid food items consumed), height meters, measuring boards, roller meters, bathrooms scales (to measure height and weights for children under 5 years), Tablets (uploaded with data entry application to administer the questionnaire) and Global Positioning Systems (GPS).

Two Forms of the questionnaire were used to record information on consumption and income using a face-to-face interview method. Form I recorded demographic information and transactions of infrequent nature like purchases of durable goods as well as other information from other modules while Form II was the Daily Record Book (DRB) used to capture information of daily transactions such as buying of bread, presents given to members of households and gifts given outside the household, etc. during the survey round. Households were shown how to record their daily transactions. However, where there were no literate persons in the households, interviewers visited them on a daily basis in order to help with the DRB recordings.

1.13   Survey Monitoring (Data Quality Control)

The issue of data quality is critical to the production of official statistics because it enhances the credibility of data and the institution that produces them. Therefore, NSA places data quality at the core of its statistical work across and data collection activities including this survey, to increase data use. Great efforts were made to check and ensure that collected data were relevant, reliable, accurate and timely.

Therefore, to achieve these attributes, consultation with key stakeholders were carried out, use of sound survey approach and sampling methodology, provision of adequate training, well developed questionnaires and training manuals including "Data quality assurance manual", capturing data with Tablets with in-built editing rules and regular field visits by the monitoring teams routinely were carried out or as the need arise. The monitoring teams consisted mainly of national supervisors were dispatched to regions at the beginning of each quarter to ensure that field work commenced as planned. Monitoring teams also conducted control interviews in the same households, which had been covered by the interviewers and sat in some interviews to observe how interviewers conducted the interviews. Furthermore, monitoring was also done on a daily basis from the head office through submission of daily monitoring reports from Regional Statisticians. The division for Quality Assurance took several field trips to undertake quality audits during field work and evaluate whether field staff were following stipulated guidelines for data collection. The comprehensive and completeness of the data collection were also audited, and further control measures were introduced to improve data collection. All survey quality checks were guided by quality guidelines for data collection as prescribed in the Data Quality Assurance and Interviewer Manuals.

Finally, it is worth mentioning that this edition of the NHIES was the first NHIES to make use of the computer assisted personal interview methodology, using the CSPro-based application in Tablets. This methodology was implemented with the aim of improving efficiency and thus data quality.

1.14 Data Processing

The data management tools to collect, transmit and store as well as clean (primary editing and recoding) survey data were designed and developed based on the CSPro 6.3 application. The processes involved are shown in Figure 2 below.

CAPI Application Modules - NHIES 2015/2016
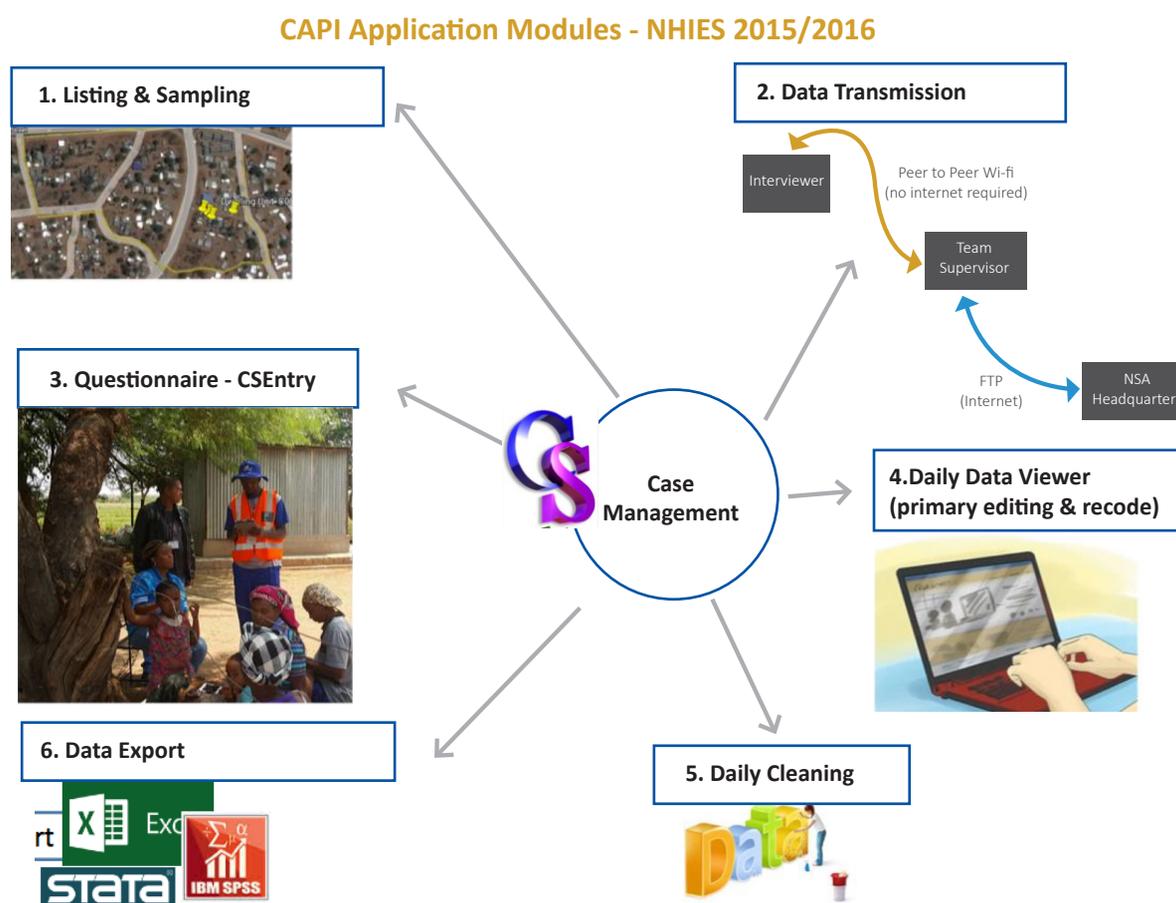
Figure 1.14.1 NHIES data management and processing process

The programs developed are listed below with explanation on how they were used in the field.

1.15   In-field Automated listing and Sampling Program

Data processing developed a systematic sampling routine program. This reduced error of supervisors not properly following the sampling algorithm or introducing bias in the household selection. In addition, it ensured that substitution of households is done procedurally in that substitution households are selected from the same stratum as the households to be substituted.

1.16   Case Management Program

This program allowed for the automation of the following field activities with minimum human interventions.
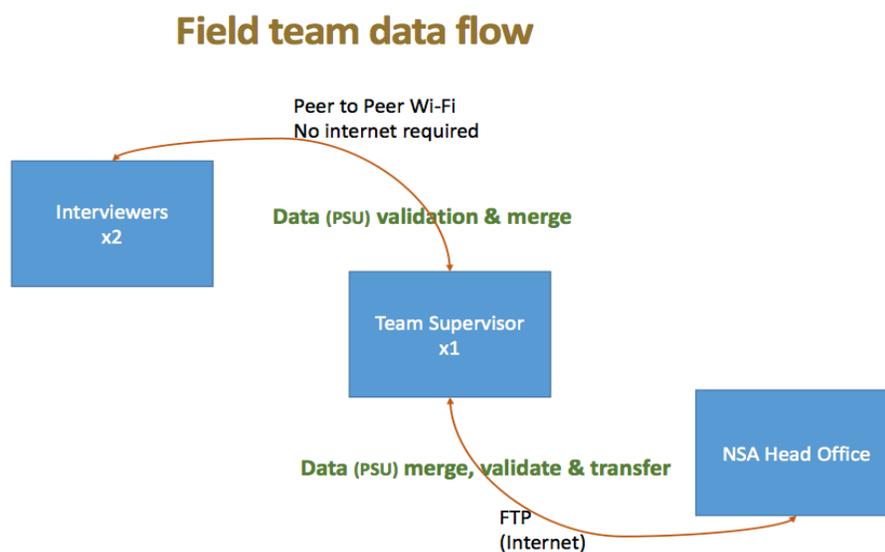
Figure 1.16.1 Fieldwork Team data flow

Case Management and data flow was tightly controlled, but the system allowed for some flexibility. For instance, household replacement and substitution of sampled households was done with the assistance of the data processing team who provided codes to unlock the substitution action.

1.17   Data Entry

Data entry application was built with many consistency checks, skipping patterns and other validations such as maximum and minimum acceptance range per variable. Supervisors were given minimum variables to check on a day-to-day basis, especially for other - specify (notes) variables. As a result, data consistency checks, coding and validation was done at field level. This minimized the time spent on post data cleaning, validation and editing process.

1.18   Data Synchronization

This program allowed for the following: - Supervisors were given SIM cards and controlled transmission of data to the Head Office. Since MD5 (Message Digest 5) algorithm - protect the integrity of a piece of data or media to detect changes and alterations to any part of a message. Hashes were stored on the program, only modified data was transferred, and only newly collected data was sent to head office.

Interviewers did not have SIM cards and hence their programs and files were updated via the supervisor's tablets. Transmissions between supervisor's tablets and interviewer's tablets was done via a locally created WI-FI hotspot.

1.19   Post Data Processing Programs

The implementation of CAPI methodology allowed for improved data quality due to consistency checks in the data entry application. In-field coding using lookups files eliminated the need for a time-consuming coding process at the Data Processing Centre (DPC). For this survey, data cleaning was divided into two (2) parts, primary cleaning, and secondary cleaning. Primary cleaning was done by data processing unit. Figure 4 exhibits the various applications and processes done as well as the different versions of data sets produced at each stage.

Data layer   **Application layer**

Raw dataset

Concatenate
(PSU, Regional, National)

Completeness Check
(kept, removed, review cases)

Merged datasets V0

Consistency check
(Specific edits, standardize variables, recodes)

Add weight
(Individual & Household)

Anonymize data
(flatten data in correct format)

Primary- cleaned & anonymized dataset V1

Data export
(Individual & Household, DRB & COICOP Files)

Figure 1.19.1 Primary - Post Data Processing data flow

The first stage of data processing activities ended at this stage, with the production of the version one (1) dataset. The next process is the secondary cleaning phase which was done by subject matter and produced version two (2) of the datasets.

1.20   Data Validation

Data cleaning

This section provides data quality analysts and researchers with data cleaning and validation methodology used for the NHIES 2015-2016. Ideally, every household survey generates two master data files. The first file presents the data as collected and entered by the survey teams from the field and go through the primary validation from the Data Processing Division (DP). While field teams do conduct coherence tests with regards to responses collected, DP staff carried out a high-level tests for internal coherence across questions, identification of fatal flaws in the collected data when compared with what was intended from the questionnaire, and as well as erroneous data entry.

A copy is then made from the 'master file' from the DP for secondary cleaning using sets of computer algorithms and visual checks by various expert involved.

The secondary data cleaning procedures provided Subject Staff and World Bank experts with step-by-step instructions developed in STATA 14 to verify the structural stability of the published NHIES 2015/2016 data sets, identify invalid entries and determine the data points that should be subjected to editing or imputation. The above tasks were scripted in STATA 14 program and do-files were created to automate their accomplishments.

Data validation checks

The validation of data was carried out in STATA, where a program was developed to carry out range checks to ensure that each provided value is within allowable minima and maxima, and internal consistency checks. For example in the case of minimum and maximum checks, the program checks that the variable recording responses to question 1.2, "Is ... female or male?" only takes values 1 or 2, which are the allowed response codes. Regarding internal consistency checks, an example is the check of consistency between "Relationship to the head of the household" (question 1.3) and "Marital status" (question 1.7): if the relationship to the head of the household is "Spouse", the individual must be married or in union; if there is a "Spouse/ Partner" in the household the head of household must be married or in union. These types of checks were performed for many of the variables. Overall, both range checks and internal consistency checks did not highlight major problems.

Outlier detection

Part of data validation is the task of detecting outliers. The term outlier is used to denote an observation that appears to be 'much' different from neighbouring observations. While the literature is rich with methods to identify outliers, in practice a few methods are used.

A common practice in empirical works hinges on the underlying distribution of the data. For instance, the Box-Cox method – first introduced by Box and Cox (1964), and currently being revived by a large community of data analysts – is based on the idea of transforming the original variable y_h to move its distribution toward normality N(0,1). If y_h denotes the total expenditure of the h-th household, the Box-Cox transformation takes the following form:

(1)
$$y_h^{(\lambda)} = \begin{cases} (y_h^\lambda - 1)/\lambda & \text{if } \lambda \neq 0 \\ \ln y_h & \text{if } \lambda = 0 \end{cases}$$

The power transformation is intended to shift from the distribution of the original variable y_h, typically skewed to the right, towards a standard normal $N(0,1)$ distribution. Once normality can be assumed, transformed (standardized or normalized) observations that exceed a certain threshold (e.g. 2.5, or 3 or even 3.5) are classified and flagged as outliers.

In the case of Namibia, we opted for a simpler solution, which is a special case of equation (1). We started from the algorithm, in which observations whose logarithms exceeded the mean of logarithms by more than 3 standard deviations where flagged out as outliers. An absolute value was taken so that the identification of extreme values on both sides of the distribution was easily made in that any observation that falls outside the interval defined in the above equation was set to missing. Less than 0.5% of observations were flagged as outliers.

1.21   Other Checks

Another part of data validation was designed and implemented with the aim of gaining insight into the overall quality of the data. The focus was on two variables, namely the expansion factors and the age reported by household members.

With respect to the expansion factors, the population pyramids presented in Figure 1.21.1 provides a useful tool to visually inspect the presence of flaws in the structure of the population by age and sex. The figure shows the population pyramids, and helps to identify potential anomalies in the data. Overall, no major problems have emerged.
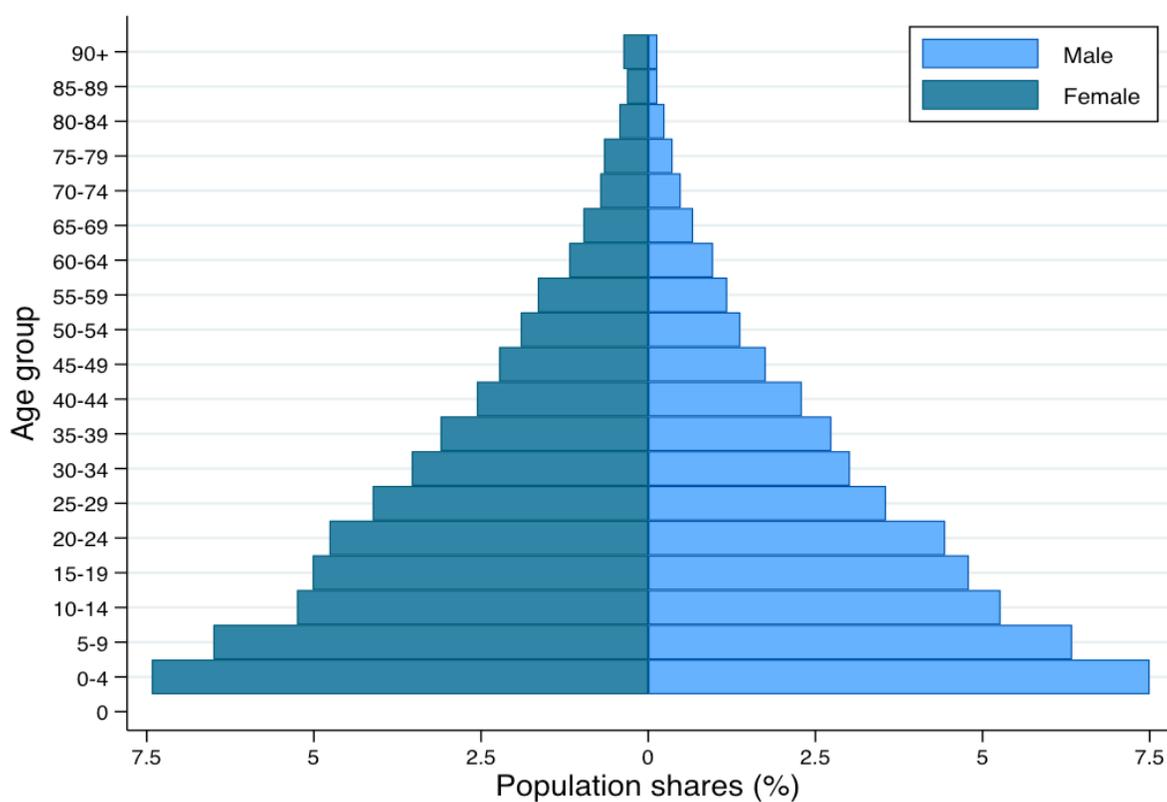
Figure 1.21.1 2015/2016 NHIES-based population pyramid

A second check focused on the variable age. The accuracy of reporting age can be used as signal for assessing data quality: it can be assumed that round-number preference in reporting one's age is usually connected with other sources of inaccuracy in age statements, and the index can be accepted as a proxy of the general reliability of responses. This is not an uncontroversial interpretation, but it turns out that age heaping is positively correlated to issues in data quality. Figure 1.21.2 shows the distribution of reported ages in the 2015/2016 NHIES.
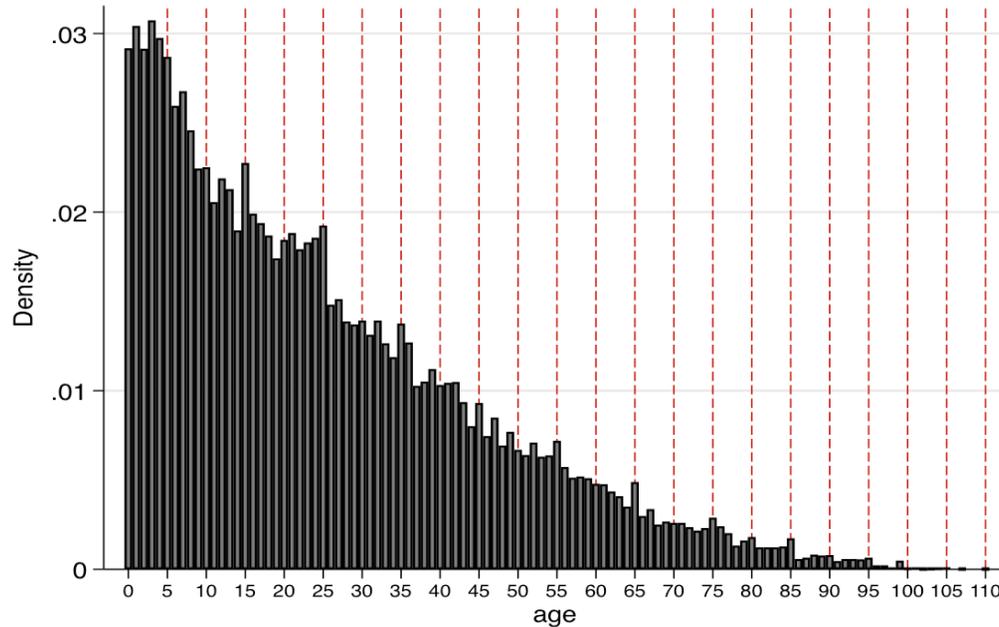
Figure 1.21.2 Age heaping, Namibia, 2015/2016

The extent of age heaping can be summarize using the Whipple index, calculated on all individuals aged 23 to 62 as follows:

(2)
$$W = \frac{(n_{25} + n_{30} + \cdots + n_{65} + n_{60})}{\frac{1}{5}\sum_{i=23}^{62} n_i}$$

The Whipple index takes on a value of 500 in the presence of perfect heaping on multiples of five, that is under the (hypothetical) situation in which all individuals report ages ending in 0 and 5; a value of 100 represents no preference for "0" or "5" (no heaping at all).[2]

Table 1.21.1 Measuring age heaping – the Whipple index

Quarters	Whipple Index
Q1	109.8176
Q2	100.3135
Q3	106.6826
Q4	107.4039
All quarters	106.2050

The Whipple indices shown in Table 1.21.1 take on borderline values between the top two categories used by the United Nations (that is, "highly accurate" and "fairly accurate" data).[3] We therefore conclude that the data on the variable age is highly accurate and fairly accurate, since the Whipple index is less than 109.9.

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[2] *The choice of the range 23 to 72 is a popular, even if arbitrary, one. When computing indexes of heaping, ages during childhood and old age are often excluded because they are affected by errors of reporting other than the preference for specific terminal digits.*

[3] *See http://unstats.un.org/unsd/demographic/products/dyb/dybcens.htm.*

1.22   Data Analysis

The results are presented in terms of total numbers, averages and percentages of the different estimates. From the onset, the procedures to be followed to analyse the NHIES data was designed as follows:

 1. Compile descriptive statistics
 2. Construct the nominal consumption aggregate,
 3. Derive real consumption aggregate (temporal and spatial price indices),
 4. Derive 2015/2016 Poverty lines,
 5. Construction of a comparable consumption aggregate,
 6. Provide insights into poverty trends.

The above procedures provide Subject Staff and World Bank experts with step-by-step instructions developed in STATA 14 Software program to verify the structural stability of the published NHIES 2015/2016 data sets, identify invalid entries and determine the data points that should be subjected to editing or imputation. The above tasks were scripted in STATA 14 program and were created to automate their accomplishments.

2. Demographic Characteristics

This chapter provides a brief snapshot on selected demographic characteristics of the population. The survey collected demographic information such as age, sex, marital status and citizenship. These variables are often used to describe the demographic profile of the Namibian households and population, income disaggregation, consumption, access to services and ownership of assets.

2.1 Households and Population

Namibia's population was estimated to be 2 280 716 people living in 544 655 households, with an average of 4.2 persons per household as shown in Table 2.1 below. The majority of the population (53.1 percent) lives in rural areas, while 46.9 percent live in urban areas. A shift in the households from rural to urban areas have been observed since 2009/2010. The most populated region is Khomas accounting for 17.5 percent of the population, followed by Ohangwena and Omusati regions with a share of 11.1 and 10.9 percent respectively. Omaheke is the least populated region accounting for 3.2 percent of the population. Among the regions, Erongo has the lowest average household size with an average of 3.0 which was the same case in 2009/2010 were Erongo region had the lowest average of household size of 3.5 persons per household. Kavango East and Kavango West have the highest share of average household size with an average of 5.8 and 6.1 persons per household, respectively.

Table 2.1 Households and Population by urban/rural and region

Region	Households		Population		Average Household size
	Number	**%**	**Number**	**%**	
Namibia	544 655	100	2 280 716	100	4.2
Urban	294 827	54.1	1 068 625	46.9	3.6
Rural	249 827	45.9	1 212 091	53.1	4.9
!Karas	23 567	4.3	84 077	3.7	3.6
Erongo	58 454	10.7	175 853	7.7	3.0
Hardap	20 901	3.8	85 629	3.8	4.1
Kavango East	25 301	4.6	146 151	6.4	5.8
Kavango West	14 518	2.7	88 705	3.9	6.1
Khomas	112 305	20.6	400 191	17.5	3.6
Kunene	21 468	3.9	95 610	4.2	4.5
Ohangwena	48 487	8.9	253 348	11.1	5.2
Omaheke	19 639	3.6	74 040	3.2	3.8
Omusati	53 090	9.7	248 490	10.9	4.7
Oshana	45 331	8.3	186 634	8.2	4.1
Oshikoto	41 411	7.6	192 469	8.4	4.6
Otjozondjupa	38 238	7.0	152 343	6.7	4.0
Zambezi	21 945	4.0	97 176	4.3	4.4

The average household size in Namibia has been declining since 1993/94, from 5.7 reported in 1993/94 to 4.2 in 2015/2016. The same pattern can be observed across urban and rural areas. On average households in rural areas were larger (4.9 persons) than households in urban areas (3.6 persons).
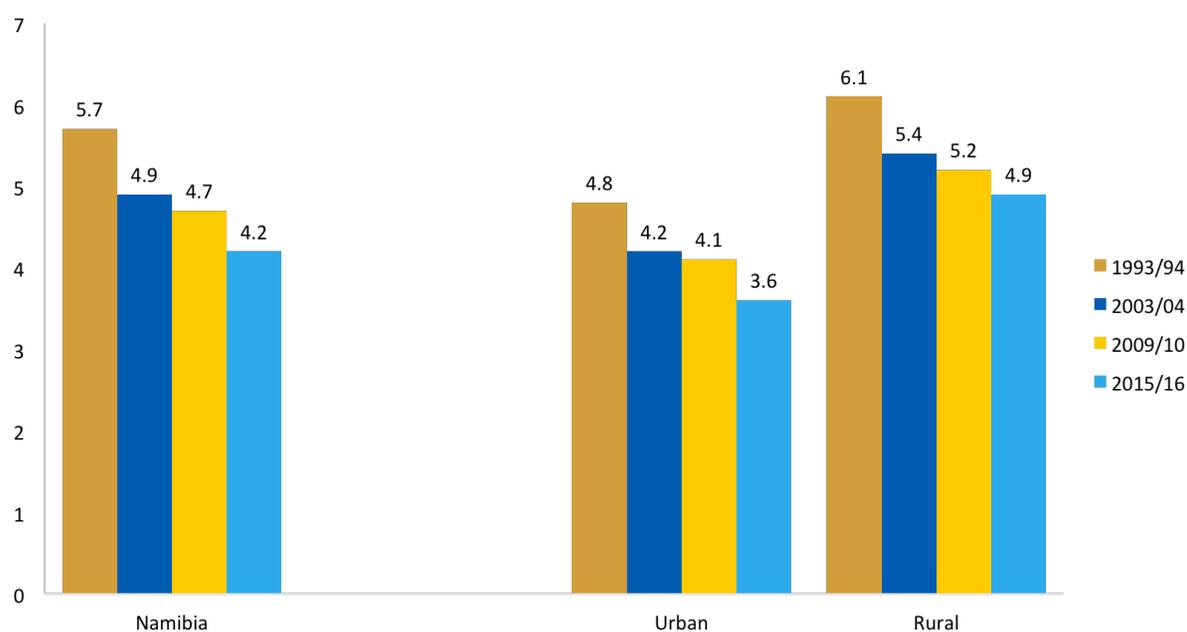
Figure 2.1 Changes in average household size by urban/rural area

2.2 Population by Age and Sex

Namibia is generally a youthful nation with about 66 percent of the population under the age of 30 years and only 11.9 percent of the population being over 50 years of age. The proportion of the population aged 95 and above is less than 1 percent as in the previous years, while an estimated 13.9 percent is under five years as shown in Table 2.2.1 below.

The sex ratio is estimated to be about 95 males per 100 females. This means that there are more females than males as it was the case in the previous surveys. The sex ratio is however, lower in older age groups, which is a reflection less male population compare to female population at older ages comparing to younger age groups, for example those of from zero to fourteen years of age where the sex ratios is above 100.

Table 2.2.1 Total Population by sex and age group

Age group	Female		Male		Both Sexes		Sex ratio
	Number	**%**	**Number**	**%**	**Number**	**%**	
Namibia	1 172 440	100	1 108 276	100	2 280 716	100	94.5
00-04	156 953	13.4	160 550	14.5	317 503	13.9	102.3
05-09	136 088	11.6	138 313	12.5	274 401	12.0	101.6
10-14	118 811	10.1	119 349	10.8	238 160	10.4	100.5
15-19	123 097	10.5	120 385	10.9	243 482	10.7	97.8
20-24	117 978	10.1	113 488	10.2	231 466	10.1	96.2

Age group	Female		Male		Both Sexes		Sex ratio
	Number	%	Number	%	Number	%	
25-29	103 281	8.8	99 547	9.0	202 828	8.9	96.4
30-34	84 146	7.2	79 543	7.2	163 689	7.2	94.5
35-39	70 321	6.0	66 664	6.0	136 985	6.0	94.8
40-44	58 801	5.0	54 020	4.9	112 821	4.9	91.9
45-49	46 998	4.0	41 197	3.7	88 195	3.9	87.7
50-54	39 468	3.4	32 425	2.9	71 893	3.2	82.2
55-59	30 679	2.6	23 243	2.1	53 922	2.4	75.8
60-64	23 633	2.0	18 245	1.6	41 878	1.8	77.2
65-69	19 555	1.7	15 021	1.4	34 576	1.5	76.8
70-74	14 687	1.3	10 031	0.9	24 718	1.1	68.3
75-79	10 178	0.9	6 970	0.6	17 148	0.8	68.5
80-84	7 167	0.6	4 585	0.4	11 751	0.5	64.0
85-89	4 765	0.4	2 339	0.2	7 103	0.3	49.1
90-94	3 753	0.3	1 292	0.1	5 045	0.2	34.4
95+	2 082	0.2	1 070	0.1	3 152	0.1	51.4

Population in rural areas is younger in comparison with the population in urban areas as shown in Table 2.2.2 and Table 2.2.3. The same pattern was observed in 2009/2010. In rural areas 70 percent of the population is under 30 years compared to the 61.8 percent in urban areas. The sex ratio for rural areas is relatively lower than urban areas from ages 30 years which may be a reflection of rural to urban migration in search for employment opportunities.

Table 2.2.2 Population in urban areas by sex and age group

Age group	Female		Male		Both Sexes		Sex ratio
	Number	%	Number	%	Number	%	
Namibia	547 129	100.0	521 496	100.0	1 068 625	100.0	95.3
00-04	71 671	13.1	73 331	14.1	145 002	13.6	102.3
05-09	47 627	8.7	47 847	9.2	95 474	8.9	100.5
10-14	43 001	7.9	41 044	7.9	84 045	7.9	95.4
15-19	49 244	9.0	42 648	8.2	91 892	8.6	86.6
20-24	59 548	10.9	51 138	9.8	110 686	10.4	85.9
25-29	67 811	12.4	64 266	12.3	132 077	12.4	94.8
30-34	54 417	9.9	53 397	10.2	107 814	10.1	98.1
35-39	42 037	7.7	42 062	8.1	84 099	7.9	100.1
40-44	32 367	5.9	32 142	6.2	64 509	6.0	99.3
45-49	23 885	4.4	23 885	4.6	47 770	4.5	100.0
50-54	17 880	3.3	18 265	3.5	36 145	3.4	102.2
55-59	12 974	2.4	12 308	2.4	25 282	2.4	94.9
60-64	8 576	1.6	7 996	1.5	16 572	1.6	93.2
65-69	5 883	1.1	4 606	0.9	10 489	1.0	78.3

Age group	Female		Male		Both Sexes		Sex ratio
	Number	%	Number	%	Number	%	
70-74	3 837	0.7	2 737	0.5	6 574	0.6	71.3
75-79	2 743	0.5	1 823	0.3	4 566	0.4	66.5
80-84	1 823	0.3	1 139	0.2	2 963	0.3	62.5
85-89	946	0.2	388	0.1	1 334	0.1	41.0
90-94	662	0.1	262	0.1	924	0.1	39.6
95+	196	0.0	211	0.0	408	0.0	107.7

Table 2.2.3 Population in rural areas by sex and age group

Age group	Female		Male		Both Sexes		Sex ratio
	Number	%	Number	%	Number	%	
Total	625 311	100	586 780	100	1 212 091	100	93.8
00-04	85 282	13.6	87 219	14.9	172 501	14.2	102.3
05-09	88 461	14.1	90 466	15.4	178 927	14.8	102.3
10-14	75 810	12.1	78 305	13.3	154 115	12.7	103.3
15-19	73 853	11.8	77 737	13.2	151 590	12.5	105.3
20-24	58 430	9.3	62 350	10.6	120 780	10.0	106.7
25-29	35 470	5.7	35 281	6.0	70 751	5.8	99.5
30-34	29 729	4.8	26 146	4.5	55 875	4.6	87.9
35-39	28 284	4.5	24 602	4.2	52 886	4.4	87.0
40-44	26 434	4.2	21 878	3.7	48 312	4.0	82.8
45-49	23 113	3.7	17 312	3.0	40 425	3.3	74.9
50-54	21 588	3.5	14 160	2.4	35 748	2.9	65.6
55-59	17 705	2.8	10 935	1.9	28 640	2.4	61.8
60-64	15 057	2.4	10 249	1.7	25 306	2.1	68.1
65-69	13 672	2.2	10 415	1.8	24 087	2.0	76.2
70-74	10 850	1.7	7 294	1.2	18 144	1.5	67.2
75-79	7 435	1.2	5 147	0.9	12 582	1.0	69.2
80-84	5 343	0.9	3 446	0.6	8 789	0.7	64.5
85-89	3 819	0.6	1 950	0.3	5 769	0.5	51.1
90-94	3 090	0.5	1 030	0.2	4 120	0.3	33.3
95+	1 886	0.3	858	0.1	2 744	0.2	45.5

An estimated 98 percent of the total population are Namibian citizens with the rest made up of citizens of other countries, including, but not limited to Angola, South Africa and Zambia as indicated in Table 2.2.4 below.

Table 2.2.4 Population by sex and citizenship

Citizenship	Female		Male		Both Sexes	
	Number	%	Number	%	Number	%
Total	1 172 440	100	1 108 276	100	2 280 716	100
Namibia	1 151 935	98.3	1 083 138	97.7	2 235 073	98
Non-Namibian	19 577	1.5	24 423	2.1	44 000	1.2
Angola	7 435	0.6	9 942	0.9	17 378	0.8
Botswana	276	0	260	0	536	0
Nigeria	519	0	324	0	843	0
South Africa	3 499	0.3	2 648	0.2	6 146	0.3
Zambia	2 521	0.2	3 706	0.3	6 228	0.3
Zimbabwe	2 505	0.2	2 728	0.2	5 233	0.2
Other SADC	268	0	982	0.1	1 250	0.1
Other Africans	442	0	932	0.1	1 374	0.1
China	95	0	807	0.1	901	0
European countries	1 070	0.1	1 003	0.1	2 073	0.1
All other countries	947	0.1	1 091	0.1	2 038	0.1
Not stated	928	0.1	715	0.1	1 643	0.1

Table 2.2.5 below shows that 62.8 percent of population aged 12 years or older were never married. About 30 percent are married with certificates, traditionally married or lived in a consensual union. The proportion of the population divorced, widowed and separated accounts for about 6 percent.

Table 2.2.5 Population 12 years and above by marital status and urban/rural area

Marital status	Urban		Rural		Total	
	Number	%	Number	%	Number	%
Total	792 702	100	797 458	100	1590 161	100
Never married	493 443	62.2	504 672	63.3	998 115	62.8
Married with certificate	145 786	18.4	104 318	13.1	250 104	15.7
Married traditionally	23 648	3.0	60 259	7.6	83 907	5.3
Consensual union	93 838	11.8	61 128	7.7	154 966	9.7
Divorced	9 036	1.1	7 950	1.0	16 986	1.1
Widowed	19 883	2.5	45 402	5.7	65 285	4.1
Separated	7 068	0.9	13 730	1.7	20 798	1.3

2.3 Households and Orphanhood

Table 2.3.1 indicates that, at the national level more than half of households (56 percent) are headed by males. The same applies to the urban (58.1 percent) and rural (53.5 percent) areas where the majority of the households were headed by males. Hardap, Erongo, Omaheke, !Karas, and Otjozondjupa, are the regions with higher percentages of male headed households accounting for 68.5, 67.7, 66.9, 65.8 and 64.3 percent respectively, whereas Omusati, Ohangwena, Oshana, Zambezi and Oshikoto have more female headed households accounting for 58.3, 57.5, 52.4, 51.8 and 50.8 percent, respectively.

Table 2.3.1 Households by sex of head, urban/rural and region

Region	Female		Male		Both sexes	
	Number	%	Number	%	Number	%
Namibia	239 816	44.0	304 839	56.0	544 655	100
Urban	123 641	41.9	171 186	58.1	294 827	100
Rural	116 175	46.5	133 652	53.5	249 827	100
!Karas	8 049	34.2	15 518	65.8	23 567	100
Erongo	18 891	32.3	39 562	67.7	58 454	100
Hardap	6 575	31.5	14 325	68.5	20 901	100
Kavango East	12 244	48.4	13 057	51.6	25 301	100
Kavango West	6 143	42.3	8 374	57.7	14 518	100
Khomas	42 902	38.2	69 403	61.8	112 305	100
Kunene	9 857	45.9	11 611	54.1	21 468	100
Ohangwena	27 862	57.5	20 624	42.5	48 487	100
Omaheke	6 506	33.1	13 133	66.9	19 639	100
Omusati	30 964	58.3	22 127	41.7	53 090	100
Oshana	23 748	52.4	21 583	47.6	45 331	100
Oshikoto	21 039	50.8	20 372	49.2	41 411	100
Otjozondjupa	13 667	35.7	24 571	64.3	38 238	100
Zambezi	11 368	51.8	10 577	48.2	21 945	100

Respondents were also asked to indicate the main language spoken in the household. There are more than ten spoken language in Namibia. The most common language is Oshiwambo which is spoken by 50.8 percent of the population (Table 2.3.2). This is followed by Nama/Damara, Rukavango, Otjiherero and Afrikaans spoken by 12, 11.8, 8.9 and 6.3 percent of the population respectively. Households where Khoisan, Rukavango, or Nama/Damara is the main language spoken have larger household sizes of 5.6, 5.4 and 4.3 persons per household, which are above the national average of 4.2 persons per household. English, the official language, is only spoken as a main language in 1.5 percent of the households.

Table 2.3.2 Households and population by main language spoken in the households

Main language	Households		Population		Ave household size
	Number	%	Number	%	
Total	544 655	100	2 280 716	100	4.2
Khoisan	6 115	1.1	34 171	1.5	5.6
Zambezi languages	23 414	4.3	96 456	4.2	4 .1
Otjiherero	49 546	9.1	202 018	8.9	4.1
Rukavango	50 307	9.2	269 153	11.8	5.4
Nama/Damara	63 208	11.6	274 147	12.0	4.3
Oshiwambo	280 225	51.5	1 158 413	50.8	4.1
Setswana	1 311	0.2	3 504	0.2	2.7
Afrikaans	40 334	7.4	144 721	6.3	3.6
German	2 099	0.4	5 086	0.2	2.4
English	7 815	1.4	24 043	1.1	3.1
Other European	3 054	0.6	9 272	0.4	3.0
Other African	6 032	1.1	16 660	0.7	2.8
Other	11 135	2.0	42 846	1.9	3.8
Not stated	59	0.0	226	0.0	3.8

Table 2.3.3 indicates that Ohangwena region (15.9 percent) has a high number of households with one or more orphaned children aged below 18 years, while !Karas region (2.6 percent) has the least number of households. Currently, the number of households with one or more orphaned member below 18 years is high (66.6 percent) in rural areas compared to urban areas (33.4 percent).

Table 2.3.3 Households with at least one orphaned member aged below 18 years by urban/rural and region

Region	Urban		Rural		Households with orphans	
	Number	%	Number	%	Number	%
Namibia	28 948	33.4	57 648	66.6	86 596	100
!Karas	1 637	72.6	617	27.4	2 255	2.6
Erongo	3 768	92.0	328	8.0	4 096	4.7
Hardap	2 452	80.9	580	19.1	3 032	3.5
Kavango East	2 266	33.1	4 579	66.9	6 846	7.9
Kavango West	339	8.1	3 872	92.0	4 210	4.9
Khomas	8 673	94.7	486	5.3	9 159	10.6
Kunene	1 654	46.1	1 932	53.9	3 586	4.1
Ohangwena	451	3.3	13 301	96.7	13 752	15.9
Omaheke	1 360	57.4	1 009	42.6	2 369	2.7
Omusati	139	1.2	11 614	98.8	11 753	13.6
Oshana	2 123	29.4	5 089	70.6	7 212	8.3
Oshikoto	498	5.0	9 446	95.0	9 945	11.5
Otjozondjupa	2 921	61.3	1 842	38.7	4 762	5.5
Zambezi	667	18.4	2 954	81.6	3 621	4.2

Table 2.3.4 shows that there were 130 263 (13 percent) orphans out of 982 566 children below 18 years in Namibia. It can be observed from the table that 10.6 percent of the orphans between age 0 and 17 years are in urban areas whereas 15 percent are in rural areas. Kavango East, Kavango West, Ohangwena, Oshikoto and Omusati each reported more than 15 percent of orphans while Erongo and !Karas reported below 10 percent of orphans.

Table 2.3.4 Children below 18 years and percentage of orphans by urban/rural and region

Region	Children (0-17 years)	Orphans (0-17 years)	Percentage of orphans
Namibia	982 566	130 263	13.3
Urban	379 225	40 023	10.6
Rural	603 341	90 240	15.0
!Karas	30 563	2 926	9.6
Erongo	56 763	4 979	8.8
Hardap	33 495	4 268	12.7
Kavango East	72 336	11 523	15.9
Kavango West	49 059	7 422	15.1
Khomas	130 854	13 959	10.7
Kunene	46 209	5 426	11.7
Ohangwena	132 855	20 647	15.5
Omaheke	33 196	3 622	10.9
Omusati	120 532	18 638	15.5
Oshana	75 581	9 909	13.1
Oshikoto	90 409	14 013	15.5
Otjozondjupa	65 677	7 165	10.9
Zambezi	45 038	5 767	12.8

Table 2.3.5 presents the distribution of households headed by orphans by sex and region. The result indicates that out of 544,655 households in Namibia, only 695 households representing 0.1 percent were headed by orphans. About 0.2 percent of households were headed by female orphans and 0.1 were headed by male orphans. At regional level, Ohangwena recorded the highest percentage of households headed by orphans of 0.4 percent, while !Karas, Erongo, Kavango West, Omusati, Otjozondjupa and Zambezi regions each recorded 0 percent.

Table 2.3.5 Households headed by orphans, sex of orphans and region

Region	None orphan headed households		Orphan headed households		Total number of Households	
	Number	%	Number	%		
Namibia	543 960	99.9	695	0.1	100	544 655
Female	239 401	99.8	415	0.2	100	239 816
Male	304 559	99.9	280	0.1	100	304 839
!Karas	23 567	100	0	0.0	100	23 567

Region	None orphan headed households		Orphan headed households		Total number of Households	
	Number	**%**	**Number**	**%**		
Erongo	58 454	100	0	0.0	100	58 454
Hardap	20 881	99.9	20	0.1	100	20 901
Kavango East	25 223	99.7	78	0.3	100	25 301
Kavango West	14 518	100	0	0.0	100	14 518
Khomas	112 190	99.9	115	0.1	100	112 305
Kunene	21 422	99.8	45	0.2	100	21 468
Ohangwena	48 276	99.6	210	0.4	100	48 487
Omaheke	19 603	99.8	36	0.2	100	19 639
Omusati	53 090	100	0	0.0	100	53 090
Oshana	45 228	99.8	103	0.2	100	45 331
Oshikoto	41 324	99.8	88	0.2	100	41 411
Otjozondjupa	38 238	100	0	0.0	100	38 238
Zambezi	21 945	100	0	0.0	100	21 945

As indicated in Table 2.3.6, 10.5 percent of the households have 1 to 25 percent of household members who are orphans. Kavango East and Kavango West regions have the highest share of households with 26 to 50 percent of household members being orphaned. In Kavango West, 2.8 percent of the households have more than 50 percent of household members who are orphaned.

Table 2.3.6 Households by percentage of orphans in the household and region and urban/rural areas

Region	Percentage of orphans					Total number of Households
	0	**1-25**	**26-50**	**>50**	**Total**	
	Percentage of households					
Namibia	84.1	10.5	4.6	0.8	100	544 655
Urban	90.2	6.2	3.2	0.5	100	294 827
Rural	76.9	15.6	6.3	1.2	100	249 827
!Karas	90.4	5.3	3.7	0.6	100	23 567
Erongo	93.0	4.2	2.6	0.2	100	58 454
Hardap	85.5	9.7	4.4	0.4	100	20 901
Kavango East	72.9	16.6	9.2	1.3	100	25 301
Kavango West	71.0	19.3	6.9	2.8	100	14 518
Khomas	91.8	4.8	2.7	0.7	100	112 305
Kunene	83.3	13.5	2.2	1.0	100	21 468
Ohangwena	71.6	20.5	6.4	1.5	100	48 487
Omaheke	87.9	7.7	3.8	0.6	100	19 639
Omusati	77.9	14.5	6.6	1.1	100	53 090
Oshana	84.1	10.6	4.9	0.4	100	45 331
Oshikoto	76.0	17.8	5.7	0.5	100	41 411

Region	Percentage of orphans					Total number of Households
	0	**1-25**	**26-50**	**>50**	**Total**	
			Percentage of households			
Otjozondjupa	87.5	7.6	4.5	0.3	100	38 238
Zambezi	83.5	8.8	6.5	1.2	100	21 945

Table 2.3.7 below indicates that orphans are more common in female headed households compared to male headed households. Clearly orphan hood is more prevalent in rural areas than in urban areas with 15.6 percent of rural households having between 1-25 percent of household members who are orphaned compared to 6.2 percent of urban households.

Table 2.3.7 Households by percentage of orphans in the household, urban/rural areas and sex of head of household

Urban/rural Sex of head	Percentage of orphans					Total number of Households
	0	**1-25**	**26-50**	**>50**	**Total**	
			Percent of households			
Namibia						
Female	76.1	15.2	7.3	1.4	100	239 816
Male	90.4	6.8	2.5	0.3	100	304 839
Total	84.1	10.5	4.6	0.8	100	544 655
Urban						
Female	84.6	9.5	5.1	0.8	100	123 641
Male	94.2	3.8	1.8	0.2	100	171 186
Total	90.2	6.2	3.2	0.5	100	294 827
Rural						
Female	67.0	21.2	9.7	2.1	100	116 175
Male	85.6	10.7	3.4	0.4	100	133 652
Total	76.9	15.6	6.3	1.2	100	249 827

3. Housing and Utilities

3.1 Types of Dwelling Units

Housing and utilities are important indicators of household socio-economic status. Housing and utilities play an important role in the living condition of the population. They have a direct impact on the environmental conditions. Therefore, it is vital to describe housing characteristics with regard to the type of dwellings occupied by the household, including building materials used for the roof, floor and wall. The chapter also reflects on the ownership of the dwelling and utilities used by the household such as sources of energy, water and toilet facilities. The improvement of Namibian household's welfare is determined by these indicators over time. There is an improvement in most indicators since the NHIES 2009/2010, except for the improvised housing units (shacks) whereby the proportion has increased in both urban and rural areas.

In Namibia, types of dwelling vary across the country. Regional distribution presented in Table 3.1.1 shows that Kavango West has the highest percent (85.8 %) of households living in traditional dwellings, followed by Omusati and Zambezi regions with 78.6 and 77.5 percent respectively. The lowest percent of households living in traditional dwelling units, was recorded in Hardap and Khomas regions with 0.4 and 0.5 percent respectively. Furthermore, Omaheke region reported the highest percent of households living in improvised housing units (39.8 percent), followed by Khomas with 32.6 percent while Zambezi region reported the lowest percent of households living in improvised housing units with 0.6 percent. The detached houses in urban areas makes up 41.5 percent of dwelling units while improvised houses form 29.6 percent of urban dwelling units.

Table 3.1.1 Households type of dwelling and region and urban/rural areas

| Region | Type of dwelling, % | | | | | | | | | | Total | |
	Detached house	Semi-detached house/ Town house	Apartment	Guest flat	Part commercial/ Industrial building	Mobile home (caravan/ tent)	Single quarters	Traditional dwelling	Improvised housing unit	Others	%	Number
Namibia	**30.6**	**5.8**	**2.9**	**2.9**	**0.5**	**0.3**	**3.1**	**32.9**	**20.2**	**0.8**	**100**	**544 655**
Urban	**41.5**	**8.8**	**4.7**	**4.5**	**0.2**	**0.2**	**5.1**	**4.6**	**29.6**	**0.9**	**100**	**294 827**
Rural	**17.7**	**2.2**	**0.9**	**1.0**	**0.9**	**0.3**	**0.8**	**66.3**	**9.1**	**0.8**	**100**	**249 827**
!Karas	62.4	2.8	5.6	1.5	0.7	0.6	2.0	6.0	18.0	0.3	100	23 567
Erongo	39.4	9.0	9.2	2.6	0.0	0.0	4.9	1.8	33.0	0.2	100	58 454
Hardap	63.0	2.7	2.7	3.1	0.0	0.5	0.2	0.4	25.2	2.2	100	20 901
Kavango East	18.5	0.1	0.2	1.6	0.0	0.5	0.2	72.3	4.4	2.2	100	25 301
Kavango West	9.1	0.0	0.7	0.2	0.0	0.0	0.9	85.8	3.0	0.2	100	14 518
Khomas	36.5	12.2	4.9	3.5	0.0	0.2	8.6	0.5	32.6	1.1	100	112 305
Kunene	25.1	7.4	2.2	1.3	0.4	0.7	0.4	45.9	16.2	0.2	100	21 468
Ohangwena	19.2	1.6	0.2	3.6	0.5	0.3	1.3	62.1	11.3	0.0	100	48 487
Omaheke	48.4	3.2	0.2	0.3	0.0	0.5	0.8	6.1	39.8	0.6	100	19 639
Omusati	3.3	3.4	0.2	3.9	3.0	0.0	0.5	78.6	5.6	1.6	100	53 090
Oshana	24.2	5.8	2.1	6.7	0.0	0.1	1.3	36.2	23.0	0.6	100	45 331
Oshikoto	13.8	5.0	2.2	2.2	1.1	0.3	1.6	62.2	10.5	1.1	100	41 411
Otjozondjupa	56.0	4.9	1.4	2.1	0.7	0.5	3.5	8.6	21.5	0.8	100	38 238
Zambezi	20.4	0.3	0.0	0.2	0.2	0.8	0.0	77.5	0.6	0.0	100	21 945

Table 3.1.2 shows that   there is a slight difference between female and male headed households living in detached houses nationally. The large proportion of male headed households (32.5 percent) reside in detached dwellings compared to 28.1 percent of their female counterparts. In rural areas, more than three quarters of female headed households (75.3 percent) reside in traditional dwellings compared to 58.5 percent of male headed households. The table further indicates that there is a slight higher number of male headed households (30.4 percent) that reside in improvised housing units in urban areas compared to 28.5 percent of female headed households.

Table 3.1.2 Households by type of dwelling, urban/rural areas and sex of head of household

Urban/Rural Sex of head	Type of dwelling, %										Total	
	Detached house	Semi-detached house/ Town house	Apartment	Guest flat	Part commercial/ Industrial building	Mobile home (caravan/ tent)	Single quarters	Traditional dwelling	Improvised housing unit	Others	%	Number
Namibia												
Female	28.1	5.0	2.5	3.2	0.6	0.2	2.6	39.4	17.6	0.7	100	239 816
Male	32.5	6.4	3.2	2.6	0.5	0.3	3.5	27.8	22.2	0.9	100	304 839
Both sexes	30.6	5.8	2.9	2.9	0.5	0.3	3.1	32.9	20.2	0.8	100	544 655
Urban												
Female	41.9	8.4	4.1	5.6	0.2	0.3	4.7	5.6	28.5	0.9	100	123 641
Male	41.2	9.2	5.1	3.7	0.2	0.2	5.4	3.9	30.4	0.9	100	171 186
Both Sexes	41.5	8.8	4.7	4.5	0.2	0.2	5.1	4.6	29.6	0.9	100	294 827
Rural												
Female	13.5	1.4	0.9	0.8	1.0	0.1	0.4	75.3	6.1	0.6	100	116 175
Male	21.3	3.0	0.8	1.3	0.9	0.5	1.1	58.5	11.7	0.9	100	133 652
Both sexes	17.7	2.2	0.9	1.0	0.9	0.3	0.8	66.3	9.1	0.8	100	249 827

Table 3.1.2 presents the distribution of households by type of dwelling and by main language spoken in the households. Households that speak Zambezi, Kavango and Oshiwambo languages reported the highest proportion of households living in traditional dwellings with 66.9, 61.4 and 40.5 percent respectively. Improvised housing was more common among households where Nama/Damara, Herero and Oshiwambo languages are spoken with 32.4, 23.1 and 21.7 percent respectively. Modern housing units, namely, detached, semi-detached and flats are mostly occupied by high proportions of households that speaks Afrikaans, Setwana, German, Nama/ Damara, English, and other African languages.

Table 3.1.3 Households by type of dwelling and main language spoken in the household

Main Language group	Type of dwelling, %										Total	
	Detached house	Semi-detached house/ Town house	Apartment	Guest flat	Part commercial/ Industrial building	Mobile home (caravan/ tent)	Single quarters	Traditional dwelling	Improvised housing unit	Others	%	Number
Khoisan	29.6	3.7	0.0	1.1	0.0	0.2	0.0	42.1	22.6	0.7	100	6 115
Zambezi languages	22.9	1.9	2.2	0.6	0.1	0.6	0.3	66.9	4.3	0.2	100	23 414
Herero languages	41.6	7.1	1.7	1.7	0.2	0.3	2.9	22.5	21.7	0.3	100	49 546
Kavango languages	16.0	1.3	0.8	0.8	0.1	0.3	2.2	61.4	14.0	2.9	100	50 307
Nama/Damara	47.8	7.0	2.6	1.3	0.2	0.5	1.8	5.4	32.4	1.0	100	63 208
Oshiwambo languages	19.7	5.3	1.9	3.1	0.9	0.2	4.6	40.5	23.1	0.6	100	280 225
Setswana	63.4	0.0	3.8	0.0	0.0	0.0	0.0	19.3	13.5	0.0	100	1 311
Afrikaans	68.5	10.0	8.9	4.7	0.0	0.1	0.5	1.1	6.1	0.0	100	40 334
German	54.4	29.6	12.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	100	2 099
English	48.9	12.2	14.6	17.6	0.0	0.0	0.0	0.5	6.1	0.0	100	7 815
Other European	32.3	2.9	38.1	15.3	0.0	0.0	0.0	5.9	0.0	5.5	100	3 054
Other African	60.4	6.8	9.0	3.1	0.0	0.0	0.0	8.1	10.7	1.9	100	6 032
Other	64.5	12.9	3.1	6.2	0.8	0.2	0.0	5.3	5.9	1.0	100	11 194
Total	**30.6**	**5.8**	**2.9**	**2.9**	**0.5**	**0.3**	**3.1**	**32.9**	**20.2**	**0.8**	**100**	**544 655**

Table 3.1.4 reveals that most of the households with orphans live in traditional dwellings (56.3 percent) compared to 28.5 percent of households without orphans. About 30 percent of households with orphans live in modern type of housing compared to 44.4 percent of households without orphans. Among households whose composition constitute head and spouse only about 47 percent live in modern type of dwellings and 27.7 percent, live in improvised dwelling units. The majority of households whose composition constitute one child and no relatives live in improvised housing units (28.3 percent) compared to households with two or more children with non-relatives (17.2 percent).

Table 3.1.4 Households by type of dwelling, household composition and orphanhood

Household composition/ Orphanhood	Type of dwelling, %										Total	
	Detached house	Semi-detached house/ Town house	Apartment	Guest flat	Part commercial/ Industrial building	Mobile home (caravan/ tent)	Single quarters	Traditional dwelling	Improvised housing unit	Others	%	Number
With only head or head and spouse	29.1	6.0	5.6	7.0	1.6	0.6	4.7	16.2	27.7	1.5	100	126 038
1 child, no relatives/ non-relative	31.2	6.4	4.9	3.6	0.3	0.1	4.6	19.7	28.3	0.9	100	51 116
2+ children, no relatives/ non-relatives	34.5	6.9	2.2	1.2	0.1	0.2	2.2	35	17.2	0.5	100	74 715
With relatives, no non-relatives	29.5	5.1	1.4	1.3	0.0	0.1	2.7	42.9	16.7	0.5	100	221 029
With non-relatives	31.9	6.2	2.4	1.9	1.0	0.3	1.5	38.6	15.1	1.2	100	71 758
Household does not have an orphan	31.6	6.1	3.4	3.3	0.6	0.3	3.5	28.5	21.7	0.9	100	458 058
Household has an orphan	24.9	4.1	0.5	0.6	0.0	0.1	1.1	56.3	12.2	0.3	100	86 596
Total	**30.6**	**5.8**	**2.9**	**2.9**	**0.5**	**0.3**	**3.1**	**32.9**	**20.2**	**0.8**	**100**	**544 655**

Table 3.1.6 present information on type of dwelling units by main source of income. The information shows that households that reported subsistence farming, old age pensions and drought relief/in-kind receipt and remittances/grants as their main source of income live mostly in traditional dwellings, with 85.6, 69.7, 61.3 and 45.8 percent. On the other hand, about 65 percent of households that depend on commercial farming live in detached dwellings. A high proportion of households (30.3 percent) that rely on business income lives in improvised dwellings compared to 29.9 percent who lives in detached houses. It is interesting to note that most of the households that reported salaries/wages live mainly in detached housing (modern) units and improvised/shack housing units with 38.6 and 25.2 percent respectively.

Table 3.1.6. Households by type of dwelling and main source of income

| Main source of income | Type of dwelling, % | | | | | | | | | | Total | |
	Detached house	Semi-detached / town house	Apartment	Guest flat	Part commercial/ Industrial	Mobile home (caravan/ tent)	Single quarters	Traditional dwelling	Improvised housing unit	Others	%	Number
Salaries & wages	38.6	8.3	4.5	3.9	0.8	0.4	4.8	12.5	25.2	1.1	100	291 674
Old age Pension	20.0	1.2	0.4	0.1	0.2	0.0	0.9	69.7	7.5	0.0	100	59 988
Subsistence farming	9.3	1.0	0.0	0.0	0.2	0.0	0.2	85.6	3.5	0.0	100	58 003
Business income	29.9	4.9	1.1	3.4	0.5	0.4	1.8	27.0	30.3	0.7	100	49 493
Remittances/grants	24.2	3.2	2.5	4.3	0.0	0.0	1.3	45.8	17.9	0.7	100	52 390
Drought/in-kind receipts	12.4	0.8	0.3	0.5	0.2	0.4	1.0	61.3	22.4	0.7	100	14 747
Commercial farming	65.8	20.8	0.0	0.0	0.0	0.0	0.0	13.4	0.0	0.0	100	1 830
Others	35.9	9.1	4.7	1.2	0.0	0.4	3.6	27.8	13.9	3.4	100	16 529
Total	**30.6**	**5.8**	**2.9**	**2.9**	**0.5**	**0.3**	**3.1**	**32.9**	**20.2**	**0.8**	**100**	**544 655**

Percentile and decile groups are usually used to indicate the skewness of the distribution of the economic standards of the households. In Table 3.1.7, households were classified by type of dwellings and percentile groups as well as decile groups, based on the adjusted per capita income. The table shows that there is a negative relationship between income and some dwelling types. As income increases, the proportion of traditional dwellings and improvised housing unit decreases. It can also be observed that there is a positive relationship between income and detached and semi-detached town houses: as the proportion of detached and semi-detached household increases with the increase in income.

Table 3.1.7 Households by type of dwelling and percentile group after adjusted per capita income

Percentiles/ Deciles	Detached house	Semi-detached / town house	Apartment	Guest flat	Part commercial/ Industrial	Mobile home (caravan/ tent)	Single quarters	Traditional dwelling	Improvised housing unit	Others	%	Number
					Type of dwelling, %						Total	
Percentiles												
1-25	13.4	0.9	0.2	0.2	0.2	0.2	2.0	62.2	20.0	0.7	100	87 593
26-50	18.0	2.8	0.6	0.3	0.5	0.2	3.0	50.2	23.3	1.1	100	112 869
51-75	30.2	4.2	1.0	2.1	0.6	0.3	4.6	31.5	24.3	1.2	100	143 590
76-90	39.3	8.2	4.6	4.9	0.7	0.4	3.3	16.2	22.2	0.2	100	110 129
91-95	52.7	12.0	7.7	6.6	0.3	0.5	2.0	6.8	10.7	0.9	100	43 761
96-98	49.9	15.9	9.8	9.8	0.8	0.1	1.8	4.9	6.4	0.6	100	26 640
99-100	57.2	15.4	13.0	7.1	0.8	0.0	0.7	3.4	1.9	0.5	100	20 074
Total	**30.6**	**5.8**	**2.9**	**2.9**	**0.5**	**0.3**	**3.1**	**32.9**	**20.2**	**0.8**	**100**	**544 655**
Deciles												
1	11.9	1.2	0.0	0.0	0.0	0.4	1.0	64.4	20.3	0.8	100	31 989
2	13.5	0.9	0.2	0.1	0.2	0.2	2.8	61.9	19.7	0.5	100	35 778
3	14.9	1.6	0.7	0.2	0.2	0.3	2.1	60.1	19.1	0.8	100	40 259
4	16.3	2.0	0.7	0.3	0.6	0.3	2.2	51.9	25.0	0.7	100	43 191
5	21.0	3.5	0.4	0.5	0.6	0.0	4.1	44.4	24.0	1.6	100	49 244
6	27.1	2.7	0.6	1.9	0.3	0.4	2.9	37.9	24.0	2.1	100	53 298
7	30.1	5.3	1.3	2.1	0.8	0.1	6.2	27.7	25.9	0.5	100	57 720
8	34.1	6.0	2.4	2.9	0.6	0.2	4.3	24.8	24.2	0.6	100	67 332
9	42.1	8.7	5.0	5.5	0.9	0.5	3.1	13.6	20.3	0.3	100	75 369
10	52.9	13.9	9.5	7.6	0.6	0.3	1.7	5.5	7.5	0.7	100	90 475

Table 3.1.8 gives the percentage distribution of persons by number of persons per room. The highest percentage of persons falls in the categories of one (35.5 percent) and two (36.4 percent) persons per room. The percentage distribution decreases with the increase in the number of persons per room. The same trend is further observed across urban/rural as well as across the regional level.

Table 3.1.8 Average number of persons per room by region and urban/rural areas

Region	Percent distribution of persons per room								Total Households	
	1	2	3	4	5	6	>6	Not stated	%	Number
Namibia	**35.5**	**36.4**	**15.8**	**6.6**	**2.8**	**1.1**	**1.8**	**0.0**	**100**	**544 655**
Urban	**36.2**	**35.6**	**16.7**	**6.7**	**2.7**	**1.0**	**1.2**	**0.0**	**100**	**294 827**
Rural	**34.6**	**37.3**	**14.7**	**6.6**	**3.0**	**1.3**	**2.5**	**0.0**	**100**	**249 827**
!Karas	35.9	34.9	15.1	8.8	3.0	0.5	1.9	0.0	100	23 567
Erongo	39.9	34.4	14.5	7.5	1.7	0.8	1.2	0.0	100	58 454
Hardap	28.4	33.6	19.1	7.9	6.6	2.9	1.6	0.0	100	20 901
Kavango East	20.7	32.5	22.0	9.3	5.4	3.4	6.7	0.0	100	25 301
Kavango West	14.3	42.7	24.7	11.9	4.3	1.2	0.6	0.2	100	14 518
Khomas	37.5	37.3	16.0	6.0	1.4	1.0	0.9	0.0	100	112 305
Kunene	26.4	26.9	15.8	11.4	9.1	1.9	8.6	0.0	100	21 468
Ohangwena	39.0	42.3	14.5	3.5	0.6	0.2	0.0	0.0	100	48 487
Omaheke	34.5	25.4	15.7	11.8	5.9	3.2	3.1	0.3	100	19 639
Omusati	39.8	42.6	12.8	2.7	0.8	0.4	0.9	0.0	100	53 090
Oshana	44.6	39.6	11.1	3.2	0.9	0.2	0.5	0.0	100	45 331
Oshikoto	40.1	40.3	13.6	4.5	1.3	0.2	0.1	0.0	100	41 411
Otjozondjupa	34.2	31.4	16.8	7.3	5.4	2.1	2.7	0.0	100	38 238
Zambezi	16.9	27.2	24.6	14.8	8.2	3.0	5.2	0.0	100	21 945

Table 3.1.9 present the distribution of the dwellings ownership titles by the type of dwelling. Land right certificate accounted for a large proportion (72.7 percent) of traditional dwellings ownership, followed by leasehold certificate (61.5 percent). The tittle deed accounted for a high proportion of detached and semi-detached dwellings with 64 and 12.6 percent respectively, compared to other ownership titles.

Table 3.1.9 Distribution of dwellings ownership titles by type of dwelling

Ownership title	Type of dwelling, %										Total	
	Detached house	Semi-detached / own house	Apartment	Guest flat	Part commercial/ Industrial	Mobile home (caravan/ tent)	Single quarters	Traditional dwelling	Improvised housing unit	Others	%	Number
Title deed	64.0	12.6	1.2	0.6	0.3	0.0	1.7	11.0	8.2	0.3	**100**	**92 161**
Leasehold Certificate	23.2	5.2	0.5	0.3	1.2	0.1	0.2	61.5	7.6	0.2	**100**	**23 977**
Land right Certificate	13.4	2.4	0.2	0.2	0.3	0.0	1.0	72.7	9.2	0.6	**100**	**67 604**
Other	25.7	4.8	4.0	4.1	0.6	0.4	4.1	29.1	26.1	1.1	**100**	**360 912**
Total	30.6	5.8	2.9	2.9	0.5	0.3	3.1	32.9	20.2	0.8	**100**	**544 655**

3.2   Materials Used for Dwellings

Materials used for dwellings indicate the living conditions of households. This section provides information about the main materials used for construction of the dwelling units occupied by households. When compared to the 2003/2004 and 2009/2010 NHIES, corrugated iron/zinc is still the most common material used for roofing in most dwellings in Namibia used by 69 percent of the households. This is followed by thatch and grass with 9.4 percent as well as cement blocks/bricks/stone used by 5.2 percent of the households. Thatch/grass is commonly used in rural areas (20 percent) compared to urban areas (0.3 percent). At regional level, it can be observed that Erongo is the only region with a high proportion of dwellings (33.3%) that uses asbestos as their main material for roofing. Wood and grass as the main material for roofing are commonly used in the northern regions with Ohangwena region the highest with 19.3 percent.

Table 3.2.1 Households by main material used for roof and region and urban/rural areas

| Region | Type of roof material, % | | | | | | | | | | | | | Total | |
	Cement blocks/ Bricks/ Stones	Burnt bricks/ Face bricks	Corrugated iron/ Zinc	Woo den poles, sticks & grass	Sticks, mud, clay and/or cow-dung	Asbestos	Brick tiles	Slate	Thatch, grass	Pre-cast/ Prefabricated	Other	None	Not stated	%	Number
Namibia	5.2	0.4	69.0	6.5	0.9	4.3	0.3	0.1	9.4	0.3	1.9	1.7	0.0	100	544 655
Urban	7.2	0.5	77.6	2.2	0.1	7.6	0.6	0.1	0.3	0.5	3.1	0.1	0.0	100	294 827
Rural	3.0	0.3	58.8	11.6	1.8	0.3	0.0	0.0	20.0	0.1	0.4	3.6	0.0	100	249 827
!Karas	0.3	0.0	86.1	1.8	0.1	7.2	0.4	0.0	3.2	0.8	0.1	0.0	0.0	100	23 567
Erongo	16.6	0.7	22.4	9.3	0.2	33.3	1.2	0.4	0.0	0.6	15.0	0.2	0.0	100	58 454
Hardap	5.4	0.2	90.5	1.5	0.0	2.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	100	20 901
Kavango East	1.5	0.3	69.2	5.2	0.6	0.0	0.0	0.0	22.3	0.6	0.0	0.2	0.0	100	25 301
Kavango West	0.8	0.0	41.2	10.7	0.3	0.0	0.0	0.0	46.7	0.1	0.0	0.0	0.2	100	14 518
Khomas	4.6	0.4	91.9	0.4	0.0	0.7	0.7	0.1	0.1	0.6	0.6	0.1	0.0	100	112 305
Kunene	3.6	0.0	77.0	6.2	10.6	0.4	0.0	0.3	1.0	0.2	0.6	0.0	0.0	100	21 468
Ohangwena	3.1	0.4	49.9	19.3	0.2	0.0	0.0	0.1	26.7	0.1	0.0	0.2	0.0	100	48 487
Omaheke	3.3	0.2	93.3	0.1	0.1	0.1	0.4	0.0	0.5	0.3	1.1	0.3	0.3	100	19 639
Omusati	2.6	0.7	58.9	11.7	2.0	0.2	0.0	0.0	13.5	0.0	0.0	10.4	0.0	100	53 090
Oshana	3.2	0.9	78.2	6.5	0.9	0.0	0.1	0.0	9.2	0.0	0.0	1.0	0.0	100	45 331
Oshikoto	3.1	0.0	62.7	7.3	0.7	0.0	0.0	0.0	19.1	0.0	0.1	7.0	0.0	100	41 411
Otjozondjupa	12.7	0.2	80.1	0.0	0.5	1.9	0.1	0.1	3.5	0.3	0.6	0.1	0.0	100	38 238
Zambezi	0.3	0.2	65.7	14.6	1.0	0.0	0.0	0.0	17.3	0.2	0.7	0.0	0.0	100	21 945

With respect to materials used for walls, the result presented in Table 3.2.2 shows that cement blocks/brick/stones was the highest materials used for constructing walls, used in 42.7 percent of the households in Namibia. The number of dwellings that use cement blocks/bricks/stones in rural areas in 2009/2010 and in 2015/2016 remained the same.

At regional level, household walls made from sticks, mud, clay/cow dung were common in Kavango West, Kavango East and Kunene regions used in 66.4, 38.3 and 39.8 percent of the households. On the other hand, walls made of cement blocks/ bricks/stones were more prominent in urban canters of !Karas (63 percent), Hardap (63.1 percent) and Erongo (56.8 percent) regions respectively.

Table 3.2.2 Households by main material used for wall and region and urban/rural areas

Region	Type of wall material, %												Total	
	Cement blocks/ Bricks/ Stones	Burnt bricks/ Face bricks	Corrugated iron/ Zinc	Wooden poles, sticks & grass	Sticks, mud, clay / cow-dung	Asbestos	Brick tiles	Slate	Thatch, grass	Other	None	Not stated	%	Number
Namibia	**42.7**	**2.8**	**28.7**	**8.0**	**13.4**	**0.3**	**0.1**	**0.1**	**0.5**	**2.9**	**0.4**	**0.0**	**100**	**544 655**
Urban	**52.5**	**2.6**	**34.8**	**2.5**	**2.2**	**0.2**	**0.1**	**0.2**	**0.0**	**4.3**	**0.5**	**0.0**	**100**	**294 827**
Rural	**31.2**	**2.9**	**21.5**	**14.5**	**26.5**	**0.3**	**0.1**	**0.0**	**1.2**	**1.3**	**0.3**	**0.0**	**100**	**249 827**
!Karas	63.0	1.1	26.2	2.9	3.3	0.4	0.0	0.0	0.7	2.5	0.0	0.0	100	23 567
Erongo	56.8	4.4	5.7	11.4	1.2	0.5	0.0	0.7	0.0	19.1	0.1	0.0	100	58 454
Hardap	63.1	0.6	34.5	0.6	0.0	1.0	0.0	0.0	0.0	0.0	0.2	0.0	100	20 901
Kavango East	18.3	2.5	23.5	11.3	38.3	1.3	0.0	0.1	2.3	2.4	0.0	0.0	100	25 301
Kavango West	16.5	2.6	6.0	4.6	66.4	0.0	0.1	0.0	2.7	0.4	0.4	0.2	100	14 518
Khomas	48.3	1.4	48.1	0.2	0.0	0.0	0.2	0.1	0.0	0.4	1.3	0.0	100	112 305
Kunene	34.0	1.3	21.7	0.9	39.8	0.1	0.0	0.8	0.0	1.3	0.1	0.0	100	21 468
Ohangwena	39.0	1.9	20.3	15.6	22.4	0.1	0.0	0.0	0.1	0.5	0.2	0.0	100	48 487
Omaheke	45.5	1.4	47.7	0.0	3.4	0.5	0.0	0.0	0.0	0.7	0.4	0.3	100	19 639
Omusati	31.9	8.6	26.1	23.0	8.3	0.2	0.1	0.0	0.6	0.5	0.8	0.0	100	53 090
Oshana	45.1	3.7	36.0	9.2	4.6	0.0	0.0	0.0	0.2	1.1	0.1	0.0	100	45 331
Oshikoto	33.9	1.7	29.1	18.5	15.1	0.0	0.0	0.0	1.3	0.4	0.1	0.0	100	41 411
Otjozondjupa	51.9	2.1	33.1	1.2	5.8	0.6	0.3	0.2	1.7	3.0	0.1	0.0	100	38 238
Zambezi	17.1	0.8	0.8	1.7	77.2	0.0	0.0	0.0	0.5	1.7	0.1	0.0	100	21 945

Table 3.2.3 shows the results for the materials used for floors in Namibia. In 2009/2010 NHIES, most households (55.6 percent) reported concrete as their main material for floor. This is still the case in the 2015/2016 NHIES where 41.9 percent of the households indicated concrete as their flooring material, followed by sand used by 30 percent of the households. In rural areas, 38.1 percent of the households have concrete floors, while 14.3 percent have mud, clay or cow dung and only 2.4 percent of the households in rural areas use tiles. At regional level, concrete was found to be more common in !Karas, Omaheke and Otjozondjupa used by 68.3, 62.6 and 61.2 percent of households. On the other hand, Zambezi, Kavango West and Kunene regions reported high proportion of households that use mud, clay and cow dung as the main material used for floor, used by 59.0, 56.4 and 20.1 percent of the households respectively.

Table 3.2.3 Households by main material used for floor and region and urban/rural areas

Region	Type of floor material, %							Total	
	Sand	Concrete	Mud, clay / cow dung	Wood	Tiles	Other	Not stated	%	Number
Namibia	**30.0**	**41.9**	**7.8**	**0.4**	**16.8**	**3.1**	**0.0**	**100**	**544 655**
Urban	**17.7**	**45.1**	**2.3**	**0.5**	**29.0**	**5.3**	**0.0**	**100**	**294 827**
Rural	**44.4**	**38.1**	**14.3**	**0.3**	**2.4**	**0.5**	**0.0**	**100**	**249 827**
!Karas	13.1	68.3	0.3	1.6	14.0	2.7	0.0	100	23 567
Erongo	12.6	50.1	0.3	0.8	31.3	4.9	0.0	100	58 454
Hardap	20.1	57.8	0.0	0.3	21.2	0.5	0.0	100	20 901
Kavango East	35.2	29.1	27.9	0.5	5.3	2.0	0.0	100	25 301
Kavango West	19.6	21.4	56.4	0.0	2.1	0.4	0.2	100	14 518
Khomas	19.7	30.0	3.1	0.5	37.0	9.6	0.0	100	112 305
Kunene	26.5	44.9	20.1	1.0	6.9	0.7	0.0	100	21 468
Ohangwena	53.2	34.7	6.9	0.1	5.1	0.0	0.0	100	48 487
Omaheke	31.1	62.6	1.0	0.0	4.5	0.6	0.3	100	19 639
Omusati	51.0	42.7	2.0	0.0	4.4	0.0	0.0	100	53 090
Oshana	33.3	48.0	2.1	0.1	14.5	2.0	0.0	100	45 331
Oshikoto	58.5	35.0	1.2	0.4	4.8	0.2	0.0	100	41 411
Otjozondjupa	23.4	61.2	0.8	0.5	13.2	0.9	0.0	100	38 238
Zambezi	8.2	24.0	59.0	0.1	7.6	1.0	0.0	100	21 945

3.3   Type of Tenure

Table 3.3.1 provides information on tenure of housing units. Households were classified according to the type of ownership of dwelling they occupied. Approximately 60 percent of households occupied housing units they owned with no mortgage (Table 3.3.1). The proportion of households renting their dwellings in the past five years has increased from 13.8 percent to 22.2 percent in 2015/2016. In rural areas, 76.6 percent of households own their housing units with no mortgages compared to 44.3 percent in urban areas. Just like in the previous survey (NHIES 2009/2010), the highest percentage for ownership with mortgages was recorded in Khomas with 14 percent, followed by Hardap, Erongo and !Karas regions with 10.9, 7.9 and 7.3 percent respectively.

Table 3.3.1 Households by type of tenure and region and urban/rural areas

Region	Type of Tenure, %					Total Households	
	Owned with no mortgage	Owned with mortgage	Occupied free	Rented	Not stated	%	Number
Namibia	**59.1**	**5.8**	**12.7**	**22.2**	**0.05**	**100.0**	**544 655**
Urban	**44.3**	**10.6**	**9.6**	**35.4**	**0.1**	**100.0**	**294 827**
Rural	**76.6**	**0.3**	**16.4**	**6.7**	**0.0**	**100.0**	**249 827**
!Karas	41.5	7.3	28.2	23.1	0.0	100.0	23 567
Erongo	35.6	7.9	11.3	45.3	0.0	100.0	58 454
Hardap	54.2	10.9	20.3	14.6	0.0	100.0	20 901
Kavango east	88.4	1.0	3.9	6.7	0.0	100.0	25 301
Kavango west	90.6	0.5	5.3	3.4	0.2	100.0	14 518
Khomas	42.5	14.0	7.8	35.5	0.2	100.0	112 305
Kunene	42.1	3.3	40.4	14.2	0.0	100.0	21 468
Ohangwena	84.5	1.4	5.5	8.7	0.0	100.0	48 487
Omaheke	58.2	3.8	27.1	10.5	0.3	100.0	19 639
Omusati	81.2	0.6	9.1	9.1	0.0	100.0	53 090
Oshana	65.8	4.6	7.8	21.8	0.0	100.0	45 331
Oshikoto	74.7	1.6	11.5	12.2	0.0	100.0	41 411
Otjozondjupa	39.3	4.6	24.9	31.2	0.0	100.0	38 238
Zambezi	76.1	1.0	8.6	14.4	0.0	100.0	21 945

3.4   Sources of Energy

Access to energy is also one of the indicators of socio-economic status of the household. This sub-section discusses the main source of energy used by households for cooking, heating and lighting. As indicated in Table 3.4.1 the most common source of energy for cooking in Namibia is firewood used by 48.6 percent of the households. The use of firewood is more prevalent in rural areas (85.5 percent) compared to urban areas (17.3 percent). Table 3.4.1 further reveals that the distribution of electricity as a source of energy for cooking is high in urban areas with 60.7 percent compared to 9.7 percent in rural areas. About 16 percent of households in urban areas use gas as their source of energy for cooking compared to about 3 percent in rural areas. Paraffin is a relatively important source of energy for cooking in Khomas and Oshana regions with 10.5 and 3.2 percent respectively. Animal dung is highly used in Oshana (3.4 percent) compared to other regions.

Table 3.4.1 Households main source of energy for cooking by region and urban/rural areas

| Region | Source of energy for cooking,% | | | | | | | | | Total | |
	Electricity from mains	Gas	Paraffin	Fire wood	Charcoal /Coal	Animal dung	Solar energy	Other	None	%	Number
Namibia	37.3	10.3	2.8	48.6	0.1	0.4	0.1	0.1	0.4	100.0	544 655
Urban	60.7	16.3	4.9	17.3	0.1	0.0	0.1	0.1	0.6	100.0	294 827
Rural	9.7	3.3	0.3	85.5	0.1	0.7	0.1	0.1	0.1	100.0	249 827
!Karas	48.2	30.0	0.3	20.3	0.0	0.0	0.6	0.0	0.6	100.0	23 567
Erongo	80.7	8.1	0.3	10.5	0.0	0.0	0.0	0.1	0.3	100.0	58 454
Hardap	59.5	5.0	0.4	34.7	0.0	0.0	0.2	0.2	0.0	100.0	20 901
Kavango East	13.4	4.9	0.5	80.5	0.0	0.0	0.0	0.4	0.2	100.0	25 301
Kavango West	6.8	0.9	0.0	92.2	0.0	0.0	0.0	0.2	0.0	100.0	14 518
Khomas	60.6	20.3	10.5	7.3	0.1	0.0	0.3	0.0	0.8	100.0	112 305
Kunene	22.0	4.2	0.0	73.4	0.0	0.0	0.0	0.0	0.4	100.0	21 468
Ohangwena	10.8	4.5	1.3	82.9	0.1	0.0	0.0	0.0	0.4	100.0	48 487
Omaheke	23.1	9.0	0.0	66.9	0.0	0.0	0.0	0.3	0.7	100.0	19 639
Omusati	9.7	2.6	0.9	86.4	0.2	0.0	0.0	0.2	0.0	100.0	53 090
Oshana	28.5	13.8	3.2	50.4	0.0	3.4	0.0	0.2	0.4	100.0	45 331
Oshikoto	15.4	8.2	0.5	75.0	0.0	0.8	0.0	0.0	0.1	100.0	41 411
Otjozondjupa	45.1	7.3	0.3	46.6	0.0	0.0	0.3	0.0	0.4	100.0	38 238
Zambezi	16.2	1.8	0.2	80.6	0.8	0.1	0.3	0.0	0.0	100.0	21 945

Electricity is the most common source of energy for lighting used by 47.8 percent of the households in Namibia (Table 3.4.2). Electricity for lighting is widely used in urban areas (71.9 percent) compared to rural areas (19.3 percent). The second common source of energy for lighting is batteries used by 31.7 percent of the households in Namibia, followed by candles with 11.2 percent of households. At regional level, Zambezi, Kavango East, Omaheke and Kavango West regions have high proportion of households using candles for lighting with 28.6, 26.2, 24.2 and 20.2 percent respectively. Solar as a source of energy for lighting is becoming popular with households in Omaheke region with 11.9 percent.

Table 3.4.2 Households by source of energy for lighting and region and urban/rural areas

| Region | Source of energy for Lighting,% | | | | | | | | | Total | |
	Electricity	Gas	Paraffin	Wood/ Charcoal	Candles	Solar energy	Other	None	Batteries	%	Number
Namibia	47.8	0.0	1.9	1.6	11.2	3.8	0.6	1.3	31.7	100.0	544 655
Urban	71.9	0.1	1.5	0.2	11.1	2.7	0.2	0.6	11.8	100.0	294 827
Rural	19.3	0.0	2.4	3.4	11.4	5.1	1.0	2.2	55.2	100.0	249 827
!Karas	77.3	0.0	1.3	0.0	11.6	4.8	0.2	0.0	4.8	100.0	23 567

Region	Source of energy for Lighting,%									Total	
	Electricity	Gas	Paraffin	Wood/ Charcoal	Candles	Solar energy	Other	None	Batteries	%	Number
Erongo	83.6	0.0	1.9	0.2	8.2	2.3	0.0	0.6	3.2	100.0	58 454
Hardap	72.1	0.0	1.8	0.0	18.3	5.4	0.3	0.9	1.3	100.0	20 901
Kavango East	30.9	0.0	0.2	4.4	26.2	2.1	1.6	7.7	27.0	100.0	25 301
Kavango West	18.5	0.0	0.0	2.1	20.2	1.6	1.0	1.9	54.8	100.0	14 518
Khomas	67.6	0.1	2.8	0.1	14.2	3.8	0.3	0.5	10.5	100.0	112 305
Kunene	41.2	0.0	5.3	5.6	8.0	7.8	1.7	2.4	27.9	100.0	21 468
Ohangwena	16.7	0.0	0.6	2.2	4.0	2.3	0.8	1.1	72.3	100.0	48 487
Omaheke	40.5	0.0	8.9	0.6	24.2	11.9	1.3	1.4	11.1	100.0	19 639
Omusati	12.7	0.0	0.4	3.9	2.9	3.8	0.7	1.2	74.4	100.0	53 090
Oshana	35.3	0.2	0.5	2.2	3.5	3.4	0.3	0.6	54.1	100.0	45 331
Oshikoto	23.5	0.0	0.3	2.5	6.0	2.4	0.4	0.6	64.3	100.0	41 411
Otjozondjupa	67.7	0.0	4.8	1.8	10.4	5.0	1.0	2.5	6.9	100.0	38 238
Zambezi	37.7	0.0	0.3	0.2	28.6	2.4	0.5	1.7	28.6	100.0	21 945

Table 3.4.3 displays information about the source of energy for heating in Namibia. Electricity from the main was recorded to be the most source of energy for heating in Namibia used by 30.6 percent of the households. It is further observed that 27 percent of households do not heat their dwellings. Furthermore, more than 60 percent of households in rural areas use firewood as their main source of energy for heating and only 7.8 percent of households use electricity from the main as their source of energy for heating. At the regional level, Kavango West, Zambezi, Ohangwena, Omusati and Oshikoto regions recorded the highest proportion of households using firewood as a source of energy for heating with 92.3, 79.2, 71.1, 68.8 and 62.8 percent respectively. Regions like Kunene, !Karas, Omaheke, Otjozondjupa and Hardap were recorded to have the highest proportion of households that do not heat their dwellings, with 69.4, 50.3, 40.4, 39.5 and 39.1 percent, respectively.

Table 3.4.3 Households by source of energy for heating and region and urban/rural areas

Region	Source of energy for Heating,%									Total	
	Electricity from mains	Gas	Paraffin	Fire wood	Charcoal / Coal	Animal dung	Solar energy	Other	None	%	Number
Namibia	**30.6**	**3.0**	**1.1**	**37.1**	**0.2**	**0.4**	**0.4**	**0.2**	**27.0**	**100.0**	**544 655**
Urban	**49.9**	**4.5**	**1.9**	**11.4**	**0.1**	**0.0**	**0.5**	**0.3**	**31.4**	**100.0**	**294 827**
Rural	**7.8**	**1.1**	**0.3**	**67.4**	**0.3**	**0.8**	**0.4**	**0.1**	**21.8**	**100.0**	**249 827**
!Karas	36.7	0.5	0.0	11.7	0.1	0.0	0.7	0.0	50.3	100.0	23 567
Erongo	77.7	4.7	0.2	8.4	0.0	0.0	0.6	0.1	8.3	100.0	58 454
Hardap	36.1	1.6	0.0	22.5	0.0	0.0	0.6	0.1	39.1	100.0	20 901
Kavango East	12.5	0.6	0.1	53.9	0.5	0.0	0.0	0.4	31.9	100.0	25 301
Kavango West	5.0	0.4	0.0	92.3	0.0	0.0	0.0	0.2	2.1	100.0	14 518
Khomas	47.0	5.1	3.9	7.3	0.1	0.0	1.0	0.4	35.3	100.0	112 305
Kunene	5.7	0.0	0.0	24.0	0.7	0.0	0.0	0.2	69.4	100.0	21 468

Region	Source of energy for Heating,%									Total	
	Electricity from mains	Gas	Paraffin	Fire wood	Charcoal / Coal	Animal dung	Solar energy	Other	None	%	Number
Ohangwena	11.1	0.7	0.1	71.1	0.0	0.1	0.0	0.0	16.8	100.0	48 487
Omaheke	20.7	2.3	0.0	35.3	0.9	0.0	0.0	0.4	40.4	100.0	19 639
Omusati	8.4	2.6	1.2	68.8	0.1	0.5	0.2	0.4	17.8	100.0	53 090
Oshana	27.5	8.0	1.8	41.5	0.0	3.3	0.2	0.3	17.6	100.0	45 331
Oshikoto	13.4	0.9	0.2	62.8	0.1	0.6	0.4	0.0	21.6	100.0	41 411
Otjozondjupa	34.1	1.3	0.2	23.8	0.1	0.0	0.8	0.3	39.5	100.0	38 238
Zambezi	10.6	1.1	0.1	79.2	0.9	0.1	0.1	0.0	7.8	100.0	21 945

According to Figure 3.4.1, NHIES 2009/2010 reported high proportion of households not using electricity or gas for cooking (60.8 percent) compared to 52.4 percent of households reported in NHIES 2015/2016. The figure indicates that the proportion of households that do not use either electricity nor gas as their source of energy for cooking in rural areas has dropped with 3 percent between the two surveys while the proportion of households that do not use electricity and gas in urban areas have slightly increased from 22.7 to 23.1 percent.
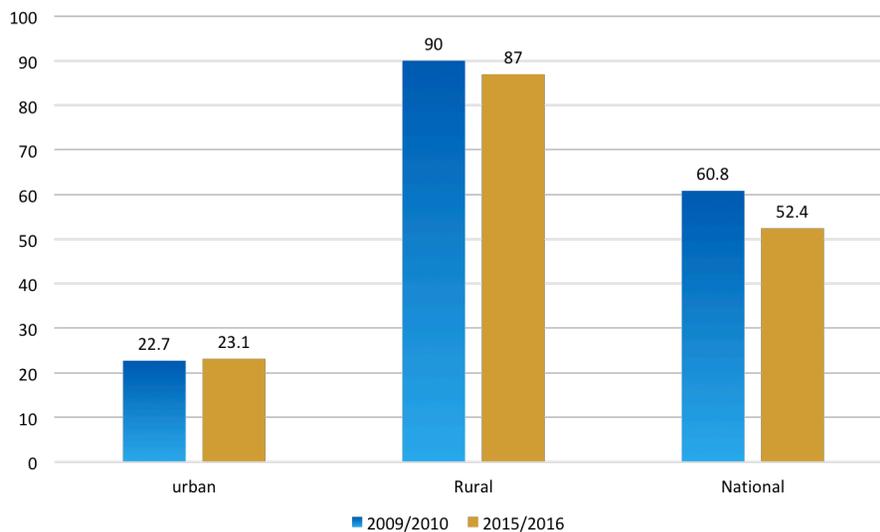
Figure 3.4.1 Proportion of households that are not using electricity or gas for cooking by urban/rural areas

3.5   Main Source of Drinking Water

The source of drinking water is an indicator of whether the households have access to safe water for drinking. Table 3.5.1 indicates that at national level, 84.4 percent of households have indicated piped water as their main source of drinking water, followed by boreholes or protected wells with 7.5 percent. The least source of water for drinking is stagnant water with 0.8 percent. The table further indicates that most households with piped water are found in urban areas with 97.7 percent compared to 68.6 percent in rural areas. Kavango West, Kunene and Kavango East reported the lowest proportion of households having access to piped water, with 60, 60.5 and 63.4 percent respectively. About 25.5 percent of households in Kavango West use flowing water as their main source of drinking water, followed by Omusati and Zambezi each with 3.8 percent. The table also indicates that Khomas region has the highest percentage of households with access to piped water with 97.5 percent, followed by Oshana with 96.5 percent then Erongo with 94 percent.

Table 3.5.1 Main source of drinking water by region and urban/rural areas

Region	Source of drinking water,%					Total	
	Piped water	Boreholes/protected wells	Stagnant water	Flowing water	Other source	%	Number
Namibia	**84.4**	**7.5**	**0.8**	**2.1**	**5.2**	**100.0**	**544 655**
Urban	**97.7**	**0.6**	**0.0**	**0.2**	**1.4**	**100.0**	**294 827**
Rural	**68.6**	**15.7**	**1.7**	**4.4**	**9.5**	**100.0**	**249 827**
!Karas	93.0	2.9	0.1	1.0	3.0	100.0	23 567
Erongo	94.0	3.8	0.2	0.0	2.0	100.0	58 454
Hardap	88.3	9.1	1.9	0.2	0.3	100.0	20 901
Kavango East	63.4	18.0	0.0	16.6	2.0	100.0	25 301
Kavango West	60.0	8.0	1.0	25.5	5.4	100.0	14 518
Khomas	97.5	0.6	0.0	0.0	1.9	100.0	112 305
Kunene	60.5	26.7	4.8	2.6	5.5	100.0	21 468
Ohangwena	72.1	13.6	2.7	0.0	11.6	100.0	48 487
Omaheke	86.1	5.5	0.1	0.0	8.3	100.0	19 639
Omusati	70.8	8.6	1.6	3.8	15.2	100.0	53 090
Oshana	96.5	1.1	0.3	0.3	1.8	100.0	45 331
Oshikoto	79.4	12.2	0.3	0.0	8.1	100.0	41 411
Otjozondjupa	91.2	7.0	0.3	0.0	1.5	100.0	38 238
Zambezi	73.5	16.2	0.0	3.8	6.5	100.0	21 945

Figure 3.5.1 Present distribution of households with access to safe water. Safe water comprised of households that have access to piped water, water from boreholes and protected wells. In Namibia, 91 percent of the households have access to safe water, while at regional level, regions such as Khomas, Oshana, Erongo, !Karas, Hardap and Otjozondjupa regions reported the highest proportion (97 percent and above) of households with access to safe water. On the other hand, Kavango West with 68 percent was the lowest region with households having access to safe water. In general, all regions have reported more than half of their households having access to safe water for drinking.
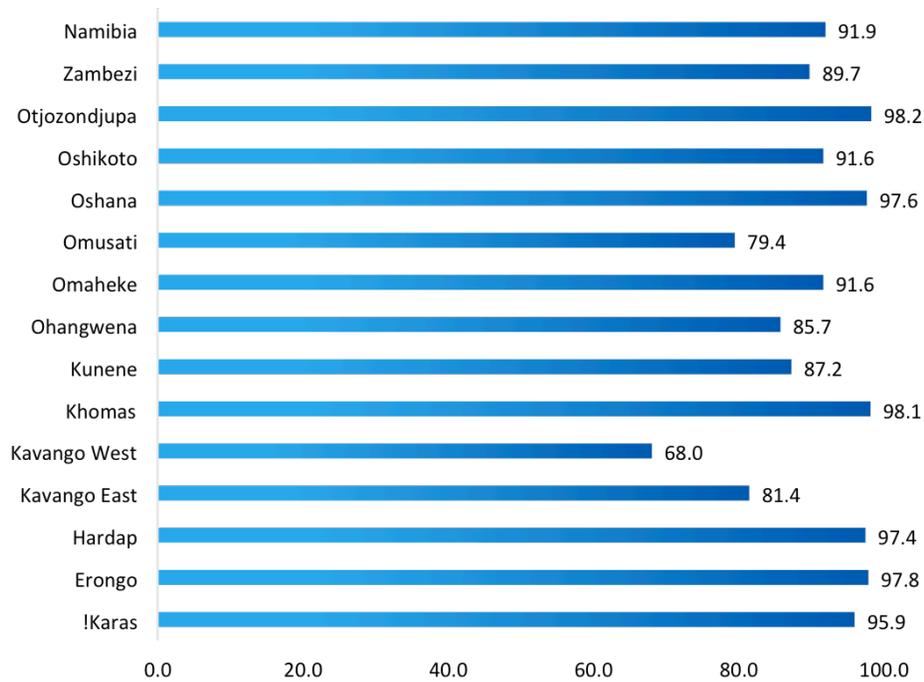
Figure 3.5.1 Proportions of Households with access to safe water by region

Figure 3.5.2 represents the proportion of households that do not have access to safe drinking water in Namibia. Access to safe drinking water is an important social economic indicator. Therefore, greater refinement to reflect the large, continuing gaps in access to safe drinking water among the world's poorest populations, and measures towards attainment of the universal right to water are needed. The figure indicates that the proportion of households that use stagnant and flowing water have decreased by 8.2 percent since 2009/2010. It was also observed that the proportion of households that use stagnant and flowing water has drastically dropped in rural areas by 12.4 percent.
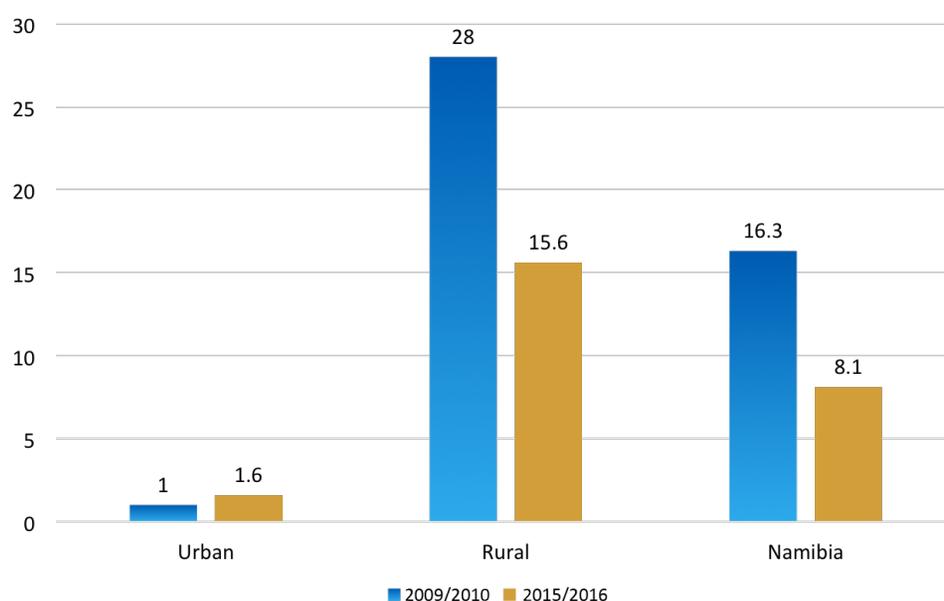
Figure 3.5.2 Households with stagnant, flowing or other main source of drinking water

Table 3.5.2 presents information about households' methods of purifying water for drinking. More than half of the household population in Namibia, 55.2 percent ,have indicated relying on boiling as their purifying method for drinking water, followed by bleach or chlorine and then water filters with 22.6 percent and 21.3 percent respectively. At regional level, more than 88 percent of households in Zambezi indicated using bleach or chlorine as their most purifying method for drinking water, while Oshikoto and Omusati reported a high proportion of households that use the purifying method of let-it-stand-and-settle with 29.2 and 11.3, percent respectively.

Table 3.5.2 Households by methods of purifying water for drinking, region and urban/rural areas

Region	Methods of purifying water %										Total	
	Boil	Bleach/ chlorine	Strain through cloth	Water filter (ceramic/sand/composite)	Solar disinfection	Let it stand & settle	Use ash	Other	Don't know	Households treating	%	Number
Namibia	**55.2**	**22.6**	**2.1**	**21.3**	**0.5**	**4**	**0.8**	**2.3**	**0.6**	**35 067**	**6.4**	**544 655**
!Karas	42.5	45.7	0.0	9.3	8.4	0.0	0.0	0.0	0.0	936	4.0	23 567
Erongo	70.7	0.0	0.0	28.5	0.0	1.5	0.0	2.4	0.0	3 940	6.7	58 454

Region	Methods of purifying water %										Total	
	Boil	Bleach/ chlorine	Strain through cloth	Water filter (ceramic/sand/composite)	Solar disinfection	Let it stand & settle	Use ash	Other	Don't know	Households treating	%	Number
Hardap	60.3	9.5	0.0	23.6	0.0	6.6	0.0	0.0	0.0	305	1.5	20 901
Kavango East	64.4	26.4	0.0	0.0	0.0	5.4	0.0	0.0	3.8	663	2.6	25 301
Kavango West	46.9	55.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	597	4.1	14 518
Khomas	62.3	3.1	0.0	36.6	0.0	0.6	0.0	3.8	0.0	16 128	14.4	112 305
Kunene	50.6	60.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	872	4.1	21 468
Ohangwena	35.0	66.1	1.4	4.2	0.0	6.2	0.1	0.0	0.0	3 159	6.5	48 487
Omaheke	83.9	0.0	0.0	16.1	0.0	0.0	0.0	0.0	0.0	514	2.6	19 639
Omusati	23.8	68.2	0.0	0.0	0.0	11.3	0.4	0.0	0.0	3 183	6.0	53 090
Oshana	50.6	44.7	0.0	0.0	0.0	4.6	0.2	0.0	0.0	539	1.2	45 331
Oshikoto	59.4	23.8	0.1	0.0	0.0	29.2	0.0	3.4	2.5	1 895	4.6	41 411
Otjozondjupa	77.2	11.1	0.0	0.0	5.1	0.0	0.0	3.8	10.3	1 383	3.6	38 238
Zambezi	4.8	88.8	0.1	4.5	0.0	4.2	0.0	0.0	0.0	953	4.3	21 945

Table 3.5.3 presents information on households by type of toilet facilities. It is interesting to note that 44.7 percent of households use flush toilets compare to 44.8 percent of households that use the bush or have no toilets. It can also be observed that a large proportion (70.2 percent) of urban households use flush toilets, compared to 14.6 percent in rural areas. The highest proportion (71.1 percent) number of households in rural areas use the bush or have no toilet facilities. Similar observation is made at regional level where the majority of households in Kavango West, Zambezi, Omusati and Ohangwena had no toilet facilities with 81.1, 78.2, 74.4 and 72.3 percent respectively. On the other hand, pit latrines are more common in Oshana, Oshikoto and Omusati regions, with 28, 15.7 and 14.4 percent respectively.

Table 3.5.3 Households by toilet facility, region and urban/rural areas

Region	Toilet facility, %					Total	
	Flush toilet	Pit Latrine	Bucket	Bush/no toilet	Others	%	Number
Namibia	**44.7**	**9.8**	**0.3**	**44.8**	**0.4**	**100.0**	**544 655**
Urban	**70.2**	**6.2**	**0.3**	**22.5**	**0.7**	**100.0**	**294 827**
Rural	**14.6**	**13.9**	**0.3**	**71.1**	**0.1**	**100.0**	**249 827**
!Karas	73.2	7.3	1.4	18.1	0.0	100.0	23 567
Erongo	86.5	3.3	0.3	9.8	0.2	100.0	58 454
Hardap	65.2	3.9	3.4	27.2	0.3	100.0	20 901

Region	Toilet facility, %					Total	
	Flush toilet	Pit Latrine	Bucket	Bush/no toilet	Others	%	Number
Kavango East	20.0	14.3	0.1	65.3	0.3	100.0	25 301
Kavango West	7.5	10.6	0.5	81.1	0.3	100.0	14 518
Khomas	70.6	4.0	0.1	23.8	1.5	100.0	112 305
Kunene	30.6	10.8	0.0	58.5	0.1	100.0	21 468
Ohangwena	14.3	13.3	0.0	72.3	0.0	100.0	48 487
Omaheke	36.8	0.7	0.0	61.4	1.0	100.0	19 639
Omusati	11.0	14.4	0.0	74.4	0.2	100.0	53 090
Oshana	33.9	28.0	0.0	38.0	0.1	100.0	45 331
Oshikoto	20.7	15.7	0.1	63.4	0.0	100.0	41 411
Otjozondjupa	60.2	4.5	0.1	35.1	0.0	100.0	38 238
Zambezi	14.9	6.9	0.0	78.2	0.0	100.0	21 945

Figure 3.5.3 presents the proportion of households that use bush or no toilet at national and urban and rural levels in 2009/2010 and 2015/2016. The figure shows that the percentage of households in Namibia that has no toilet facility has dropped by 4.5 percent. However, households that has no toilet facilities in urban areas has increased by 9 percent.
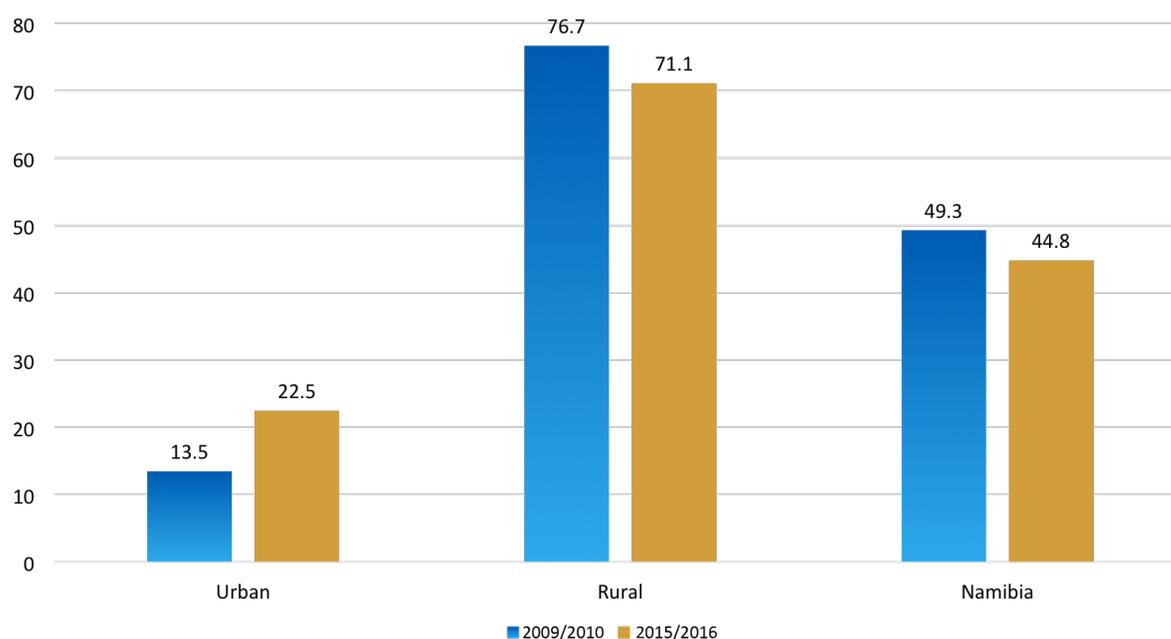
Figure 3.5.3 Percentage of Households that use bush/no toilet by urban/rural areas.

3.6   Disposal of Child Stools

Table 3.5.4 presents the method used by households with children to dispose child stools. The majority of households left children stools in the open (42.6 percent), followed by burying with 37.6 percent. The least methods reported were throw-into-garbage and child use of toilet/latrine practised by 1.3 and 2.8 percent of the households respectively. Zambezi recorded the highest proportion of households practicing the left in open method, followed by Kavango West with 89.8 and 84.3 percent. On the other hand, Erongo and Khomas region recorded the lowest proportion of households practicing this method each with 6 percent.

Table 3.5.4 Households by method of child stool disposal, region and urban/rural areas.

Region	Method of child stool disposal, %							Total	
	Child used toilet/ latrine	Rinsed/ put into toilet/ latrine/ drain or ditch	Thrown into garbage	Buried	Left in open	Other	Other	%	Number
Namibia	**2.8**	**6.1**	**1.3**	**37.6**	**42.6**	**7.5**	**2.1**	**100**	**155 494**
!Karas	7.6	11.7	0.0	67.3	7.1	4.8	1.4	100	5 633
Erongo	4.7	3.5	1.1	83.3	6.0	1.1	0.4	100	11 670
Hardap	5.2	1.5	2.2	68.9	18.0	3.0	1.2	100	5 604
Kavango East	0.5	8.9	1.7	17.1	68.2	1.8	1.7	100	9 602
Kavango West	1.1	2.3	0.1	2.4	84.3	7.9	1.8	100	6 815
Khomas	3.0	7.0	2.2	70.6	5.5	5.0	6.8	100	28 078
Kunene	4.5	8.9	2.2	19.3	40.4	23.4	1.2	100	7 213
Ohangwena	0.4	3.7	0.2	7.5	78.3	8.1	1.7	100	17 315
Omaheke	4.0	9.7	0.9	26.3	49.1	9.9	0.0	100	5 238
Omusati	1.0	6.8	0.0	14.3	65.3	12.0	0.6	100	15 275
Oshana	3.0	9.6	2.9	39.8	38.1	6.0	0.5	100	12 166
Oshikoto	1.6	5.4	1.4	20.6	52.4	16.7	1.9	100	12 539
Otjozondjupa	5.7	3.0	1.8	50.8	31.6	6.1	0.9	100	10 970
Zambezi	2.1	4.0	1.2	2.9	89.8	0.0	0.0	100	7 376

3.7   Selected Indicators on Housing Condition

Table 3.5.5 presents the summarized selected indicators on housing conditions from households information tables presented earlier. Indicators considered were improvised housing; cooking and lighting without electricity, gas or solar; bucket or bush/ no toilet and flowing or stagnant source of drinking water. It is evident from the table that a high percentage of these indicators was found to be prominent in households with orphans. In particular, 73 and 64.4 percent of the households with orphans cooks and lights without electricity, gas and solar compared to 48.3 and 45.3 percent of households without orphans. Similarly, 58.3 percent make use of bucket and bush/no toilet as part their toilet facility as opposed to 42.6 percent of household without orphans.

Table 3.5.5 Households by selected indicators on housing condition, orphanhood and region and urban/rural areas

Region, Urban/rural areas, Orphanhood	Housing indicators, %					Total
	Improvised housing	Cooking without electricity, gas or Solar	Lighting without electricity, gas or solar	Bucket or bush/no toilet	Flowing, stagnant water	Number of Households
Namibia	**20.2**	**52.2**	**48.4**	**45.1**	**2.9**	**544 655**
Urban	29.6	23.0	25.3	22.8	0.3	294 827
Rural	9.1	86.8	75.6	71.4	6.1	249 827
Orphanhood						
Households without orphans	21.7	48.3	45.3	42.6	2.4	458 058
Households with orphans	12.2	73.0	64.4	58.3	5.8	86 596
!Karas	18.0	21.1	17.9	19.5	1.1	23 567
Erongo	33.0	11.2	14.1	10.0	0.2	58 454
Hardap	25.2	35.3	22.5	30.5	2.2	20 901
Kavango East	4.4	81.7	67.0	65.4	16.6	25 301
Kavango West	3.0	92.2	79.7	81.6	26.6	14 518
Khomas	32.6	18.8	28.5	23.9	0.0	112 305
Kunene	16.2	73.8	50.9	58.5	7.3	21 468
Ohangwena	11.3	84.6	80.9	72.3	2.7	48 487
Omaheke	39.8	67.6	47.3	61.4	0.1	19 639
Omusati	5.6	87.6	83.5	74.4	5.4	53 090
Oshana	23.0	57.7	61.1	38.0	0.6	45 331
Oshikoto	10.5	76.4	74.1	63.5	0.3	41 411
Otjozondjupa	21.5	47.3	27.3	35.2	0.3	38 238
Zambezi	0.6	81.7	59.9	78.2	3.8	21 945

4.   Access to Services

The Survey collected information on household member's access to various services and facilities. Access to education, work, and healthcare are all important measures of quality of life. Such information informs policy makers on areas in Namibia that have adequate infrastructure and services and those that need further improvement to better the life of Namibians. Moreover, access to various amenities and facilities is a good indicator of the welfare of Namibian households.

This chapter covers the location of households in terms of distance to key private and public services, including drinking water, health and educational facilities, public transport and banks. The welfare of households is measured partly by access to various amenities and facilities. A key element of access is distance. Each household were asked about the walking distance in minutes to these services (later converted into kilometres). The results show that in general most households in Namibia have these services within a few minutes. However, as is the case throughout the survey national averages have a tendency to mask differences between urban and rural areas, and between the 14 regions. The urbanised regions of Erongo and !Karas stand out as regions where most households have relatively short distances to the various services. Conversely regions such as Kavango West and Kunene and other rural regions have large proportions of households that have to travel long distances to these services.

4.1   Time to Drinking Water

Table 4.1.1 shows that in Namibia, over 65 percent of the households have access to their source of water for drinking inside their property yards, while slightly over 9 per cent of households travel a distance of less than 5 minutes to and from their main source of drinking water. On the other hand, 2.2 per cent of households travel an hour or more to and from their main water source of drinking water. Similarly, 76.4 percent of urban households have access to drinking water in their yard compared to 53.5 per cent of rural households, while only 4.5 percent of rural households travels for an hour or more to their sources of drinking water. Interestingly there are still 0.3 percent of households in urban areas that travels an hour or more to access drinking water.

At regional level, more than 80 percent of households in !Karas, Erongo and Hardap regions have access to drinking water in their yard. In Kavango West, 11.9 percent of the households have to travel 60 minutes or more to and from their sources of drinking water, while about 59 per cent of the households in Zambezi region travel up to 30 minutes to and from their sources of drinking water.

Table 4.1.1 Households by time to drinking water, region and urban/rural areas

Region	Time taken in minutes to and from drinking water source							
	0 - 5	6 - 15	16 - 30	31 - 60	60 +	Water inside yard	Total	Total number of households
	Percent of households							
Namibia	**9.8**	**7.4**	**9.5**	**5.3**	**2.2**	**65.9**	**100**	**544 655**
Urban	**11.0**	**5.7**	**4.8**	**1.8**	**0.3**	**76.4**	**100**	**294 827**
Rural	**8.3**	**9.4**	**14.9**	**9.4**	**4.5**	**53.5**	**100**	**249 827**
!Karas	6.2	7.6	4.6	0.7	0.3	80.6	100	23 567
Erongo	4.6	3.9	2.2	2.1	0.5	86.8	100	58 454
Hardap	4.8	3.4	4.4	0.7	0.8	85.8	100	20 901
Kavango East	6.0	8.2	19.1	13.7	6.6	46.5	100	25 301

Region	Time taken in minutes to and from drinking water source							Total number of households
	0 - 5	**6 - 15**	**16 - 30**	**31 - 60**	**60 +**	**Water inside yard**	**Total**	
				Percent of households				
Kavango West	5.2	14.8	24.6	20.2	11.9	23.3	100	14 518
Khomas	19.1	6.1	4.9	1.0	0.4	68.5	100	112 305
Kunene	9.2	13.1	16.5	11.7	5.4	44.1	100	21 468
Ohangwena	7.4	7.5	14.5	12.3	4.9	53.3	100	48 487
Omaheke	8.7	5.3	12.2	5.6	1.9	66.4	100	19 639
Omusati	5.5	10.2	16.1	9.4	1.7	57.1	100	53 090
Oshana	9.2	5.8	5.2	0.9	0.0	78.9	100	45 331
Oshikoto	8.0	4.0	11.6	6.3	5.4	64.6	100	41 411
Otjozondjupa	5.6	5.2	6.3	3.3	0.8	78.8	100	38 238
Zambezi	20.3	24.4	15.0	3.5	0.9	35.9	100	21 945

Table 4.1.2 shows the relationship between the level of household income and the distance to source of drinking water. It is evident that the higher the income the closer the household to the source of drinking water. It is however interesting to note that there are some low income households which travel less distance to the source of drinking water. This is confirms by the 12 percent of the households from the lowest incomes, as represented by the 1-25 percentile group who travel only 5 minutes or less to and from the water source. With regard to high income households which are from the 99-100 percentile, 96 per cent of them have water inside their yards.

Table 4.1.2 Households by distance to drinking water sources and percentile group after adjusted per capita income

Percentiles/ deciles Percentiles	Time taken in minutes to and from drinking water source							Total number of households
	0 - 5	**6 - 15**	**16 - 30**	**31 - 60**	**60+**	**Water inside yard**	**Total**	
				Percent of households				
1-25	12.2	13.2	17.9	10.7	4.8	41.1	100	87 593
26-50	13.0	9.8	13.9	8.3	3.2	51.8	100	112 869
51-75	12.2	8.2	8.7	4.4	1.9	64.6	100	143 590
76-90	7.9	4.4	5.0	2.7	0.9	79.1	100	110 129
91-95	2.2	1.1	4.0	1.0	0.8	90.9	100	43 761
96-98	1.7	0.9	1.7	0.2	0.2	95.2	100	26 640
99-100	0.8	1.5	0.3	0.5	0.1	96.7	100	20 074
Total	**9.8**	**7.4**	**9.5**	**5.3**	**2.2**	**65.9**	**100**	**544 655**
Deciles								
1	14.2	16.4	20.2	12.7	4.4	32.1	100	31 989
2	11.0	11.9	16.8	8.7	5.8	45.8	100	35 778
3	11.8	10.7	15.9	9.8	4.3	47.5	100	40 259
4	11.9	10.5	14.2	8.6	3.6	51.2	100	43 191
5	14.2	8.8	12.8	7.9	2.2	54.1	100	49 244
6	14.4	9.6	9.6	5.8	2.2	58.5	100	53 298
7	11.6	7.6	7.6	3.5	2.0	67.7	100	57 720
8	9.1	6.8	7.8	3.9	1.2	71.3	100	67 332
9	7.7	3.3	4.3	2.1	0.8	81.8	100	75 369
10	1.7	1.2	2.5	0.6	0.5	93.5	100	90 475

4.2   Distance to Health Facilities

Table 4.2.1 indicates that 33.1 per cent of households in Namibia travel less than one kilometre to the nearest hospital or clinic while 32 per cent travel between two and five kilometres. On the other hand, 13.3 percent of households travel a distance between 11 to 40 kilometres to the nearest health facility while 4.6 percent are more than 40 kilometers away from the nearest health facility. Urban households travel shorter distances compare to those in rural areas.

Table 4.2.1 Households by distance to hospital/clinic, region and urban/rural areas

Region	Distance to hospital/clinic (km)									Number of households
	0-1	2-5	6-10	11-25	26-40	>40	Unknown	Not stated	Total	
	Percent of households									
Namibia	33.1	32.0	11.4	9.7	3.6	4.6	5.5	0.0	100	544 655
Urban	48.4	38.0	6.0	2.0	0.3	0.1	5.3	0.0	100	294 827
Rural	15.2	24.9	17.7	18.9	7.5	10.1	5.7	0.0	100	249 827
!Karas	49.9	31.0	4.4	2.6	2.5	9.3	0.3	0.0	100	23 567
Erongo	62.7	26.7	1.6	4.8	1.2	1.3	1.7	0.0	100	58 454
Hardap	52.3	24.1	3.2	8.8	5.1	6.5	0.1	0.0	100	20 901
Kavango East	33.7	35.2	8.2	1.5	3.3	1.6	16.5	0.0	100	25 301
Kavango West	20.2	20.5	21.7	20.9	5.2	1.7	9.6	0.2	100	14 518
Khomas	34.2	37.9	9.5	4.7	1.0	1.3	11.3	0.0	100	112 305
Kunene	29.0	15.3	5.8	19.9	6.0	19.3	4.6	0.0	100	21 468
Ohangwena	17.2	26.6	26.0	13.1	5.0	3.4	8.7	0.0	100	48 487
Omaheke	29.9	25.2	3.1	10.4	9.4	20.5	1.4	0.0	100	19 639
Omusati	16.7	38.3	16.3	20.9	3.7	2.7	1.5	0.0	100	53 090
Oshana	34.5	39.1	18.1	4.8	1.8	0.1	1.6	0.0	100	45 331
Oshikoto	12.5	36.6	15.5	15.5	6.3	5.2	8.4	0.0	100	41 411
Otjozondjupa	39.9	25.6	4.4	7.8	8.1	14.1	0.2	0.0	100	38 238
Zambezi	27.1	35.7	17.6	17.3	2.2	0.0	0.1	0.0	100	21 945

4.3   Distance to Banking Facilities

Table 4.3.1 shows that 19.8 percent of households in Namibia have access to banks within a distance of a kilometre, while 19.5 percent of the households travel more than 40 kilometres to the nearest bank. In urban areas, 34.8 percent of households have access to banks within a kilometre compared to rural areas where 40.7 percent of the households travel more than 40 kilometres to the nearest bank. At regional level, 47.6 percent of households in Erongo travel within a kilometre to the nearest banks while households in Kunene, Kavango West, Omaheke and Zambezi travels more than 40 km to a bank with 49.2, 46.5, 45.6 and 45.6 percent respectively.

Table 4.3.1 Households by distance to banking facilities, region and urban/rural areas

Region	Distance to reach a bank (km)								Number of households	
	0-1	2-5	6-10	11-25	26-40	>40	Unknown	Not stated	%	Total
	Percent of households									
Namibia	19.8	28.5	8.7	11.3	7.5	19.5	4.8	0.0	100	544 655
Urban	34.8	46.7	9.6	2.5	0.3	1.6	4.5	0.0	100	294 827
Rural	2.0	6.9	7.6	21.6	16.0	40.7	5.1	0.0	100	249 827
!Karas	32.3	38.2	4.6	1.4	1.3	21.9	0.3	0.0	100	23 567
Erongo	47.6	36.5	4.5	2.3	0.5	7.6	1.1	0.0	100	58 454
Hardap	26.1	37.3	1.9	4.7	1.9	26.6	1.6	0.0	100	20 901
Kavango East	8.8	23.4	12.0	3.7	7.9	27.1	17.1	0.0	100	25 301
Kavango West	3.3	2.5	2.5	21.8	22.5	46.5	0.6	0.2	100	14 518
Khomas	23.7	42.8	15.3	4.9	0.4	3.5	9.3	0.0	100	112 305
Kunene	21.6	14.2	0.8	3.1	5.5	49.2	5.7	0.0	100	21 468
Ohangwena	10.2	12.2	10.9	25.9	20.9	15.4	4.5	0.0	100	48 487
Omaheke	11.8	28.3	6.1	3.6	3.5	45.6	1.1	0.0	100	19 639
Omusati	6.3	9.6	11.2	33.7	16.9	21.8	0.3	0.0	100	53 090
Oshana	22.5	36.8	12.8	16.2	6.2	1.8	3.8	0.0	100	45 331
Oshikoto	3.9	20.2	4.2	18.3	15.8	27.0	10.6	0.0	100	41 411
Otjozondjupa	21.9	34.0	4.3	2.3	3.1	34.4	0.0	0.0	100	38 238
Zambezi	9.6	21.9	4.0	6.4	12.1	45.6	0.4	0.0	100	21 945

4.4 Distance to Public Transport

In Namibia, 65.8 percent of all household's access public transportation within a distance of a kilometre, of which the majority were found in urban areas (82.6 percent) compared to rural areas (45.9 percent). In addition, 17.2 percent of households were accessing public transportation at a distance of between 2 and 5 kilometres, with only 3.1 percent of the household's access public transportation at a distance of more than 40 kilometres. At regional level, Erongo and Zambezi regions have the highest proportions of households accessing public transportation at a distance of a kilometres or less with 89 and 87.9 percent. On the other hand, Hardap and Kunene regions have large proportions of households accessing public transportation at a distance of 40 kilometres or more with 31.3 percent and 11.1 percent.

Table 4.4.1 Households by distance to public transport, region and urban/rural areas

Region	Distance to public transport (km)									Number of households
	0-1	2-5	6-10	11-25	26-40	>40	Unknown	Not stated	Total	
	Percent of households									
Namibia	65.8	17.2	4.2	2.9	3.0	3.1	3.7	0.0	100	544 655
Urban	82.6	11.5	0.8	0.2	0.1	1.6	3.3	0.0	100	294 827
Rural	45.9	23.9	8.3	6.2	6.4	5.0	4.3	0.0	100	249 827
!Karas	74.1	11.9	3.1	1.3	4.1	4.5	1.0	0.0	100	23 567
Erongo	89.0	5.2	1.1	2.2	0.8	0.9	0.8	0.0	100	58 454
Hardap	48.2	11.5	1.5	2.8	4.4	31.3	0.2	0.0	100	20 901
Kavango East	74.5	9.3	3.1	0.2	0.4	0.5	12.0	0.0	100	25 301
Kavango West	68.9	12.1	4.3	4.0	3.2	1.2	6.0	0.2	100	14 518
Khomas	78.9	11.3	1.1	0.5	0.5	0.8	6.9	0.0	100	112 305
Kunene	48.7	13.4	3.2	5.3	12.3	11.1	5.9	0.0	100	21 468
Ohangwena	46.0	24.8	14.0	6.2	2.4	1.1	5.3	0.0	100	48 487
Omaheke	50.1	19.3	5.0	5.9	12.5	6.4	0.8	0.0	100	19 639
Omusati	45.3	40.4	5.9	5.0	1.4	1.0	1.0	0.0	100	53 090
Oshana	73.9	17.8	4.5	1.2	0.8	0.0	1.9	0.0	100	45 331
Oshikoto	44.4	31.6	8.6	4.5	3.7	1.5	5.7	0.0	100	41 411
Otjozondjupa	61.4	12.8	3.2	6.0	9.9	6.3	0.5	0.0	100	38 238
Zambezi	87.9	10.7	0.7	0.4	0.0	0.0	0.3	0.0	100	21 945

4.5   Distance to Primary School

As observed in Table 4.5.1, 53 percent of households in Namibia reported travelling within a kilometre to the nearest primary school, with 28.9 percent of households traveling between two to five kilometres to the nearest primary school. This result is further reflected across the urban/rural divide, in which urban areas has the highest percentage (66.7 percent) of households accessing primary school at a distance of a kilometre compared to rural areas (36.8 percent). It is further interesting to note that only 2.3 percent of household covers a distance of more than 40 kilometers and above to reach the nearest primary schools.

Furthermore, regions that have high proportion of households within a kilometre of the nearest primary school were Erongo, Hardap, Oshana, and !Karas with 72.2, 67.4, 65.9 and 63.9 percent.

Table 4.5.1 Households by distance to primary school, region and urban/rural areas

Region	Distance to primary school (km)									Number of households
	0-1	2-5	6-10	11-25	26-40	>40	Unknown	Not stated	Total	
	Percent of households									
Namibia	**53.0**	**28.9**	**4.8**	**2.8**	**3.8**	**2.3**	**4.5**	**0.0**	**100**	**544 655**
Urban	**66.7**	**25.6**	**2.3**	**0.6**	**0.6**	**0.2**	**4.2**	**0.0**	**100**	**294 827**
Rural	**36.8**	**32.8**	**7.7**	**5.4**	**7.6**	**4.7**	**5.0**	**0.0**	**100**	**249 827**
!Karas	63.9	19.5	4.3	1.7	4.0	6.5	0.1	0.0	100	23 567
Erongo	72.2	19.0	2.7	2.8	1.4	0.5	1.4	0.0	100	58 454
Hardap	67.4	9.3	3.2	6.4	8.0	5.6	0.0	0.0	100	20 901
Kavango East	44.7	30.9	6.7	1.6	1.0	1.4	13.7	0.0	100	25 301
Kavango West	59.0	24.9	3.0	0.6	1.7	1.1	9.5	0.2	100	14 518
Khomas	55.4	29.2	3.0	1.0	1.9	1.2	8.4	0.0	100	112 305
Kunene	44.9	13.0	8.1	9.0	14.1	5.9	5.0	0.0	100	21 468
Ohangwena	36.4	41.3	9.5	3.7	2.1	0.3	6.6	0.0	100	48 487
Omaheke	49.7	10.0	4.4	8.5	18.7	8.2	0.4	0.0	100	19 639
Omusati	37.7	50.4	6.8	2.1	1.5	0.2	1.3	0.0	100	53 090
Oshana	65.9	28.2	4.3	0.8	0.0	0.0	0.8	0.0	100	45 331
Oshikoto	33.8	44.3	5.7	2.8	2.8	0.8	9.8	0.0	100	41 411
Otjozondjupa	54.7	14.9	2.8	4.6	12.4	10.5	0.2	0.0	100	38 238
Zambezi	59.7	32.1	4.7	2.0	1.2	0.0	0.2	0.0	100	21 945

5.   Education

5.1   Literacy

The survey also collected information on education and literacy. Table 5.1.1 provides information on the levels of literacy. Literate people in this survey were defined as all people who could write and read in any language with understanding. This question was asked of all persons six years and above. However, information is presented only for the population age 15 years and above. It is worth noting that no tests were administered to determine the literacy level of people, therefore the information presented was based on answers given by household members during the interviews.

The result shown in Table 5.1.1 indicates that 87.4 percent of the population aged 15 years and above are literate. Furthermore, the table reveals that literacy rate is high in urban areas with 94 percent compared to rural areas with 81 percent with no big differences between female and male in both areas. Most regions have literacy rate above 80 percent except for Kunene, Omaheke and Kavango East with 62.8, 71.8 and 77.8 percent respectively.

Table 5.1.1 Population 15 years and above by sex, literacy, region and urban/rural areas.

Region	Female			Male			Both sexes			Population
	Literate	Not literate	Total	Literate	Not literate	Total	Literate	Not literate	Total	
Namibia	**87.1**	**12.9**	**100**	**87.8**	**12.2**	**100**	**87.4**	**12.6**	**100**	**1450 652**
Urban	**93.8**	**6.2**	**100**	**93.6**	**6.4**	**100**	**93.7**	**6.3**	**100**	**744 104**
Rural	**80.2**	**19.8**	**100**	**81.5**	**18.5**	**100**	**80.8**	**19.2**	**100**	**706 548**
Karas	95.1	4.9	100	95.3	4.7	100	95.2	4.8	100	58 306
Erongo	96.1	3.9	100	93.0	7.0	100	94.4	5.6	100	126 363
Hardap	91.4	8.6	100	89.0	11.0	100	90.1	9.9	100	57 336
Kavango East	73.6	26.4	100	83.2	16.8	100	77.8	22.2	100	85 686
Kavango West	77.9	22.1	100	82.8	17.2	100	80.1	19.9	100	47 495
Khomas	96.0	4.0	100	94.9	5.1	100	95.5	4.5	100	286 288
Kunene	60.8	39.2	100	64.8	35.2	100	62.8	37.2	100	55 202
Ohangwena	85.3	14.7	100	87.4	12.6	100	86.2	13.8	100	143 447
Omaheke	72.3	27.7	100	71.4	28.6	100	71.8	28.2	100	44 862
Omusati	85.7	14.3	100	87.0	13.0	100	86.3	13.7	100	150 407
Oshana	92.6	7.4	100	90.8	9.2	100	91.8	8.2	100	123 174
Oshikoto	88.1	11.9	100	84.3	15.7	100	86.4	13.6	100	117 460
Otjozondjupa	80.5	19.5	100	82.5	17.5	100	81.6	18.4	100	95 278
Zambezi	82.7	17.3	100	89.3	10.7	100	85.9	14.1	100	59 348

Table 5.1.2 indicates literacy levels for the youth aged 15 to 24 years. Youth literacy rate is 94.4 percent, which has not changed from 94.4 percent reported in 2009/2010. The table also reveals that at national level, there is no significant difference between the levels of literacy for females (95.4 percent) and males (93.2 percent). Furthermore, youth in urban areas are more literate with 97.2 percent compared to those in rural areas with 92.3 percent. All regions have recorded high literacy rates of over 90 percent except for Otjozondjupa, Omaheke and Kunene which reported literate rates of 84.9, 84.5 and 74.1 percent.

Table 5.1.2 Population aged 15-24 years by sex, literacy and region and urban/rural areas

Region	Female			Male			Both sexes			Population
	Literate	Not literate	Total	Literate	Not literate	Total	Literate	Not literate	Total	
Namibia	**95.4**	**4.6**	**100**	**93.2**	**6.8**	**100**	**94.4**	**5.6**	**100**	**474 948**
Urban	**97.4**	**2.6**	**100**	**96.8**	**3.2**	**100**	**97.2**	**2.8**	**100**	**202 578**
Rural	**93.8**	**6.2**	**100**	**90.8**	**9.2**	**100**	**92.3**	**7.7**	**100**	**272 370**
!Karas	98.4	1.6	100	99.9	0.1	100	99.1	0.9	100	14 356
Erongo	96.1	3.9	100	97.8	2.2	100	96.9	3.1	100	26 827
Hardap	98.3	1.7	100	94.2	5.8	100	96.2	3.8	100	15 500
Kavango East	93.0	7.0	100	91.8	8.2	100	92.5	7.5	100	34 302
Kavango West	95.6	4.4	100	93.3	6.7	100	94.4	5.5	100	20 026
Khomas	98.8	1.2	100	97.9	2.1	100	98.4	1.6	100	73 121
Kunene	78.3	21.7	100	70.1	29.9	100	74.1	25.9	100	17 406
Ohangwena	96.0	4.0	100	95.7	4.3	100	95.8	4.2	100	64 102
Omaheke	88.6	11.4	100	80.9	19.1	100	84.5	15.5	100	12 982
Omusati	97.3	2.7	100	94.7	5.3	100	96.0	4.0	100	61 617
Oshana	98.1	1.9	100	94.9	5.1	100	96.6	3.4	100	42 305
Oshikoto	97.8	2.2	100	93.2	6.8	100	95.4	4.6	100	44 568
Otjozondjupa	85.6	14.4	100	84.3	15.7	100	84.9	15.1	100	26 426
Zambezi	94.4	5.6	100	93.8	6.2	100	94.1	5.9	100	21 410

5.2 Mode of Transport to School

On modes of transport used to travel to school, an estimated 83.4 percent of the school going population indicated that they walk to school, followed by 8 percent that travel by taxi (Table 5.1.3). The rest of the modes of transport are all used by less than 5 percent of the school going population.

Table 5.1.3 Mode of traveling to school

Mode of Transport	Population	
	Number	%
Walk	565 350	83.4
Bicycle	812	0.1
Motorbike	241	0.0
Bakkie	17 907	2.6
Sedan	29 334	4.3
Taxi	54 535	8.0
Minibus/ Bus	5 865	0.9
Riding horse/ donkey/ mule	45	0.0
Animal drawn vehicle	45	0.0
Other (Specify)	3 833	0.6
Total	**677 967**	**100.0**

5.3   Age at Enrolment in Primary School

Table 5.1.4 presents age at first enrolment in primary school by regions. The result shows that most of the children started school at an early age of 6 or 7. The highest enrolment rate was at the age of 7 with 52.8 percent followed by those aged 6 with 37.4 percent. Zambezi region reported the highest percentages of those who enrolled at the age of 6 with 59.3 percent, followed by Khomas (43.3 percent) while the region with the lowest enrolment is Kunene with 21 percent. Those who enrolled at age 7 years were mostly from Otjozondjupa with 65.7 percent while least were from Zambezi region with 31.8 percent.

Table 5.1.4 Age at first enrolment in primary by region

Region	Age								
	4	**5**	**6**	**7**	**8**	**9**	**10**	**11-20**	**Total**
Namibia	0.1	1.5	37.4	52.8	5.1	1.5	0.8	0.8	100.0
!Karas	0.0	1.0	38.3	58.6	1.8	0.0	0.2	0.0	100.0
Erongo	0.5	0.4	36.3	58.9	3.2	0.2	0.6	0.0	100.0
Hardap	0.3	2.7	39.6	52.4	3.6	1.1	0.2	0.1	100.0
Kavango	0.2	1.2	39.5	43.1	8.2	3.1	2.5	2.2	100.0
Kavango	0.0	1.5	30.4	53.8	8.1	2.9	2.2	1.1	100.0
Khomas	0.2	3.2	43.3	49.0	2.8	0.8	0.4	0.3	100.0
Kunene	0.0	1.0	20.8	53.1	10.1	6.1	3.4	5.4	100.0
Ohangwena	0.0	0.5	37.5	55.0	4.4	1.1	0.7	0.7	100.0
Omaheke	0.0	1.3	26.3	55.5	10.9	3.9	1.1	1.0	100.0
Omusati	0.0	1.5	31.0	59.7	5.6	0.9	0.5	0.8	100.0
Oshana	0.0	0.7	39.9	55.4	2.4	1.2	0.0	0.3	100.0
Oshikoto	0.1	1.7	38.8	48.6	8.4	1.3	0.7	0.4	100.0
Otjozondjupa	0.0	0.6	25.8	65.7	4.2	2.0	0.9	0.9	100.0
Zambezi	0.1	2.6	59.3	31.8	4.3	1.0	0.4	0.5	100.0

5.4   Cost of Education

It is widely accepted that expenditure on education is one of the important factors for sustainable development. In Namibia, expenditure on education is incurred in two ways: individual and institutional. Individual expenditure refers to the expenditure made by the students or their parents, also referred to as household expenditure on education. On the other hand, institutional expenditure is referred to as government or non-government expenditure on education. In Namibia, household expenditure on education is quite sizeable, even households from lower income groups spend considerable amounts of money on acquiring education.

Table 5.1.6 shows that the cost of education in Namibia is mostly on tuition fees (N$1 136.40) compared to other school expense categories. Households in Khomas region, which is the most populated region, spent more money on education compared to other regions especially on tuition fees and transport with N$3333.0 and N$892.4 respectively. Oshana and Erongo regions also spent large amounts of money on tuition fees, compared to other regions with N$1 185.2 and N$ 1 135.8 respectively.

Table 5.1.6 Cost of education by expense category and region (average N$ per year)

Region	Tuition	Private (academic) lessons	School uniform	School footwear	Sports uniforms	Accommodations	Transport	School or university books / materials/ school bags	Other expenses	Total N$
Namibia	**1 136.4**	**87.9**	**104.1**	**52.7**	**10.5**	**60.9**	**278.0**	**132.5**	**34.8**	**1 897.9**
!Karas	1 135.8	11.2	128.3	56.3	19.2	12.5	62.0	83.8	40.1	1 549.1
Erongo	600.6	40.8	109.2	47.7	14.7	29.1	190.6	80.0	20.4	1 133.2
Hardap	565.9	21.6	122.2	59.8	24.2	40.9	85.1	149.8	143.9	1 213.5
Kavango East	300.7	15.2	129.3	73.7	4.5	23.4	25.7	94.3	23.5	690.3
Kavango West	230.3	70.8	156.1	72.3	2.6	9.4	22.5	169.9	29.4	763.4
Khomas	3 333.0	271.1	121.6	50.8	19.9	105.2	892.4	312.4	81.4	5 187.8
Kunene	360.4	10.3	61.7	37.7	4.9	40.5	42.3	30.8	12.2	600.8
Ohangwena	127.0	11.5	93.3	59.9	1.6	10.9	41.3	43.9	6.1	395.6
Omaheke	180.7	2.7	180.7	72.2	7.7	24.1	76.8	59.0	15.4	619.4
Omusati	234.8	74.0	88.2	56.5	1.0	59.7	42.0	56.9	7.8	621.0
Oshana	1 185.2	33.2	97.8	57.0	5.1	146.7	159.1	147.6	19.9	1 851.8
Oshikoto	285.9	69.9	68.1	44.2	2.9	95.5	86.5	47.6	3.9	704.6
Otjozondjupa	359.9	24.4	55.2	35.2	8.4	6.7	121.5	67.6	9.2	688.1
Zambezi	318.9	6.6	87.4	57.5	2.3	48.0	74.7	79.9	8.0	683.2

Households that received outside financial assistance for educational purposes accounts for 8.3 percent (Figure 5.2). The majority did not receive any assistance and depends mostly on their own or other sources to finance their education.
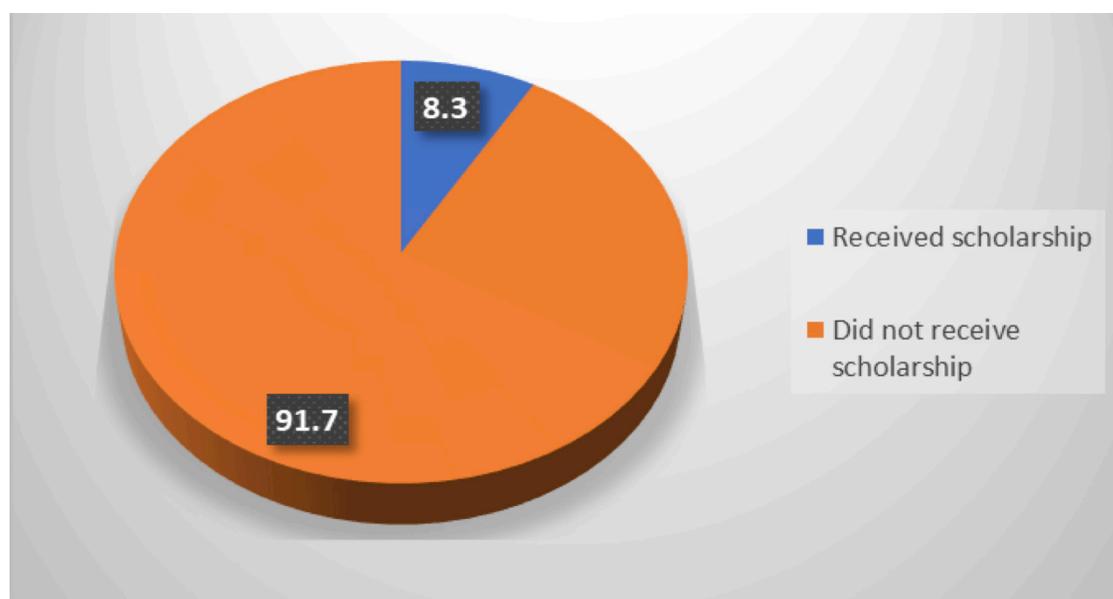
Figure 5.1.6 Households receiving outside financial assistance for education

6.   Health

Health is one of the key indicators for quality of life. The World Health Organization (WHO) defined health in its broader sense in its 1948 constitution as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. This definition has been subjected to controversy, in particular as lacking operational value, the ambiguity in developing cohesive health strategies, and because of the problem created by use of the word "complete". Other definitions have been proposed, among them a recent definition that correlates health and personal satisfaction. Classification systems such as the WHO Family of International Classifications, including the International Classification of Functioning, Disability and Health (ICF) and the International Classification of Diseases (ICD), are commonly used to define and measure the components of health.

The Health section is a new addition to the survey. Therefore, there will be no comparison with previous survey results. Questions were asked about certain health conditions of individual members of the households. A selected number of most reported chronic diseases are presented in the report. Where more than one type of disease was reported, only the main or most severe one is presented.

6.1   Type of Chronic Illness

Table 6.1.1 presents the types of chronic illness in the population. At national level high blood pressure was the most prevalent disease in the population compared to other diseases with 6.1 percent of the population indicated having this condition. Other chronic illnesses worth mentioning that affect the population were respiratory or asthma, joints inflammation, diabetes and heart or cardiac conditions. Table 6.1.1 further shows that high blood pressure was slightly high in urban than rural areas. Similarly, asthma was the second most common respiratory illness affecting 1 percent of the population.

At regional level, Omaheke recorded the highest percent of population with high blood pressure with 9.1 percent, followed by Hardap and !Karas with 8.1 and 7.9 percent. On the other hand, Kavango East reported the least proportion of the population with a chronic illness of high blood pressure.

Table 6.1.1 Types of chronic illness in the population by region and urban/rural areas

Region	Diabetes	High blood pressure	Joint inflammation	Cancer	Cardiac / Heart	Epilepsy	Respiratory disease (asthma, etc.)	Stomach ulcer	Chronic kidney disease	Anaemia	Chronic mental/ psychological illness	Other	Does not have a chronic illness	Not stated	Total	Population
Namibia	0.8	6.1	0.9	0.2	0.8	0.5	1.0	0.3	0.1	0.1	0.4	0.6	88.2	0.0	100	2 280 716
Urban	1.3	6.4	0.6	0.2	0.7	0.4	1.2	0.2	0.1	0.2	0.2	0.7	87.6	0.1	100	1 068 625
Rural	0.4	5.8	1.1	0.1	0.8	0.7	0.7	0.3	0.1	0.1	0.6	0.5	88.6	0.0	100	1 212 091
!Karas	1.8	7.9	0.5	0.1	0.4	0.8	0.9	0.3	0.0	0.1	0.2	0.4	86.5	0.0	100	84 077
Erongo	1.6	7.7	0.5	0.2	0.4	0.3	1.9	0.1	0.1	0.1	0.2	0.5	86.2	0.0	100	175 853
Hardap	1.9	8.1	1.0	0.4	0.7	0.7	1.7	0.3	0.2	0.0	0.2	1.1	83.5	0.0	100	85 629
Kavango East	0.2	4.1	0.6	0.1	1.9	1.1	0.7	0.5	0.1	0.2	0.7	0.4	89.4	0.1	100	146 151
Kavango West	0.3	5.2	1.0	0.1	1.0	0.6	1.1	0.5	0.4	0.3	1.3	0.6	87.5	0.1	100	88 705
Khomas	1.0	6.4	0.6	0.3	0.8	0.3	1.3	0.3	0.2	0.2	0.1	1.0	87.5	0.1	100	400 191
Kunene	0.8	5.2	1.1	0.2	0.8	0.8	0.8	0.3	0.1	0.2	0.6	0.9	88.2	0.0	100	95 610
Ohangwena	0.4	4.7	1.1	0.1	0.5	0.4	0.3	0.3	0.0	0.2	0.7	0.1	91.3	0.0	100	253 348
Omaheke	1.5	9.1	0.7	0.1	0.7	0.5	2.2	0.1	0.0	0.0	0.1	0.5	84.3	0.2	100	74 040
Omusati	0.4	5.6	0.8	0.2	0.5	0.9	0.6	0.3	0.0	0.1	0.6	0.7	89.3	0.0	100	248 490
Oshana	0.5	5.2	1.1	0.2	0.5	0.4	0.4	0.3	0.1	0.0	0.6	0.6	90.1	0.1	100	186 634
Oshikoto	0.4	6.1	1.5	0.1	0.7	0.4	0.4	0.2	0.1	0.2	0.5	0.4	88.9	0.0	100	192 469
Otjozondjupa	1.2	7.4	1.2	0.2	1.0	0.5	1.1	0.1	0.3	0.1	0.4	0.4	85.9	0.0	100	152 343
Zambezi	0.9	5.0	1.0	0.2	0.8	0.7	1.1	0.2	0.4	0.2	0.3	0.2	88.9	0.0	100	97 176

Table 6.1.2 presents the types of chronic illnesses by age groups. The result shows that most illnesses are not limited to certain age groups but do affect all ages in varying degrees. It is clear however that older age groups are more affected than young groups. As observed in table 6.1.2, high blood pressure or hypertension is the most common illness that affects just over 6 percent of the Namibian population. Looking at the result, one can safely say that chronic illnesses are age related, whereby young ages are less affected compared to older ages, though not exclusively.

Table 6.1.2 Types of chronic Illness by age groups

Age groups	Diabetes	High blood pressure	Joint inflammation	Cancer	Cardiac / Heart	Epilepsy	Respiratory disease (asthma, etc.)	Stomach ulcer	Chronic kidney disease	Anaemia	Chronic mental/ psychological illness	Other	Does not have a chronic illness	Not stated	Total	Population
							Percentage									
<1	0.2	0.0	0.1	0.0	0.5	0.0	0.6	0.1	0.0	0.1	0.0	0.0	98.3	0.0	100	66 588
1-10	0.1	0.0	0.1	0.0	0.2	0.4	0.6	0.2	0.0	0.1	0.1	0.3	97.9	0.0	100	575 655
11-20	0.1	0.3	0.1	0.0	0.6	0.6	0.9	0.3	0.1	0.1	0.5	0.5	95.9	0.0	100	475 957
21-30	0.2	2.1	0.5	0.1	0.9	0.7	0.6	0.2	0.2	0.2	0.5	0.5	93.3	0.1	100	422 286
31-40	0.8	6.5	0.9	0.3	0.9	0.6	1.1	0.4	0.2	0.1	0.6	0.8	86.9	0.0	100	290 980
41-50	1.8	14.6	1.6	0.3	1.3	0.8	1.4	0.2	0.1	0.4	0.9	1.0	75.6	0.1	100	192 948
51-60	4.9	26.7	3.3	0.5	1.2	0.4	2.1	0.3	0.2	0.4	0.8	1.3	57.7	0.1	100	119 894
61-70	4.1	34.3	3.8	0.6	1.4	0.6	2.7	0.4	0.5	0.0	0.8	0.7	50.1	0.0	100	67 491
70+	4.1	37.3	6.8	1.6	2.5	0.7	1.1	0.6	0.5	0.2	0.6	0.6	43.3	0.0	100	68 917
Total	**0.8**	**6.1**	**0.9**	**0.2**	**0.8**	**0.5**	**1.0**	**0.3**	**0.1**	**0.1**	**0.4**	**0.6**	**88.2**	**0.0**	**100**	**2 280 716**

6.2   Disability

Types of disabilities are presented in table 6.1.3 whereby the result shows that most of the population with disability in Namibia (8.6 percent) reported some difficulty seeing as compared to other disabilities. A similar distribution is observed across the urban/rural set-up, with rural areas accounting for a slightly higher, 8.8 percent of the population compared to 8.4 percent of the population in urban areas.

Table 6.1.3 Types of disabilities by urban/rural areas

Area and Population		Disability, %					
		Seeing	Hearing	Walking	Remembering/ concentrating	Self-care	Communicating
Namibia **2 280 716**	No difficulty	91.5	96.1	95.4	96.7	98.4	98.8
	Some difficulty	7.3	3.3	3.4	2.6	1.0	0.8
	A lot of difficulty	1.1	0.5	0.9	0.5	0.3	0.3
	Cannot do it	0.2	0.1	0.3	0.2	0.3	0.2
Urban **1 068 625**	No difficulty	91.6	97.1	96.7	96.7	98.8	99.0
	Some difficulty	7.2	2.4	2.3	2.6	0.7	0.6
	A lot of difficulty	1.1	0.4	0.8	0.5	0.2	0.2
	Cannot do it	0.1	0.1	0.3	0.2	0.4	0.2
Rural **1 212 091**	No difficulty	91.4	95.2	94.4	96.7	98.1	98.6
	Some difficulty	7.4	4.1	4.4	2.6	1.3	0.9
	A lot of difficulty	1.1	0.6	1.1	0.5	0.3	0.3
	Cannot do it	0.2	0.1	0.2	0.2	0.3	0.2
	Cannot do it	0.1	0.0	0.3	0.2	0.2	0.2

7. Main Source of Income

One of the main objectives of this survey was to collect information on household's income and determine the distribution of economic resources amongst the Namibian population. Households were asked to state their sources of income, indicating the main source, from a list of possible sources including , but not limited to, salaries and/or wages, subsistence farming, commercial farming, business activities, pensions from employment and/or annuity fund, cash remittances, rental income, interest from savings/investments, state old-age pension, war veterans/ex-combatants subvention, disability grants for adults (over 16 years), state child maintenance grants, state foster care grant, state special maintenance grants (disabled under 16 years), alimony and similar allowances, drought relief, and in kind receipts.

Table 7.1.1 shows that 53.6 percent of the households in Namibia reported salaries and wages as their main source of income, followed by pensions (pensions from employment and/or annuity fund and state old-age pension) with 11 percent and subsistence farming with 10.6 percent.

In urban areas, 72 percent of the households reported salaries and wages as their main source of income, followed by business income with 11.3 percent, compared to rural areas, where 31.8 percent of the households reported salaries and wages as their main source of income, followed by subsistence farming with 22.4 percent.

At the regional level, salaries and wages dominates the main sources of income in most regions, with the exception of Omusati and Ohangwena where large proportions of households reported subsistence farming as the main source of income, with 38.5 and 22.7percent.

Table 7.1.1 Households by main source of income, region and urban/rural areas

Region	Main source of income, %									Number of House holds
	Salaries/ wages	Pension	Subsistence farming	Business income	Remittances/ Grants	Drought/ In-kind receipts	Commercial farming	Others	Total	
Namibia	**53.6**	**11.0**	**10.6**	**9.1**	**9.6**	**2.7**	**0.3**	**3.0**	**100**	**544 655**
Urban	**72.0**	**4.0**	**0.7**	**11.3**	**7.3**	**1.1**	**0.1**	**3.5**	**100**	**294 827**
Rural	**31.8**	**19.3**	**22.4**	**6.4**	**12.4**	**4.6**	**0.6**	**2.4**	**100**	**249 827**
!Karas	79.0	8.9	1.0	2.0	4.9	0.7	1.9	1.6	100	23 567
Erongo	80.0	5.2	0.4	5.5	5.0	0.9	0.1	2.8	100	58 454
Hardap	70.5	8.3	1.8	2.7	11.2	0.8	1.1	3.5	100	20 901
Kavango East	40.7	13.8	12.2	10.8	9.3	5.1	0.0	8.1	100	25 301
Kavango West	29.9	18.2	19.2	11.5	13.6	3.9	0.0	3.7	100	14 518
Khomas	73.2	1.5	0.3	12.8	6.5	0.7	0.2	4.8	100	112 305
Kunene	44.0	11.6	18.8	6.5	9.0	7.4	0.3	2.4	100	21 468
Ohangwena	21.6	20.6	22.7	10.3	18.6	4.4	0.2	1.6	100	48 487
Omaheke	58.7	12.8	6.7	7.7	6.9	3.9	1.0	2.3	100	19 639
Omusati	24.7	18.1	38.5	3.6	8.0	4.5	0.6	2.1	100	53 090
Oshana	41.5	14.7	7.2	16.1	16.8	1.1	0.0	2.6	100	45 331
Oshikoto	35.3	18.8	21.9	6.6	12.6	3.8	0.0	1.0	100	41 411
Otjozondjupa	69.2	7.9	3.3	6.9	5.8	4.2	0.6	2.1	100	38 238
Zambezi	46.8	14.5	2.6	17.6	12.8	3.2	0.0	2.5	100	21 945

The majority of male headed households, 61.8 percent, reported salaries and wages as their main source of income compared to 43 percent of female headed households. A further 14.2 percent of female-headed households also reported pensions as their main source of income, followed by subsistence farming, 12.7 percent. Similarly, in urban areas, 77.9 percent of male-headed households reported salaries and wages as their main source of income. On the other hand, in rural areas, 25.4 percent of female-headed household reported subsistence farming as their main source of income.

Table 7.1.2 Households by main source of income, urban/rural areas and sex of head of households

Area and Sex of head	Main source of income, %								Total	
	Salaries & wages	Pension	Subsistence farming	Business income	Remittances/ grants	Drought /In-kind receipts	Commercial farming	Others	%	Number of House holds
Namibia										
Female	**43.0**	**14.2**	**12.7**	**9.3**	**14.4**	**2.9**	**0.1**	**3.3**	**100.0**	**239 816**
Male	**61.8**	**8.5**	**9.0**	**8.9**	**5.9**	**2.6**	**0.5**	**2.8**	**100.0**	**304 839**
Both Sexes	**53.6**	**11.0**	**10.6**	**9.1**	**9.6**	**2.7**	**0.3**	**3.0**	**100.0**	**544 655**
Urban										
Female	63.7	5.3	0.8	12.3	11.8	1.6	0.0	4.4	100.0	123 641
Male	77.9	3.0	0.5	10.6	4.0	0.8	0.1	2.9	100.0	171 186
Both Sexes	72.0	4.0	0.7	11.3	7.3	1.1	0.1	3.5	100.0	294 827
Rural										
Female	21.0	23.7	25.4	6.1	17.0	4.3	0.2	2.2	100.0	116 175
Male	41.2	15.5	19.9	6.7	8.3	4.8	0.9	2.7	100.0	133 652
Both Sexes	31.8	19.3	22.4	6.4	12.4	4.6	0.6	2.4	100.0	249 827

Results of the household's main source of income by main language presented in Table 7.1.3 shows a higher proportion of households where English, Afrikaans and Nama/Damara are the main languages spoken reported salaries and wages as their main source of income, with 78.9, 71.8 and 67.7 percent respectively. Households where Oshiwambo and Otjiherero are the main language spoken reported subsistence farming as their main source of income with 15.4 and 13.1 percent respectively.

Table 7.1.3 Households by main source of income and main language spoken in the household

Main language	Main source of income, %								Total	
	Salaries & wages	Pension	Subsistence farming	Business income	Remittances/ grants	Drought /In-kind receipts	Commercial farming	Others	%	Number of House holds
Khoisan	48.1	15.7	1.3	4.1	7.1	22.1	0.0	1.5	100	6 115
Zambezi languages	54.3	12.3	2.1	15.2	11.8	2.3	0.0	2.1	100	23 414
Otjiherero	54.9	9.5	13.1	6.8	8.3	3.7	0.2	3.3	100	49 546
Rukavango	49.0	12.3	11.8	9.2	8.6	3.9	0.0	5.2	100	50 307
Nama/Damara	67.7	10.4	2.0	4.0	10.0	2.8	0.3	2.9	100	63 208
Oshiwambo	46.8	12.4	15.4	10.1	10.6	2.4	0.2	2.1	100	280 225
Setswana	53.3	10.5	5.7	9.9	13.6	6.9	0.0	0.0	100	1 311
Afrikaans	71.8	7.2	0.3	7.7	5.0	0.3	1.7	6.1	100	40 334
German	48.1	11.1	0.0	16.2	5.4	0.0	1.9	17.3	100	2 099

| Main language | Main source of income, % | | | | | | | | Total | |
	Salaries & wages	Pension	Subsistence farming	Business income	Remittances/ grants	Drought /In-kind receipts	Commercial farming	Others	%	Number of House holds
English	78.9	1.4	0.0	8.6	3.7	0.0	1.1	6.3	100	7 815
Other European	40.0	2.3	0.0	13.4	42.8	1.5	0.0	0.0	100	3 054
Other African	69.4	3.5	1.0	17.1	2.6	1.8	1.9	2.7	100	6 032
Others	71.0	3.6	3.4	10.4	6.3	0.6	1.4	3.4	100	11 194
Total	**53.6**	**11.0**	**10.6**	**9.1**	**9.6**	**2.7**	**0.3**	**3.0**	**100.0**	**544 655**

The result on household's main source of income by percentile group after adjusting for the per capita income in Table 7.1.4 shows that wages and salaries was the main source of income reported across the percentile groups. On the other hand, 22.4 percent of the households in the 1-25 percentile reported pension while 17.7 percent in the 26-50 percentile reported subsistence farming as their main sources of income. Similar results are further reflected across the deciles grouping.

Table 7.1.4 Households by main source of income and percentile group after adjusted per capita income

| Percentile group/deciles | Main source of income, % | | | | | | | | Total | |
	Salaries & wages	Pension	Subsistence farming	Business income	Remittances/ grants	Drought /In-kind receipts	Commercial farming	Others	%	Number
Percentiles										
1-25	28.5	22.4	16.9	9.2	12.7	6.7	0.2	3.3	100	87 593
26-50	41.0	16.1	17.7	7.9	12.1	3.0	0.1	2.1	100	112 869
51-75	54.8	9.9	10.8	9.5	9.7	2.6	0.0	2.6	100	143 590
76-90	70.6	4.8	4.8	8.4	7.6	1.3	0.1	2.5	100	110 129
91-95	76.2	2.3	3.4	8.1	5.4	0.5	0.8	3.2	100	43 761
96-98	70.1	4.5	1.6	11.8	7.8	0.0	1.4	2.9	100	26 640
99-100	59.7	3.0	1.9	14.7	4.1	0.8	2.9	12.8	100	20 074
Total	**53.6**	**11.0**	**10.6**	**9.1**	**9.6**	**2.7**	**0.3**	**3.0**	**100**	**544 655**
Deciles										
1	26.5	24.2	13.9	8.6	11.2	10.8	0.3	4.4	100	31 989
2	30.1	21.1	18.1	8.8	14.2	5.3	0.0	2.4	100	35 778
3	31.4	22.0	20.4	8.6	11.4	3.0	0.3	3.0	100	40 259
4	39.2	15.4	17.4	8.9	13.4	3.5	0.3	1.9	100	43 191
5	45.5	14.2	16.6	7.7	11.7	2.4	0.0	1.8	100	49 244
6	48.2	12.8	12.3	9.4	11.2	2.9	0.0	3.2	100	53 298
7	57.4	8.3	10.0	10.8	9.1	2.5	0.0	1.9	100	57 720
8	62.6	6.8	7.6	9.2	8.3	2.2	0.0	3.2	100	67 332
9	73.5	4.2	4.5	7.2	7.3	0.9	0.2	2.1	100	75 369
10	70.8	3.1	2.6	10.7	5.8	0.4	1.4	5.3	100	90 475

Table 7.5 shows that 31.9 percent of households with orphans reported salaries and wages as their main source of income, pension was reported by 21.2 percent while subsistence farming was reported by 17.9 percent of the households with orphans. At regional level, most of the households In Omusati region, 48.7 percent of households with orphans reported subsistence farming as the main source of income, followed by Kunene region with 27.2 per cent.

Table 7.5 Households with orphans by main source of income, region and urban/rural areas

| Region | Main source of income, % | | | | | | | | Total | |
	Salaries & wages	Pension	Subsistence farming	Business income	Remittances/ grants	Drought/ In-kind receipts	Commercial farming	Others	%	Number of House holds
Namibia	**31.9**	**21.2**	**17.9**	**8.2**	**15.2**	**2.5**	**0.1**	**2.9**	**100.0**	**86 596**
!Karas	70.5	20.0	0.0	0.0	7.5	0.0	2.0	0.0	100.0	2 255
Erongo	71.9	6.5	0.0	12.0	5.7	0.0	0.0	3.9	100.0	4 096
Hardap	61.6	11.7	0.7	1.8	19.7	0.0	0.0	4.5	100.0	3 032
Kavango East	27.0	16.0	18.1	7.7	17.6	5.7	0.0	8.0	100.0	6 846
Kavango West	25.2	20.1	18.2	13.7	15.1	2.7	0.0	4.9	100.0	4 210
Khomas	68.5	1.9	2.3	13.7	8.3	1.2	0.0	4.2	100.0	9 159
Kunene	25.2	15.4	27.2	9.3	20.7	2.2	0.0	0.0	100.0	3 586
Ohangwena	12.1	31.9	21.5	6.7	24.7	2.0	0.4	0.7	100.0	13 752
Omaheke	54.7	20.2	6.0	11.7	4.5	2.0	0.0	1.0	100.0	2 369
Omusati	9.2	28.1	48.7	1.2	9.4	3.5	0.0	0.0	100.0	11 753
Oshana	22.6	26.8	10.2	12.4	22.0	1.2	0.0	4.8	100.0	7 212
Oshikoto	17.8	30.3	25.3	6.6	15.7	2.3	0.0	2.0	100.0	9 945
Otjozondjupa	58.3	10.3	1.0	10.8	13.0	3.7	0.0	2.9	100.0	4 762
Zambezi	26.3	28.6	4.4	13.8	12.9	7.2	0.0	6.8	100.0	3 621

8.   Household Indebtedness

Household debt can be defined in several ways, based on what types of debt are included. According to the 1993 System of National Accounts, household debt is defined as all liabilities that require payment or payments of interest or principal by household to the creditor at a date or dates in the future. Consequently, all debt instruments are liabilities, but some liabilities such as shares, equity and financial derivatives are not considered as debt.

For this analysis, common household debt types include bonds, hire purchases on vehicles, hire purchases on household furniture and appliances, hire purchases from retail outlets, bank loans, overdraft and credit card; cash loans from friends and relatives in and outside Namibia, outstanding fines, and others loans from other sources.

Respondents were asked if they had any outstanding debts and Table 8.1.1 shows that 23.0 percent of households (125,425) owed outstanding balances in one form of debt or another. There were more reported households with debts in urban areas with 29.9 percent than in rural areas with 14.9 percent. Regions with more households with debts include Kavango West with 41.8 percent followed by Hardap, Otjozondjupa and !Karas with 41.5 percent, 34.0 percent and 33.3 percent respectively.

Table 8.1.1 Households by debt/outstanding loans, region and urban/rural areas

Region	Households with outstanding debt/loan		Total number of Households
	Number	%	
Namibia	**125 425**	**23.0**	**544 655**
Urban	88 136	29.9	294 827
Rural	37 289	14.9	249 827
!Karas	7 855	33.3	23 567
Erongo	15 486	26.5	58 454
Hardap	8 682	41.5	20 901
Kavango East	6 785	26.8	25 301
Kavango West	6,066	41.8	14 518
Khomas	35 975	32.0	112 305
Kunene	6 743	31.4	21 468
Ohangwena	4 227	8.7	48 487
Omaheke	3 690	18.8	19 639
Omusati	1 356	2.6	53 090
Oshana	5 465	12.1	45 331
Oshikoto	5 176	12.5	41 411
Otjozondjupa	13 015	34.0	38 238
Zambezi	4 905	22.4	21 945

8.1   Types of Debt

Figure 8.1.1 shows the most common types of debt owed by households. Cash loans from sources in Namibia was the most prevalent debt owed by 28.7 percent of households (35,975), followed by car loan debts owed by 12.3 percent of households and furniture & appliances owed by 6.9 percent of the households.
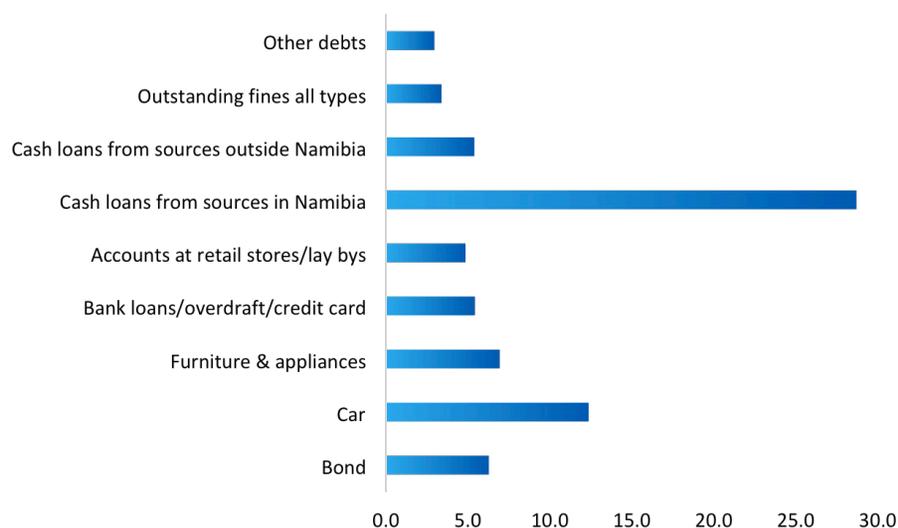
Figure 8.1.1 Distribution of indebted households by type of debt

Figure 8.1.2 presents the contribution of household debts to the total household's debts in Namibia by types of debt. It is evident from the figure that cash loan debts from sources in Namibia contributed 6.6 percent of the total indebted households (125, 425), followed by car loan debts with 2.8 percent of households and furniture & appliances with 1.6 percent of all indebted households.
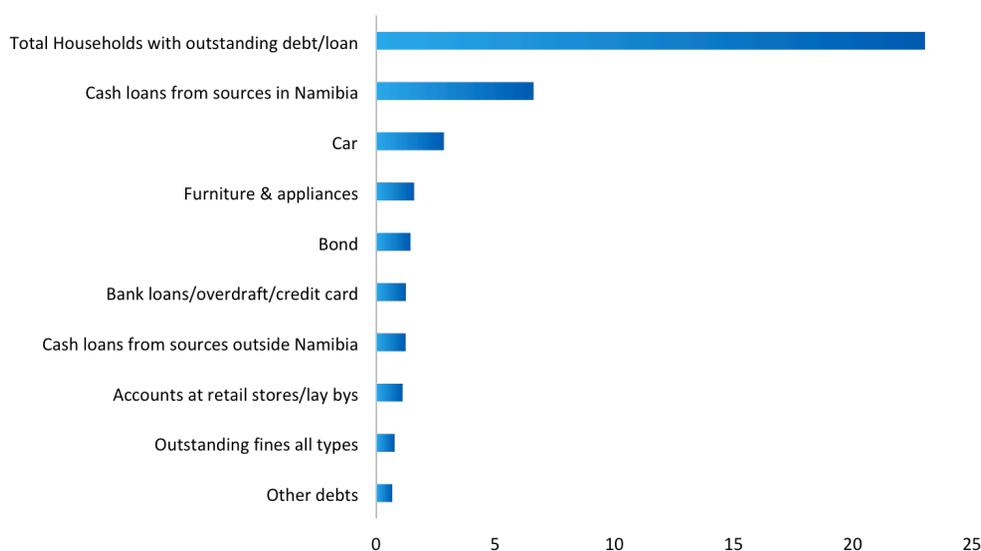
Figure 8.1.2 Component (%) of household debt

9. Ownership of and access to assets

This chapter presents survey results related to households' ownership of and access to assets. The results on ownership of and access to assets revealed disparities between urban and rural areas, regions, sex of the head of households, levels of household income, and educational attainment of the head of the household.

9.1 Ownership of and Access to Selected Assets

Table 9.1.1 shows ownership and access to selected items such as motor vehicles, bicycle, refrigerators, freezers, sewing/ knitting machines, radio, telephone (landline), TV, cell phone, donkey/ox cart, plough and tractor, among others. It can be observed that at national level, 93.3 percent of the households reported owning a cell phone, 30.9 percent reported having access to a motor vehicle and 86 percent did not have access to a telephone (landline). Cell phone is common in both urban and rural areas where they are owned by 97.2 and 88.9 percent of the households. Access to radio recorded only 25.9 and 21.1 percent in urban and rural areas respectively.

Furthermore, households in urban areas reported a higher share of TV set ownership with 63.8 percent compared to only 17.4 percent of households in rural areas. It is worth noting that 31.4 percent of households in rural areas owned a plough and 35.1 percent reported having access to a motor vehicle.

The regions of Ohangwena and Oshana reported the highest proportions of households owning a radio, 63.9 percent and 61.1 percent, while Erongo, !Karas and Hardap had the highest proportions of households owning a TV with 70.4, 67.5 and 63.7 percent respectively. About 82 percent of households in Omusati and 68.0 percent in Oshikoto region had no access to a TV.

Table 9.1.1 Households by ownership of/access to selected assets, region and urban/rural areas

Region	Owner ship / Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing /knitting machine	Radio	Telephone	Television	Cellphone	Donkey cart/ Ox cart	Plough	Tractor
Namibia	Owns	15.9	10.8	37.8	17.8	7.8	45.6	4.9	42.5	93.3	6.0	15.7	0.6
544 655	Has access	30.9	10.0	10.3	18.9	11.0	23.7	9.1	11.8	2.5	9.1	11.3	16.2
	No access	53.2	79.3	51.9	63.3	81.2	30.7	86.0	45.7	4.2	84.9	73.1	83.2
Urban	Owns	23.8	11.7	59.4	25.5	8.5	37.8	8.2	63.8	97.2	1.8	2.4	0.2
294 827	Has access	27.3	8.7	10.2	24.2	9.4	25.9	12.3	10.3	0.9	4.7	4.8	5.3
	No access	49.0	79.6	30.4	50.3	82.2	36.3	79.4	25.9	1.9	93.5	92.8	94.5
Rural	Owns	6.6	9.7	12.4	8.7	7.1	54.7	1.0	17.4	88.9	10.9	31.4	1.0
249 827	Has access	35.1	11.5	10.5	12.7	12.9	21.1	5.2	13.5	4.3	14.2	18.9	29.0
	No access	58.3	78.9	77.2	78.6	80.1	24.2	93.8	69.1	6.8	74.9	49.8	70.0

Region	Owner ship / Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing /knitting machine	Radio	Telephone	Television	Cellphone	Donkey cart/ Ox cart	Plough	Tractor
!Karas	Owns	17.3	10.2	62.3	28.7	8.0	32.4	12.5	67.5	97.1	6.5	1.2	0.8
23 567	Has access	36.1	12.6	10.6	23.2	10.1	32.5	11.9	9.7	1.5	6.4	3.4	7.0
	No access	46.6	77.2	27.1	48.1	81.9	35.2	75.6	22.8	1.4	87.0	95.4	92.2
Erongo	Owns	20.8	14.2	65.3	27.8	7.9	37.3	6.4	70.4	96.8	5.4	4.7	0.4
58 454	Has access	24.5	4.7	7.9	27.8	4.0	24.4	5.1	6.5	1.2	4.5	1.8	1.8
	No access	54.7	81.1	26.9	44.4	88.0	38.3	88.5	23.1	1.9	90.1	93.6	97.8
Hardap	Owns	17.7	19.8	58.6	33.8	14.0	36.8	11.1	63.7	91.5	13.7	0.7	1.3
20 901	Has access	35.9	6.1	9.4	26.7	3.3	38.2	13.5	7.1	3.1	5.5	0.6	1.4
	No access	46.4	74.1	32.0	39.5	82.7	25.0	75.3	29.2	5.4	80.8	98.8	97.3
Kavango East	Owns	5.0	4.9	23.9	6.9	3.1	39.0	1.8	28.8	80.8	0.8	16.2	0.1
25 301	Has access	28.8	20.5	16.5	21.4	13.3	30.9	14.9	27.1	8.5	22.9	32.7	9.4
	No access	66.3	74.6	59.6	71.7	83.6	30.2	83.3	44.1	10.8	76.3	51.1	90.5
Kavango West	Owns	2.1	6.1	11.5	7.6	3.7	49.6	0.4	16.8	86.0	7.2	43.0	0.0
14 518	Has access	32.1	10.2	7.3	8.1	18.2	39.3	3.5	28.1	10.1	31.2	42.6	19.2
	No access	65.9	83.8	81.2	84.4	78.1	11.1	96.1	55.2	3.9	61.7	14.4	80.8
Khomas	Owns	31.3	11.2	58.6	24.4	8.9	35.6	10.8	61.0	97.3	0.8	0.8	0.2
112 305	Has access	21.7	8.0	9.1	19.8	8.2	23.5	13.7	10.0	0.7	4.6	4.1	5.0
	No access	47.0	80.8	32.3	55.8	82.9	40.9	75.5	29.0	2.0	94.6	95.2	94.8
Kunene	Owns	6.7	8.2	28.0	13.9	12.0	34.5	2.7	31.6	84.2	12.5	6.7	0.1
21 468	Has access	18.7	3.6	2.5	5.5	3.6	24.2	3.4	6.4	2.4	9.3	6.6	2.7
	No access	74.7	88.2	69.4	80.6	84.5	41.3	93.9	62.0	13.4	78.2	86.7	97.2
Ohangwena	Owns	6.4	9.2	12.9	12.0	6.7	63.9	0.2	16.8	94.1	1.1	38.6	0.6
48 487	Has access	63.0	21.2	19.1	22.6	35.4	23.6	7.6	22.7	4.0	4.7	27.0	41.2
	No access	30.5	69.6	68.0	65.4	57.9	12.6	92.2	60.5	1.9	94.2	34.4	58.2
Omaheke	Owns	8.4	6.0	27.2	13.3	11.8	46.2	5.2	37.2	86.1	12.6	1.9	1.0
19 639	Has access	15.4	5.6	14.9	21.2	3.0	20.2	12.3	13.3	3.6	13.1	3.5	5.5
	No access	76.2	88.4	57.9	65.5	85.2	33.6	82.5	49.5	10.4	74.3	94.6	93.5
Omusati	Owns	7.8	13.1	9.3	5.7	6.0	56.1	0.0	11.7	92.8	11.5	44.4	1.1
53 090	Has access	31.1	10.3	6.6	4.4	15.4	16.2	4.2	5.9	2.1	13.8	12.0	33.3
	No access	61.1	76.6	84.1	89.9	78.6	27.8	95.8	82.4	5.0	74.7	43.7	65.6
Oshana	Owns	19.1	10.7	25.2	17.3	7.0	61.1	1.7	32.9	97.7	4.6	10.5	0.6
45 331	Has access	46.3	8.6	10.3	15.8	13.0	17.9	7.7	11.8	0.8	5.2	8.7	29.6
	No access	34.7	80.7	64.6	66.9	80.0	21.0	90.6	55.4	1.5	90.2	80.8	69.8

Region	Owner ship / Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing /knitting machine	Radio	Telephone	Television	Cellphone	Donkey cart/ Ox cart	Plough	Tractor
Oshikoto	Owns	8.1	4.5	19.2	9.0	5.2	59.6	1.0	21.1	93.9	11.2	39.3	0.4
41 411	Has access	24.9	6.9	11.8	26.0	5.4	20.2	7.7	10.9	2.4	15.6	14.3	37.3
	No access	67.0	88.7	69.0	65.0	89.4	20.2	91.2	68.0	3.7	73.2	46.4	62.3
Otjozondjupa	Owns	15.4	14.7	50.6	20.8	12.4	38.5	5.4	58.0	93.1	6.0	1.6	1.4
38 238	Has access	13.6	6.3	7.2	17.6	6.8	20.9	8.9	7.2	1.8	8.7	6.2	9.3
	No access	71.0	79.1	42.2	61.6	80.8	40.7	85.7	34.8	5.1	85.2	92.2	89.3
Zambezi	Owns	7.9	10.9	27.4	11.5	1.9	44.3	0.7	39.3	86.1	9.5	23.6	0.5
21 945	Has access	49.3	22.0	15.1	16.4	8.1	25.7	8.5	17.2	4.9	10.7	30.2	12.5
	No access	42.8	67.2	57.6	72.1	89.9	30.0	90.8	43.5	8.9	79.8	46.2	87.0

The proportion of male-headed households owning or having access to assets was generally higher than that of female-headed households, accept for owning sewing/knitting machines, cell phone, donkey/ox cart and plough. Table 9.1.2 indicates that 46.7 percent of male-headed households own a radio compared to 44.1 percent of female-headed households. For ownership of plough, 14.6 percent of male-headed households owned a plough compared to 14.6 percent of female-headed households. The proportion of households that owned a cell phone for female-headed and male-headed households were almost equal, with 93.6 percent and 93.1 percent respectively.

Table 9.1.2 Households by ownership of/access to selected assets, sex of head of household and urban/rural areas

Area and Sex of Head of Household	Ownership /Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing /knitting machine	Radio	Telephone	Television	Cellphone	Donkey /Ox cart	Plough	Tractor
Namibia													
Female	**Owns**	**9.3**	**7.1**	**35.2**	**15.1**	**9.2**	**44.1**	**4.0**	**39.2**	**93.6**	**4.7**	**17.0**	**0.3**
239 671	**Has access**	**34.2**	**9.4**	**10.7**	**19.3**	**12.5**	**24.0**	**7.5**	**12.3**	**2.5**	**8.7**	**12.7**	**18.4**
	No access	**56.5**	**83.5**	**54.1**	**65.6**	**78.3**	**31.8**	**88.5**	**48.6**	**3.9**	**86.6**	**70.3**	**81.3**
Male	**Owns**	**21.1**	**13.7**	**39.9**	**19.9**	**6.8**	**46.7**	**5.6**	**45.2**	**93.1**	**7.0**	**14.6**	**0.8**
304 781	**Has access**	**28.3**	**10.4**	**10.0**	**18.6**	**9.8**	**23.4**	**10.3**	**11.4**	**2.5**	**9.4**	**10.2**	**14.4**
	No access	**50.7**	**76.0**	**50.1**	**61.5**	**83.5**	**29.9**	**84.1**	**43.5**	**4.4**	**83.6**	**75.2**	**84.8**
Both sexes	**Owns**	**15.9**	**10.8**	**37.8**	**17.8**	**7.8**	**45.6**	**4.9**	**42.5**	**93.3**	**6.0**	**15.7**	**0.6**
544 655	**Has access**	**30.9**	**10.0**	**10.3**	**18.9**	**11.0**	**23.7**	**9.1**	**11.8**	**2.5**	**9.1**	**11.3**	**16.2**
	No access	**53.2**	**79.3**	**51.9**	**63.3**	**81.2**	**30.7**	**86.0**	**45.7**	**4.2**	**84.9**	**73.1**	**83.2**

Area and Sex of Head of Household	Ownership /Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing /knitting machine	Radio	Telephone	Television	Cellphone	Donkey /Ox cart	Plough	Tractor
Urban													
Female	Owns	14.7	7.4	58.4	22.4	11.2	36.6	7.4	63.0	96.4	1.6	1.5	0.1
123 641	Has access	29.6	7.1	11.4	25.9	9.4	25.9	11.3	11.6	1.2	4.2	4.8	5.5
	No access	55.7	85.5	30.2	51.7	79.3	37.5	81.4	25.4	2.4	94.3	93.7	94.4
Male	Owns	30.3	14.8	60.0	27.7	6.5	38.7	8.8	64.5	97.7	2.0	2.9	0.3
171 128	Has access	25.6	9.9	9.4	22.9	9.4	25.9	13.1	9.4	0.8	5.1	4.9	5.2
	No access	44.1	75.3	30.6	49.4	84.2	35.4	78.0	26.2	1.6	92.9	92.2	94.5
Both sexes	Owns	23.8	11.7	59.4	25.5	8.5	37.8	8.2	63.8	97.2	1.8	2.4	0.2
294 769	Has access	27.3	8.7	10.2	24.2	9.4	25.9	12.3	10.3	0.9	4.7	4.8	5.3
	No access	49.0	79.6	30.4	50.3	82.2	36.3	79.4	25.9	1.9	93.5	92.8	94.5
Rural													
Female	Owns	3.6	6.7	10.4	7.4	7.0	52.2	0.4	13.8	90.7	8.0	33.5	0.5
116 030	Has access	39.1	11.9	10.1	12.2	15.8	22.0	3.5	13.0	3.8	13.5	21.1	32.3
	No access	57.3	81.4	79.5	80.4	77.2	25.8	96.1	73.2	5.5	78.5	45.5	67.3
Male	Owns	9.2	12.2	14.1	9.8	7.1	56.9	1.5	20.5	87.3	13.4	29.5	1.5
133 652	Has access	31.7	11.1	10.8	13.1	10.3	20.3	6.7	13.9	4.7	14.9	17.0	26.2
	No access	59.2	76.7	75.1	77.1	82.5	22.8	91.8	65.6	8.0	71.7	53.5	72.3
Both sexes	Owns	6.6	9.7	12.4	8.7	7.1	54.7	1.0	17.4	88.9	10.9	31.4	1.0
249 683	Has access	35.1	11.5	10.5	12.7	12.9	21.1	5.2	13.5	4.3	14.2	18.9	29.0
	No access	58.3	78.9	77.2	78.6	80.1	24.2	93.8	69.1	6.8	74.9	49.8	70.0

Table 9.1.3 indicates differences of ownership of and access to assets across the main languages spoken in the households. Households where the main language spoken is German reported 100 percent ownership of refrigerator, 87.7 percent ownership of TV and 100 percent ownership of cell phone respectively. On the other hand, among the households where the main language spoken is Khoisan the corresponding percentages were 6.9, 15.2 and 55.3 percent respectively.

Table 9.1.3 Households by ownership of/access to selected assets and main language spoken in households

Main language spoken	Ownership /Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing / knitting machine	Radio	Television	Telephone	Cellphone	Don key /Ox cart	Plough	Tractor
Khoisan	Owns	1.0	5.5	6.9	3.1	0.0	30.7	15.2	0.0	55.3	3.3	0.0	0.0
6 115	Has access	16.4	4.9	7.5	8.9	2.1	26.1	10.1	6.8	13.1	18.1	9.7	11.1
	No access	82.7	89.6	85.6	88.0	97.9	43.2	74.8	93.2	31.5	78.6	90.3	89.0

Main language spoken	Ownership /Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing / knitting machine	Radio	Television	Telephone	Cellphone	Don key /Ox cart	Plough	Tractor
Zambezi languages	Owns	12.4	11.1	35.1	11.4	1.6	42.2	46.6	1.2	89.4	8.2	22.2	0.2
23 414	Has access	45.0	19.7	13.7	19.3	8.1	27.1	14.7	9.9	3.7	8.3	26.7	12.7
	No access	42.5	69.2	51.2	69.3	90.3	30.7	38.7	88.9	6.8	83.5	51.1	87.1
Otjiherero	Owns	9.2	5.9	38.8	15.7	16.7	36.4	44.0	3.6	89.8	10.5	4.4	0.4
49 546	Has access	22.8	5.0	7.4	16.8	7.0	26.6	9.1	7.7	2.8	11.3	6.0	4.9
	No access	68.0	89.2	53.8	67.5	76.3	37.0	46.9	88.7	7.4	78.2	89.6	94.7
Rukavango	Owns	4.9	5.5	20.7	7.8	2.8	39.5	28.2	1.7	86.4	2.4	20.5	0.1
50 307	Has access	27.7	16.9	13.3	17.4	12.4	32.4	24.1	9.7	7.2	21.7	30.4	12.6
	No access	67.4	77.5	66.0	74.8	84.8	28.0	47.7	88.5	6.4	76.0	49.1	87.3
Nama/Damara	Owns	11.7	11.2	48.7	21.2	10.9	37.8	60.5	3.8	90.5	12.2	0.4	0.1
63 208	Has access	25.6	5.2	9.1	17.9	4.2	25.7	7.2	9.5	3.1	7.0	1.6	4.6
	No access	62.7	83.6	42.2	60.9	84.8	36.5	32.3	86.6	6.4	80.7	98.0	95.4
Oshiwambo	Owns	12.6	9.4	27.5	13.8	5.4	52.5	30.6	1.5	96.2	5.0	23.7	0.6
280 225	Has access	35.3	10.9	11.7	19.0	14.7	19.9	12.8	7.5	1.5	8.2	12.0	25.0
	No access	52.1	79.6	60.8	67.2	79.9	27.6	56.7	91.0	2.3	86.7	64.3	74.4
Setswana	Owns	7.9	6.2	51.2	12.4	5.1	58.8	56.5	10.3	88.6	14.3	0.0	0.0
1 311	Has access	31.1	2.0	10.1	20.9	7.9	12.9	7.1	23.1	0.0	10.0	3.3	6.3
	No access	60.9	91.8	38.7	66.7	87.0	28.3	36.4	66.6	11.4	75.7	96.7	93.8
Afrikaans	Owns	44.4	23.1	87.4	47.2	18.1	37.3	85.7	24.8	97.0	3.5	0.6	1.3
40 334	Has access	23.5	4.3	3.8	23.1	5.4	34.7	4.3	15.3	0.9	3.7	2.3	2.6
	No access	32.1	72.6	8.8	29.7	76.5	28.0	10.0	59.9	2.1	92.8	97.1	96.2
German	Owns	76.0	43.6	100.0	57.8	41.2	82.0	87.7	72.1	100.0	0.0	1.4	6.0
2 099	Has access	6.6	2.8	0.0	22.3	3.2	10.0	1.4	1.4	0.0	2.3	2.8	3.6
	No access	17.5	53.5	0.0	19.9	55.6	8.0	10.9	26.5	0.0	97.7	95.7	90.4
English	Owns	65.7	23.9	86.2	36.8	10.0	35.3	85.6	25.7	98.2	1.3	0.5	1.9
7 815	Has access	17.1	7.6	5.1	32.8	4.4	27.4	5.5	15.9	1.3	2.7	3.1	5.1
	No access	17.3	68.5	8.6	30.3	85.6	37.3	9.0	58.4	0.6	96.0	96.5	93.0
Other European	Owns	32.7	6.7	76.9	13.9	0.6	12.8	75.8	5.5	94.2	0.0	0.0	0.0
3 054	Has access	31.2	4.0	8.1	20.4	1.4	5.8	5.8	8.9	2.3	0.0	0.0	5.6
	No access	36.1	89.3	15.0	65.7	98.0	81.4	18.4	85.6	3.5	100.0	100.0	94.4
Other African	Owns	41.0	23.3	69.2	32.1	13.5	41.6	75.9	14.4	93.8	4.4	3.0	1.7
6 032	Has access	19.7	9.1	8.0	23.8	6.5	12.7	3.3	12.3	0.4	6.3	1.9	3.0
	No access	39.3	67.6	22.8	44.1	79.9	45.7	20.8	73.3	5.8	89.3	95.1	95.3
Other	Owns	49.7	23.9	76.0	40.8	5.5	39.8	81.4	22.1	96.8	2.1	3.8	2.7
11 194	Has access	24.4	12.0	7.8	15.5	9.4	18.2	4.2	20.1	0.8	2.7	2.5	7.0
	No access	25.9	64.1	16.2	43.7	85.1	42.0	14.4	57.2	2.5	94.7	93.7	90.4

Main language spoken	Ownership /Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing / knitting machine	Radio	Television	Telephone	Cellphone	Don key /Ox cart	Plough	Tractor
Namibia	Owns	15.9	10.8	37.8	17.8	7.8	45.6	42.5	4.9	93.3	6.0	15.7	0.6
544 655	Has access	30.9	10.0	10.3	18.9	11.0	23.7	11.8	9.1	2.5	9.1	11.3	16.2
	No access	53.2	79.3	51.9	63.3	81.2	30.7	45.7	86.0	4.2	84.9	73.1	83.2

Table 9.1.4 indicates ownership or access to selected assets by household composition and orphan-hood. Generally, ownership of a cell phone, TV and radio was more common in all households irrespective of household composition and orphan-hood status compared to other assets.

Table 9.1.4 Households by ownership of/access to selected assets, household composition and orphan-hood

Household Composition	Ownership /Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing/ knitting machine	Radio	Television	Telephone	Cellphone	Don key/ Ox cart	Plough	Tractor
With only head or head and spouse	Owns	14.6	6.7	39.2	14.7	4.7	40.8	41.4	4.9	90.0	4.5	6.2	0.8
126 038	Has access	30.3	8.8	12.8	23.8	8.6	24.8	12.3	10.5	3.9	7.7	7.4	10.7
	No access	55.1	84.4	48.1	61.5	86.7	34.3	46.4	84.6	6.1	87.8	86.4	88.6
With 1 child, no relatives/ non-relative	Owns	20.4	10.1	45.1	18.2	7.8	40.0	50.8	5.7	94.1	3.0	6.4	0.5
51 116	Has access	28.5	7.7	12.4	24.4	11.5	26.1	11.6	12.7	2.1	9.1	10.8	12.1
	No access	51.1	82.2	42.5	57.4	80.7	33.9	37.6	81.5	3.8	87.8	82.8	87.4
With 2+ children, no relatives/ non-relative	Owns	20.1	17.3	43.9	24.8	6.7	41.6	49.6	7.4	92.1	4.9	13.1	0.4
74 715	Has access	29.5	9.5	6.9	15.3	10.8	27.5	10.1	9.1	3.1	9.2	13.9	11.2
	No access	50.3	73.2	49.3	60.0	82.5	31.0	40.3	83.5	4.9	85.9	73.0	88.4
With relatives, no non-relatives	Owns	13.2	10.1	34.1	16.2	9.4	48.7	39.9	4.0	94.5	7.1	20.9	0.4
221 029	Has access	32.9	11.3	9.3	16.3	12.1	23.0	12.2	7.6	2.1	10.1	13.1	20.6
	No access	54.0	78.6	56.6	67.4	78.5	28.4	47.9	88.3	3.4	82.7	66.0	79.0
With non-relatives	Owns	19.0	13.5	35.3	20.3	9.5	52.5	39.3	4.6	96.4	8.4	25.2	0.9
71 758	Has access	28.7	9.9	11.4	18.1	11.8	18.3	11.4	8.3	0.9	8.2	10.1	20.5
	No access	52.4	76.6	53.3	61.5	78.7	29.1	49.3	87.1	2.8	83.3	64.7	78.7

Household Composition	Ownership /Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing/ knitting machine	Radio	Television	Telephone	Cellphone	Don key/ Ox cart	Plough	Tractor
Namibia	Owns	15.9	10.8	37.8	17.8	7.8	45.6	42.5	4.9	93.3	6.0	15.7	0.6
544 655	Has access	30.9	10.0	10.3	18.9	11.0	23.7	11.8	9.1	2.5	9.1	11.3	16.2
	No access	53.2	79.3	51.9	63.3	81.2	30.7	45.7	86.0	4.2	84.9	73.1	83.2
Household does not have an orphan	Owns	16.8	10.8	39.7	18.2	7.5	44.2	44.2	5.3	93.3	5.5	13.0	0.6
458 058	Has access	30.0	9.5	10.3	19.6	10.3	24.3	11.4	9.6	2.5	8.6	10.3	14.2
	No access	53.2	79.7	50.1	62.2	82.3	31.5	44.4	85.1	4.3	85.9	76.6	85.3
Household has an orphan	Owns	11.0	10.6	28.1	15.5	9.7	52.8	33.5	3.0	93.8	8.4	29.5	0.5
86 596	Has access	35.5	12.5	10.7	15.4	14.7	20.3	13.9	6.4	2.4	11.7	16.2	27.0
	No access	53.5	76.9	61.2	69.2	75.6	26.9	52.6	90.5	3.8	79.7	54.4	72.5

Table 9.1.5 indicates that households which reported the main source of income as commercial farming had the highest proportions owning assets except, radio, donkey/ox cart and plough. On the other hand, households whose main source of income is drought/in-kind receipts had the lowest proportions of ownership of all assets. As shown in Table 9.1.5, cell phone is owned by most households regardless of their source of income.

Table 9.1.5 Households by ownership of/access to selected assets and main source of income

Main Source of Income	Ownership / Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing / knitting machine	Radio	Television	Telephone	Cellphone	Donkey / Ox cart	Plough	Tractor
Salaries & wages	Owns	20.8	11.8	51.6	22.6	6.8	39.1	57.7	5.7	96.1	3.3	5.0	0.4
291 674	Has access	28.5	9.1	11.0	23.4	9.7	26.3	10.7	13.0	1.4	7.0	8.0	9.5
	No access	50.7	79.2	37.4	54.0	83.5	34.6	31.6	81.3	2.5	89.7	87.0	90.1
Pension	Owns	6.8	8.3	16.7	8.8	10.9	63.8	19.2	3.9	86.9	12.2	35.9	0.5
59 988	Has access	38.7	11.9	7.7	11.3	14.6	17.2	12.4	4.4	5.0	9.9	14.6	31.9
	No access	54.5	79.8	75.5	79.9	74.6	19.1	68.5	91.7	8.2	77.9	49.6	67.6

Main Source of Income	Ownership / Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing / knitting machine	Radio	Television	Telephone	Cellphone	Donkey / Ox cart	Plough	Tractor
Subsistence farming	Owns	4.6	11.4	4.9	4.9	8.1	60.6	6.8	0.4	91.0	15.4	53.3	0.3
58 003	Has access	27.6	11.6	6.2	6.0	12.6	16.4	9.6	3.0	3.5	18.3	17.2	31.6
	No access	67.9	77.0	88.9	89.2	79.3	22.9	83.5	96.6	5.5	66.3	29.5	68.1
Business income	Owns	23.7	13.1	40.1	22.8	9.5	47.0	46.6	5.3	96.3	4.5	11.1	0.8
49 493	Has access	30.6	10.8	11.7	21.1	9.8	21.9	13.6	8.3	1.6	7.5	10.1	13.4
	No access	45.7	76.1	48.2	56.2	80.7	31.2	39.8	86.4	2.1	88.0	78.8	85.8
Remittances/ grants	Owns	6.5	6.2	25.3	10.9	6.1	45.7	27.1	1.9	92.4	5.1	18.6	0.8
52 390	Has access	40.5	11.7	13.6	19.4	15.2	25.6	16.5	3.7	3.2	9.7	16.3	23.0
	No access	53.0	82.1	61.1	69.7	78.7	28.7	56.4	94.4	4.4	85.2	65.1	76.3
Drought/ in-kind receipts	Owns	0.7	5.9	5.0	1.8	1.4	31.0	9.3	0.0	68.9	6.6	11.4	0.0
14 747	Has access	25.7	5.0	8.7	8.3	9.4	30.2	13.0	1.5	9.7	11.2	21.8	11.5
	No access	73.6	89.1	86.3	89.9	89.2	38.8	77.7	98.5	21.3	82.2	66.9	88.5
Commercial farming	Owns	24.8	20.2	77.2	78.4	40.0	42.7	77.5	48.7	97.3	8.5	12.1	34.8
1 830	Has access	27.6	8.8	0.0	2.2	0.8	20.0	5.1	5.1	0.0	11.7	6.3	22.7
	No access	47.6	71.0	22.8	19.4	59.2	37.3	17.3	46.2	2.7	79.8	81.6	42.5
Others	Owns	21.8	10.0	44.5	25.3	15.4	49.2	47.4	18.3	92.2	4.3	6.6	1.1
16 529	Has access	30.0	9.7	11.3	16.0	7.5	21.4	15.6	4.6	3.4	10.9	15.5	13.0
	No access	48.2	80.3	44.3	58.8	77.1	29.3	37.1	75.9	4.4	83.6	77.9	86.0
Total	**Owns**	**15.9**	**10.8**	**37.8**	**17.8**	**7.8**	**45.6**	**42.5**	**4.9**	**93.3**	**6.0**	**15.7**	**0.6**
544 655	**Has access**	**30.9**	**10.0**	**10.3**	**18.9**	**11.0**	**23.7**	**11.8**	**9.1**	**2.5**	**9.1**	**11.3**	**16.2**
	No access	**53.2**	**79.3**	**51.9**	**63.3**	**81.2**	**30.7**	**45.7**	**86.0**	**4.2**	**84.9**	**73.1**	**83.2**

The proportions of households owning assets increased with the increase in income of households as reflected in Table 9.1.6, except for donkey/ox cart and plough.

Table 9.1.6 Households by ownership of/access to selected assets, after adjusted per capita income

Percentiles /deciles	Ownership /Access	Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing /knitting machine	Radio	Television	Telephone	Cellphone	Donkey /Ox Cart	Plough	Tractor
Percentiles													
1-25	Owns	2.2	7.2	8.5	3.6	4.7	45.5	12.9	0.4	85.1	8.4	21.9	0.0
87 593	Has access	30.3	10.7	8.6	8.1	9.7	22.2	14.8	3.8	5.3	12.5	19.9	17.8
	No access	67.5	82.1	82.9	88.3	85.5	32.3	72.3	95.8	9.7	79.0	58.2	82.3
26-50	Owns	4.6	8.8	17.2	9.3	6.7	50.2	22.7	0.6	91.9	7.8	24.2	0.2
112 869	Has access	34.2	12.1	11.0	14.9	12.6	21.1	13.5	5.2	3.3	11.2	12.9	21.8
	No access	61.2	79.1	71.8	75.9	80.7	28.7	63.8	94.2	4.8	81.0	62.9	78.0
51-75	Owns	9.7	9.3	32.9	14.7	7.5	46.6	39.0	2.0	93.6	6.3	16.0	0.6
143 590	Has access	34.1	10.5	12.3	20.2	12.3	23.6	13.4	8.0	2.4	9.2	11.4	17.4
	No access	56.3	80.2	54.8	65.2	80.2	29.9	47.7	89.9	4.0	84.5	72.6	82.0
76-90	Owns	20.7	10.6	54.3	23.2	7.8	42.4	59.0	4.7	97.2	4.4	9.7	0.5
110 129	Has access	30.9	8.9	11.6	27.8	10.1	25.8	10.5	12.4	1.2	7.3	7.4	13.8
	No access	48.4	80.5	34.2	48.9	82.1	31.7	30.5	82.9	1.7	88.2	82.9	85.7
91-95	Owns	38.5	16.2	75.9	34.6	8.8	40.1	77.5	12.4	98.2	2.9	5.9	0.7
43 761	Has access	25.0	6.6	7.5	20.4	9.4	25.7	6.9	16.5	0.5	5.6	5.6	8.8
	No access	36.6	77.2	16.6	45.0	81.8	34.2	15.6	71.1	1.2	91.5	88.4	90.4
96-98	Owns	46.6	19.2	83.0	41.6	15.1	44.1	85.0	23.3	98.1	3.2	4.8	1.9
26 640	Has access	24.4	7.4	5.2	25.4	8.8	26.1	4.1	18.8	0.2	6.2	6.9	8.7
	No access	29.0	73.4	11.8	33.0	76.2	29.8	11.0	57.9	1.7	90.5	88.3	89.4
99-100	Owns	66.7	25.5	83.9	51.8	17.5	44.0	85.2	30.1	97.8	2.1	5.8	3.6
20 074	Has access	13.3	7.3	6.3	19.0	9.2	26.3	5.4	14.4	1.2	2.4	2.8	8.5
	No access	19.9	67.2	9.8	29.2	73.3	29.8	9.5	55.5	1.0	95.5	91.5	87.9
Deciles													
Decile 1	Owns	1.1	6.1	4.1	2.3	4.0	41.1	8.1	0.1	79.5	7.4	14.4	0.0
31 989	Has access	25.0	10.6	10.0	7.4	7.0	22.0	18.5	4.2	6.8	12.4	22.0	12.6
	No access	73.9	83.3	85.9	90.4	89.0	36.9	73.5	95.4	13.8	80.0	63.6	87.5
Decile 2	Owns	3.0	8.0	9.4	4.3	4.9	46.9	14.5	0.5	88.0	9.6	25.6	0.0
35 778	Has access	32.8	10.8	7.6	7.3	10.6	21.1	12.9	4.1	4.2	12.3	18.9	19.9
	No access	64.2	81.3	83.0	88.4	84.5	32.1	72.6	95.4	7.8	78.1	55.5	80.2
Decile 3	Owns	3.5	8.6	12.6	5.6	5.1	52.5	16.9	0.4	89.9	8.8	28.8	0.0
40 259	Has access	32.7	9.2	9.6	12.0	12.2	22.3	12.9	2.9	3.7	13.5	16.1	22.7
	No access	63.9	82.2	77.8	82.4	82.7	25.2	70.2	96.7	6.4	77.7	55.1	77.3

Percentiles /deciles	Ownership /Access	Selected Assets, %											
		Motor vehicle	Bicycle	Refrigerator	Freezer	Sewing /knitting machine	Radio	Television	Telephone	Cellphone	Donkey /Ox Cart	Plough	Tractor
Decile 4	Owns	4.0	8.5	17.2	8.2	6.4	50.5	24.1	0.8	92.2	8.3	25.8	0.4
43 191	Has access	35.4	14.3	11.8	14.9	13.5	19.6	13.7	4.8	3.4	10.4	12.9	20.2
	No access	60.6	77.1	71.0	76.9	80.2	29.9	62.3	94.4	4.4	81.3	61.3	79.4
Decile 5	Owns	5.3	8.8	19.7	11.3	8.0	48.0	24.4	0.5	92.0	6.5	20.3	0.2
49 244	Has access	34.4	11.9	10.1	15.5	12.1	22.9	13.4	6.3	3.5	10.7	12.5	22.6
	No access	60.3	79.3	70.2	73.2	79.9	29.1	62.3	93.1	4.6	82.7	67.3	77.3
Decile 6	Owns	7.0	8.7	25.8	11.6	6.6	45.4	33.1	1.1	92.6	7.0	18.2	0.7
53 298	Has access	32.5	11.2	11.4	17.6	11.4	23.4	12.8	5.6	2.8	10.0	12.8	19.9
	No access	60.5	80.1	62.8	70.7	82.0	31.2	54.1	93.3	4.7	83.0	69.0	79.5
Decile 7	Owns	10.5	9.5	35.4	14.2	9.0	49.3	40.2	1.9	93.8	5.7	15.3	0.5
57 720	Has access	35.7	10.1	13.3	23.1	14.2	21.5	14.1	9.0	2.1	8.0	10.1	14.7
	No access	53.8	80.4	51.4	62.7	76.8	29.2	45.7	89.0	4.0	86.1	74.6	84.8
Decile 8	Owns	14.4	10.4	43.7	20.3	6.4	43.2	49.6	2.8	96.0	4.8	12.0	0.3
67 332	Has access	32.9	9.4	11.5	23.9	10.8	27.4	11.0	10.7	1.7	9.1	11.3	16.9
	No access	52.7	80.2	44.9	55.8	82.7	29.5	39.3	86.4	2.3	86.1	76.8	82.8
Decile 9	Owns	22.8	10.4	57.5	24.6	8.4	42.4	61.9	6.1	97.3	4.8	9.5	0.6
75 369	Has access	30.4	9.0	12.0	27.5	9.7	25.1	11.1	12.8	1.1	6.9	5.7	13.0
	No access	46.8	80.6	30.5	47.9	81.9	32.5	27.0	81.2	1.6	88.3	84.9	86.4
Decile 10	Owns	47.1	19.2	79.8	40.5	12.6	42.1	81.4	19.5	98.1	2.8	5.6	1.7
90 475	Has access	22.2	7.0	6.6	21.6	9.2	26.0	5.8	16.7	0.6	5.1	5.4	8.7
	No access	30.6	73.9	13.7	37.9	78.3	31.9	12.9	63.8	1.3	92.1	89.1	89.6

Figure 9.1.1 shows the proportion of households that owned a radio had increased from 65 percent in 1993/1994, to 71 percent in 2003/2004 and to 72 percent in 2009/2010, however dropped to 42 percent in 2015/2016. Over the period 2009/2010 to 2015/2016, the proportion of households that owned a telephone (landline) had dropped tremendously, from 56 percent to 4.9 percent as shown by Figure 9.1.2, while the proportion of households owning motor vehicles had declined between 1993/1994 and 2015/2016 from 20 percent to 16 percent (Figure 9.1.3).
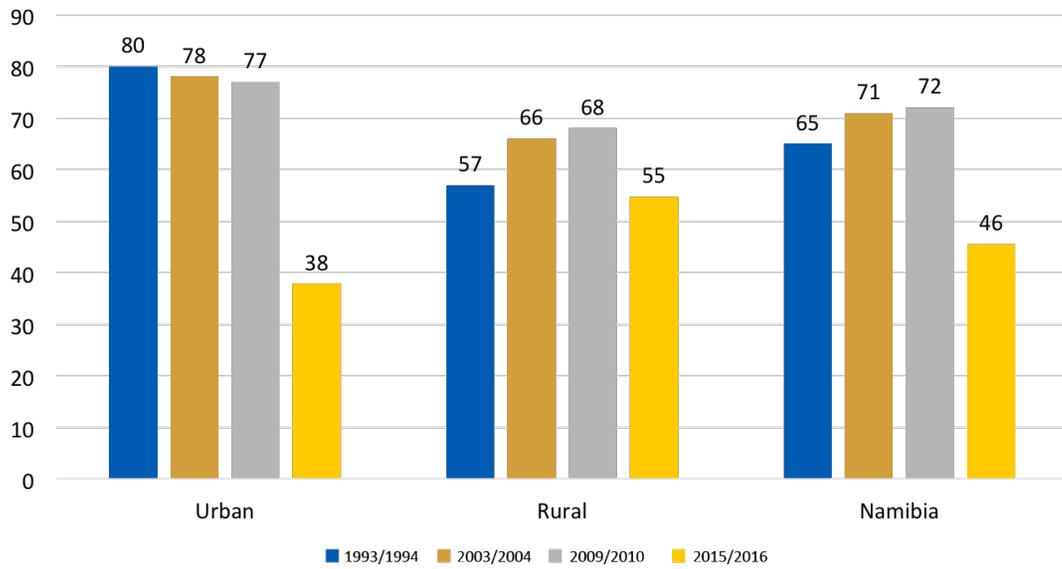
**Figure 9.1.1 Percentage of households that own a radio by region and urban/rural, 1993/1994, 2003/2004-2009/2010, 2015-2016**
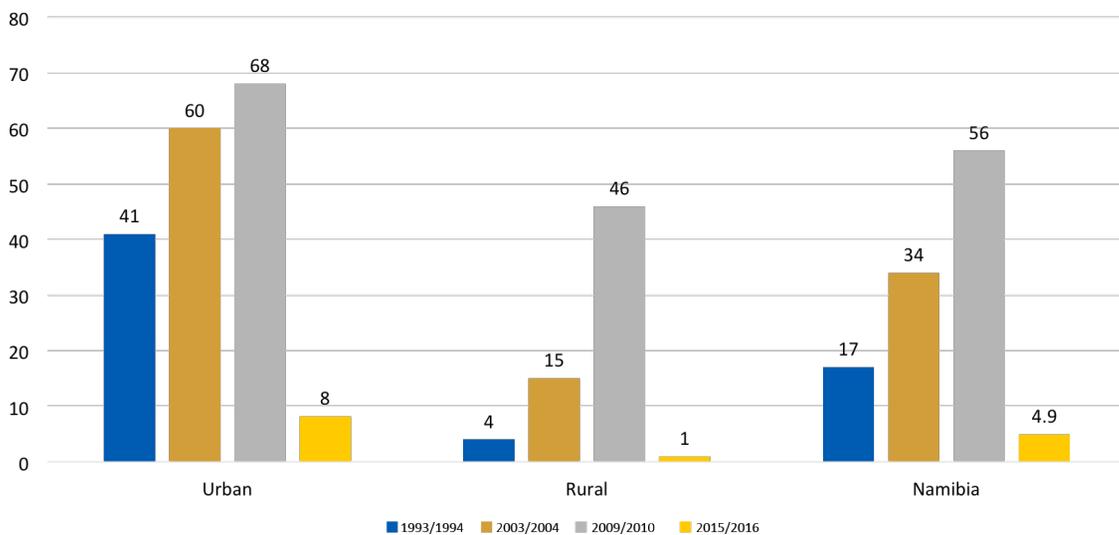

Figure 9.1.2 Percentage of households that own a telephone by region and urban/rural, 1993/1994, 2003/2004, 2009/2010, 2015/2016
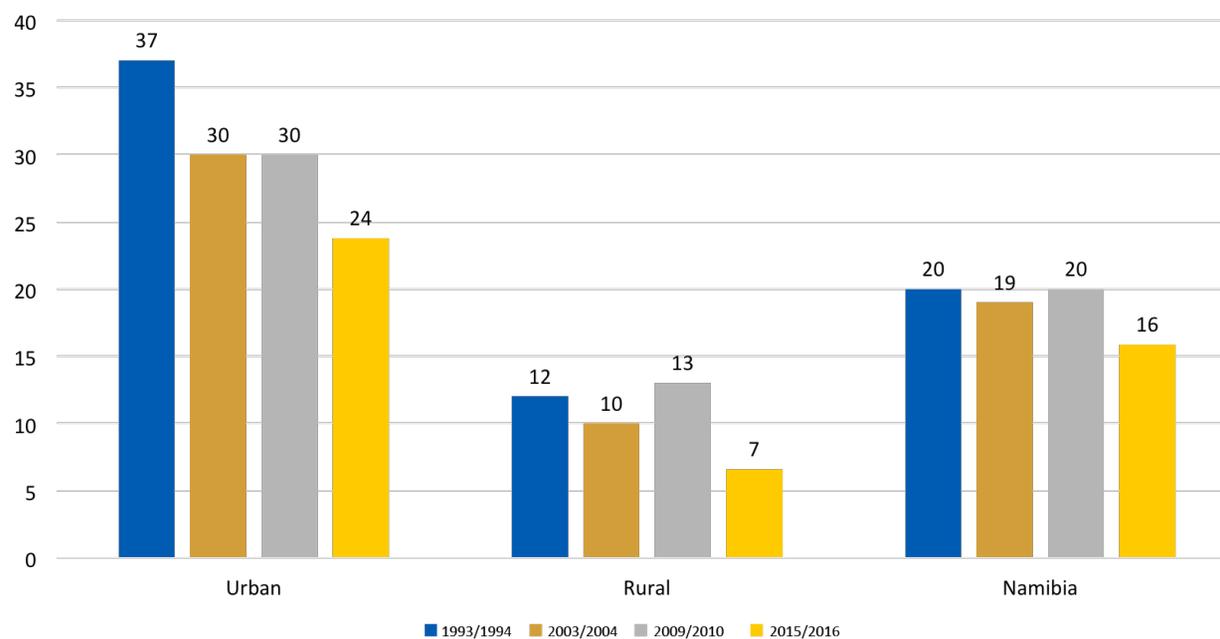
Figure 9.1.3 Percentage of households that own a motor vehicle by region and urban/rural, 1993/1994, 2003/2004-2009/2010, 2015-2016

10. Annual Consumption

This chapter reports on the key results from the NHIES relating to the consumption of households. These results provide a picture of the living standard of households as expressed in patterns of consumption. The results show general increases in the levels of consumption of Namibian households over the past five years with some differences. For instance, urban areas have notably higher consumption pattern compared to rural areas. Similarly, male-headed households generally have higher consumption compared to female-headed households. Moreover, there are sizeable differences in levels of consumption when it comes to the main language spoken in the household. The level of consumption of the poorest households has improved over the period, indicating a slight closing of the gap between the poorest and the richest households, resulting in the reduction of inequality in income distribution. Notwithstanding these improvements, inequality in income distribution in Namibia remains among the highest in the world.

Definitions of consumption
Household consumption
Consumption in this report is composed of annualised daily transactions that households recorded in the Daily Record Book in addition to the annual expenditures reported by households. Consumption thus includes items consumed frequently by the household members such as food and beverages. But consumption also includes expenditures that are incurred less frequently, for instance clothing, furniture and electrical appliances, as well as an imputed rent for free occupied or owner occupied dwellings.

Use of percentiles and deciles
In this report adjusted per capita income (APCI) is used to classify households into percentile groups. The households were ranked from the lowest APCI to the highest. Percentiles are frequently used to illustrate the skewness of income distribution in a population. The households were divided into 100 equal sized groups defined by APCI. The first (1st) percentile includes the 1 percent of the households with the lowest APCI. The 2nd percentile includes the 1 percent of households having the lowest APCI after exclusion of the first percentile. The 3rd percentile includes the 1 percent of the households having the lowest APCI after exclusion of the 1st and 2nd percentiles, etc. The 100th percentile includes the 1 percent of the households having the highest APCI. In this report the percentiles are aggregated into groups as follows:

Groups of percentiles
A: APCI = 1-25
This group includes the 25 percent of the households having lowest APCI.
B: APCI = 26-50
This group includes the 25 percent of the households, which have a higher APCI than A.
C: APCI = 51-75
This group includes the 25 percent of the households, which have a higher APCI than A and B.
D: APCI = 76-90
This group includes the 15 percent of the households, which have a higher APCI than A to C.
E: APCI = 91-95
This group includes the 5 percent of the households, which have a higher APCI than A to D
F: APCI = 96-98
This group includes the 3 percent of the households, which have a higher APCI than A to E
G: APCI = 99-100
This group includes the 2 percent of the households having the highest APCI than A to F. The number of households in equal sized groups is not quite identical due to the applied sample weights and rounding.

The deciles include 10 percentiles in each group, which means 10 percent. The first decile includes the 10 percent households with the lowest APCI and the decile number 10 includes the 10 percent households with the highest APCI. In the tables the deciles are numbered from 1 to 10.

10.1   Annual Consumption

Annual consumption in this report is described using the total household consumption, average household consumption and the consumption per capita indicators presented in Namibia Dollars (N$). Some important household characteristics are used as the background information to disaggregate the results. In all tables, households and population in percentage are included for ease of reference along with household size.

Table 10.1.1 shows that the estimated total consumption in the Namibian households over the survey period was about N$64 849 million or N$64 billion. The average annual consumption and the per capita consumption were found to be N$119 065 and N$28 434 respectively. Contribution of the urban households towards the total consumption was roughly double that of the rural households. There were large differences between the urban and rural areas showing the wide disparities that still exists. Average consumption of urban households (N$150 692) was almost double while the consumption per capita was more than double those of rural households respectively.

At regional level, the highest per capita consumption was in the Khomas region followed by Erongo and the lowest was observed in Kavango West and Kavango East regions. Kavango West, Kavango East and Zambezi regions had about half the national average of consumption per capita while only about one fifth that of Khomas region. Although Kunene, Ohangwena, Omaheke, Omusati, Oshikoto and Otjozondjupa regions had a higher consumption per capita compared to Kavango West and Kavango East regions, they were still below the national average and had only about one fourth of the Khomas region.

Table 10.1.1 Annual consumption by region and urban/rural areas

Region	Households	Population	Average Household size	Total Consumption		Average household consumption	Consumption per capita
	%	%		Million N$	%	N$	N$
Namibia	**100**	**100**	**4.2**	**64 849**	**100**	**119 065**	**28 434**
Urban	54.1	46.9	3.6	44 428	68.5	150 692	41 575
Rural	45.9	53.1	4.9	20 421	31.5	81 742	16 848
!Karas	4.3	3.7	3.6	2 754	4.2	116 875	32 760
Erongo	10.7	7.7	3.0	7 518	11.6	128 617	42 752
Hardap	3.8	3.8	4.1	3 055	4.7	146 157	35 675
Kavango East	4.6	6.4	5.8	1 767	2.7	69 844	12 091
Kavango West	2.7	3.9	6.1	1 065	1.6	73 358	12 006
Khomas	20.6	17.5	3.6	23 534	36.3	209 555	58 807
Kunene	3.9	4.2	4.5	1 344	2.1	62 612	14 059
Ohangwena	8.9	11.1	5.2	4 581	7.1	94 482	18 082
Omaheke	3.6	3.2	3.8	1 554	2.4	79 140	20 992
Omusati	9.7	10.9	4.7	3 599	5.5	67 792	14 484
Oshana	8.3	8.2	4.1	5 327	8.2	117 508	28 541
Oshikoto	7.6	8.4	4.6	3 725	5.7	89 944	19 352
Otjozondjupa	7.0	6.7	4.0	3 816	5.9	99 805	25 051
Zambezi	4.0	4.3	4.4	1 209	1.9	55 112	12 446

Figure 10.1.1 clearly shows the share of the households and their contributions towards the total consumption for each of the regions. The households in Khomas region contributed a much larger component to the total consumption compared to all other regions and the consumption share was also much larger than the share of the households. Erongo and Hardap were the only other regions where the consumption share exceeded the population share but with a lesser extent compared to Khomas region. Most of the other regions had much larger share of households but smaller contributions towards the total consumption, except !Karas and Oshana regions with an almost equal consumption share and population share.
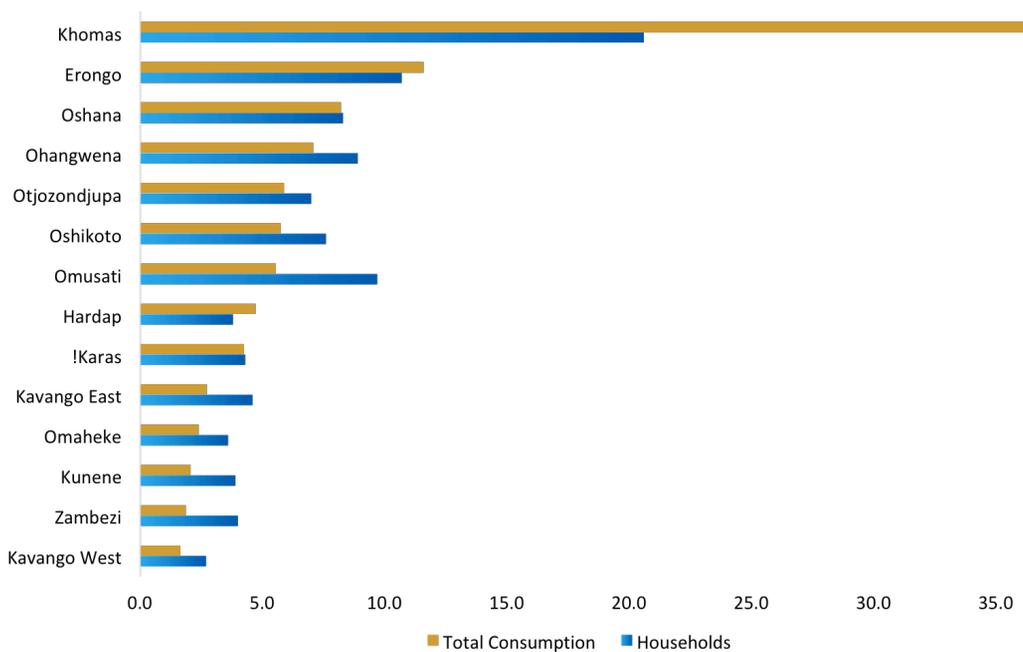
Figure 10.1.1 Annual household consumption by region

Total consumption of the male-headed households in Namibia is about 63 percent, which was almost double the contribution of the female-headed households. A similar pattern could be observed in urban areas with 66.2 percent for the male-headed households against 33.8 percent for female-headed households. Average household consumption and the consumption per capita of the female-headed households in urban areas were also lower than the male-headed households, N$121 456 and N$32 251 compared to N$171 807 and N$48 775, respectively.

Table 10.1.2 Annual consumption by urban/rural areas and sex of head of household

Urban/Rural Sex of head	Households	Population	Average Household size	Total Consumption		Average household consumption	Consumption per capita
	%	%		Million N$	%	N$	N$
Namibia							
Female	44.0	47.2	4.5	23 824	36.7	99 343	22 119
Male	56.0	52.8	3.9	41 025	63.3	134 580	34 085
Both sexes	100	100	4.2	64 849	100	119 065	28 434

Urban/Rural Sex of head	Households	Population	Average Household size	Total Consumption		Average household consumption	Consumption per capita
	%	%		Million N$	%	N$	N$
Urban							
Female	41.9	43.6	3.8	15 017	33.8	121 456	32 251
Male	58.1	56.4	3.5	29 411	66.2	171 807	48 775
Both sexes	100	100	3.6	44 428	100	150 692	41 575
Rural							
Female	46.5	50.4	5.3	8 807	43.1	75 808	14 403
Male	53.5	49.6	4.5	11 614	56.9	86 899	19 337
Both sexes	100	100	4.9	20 421	100	81 742	16 848

There was very high variation in the household consumption by the main language spoken in the household. Per capita consumption of the households where the main Language spoken is Rukavango and Khoisan were the lowest with N$13 274 and N$7 088, respectively. Households where the main language spoken were German and English reported the highest consumption per capita of N$199 330 and N$133 256, respectively. Households where German was the main language spoken had a consumption per capita which is 28 times higher than that of Khoisan-spoken households and about 8 times higher than the Oshiwambo-spoken households.

The population share of the households where German is the main language spoken was 0.2 percent while for Rukavango or Khoisan households was 11.8 and 1.5 percent, respectively. Households where the main language spoken is Oshiwambo had the highest population share of 50.8 percent and a consumption per capita of N$23 626, which was still below the national average.

Table 10.1.3 Annual consumption by main language spoken in the household

Main language spoken	Households	Population	Average Household size	Total Consumption		Average household consumption	Consumption per capita
	%	%		Million N$	%	N$	N$
Khoisan	1.1	1.5	5.6	242	0.4	39 606	7 088
Zambezi languages	4.3	4.2	4.1	1 590	2.5	67 928	16 489
Otjiherero	9.1	8.9	4.1	5 016	7.7	101 231	24 827
Rukavango	9.2	11.8	5.4	3 573	5.5	71 021	13 274
Nama/Damara	11.6	12	4.3	5 938	9.2	93 948	21 661
Oshiwambo	51.5	50.8	4.1	27 369	42.2	97 669	23 626
Setswana	0.2	0.2	2.7	126	0.2	96 116	35 966
Afrikaans	7.4	6.3	3.6	10 422	16.1	258 406	72 017
German	0.4	0.2	2.4	1 014	1.6	483 059	199 330
English	1.4	1.1	3.1	3 204	4.9	409 955	133 256
Other European	0.6	0.4	3.0	826	1.3	270 465	89 087
Other African	1.1	0.7	2.8	1 316	2	218 232	79 018
Others	2.1	1.9	3.8	4 212	6.5	376 276	97 793
Total	**100**	**100**	**4.2**	**64 849**	**100**	**119 065**	**28 434**

Households that reported commercial farming as the main source of income had the highest average household consumption and consumption per capita of N$478 749 and N$132 016 (Table 10.1.4), respectively. Furthermore, households where the subsistence farming is the main source of income had a low per capita consumption of N$13 836. The population share of the commercial farming households was very low, (0.3 percent) and they also had a low average household size of 3.6, while those for the subsistence farming households were 14.2 percent and 5.6 percent, respectively. The households who reported salaries and wages as their main source of income had the highest population share of 45.1 percent and contributes 59.4 percent towards total consumption with a consumption per capita of N$37 399.

Households whose main source of income is business activities (non-farming) and others had a higher consumption per capita than the national average. The households who reported any of the remaining categories as their main source of income had low consumption per capita than the national average of N$28 434. Among this group the highest population share of 15.4 percent was observed for the households with pension as the main source of income but having a low consumption per capita of N$14 990.

Table 10.1.4 Annual consumption by main source of income

Main source of income	Households	Population	Average Household size	Total Consumption		Average household consumption	Consumption per capita
	%	%		Million N$	%	N$	N$
Salaries & wages	53.6	45.1	3.5	38 499	59.4	131 993	37 399
Pension	11.0	15.4	5.9	5 282	8.1	88 045	14 990
Subsistence farming	10.6	14.2	5.6	4 492	6.9	77 447	13 836
Business income	9.1	9.4	4.3	7 767	12	156 930	36 141
Remittances/grants	9.6	10.1	4.4	4 655	7.2	88 850	20 180
Drought/in-kind receipts	2.7	2.6	4.1	653	1	44 280	10 885
Commercial farming	0.3	0.3	3.6	876	1.4	478 749	132 016
Others	3.0	2.7	3.8	2 626	4	158 854	42 298
Total	**100**	**100**	**4.2**	**64 849**	**100**	**119 065**	**28 434**

Households are classified into percentile groups and deciles based on the adjusted per capita income (APCI) as indicated in Table 10.1.5. The first percentile group 1-25 includes the 25 percent of households with the lowest APCI. The last group 99 – 100 includes the 2 percent households with the highest APCI. The deciles divide the households into ten equal sized groups. Both the percentile groups and the deciles revealed the disparities that exist among the Namibian households with regard to the distribution of household consumption, which is skewed to the right. The 25 percent of the households in the first percentile group 1-25 which had on the average 6 to 7 persons, contributed 3.7 percent to the total consumption. The 2 percent of the households in the last percentile group had only 2 to 3 persons in the household and their contribution to the total consumption is 22.7 percent, which was more than six times the first group even though the population share of the first group was about 16 percent. The average household consumption of the first percentile group was N$27 301 compared to the N$733 245 of the last group which was about 26 times larger. Disparity becomes even more evident when consumption per capita is considered when N$4 194 of the first group is compared against the N$322 808 of the second group which was about 75 times higher.

Deciles also revealed a similar picture where the 10th decile has a per capita consumption of N$142 637 compared to the N$2 566 of the first decile which was about 55 times higher.

Table 10.1.5 Annual consumption by percentile group and deciles after adjusted per capita income

Percentile group/deciles	Households	Population	Average Household size	Total Consumption		Average household consumption	Consumption per capita
	%	%		Million N$	%	N$	N$
Percentiles							
1-25	25.0	16.1	6.5	2 391	3.7	27 301	4 194
26-50	25.0	20.7	5.1	5 436	8.4	48 160	9 533
51-75	25.0	26.4	4.0	10 847	16.7	75 540	19 017
76-90	15.0	20.2	3.1	13 646	21	123 911	39 912
91-95	5.0	8.0	2.6	8 863	13.7	202 523	77 670
96-98	3.0	4.9	2.6	8 948	13.8	335 875	130 903
99-100	2.0	3.7	2.3	14 719	22.7	733 245	322 808
Total	**100**	**100**	**4.2**	**64 849**	**100**	**119 065**	**28 434**
Deciles							
1	10	5.9	7.1	585	0.9	18 299	2 566
2	10	6.6	6.4	1 087	1.7	30 377	4 766
3	10	7.4	5.7	1 530	2.4	38 013	6 704
4	10	7.9	5.3	2 030	3.1	46 995	8 891
5	10	9.0	4.6	2 595	4	52 693	11 397
6	10	9.8	4.3	3 379	5.2	63 403	14 801
7	10	10.6	4.0	4 555	7	78 910	19 959
8	10	12.4	3.4	6 371	9.8	94 622	27 978
9	10	13.8	3.0	10 188	15.7	135 176	44 673
10	10	16.6	2.5	32 529	50.2	359 540	142 637

Figure 10.1.2 presents a comparison of monthly per capita consumption since 2003/2004 and it shows that the monthly per capita consumption had increased over the years, from N$900 in 2003/2004 to N$2 213 in 2015/2016.
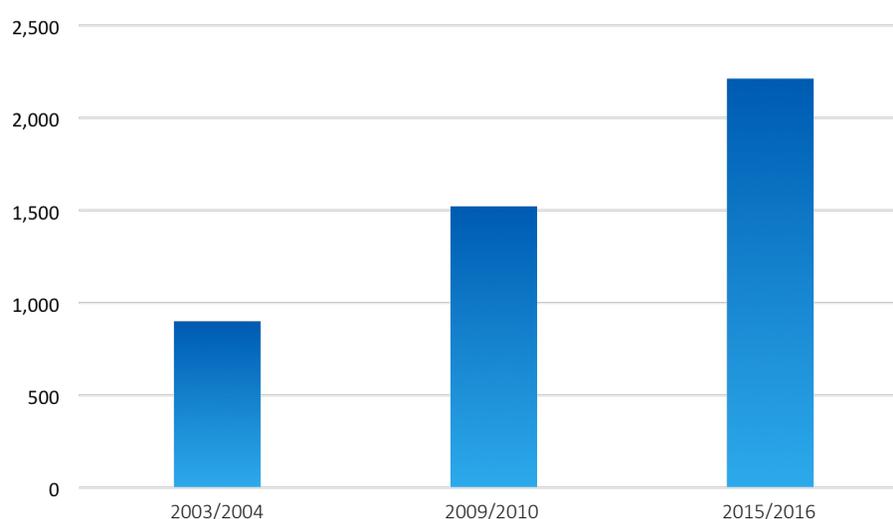
Figure 10.1.2 Monthly per capita consumption (N$), 2003/2004 to 2015/2016

11. Distribution of annual consumption

Tables in this chapter are about distribution of consumption of selected consumption groups. Food consumption ratio and type of transaction show relationships with various household characteristics such as household composition, orphan-hood and income.

11.1 Consumption Groups

Table 11.1.1 shows that households in Namibia spent 36.3 percent of their total expenditure on food and beverages (including alcoholic beverages and tobacco), 31.8 percent on housing, 7.5 percent on transport and communication and 10.8 percent of consumption on "other" goods and services. The category "other" includes recreation, culture, accommodation services and miscellaneous goods and services. As it was demonstrated during the NHIES 2003/04 and NHIES 2009/2010 surveys data, Education and Health continued to make up a very small proportion of total household consumption with 2.6 percent and 1.6 percent respectively, while the proportion of consumption on clothing and footwear reported was 4.2 percent.

It was also observed that urban households continued to spend a smaller proportion of their consumption on food and beverages (26.9 percent) than rural households (56.6 percent). Nevertheless, urban households tend to spend a large proportion of their consumption on housing (35.4 percent), a trend observed in 2003/04 and 2009/2010.

The higher proportion of food consumption, between 48 percent and 64 percent, was observed in Omusati, Kavango West, Ohangwena, Oshikoto, Kunene and Oshana regions. High proportion of consumption on housing, between 37 percent and 39 percent were observed in the regions of Erongo, Hardap and Khomas.

Table 11.1.1 Annual consumption by consumption group, region and urban/rural areas

Region Urban/Rural	Annual consumption, %									Total household consumption	Average household consumption
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
Namibia	**36.3**	**31.8**	**4.2**	**1.6**	**2.6**	**5.3**	**7.5**	**10.8**	**100**	**64 849**	**119 065**
Urban	26.9	35.4	4.8	2.0	3.2	5.7	8.9	13.0	100	44 428	150 692
Rural	56.6	23.9	2.8	0.9	1.2	4.3	4.6	5.8	100	20 421	81 742
!Karas	31.5	28.5	3.2	1.9	2.4	5.9	9.8	16.9	100	2 754	116 875
Erongo	23.1	38.6	5.3	1.8	1.8	6.1	10.5	12.8	100	7 518	128 616
Hardap	26.3	38.7	3.8	1.3	1.3	5.9	9.9	12.7	100	3 055	146 157
Kavango East	42.3	27.3	3.8	1.0	2.1	6.4	6.1	10.9	100	1 767	69 844
Kavango West	57.0	21.3	3.4	1.2	1.5	4.9	5.2	5.5	100	1 065	73 358
Khomas	25.5	36.9	4.5	2.5	4.1	5.5	8.0	13.0	100	23 534	209 555

Region Urban/Rural	Annual consumption, %									Total household consumption	Average household consumption
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
Kunene	50.5	24.4	4.0	1.4	2.2	5.7	4.6	7.1	100	1 344	62 612
Ohangwena	56.0	25.9	3.8	0.8	0.9	3.8	4.7	4.2	100	4 581	94 482
Omaheke	46.7	24.6	4.3	1.3	1.7	4.7	9.2	7.3	100	1 554	79 140
Omusati	63.5	21.6	3.2	0.5	1.8	4.1	1.6	3.8	100	3 599	67 792
Oshana	47.9	23.5	4.3	0.6	2.1	3.9	8.8	8.8	100	5 327	117 508
Oshikoto	53.5	28.0	2.4	0.6	1.2	3.8	3.9	6.5	100	3 725	89 944
Otjozondjupa	38.4	28.5	3.7	1.7	1.6	5.5	7.1	13.6	100	3 816	99 805
Zambezi	41.5	22.9	5.7	1.0	1.9	10.8	9.7	6.5	100	1 209	55 112

Table 11.1.2 presents the distribution of annual consumption by area and sex of the head of the household. The result indicates that consumption on food and beverages was higher in female-headed households than in male-headed households with 41 percent of the total annual consumption compared to 33.6 percent in male-headed households. The distribution of consumption on housing, clothing/footwear, health, education and furnishing did not differ much between female-headed and male-headed households. However, for male-headed households, 8.6 percent of the annual consumption is spent on transport/communication and 11.3 percent on other items, compared to 5.7 percent and 9.9 percent respectively for female-headed households. This difference in consumption pattern was reflected in both urban and rural households, except for consumption on housing in urban areas, where a higher proportion was observed among female-headed households with 36.1 percent.

Table 11.1.2 Annual consumption by consumption group, urban/rural areas and sex of head of household

Urban/Rural Sex of head	Annual consumption, %									Total household consumption	Average household consumption
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
Namibia											
Female	**41.0**	**30.5**	**3.9**	**1.3**	**2.9**	**4.7**	**5.7**	**9.9**	**100**	**23 824**	**99 343**
Male	**33.6**	**32.5**	**4.3**	**1.8**	**2.3**	**5.6**	**8.6**	**11.3**	**100**	**41 025**	**134 580**
Total	**36.3**	**31.8**	**4.2**	**1.6**	**2.6**	**5.3**	**7.5**	**10.8**	**100**	**64 849**	**119 065**
Urban											
Female	27.5	36.1	4.6	1.7	4.0	5.4	7.7	12.9	100	15 017	121 456
Male	26.7	35.0	4.9	2.2	2.8	5.9	9.5	13.1	100	29 411	171 807
Total	26.9	35.4	4.8	2.0	3.2	5.7	8.9	13.0	100	44 428	150 692
Rural											
Female	64.0	20.9	2.7	0.6	1.2	3.6	2.4	4.6	100	8 807	75 808
Male	51.0	26.1	2.8	1.1	1.1	4.9	6.3	6.7	100	11 614	86 899
Total	56.6	23.9	2.8	0.9	1.2	4.3	4.6	5.8	100	20 421	81 742

Table 11.1.3 shows major differences among households speaking different main languages. The Khoisan-speaking households had the lowest annual average household consumption of N$39 606 and the highest proportion spent on food and beverages (73.6 percent). German-speaking households and households speaking English had the highest annual average household consumption of N$483 059 and N$409 955 respectively. They also had the lowest spending on food and beverages with English-speaking households spending 13.6 percent while German-speaking households spent 20.3 percent.

Households where the main languages spoken were Khoisan, Rukavango, Zambezi languages or Oshiwambo languages, had a lower proportion of consumption on housing, 13.2 percent, 24.3 percent, 25 percent and 27.4 percent respectively.

Table 11.1.3 Annual consumption by consumption group and main language spoken in the household

| Main language spoken | Annual consumption, % | | | | | | | | Total household consumption | Average household consumption |
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
Khoisan	73.6	13.2	2.9	0.4	0.4	2.1	3.7	4.1	100	242	39 606
Zambezi languages	37.9	25.0	6.1	1.3	2.7	9.4	8.2	9.4	100	1 590	67 928
Otjiherero	41.5	30.7	3.9	1.1	2.6	4.2	6.7	9.3	100	5 016	101 231
Rukavango	46.6	24.3	3.8	1.0	2.0	5.3	6.5	10.4	100	3 573	71 021
Nama/Damara	40.3	30.6	4.5	1.0	2.2	4.3	5.8	11.2	100	5 938	93 948
Oshiwambo	45.0	27.4	4.4	0.9	2.4	4.2	7.2	8.5	100	27 369	97 669
Setswana	29.4	42.1	4.8	0.8	4.0	4.0	3.2	12.7	100	126	96 116
Afrikaans	24.2	38.5	3.5	1.8	2.6	7.3	8.2	13.8	100	10 422	258 406
German	20.3	41.3	1.8	5.0	3.9	4.6	9.5	13.4	100	1 014	483 059
English	13.6	32.8	4.8	7.1	2.4	5.1	13.9	20.3	100	3 204	409 955
Other European	18.3	35.0	8.2	2.2	5.7	16.6	2.9	11.0	100	826	270 465
Other African	18.8	39.3	3.7	4.6	4.0	7.4	8.9	13.2	100	1 316	218 232
Others	16.0	50.4	3.1	2.4	2.9	5.6	7.8	11.8	100	4 212	376 276
Total	**36.3**	**31.8**	**4.2**	**1.6**	**2.6**	**5.3**	**7.5**	**10.8**	**100**	**64 849**	**119 065**

Households that reported drought/in-kind receipts, pension and subsistence farming as their main source of income had the highest proportion of consumption on food and beverages (69.1, 64.1, and 63.9 percent). Similarly, Commercial farmers spend about 27 percent of their consumption on food and beverages.

Table 11.1.4 Annual consumption by consumption group and main source of income

| Main source of income | Annual consumption, % | | | | | | | | | Total household consumption | Aver age household consumption |
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
Salaries & wages	30.0	31.8	5.1	2.0	2.9	5.9	9.1	13.3	100	38 499	131 993
Pension	64.1	22.8	1.8	1.0	1.2	3.1	2.7	3.3	100	5 282	88 045
Subsistence farming	63.9	23.1	2.4	0.6	1.0	3.4	2.7	2.9	100	4 492	77 447
Business income	30.4	37.5	3.7	1.3	2.5	6.3	7.8	10.5	100	7 767	156 930
Remittances/grants	45.5	29.6	3.7	0.7	3.9	3.6	4.8	8.2	100	4 655	88 850
Drought/in-kind receipts	69.1	18.4	2.6	0.5	2.3	2.5	2.0	2.8	100	653	44 280
Commercial farming	27.6	31.5	0.6	1.7	1.0	8.9	14.0	14.6	100	876	478 749
Others	21.2	55.0	2.4	2.1	1.3	3.7	5.9	8.3	100	2 626	158 854
Total	**36.3**	**31.8**	**4.2**	**1.6**	**2.6**	**5.3**	**7.5**	**10.8**	**100**	**64 849**	**119 065**

The percentile groups showed a skewed distribution of average household consumption whereby the last two percent of households reported an average household consumption of N$733 245 compared to N$27 301 reported by the first quarter. The share of housing consumption was highest in the last two percent of households compared to other consumption items. The decile grouping showed a clear increasing trend on furnishing/equipment, transport and communication and other consumption, increasing from the first to the last decile as average household consumption increased. Food/beverages consumption on the other hand, decreased with an increase in the average household consumption.

Table 11.1.5 Annual consumption by consumption group and percentile group after adjusted per capita income

| Percentile group/ deciles | Annual consumption, % | | | | | | | | | Total household consumption | Average household consumption |
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
Percentiles											
1-25	57.1	22.4	3.8	0.7	2.4	4.1	3.5	6.0	100	2 391	27 301
26-50	55.2	23.1	4.2	0.6	1.8	4.4	3.6	6.9	100	5 436	48 160
51-75	47.7	26.0	4.1	1.0	2.8	4.9	4.6	9.0	100	10 847	75 540
76-90	36.8	31.8	5.1	1.3	2.9	5.5	5.7	11.0	100	13 646	123 911
91-95	30.2	33.4	5.1	1.9	3.8	5.8	7.0	12.9	100	8 863	202 523
96-98	25.3	36.8	4.3	1.4	2.9	5.7	10.8	12.8	100	8 948	335 875
99-100	27.4	36.7	2.8	3.0	1.4	5.2	11.9	11.6	100	14 719	733 245
Total	**36.3**	**31.8**	**4.2**	**1.6**	**2.6**	**5.3**	**7.5**	**10.8**	**100**	**64 849**	**119 065**

Percentile group/ deciles	Annual consumption, %									Total household consumption	Average household consumption
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
Deciles											
1	55.7	23.4	3.6	0.7	2.7	4.6	3.6	5.6	100	585	18 299
2	56.2	22.7	4.0	0.7	2.8	4.0	3.3	6.2	100	1 087	30 377
3	58.6	20.9	4.0	0.6	2.0	4.4	3.5	6.1	100	1 530	38 013
4	56.5	22.0	3.9	0.7	1.8	4.1	3.9	7.0	100	2 030	46 995
5	53.6	24.7	4.4	0.6	1.6	4.5	3.5	7.1	100	2 595	52 693
6	52.5	24.5	3.8	0.9	2.2	4.3	4.1	7.8	100	3 379	63 403
7	46.8	26.0	4.1	1.1	2.5	5.3	5.0	9.2	100	4 555	78 910
8	42.3	28.8	4.5	0.9	3.3	5.3	4.8	10.0	100	6 371	94 622
9	35.2	32.5	5.3	1.4	3.0	5.5	5.9	11.3	100	10 188	135 176
10	27.6	35.8	3.8	2.3	2.5	5.5	10.3	12.3	100	32 529	359 540

11.2   Poverty and Inequality

In 2003/2004 Namibia introduced a paradigm shift from the use of the conventional food consumption ratio to the use of the cost of basic needs approach as a measure of the poverty threshold. Poverty thresholds are particularly useful for creation of the poverty profiles, poverty mapping, estimating deprivation indices, implementing poverty social impact analysis on the poor and the vulnerable. It is also used for exploring and re-evaluating determinants of poverty and ultimately guiding policy interventions aimed at eradicating poverty as stipulated in the National Development Plans, Vision 2030, the Harambe Prosperity Plan, the Africa Agenda 2063 and in the Sustainable Development Goals (SDGs).

11.2.1 Poverty lines

In this chapter poverty is defined as the number of people who are unable to command sufficient resources to satisfy basic needs. They are counted as the total number of people living below a specified minimum level of income or below a national poverty line. Table 11.2.1 shows the estimated poverty lines for 2015/2016.

The table further shows the computed poverty lines for 2015/2016 periods using a similar methods used in 2003/2004 and 2009/2010. The poverty lines (both the lower and upper bound) are calculated as the amount below which persons are classified as severely poor or simply as poor. The figures are adjusted for inflation effects. The food poverty line estimate for 2015/2016 is N$ 293.1, with the lower bound poverty line estimated at N$ 389.3 and the upper bound poverty line at N$ 520.8.

Table 11.2.1 Namibia's poverty lines (current ND/adult/month), 2003/04-2015/2016

Poverty lines	2003/2004 N$	2009/2010 N$	2015/2016 N$
FPL (Food poverty line)	127.15	204.05	293.1
LBPL (Lower bound poverty line)	184.56	277.54	389.3
UBPL (Upper bound poverty line)	262.45	377.96	520.8

The upper bound poverty line identifies persons that are considered to be poor while the lower bound poverty line identifies persons that are food poor since their total consumption expenditures are insufficient to meet their daily calorific requirement. For instance any person who was not able to spend at least N$389.30 per month on basic necessities was considered severely poor. A person who was not able to spend at least N$520.80 per month on basic needs was considered to be poor.

Table 11.2.2 summarizes a selection of the main findings of the poverty estimates. Most of the estimates suggested that poverty has further decreased during the last five years. In total 6.1 percent of the population (139 124 persons) in the country could not afford to buy the minimum (2 100 kcal) calories per day. The table also revealed that 10.7 percent of the population (244 037 persons) were still below the lower bound poverty line while 17.4 percent of the population (396,845) were still below the upper bound poverty line.

Table 11.2.2 Selected inequality and poverty estimates, 2003/04-2015/2016

	2003/04	**2009/2010**	**2015/2016**		**diff. (%)**	**diff. (%)**	**diff. (%)**
	1	2	3		(2) - (1)	(3)- (2)	(3) - (1)
Population	1 817 251	2 066 398	2 280 716		13.7	10.4	25.5
FOOD POVERTY LINE							
Headcount ratio (%)	11.0	7.2	6.1		-34.3	-15.8	-44.6
LOWER POVERTY LINE							
Headcount ratio (%)	21.8	15.4	10.7		-29.3	-30.7	-51.0
UPPER POVERTY LINE							
Headcount ratio (%)	37.5	28.8	17.4		-23.4	-39.5	-53.7

Table 11.2.3 shows the incidence, depth and severity of poverty as measured by the conventional P0, P1 and P2 indices respectively for both the upper and lower bound poverty lines. According to these measures, 17.4 percent of the population in Namibia were considered poor using the upper bound poverty line (N520.8). This indicated a decline in poverty levels since 2009/2010.

Table 11.2.3 Incidence, depth and severity of poverty by category of poor persons, 2015/2016

	Incidence (P0)	**Depth (P1)**	**Severity (P2)**
Poor	17.4%	6.0%	2.9
Severely poor	10.7%	3.4%	1.5

On average those poor people were just 6.0 percent below the poverty line, meaning that they were N$31.2 on average below the upper bound poverty line. In other words, they needed just N$31.2 each to be removed from poverty.

P2 shows the severity index over time. The measurement of the severity of poverty gives a higher weight to the poorest of the poor. This measure can be particularly useful in tracking developments for the poorest over time and comparing severe deprivation across groups. About 10.7 percent of the population were severely poor or food poor as measured by the lower bound poverty line of N$389.3. On average, severely poor people were just 3.4 percent below the severe poverty line. This measurement of the depth of severe poverty says that an average of N$13.2 additional consumption expenditure per person would be needed to lift severely poor Namibians out of severe poverty (that is, 3.4 percent times N$389.3).

Figure 11.2.1 shows the incidence of poverty by sex of the head of household. The incidence of poverty in female-headed households is higher with 19.2 percent compared to the male-headed households with 15.8 percent. The female-headed households also have a larger incidence of severely poor with 11.7 percent compared to 9.9 percent for male-headed households. Comparisons with the 2009/2010 survey show that poverty levels have fallen from 22.4 to 19.2 percent for female-headed households and from 17.6 to 15.8 percent for male-headed households, respectively. The incidence of severely poor households has only slightly increased from 11.1 to 11.7 percent for female-headed households and from 8.5 to 9.9 percent for male-headed households. The statistics shows that despite the overall reductions in the incidence of poverty, the incidence of severely poor households, slightly increased and still remains disproportionately higher in female headed households.
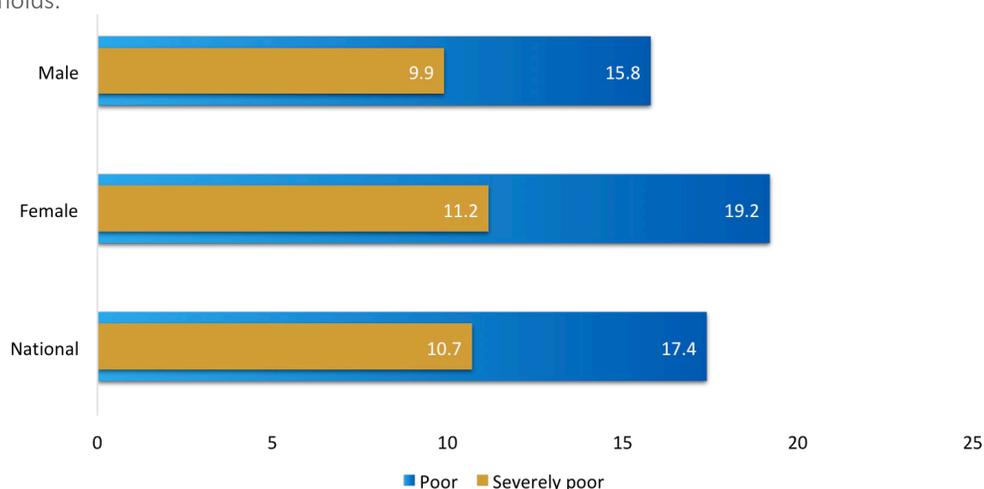
Figure 11.2.1 Incidence of Poverty by Sex of head of household

Figure 11.2.2 indicates that the poor are disproportionately located in rural areas. About 25.1 percent of rural households are poor, compared to 8.6 percent for urban households. The incidence of severely poor households is also higher among rural households, where 15.9 percent of the households were found to be severely poor compared to 4.8 percent in urban areas. When compared to the 2009/2010 NHIES, the number of severely poor people in rural areas has increased from 13.56 percent to 15.9 percent.
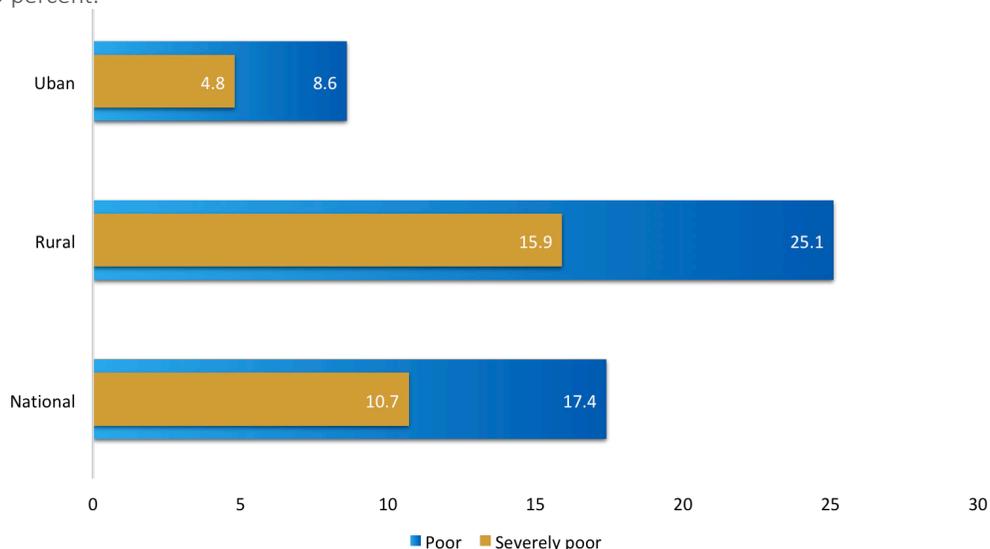
Figure 11.2.2 Incidence of Poverty by Urban and Rural Areas

Figure 11.2.3 shows the distribution of poverty across the country. The dark colours represent regions with higher poverty levels and the light colours the regions with lower poverty levels. There are very high levels of poverty in the Kunene, Kavango East, Zambezi and Omaheke regions. These regions have poverty levels above the national average of 17.4 percent. Lower levels of poverty are observed in Khomas, Erongo and !Karas regions.

Similarly, the distribution of severely poor households across the country is highly concentrated in Kunene, Kavango East, Zambezi and Omaheke regions. These regions have severely poverty rate above the national average of 10.7%. Lower levels of severely poor are found in Khomas and Erongo regions.
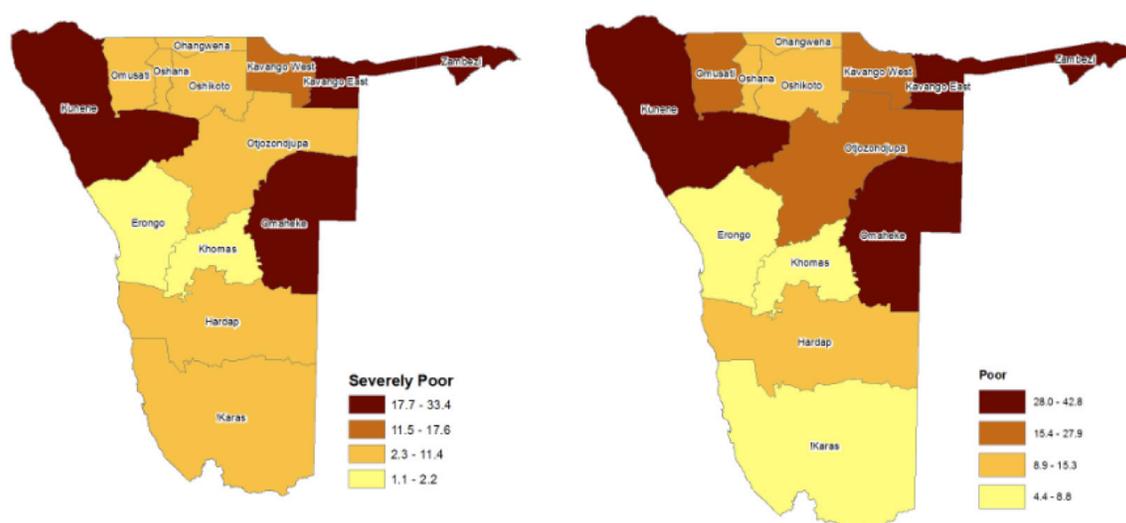
Figure 11.2.3 Distribution of Poverty by Regions

11.3   The GINI-Coefficient

The GINI coefficient for Namibia over the three years survey periods is represented in figure 11.3.1 below for 2003/2004, 2009/2010 and 2015/2016 and is 0.60, 0.58 and 0.56 respectively. The GINI coefficient is calculated on the adjusted per capita income for every single household member. Thus, it shows that inequality in the distribution of income has decreased albeit incrementally. Despite this decline however, the level of inequality in Namibia remains among the highest in the world.
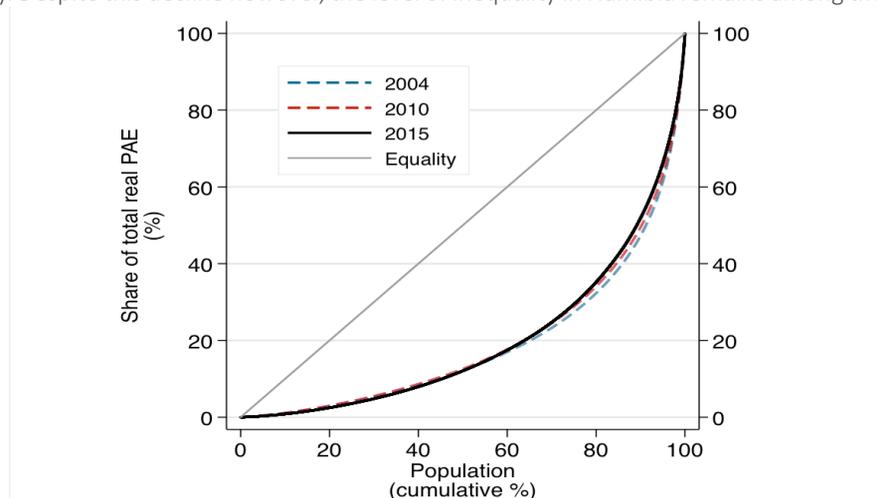
Figure 11.3.1 Lorenz diagram for income distribution among the population in Namibia

Appendix 1: Detailed Tables

Table 1 Annual consumption by urban/rural areas and region

Region	Households	Population	Average Household size	Total Consumption		Average household consumption	Consumption per capita
	%	%		Million N$	%	N$	N$
!Karas							
Urban	58.5	68.5	4.2	1 729	62.8	125 449	30 014
Rural	41.5	31.5	2.7	1 026	37.3	104 801	38 735
Total	100	100	3.6	2 754	100	116 875	32 760
Erongo							
Urban	89.9	89.7	3.0	7 115	94.6	135 340	45 105
Rural	10.1	10.3	3.1	403	5.4	68 502	22 250
Total	100	100	3.0	7 518	100	128 616	42 752
Hardap							
Urban	70.1	78.5	4.6	2 167	70.9	147 951	32 235
Rural	29.9	21.5	2.9	888	29.1	141 958	48 230
Total	100	100	4.1	3 055	100	146 157	35 675
Kavango East							
Urban	46.1	40.4	5.1	1 032	58.4	88 421	17 474
Rural	53.9	59.6	6.4	735	41.6	53 933	8 440
Total	100	100	5.8	1 767	100	69 844	12 091
Kavango West							
Urban	7.2	5.7	4.8	93	8.7	89 011	18 419
Rural	92.8	94.3	6.2	972	91.3	72 147	11 620
Total	100	100	6.1	1 065	100	73 358	12 006
Khomas							
Urban	96.2	96.1	3.6	23 022	97.8	213 040	59 869
Rural	3.8	3.9	3.7	512	2.2	120 766	32 719
Total	100	100	3.6	23 534	100	209 555	58 807
Kunene							
Urban	41.9	42.3	4.5	636	47.3	70 795	15 720
Rural	58.1	57.7	4.4	708	52.7	56 718	12 838
Total	100	100	4.5	1 344	100	62 612	14 059
Ohangwena							
Urban	18.0	9.7	2.8	777	17.0	88 927	31 630
Rural	82.0	90.3	5.8	3 804	83.0	95 704	16 627
Total	100	100	5.2	4 581	100	94 482	18 082

Region	Households	Population	Average Household size	Total Consumption		Average household consumption	Consumption per capita
	%	%		Million N$	%	N$	N$
Omaheke							
Urban	46.8	49.4	4.0	796	51.2	86 586	21 777
Rural	53.2	50.6	3.6	758	48.8	72 588	20 226
Total	100	100	3.8	1 554	100	79 140	20 992
Omusati							
Urban	9.3	4.7	2.3	329	9.1	66 406	28 274
Rural	90.7	95.3	4.9	3 270	90.9	67 934	13 806
Total	100	100	4.7	3 599	100	67 792	14 484
Oshana							
Urban	54.5	42.9	3.2	2 891	54.3	117 083	36 141
Rural	45.5	57.1	5.2	2 436	45.7	118 017	22 840
Total	100	100	4.1	5 327	100	117 508	28 541
Oshikoto							
Urban	17.6	11.7	3.1	722	19.4	99 331	32 172
Rural	82.5	88.3	5.0	3 003	80.6	87 946	17 660
Total	100	100	4.6	3 725	100	89 944	19 352
Otjozondjupa							
Urban	58.0	60.7	4.2	2 464	64.6	111 063	26 658
Rural	42.0	39.3	3.7	1 352	35.4	84 244	22 572
Total	100	100	4.0	3 816	100	99 805	25 051
Zambezi							
Urban	32.0	30.2	4.2	655	54.2	93 190	22 336
Rural	68.0	69.8	4.5	555	45.9	37 178	8 174
Total	100	100	4.4	1 209	100	55 112	12 446
Namibia							
Urban	**54.1**	**46.9**	**3.6**	**44 428**	**68.5**	**150 692**	**41 575**
Rural	**45.9**	**53.1**	**4.9**	**20 421**	**31.5**	**81 742**	**16 848**
Total	**100**	**100**	**4.2**	**64 849**	**100**	**119 065**	**28 434**

Table 2 Annual consumption by group and urban/rural areas

Region Urban/Rural	Annual consumption, %									Total household consumption	Average household consumption
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
!Karas											
Urban	31.7	31.1	3.3	1.6	2.5	4.9	7.6	17.2	100	1 729	125 449
Rural	31.2	24.0	2.9	2.2	2.3	7.5	13.5	16.4	100	1 026	104 801
Total	31.5	28.5	3.2	1.9	2.4	5.9	9.8	16.9	100	2 754	116 875
Erongo											
Urban	22.6	38.7	5.4	1.7	1.9	6.0	10.8	12.8	100	7 115	135 340
Rural	32.3	36.2	4.5	2.5	0.7	6.0	5.0	12.7	100	403	68 502
Total	23.1	38.6	5.3	1.8	1.8	6.1	10.5	12.8	100	7 518	128 616
Hardap											
Urban	23.5	36.7	4.5	1.4	1.6	6.6	11.1	14.5	100	2 167	147 951
Rural	32.8	43.6	2.1	1.4	0.6	4.4	6.8	8.3	100	888	141 958
Total	26.3	38.7	3.8	1.3	1.3	5.9	9.9	12.7	100	3 055	146 157
Kavango East											
Urban	31.6	32.2	4.7	1.0	2.5	7.2	7.8	13.2	100	1 032	88 421
Rural	57.4	20.5	2.7	1.0	1.5	5.3	3.7	7.9	100	735	53 933
Total	42.3	27.3	3.8	1.0	2.1	6.4	6.1	10.9	100	1 767	69 844
Kavango West											
Urban	28.0	31.2	6.5	1.1	2.2	7.5	11.8	10.8	100	93	89 011
Rural	59.8	20.4	3.1	1.2	1.4	4.6	4.5	5.0	100	972	72 147
Total	57.0	21.3	3.4	1.2	1.5	4.9	5.2	5.5	100	1 065	73 358
Khomas											
Urban	25.1	36.9	4.5	2.5	4.2	5.5	8.2	13.1	100	23 022	213 040
Rural	41.4	38.9	1.6	0.4	0.2	3.9	2.5	11.1	100	512	120 766
Total	25.5	36.9	4.5	2.5	4.1	5.5	8.0	13.0	100	23 534	209 555
Kunene											
Urban	32.9	28.8	5.0	2.4	4.1	7.2	6.8	12.9	100	636	70 795
Rural	66.2	20.5	3.1	0.6	0.6	4.1	2.7	2.0	100	708	56 718
Total	50.5	24.4	4.0	1.4	2.2	5.7	4.6	7.1	100	1 344	62 612
Ohangwena											
Urban	43.9	26.4	6.8	1.8	0.4	6.0	5.4	9.1	100	777	88 927
Rural	58.5	25.7	3.1	0.6	1.0	3.3	4.5	3.2	100	3 804	95 704
Total	56.0	25.9	3.8	0.8	0.9	3.8	4.7	4.2	100	4 581	94 482

Region Urban/Rural	Annual consumption, %									Total household consumption	Average household consumption
	Food and beverages	Housing	Clothing and footwear	Health	Education	Furnishing and equipment	Transport and communication	Other	Total	Million N$	N$
Omaheke											
Urban	31.8	30.2	6.2	1.4	3.0	6.3	10.7	10.6	100	796	86 586
Rural	62.4	18.9	2.4	1.2	0.4	3.2	7.7	4.0	100	758	72 588
Total	46.7	24.6	4.3	1.3	1.7	4.7	9.2	7.3	100	1 554	79 140
Omusati											
Urban	42.9	29.5	5.8	0.3	3.3	5.5	4.0	9.1	100	329	66 406
Rural	65.5	20.9	3.0	0.5	1.6	3.9	1.3	3.3	100	3 270	67 934
Total	63.5	21.6	3.2	0.5	1.8	4.1	1.6	3.8	100	3 599	67 792
Oshana											
Urban	32.5	28.9	5.8	0.8	2.8	4.6	12.4	12.1	100	2 891	117 083
Rural	66.2	17.2	2.5	0.5	1.2	3.0	4.4	4.9	100	2 436	118 017
Total	47.9	23.5	4.3	0.6	2.1	3.9	8.8	8.8	100	5 327	117 508
Oshikoto											
Urban	35.3	33.1	5.4	1.1	1.7	5.4	5.4	12.6	100	722	99 331
Rural	57.8	26.8	1.7	0.5	1.1	3.5	3.6	5.0	100	3 003	87 946
Total	53.5	28.0	2.4	0.6	1.2	3.8	3.9	6.5	100	3 725	89 944
Otjozondjupa											
Urban	33.6	31.8	4.3	1.5	2.2	5.3	7.0	14.3	100	2 464	111 063
Rural	47.1	22.3	2.5	1.9	0.7	5.8	7.5	12.3	100	1 352	84 244
Total	38.4	28.5	3.7	1.7	1.6	5.5	7.1	13.6	100	3 816	99 805
Zambezi											
Urban	29.9	31.3	5.2	1.1	2.4	9.3	12.2	8.7	100	655	93 190
Rural	55.3	13.0	6.5	0.9	1.3	12.4	6.7	4.0	100	555	37 178
Total	41.5	22.9	5.7	1.0	1.9	10.8	9.7	6.5	100	1 209	55 112
Namibia											
Urban	**26.9**	**35.4**	**4.8**	**2.0**	**3.2**	**5.7**	**8.9**	**13.0**	**100**	**44 428**	**150 692**
Rural	**56.6**	**23.9**	**2.8**	**0.9**	**1.2**	**4.3**	**4.6**	**5.8**	**100**	**20 421**	**81 742**
Total	**36.3**	**31.8**	**4.2**	**1.6**	**2.6**	**5.3**	**7.5**	**10.8**	**100**	**64 849**	**119 065**

Table 3 Households by ownership of and access of assets

Assets	Owns	Has Access	Has no access	Total
Motor car, station wagon	15.9	30.9	53.2	100
Buses & Mini-buses	0.7	29.9	69.4	100
Bakkies and 4-wheel drives	11.4	35.9	52.6	100
Motor cycle/scooter	1.0	3.4	95.6	100
Bicycle	10.8	10.0	79.3	100
Electric stove	35.4	5.8	58.7	100
Gas or paraffin stove	23.0	4.6	72.4	100
Microwave oven	25.2	6.0	68.8	100
Refrigerator	37.8	10.3	51.8	100
Freezer	17.8	18.9	63.3	100
Washing machine	18.6	5.2	76.2	100
Sewing/knitting machine	7.8	11.0	81.2	100
Radio	45.6	23.7	30.7	100
Stereo/HiFi/tape recorder	14.3	6.5	79.2	100
Television	42.5	11.8	45.7	100
Internet aerial/dish	15.0	8.2	76.7	100
Video cassette recorder/DVD	18.9	6.2	74.9	100
Telephone handset/receiver	4.9	9.1	86.0	100
Cell telephone	93.3	2.5	4.2	100
Computer-laptop or desktop	18.7	9.2	72.1	100
Tablet-ipad, etc	4.4	4.7	90.9	100
Camera	10.3	20.5	69.2	100
Generator	3.8	6.4	89.8	100
Living room furniture set	30.6	5.5	63.8	100
Bedroom furniture set	57.8	3.8	38.5	100
Dining room/kitchen furniture	25.4	7.4	67.2	100
Donkey cart/Ox Cart	6.0	9.1	84.9	100
Plough	15.6	11.3	73.1	100
Tractor	0.6	16.2	83.2	100
Wheelbarrow	21.2	15.5	63.3	100
Grinding mill	0.7	17.4	82.0	100

Assets	Owns	Has Access	Has no access	Total
Motor boat	0.1	1.8	98.1	100
Canoe/boat	1.0	4.3	94.7	100
Tents with/without chairs & tables	7.5	8.6	83.9	100
Wheelchair electric or not	0.5	1.9	97.6	100

Appendix 2: The Sample Weights

Weighting is a process of accounting for the selection probabilities and non-response in a sample survey. The inverse of these selection probabilities adjusted for non-response is called the design (base) weight. For the calculation of income and consumption per capita aggregates, weights calibration was required to get the required population and households weights for the calculation of per capita indicators. Assistance was sought from experts from the World Bank as there was no internal expertise to do weight calibration as required.

2.1 The Design/Base Weight

Population figures were estimated by raising sample figures using design weights. Design weights were calculated based on the probabilities of selection at each stage. The first stage weights were calculated using the sample selection information from the sampling frame and the second stage weights were calculated based on the sample selection information of the household listing.

The first stage probability of selection p_1 was calculated using the following equation:

$$p_1 = \frac{M_{hi} * n_h}{M_h}$$

(2)

where;
M_{hi} = Number of households in PSU (i) in stratum h (PSU size)
M_h = Total number of households in stratum h (stratum size)
n_h = Number of PSUs selected from the stratum h

The second stage probability of selection p_2 was calculated using the following equation:

$$p_2 = \frac{m_{hi}}{M'_{hi}}$$

(3)

Where;
m_{hi} = Number of households in the sample from the ith PSU in stratum h
M'_{hi} = Number of households in the ith PSU in stratum h according to survey listing

Therefore, the Inverse Sampling Rate (ISR) which is the design weights was calculated as follows:

$$ISR = \frac{1}{p_1} * \frac{1}{p_2} = \frac{M_h}{M_{hi} * n_h} * \frac{M'_{hi}}{m_{hi}}$$

(4)

2.2 The Design Weight Adjustment

2.2.1 Adjustment for Segmented PSU

For the PSUs that were segmented during listing stage, additional probability of selection was introduced. Let t be the number of households in the selected segment and T the total number of households in a segmented PSU, then equation 2 above can be adjusted to account for segments selection as follows:

$$p_1^{adj} = \frac{M_{hi} * n_h}{M_h} * \frac{t}{T}$$

(5)

2.2.2 Adjustment for Household Non-Response

Unit non-response can be accounted for during surveys by applying non response adjustment factor to weights. An adjustment is usually made to the design weight on the assumption that the characteristics of the responding units are similar to those of the non-responding units. The household non-response was carried out for the NIDS 2016 by getting the selection probability of households (p_2) using the responding households instead of expected households. Therefore, m_{hi} in equation 3 was replaced by the number of responding households within each PSU and hence equation 3 becomes:

$$p_2{}^r = \frac{m_{hi}{}^r}{M'_{hi}} \tag{6}$$

where;
$m_{hi}{}^r$ = Number of responding households in the sample from the ith PSU in stratum h

Therefore, the design weights was calculated by incorporating equation 5 and equation 6 to form the following equation:

$$ISR^{adj} = \frac{1}{p_1{}^{adj}} * \frac{1}{p_2{}^r} = \left[\left(\frac{M_h}{M_{hi} * n_h} * \frac{T}{t} \right) * \frac{M'_{hi}}{m_{hi}{}^r} \right] \tag{7}$$

2.3 Weight Calibration

This section presents in brief the applied calibration approach, and the associated quality metrics. Using calibration for the adjustment of survey weights is a widely used approach in statistical agencies. It is used for two purposes:
   i.   To adjust for non-response
   ii. To increase estimator efficiency.

In particular the adjustment of non-response can be done in a much more efficient way, than individual cell or cluster level adjustments. The weights will be adjusted in a way that the overall deviation from the original weights is minimized. Individuals from underrepresented groups will experience an increase in their weights, individuals from overrepresented groups will receive a decrease in their weights, however this is done under the constraints of minimizing the overall difference. The latter is also the major difference between other approaches of non-response adjustment, which do not take into account the total changes.

However many statistical software packages only implement the most basic type of calibration, namely post-stratification. The R based REGENESEES 1.9 (Zardetto, 2017) package however offers a wide range of calibration approaches, and was also applied to the underlying case.

The following requirements were used in the adjustment of the weights (calibration process)
   a.   National 5 year age sex distribution
   b.   National urban 5 year age sex distribution
   c.   National rural 5 year age sex distribution
   d.   Regional 10 year age sex distribution

In addition, it is required that weights are held constant for all members of the same household.

There are several approaches to address the required adjustment of the weights (i.e. to formulate the calibration model), however after checking the resulting quality metrics, two approaches have been selected.

The first approach is a 2 stage calibration, with calibration of the weights to the age/sex distribution by domain (regions) at the first stage and urban/rural/national at the second stage, and the second approach is a single stage adjustment to the same totals, but not at the domain level. Whereas the former results in a lower deviation of the calibrated weights from the original ones, the latter has a better representation of the underlying totals, but at the price of a larger deviation from the original weights. In particular in the individual analysis of certain small sub-populations (i.e female population of 85+ in the Zambezi region), this deviations may be relevant.

As a result, four sets of weights were produced, file **ind2s.csv** (variable: *HH_WEIGHT.cal.cal*, trimmed and the variable HH_WEIGHT.cal, untrimmed) for the two stage design and **ind1s.csv** (variables: *HH_WEIGHT.cal*, untrimmed and *HH_WEIGHT.cal.cal*, trimmed) for the single stage.

Quality Checks for the Calibrated Weights

The presented quality checks below are only part of a large number of checks. To test the efficiency of the resulting calibrated weights it is important to also look on their impact on the Design Effect (DEFF) as well as the Standard Error. These results are not presented here.

Population Totals

Table 1: National Population

	Total
Original data	1 977 910
Single stage calibration	2 280 627
Two stage calibration	2 280 716

Table 2: Population by Region

Region	Original	Single Stage	Two Stage
!Karas	61 326	84 077	81 180
Erongo	147 442	175 853	173 568
Hardap	62 848	85 629	80 308
Kavango East	142 739	146 151	141 895
Kavango West	79 026	88 705	96 758
Khomas	326 447	400 102	398 379
Kunene	64 595	95 610	93 114
Ohangwena	230 994	253 348	268 799
Omaheke	58 036	74 040	68 959
Omusati	239 786	248 490	256 186
Oshana	167 957	186 634	179 110
Oshikoto	186 862	192 469	198 880
Otjozondjupa	131 375	152 343	142 422
Zambezi	78 477	97 176	101 156

Table 3: Population by Age Group

	Original	Single Stage	Two Stage
X0.4	286 654	317 503	317 503
X5.9	249 519	274 401	274 401
X10.14	204 959	238 160	238 160
X15.19	195 019	243 482	243 482
X20.24	193 345	231 466	231 466
X25.29	159 946	202 828	202 828
X30.34	135 591	163 689	163 689
X35.39	120 009	136 985	136 985
X40.44	97 589	112 821	112 821
X45.49	77 297	88 195	88 195
X50.54	63 520	71 893	71 893
X55.59	53 022	53 922	53 922
X60.64	40 004	41 878	41 878
X65.69	29 703	34 576	34 576
X70.74	21 507	24 718	24 718
X75.79	18 959	17 148	17 148
X80.84	31 267	26 962	27 051

Graphical Analysis of Weights

In the following, the presentation the frequency will be shown as well as the spatial distribution of the weights and the effect of the calibration is highlighted.

Frequency Distribution

i. Original Weights

The initial unadjusted weights cover a range from around 6 to 179, with a mean of around 48, as shown in the following figure.

Minimum: 6.05 Mean: 47.57 Maximum: 179.72

Frequency distribution for the initial (design) weights
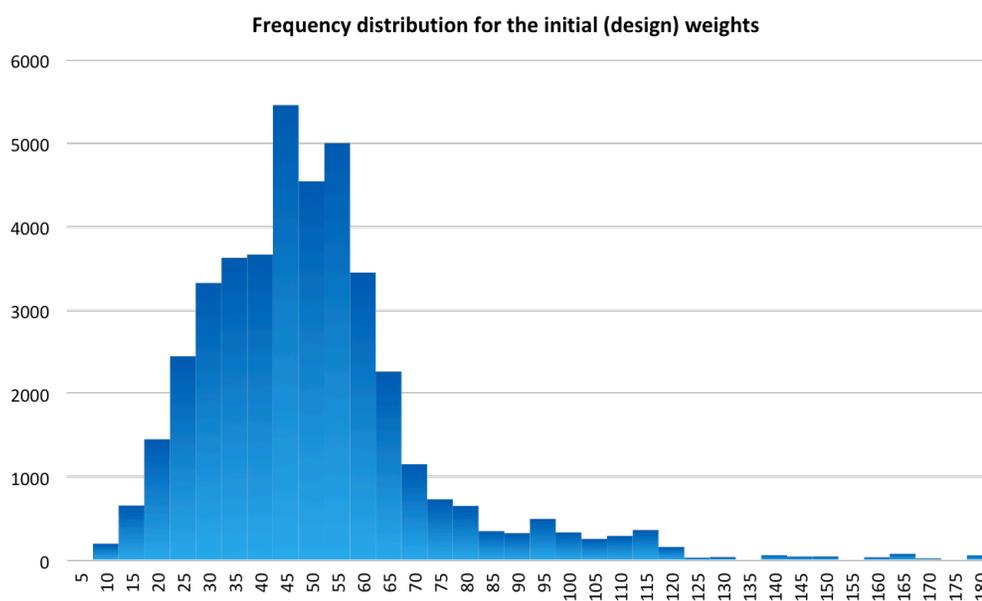
ii. 1 Stage Adjustment

For the untrimmed weights we receive a range from approximately 1 to 479, and a slightly increased mean - in comparison of the original weights of around 56.

Minimum: 1.06 Mean: 54.85 Maximum: 489

Frequency distribution for 1 step calibration
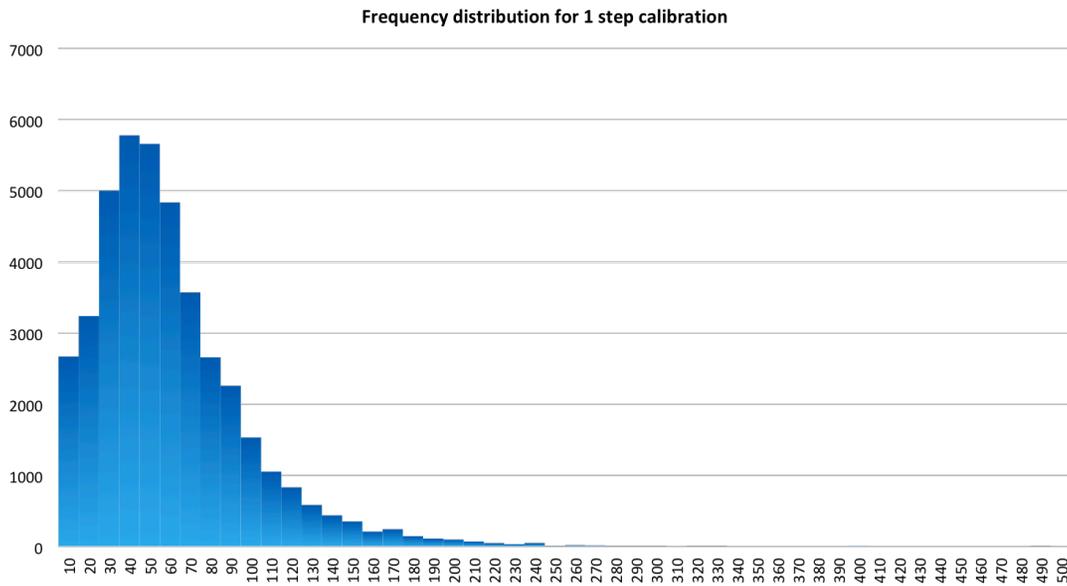
If trimming is applied to the same weights, they can be trimmed to a range of 2 to 400, and an almost unchanged mean of around 56.

Minimum: 2 Mean 54.85 Maximum: 400

Frequency distribution for 1 step calibration Trimmed weights
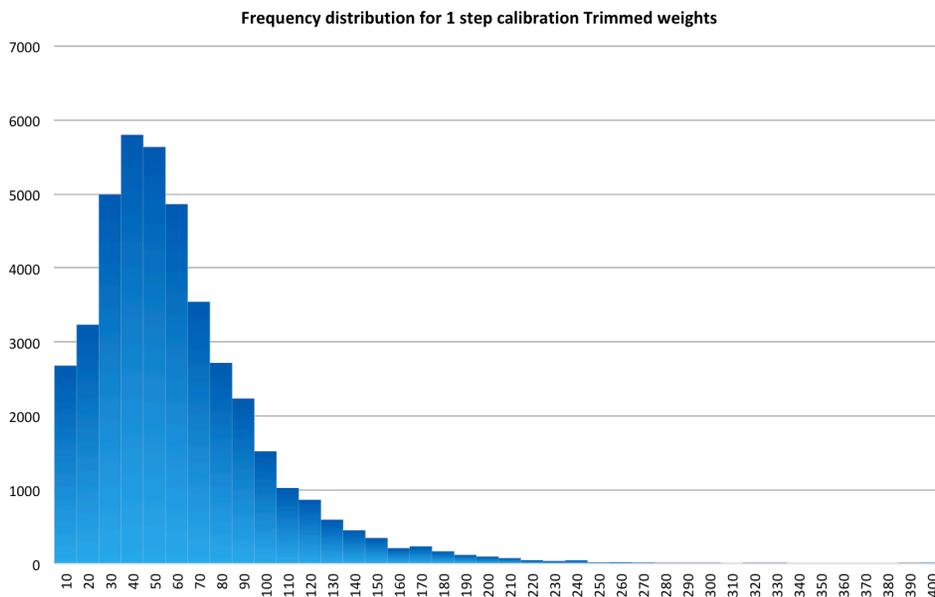
iii. 2 Stage Adjustment

In the 2 stage adjustment only the final stage is presented, not the interim stage. The range of the 2 stage adjustment is larger, and the mean is overall the same, however as calibration has been done partitioned by domain, within domain variation is better. (Frequency distribution graphs for this process is not presented in this report)

2.4 Final Sample Weight

Even though all weights behave fairly well as shown in the sections above, the untrimmed weights (HH_WEIGHT.cal) based on the one stage calibration are the ones recommended for usage. The trimmed one of the same file could be the second choice, however the effect of trimming is not always clear, and in the worst case can even introduce bias, thought this is quite unlikely in this case, as only moderate trimming has been applied. Therefore the weight used for analysis is HH_WEIGHT.cal based on the two stage calibration untrimmed weights.

Appendix 3: Estimation

3.1 Quality of the Survey Estimates

Estimates from sample data differ from figures that would have been obtained from a complete enumeration of all households using the same instruments. Results are subjected to both sampling and non-sampling errors. Non-sampling errors include biases from inaccurate reporting, processing and measurements as well as error from non-response and incomplete reporting. Unfortunately Non-sampling error cannot be readily measured. However the extent possible each type of error can be minimized through the procedures used for data collection, editing, quality control and non-response adjustment. This section will then present the measure of precision that can used to measure the sampling errors of the estimates.

The following measures of precision was calculated for 2015/2016 NHIES key indicators:

(a)   Standard error
      The sampling error of a particular statistics is measured in terms of the **standard error** of that statistics which is the square root of the variance. The standard error is the standard deviation of the statistics which measures the variability in the estimates around the expected value. The standard error given in this report were estimated using the Taylor series Linearization method in Stata 12.1 program.

(b)   Confidence Interval
      The interval within which a population parameter is likely to be found, determined by sample data and a chosen confidence level (1-α [α refers to the level of significance]). At standard level, a significance level α=0.05 resulting in a 95% Confidence Interval is used. The 95% Confidence Interval for the sample statistic b is expressed as:

$$CI(b) = b \pm (1.96 \; x \; s\hat{e}(b) \tag{8}$$

      The confidence interval gives a range where the population parameter lies. A wider confidence intervals implies that there is too much variability in the statistics to estimate the population parameter while a narrower interval indicates less variability, signifying a desirable outcome.

(c)   Design effects
      The NHIES 2015/2016 was based on a complex design that involve stratification and clustering. Additionally, the weighting involves a non-linear adjustments (non-response and post stratification adjustments). Therefore it is very crucial that these aspects of the complex design are accounted for in the variance estimation. The design effects (DEFF) compares the variance of the estimates from the sample design that was actually implemented to the variance of the estimates that would have been obtained from Simple Random Sampling (SRS) design with the same sample size.

$$deff \; = \; \frac{sampling \; variance \; of \; a \; complex \; sample \; design}{sampling \; variance \; of \; simple \; random \; sample \; design}$$

      Design Effect is another way to evaluate the efficiency of the sample design and the procedure used to develop the survey estimates. Deff is defined as the ratio of the variance of a certain statistic under the given complex survey design to that of the variance of the same statistic, if a SRS design is used with the same sample size. If DEFF value is 1, the complex survey design is as efficient as the SRS. A DEFF value greater than 1 means sampling errors have increased due to complex survey design compared to the SRS. If the design effect is less than one, this indicates that the sample design leads to estimates with smaller variance than under an SRS design, therefore it is more efficient.

(d)   Coefficient of variation
The Coefficients of Variation (CV) of the sample statistics,   is given by:

(9)

$$CV(b) = \frac{s\hat{e}(b)}{b}$$

The coefficient of variation is based on the Standard Error (SE), which is a function of the sample variation and sample size. The Coefficient of variation is the ratio of the standard error of the survey estimates to the value of the estimates itself. The coefficient of variation is a measure of spread that describes the amount of variability relative to the estimates.

Figure below illustrates a model that is generally used to determine the reliability of survey estimates, based on the coefficient of variation for the estimates.

Figure 1 Level of the Coefficient of Variation for the Survey Estimates

CV level		Interpretation
a.	0.0% - 1.0%	
b.	1.1% - 5.0%	Estimates are reliable
c.	5.1% - 15.0%	
d.	15.1% - 25.5%	Estimates can be used with Caution
e.	25.6% +	Estimates are unreliable
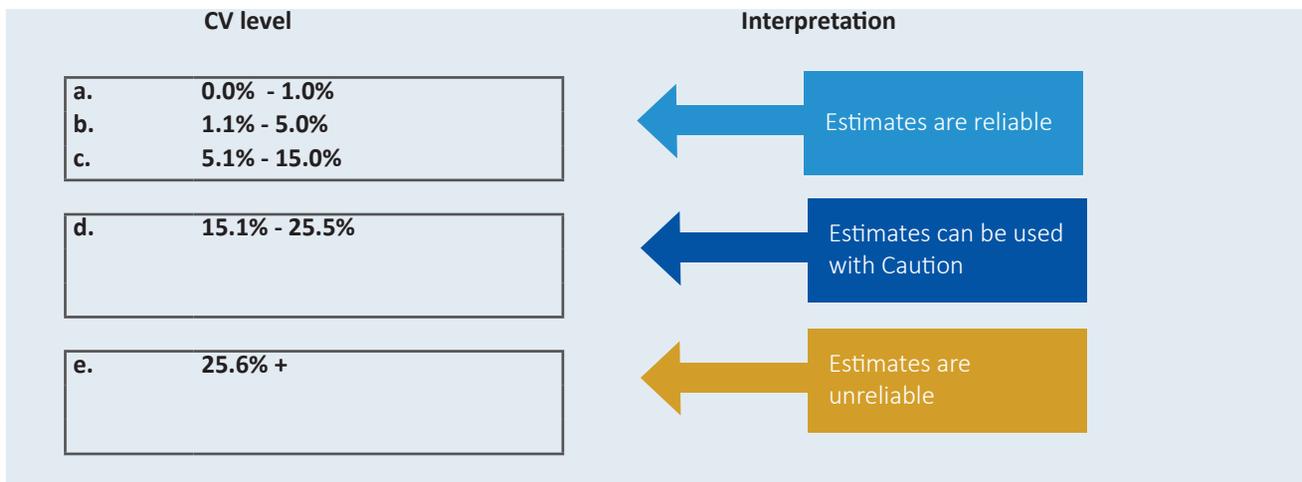
Appendix 4: Sampling Errors

4.1.1. Sampling Error for Average Household Size

Area	Mean	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
							%	
Namibia	4.2	0.048	4.09	4.28	10 090	544 655	1.14	2.49
Urban	3.6	0.054	3.52	3.73	4 555	294 827	1.48	2.31
Rural	4.9	0.080	4.69	5.01	5 535	249 827	1.65	2.65
!Karas	3.6	0.170	3.23	3.90	559	23 567	4.78	2.15
Erongo	3.0	0.092	2.83	3.19	828	58 454	3.06	2.20
Hardap	4.1	0.179	3.74	4.45	561	20 901	4.38	1.89
Kavango East	5.8	0.242	5.30	6.25	554	25 301	4.18	2.25
Kavango West	6.1	0.210	5.70	6.52	568	14 518	3.44	1.00
Khomas	3.6	0.105	3.36	3.77	1 084	112 305	2.94	3.50
Kunene	4.5	0.254	3.96	4.95	570	21 468	5.69	2.73
Ohangwena	5.2	0.178	4.88	5.57	854	48 487	3.40	2.29
Omaheke	3.8	0.281	3.22	4.32	557	19 639	7.46	3.55
Omusati	4.7	0.226	4.24	5.12	854	53 090	4.82	4.43
Oshana	4.1	0.130	3.86	4.37	846	45 331	3.16	1.58
Oshikoto	4.6	0.172	4.31	4.98	852	41 411	3.69	2.05
Otjozondjupa	4.0	0.185	3.62	4.35	837	38 238	4.64	2.37
Zambezi	4.4	0.179	4.08	4.78	566	21 945	4.05	2.02

4.1.2. Sampling Errors for Total Household Consumption

Area	Total Household consumption	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	(In Millions)	(In millions)	(In Millions)	(In millions)			%	
Namibia	64 849.33	2 596.66	59 752.58	69 946.08	10 090	544 655	4.00	4.75
Urban	44 428.02	2 458.40	39 602.65	49 253.38	4 555	294 827	5.53	5.42
Rural	20 421.32	836.02	18 780.37	22 062.26	5 535	249 827	4.09	1.44
!Karas	2 754.36	350.71	2 065.98	3 442.74	559	23 567	12.73	2.21
Erongo	7 518.12	758.24	6 029.84	9 006.39	828	58 454	10.09	3.83
Hardap	3 054.77	374.23	2 320.23	3 789.32	561	20 901	12.25	1.32
Kavango East	1 767.13	180.87	1 412.12	2 122.14	554	25 301	10.24	1.77
Kavango West	1 064.98	100.02	868.66	1 261.31	568	14 518	9.39	1.04
Khomas	23 534.16	2 238.30	19 140.81	27 927.51	1 084	112 305	9.51	5.6
Kunene	1 344.13	272.64	808.99	1 879.28	570	21 468	20.28	2.92
Ohangwena	4 581.13	299.71	3 992.85	5 169.41	854	48 487	6.54	1.73
Omaheke	1 554.23	300.08	965.23	2 143.24	557	19 639	19.31	1.56
Omusati	3 599.08	264.89	3 079.15	4 119.02	854	53 090	7.36	2.24
Oshana	5 326.75	558.86	4 229.82	6 423.68	846	45 331	10.49	1.54
Oshikoto	3 724.69	332.55	3 071.95	4 377.43	852	41 411	8.93	2.04
Otjozondjupa	3 816.33	304.03	3 219.58	4 413.07	837	38 238	7.97	0.93
Zambezi	1 209.46	110.69	992.19	1 426.73	566	21 945	9.15	1.5

4.1.3. Sampling Error for Average Household Consumption

| Area | Average House hold Consumption | Standard Error | 95% Confidence Interval | | Observation | | Coefficient of Variation | Design Effect |
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
							%	
Namibia	119 065.00	4 714.74	109 810.90	128 319.10	10 090	544 655	3.96	4.64
Urban	150 691.60	8 328.52	134 344.30	167 038.80	4 555	294 827	5.53	6.35
Rural	81 741.72	3 196.84	75 466.94	88 016.50	5 535	249 827	3.91	1.46
!Karas	116 875.20	13 715.36	89 954.57	143 795.70	559	23 567	11.74	2.68
Erongo	128 616.50	12 591.12	103 902.50	153 330.40	828	58 454	9.79	5.23
Hardap	146 156.80	16 306.31	114 150.70	178 162.90	561	20 901	11.16	1.40
Kavango East	69 843.59	6 957.25	56 187.86	83 499.31	554	25 301	9.96	2.54
Kavango West	73 357.84	5 173.15	63 203.95	83 511.73	568	14 518	7.05	1.02
Khomas	209 554.90	20 363.44	169 585.40	249 524.30	1 084	112 305	9.72	7.65
Kunene	62 612.12	11 613.25	39 817.58	85 406.67	570	21 468	18.55	2.95
Ohangwena	94 482.30	5 593.07	83 504.19	105 460.40	854	48 487	5.92	2.40
Omaheke	79 140.26	15 114.19	49 474.05	108 806.50	557	19 639	19.10	1.72
Omusati	67 791.53	4 694.38	58 577.37	77 005.70	854	53 090	6.92	3.20
Oshana	117 508.30	11 062.85	95 794.10	139 222.60	846	45 331	9.41	1.47
Oshikoto	89 943.65	7 731.92	74 767.40	105 119.90	852	41 411	8.60	2.74
Otjozondjupa	99 804.74	8 329.81	83 454.94	116 154.50	837	38 238	8.35	1.27
Zambezi	55 112.15	4 135.86	46 994.26	63 230.05	566	21 945	7.50	1.75

4.1.4. Sampling Errors for Per Capita Consumption

| Area | Per Capita Consumption | Standard Error | 95% Confidence Interval | | Observation | | Coefficient of Variation | Design Effect |
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
							%	
Namibia	28 433.76	1 148.52	26 179.44	30 688.08	10 090	544 655	4.04	4.35
Urban	41 574.94	2 333.91	36 993.93	46 155.94	4 555	294 827	5.61	5.85
Rural	16 848.01	682.94	15 507.53	18 188.48	5 535	249 827	4.05	1.51
!Karas	32 760.00	3 958.73	24 989.79	40 530.21	559	23 567	12.08	2.55
Erongo	42 752.28	4 358.19	34 198.01	51 306.55	828	58 454	10.19	5.18
Hardap	35 674.51	4 721.37	26 407.38	44 941.64	561	20 901	13.23	1.79
KavangoEast	12 091.13	1 330.53	9 479.55	14 702.71	554	25 301	11.00	2.65
KavangoWest	12 005.91	855.21	10 327.30	13 684.53	568	14 518	7.12	1.01
Khomas	58 807.31	5 857.99	47 309.22	70 305.40	1 084	112 305	9.96	7.23
Kunene	14 058.51	2 432.79	9 283.43	18 833.60	570	21 468	17.30	2.50
Ohangwena	18 082.35	1 152.91	15 819.41	20 345.29	854	48 487	6.38	2.59
Omaheke	20 991.81	4 465.85	12 226.22	29 757.41	557	19 639	21.27	2.17
Omusati	14 483.82	965.63	12 588.48	16 379.16	854	53 090	6.67	2.75
Oshana	28 541.16	2 735.25	23 172.40	33 909.92	846	45 331	9.58	1.44
Oshikoto	19 352.16	1 590.45	16 230.41	22 473.91	852	41 411	8.22	2.41
Otjozondjupa	25 050.88	2 561.59	20 022.97	30 078.79	837	38 238	10.23	1.65
Zambezi	12 446.08	1 054.86	10 375.59	14 516.57	566	21 945	8.48	2.18

4.1.5. Sampling Error for Annual Total Household Consumption by Sex of Head

Area		Total Households Consumption	Standard Error	95% Confidence interval		Observation		Coefficient of Variation	Design Effect
				Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
		(In millions)	(In millions)	(In millions)	(In millions)			%	
Namibia									
	Female	23 824.00	1 050.14	21 762.78	25 885.21	4 616	239 816	4.41	2.63
	Male	41 025.33	2 158.67	36 788.28	45 262.39	5 474	304 839	5.26	3.9
Urban									
	Female	15 016.96	929.90	13 188.59	16 845.34	2 037	123 641	6.19	3.3
	Male	29 411.05	2 059.84	25 360.98	33 461.12	2 518	171 186	7.00	3.97
Rural									
	Female	8 807.033	487.93	7 848.16	9 765.90	2 579	116 175	5.54	1.43
	Male	11 614.28	645.70	10 345.35	12 883.21	2 956	133 652	5.56	1.77

4.1.6. Sampling Error for Annual Average Household Consumption by Sex of Head

Area		Average Households consumption	Standard error	95% Confidence Interval		Observation		Coefficient of Variation	Design effect
				Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
								%	
Namibia									
	Female	99 342.82	3 983.97	91 523.07	107 162.60	4 616	239 816	4.01	2.62
	Male	134 580.40	6 829.43	121 175.60	147 985.30	5 474	304 839	5.07	4.08
Urban									
	Female	121 456.10	6 850.64	107 986.30	134 925.90	2 037	123 641	5.64	4.44
	Male	171 807.20	11 649.95	148 900.90	194 713.40	2 518	171 186	6.78	5.11
Rural									
	Female	75 808.38	3 758.00	68 423.19	83 193.57	2 579	116 175	4.96	1.06
	Male	86 899.17	4 498.70	78 058.36	95 739.98	2 956	133 652	5.18	1.41

4.1.7. Sampling Error for Annual Per Capita Consumption by Sex of Head

Area		Per Capita Consumption	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design Effect
				Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
								%	
Namibia									
	Female	22 118.81	930.53	20 292.36	23 945.25	4 616	239 816	4.21	2.55
	Male	34 084.85	1 754.56	30 641.00	37 528.71	5 474	304 839	5.15	3.81
Urban									
	Female	32 250.83	1 962.97	28 391.22	36 110.44	2 037	123 641	6.09	4.17
	Male	48 774.97	3 317.22	42 252.62	55 297.33	2 518	171 186	6.80	4.75
Rural									
	Female	14 403.24	704.85	13 018.07	15 788.41	2 579	116 175	4.89	1.01
	Male	19 336.87	1 057.91	17 257.88	21 415.86	2 956	133 652	5.47	1.51

4.1.8. Sampling Error for Annual Total Household Consumption by APCI Percentiles and Deciles

Percentile group/ deciles	Total Consumption	Standard error	95% Confidence Interval		Coefficient of Variation	Design effect
			Lower Confidence Limit	Upper Confidence Limit		
					%	
Percentiles						
1-25	2 391	101	2 193	2 590	4.23	2.34
26-50	5 436	191	5 060	5 811	3.52	2.23
51-75	10 847	379	10 103	11 590	3.49	2.7
76-90	13 646	606	12 456	14 836	4.44	2.89
91-95	8 863	700	7 489	10 236	7.89	3.71
96-98	8 948	805	7 368	10 527	8.99	2.73
99-100	14 719	1 983	10 827	18 611	13.47	3.29
Deciles						
1	585	38	511	660	6.47	1.99
2	1 087	66	958	1 216	6.04	1.92
3	1 530	80	1 372	1 688	5.26	1.72
4	2 030	113	1 809	2 251	5.54	1.93
5	2 595	128	2 343	2 847	4.95	1.73
6	3 379	172	3 041	3 718	5.10	1.99
7	4 555	216	4 132	4 978	4.73	1.76
8	6 371	333	5 717	7 025	5.23	2.41
9	10 188	521	9 165	11 212	5.12	2.58
10	32 529	2 631	27 366	37 692	8.09	4.62

4.1.9. Sampling Error for Annual Average Household Consumption by APCI Percentiles and Deciles

Percentile Group/ Deciles	Average Consumption	Standard Error	95% Confidence Interval		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit		
Percentiles						
1-25	27 301	618	26 088	28 514	2.26	2.07
26-50	48 160	901	46 392	49 927	1.87	1.99
51-75	75 540	1 590	72 420	78 660	2.10	2.53
76-90	123 911	3 367	117 303	130 519	2.72	2.54
91-95	202 523	8 122	186 582	218 464	4.01	2.95
96-98	335 875	15 887	304 692	367 058	4.73	2.17
99-100	733 245	54 484	626 304	840 186	7.43	1.88
Deciles						
1	18 299	472	17 373	19 226	2.58	1.29
2	30 377	971	28 471	32 283	3.20	2.08
3	38 013	895	36 257	39 768	2.35	1.51
4	46 995	1 378	44 291	49 699	2.93	1.95
5	52 693	1 375	49 994	55 391	2.61	1.63
6	63 403	1 801	59 867	66 939	2.84	2.04
7	78 910	2 123	74 742	83 078	2.69	1.67
8	94 622	2 930	88 870	100 373	3.10	2.22
9	135 176	4 222	126 889	143 462	3.12	2.44
10	359 540	17 988	324 233	394 846	5.00	2.73

4.1.10. Sampling Error for Annual Per Capita Consumption by APCI Percentiles and Deciles

Percentile Group/ Deciles	Per Capita Consumption	Standard Error	95% Confidence interval		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit		
Percentiles						
1-25	4 194	69	4 059	4 329	1.64	2.32
26-50	9 533	64	9 407	9 659	0.67	1.56
51-75	19 017	152	18 719	19 315	0.80	1.87
76-90	39 912	431	39 067	40 758	1.08	1.94
91-95	77 670	1 086	75 538	79 801	1.40	1.83
96-98	130 903	3 166	124 689	137 117	2.42	2.13
99-100	322 808	22 246	279 144	366 472	6.89	1.85
Deciles						
1	2 566	52	2 464	2 668	2.03	2.14
2	4 766	38	4 691	4 841	0.80	1.65
3	6 704	33	6 639	6 770	0.50	1.15
4	8 891	58	8 777	9 006	0.65	1.53
5	11 397	75	11 249	11 545	0.66	1.66
6	14 801	98	14 608	14 994	0.66	1.44
7	19 959	147	19 670	20 248	0.74	1.71
8	27 978	193	27 598	28 358	0.69	1.55
9	44 673	485	43 721	45 626	1.09	1.95
10	142 637	6 423	130 029	155 244	4.50	2.53

4.1.11. Sampling Error for Consumption Group: Food, Beverage and Tobacco

Area	Food and Beverage Consumption	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	%	%					%	
Namibia	36.3	1.4	33.5	39.0	10 090	544 655	3.87	2.78
Urban	26.9	1.5	23.9	30.0	4 555	294 827	2.88	5.70
Rural	56.6	1.8	53.0	60.2	5 535	249 827	1.62	3.23
!Karas	31.5	4.0	23.6	39.4	559	23 567	12.76	1.16
Erongo	23.1	1.6	20.0	26.3	828	58 454	6.86	2.73
Hardap	26.2	3.3	19.7	32.8	561	20 901	12.66	0.99
Kavango East	42.3	3.2	36.1	48.5	554	25 301	7.45	1.62
Kavango West	57.0	4.2	48.6	65.3	568	14 518	7.45	1.60
Khomas	25.5	2.7	20.2	30.8	1 084	112 305	10.62	3.00
Kunene	50.5	9.4	32.1	68.9	570	21 468	18.54	3.05
Ohangwena	56.0	3.2	49.8	62.2	854	48 487	5.62	2.84
Omaheke	46.7	8.4	30.1	63.3	557	19 639	18.09	1.66
Omusati	63.5	2.9	57.8	69.1	854	53 090	4.51	2.47
Oshana	47.9	5.1	38.0	57.9	846	45 331	10.61	1.65
Oshikoto	53.5	3.4	46.9	60.1	852	41 411	6.27	1.96
Otjozondjupa	38.4	3.0	32.5	44.3	837	38 238	7.82	0.74
Zambezi	41.5	3.0	35.6	47.5	566	21 945	7.26	2.21

4.1.12. Sampling Error for Consumption Group: Housing

Area	Housing Consumption	Standard error	95% Confidence interval		Observation		Coefficient of Variation	Design effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	%	%					%	
Namibia	31.8	1.1	29.5	34.0	10 090	544 655	3.60	2.94
Urban	35.4	1.4	32.6	38.2	4 555	294 827	4.10	3.28
Rural	23.9	1.3	21.3	26.5	5 535	249 827	5.57	1.39
!Karas	28.5	2.1	24.3	32.6	559	23 567	7.38	1.10
Erongo	38.6	1.7	35.3	41.9	828	58 454	4.35	1.35
Hardap	38.7	4.4	30.1	47.4	561	20 901	11.37	1.27
Kavango East	27.4	1.6	24.3	30.4	554	25 301	5.68	1.06
Kavango West	21.3	2.2	17.0	25.5	568	14 518	10.17	0.71
Khomas	36.9	2.6	31.9	41.9	1 084	112 305	6.94	3.65
Kunene	24.4	4.6	15.3	33.5	570	21 468	18.91	2.04
Ohangwena	25.9	2.0	21.9	29.9	854	48 487	7.88	1.77
Omaheke	24.7	4.7	15.5	33.8	557	19 639	18.85	1.67
Omusati	21.6	2.6	16.5	26.8	854	53 090	12.12	2.42
Oshana	23.5	2.7	18.3	28.7	846	45 331	11.28	1.36
Oshikoto	28.0	2.6	23.0	33.1	852	41 411	9.13	1.65
Otjozondjupa	28.5	2.0	24.5	32.4	837	38 238	7.02	0.75
Zambezi	22.9	2.0	18.9	26.8	566	21 945	8.82	2.02

4.1.13. Sampling Error for Consumption Group: Clothing and Footwear

Area	Clothing and Footwear Consumption	Standard Error	95% Confidence interval		Observation		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	%	%					%	
Namibia	4.16	0.14	3.88	4.448	10 090	544 655	3.62	2.11
Urban	4.81	0.21	4.40	5.212	4 555	294 827	4.47	2.35
Rural	2.76	0.15	2.47	3.056	5 535	249 827	5.44	1.78
!Karas	3.18	0.44	2.32	4.045	559	23 567	12.59	1.07
Erongo	5.32	0.51	4.32	6.314	828	58 454	9.82	2.86
Hardap	3.79	0.38	3.05	4.530	561	20 901	8.75	0.90
Kavango East	3.84	0.53	2.80	4.892	554	25 301	13.96	2.01
Kavango West	3.37	0.36	2.66	4.079	568	14 518	10.75	1.04
Khomas	4.47	0.32	3.85	5.094	1 084	112 305	7.73	2.50
Kunene	4.02	0.89	2.26	5.769	570	21 468	23.54	2.70
Ohangwena	3.75	0.40	2.98	4.530	854	48 487	10.54	2.46
Omaheke	4.31	1.12	2.11	6.501	557	19 639	26.75	0.97
Omusati	3.23	0.36	2.52	3.937	854	53 090	11.04	2.97
Oshana	4.34	0.43	3.49	5.193	846	45 331	9.99	1.37
Oshikoto	2.43	0.30	1.84	3.024	852	41 411	12.41	1.68
Otjozondjupa	3.69	0.31	3.09	4.295	837	38 238	8.73	0.93
Zambezi	5.73	0.35	5.03	6.421	566	21 945	6.16	0.93

4.1.14. Sampling Error for Consumption Group: Health

Area	Health Consumption	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	%	%					%	
Namibia	1.65	0.24	1.18	2.12	10 090	544 655	14.47	2.38
Urban	2.01	0.34	1.34	2.68	4 555	294 827	16.98	2.42
Rural	0.85	0.10	0.66	1.05	5 535	249 827	11.61	0.98
!Karas	1.87	0.47	0.95	2.79	559	23 567	25.13	1.28
Erongo	1.79	0.42	0.96	2.62	828	58 454	23.57	1.46
Hardap	1.36	0.26	0.85	1.87	561	20 901	19.19	1.44
Kavango East	0.96	0.14	0.69	1.22	554	25 301	14.21	1.00
Kavango West	1.21	0.24	0.74	1.68	568	14 518	19.88	0.81
Khomas	2.49	0.62	1.28	3.71	1 084	112 305	24.87	2.49
Kunene	1.44	0.42	0.61	2.27	570	21 468	29.49	1.69
Ohangwena	0.77	0.12	0.54	1.01	854	48 487	15.72	2.19
Omaheke	1.32	0.29	0.75	1.89	557	19 639	21.99	1.09
Omusati	0.49	0.22	0.06	0.92	854	53 090	44.34	2.43
Oshana	0.63	0.11	0.41	0.84	846	45 331	17.80	0.95
Oshikoto	0.61	0.14	0.32	0.89	852	41 411	23.77	1.70
Otjozondjupa	1.64	0.38	0.90	2.39	837	38 238	23.13	0.71
Zambezi	1.00	0.22	0.57	1.43	566	21 945	21.96	1.44

4.1.15. Sampling Error for Consumption Group: Education

Area	Education Consumption	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	%	%					%	
Namibia	2.56	0.12	2.31	2.80	10 090	544 655	4.88	1.97
Urban	3.20	0.17	2.87	3.54	4 555	294 827	5.34	1.92
Rural	1.15	0.10	0.95	1.35	5 535	249 827	9.03	2.26
!Karas	2.43	0.55	1.35	3.50	559	23 567	22.51	2.20
Erongo	1.80	0.17	1.46	2.14	828	58 454	9.50	1.11
Hardap	1.33	0.17	1.00	1.66	561	20 901	12.53	0.83
Kavango East	2.10	0.34	1.44	2.76	554	25 301	15.96	1.37
Kavango West	1.51	0.38	0.77	2.25	568	14 518	24.97	1.30
Khomas	4.07	0.31	3.46	4.68	1 084	112 305	7.64	2.03
Kunene	2.25	1.05	0.18	4.32	570	21 468	46.89	1.97
Ohangwena	0.90	0.12	0.67	1.13	854	48 487	13.05	2.25
Omaheke	1.73	0.55	0.66	2.81	557	19 639	31.57	1.57
Omusati	1.75	0.33	1.10	2.39	854	53 090	18.76	2.75
Oshana	2.11	0.23	1.67	2.56	846	45 331	10.78	1.01
Oshikoto	1.23	0.17	0.90	1.55	852	41 411	13.55	1.72
Otjozondjupa	1.61	0.25	1.13	2.10	837	38 238	15.26	1.27
Zambezi	1.90	0.23	1.46	2.34	566	21 945	11.85	0.97

4.1.16. Sampling Error for Consumption Group: Furnishing and Equipment

Area	Furnishing and Equipment	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	%	%					%	
Namibia	5.27	0.25	4.78	5.76	10 090	544 655	4.74	2.55
Urban	5.72	0.35	5.04	6.40	4555	294 827	6.05	2.82
Rural	4.30	0.23	3.86	4.74	5535	249 827	5.26	1.28
!Karas	5.90	0.61	4.70	7.10	559	23 567	10.37	0.82
Erongo	6.05	0.44	5.19	6.90	828	58 454	7.21	1.67
Hardap	5.94	0.65	4.66	7.21	561	20 901	10.94	1.11
Kavango East	6.41	0.66	5.11	7.72	554	25 301	10.34	0.73
Kavango West	4.91	0.73	3.48	6.35	568	14 518	14.83	1.21
Khomas	5.50	0.62	4.28	6.73	1 084	112 305	11.35	3.15
Kunene	5.64	1.14	3.41	7.88	570	21 468	20.16	2.36
Ohangwena	3.80	0.36	3.09	4.51	854	48 487	9.54	2.61
Omaheke	4.71	1.03	2.70	6.73	557	19 639	21.82	1.58
Omusati	4.05	0.51	3.05	5.05	854	53 090	12.58	2.72
Oshana	3.89	0.40	3.12	4.67	846	45 331	10.17	1.14
Oshikoto	3.85	0.39	3.08	4.62	852	41 411	10.18	1.15
Otjozondjupa	5.50	0.53	4.46	6.55	837	38 238	9.70	1.03
Zambezi	10.73	0.99	8.78	12.68	566	21 945	9.25	1.03

4.1.17. Sampling Error for Consumption Group: Transport and Communication

Area	Transport and Communication Consumption	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	%	%					%	
Namibia	7.54	0.49	6.59	8.49	10 090	544 655	6.44	1.80
Urban	8.87	0.67	7.56	10.19	4 555	294 827	6.44	1.80
Rural	4.64	0.47	3.71	5.57	5 535	249 827	7.55	1.88
!Karas	9.77	1.63	6.57	12.97	559	23 567	10.22	1.45
Erongo	10.48	1.90	6.76	14.21	828	58 454	16.70	0.98
Hardap	9.88	1.78	6.39	13.37	561	20 901	18.09	2.03
Kavango East	6.08	1.38	3.37	8.78	554	25 301	17.99	0.88
Kavango West	5.15	1.05	3.10	7.21	568	14 518	22.66	1.16
Khomas	8.04	0.92	6.23	9.84	1 084	112 305	20.34	0.68
Kunene	4.63	1.10	2.47	6.79	570	21 468	11.43	2.17
Ohangwena	4.66	1.22	2.27	7.06	854	48 487	23.80	1.75
Omaheke	9.19	1.87	5.53	12.86	557	19 639	26.13	2.98
Omusati	1.55	0.29	0.99	2.12	854	53 090	20.30	0.89
Oshana	8.76	2.16	4.51	13.01	846	45 331	18.45	1.32
Oshikoto	3.90	0.63	2.66	5.14	852	41 411	24.71	1.31
Otjozondjupa	7.13	1.32	4.55	9.72	837	38 238	16.20	1.06
Zambezi	9.70	2.32	5.15	14.26	566	21 945	18.46	0.90

4.1.18. Sampling Error for Consumption Group: Others

Area	Other Consumption	Standard Error	95% Confidence Interval		Observation		Coefficient of Variation	Design Effect
			Lower Confidence Limit	Upper Confidence Limit	Unweighted	Weighted		
	%	%					%	
Namibia	10.77	0.36	10.07	11.47	10 090	544 655	3.33	1.92
Urban	13.05	0.45	12.17	13.92	4 555	294 827	3.41	1.72
Rural	5.82	0.41	5.02	6.63	5 535	249 827	7.03	1.93
!Karas	16.88	1.37	14.19	19.57	559	23 567	8.12	1.21
Erongo	12.81	0.60	11.63	13.99	828	58 454	4.69	1.46
Hardap	12.73	1.41	9.97	15.49	561	20 901	11.05	1.41
Kavango East	10.94	1.57	7.86	14.02	554	25 301	14.35	0.86
Kavango West	5.56	0.82	3.95	7.17	568	14 518	14.72	1.33
Khomas	13.03	0.77	11.53	14.53	1 084	112 305	5.87	1.77
Kunene	7.13	1.85	3.49	10.76	570	21 468	25.98	3.21
Ohangwena	4.22	0.56	3.12	5.32	854	48 487	13.29	4.29
Omaheke	7.36	1.50	4.42	10.31	557	19 639	20.35	1.58
Omusati	3.83	0.62	2.62	5.05	854	53 090	16.16	2.27
Oshana	8.80	1.16	6.51	11.08	846	45 331	13.23	2.64
Oshikoto	6.48	0.72	5.07	7.89	852	41 411	11.11	2.43
Otjozondjupa	13.58	0.91	11.79	15.36	837	38 238	6.71	0.88
Zambezi	6.53	0.54	5.46	7.60	566	21 945	8.33	1.64
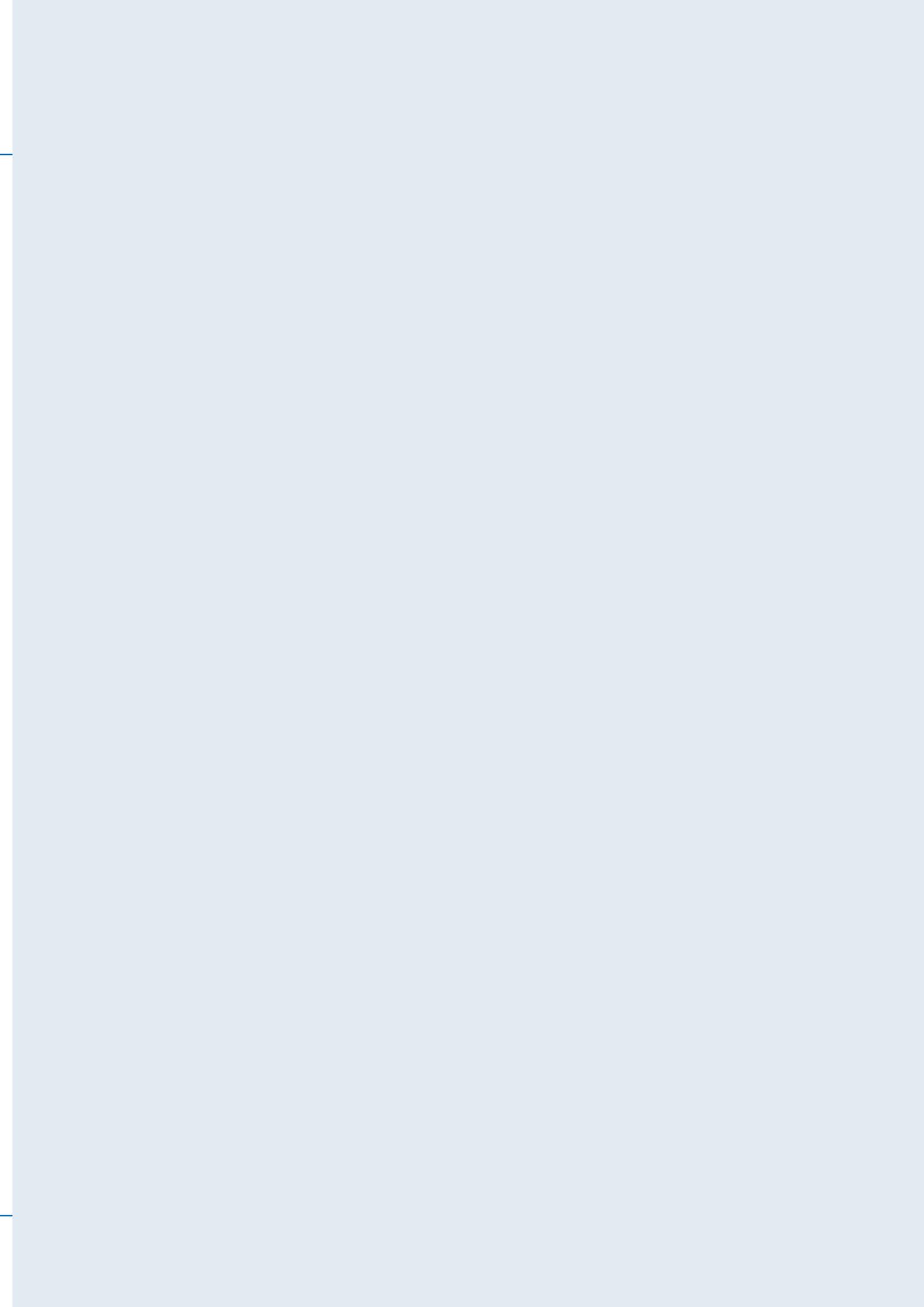
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