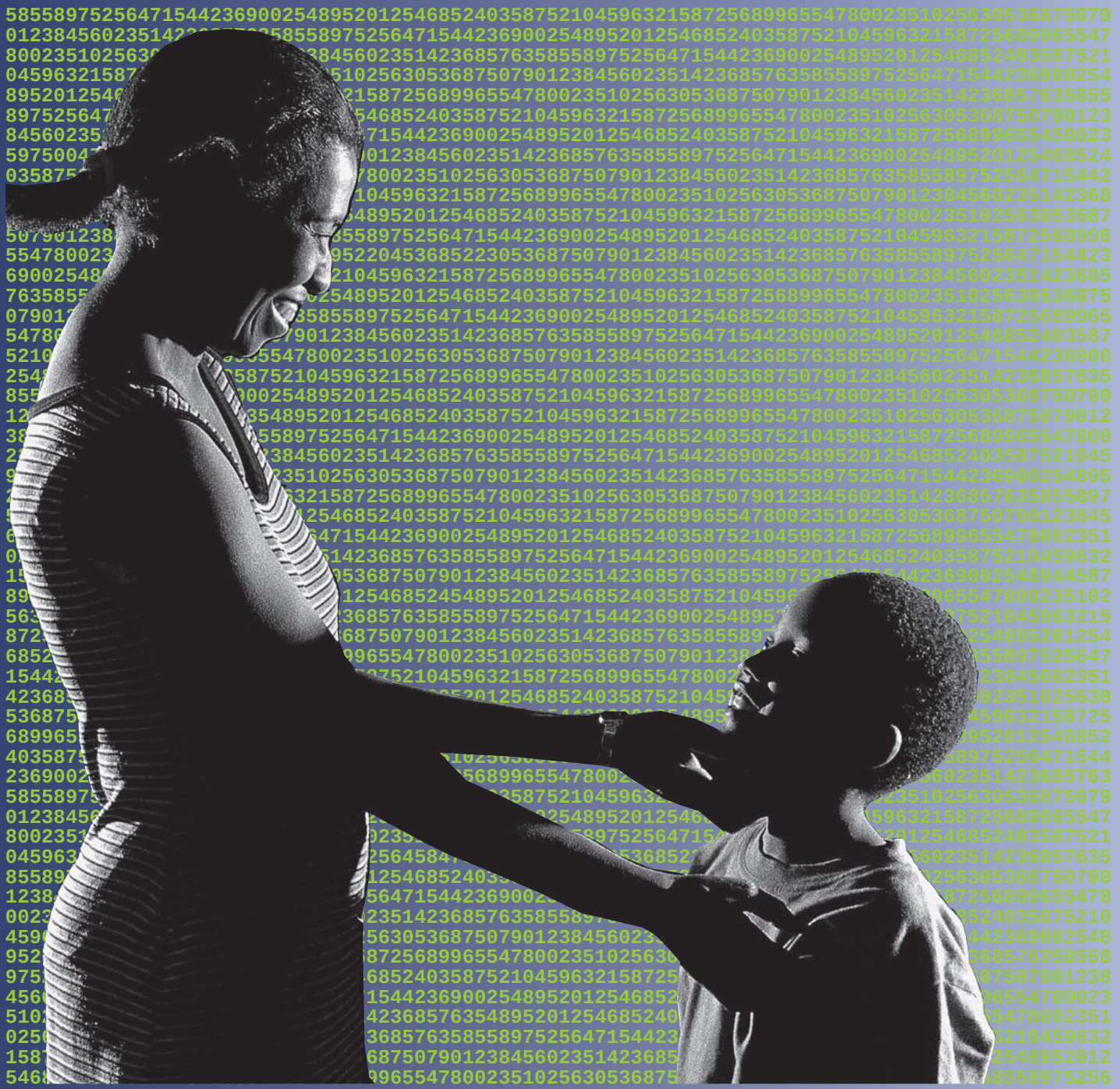
An atlas of Namibia's population:
monitoring and understanding its characteristics



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REPUBLIC OF NAMIBIA

An atlas of Namibia's population: monitoring and understanding its characteristics

Preface

Strangers knock on the doors of every household in Namibia every 10 years. This is Census Night the visitors announce, and they are here to collect information for Namibia's Population and Housing census. And in some years between those 10-year intervals, there are other knocks on the door when people come to collect information for occasional surveys on health, employment, income and expenditure and others.

These census and survey enumerators work under the auspices of the Central Bureau of Statistics (CBS), and it is our responsibility to collect, process and disseminate census and survey results to the Namibian public. You may ask, however, why are censuses and surveys necessary, and what becomes of the information collected from your homes?

To help answer those questions, this publication presents a selection of interesting results from recent censuses. Another purpose in compiling this booklet is to prepare Namibians for the forthcoming census in 2011 so that everyone has fresh ideas on the function, scope and products of the census.

The selection of information presented here is relatively limited on account of space, and much more is available from the CBS's published reports, especially those for the more recent surveys and censuses, such as the 2001 Population & Housing Census, the 2003-2004 Namibia Household Income & Expenditure Survey and the 2006 Namibia Inter-Censal Demographic Survey. I urge all Namibians, especially those responsible for the delivery of public services to obtain, study and act upon the information in those reports.

Information collected during censuses and surveys is objective and factual. Much of it is also fascinating because it allows us to ponder the activities and processes which allow more people to live in certain areas than others, for example. We can also begin to grasp the challenges faced by public servants to provide education, health and other services.

Please enjoy and share this book with those around you. More importantly, enjoy statistics and demography, discuss the implications of results from surveys and censuses, and embrace the concept that the more we know, the more we can prosper!

Let me take the opportunity to thank the Government of the Grand Duchy of Luxembourg, through Project NAM/348 'GIS and Statistics Development in Namibia' implemented by Lux-Development (the Luxembourg Agency for Development Cooperation) for their invaluable support in the production of this Atlas.

In the same manner many thanks go to all the respondents who provided the information and to the men and women at the CBS who collected the data.

F.S.M. Hangula
Government Statistician

Maps and graphs

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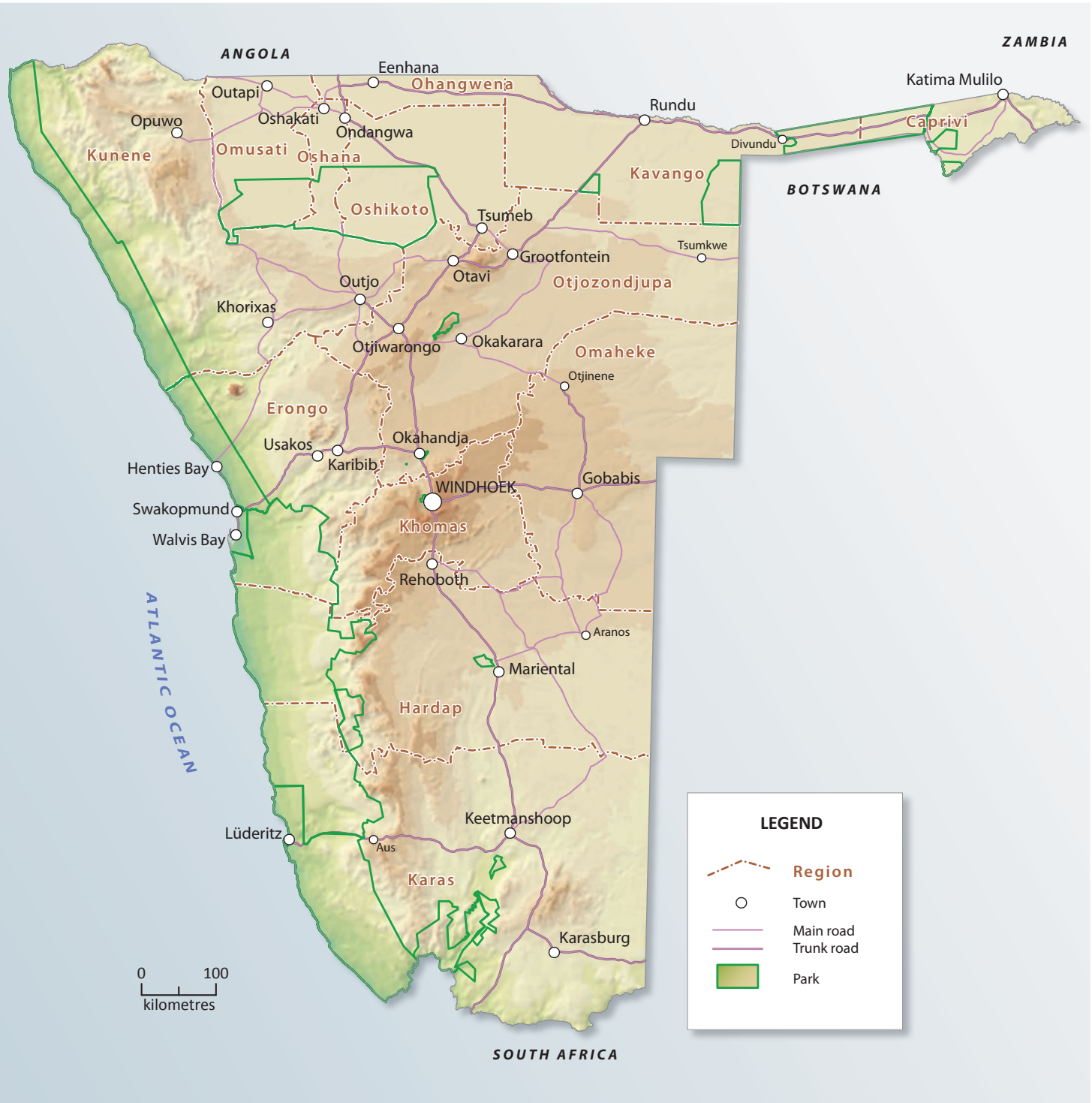


Figure 1. Namibia's main geographic features

1 Introduction

About 229,000 people were counted in Namibia's first population census in 1921. Since then, censuses have been held roughly every 10 years and many separate sample surveys have been conducted at sporadic intervals across the country or in certain regions or towns. The censuses and surveys have taken a good deal of time and money to conduct, which prompts us to ask: why are people counted? And why should information be collected about their ages, occupations and homes, for example? What is done with this demographic information, and what benefits are provided by the data?

This *Atlas* aims to help answer these and other questions by introducing readers to aspects of how information on Namibia's population is collected, processed and reported. Examples of some of the more interesting results obtained during the 2001 Population & Housing Census and the 2006 National Inter-censal Demographic Survey are presented together with brief explanations on the relevance and significance of the results.

Demographic information for Namibia is valuable for many reasons. Most obviously and generally, good information is required for the delivery of public services to attend effectively to the needs of the country's residents. For example, services can be adjusted over time as information shows how needs change from year to year. Likewise, the geographical allocation of services may be altered and improved according to changes in the distribution of people who need services. The more that is known about the public, the more government can do to provide good services. Conversely, if little information is available, little can be expected from government.

On a broader level, information is needed for long-term planning and to evaluate whether Namibia is meeting the policy goals to which it committed in Vision 2030 and National Development Plans, for example. Civil society and the private sector also require data on Namibia's population if the country is to develop economically and function democratically. Public information about the people of Namibia therefore contributes to better governance and accountability.

Namibia does not exist in isolation, and as a member of the international community, it is required to report on trends and features of its demography, which it does to the many agencies of the United Nations, SADC (Southern African Development Community) and the African Union (AU), for instance. These organisations use the information to inform others around the world about Namibia, and to prepare comparative statistics which allow us to evaluate how well Namibia performs in relation to other nations. To be comparable to figures obtained in other countries, Namibian censuses have to follow certain methodological standards.

These broad justifications illustrate some of the value of information on Namibia's population. Much of this information is collected during the Population & Housing Census, which is conducted every 10 years.

According to the 2001 Population & Housing Census, three out of ten households in Kavango get their water from the Okavango River. While the purity and cleanliness of its water is well known, the river water contains parasites such as bilharzia and is therefore unsafe for human consumption.

The main and immediate objectives of the Census are to provide reliable figures which measure:

- the size and growth of the population;
- its structure and composition in terms of age, sex, and regional distribution;
- the levels of fertility and mortality for the country as a whole, for males and females, in different regions and groupings;
- some socio-economic indicators, such as levels of education, disability, employment, housing conditions, energy use, and access to water and sanitation.

These numerical measures can then be used for a great number of applications, which are described in the following categories.

Public services

Census results are valuable for assessing the needs of the people, for example, for services and opportunities, for schooling, health services and jobs. Schools can be built in the most appropriate places. Plans can be made for future needs using estimates of growth rates and the numbers of children expected to need schooling in the years ahead. The same is true for clinics and hospitals, police stations, roads and water supplies – indeed for all public services.

Census information should guide the allocation of public funds, for example by allowing funds to be apportioned to different regions according to the number of people who live in each region. Likewise, census results help to guide relative allocations to sectors, for example between education, health and social welfare. Census information enables public funds to be used more transparently, equitably and efficiently, and according to the needs of the public.

National economists and planners in the Ministry of Labour & Social Welfare need information on employment rates and trends; the Ministry of Health & Social Services has to respond to changing patterns of infant and child mortality; while the Ministry of Regional & Local Government, and Housing & Rural Development pays attention to urban growth, housing conditions and the number of people in different regions. And, for instance, planning for the supply of teacher training programmes by the Ministry of Education requires information on migration, and on which skills are required in Namibia and should be taught in schools. Such information all comes from censuses and surveys of the kind described in this book.

Knowing the number of children now entering the population is vital for the planning of public services 10, 20 and more years on from now.

Information on the number of people in different age groups is essential to plan and guide most public services. This is obvious for pre-primary, primary and secondary schooling, but age statistics are also important for the planning of pension benefits, maternal services and vocational training. Likewise, vaccination and other programmes directed at infants (who are less than one year old) and children between one and five years can only be cost effective if planners know how many young people there are in each region and town.

Gender information provided by censuses is crucial for programmes that focus on women, for example in offering employment, training and maternal health care.

Analysis of trends

Census and survey data are invaluable for monitoring and detecting patterns or trends over the years, since past trends often throw light on the present and provide guidelines to the future. Past trends also often draw attention to current processes that would otherwise not be recognised or understood. A broader understanding of these processes can enable policy makers and planners make wiser choices for the development of the country. Analyses of trends allow us to examine simple, but critical questions such as:

- At what rate is the population growing?
- How do urban growth rates compare with those in rural areas?
- Are levels of education, employment and economic activity increasing or decreasing?
- How are mortality rates and life expectancies changing?
- Do women now have fewer or more children than before?

Answering more complex questions also depends on the availability and use of demographic data, such as:

- Is Namibia meeting goals set in development plans and policies?
- How do economic conditions in Namibia compare with those in other countries?
- What changes are taking place in the nature and composition of Namibian society, for example, from rural to urban, from food security to financial security, or from large, male-headed families to smaller ones often headed by mothers?
- How are demands on services and commodities expected to change over the next decade?

Private sector

Most sectors of the economy require accurate information about the population and its characteristics. For example, demographic information is used to tune marketing campaigns so that they effectively target potential clients according to their characteristics and distribution. New retail outlets are best located where the traffic of people is greatest and where the outlets will be ensured maximum sales. Distribution and transportation routes can be planned to achieve the greatest benefit. Population censuses also provide indices of comparative wealth which are vital for economic and financial planning.

Economists and business managers have particular interests in trends which enable forecasts to be made with greater confidence. Regional patterns contribute to an understanding of economic conditions in different areas of the country, while information on levels of education provide measures to assess the availability of trained, skilled and potential employees, for example.

Censuses and surveys therefore provide vital information that is needed to grow Namibia's wealth.

Updating information

Census results provide information to update the Electoral Register; and to adjust the delineation of political and administrative boundaries for regions, constituencies and urban areas from time to time. Likewise, decisions on the sizes of the national legislature and regional and local governments are guided by information on the size and distribution of the population.

Cover pages of various reports for censuses and surveys over the past 90 years in Namibia.

2 Censuses and surveys in Namibia

The first official census was in 1921, and censuses were subsequently undertaken in 1936, 1946, 1951, 1970, 1981, 1991 and 2001. The next census will be held in 2011. Nowadays, the responsibility for producing and co-ordinating official statistics rests with the Central Bureau of Statistics (CBS) which is currently part of the National Planning Commission. The mission of the CBS is to produce and make publicly available objective, relevant, comparable, reliable, timely and easily accessible official statistics in all areas of national interest and relevance.

Year	Total population
1921	228,916
1936	320,457
1946	362,464
1951	439,081
1970	761,010
1981	1,033,196
1991	1,409,915
2001	1,830,330

What is the difference between a census and a survey? A census is a complete count (technically called an enumeration) of a population. During a census information is collected on every member of the population – old or young, citizen or foreigner – present in the country on a certain date. It is a massive undertaking since every household has to be visited. Because of the enormity of the task, a census is usually only possible every 10 years, and it is the most important single statistical undertaking in a country. The 2001 Population & Housing Census was undertaken in accordance with the Statistics Act of 1976, and the date for census taking was issued in the form of a Government Notice. This notice specified the census night (27 August in 2001) and also the particulars to be collected. The important thing about a stipulated census night is that each person is counted at the place where he or she was on that night. This is known as a *de facto* census. A *de jure* census, by contrast, would attempt to trace and record each person in the place that he or she normally lives.

While a census covers everyone, a survey collects information from a selection of individuals who are interviewed. For example, all 346,253 households in Namibia were visited during the 2001 Population & Housing Census, whereas the National Intercensal Demographic Survey in 2006 was based on a sample of 10,000 households. This sample was selected according to rigorous statistical methods to ensure that it was reasonably representative of the whole population.

The sample selection process was done in two stages. First, out of about 4,200 enumeration areas (see page 10), 500 were selected as Primary Sampling Units (PSUs) to be representative of demographic conditions across Namibia. In a second step, certain households were selected randomly in each PSU from a list of households established during the complete 2001 Population & Housing Census. The clustering of households within Primary Sampling Units minimises travelling costs, but the clusters are still broad and large enough to provide reliable estimations of demographic variables. However, it is worth noticing that results are affected by margins of error (see page 13) in all sample surveys. These margins of error should always be calculated to provide measures of confidence for survey results. For example, a population census will record where everyone lives and be able to report that 43% of Namibians live in towns. By contrast, a survey can only estimate what percentage of the population lives in towns.

Examples of recent surveys are the National Household Income & Expenditure Surveys in 1993/1994, 2003/2004 and in 2009/2010; the National Demographic & Health survey in 2000, and National Labour Force Surveys conducted in 1998 and 2007. In addition, National Intercensal Demographic Surveys were done in 1996 and 2006, which were mid-points between the population censuses of 1991, 2001 and 2011.

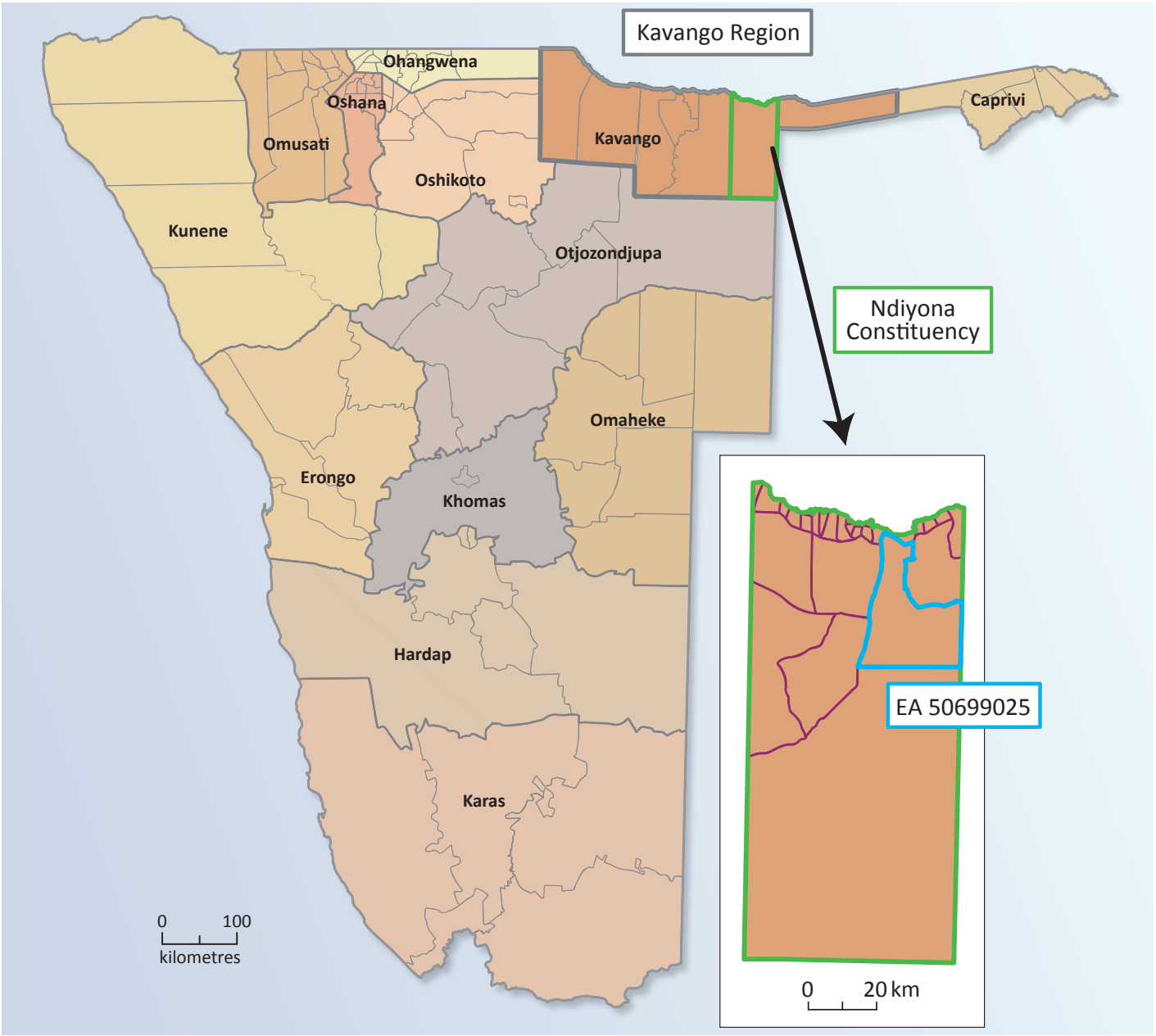


Figure 2. Levels of aggregation used for census results.

The country consists of 13 regions. Each of these has a number of constituencies, further subdivided into enumeration areas, which have been especially demarcated for the collection of census data (see page 19). The map focuses on an example of the Ndiyona constituency from the Kavango Region. Each enumeration area has a code number, in this case 50699025.

3 What are statistics?

Many people are perplexed by statistics, often glossing over the numbers and then proclaiming a lack of knowledge of their meaning or usefulness. This frequently amounts to laziness, and ignorance of objective figures or data can be as inexcusable as ignorance of the law.

To be fair, statistics can be complicated and statisticians sometimes use jargon that is unnecessarily contorted. But most statistics from censuses and surveys are straightforward, such as: 12,000 households do not have proper sanitation, or 52,000 children are not at school, or 5% of children die before the age of 5 years. These figures are examples of the results that come from censuses and surveys. They are very simple, and their simplicity makes them immensely useful for decision-makers to implement measures to improve sanitation, raise school enrolment or reduce child mortality, for example.

Data and statistics are hard, cold numbers, and it is the job of census or survey statisticians to collect, check and analyse these data. Demographers are employed to interpret the data and convert them into information. Demography is the study of populations, while demographic trends and characteristics refer to features of populations (see below).

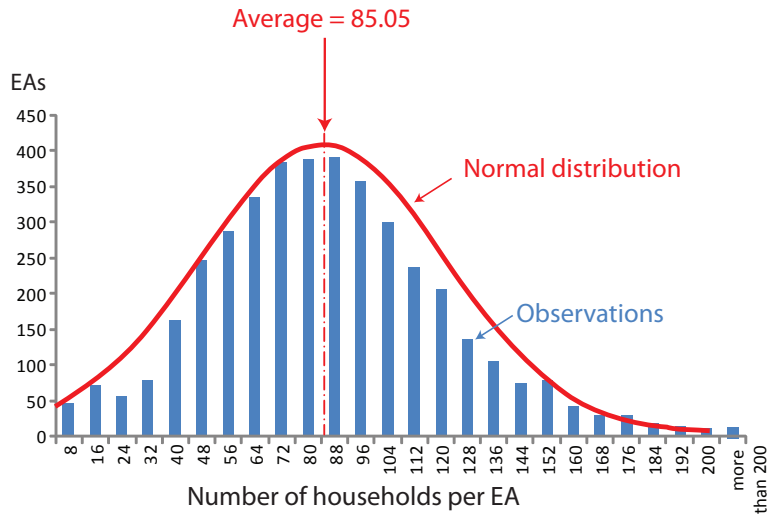
What is important about the results of censuses and surveys is that they provide quantitative and objective information, which is quite different from qualitative opinion or subjective assumption. The results of a census will show that 78,000 people live in a region, for example, which is much better than a qualitative assessment that the region has a large population. Likewise, a politician may argue that a population in a region is growing so rapidly that the region should receive an increased slice of the budget, but 'so rapidly' is usually based on subjective opinion

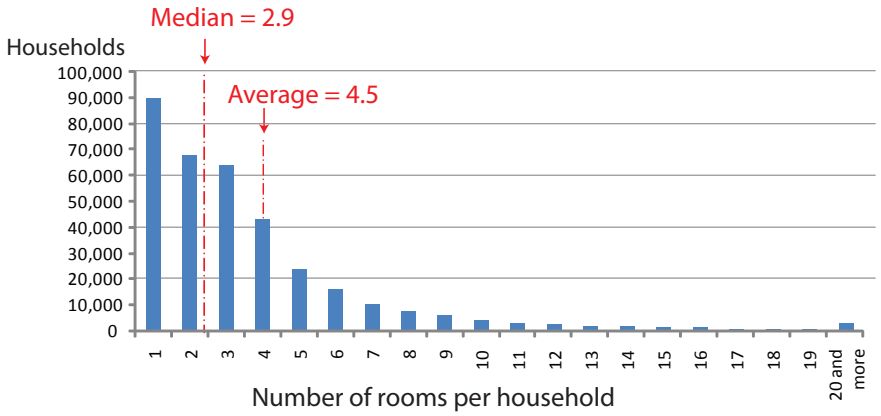
As can be imagined, large amounts of detailed data are collected during censuses and surveys. For each person and household, there is a massive array of figures (see the Appendix). These data are grouped or aggregated for purposes of reporting into units that are useful and comprehensible. The highest level of aggregation is the country, while successively lower levels are regions, constituencies, towns and sometimes enumeration areas.

Common and important statistical terms

Typically, there are two kinds of statistics: those that refer to *continuous* measures which vary between highest and lowest values (such as the income of people) and those that are counted in *categories* (such as men and women, or different types of housing or employment).

Continuous variables have *minimum* and *maximum* values; for example, the shortest distance that people walk to fetch water may be 150 metres while the longest is 3,500 metres. We get the *mean* or *average* by adding up all the individual distances from water for all households and then dividing the cumulative or total distance by the number of households. For instance, the average or mean distance to water could be 1,900 metres in a particular rural area of Namibia.





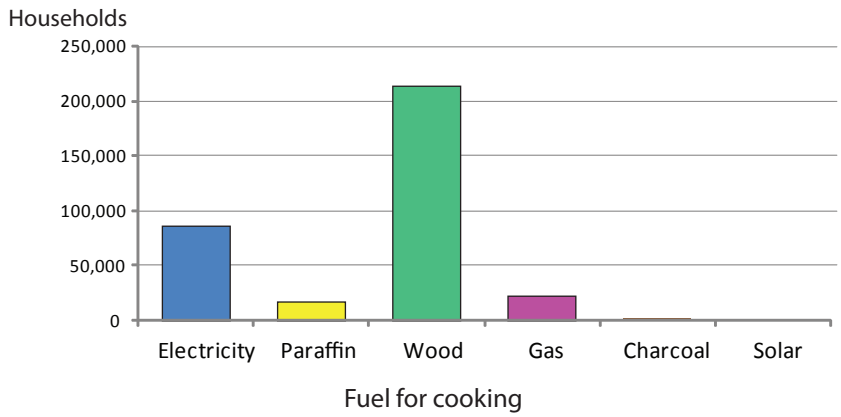


Figure 3.
Examples of three kinds of statistical distribution. The number of households per enumeration area is distributed normally (TOP), whereas the number of rooms per household is highly skewed (MIDDLE). The number of households using different kinds of fuel for cooking is an example of a categorical variable, where the data are simply divided into different groups (BOTTOM)

Sometimes an average or mean does not show the middle of the variation of a continuous variable. For example, most Namibians have low incomes whereas a small number of people earn very large sums of money. An average or mean of incomes will be distorted by the high figures of the very rich, falsely suggesting that the incomes of most people in Namibia are more substantial than they really are.

In this case, the *median* is a better measure of incomes than the average. It is calculated by arranging or ranking all the individual incomes sequentially from lowest to highest, and taking the mid-point that separates the lowest from the highest half of the incomes. Fifty percent of the population thus has an income lower than the median, while the income of the other 50% of people is higher than the median. Because it focuses on the number of people rather than on the amount of money that they earn, the median overcomes the problem of distortion (or *skewing* in statistical terms). Examples of other variables that are usually highly skewed are levels of education, ages, and population density.

Averages and medians are single figures that describe the centres of sets of measurements, for instance between the highest and lowest measures, or where most measurements fall. However, these single figures mask variation in the population. If it is reported that the average distance between houses and their source of water is 1,900 metres, we still know nothing about how representative this figure is of the majority of homes. Most houses may indeed be roughly two kilometres from water points. On the other hand, the 1,900 metres could simply be the average of those people who walk tens of kilometres to fetch water and the others who only walk a few steps.

Statisticians use various measures to reflect this variation, for example *standard deviations, standard errors* and *variance*. These measures are also particularly important as indicators of accuracy for results obtained from samples because they indicate how closely averages or means reflect the characteristics of the whole population. Measures of variability are then often turned into *confidence limits* which indicate how reliable the results may be. For example, the average distance to water could be 1,900 metres, but with 95% confidence limits of 200 metres we would know that 95% of all houses are within distances between 1,700 and 2,100 metres, which are the distances 200 metres less and 200 metres greater than the average of 1,900 metres.

Confidence limits, standard deviations and the like are fairly complicated statistics and they are thus often avoided when census and survey results are reported. But they are important, especially for interpreting small differences which could be real or simply due to chance. A whole range of statistical tests are available to evaluate the probability of differences being real or fortuitous. Readers may wish to consult standard books on statistics or that great source of free information on the web: http://en.wikipedia.org.

One very simple piece of information that gives a measure of the reliability or accuracy of results from surveys is the sample size, which is often abbreviated as 'n'. It is obvious that the greater the sample size, the more confident we can be of the results. However, because surveys are expensive undertakings people who design surveys go to great lengths to estimate how small a sample can be to deliver reliable results or estimates. For example, there is no point in sending enumerators to 10,000 households if a sample of 1,000 homes will give results of adequate accuracy.

Whereas most people in any particular rural area speak the same language, towns in Namibia have become melting pots which attract residents from all corners of the country, and beyond.

Estimating adequate sample sizes is, however, not an elementary task. One of the most important aspects to take into account is the variability of what is to be surveyed. For example, a relatively small number of households can be sampled if we want to know the average sizes of families living in a housing complex where all the homes have three or four bedrooms (i.e. low variance). But a much larger sample would be needed if the City of Windhoek needed to know the average family size in the whole city where there are lots of small flats, informal shacks, middle-income homes and mansions (i.e. high variance).

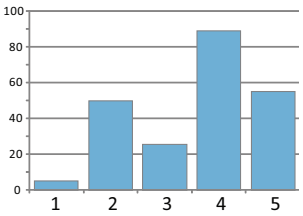
The great majority of results from censuses and surveys are reported as simple totals or percentages, such as: there 3,432 disabled children in a given region, or 65% of households are headed by women in a region where many men are absent as migrant labourers, for example.

These are primary results. There are also derived variables that are obtained by calculating ratios or relationships between two (or more) primary results. For instance, population density is calculated from the number of people counted in a particular area and usually expressed as people per square kilometre (see page 33).

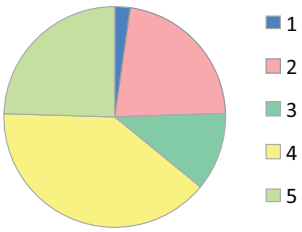
Methods of reporting census and survey results

The great majority of results are first reported in tables, usually in thick books consisting of hundreds of pages filled with rows and columns of figures. These statistical tables are used to report all the numbers collected from all the questions asked during a census or survey. Usually, no interpretations of the meaning or significance of the figures is offered, which are there for users to consult and draw upon as the need arises.

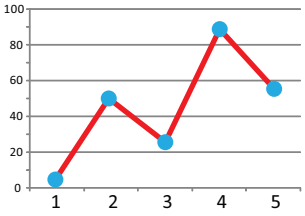
The pages ahead in this book provide examples of how results in the tables can be presented graphically, often using selected combinations of colours and styles of graphs and maps to highlight important trends or differences.



Bar charts are perhaps the most common way of displaying data, but they are only suited to information that falls into distinct categories, as opposed to continuous variables, as described above. The height of each bar indicates the number of individuals in each category or class (see the example on page 29).



Pie charts are also often used to present results grouped into categories. The whole pie includes all the classes to be compared, with the size of each slice being proportional to the number of people or households falling in each class (an example is on page 30)



Figures from continuous variables are often plotted on *line* or *scatter graphs*. Their most usual application is in showing how census results change, for example how populations grow or fertility rates change over the years (see the example on page 25). These graphs are also useful for showing how different variables change with different lines or scatter symbols being used for different variables.

Nowadays, maps are often used to display and compare results from censuses and surveys. The use of computerised geographical information systems (GIS), digital images and global positioning systems (GPS) have made it easy to attach information collected in different towns or regions, for example, to their locations on maps. It is then a simple matter to use the GIS programmes to draw maps using symbols of different sizes and colours to represent trends and differences. Many of the presentations in this book combine maps and graphs to give a clearer idea of how conditions vary spatially across the country.

Apart from displaying simple results, GIS programmes have become indispensable tools for two other aspects relevant to this book. The first application is for planning the collection of information so that the entire country is covered systematically (see page 19).

The second GIS application is for analysing geographical relationships between demands for public services and the locations at which the government provides those services. The results of these analyses can be used to improve access to the services (see page 18).

The Central Bureau of Statistics (CBS) is adopting a central role to help co-ordinate the collection and dissemination of geographical information in the country. This is through the National Spatial Data Infrastructure (NSDI) which aims to bring together people and organisations that make special use of digital information on Namibia's geography. The NSDI should also do much to promote the sharing and use of spatial information and analyses.

Demography

Statistics is a discipline of numbers, calculations, and estimations. It is all about numbers and a bit dull if you are not interested in figures. Demography on the other hand uses the numbers to study and understand how human populations behave. The focus is not on the behaviour of individual people, but on how populations of people change, move, and function. Demography concentrates on questions, such as how, and why fertility and school enrolment rates change, when populations grow, and what drives the movements of people from one region to another.

Many demographic studies use census and survey results as a departure point, and then seek to interpret the meaning and significance of the results. Often this requires the use of other information, for example information on economic conditions, policies that affect choices in having children, and parental demands for their children to be educated.

Public service programmes, policies and plans can be adjusted in response to changes revealed by censuses and surveys, but the most effective responses will come from understanding why changes occur.

Urban growth has been greatest in the informal and low income housing areas, as shown here in the Nau-Aib suburb of Okahandja. The image on the left was taken in 2001 while that on the right is from 2010.

Although segregated housing is thankfully a system of the past, many Namibian towns remain divided into three zones reflecting areas previously allocated for the housing of whites, blacks and coloureds. Thus Nau-Aib was reserved for blacks, Veddersdal for coloureds and the central area of Okahandja for whites. The same was true for central Windhoek, Khomasdal and Katutura, for example

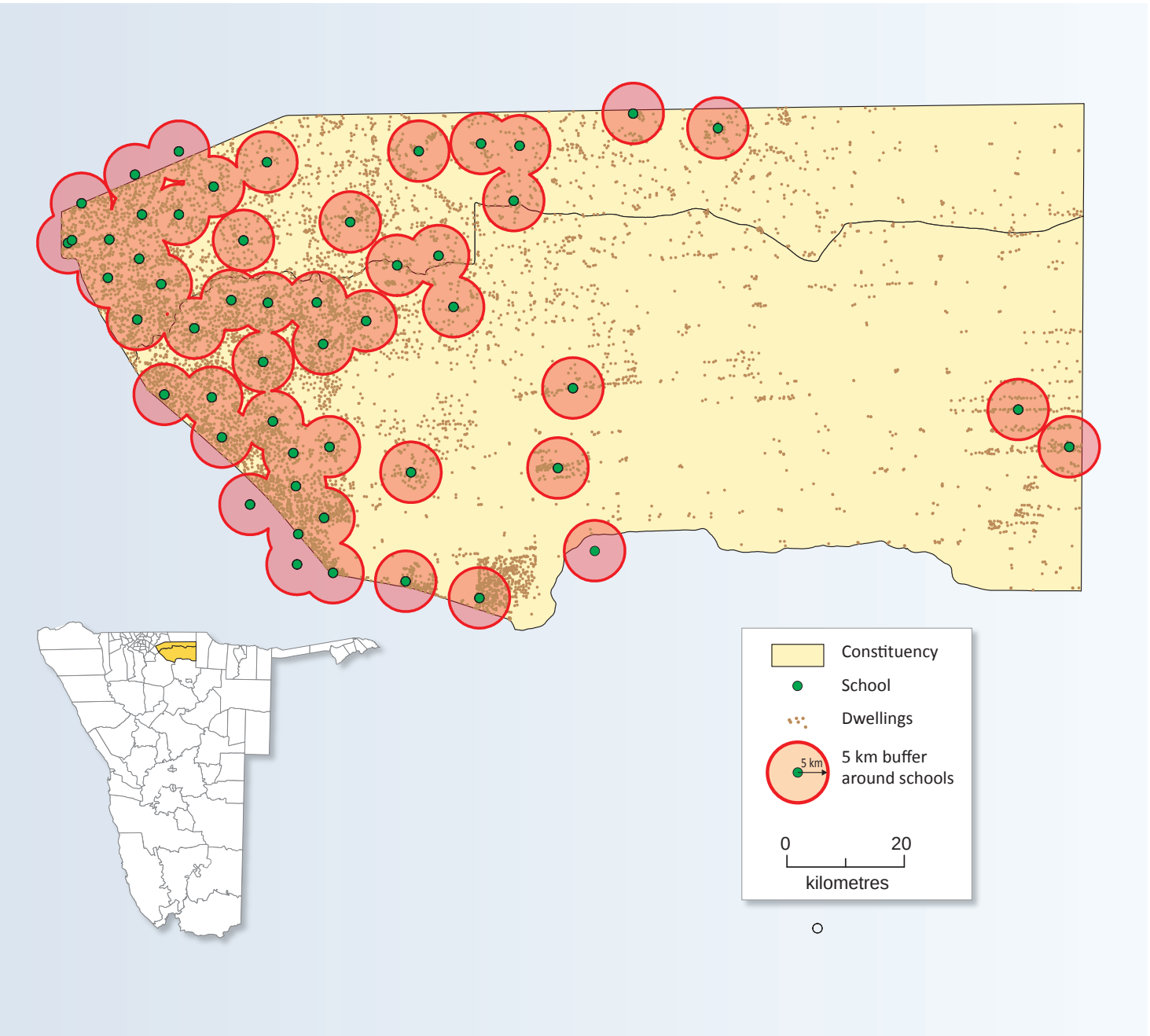


Figure 4.

An example of how the mapped information on dwellings now being assembled by the Central Bureau of Statistics can be used for school planning. The areas shown here are the constituencies of Okankolo (top) and Engodi (bottom) in Oshikoto. Each small dot is a dwelling mapped off aerial photographs taken in 2008, while the circles are catchment areas with a radius of 5 kilometres around each school. Dwellings far from schools are easy to identify, and areas where there are dense aggregations of dwellings away from schools would need to be targeted when new schools are built. Using similar methods, the same data on the location of dwellings can be used to improve the provision of almost all public services.

4 Conducting a census

Both censuses and surveys are enormous tasks, requiring a great deal of planning, co-ordination, management, and expense. Population censuses are much bigger undertakings, however, because every household in the country has to be visited so that information on each person is collected. For example, several thousand people are employed as enumerators and supervisors to help conduct each census.

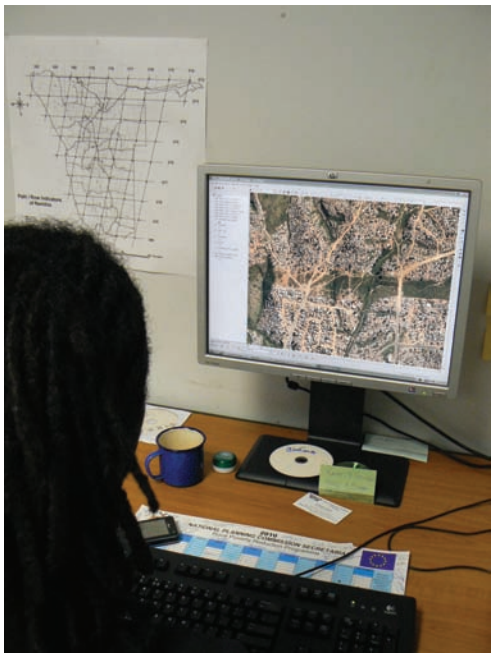
Two major planning processes are undertaken before each census: dividing the country into enumeration areas (EAs) and preparing the questionnaires.

Enumeration areas

A total of 4,080 enumeration areas were prepared before the 2001 Population & Housing Census. Each enumeration area should ideally comprise of about 80 to 100 households since this is the number of homes that one enumerator should be able to cover during the census period. However, enumeration areas may contain as few as 50 households in sparsely populated areas where travel distances between households are substantial.

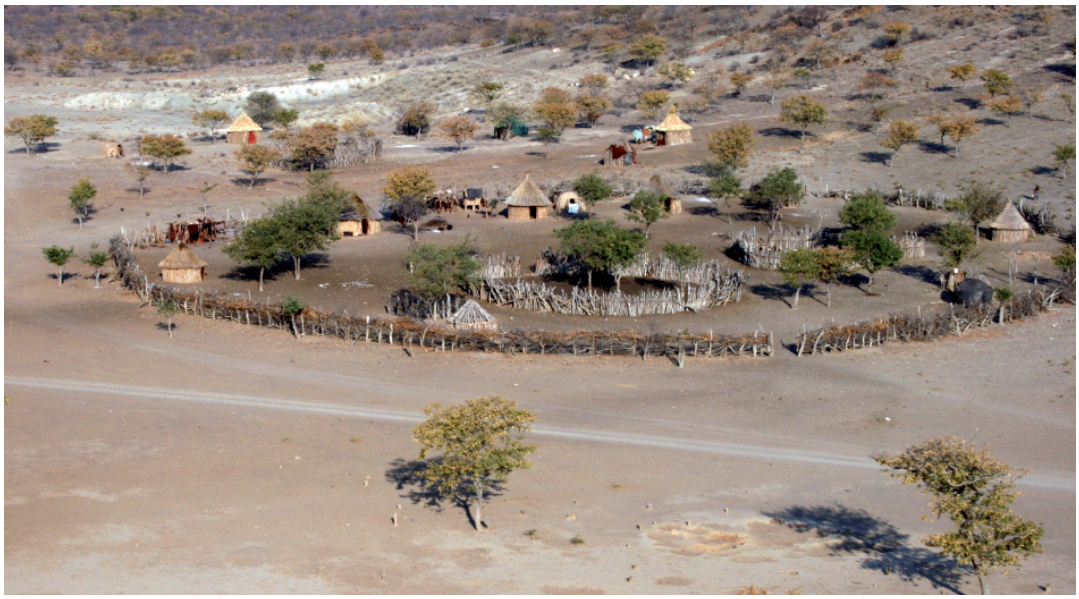
Planning the extent of each enumeration area is particularly challenging. This phase of the census is called pre-enumeration census mapping. The boundaries have to follow designated borders (such as those of constituencies, urban areas and regions) while at the same time including what is hoped to be the number of households that can be covered by the enumerator. As far as possible, the enumeration area boundaries should also follow roads, rivers and other visible landmarks that the enumerators can identify in the field. This is necessary to avoid the same households being counted twice or some households being overlooked.

In recent years the planning and demarcation of enumeration boundaries has benefited greatly from the use of GIS software and data. Instead of sketching boundaries on paper maps, different themes or layers of data for geographical features can be viewed on a computer screen and then used to help plan the extent of each enumeration area in the country. For example, regional, constituency and farm boundaries, roads, tracks, fences and water courses can all be superimposed in a view. Potential enumeration area borders can then be adjusted in relation to the positions of other features. Once all the enumeration area boundaries have been planned, the GIS programmes are used to compile and print local maps at appropriate scales. The maps are then used by the field enumerators to guide them to systematically cover the areas they have been allocated.



Many types of geographical information can be overlaid and analysed using computerised geographical information systems.

Census planning now also benefits from the ready and free availability of satellite images and aerial photography which can be viewed in GIS programmes. Again, enumeration boundaries can be planned and adjusted to match features visible on the images. For the first time, planning for the 2011 Population & Housing census also used the locations of building structures that had been mapped off detailed aerial photographs, and subsequently verified in the field as being inhabited by one or more households. This made the planned allocation of appropriate numbers of households to enumeration areas much more accurate than before.



The fundamental unit of enumeration in a census is the household, which is defined by the people that usually cook and eat together. There can be several households in one house or dwelling.

The set of data for the locations of dwellings is known as the Dwelling Unit Frame, and each dwelling also has a unique identification number. Information for each dwelling and its occupants collected in 2011 will be linked via the identification number to the precise location of the dwelling. While this may seem like a simple technical improvement, the linking of census information to individual dwellings represents a massive advance, and Namibia is one of the first countries in Africa to do this.

Beforehand, the smallest area for which census data could be identified was the enumeration area. While these are small in densely populated zones, sparsely inhabited enumeration areas may each cover hundreds or thousands of square kilometres. As a result, all that could be known from the aggregate figures for an enumeration area was that they represented people somewhere in that area. On top of that, since enumeration area boundaries change from census to census and survey to survey, changes over time are difficult to assess. Having the precise location for each household's census information, by contrast, means that the data can be analysed and presented at any scale or level of aggregation. For example, to test the importance of proximity to schools for school attendance, attendance rates in all households less than 5 kilometres or more than 5 kilometres from schools could be compared across the whole country, or only in certain regions or socio-economic landscapes. Another example of a planning application using the dwelling data is shown in Figure 4 on page 18. In short, the power and purpose of census information will increase substantially once all the questionnaire data can be linked to mapped households.

Questionnaires

The questionnaire is the most important document for any census, since it is the main tool for collecting information. The process of designing the questionnaire is fairly complex because the information to be collected must serve the demographic objectives of the census, and data users in such sectors as education, health, labour and housing. In addition, the questionnaire must also conform to recommended international and regional standards. In preparing the questionnaire for the 2011 Population & Housing Census, the Central Bureau of Statistics therefore consulted a wide range of stakeholders.

Technical aspects of the design are crucial so that the enumerators can record information clearly and unambiguously, and in such a way that the data can be captured using electronic scanners. Questionnaires should also not be too long to guard against problems of respondent fatigue. These may occur when respondents get tired or disinterested so that they possibly provide incorrect responses, especially in the last sections of the questionnaire.

Three different questionnaires are normally used for population and housing censuses: Form A for individuals in each household and the household's structure and properties; Form B for people living semi-permanently in institutions such as hostels, prisons and hospitals, and Form C for overnight travellers in hotels and elsewhere and the homeless.

The careful formulation and design of questionnaires is one important prerequisite. Another is for the enumerators or interviewers to be well trained, confident, professional and responsible. As might be imagined, circumstances differ from one household to the next, requiring the interviewers to respond appropriately. Every question needs to be covered and the answers properly recorded and checked before the field enumerator can go on to the next household. In addition to the training provided to enumerators, an Interviewers' Manual was compiled to be carried and used by interviewers for reference purposes.

The questionnaire used for Form A in the 2001 Population & Housing Census is reproduced in the Appendix. Information on housing broadly covers aspects of the type and size of the construction, the services used by the home, and some demographic features relating to births and deaths in the family. The main source of income for the household is also recorded, as well as the main language spoken at home, which is sometimes used as a crude proxy for ethnicity. Direct questions on race have not been asked in Namibia since independence in 1990 because they are deemed sensitive in the light of past prejudices based on ethnicity. Paradoxically, good data on Namibia's ethnic composition could guide present policies to benefit certain previously disadvantaged groups.

Information reported for each person covers a great variety of personal attributes: sex, age, movements, marital status, citizenship, handicaps, education, economic activity and, in the case of women, fertility and survival of offspring. Throughout the process of gathering and processing such personal information, absolute confidentiality is maintained and respected. All census staff pledge oaths of secrecy not to divulge the collected information to anyone other than census officials. This is in accordance with laws and regulations relating to public census and survey undertakings.

The enumeration process

In 2001, the interviewers were stationed in their respective enumeration areas about four days before the Census Reference Night of 27 August. This was to enable them to familiarise themselves with their enumeration areas using the maps which were provided. Supervisors were called to solve any problems relating to the physical identification of the boundaries on the ground. The four days were also used to identify the households within the enumeration areas, as well as meeting with local leaders.

The actual census began on the Census Reference Night when special population groups (homeless, hotel guests, hospital patients) and institutional populations (school hostels and prisoners) were enumerated to record their *de facto* locations (see page 9). Thereafter, enumerators systematically visited all private households over a period of several weeks, sometimes returning to obtain complete information that was not available earlier. The Census Reference Night is the night to which all information should refer, and every person in Namibia on that night should have had information collected about him or her. The period of field enumeration formally ended on 5 October 2001.

Post-enumeration data processing

A series of activities and processes began after the phase of enumeration, such as manual editing and coding, data entry and checking and the production of tables of results. As computer performance and functionality improves, more and more of the data processing is done using scanners and routines that identify errors. For example, all information on all questionnaires was typed manually during 1991 census, while about 80% of information was recorded using scanners in 2001. The use of such computerised aids reduces the cost and time for processing, and cuts down on mistakes.

Scanners are now used to capture information off questionnaires used in censuses and surveys, which means that results can be obtained more rapidly and accurately than before when all information had to be typed into computerised databases.

The main products of censuses have been printed reports consisting of hundreds of tables which provide counts of people and households according to many different variables. The main products of censuses have been printed reports consisting of hundreds of tables which provide counts of people and households according to many different variables. For example:

TOTAL POPULATION BY SEX AND SINGLE YEAR AGES, NAMIBIA, 2001 CENSUS

Age (years)	Total	Female	Male
0	46,852	23,571	23,281
1	46,703	23,274	23,429
2	47,929	24,063	23,866
3	50,987	25,517	25,470
4	48,758	24,760	23,998
5	etc	etc	etc
6	etc	etc	etc

TOTAL URBAN POPULATION BY MARITAL STATUS AND SEX, NAMIBIA, 2001 CENSUS

Marital status	Total	Female	Male
Never married	430,651	215,275	215,376
Married with certificate	97,060	46,021	51,039
Married traditionally	19,876	9,593	10,283
Consensual union	31,956	16,239	15,717
Divorced/separated	8,818	5,872	2,946
Widowed	10,620	8,777	1,843
Not stated	4,613	1,459	3,154
Total	603,594	303,236	300,358

Many households have three generations living under the same roof, which is largely a consequence of the longer lives that grandparents now enjoy.

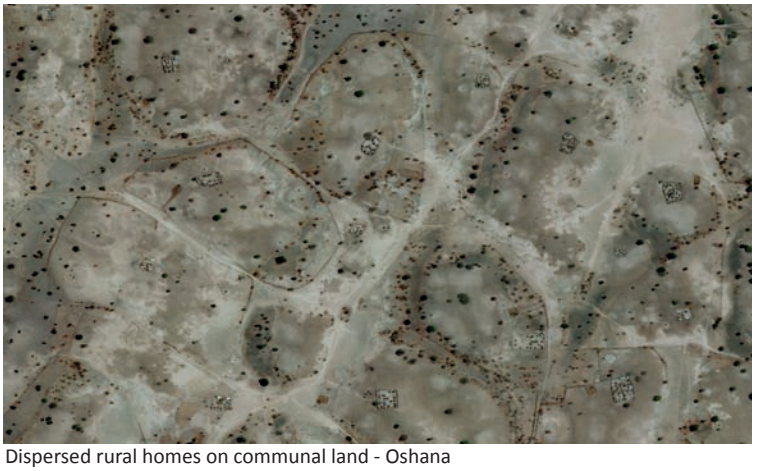
Urban informal homes - Havana, Windhoek

Isolated rural household on freehold land - Otjozondjupa

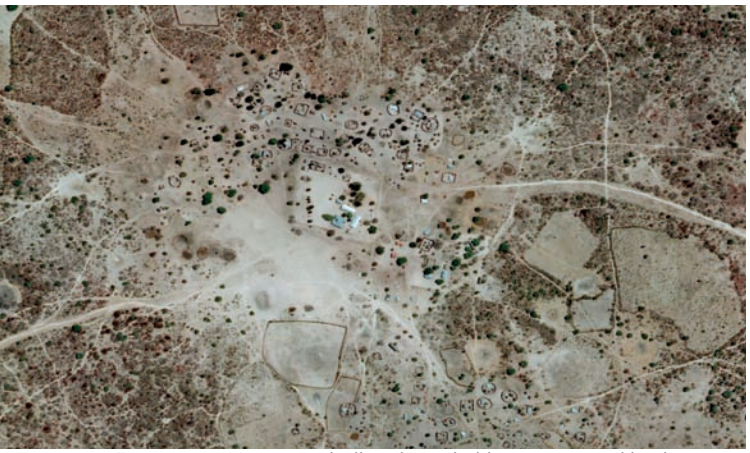
Urban low income formal housing - Katutura, Windhoek

Isolated rural household on communal land - Kunene

Urban upper income formal housing - Eros, Windhoek



Dispersed rural homes on communal land - Oshana



Concentrated village households on communal land - Caprivi

Dispersed rural homes on communal land - Kavango

5 Growing numbers of people

About 229,000 people were recorded during the first census in 1921, while the most recent 2001 census reported Namibia's population as 1,830,330 people. The country's population growth therefore grew more than eight times over the 80 years between 1921 and 2001.

The graph in Figure 5 also shows estimates of the total population in 2011 and 2011. These are based on population growth projections made using fertility and mortality rates calculated from the results of the 2001 census and the effects of changing HIV /AIDS-related mortality.

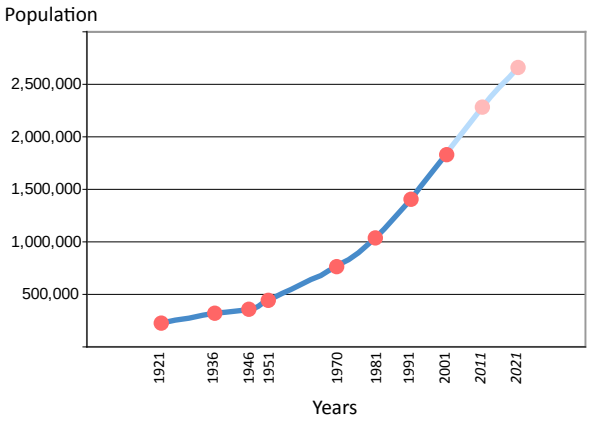


Figure 5.
The number of people counted during each population census between 1921 and 2001, followed by estimates of the total population in 2011 and 2021

Population growth simply measures the difference or increase in the total number of people from one year to another. On the other hand, the *population growth rate* measures the speed of increase and is normally expressed as the percentage increase each year. In the first half of the 20th century, the population grew by about 2% per year. The rate of growth increased then to about 3% during most of the second half of the century. More recently, growth rates declined to about 2.6% between 1991 and 2001 and are now down to about 2% per year.

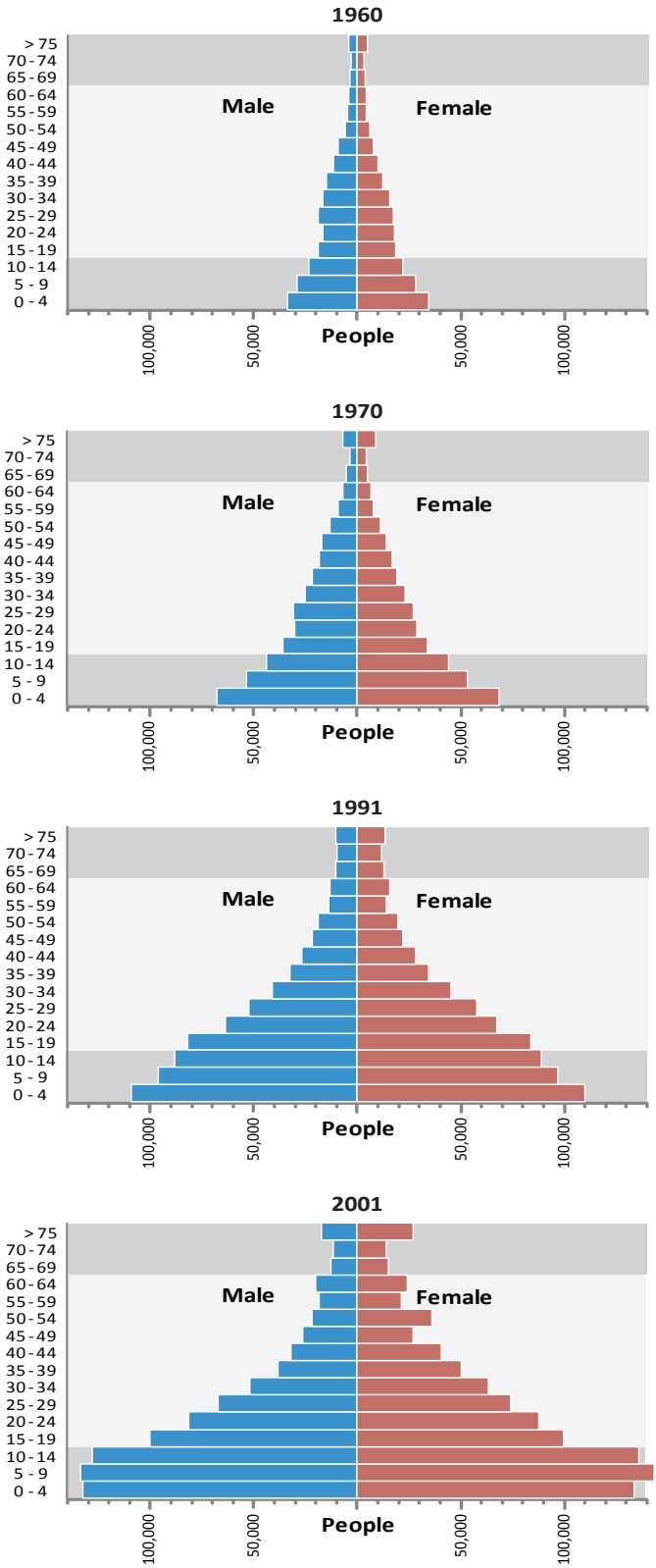
Two major developments have caused the population of Namibia to grow. The first is improved medical care which lowered mortality and increased survival rates. As a result, many more infants and children survive to adulthood and to produce their own children, and people now have much higher life expectancies than before.

Immigration is the second process to have caused population growth in Namibia. Much of the immigration has been from Angola by people seeking economic opportunities and social services in Namibia, as well escaping the harsh effects of colonial rule, especially during the 1920s and 1930s, and the more recent civil war during the last two decades of the 20th century.

The more recent slowing of the *rate* of population growth is largely due to a reduction in fertility as a result of the improved levels of education among younger women, and their greater participation in formal business and employment. Other factors to have possibly led to reductions in fertility are HIV/AIDS and family planning programmes (see page 44).

(opposite page)
The design and planning of population censuses and surveys is affected by the distribution and density of housing, while information is also often collected about the houses themselves. These images show the variety of kinds of housing in Namibia, all of which needs to be accommodated during a census or survey.

Figure 6.
Namibia's population has grown, and also changed in 'shape' over the past few decades, as indicated by these four age pyramids. Numbers of young people increased rapidly as a result of higher child survival, but have recently started to decline due to lower fertility. Improved health services have also led to increases of the relative numbers of elderly people in the population.



Improved health services have also led to increases in the relative numbers of elderly people in the population.

There have been enormous differences in population growth between different regions (Figure 7). The highest rates of growth were in the central regions of Khomas and Erongo, largely as a result of immigration by people from elsewhere in the country. The large number of Angolan immigrants during the 1990s also caused the population of Kavango to grow substantially. For example, Kavango's population grew by over 60,000 people from 140,258 in 1991 to 202,694 in 2001.

By contrast, the populations of certain regions have hardly grown, and some appear to have declined. For example, rural populations have declined in many areas of Hardap, Karas, Omaheke and Otjozondjupa.

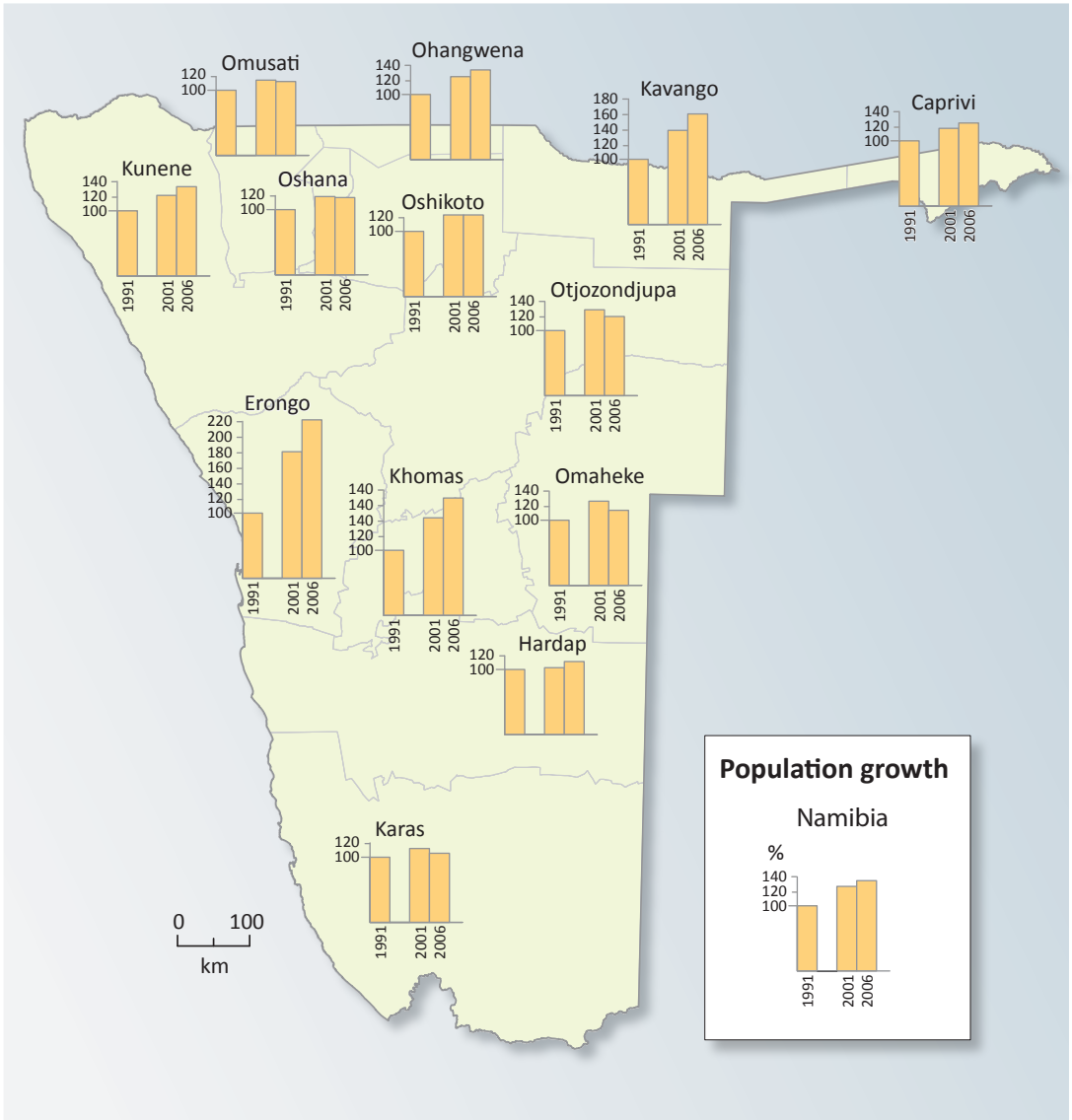
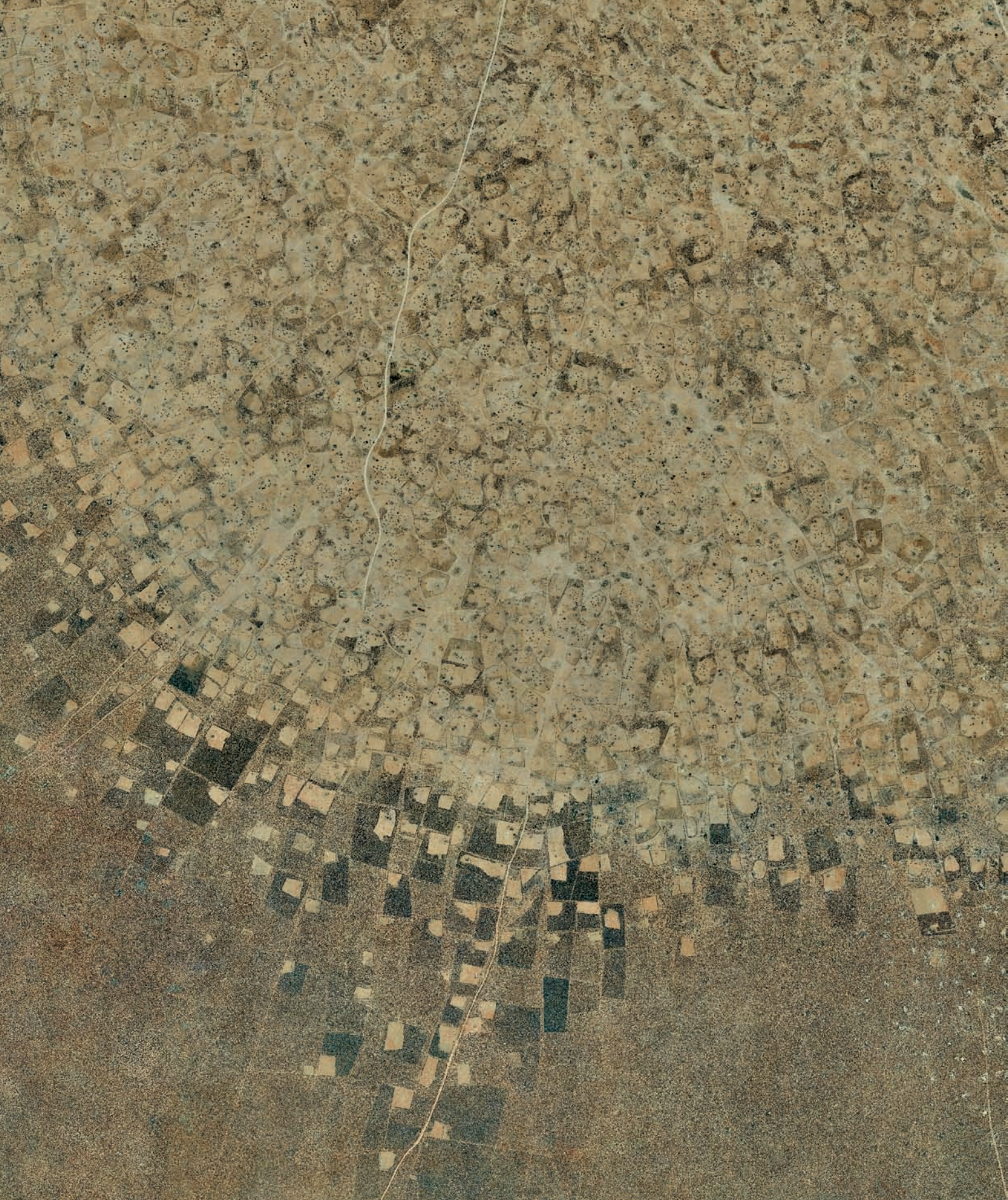


Figure 7.

Population growth in each region between the population censuses in 1991 and 2001 and the inter-censal survey in 2006. The figures on the y-axis are the percentage population change since 1991 where the population in each region has been adjusted to a standard value of 100 in 1991.

(The figures for Caprivi, Kavango, Kunene and Omusati were adjusted to correct for changes made to their boundaries between 1991 and 2001. The growth rate for the Erongo region excludes Walvis Bay which was not part of the region during the 1991 census).



The greatest difference in population growth has been between urban and rural areas (Figure 8). As a result of rural residents moving to towns to seek cash incomes and better social services, the country's urban population has grown annually at between 4 and 5% over the past few decades. Rural populations have only grown at between 1 and 2% per year in most areas.

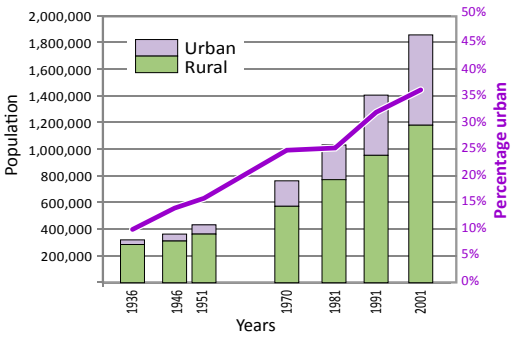


Figure 8.
Urbanisation refers to the general process of people moving from rural areas to homes in cities, towns and other settlements where most housing is formally structured and cash economies are prevalent. The bar graph shows the numbers (left y-axis) and percentage (right y-axis) of people in urban and rural areas between 1936 and 2001.

Rates of urban growth are actually higher than those shown in Figure 8. This is because only people living in declared urban areas are included in the official urban figures in Figure 8. For example, towns such a Tsumkwe, Kamanjab, Aranos and many other 'undeclared' towns were not included. In addition, large numbers of people living in some informal settlements around declared towns were excluded. Once these informal settlements and 'undeclared towns' are included, about 38% of all Namibians were living in urban areas in 2001 (see page 32). Extrapolation using urban growth rates of 4 – 5% per year indicates that about 45% of the Namibian population now lives in urban areas.

Based on current trends and aspirations, these young people are much more likely to live their adult working lives in towns and cities than in rural areas.

(opposite page)
The highest numbers and concentrations of people living rurally are in the communal areas of Omusati, Ohangwena, Oshikoto and Oshana. The area shown in this image is just south of Okahao and demonstrates the gradual expansion of households, fields and the clearing of natural vegetation southwards. Most of the uppermost two-thirds of the image consists of densely packed homesteads established long ago, while the most recently established homesteads are to the south in the only unoccupied areas

While many people have moved to towns, there have also been interesting differences across the country in the patterns of movement. Based on the census question which asks where each person was born it is possible to see the degrees to which different regions are comprised of people who were born locally or who moved there from other places. Overall, 27% of all people enumerated during the 2001 census were not born in the region in which they were then resident. Put another way, about three-quarters of people were living in the region where they were born.

Erongo and Khomas have attracted the greatest proportions of immigrants, since close to 60% of their residents were born outside of these two regions (Figure 9). The other southern and central regions of the country also consisted of many immigrants, most of whom were actually from four of the northern regions of Omusati, Oshana, Oshikoto and Ohangwena. Most of these and the other northern regions (Kunene, Kavango and Caprivi) had populations comprised very largely of people born locally. (Many recent immigrants from Angola probably reported that they were born in Namibia.)

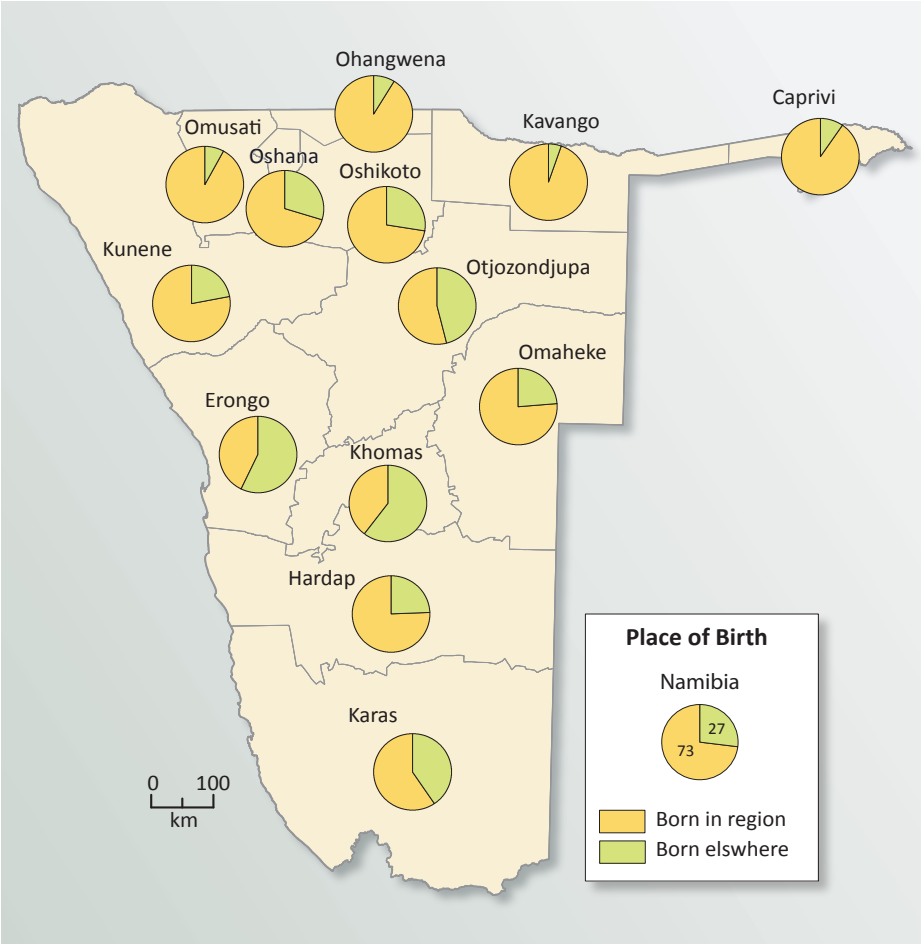


Figure 9.

Percentages of people in each region in 2001 who had been born in the same region, and others who were born elsewhere. The southern and central regions consist of many immigrants, whereas most people living in the northern regions were also born in the north. This reflects the general migration of people from the north to the south, but also the relatively low levels of migration from the southern to northern regions.

6 The distribution of people

Many more people live in the northern areas of Namibia than in the central and southern ones. This relative concentration is largely a result of the better conditions for crop farming in the northern regions, as well as high rates of immigration from Angola over many decades mentioned earlier.

Of the total population in 1991, 64% was in Kunene, Omusati, Oshana, Ohangwena, Oshikoto, Kavango and Caprivi. By 2001, the percentage had dropped to 62%, largely as a result of the large numbers of people who left the northern regions to settle in the centre and south, especially in urban areas (see page 29). Note that while the difference between 1991 and 2001 is only 2%, relatively more people were also added to the northern regions during this period because of high fertility rates (see page 43) and immigration from Angola.

In 2001, the other 38% of people were in the southern and central areas of Namibia in Erongo, Otjozondjupa, Khomas, Omaheke, Hardap and Karas. Here, most people have been concentrated increasingly in towns, such as Windhoek, Grootfontein, Walvis Bay and Keetmanshoop (Figure 11). As a result, the remaining rural areas are extremely sparsely populated. With the exception of Omaheke, all these southern regions have about half or more of their populations living in urban settlements, as shown in the table on the next page.

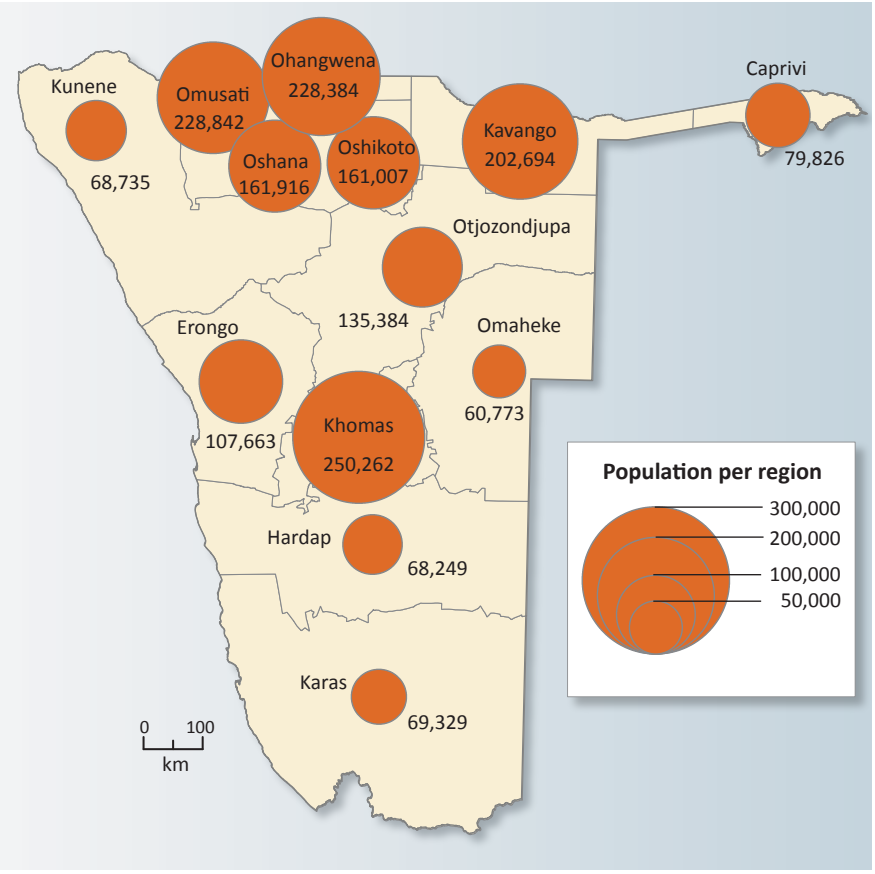


Figure 10.

The number of people recorded in each region during the 2001 Population & Housing Census. The size of the circle is proportional to the number of people in each region. The 13 regions can be divided into three size groups. The first consists of the highly populated ones each with more than 12% of the Namibian population: Khomas, Omusati and Ohangwena. The second group of regions each had about 9-10% of the population (Oshana, Oshikoto and Kavango); while the last group of five regions each had less than 5% of the total population: Caprivi, Kunene, Karas, Omaheke and Hardap.

THE NUMBERS OF PEOPLE AND PROPORTION OF THE NATIONAL POPULATION RECORDED IN THE 1991 AND 2001 POPULATION CENSUSES. THE REGIONS HAVE BEEN LISTED FROM NORTH TO SOUTH AND WEST TO EAST.

	1991 population		2001 population		Urban population in 2001[1]	
	Number	Percentage	Number	Percentage	Number	Percentage
Kunene	55,655	3.9%	68,735	3.8%	17,452	25%
Omusati	197,810	14.0%	228,842	12.5%	6,682	3%
Oshana	134,881	9.6%	161,916	8.8%	48,144	30%
Oshikoto	128,744	9.1%	161,007	8.8%	27,958	17%
Ohangwena	179,629	12.7%	228,384	12.5%	23,414	10%
Kavango	140,258	10.0%	202,694	11.1%	60,095	30%
Caprivi	66,992	4.8%	79,826	4.4%	26,414	33%
Otjozondjupa	102,535	7.3%	135,384	7.4%	61,666	46%
Erongo[2]	55,470	3.9%	107,663	5.9%	88,785	82%
Khomas	167,071	11.9%	250,262	13.7%	226,486	91%
Omaheke	52,733	3.7%	68,039	3.7%	22,133	33%
Hardap	66,495	4.7%	68,249	3.7%	44,145	65%
Karas	61,151	4.3%	69,329	3.8%	47,602	69%
Namibia	1,409,424	100.0%	1,830,330	100.0%	700,976	38%

[1] This includes 'undeclared' urban areas such as: Okahao, Oshikuku, Okongo, Omuthiya, Nkurenkuru, Ndiyona, Divundu, Tsumkwe, Kamanjab, Maltahöhe, Aranos, Warmbad, Rosh Pinah, Aus, Bethanie, Gibeon, Tses, Koës, Gochas, Otjinene, Epukiro, Steinhausen, Leonardville and Aminuis.

[2] The population of about 20,000 people in Walvis Bay was not included in the 1991 census.

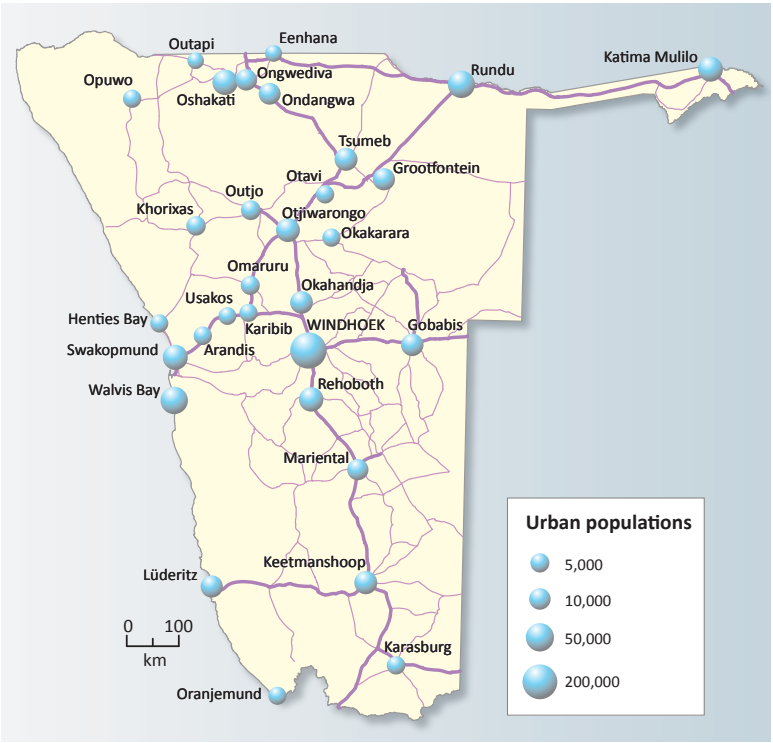


Figure 11.
The numbers of people living in 30 places that were declared urban areas in 2001. The diameter of the circles is proportional to the number of people in each town.

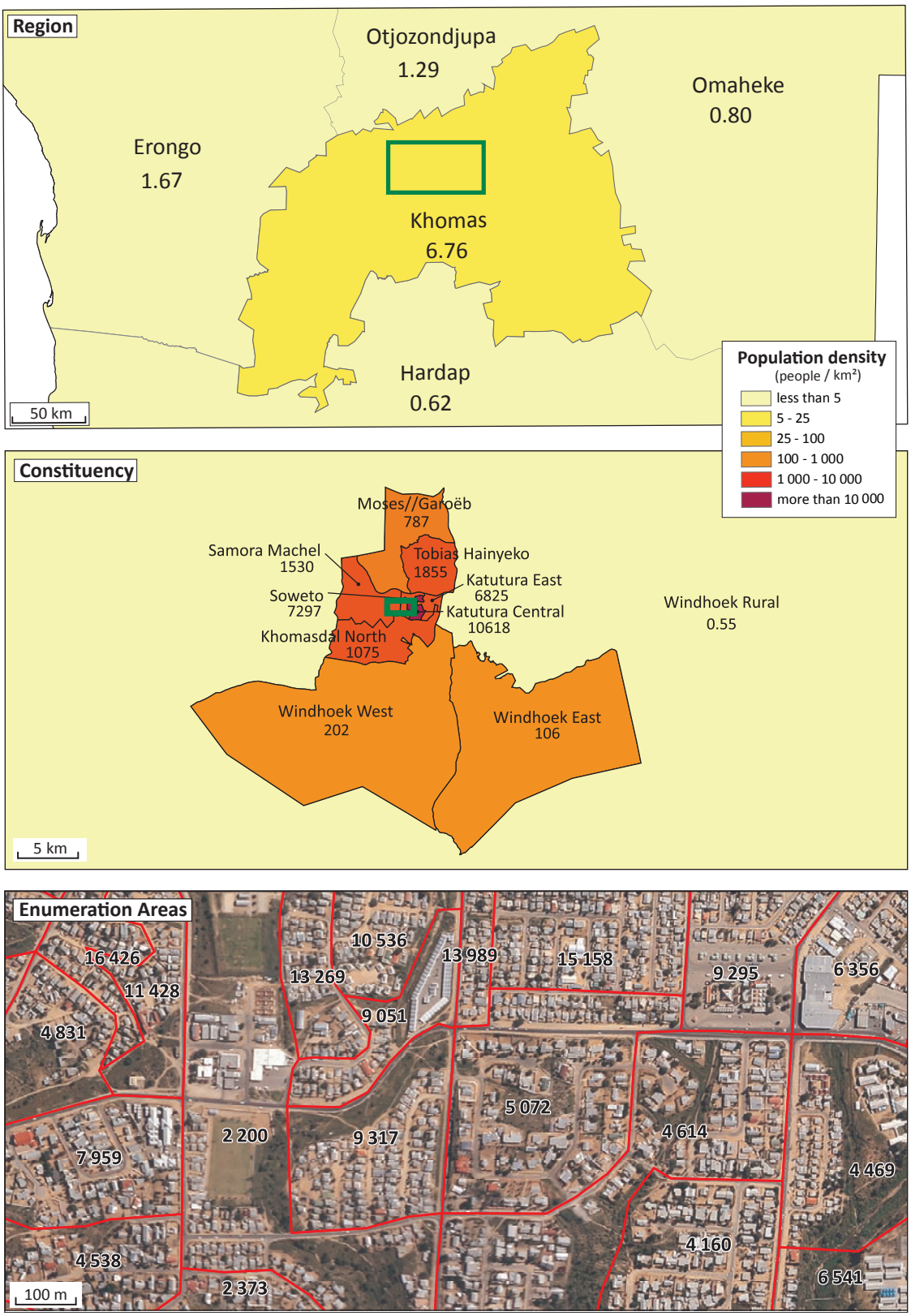


Figure 12.
The density of the population is defined by the number of individuals per given unit of land area. With a surface area of about 824,000 square kilometres and a total population of about 2,200,000 people (as estimated in 2010), Namibia's population density is 2.7 people per square kilometre. This is the average. But it is a rather meaningless figure because there are very few places in the country where we find just fewer than three people in a square kilometre. Indeed, densities are far lower than 2.7 in most areas, and very much higher in others.
The map above illustrates problems associated with density calculations for different areas. For example, the calculated population density of Khomas is many times greater than that of the surrounding regions (top map). However, this comparison is nonsensical because no one actually lives in most of Khomas, as shown by the low densities in the Windhoek Rural constituency (middle map). Indeed, estimates of population density only become interesting and useful when they are derived from areas that are rather evenly inhabited, such as the enumeration areas in Soweto constituency in north-western Windhoek (bottom map). The green blocks in the top and middle maps are the areas enlarged in the middle and bottom maps, respectively.

A small pan with relatively fertile soils in eastern Ohangwena provides homes and fields for many people, but no one lives in the surrounding sandy woodlands. Namibia is ranked 234th out of a total of 239 countries in terms of population densities. The world average is about 45 people/square kilometre, and the country with the highest population density is Macau (China), with 18,534 inhabitants /square kilometre[1].

[1] http://en.wikipedia.org/wiki/Listofcountriesbypopulationdensity

Figure 13 (on facing page) shows how substantially densities vary across the country. The map also shows very local effects, such as the aggregation of people along main roads (for example in Caprivi), along dry fossil rivers (such as along the Omatako Omuramba in Otjozondjupa and Kavango) and on more fertile soils around pans in eastern Ohangwena and along the Okavango River in Kavango.

The most densely populated areas of the country are in towns, especially in informal settlements and areas where there are many apartment blocks. Here, densities are often above 50,000 people per square kilometre, which means that each person 'occupies' an area of less than 20 square *metres*. By striking contrast, each person 'occupies' more than 20 square *kilometres* (or 20 million square *metres*) in the most sparsely populated areas of Namibia. The reasons for such low densities vary across the country, but in most areas it is the absence of fertile soil and/or water that prevent more people from living there. This is the case in many areas of Otjozondjupa, Kavango and Karas, and in the western Namib Desert. Densities are obviously also very low in places where people are not allowed to live or where settlement is reserved, such as in mining areas and national parks.

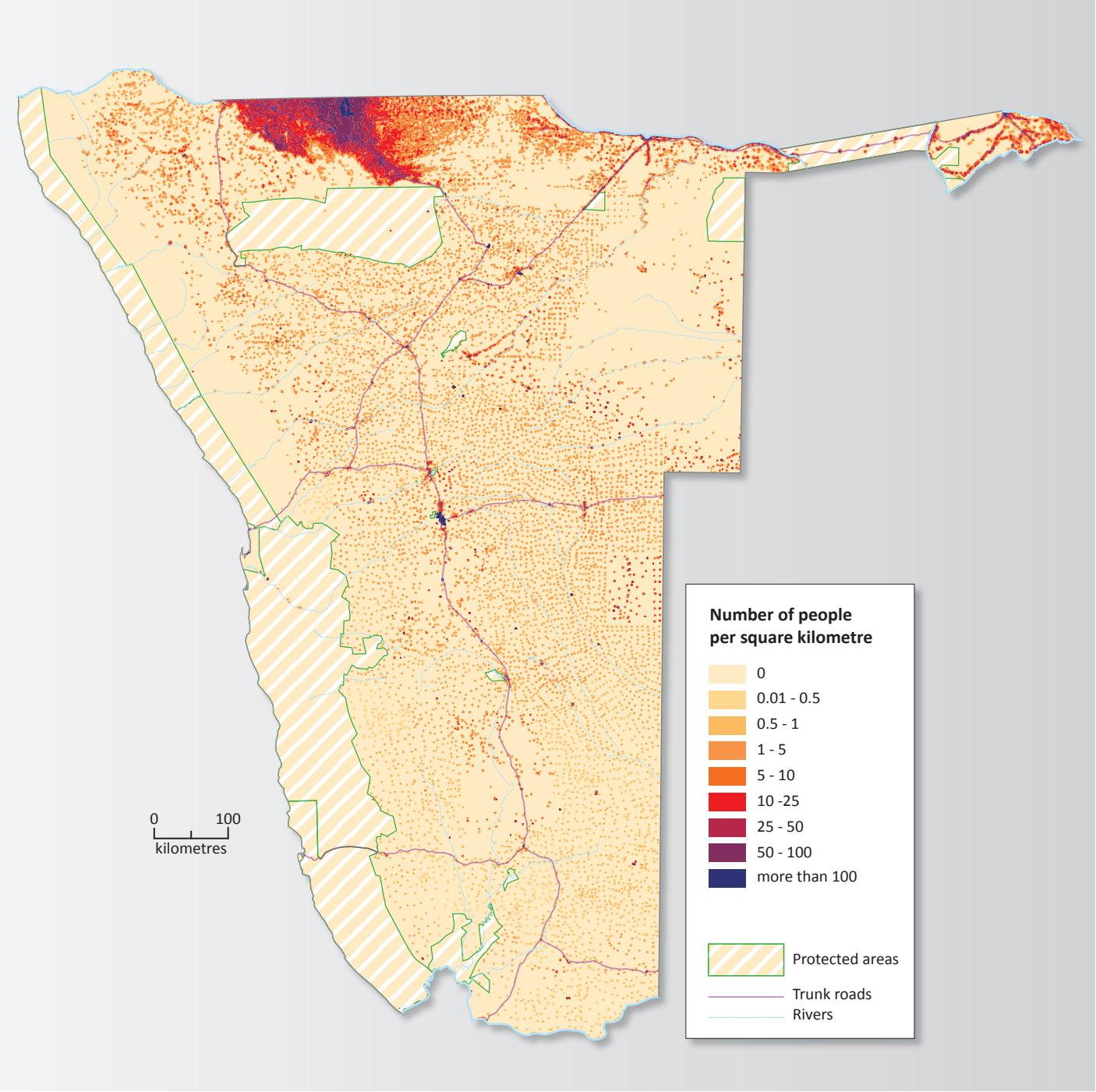


Figure 13.

The density of people in 2000 for each square kilometre of the country as calculated largely from counts of individual households. These were mapped from aerial photographs in much the same way as the dwelling frame now being developed by the Central Bureau of Statistics (see page 20)[2]

[2] from Mendelsohn JM, Jarvis AM, Roberts CS & Robertson T. *Atlas of Namibia*. David Philip, Cape Town.

There are several reasons why so many people live in the Owambo area in Oshana, Oshikoto, Omusati and Ohangwena. One factor to have played a key role for centuries is the availability of fresh water in hand-dug wells known as *omafima* wells. These are shallow, funnel shape holes dug into sand on higher levels above the Oshana channels. The water is fresh because it has accumulated from rain water filtering through the sand and then being trapped by underlying hard layers of cemented sandstone and iron oxide. In the absence of fresh water from *omafima* wells very few people would have been able to live in this area.

7 The structure of the population

A 'normal' population consists largely of very young children, and then steadily decreasing numbers of older children and adults. The numbers of males and females are approximately equal. These characteristics are largely true for the whole Namibian population, as shown in the top age pyramid in Figure 14. These are also the features of growing populations which tend to have large numbers of young people at the pyramid base. More static populations (such as those in Europe) have age pyramids that are more column-like in shape, with a more even spread of numbers between young, middle-age and elderly people.

However, Figure 14 and 15 show that with so much movement, especially by working-age adolescents and adults to towns (see page 29), the structure of populations in many areas of Namibia appears distinctly 'abnormal'. Urban populations are particularly dominated by working-age people between 20 and 40 years of age. The numbers of children in towns is also significantly lower than those of working-age adults, indicating that many urban residents moved there as young adults.

Interestingly, there are only slightly more very young (0-4 years) children than older ones and teenagers in towns (Figure 14). In rural areas, by contrast, there are substantial differences between the numbers of young people in different 5-year categories.

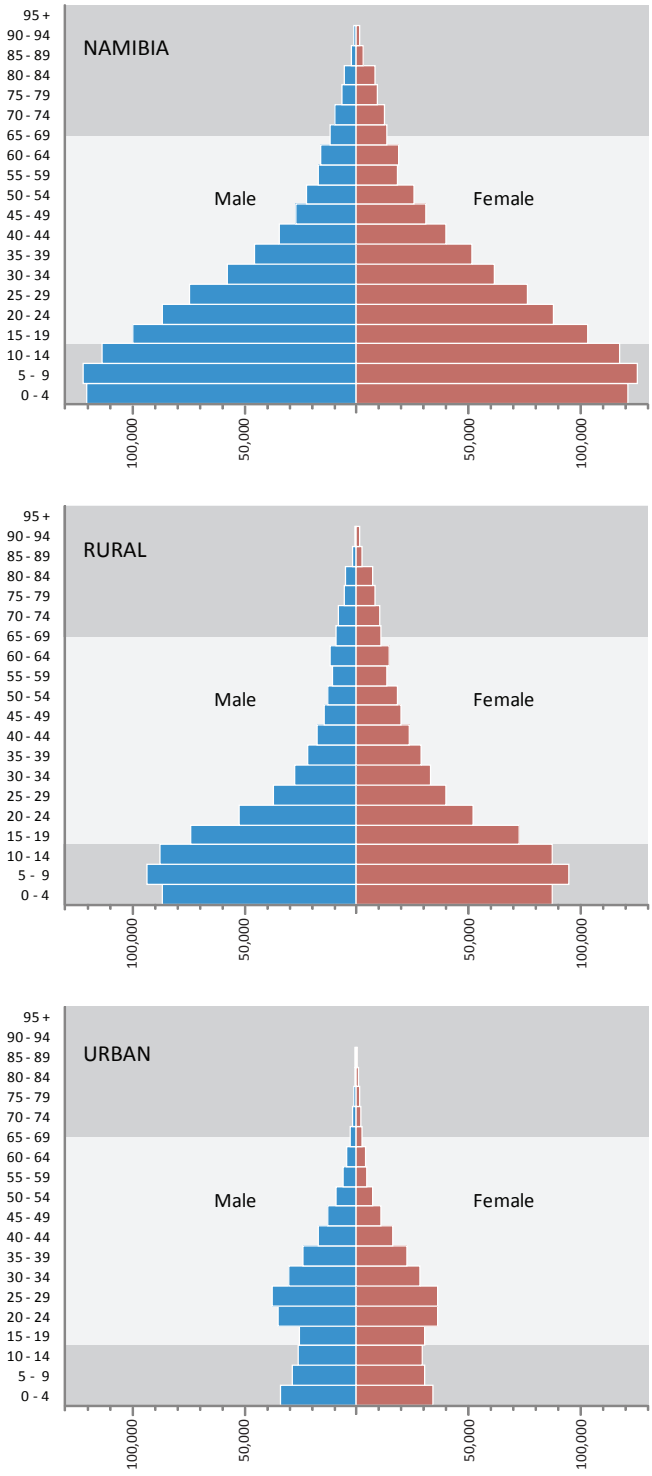


Figure 14.

The structure of the Namibian population in 2001 is depicted in these age pyramids. Each horizontal bar indicates the number of males (left) or females (right) in each 5-year age group. The population of the entire country is shown at the top, the rural population is in the middle and urban population is at the bottom.

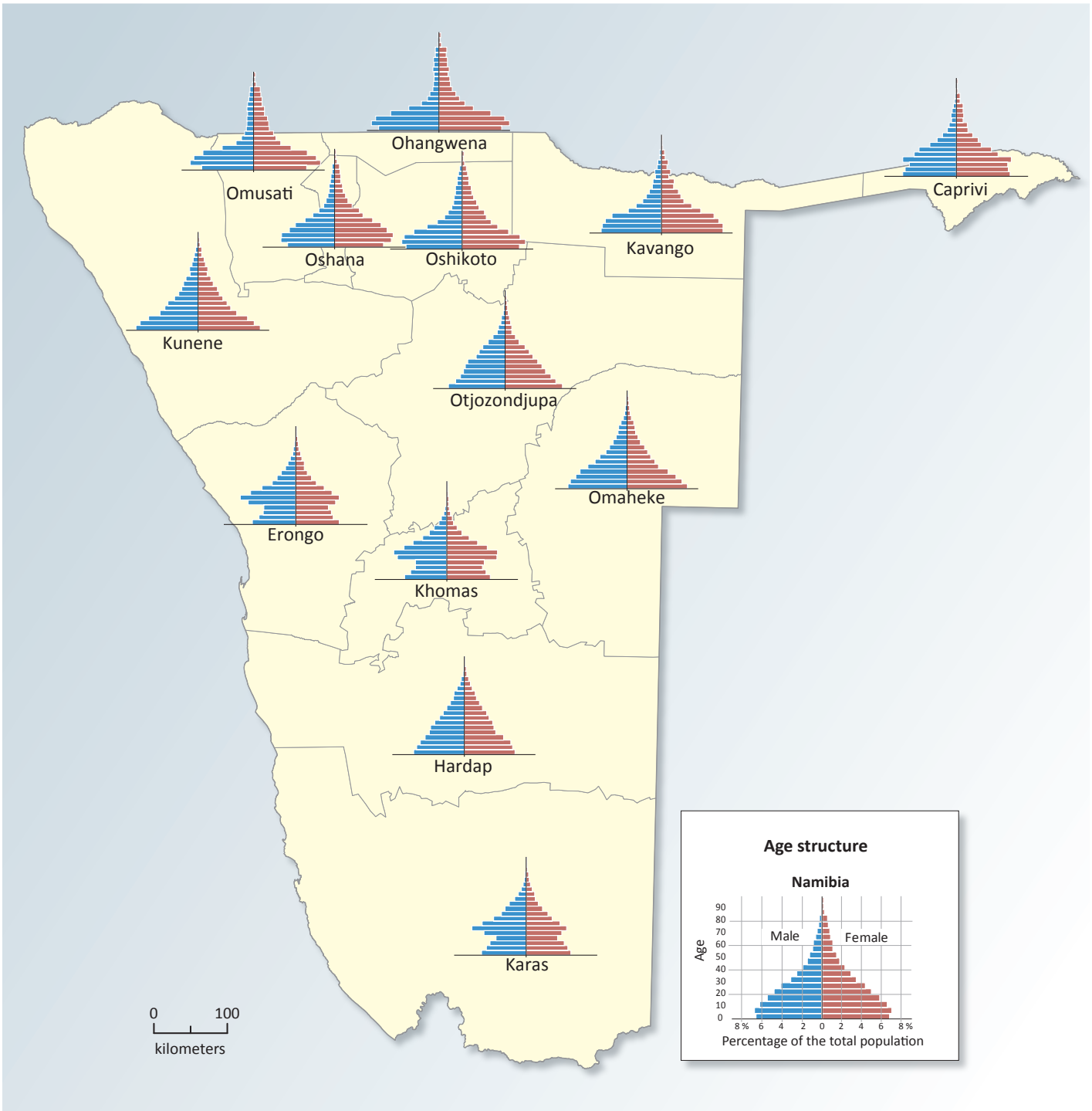


Figure 15.

Age pyramids for the population of each region, as recorded during the 2001 census. Note that the horizontal bars do not show the *number* of people in each age group, but rather show the *percentage* of people in each group. This makes it easier to compare the pyramid structures, especially between regions that have very different population sizes.

Another change to the usual structure of age pyramids has been caused by the recent reduction in fertility, with the result that there are now fewer younger than older children (Figure 14). This effect is particularly visible in Omusati, Oshana, Ohangwena and Oshikoto, and to a lesser degree in Kavango and Caprivi. No such effect is visible in Kunene and the central and southern regions (Figure 15), however.

Comparing the age pyramids for urban and rural populations in Figure 14 indicates that there are few elderly people (especially women) in towns. Rural areas have relatively larger populations of older people, among which women predominate. The higher proportions of elderly women are particularly striking in Ohangwena and Omusati where they outnumber elderly men by a wide margin (Figure 15). Urban areas, on the other hand, have relatively more people in the economically active age groups between 15 and 59 years.

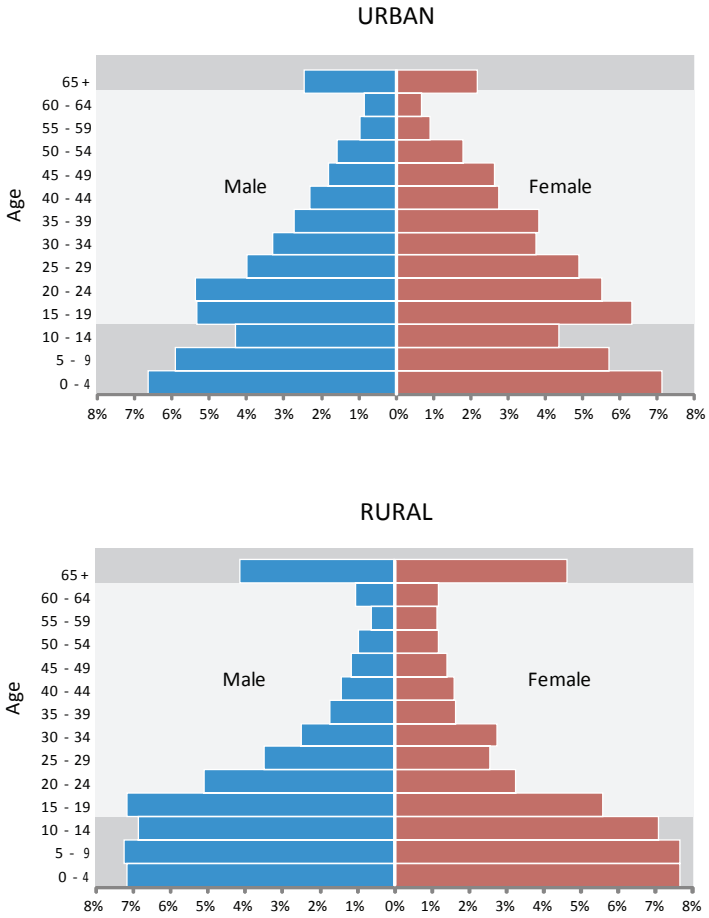


Figure 16.

The structure of populations may even differ substantially within small local areas. The top age pyramid is for the town of Okakarara in 2001, while the bottom one is for rural people living in the communal area immediately around the town. Note how the number of 15–19 year-olds increases in Okakarara as a result of children coming to secondary school in the town. The rural areas are dominated by young people less than 20 years old, with very few adults aged between 30 and 59.

Overall, there are slightly more females than males in Namibia because male mortality rates are fractionally higher. The effect of earlier and higher mortality among males means that the ratio between the sexes becomes increasingly skewed among older people. Whereas very young girls and boys are about equal in number, there are only two men per three women among people aged 70 and older (Figure 17).

Figure 17.
Half-pie diagrams showing the proportion of men (blue) and women (red) in urban (top half) and rural areas (bottom half). There are considerably fewer men than women in all the northern regions, except for Kunene. Rural areas in Kunene and all the central and southern regions have significantly more men than women, probably as a result of men going to work on mines and farms in those regions. There are also more men than women in the urban areas of Erongo and Khomas, again as a result of men being more mobile in pursuit of labour than women. However, some towns such as Okakarara have more women than men (see Figure 16)

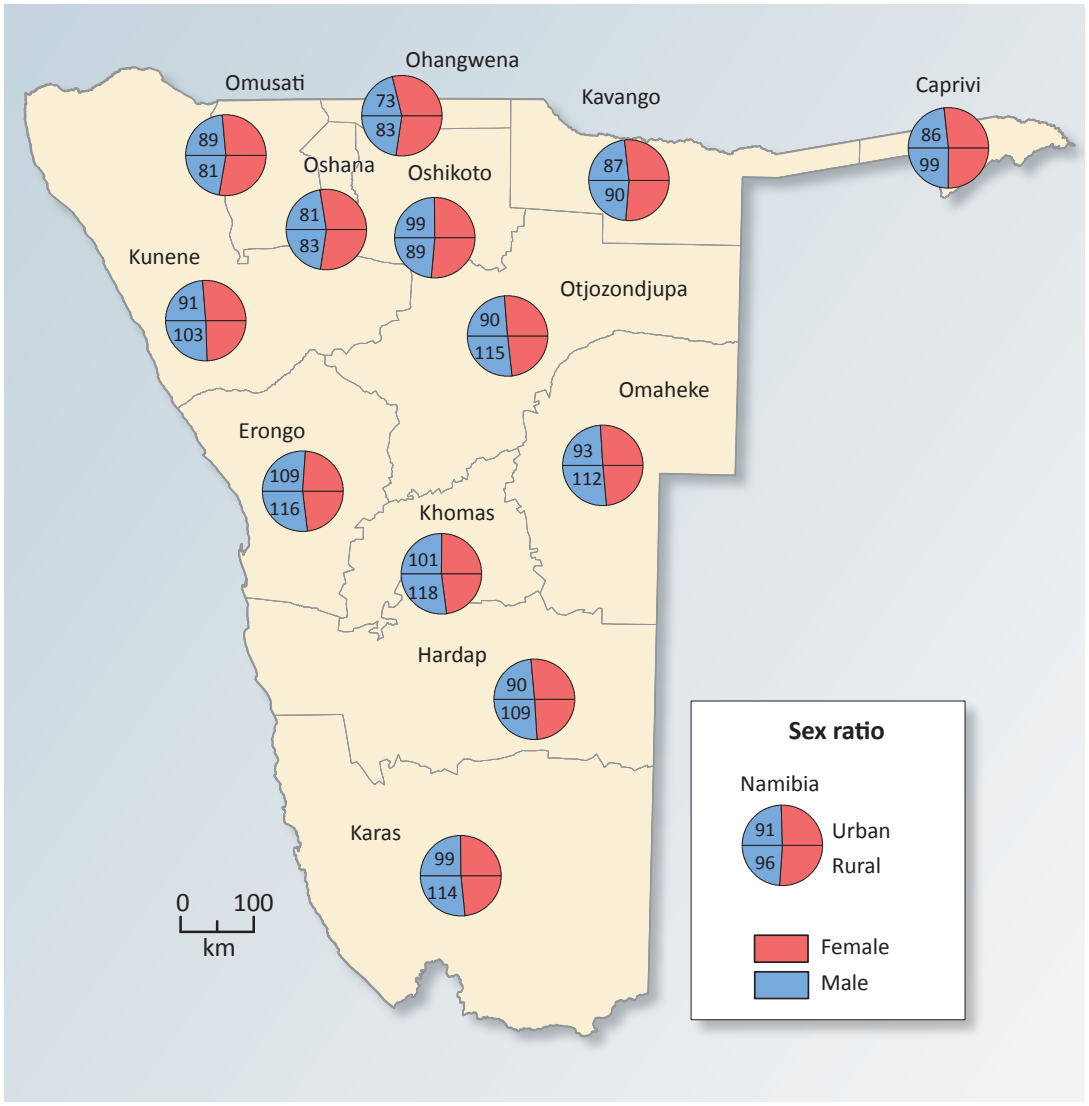
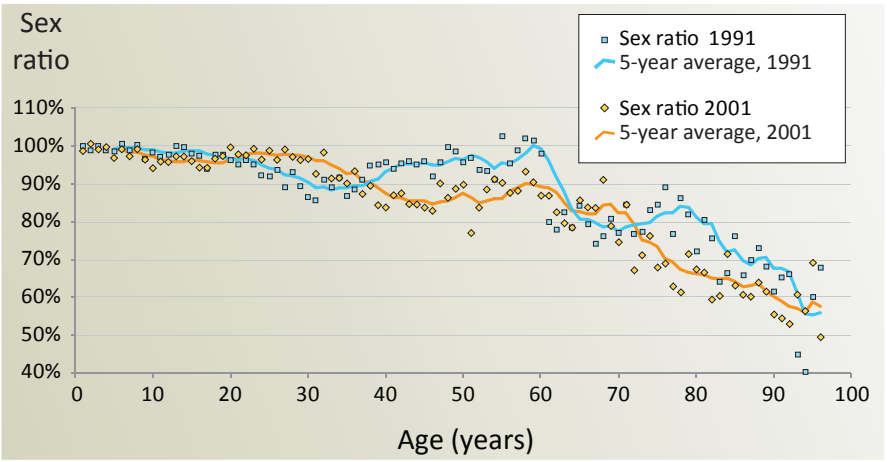


Figure 18.
Ratios of males to females between the ages of 1 and 95 and older, expressed as a percentage of males to females. The graph compares figures from the 1991 and 2001 Population & Housing Censuses. The higher sex ratios in 1991 for people above the age of 40 suggest that there were relatively more elderly men alive at that time than in 2001. The cause of this difference is a mystery.



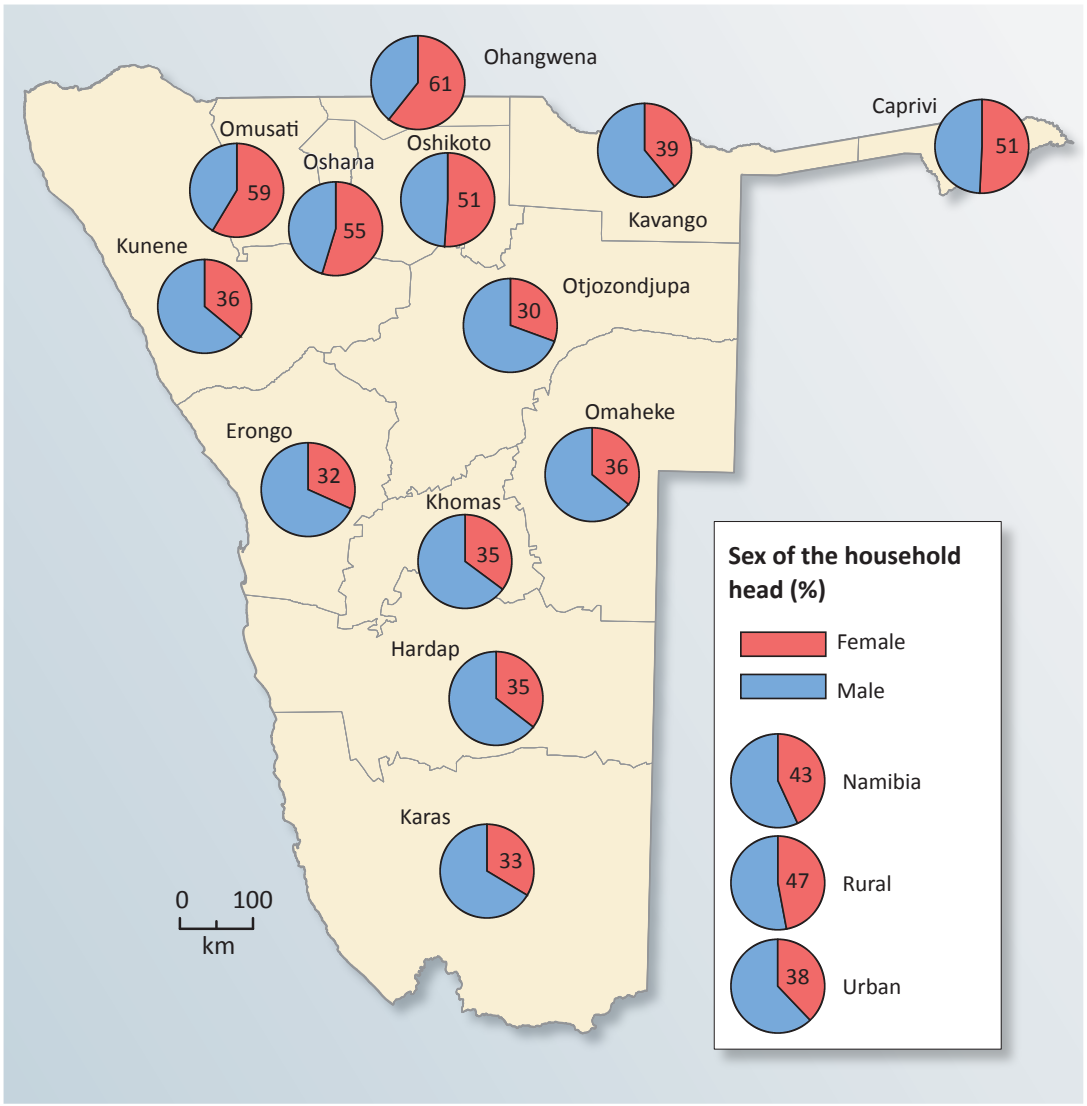
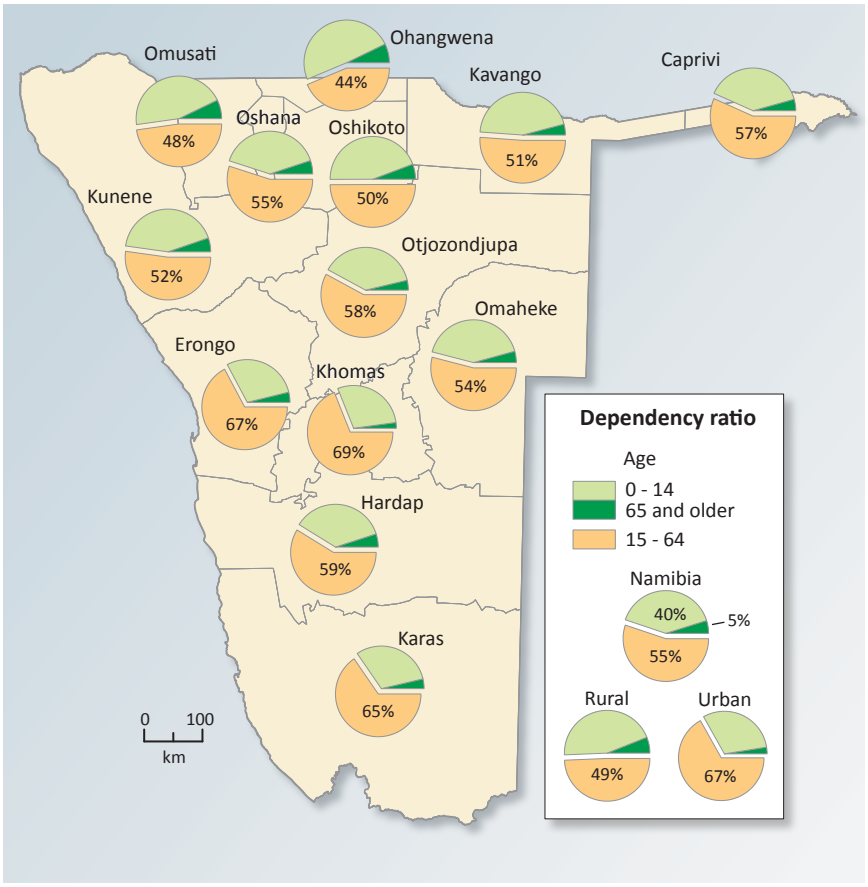


Figure 19.
Men are usually regarded as the heads of their households, but there are also significant numbers of households that are headed by women. This is particularly true in areas where many men have left home to work elsewhere. Thus, the high proportions of female-headed homes in Omusati, Oshana, Ohangwena and Oshikoto are due to so many men working in the central and southern regions of Namibia.

The great majority (97%, in fact) of Namibians live in private homes. This was the percentage of the population enumerated in private households. The remaining 3% was split between people in institutions (such as hostels, hospitals and prisons – who made up about 2.5% of the population) and the homeless and overnight travellers in hotels, etc, who comprised 0.5% of the entire population.

Most private households are relatively large (Figure 21). For example, close to 40% of all families consist of 6 and more members, and almost 67% of the whole population live in these larger households. By contrast, single-person households make up 12% of all households, but only 2% of all people are in these tiny households. For purposes of censuses and surveys, a household is defined as a place where people living together also share catering arrangements.

Figure 20.
The pie diagrams provide ratios of dependent to productive people. Dependency is measured as the number of young (less than 15 years) and old people (65 years or more) who are likely to be dependent, relative to the number of people aged 15-64 years who can be expected to be working and productive. The highest dependency ratios are in northern Namibia and rural areas, where there is roughly one dependent person for each productive person. In urban areas and most of the central and southern regions, there are relatively fewer dependents and more people of working ages.



Large households are generally much wealthier and more resilient than small homes. There are several reasons for this: wealthier men tend to have more children than poorer ones, and large households have both more incomes and more varied sources of income than smaller ones. This is true for in-kind and cash incomes.

Figure 21.
The sizes of households, or the numbers of people living together in each home. The height of the bars indicates the percentage of households in each size class, while the width of each bar is proportional to the number of people living in each size class in Namibia. For example, about 11% of households have 5 members while another 11% have 10 or more members.

8 Fertility and mortality

The growth and structure of any population is determined by three factors or processes: immigration, fertility and mortality. The last two factors are considered here. However, obtaining reliable measures of fertility and mortality is not easy, and a variety of approaches are used to assess their rates.

Fertility is estimated from data gathered in response to two questions asked of each girl or woman aged 12 to 49 during a census: How many children has she borne in the past 12 months, and how many has she borne during her lifetime?[3]

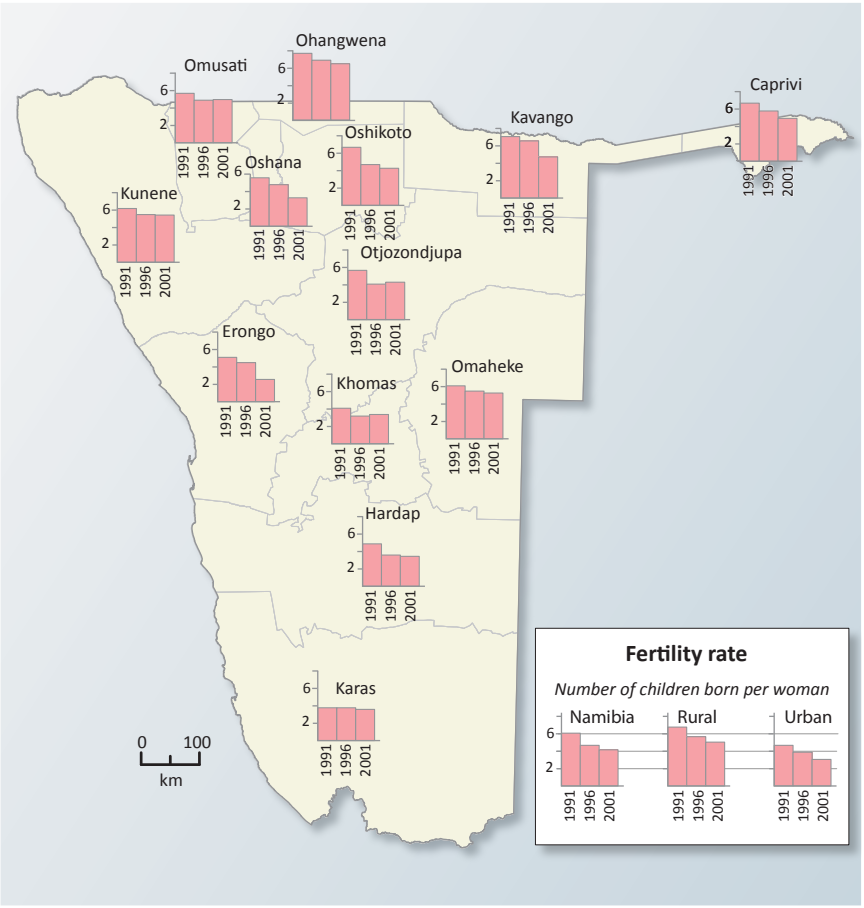


Figure 22.

Total fertility rates estimated in 1991, 2001 and 2006 for the country, urban and rural areas, and the 13 regions. Overall, fertility rates dropped between 1991 and 2006 from 6.1 to 4.1 children as the average number of children that a Namibian woman would produce during her lifetime. The decline occurred among women in both rural and urban areas, although rural fertility rates are almost double those in urban areas. The most significant reductions in fertility have been in the northern regions, as well as Erongo, perhaps because of the rapid growth of that region's urban population. For example, fertility rates in Ohangwena and Kavango in 1991 were 7.7 and 7.1 children, respectively, which then dropped to in 2006 to 5.7 and 5.2 children. By contrast, fertility rates in most southern and central regions remained rather stable between 1991 and 2006.

[3] Estimates of fertility based on births in the last 12 months underestimate the level of fertility because intervals between births are generally much longer than 12 months. While estimates based on the number of children ever born to women provide lifetime estimates of fertility levels, they provide no information on births and fertility in recent years. As a solution, levels of fertility estimated from reported births in the last 12 months are adjusted using the number of children ever born.

From these figures, estimates are generated of total fertility rate (TFR), which is the average number of children a woman would be expected to have if she survives throughout her reproductive period, which is taken as being from about age 15 to 49 years. Another measure of interest to demographers is age-specific fertility rate (ASFR), which is the average number of births per woman in different age groups (Figure 23).

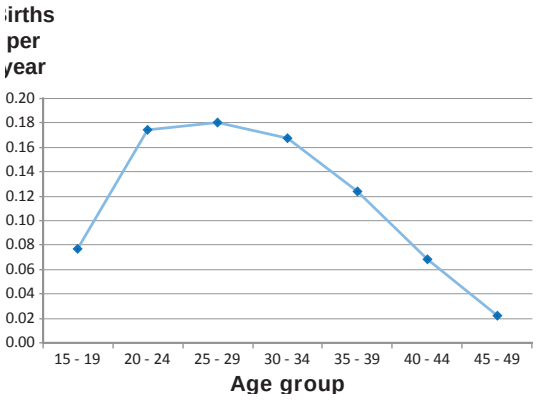


Figure 23. The greatest numbers of children are born to mothers in their twenties and early thirties, shown in this graph in the groups of 20-24, 25-29 and 30-34 years. The graph shows the age-specific fertility rate, which is the number of children born each year (y-axis) by women of different ages (x-axis). The number of births is a fraction of 1 because children are always born at intervals of much more than a year, on average.

Why should fertility rates have dropped so significantly over the past two decades? Doubtless, several factors have been at play, including the effects of the AIDS epidemic, the successes of family planning programmes and the greater use of condoms to prevent the transmission of HIV. However, the biggest impact on fertility has probably come from the higher levels of education now achieved by women and their increasing participation in the formal economic world as businesswomen and salaried employees. There are several consequences of education: educated women delay marriage, have greater career opportunities, are more likely to use contraceptives, and are less likely to adopt traditional childbearing roles

These effects are clearly visible in the data shown in Figure 24, and they have been shown to be widely true throughout the world: the more educated a woman is, the fewer children she will bear. However, even if fertility declines, the number of births may continue to increase over the medium term because the number of females of child-bearing ages continues to increase.

On average, the number of children produced by each woman dropped by two between 1991 and 2001.

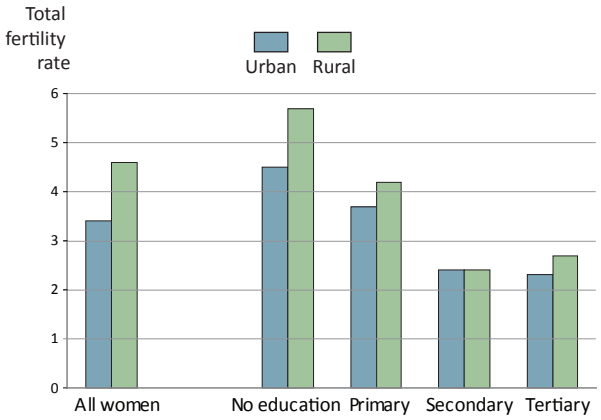


Figure 24.

Women in rural areas bear more children than those in urban centres, while women with higher levels of education have fewer children than those with little formal schooling. Interestingly, women who have completed their tertiary education have families of similar size to those who only completed secondary schooling. These results were obtained from 2001 Population & Housing Census.

Another major contributor to population growth is reduced mortality. Two measures of this are usually estimated from census results: infant mortality (which is the number of infants dying before their 1st birthday out of 1,000 live births) and child mortality (which is the number of children dying before their 5th birthday out of 1,000 live births). In 2006, when the latest estimates were made, infant mortality stood at 50 while child mortality was 67. These two rates are above those set by Namibia as Millennium Development Goals (MDG) of 45 for infant mortality and 38 for child mortality.

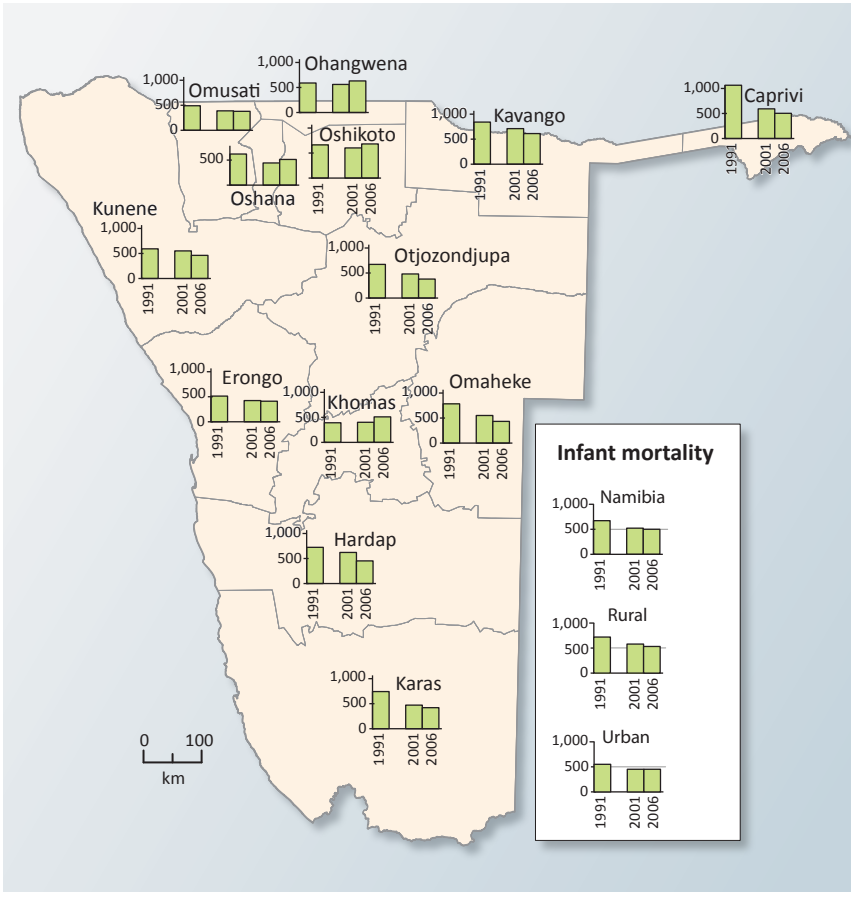
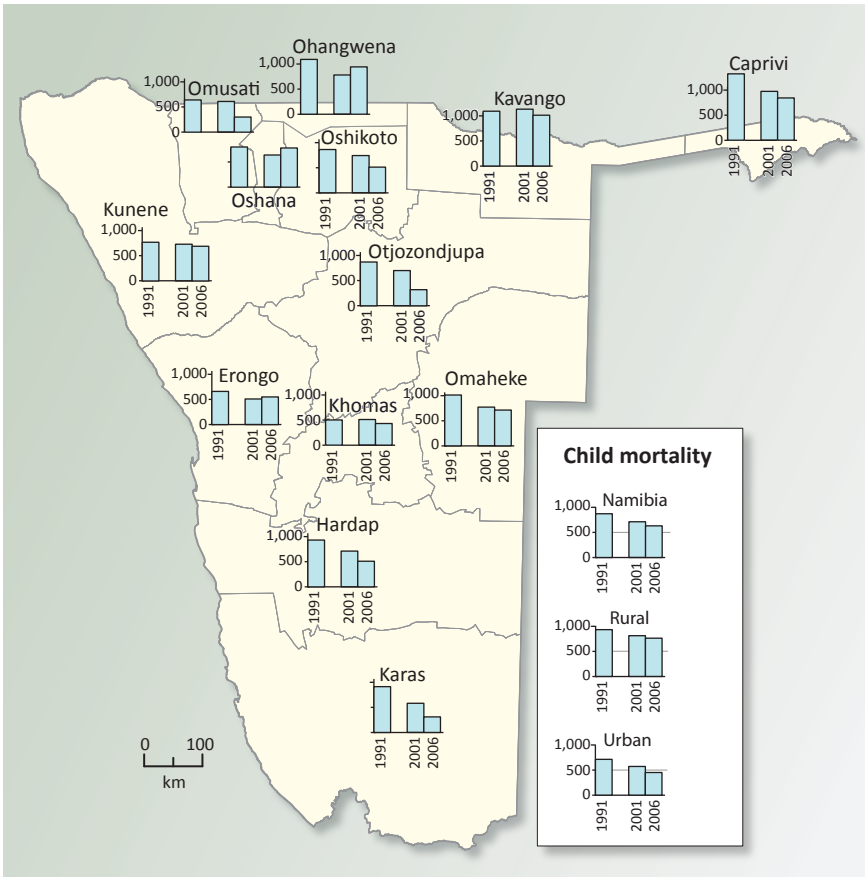


Figure 25.

Infant mortality dropped significantly between 1991 and 2001, especially so in areas where mortality rates had been particularly high, such as in Omaheke, Oshana, Caprivi and Karas. The changes in mortality rates between 2001 and 2006 have not been significant. Slightly more infants die in rural than in urban areas, on average. Infant mortality rates are calculated as the number of infants dying before their 1st birthday out of 1,000 live births.

Figure 26.

Child mortality rates have varied more substantially than those of infants shown in Figure 25. The highest rates of child mortality in certain regions (especially Caprivi, Kavango and Ohangwena) were double or triple those in other regions (for example, Omusati, Karas and Otjozondjupa). Child mortality is the number of children dying before their 5th birthday out of 1,000 live births.



Child mortality rates in 2006 were lower everywhere than they had been in 1991, but more children were dying in Erongo, Ohangwena and Oshana in 2006 than in 2001.

The cumulative effects of infant, child and later death rates largely determine the number of people surviving to different ages, and the overall size of the population. These mortality rates also determine the average life span or life expectancy of people, which is the total number of years that each person can expect to live, on average.

Adult deaths have affected life expectancies more significantly than infant and child mortality. This is evident from the fact that although the survival of infants and children improved, life spans dropped drastically between 1991 and 2001 (Figure 27). This was due to the HIV/AIDS epidemic, but results from the 2006 Inter-censal Demographic Survey indicate that men and women can, respectively, expect to live 3 and 5 years longer than was estimated in 2001. This is probably due to successes in the use anti-retroviral (ARV) drugs and other measures to reduce HIV/AIDS.

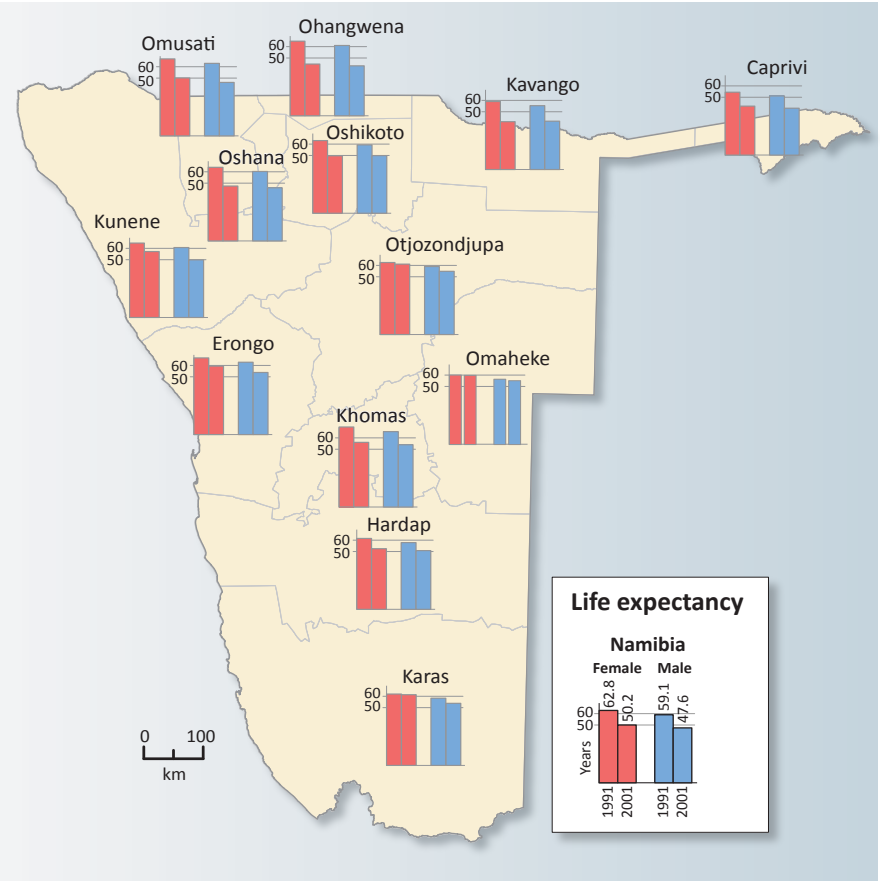


Figure 27.

Life expectancies dropped by about 12 years between 1991 and 2001 as a result of the increased mortality caused by HIV/AIDS. On average, women in Namibia can expect to live about 4 years longer than men.

A high proportion of Namibian children go to school, whereas very few of their grandparents had access to a formal education. Rates of literacy among young people are thus generally much higher than among their parents and grandparents.

9 Education

Everyone aged 6 years and above is asked questions about his or her education during a population census. The questions concern attendance at school, the highest level of schooling achieved, and about abilities to read and write in their mother or home language. The latter question is used to gauge levels of literacy, but the results are often unreliable because people tend to exaggerate their abilities. Since reading and writing tests are beyond the scope of censuses, a proxy sometimes used as a measure of literacy is the number or percentage of people who have completed four years of schooling.

One goal of the education sector in Namibia is to ensure that all children have access to a basic education. By Namibian standards, basic education is deemed to be up to Grade 10 and so compulsory, free education is therefore applied up to the completion of Grade 10 or to the age of 16 years, whichever comes first. The number or proportion of children aged 16 and younger at school thus provides a valuable measure of access to education. School attendance means attendance at any regular educational institution, public or private, for systematic instruction.

A variety of factors determine whether children are at school or not. In addition to a lack of nearby access to schools, socio-economic factors often keep children from going to school or encourage them to leave before completing their education.

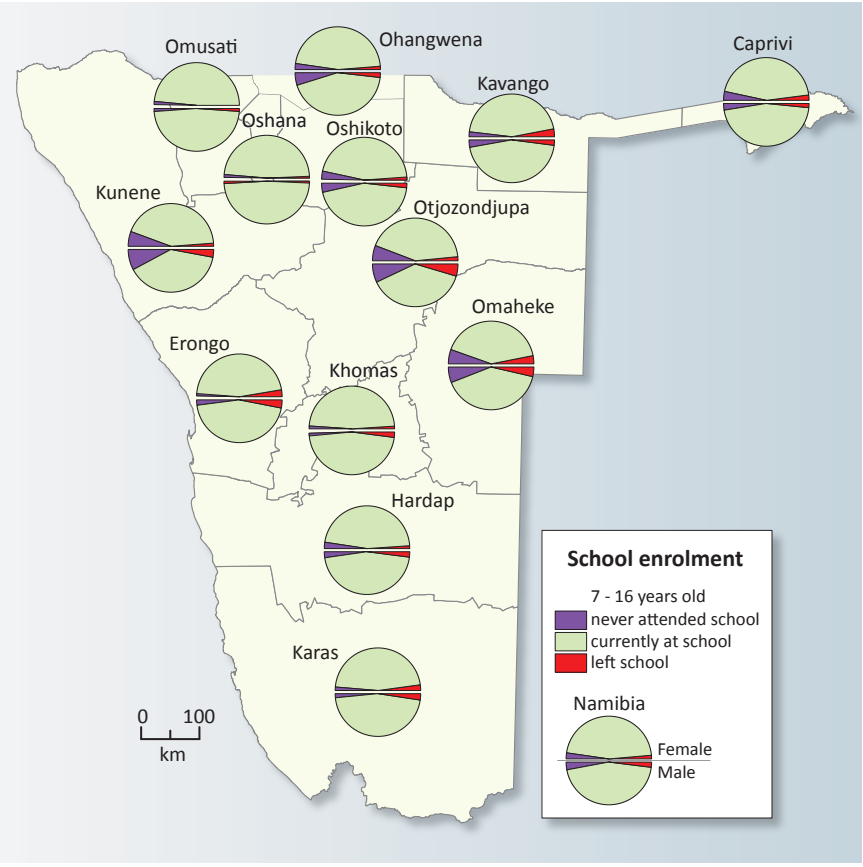


Figure 28.

These half-pie diagrams show levels of school attendance by children aged 7 to 16 years. Attendance for females is in the top half and that for males in the half below. Rates of attendance are high in most regions, but substantial numbers of children are not at school in Kunene, Otjozondjupa and Omaheke. The majority of these children, most of whom are girls, come from homes associated with pastoral or hunter-gatherer economies; these are sometimes known as marginalised groups. Their absence from school is often more a consequence of social and economic constraints than because of physical distance from schools.

Compared with many developing countries, Namibia boasts high rates of school attendance as indicated by the figures in the table below. This has long been the case and reflects the high demands that parents place on the education of their children. Another consequence of high demand is that the majority of rural schools in Namibia were started as private schools by local parents, and then later taken over and further developed by the public service.

THE PERCENTAGE OF ALL CHILDREN AGED 7 TO 16 YEARS AT SCHOOL IN 1991, 2001 AND 2006.

Year	Total	Female	Male
1991	86	88	84
2001	86	88	85
2006	91	93	90

Overall school attendance by girls has been 3 to 4% higher than for boys in recent times. However, in some regions such as Kavango and Caprivi, girls tend to leave school at earlier ages than boys, while the reverse is true in the central-northern regions of the country.

Although levels of attendance and access to schooling are high in Namibia, levels of educational attainment have been low. One perspective on this is given by the figures in the table below. For example, more than 75% or three-quarters of everyone who had left school by 2001 had only completed some or all primary grades. Less than 6% of the population had completed any education above secondary schooling. Levels of education among older people are also very much lower than those of younger generations.

THE LEVEL OF EDUCATIONAL ATTAINMENT BY PEOPLE AGED 15 YEARS AND ABOVE WHO HAD LEFT SCHOOL WHEN THE 2001 CENSUS WAS CONDUCTED. THE FIGURES ARE THE PERCENTAGES OF PEOPLE IN EACH CATEGORY OF EDUCATIONAL ATTAINMENT.

Educational level	Total	Female	Male
Incomplete primary school	33.5	32.4	34.7
Primary school	41.5	43.8	38.8
Secondary school	15.5	15.2	15.9
University	2.0	1.8	2.2
Technical training after secondary school	2.3	2.1	2.6
Teachers training	1.3	1.4	1.2
Not stated	3.9	3.3	4.6
Total	100.0	100.0	100.0

Results from the 2006 Intercensal Demographic Survey indicate that educational levels are improving. For example, the proportion of people aged 15 and above who had completed primary school rose from 42% in 2001 to 49% in 2006, while the percentage to have completed secondary school increased from 16% to 19% over the same period.

10 Employment

Rates of employment and especially unemployment are important measures of a country's economic success and social well-being. A variety of estimates of these rates have been produced by various surveys and censuses over the years, but many of the results have been regarded with some circumspection.

It is beyond the scope of this publication to evaluate or comment upon these results, but it is worthwhile noting that discrepancies between sets of results often arise because of inconsistent or varying definitions. One significant problem is to define what part of the population is actually eligible for employment. For example, at what age can we regard young people as being eligible for employment: 14, 16, 18 or 21 years, for example? Are mothers who look after the family home and their children employed or not? If not, should they be part of the 'unemployed' segment or the 'economically inactive' category of the population?

This raises a second difficulty: when is someone classified as unemployed? This can be defined in a broad or strict sense, depending on the inclusion or exclusion of those who are not actually seeking jobs. The use of either definition has a large impact on the rate of unemployment and may be quite controversial. According to international statistical standards, people classified as unemployed should meet three criteria: being without work, being available for work, and actively looking for work. However, defining each of these three conditions is itself often difficult, particularly where many people work informally or on a part-time basis. For example, are people who work part-time as piece-meal labourers unemployed or self-employed?

Figure 29 provides a diagrammatic perspective on how the population can be divided into categories of economic activity and employment. In this case, everyone less than 15 years old is excluded, as are students, home-makers and income recipients 15 years and older who are considered to be economically inactive. The remainder is the labour force or economically active segment of the population.

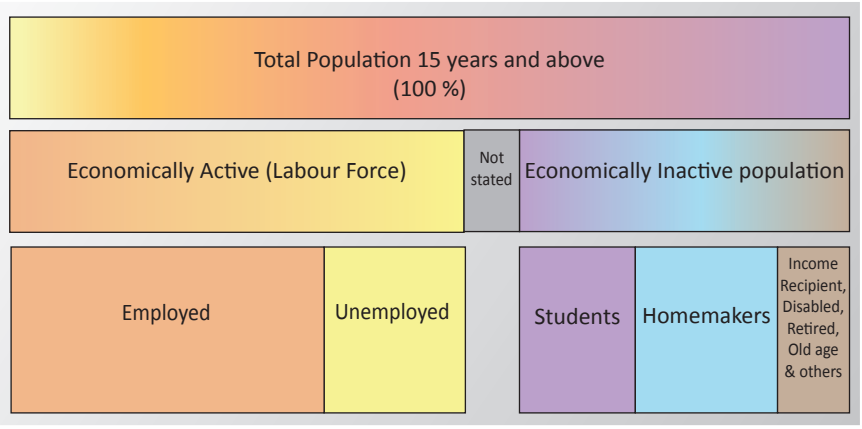


Figure 29.
Measures of employment and economic activity focus on people aged 15 and above, who are separated into groups of people defined as economically 'active' or 'inactive'.

With a population of 43,611 people, Walvis Bay was Namibia's second largest town in 2001. Much of its population consists of working adults and their dependants attracted to the fishing and import-export industries in the port.

11 Housing conditions

The 2001 Population & Housing Census asked a range of questions on the characteristics of homes. These included questions on the type of housing, tenure over homes, the materials used for construction, and source of energy for cooking, lighting and heating.

Formal detached or semi-detached homes and traditional dwellings are the commonest types of housing. Each category made up about 41% of all homes in 2001 (Figure 30). Detached and semi-detached dwellings made up 67% of all homes in urban areas, whereas 66% of all rural homes were traditional houses. The great majority of traditional dwellings are in the northern regions because this is where most rural inhabitants live. Only about 3% of all Namibian homes were in flats or apartments.

About 9.2% or almost one in ten homes in Namibia were improvised informal shacks in 2001, and this had increased to 12.6% in 2006.. These are most abundant in urban areas, particularly those that have been growing rapidly. Many new-comers to urban areas first construct for themselves informal houses, often on the outskirts of the town or city in areas dismissively called shanty-towns or squatter slums. These homes are gradually converted into more formal housing by the owners as their wealth increases and when the local government zones and develops the 'slums' into low or medium income suburbs. In turn, new belts of informal housing develop further out on the peripheries of these new suburbsto accommodate the latest immigrants from rural areas.

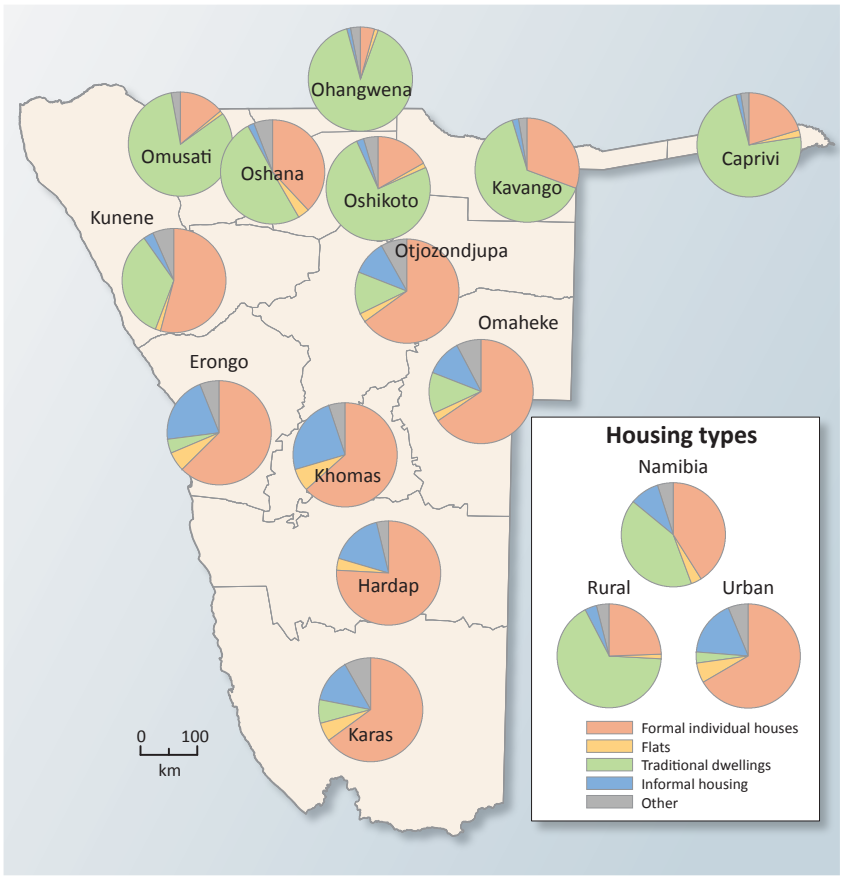


Figure 30.
Proportions of different types of housing in each of the regions, and in urban and rural areas and the country as a whole, as recorded during 2001 Population & Housing Census.

There is often a close relationship between the type of housing and the materials used for their walls, roofs and floors. For example, most detached or semi-detached houses have brick or cement block walls, corrugated iron, asbestos or tiled roofs, and cement or tiled floors. Traditional houses, by contrast, usually have walls of sticks and mud, earthen floors and thatched roofs.

The use of building materials has changed substantially in recent years as home owners have made increasing use of modern, fabricated materials for the walls, roof and walls (Figure 32). For example, 52% of all homes had walls of poles, sticks, mud, sticks and grass, reeds etc in 1991, whereas only 29% of homes had walls of these materials just 10 years later in 2001. Over the same period, there was a corresponding increase in the use of corrugated iron, bricks and cement blocks as walling material. The greatest changes occurred in the northern, rural areas.

Figure 31.
Proportions of houses built using different materials for their walls, as recorded during the Population & Housing Census of 2001. A total of 42.5% of houses had walls built of traditional materials, while 55.1% used modern fabricated materials for their walls.

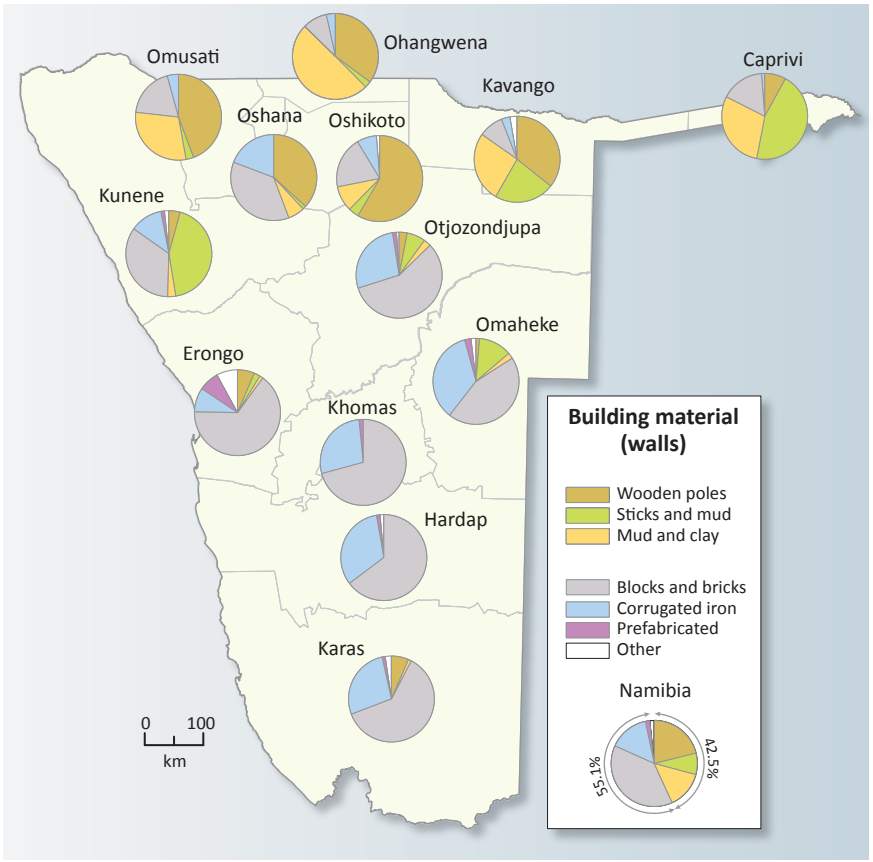
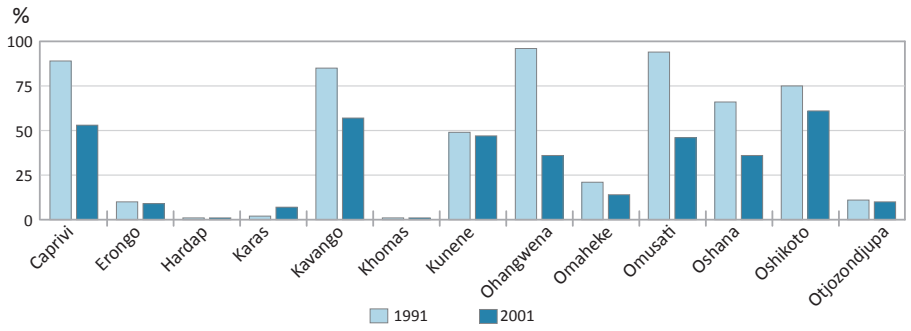
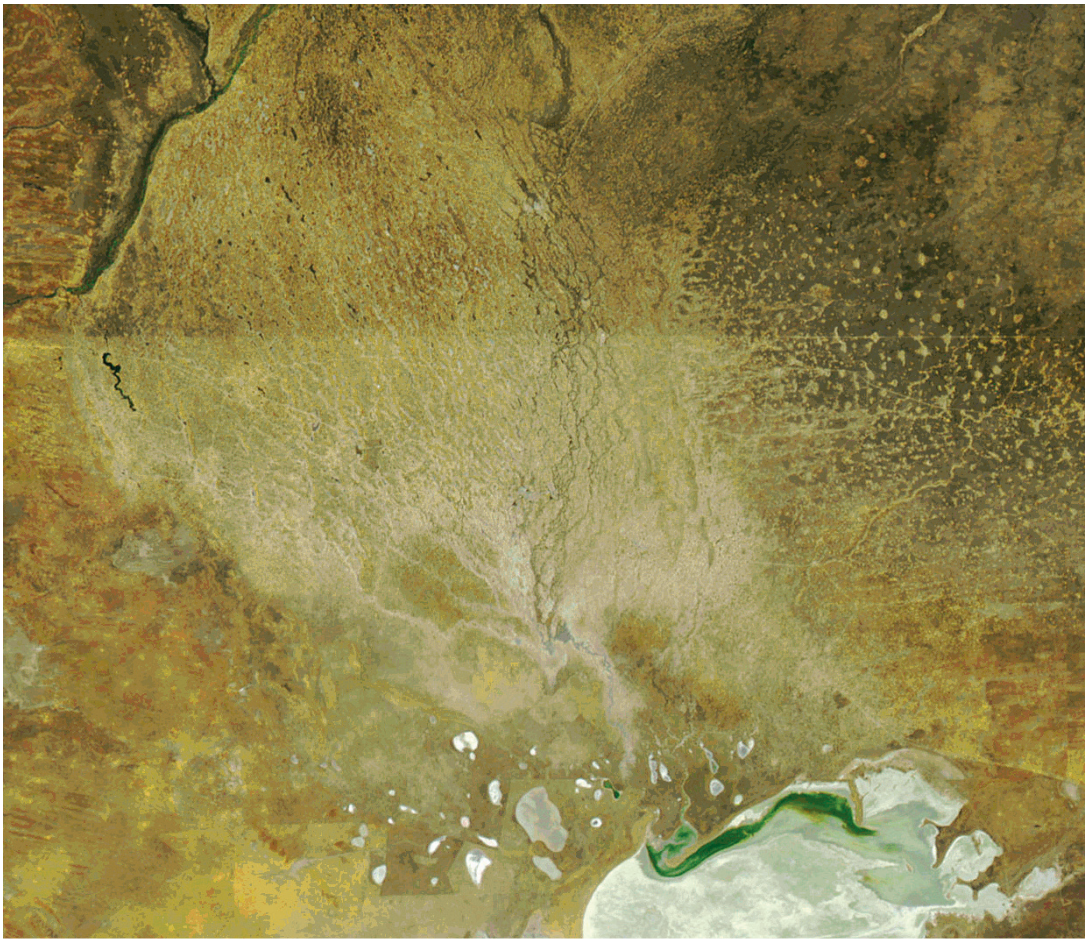


Figure 32.
Percentages of houses in 1991 and 2001 having walls of mud, woods, poles, cow dung and reeds.





The use of wood, especially tree trunks for house and palisade walls has led to large areas of Namibia being deforested. This is why the border between Angola and Namibia is one of very few man-made borders clearly visible from space; the paler area in Namibia is the result of trees being cut down, while many more trees remain in the less densely populated area across the border in Angola.

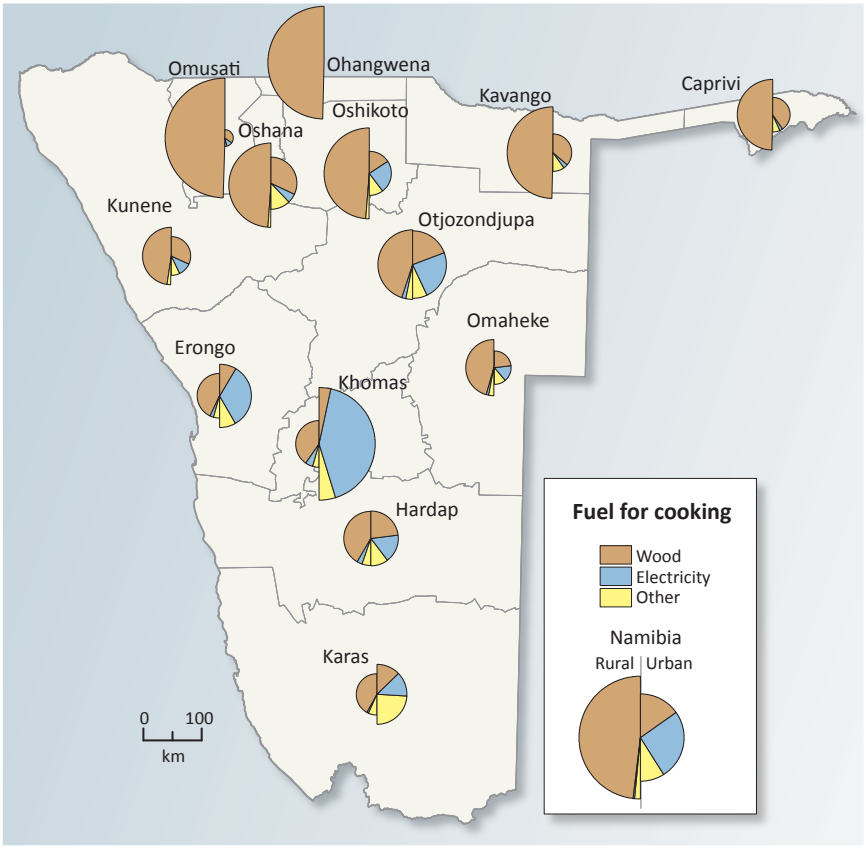
High proportions of rural homes are now partially or largely built using modern, purchased materials, such as the one at the top of this photograph. These houses are thus increasingly built 'with cash' unlike those built 'with labour' in former times when all the houses were constructed using natural materials collected locally, such as mud, poles, sticks, thatch and dung. The house in the foreground was built largely with natural materials.

In addition to material for the construction of houses, wood is also widely used as a fuel for cooking, heating and even lighting. Its use for fuel is most prevalent in rural areas, especially those in the northern regions where wood is relatively easy to collect from local woodlands. Wood is also free, apart from the labour and time costs incurred while gathering firewood. Electricity, gas and paraffin can only be purchased, by contrast. In any case, there are few electricity lines in the northern rural regions and gas and paraffin is often only available from shops.

Electricity is the predominant source of energy for cooking in urban areas, where it is also the main fuel used for lighting and heating. However, electricity is only used in relatively affluent homes in formal housing areas which are supplied with a power grid. Most residents of informal shacks and low-income formal houses use wood that they collect locally for cooking fuel.

Figure 33.

Half-pie diagrams illustrating the proportion of homes using wood, electricity and other fuels for cooking. The 'other fuels' comprise largely of gas and paraffin. Rural areas are shown in the left-hand pie and urban areas on the right-hand side. The diameters of the pies are also proportional to the number of houses in rural and urban areas in each region.



In 1991, only 1% of all households in Namibia reported using paraffin for cooking. This percentage rose to 5% in 2001. While this was not a large proportion or escalation, much of the increased usage of paraffin notably occurred in the informal housing areas in north-western Windhoek. Whereas only about 100 homes used paraffin in 1991 in these shack areas, there were about 9,700 paraffin-using households in that area in 2001. An understanding of factors leading to this almost 100-fold increase in paraffin use could provide valuable lessons. For example, ways of using fuel more economically may be found, health risks may be reduced, ways might be found to reduce the decimation of natural woodland, and Namibia may escape the degrading effects of charcoal production now seen in many countries to the north.

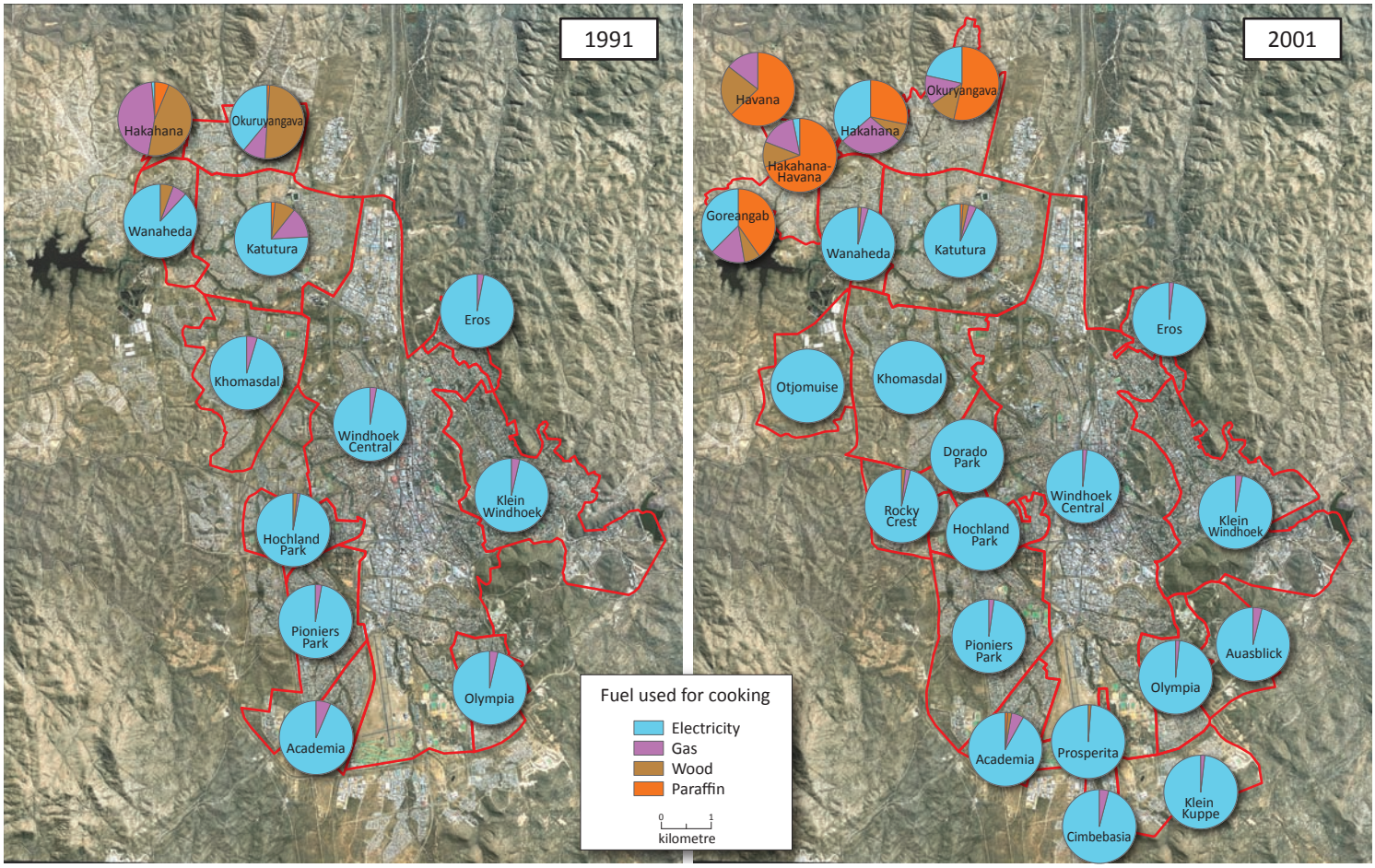


Figure 34.

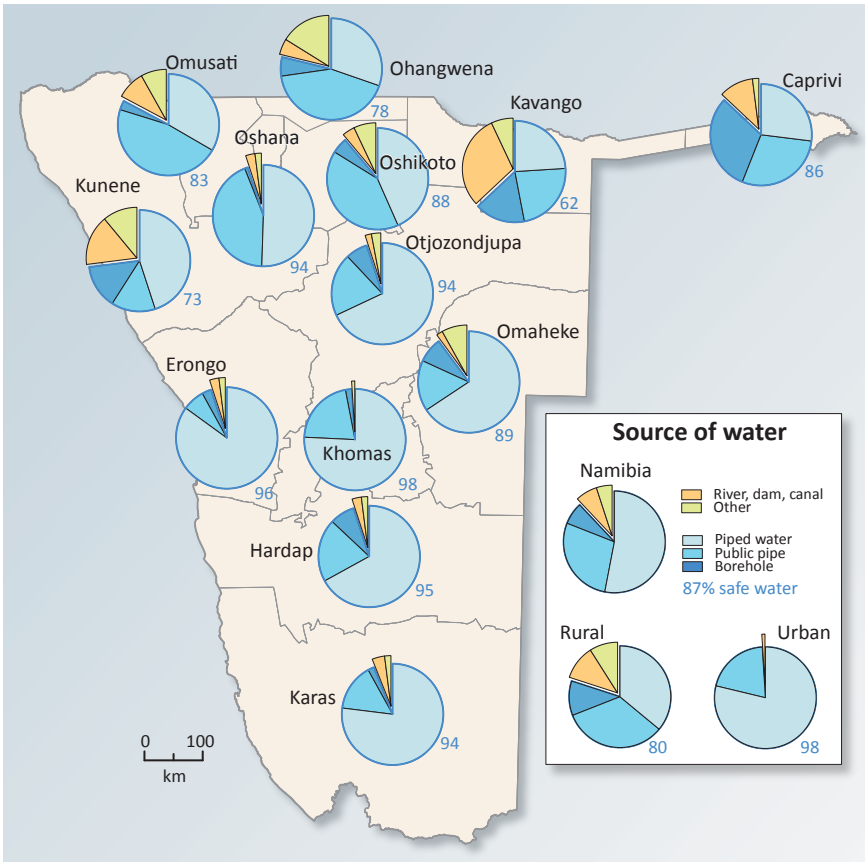
The pie diagrams show the proportion of homes in each suburb of Windhoek using different fuels for cooking. Note the substantial increase in the use of paraffin by people living in the informal settlements in the north-west of the city. Some of Windhoek's substantial growth in recent years is also visible here. Several formal suburbs were planned and developed between 1991 and 2001, such as Otjomuise and Cimbebasia, while other zones of informal housing, such as Havana and Goreangab, were established by immigrants to the city. The boundaries of the suburbs were as they existed in 1991 and 2001, while the underlying photograph used in both maps was taken in 2010 and shows further expansion of the city since 2001.

Inadequate sanitation and a lack of safe water for drinking and cooking create environments conducive to the spread of infectious and parasitic diseases. Several census questions thus relate to sources of water, types of toilet facilities and the disposal of garbage.

Two aspects concerning the supply of water to households are of importance: the quality of the water for human consumption, and its availability. During the 2001 Population & Housing Census each household therefore reported its main source of water for drinking and cooking and also the one-way walking distance to the usual water source.

Figure 35.

Proportions of homes in the different regions, and in urban and rural areas using different sources of water. Those coloured in shades of blue are considered pure and clean and therefore safe, while unsafe water from rivers, dams, open canals and wells (which include most classified as 'other') is more likely to lead to health problems. Kunene, Omusati, Ohangwena, Kavango and Caprivi have the lowest levels of access to safe water. In 2001, 98% of urban households had access to safe water compared to 80% of rural homes.



Water taken from boreholes or piped from water treatment plants is considered safe because it is unlikely to harbour parasites or poisons that are associated with unsafe water taken directly from dams, open canals, rivers and open wells.

The great majority of urban households use safe water, while those that use unsafe water are largely in rural areas (Figure 35). Dependence on unsafe water is also most prevalent in the northern regions where water from the Kunene, Okavango, Kwando and Zambezi rivers is often used. In addition, many northern and rural homes use water from hand-dug wells. While this underground water is often clean and pure as a result of filtering through sand, wells do become contaminated when the water has to be shared with livestock.

Access to water has been one of the most important factors to determine the distribution of people in Namibia (see page 36), especially so before schemes to purify and distribute water were developed. Nowadays, or at least in 2001, 54% of all households have water within their premises, while the residents of another 21% homes get their water from sources within 200 metres of their dwellings. Urban households are better off than rural ones, since four out of five urban homes have water within their premises as against just over one out of three rural ones which often also share water piped to public standpoints or taps. Water is available within one

kilometre of more than 99% of urban households, but only 85% of rural homes have water sources within one kilometre. Most of the households that are far from water are in the northern regions, particularly in Kavango, Ohangwena, Omusati and Oshikoto (Figure 36).

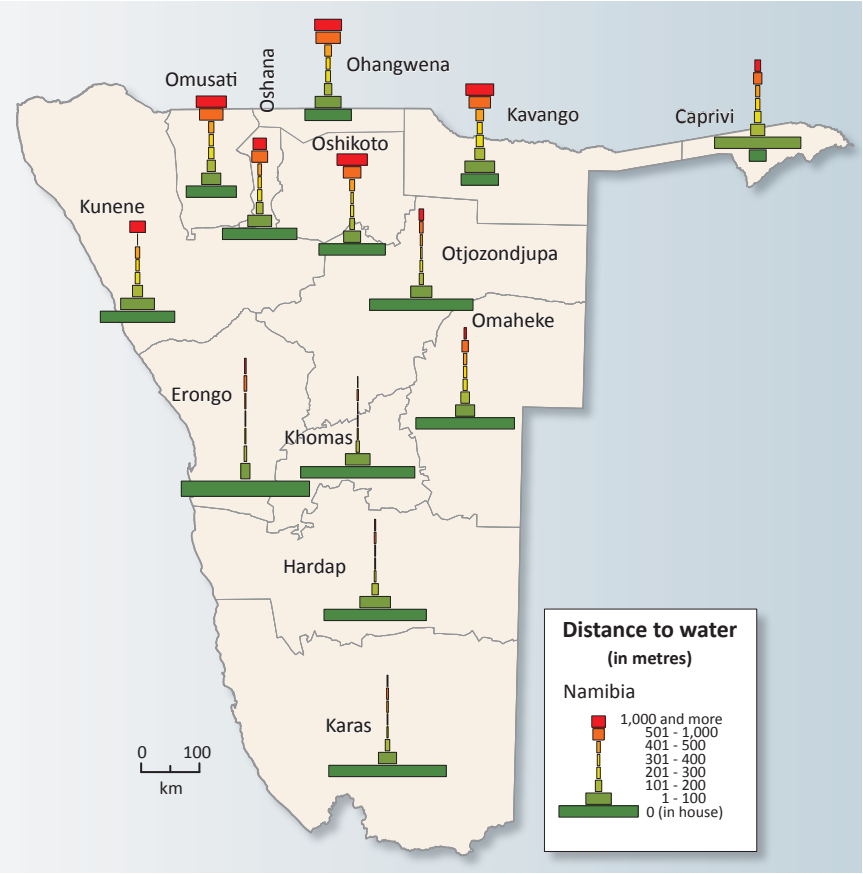


Figure 36.

Distances between households and their sources of water, as reported during the 2001 Population & Housing Census. The majority of people in the central and southern regions have water piped into their homes, whereas most northern residents obtain their water from sources outside their houses. These sources are often at considerable distances. It is interesting how these graphs reflect two quite different groups of households in the northern regions: homes with water nearby and those with water far away, with rather few households between the two groups.

The availability of water was one of the most important factors to determine the distribution of Namibia's population. Nowadays, this is less of a constraint since groundwater can be found and pumped to the surface in many areas.

Much of Namibia's population is 'on the move': geographically, socially and economically. These images encapsulate aspects of the transition. Public toilets have been established in areas of informal housing around towns and large villages to improve sanitary conditions.

People living in the self- and roughly built shack of corrugated iron have probably moved from a rural home to an informal housing area outside a town. They remain reliant on firewood for cooking and to heat their home during winter.

While this is a poor home with little income, one member of the family may have acquired a car which provides for mobility and perhaps small cash earnings as a taxi. As time goes on and incomes grow, the family will improve their home or move to a brick-built house in a formal suburb or the town. Gas, paraffin or electricity will replace wood fuel, their children will have greater access to health care and a secondary education, and fewer children will be born as women in the home focus on their jobs or self-made businesses.

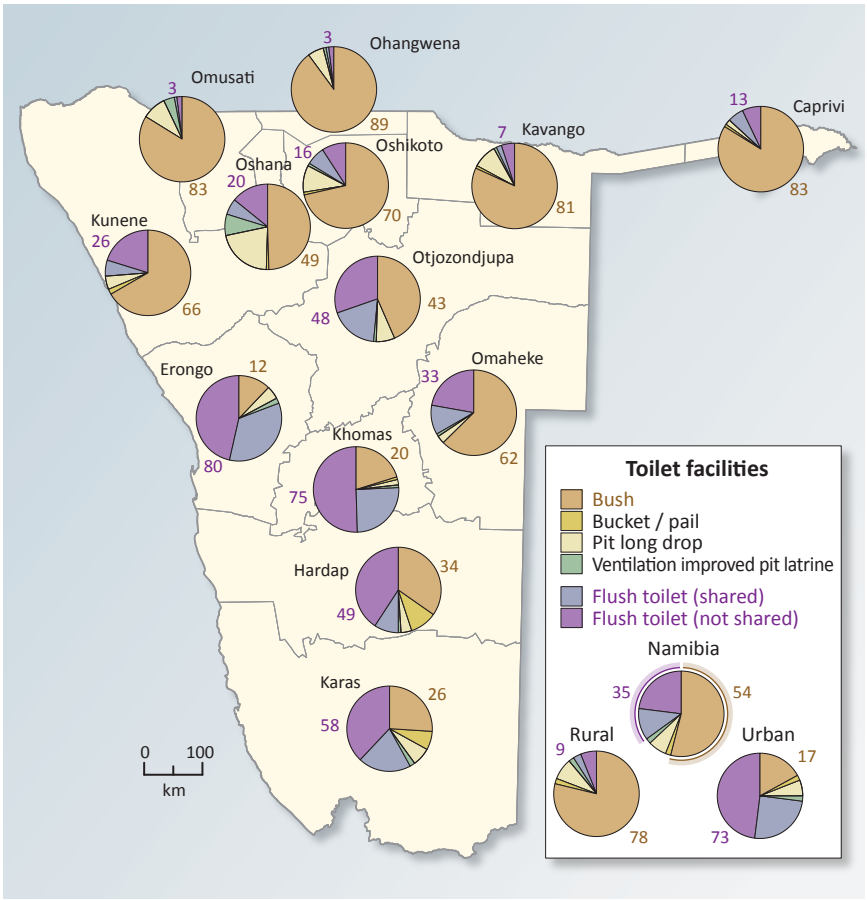


Figure 37.

Proportions of homes using or having access to different types of sanitation. In 2001, 54% of all households had no access to formal facilities and therefore used 'the bush'. This percentage is an improvement over the 61% of houses that used the bush in 1991, and the proportion improved even further to 49% in 2006.

A range of different toilet facilities were recorded during the 2001 Population & Housing Census: Flush toilet (not shared) - 22.5%; Flush toilet (shared) - 11.9%; Ventilated improved pit - 2%; Long-drop pit - 7.1%; Bucket or pail - 1.5%; and Bush - 54.2%. Another 0.7% of homes were reported as 'other' or 'not stated'.

Figure 37 shows how access to toilet facilities varies across Namibia. The greatest differences are between urban and rural homes. Over 70% of urban households use flush toilets while the corresponding figure in rural areas is less than 10%. Over 78% of the rural households use the bush as against 17% in the urban areas. Even though this figure for urban usage of bush toilets is much lower than for rural areas, the concentration of urban faecal waste constitutes a relatively greater health hazard.

There are also large differences between the regions. For example, over 80% of the households in Caprivi, Kavango, Ohangwena and Omusati regions had no access to a toilet facility in 2001. By contrast, only 20% of homes in Khomas and 11.5% in Erongo then lacked toilet facilities. These regional discrepancies reflect both the comparatively undeveloped nature of many rural homes in northern Namibia and the high proportions of urban households in the southern and central regions of the country.

Republic of Namibia
2001 Population and Housing Census
Form A: Household Questionnaire

Form No

CONFIDENTIAL

A	Identification	EA-Number	Census Building No	Household Serial No
	CODE			

F FOR FEMALES, AGED 12 TO 49 YEARS

Person Number	Before starting with Section E, transfer from Section B actual names and persons numbers for all females (aged 12-49)	Transfer from Section B, Column B5 the age of all females 12-49 years	Have you had any live birth? 1 yes 2 No 9 Don't know If 2 go to the next woman or G1	If Yes, Total number of children born alive? F	M	How many were with you on the reference night? F	M	How many were elsewhere on the reference night? F	M	How many have died? F	M	How old were you when you had your first live birth?	When was your last live birth? MM	YY	These questions refer to the last live birth: Was it a boy or girl or multiple birth? Enter number F	M	Is the child/ children still alive? If Yes, enter number living If none enter 0 If coded 0 in F15 or F16 leave blank in F17 or F18 F	M	Was the birth registered? 1 Yes 2 No 9 Don't know
F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14		F15	F16	F17	F18	F19

CONTROL SECTION

Number of persons enumerated in this household	Total in HH	17 years +
Male		
Female		
Total		

Response Category
1 Fully completed
2 Partially completed
3 Refusal
4 Non-Contact
5 Other, specify

TO BE COMPLETED BY INTERVIEWER

Date enumeration started in the Household.........................

Date enumeration completed in Household...................

Name of Interviewer ....

Comments...

Signature...

TO BE COMPLETED BY SUPERVISOR

Has questionnaire been checked?

Yes ☐ No ☐

Date Checked ....

Name of Supervisor ....

Comments...

Signature.............................

TO BE COMPLETED BY EDITOR/ CODER

Questionnaire been coded/edited?

Yes ☐ No ☐

Date Coded/Edited ....

Name of Coder/Editor ....

Comments...

Signature.............................

SPECIFIC COMMENTS

Person	Column	

G HOUSING CHARACTERISTICS - To be completed for each household

G1 Type of Housing unit
01 Detached House
02 Semi-Detached/ Townhouse
03 Apartment/Flat
04 Guest flat
05 Part commercial/ industrial
06 Mobile home (Caravan, tent)
07 Single quarters
08 Traditional dwelling
09 Improvised housing unit (shack)
10 Other, specify

G2 Tenure
01 Rented(not tied to the job)
02 Owner occupied (with mortgage)
03 Owner occupied (without mortgage)
04 Rent free (not owner occupied)
05 Provided by employer (Government)
06 Provided by employer (Private)
07 Other, specify

G3 Number of Rooms
How many rooms are there in this household? (Exclude bathrooms, toilets, kitchens, stoeps and verandahs)

What is the main construction material used for

G4 Outer walls
01 Cement blocks/bricks
02 Burnt bricks/ Face bricks
03 Mud/Clay bricks
04 Corrugated-iron sheets
05 Prefab
06 Woodenpoles, sticks and grass
07 Sticks, mud and cow-dung
08 Other, specify

G5 Roof
01 Corrugated-iron sheet
02 Asbestos sheets
03 Brick tiles
04 Slate
05 Wood covered with malthoid
06 Thatch, grass
07 Sticks, mud and cow-dung
08 Other, specify

G6 Floor
1 Sand
2 Cement
3 Mud/Clay
4 Other, specify

G7 What is the household's main source of water for drinking and cooking?
01 Piped water inside
02 Piped water outside
03 Public pipe
04 Borehole
05 Borehole with open tank
06 Borehole with tank covered
07 River/Stream/Dam
08 Canal
09 Well protected
10 Well unprotected
11 Other, specify

G8 Distance in metres

What is the households main source of energy for

G9 Cooking
01 Electricity
02 Parafin
03 Wood/ Charcoal from wood
04 Gas
05 Charcoal-coal
06 Solar
07 No cooking
08 Other, specify

G10 Lighting
01 Electricity
02 Parafin
03 Candle
04 Gas
05 Solar
06 Wood
07 Other, specify

G11 Heating
01 Electricity
02 Parafin
03 Wood/ Charcoal from wood
04 Gas
05 Charcoal-coal
06 Solar
07 No heating
08 Other, specify

G12 Has the household access to
1 Yes
2 No
1 TV?
2 Radio?
3 Newspaper daily?
4 Newspaper occasionally?
5 Telephone/ Cell?
6 Computer?

G13 Main Toilet facility
01 Flush toilet not shared
02 Flush toilet shared
03 VIP
04 Pit long-drop
05 Bucket/pail
06 Bush
07 Other, specify

G14 How does this household dispose of refuse/ garbage?
1 Regularly collected
2 Irregularly collected
3 Incinerated
4 Roadside dumping
5 Rubbish pit
6 Other, specify

G15 What is the main language spoken in this house-hold?
(See language codelist)

G16 What is the household's main source of income?
1 Farming
2 Business activities-non farming
3 Wages and salaries
4 Pension
5 Cash remittance
6 Other, specify

H MORTALITY

DEATHS IN THE HOUSEHOLD

Has any death occurred in the household since 1998?

1 Yes
2 No

H1	If yes, give number: 1998 F	1998 M	1999 F	1999 M	2000 F	2000 M	2001	Sex 1 Female 2 Male	Age	Death registered? 1 Yes 2 No
	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11
							1			
							2			
							3			
							4			
							5			
							6			

H12 If any death occured in 2001 and the deceased was female aged 12 to 49 years and she did not die from an accident did she die during pregnancy, child birth or within one month after child birth?
If Yes enter number of women
If No enter 0
9 Don't know

Republic of Namibia
2001 Population and Housing Census
Form A: Household Questionnaire

Form No 334218

CONFIDENTIAL

Identification	Region	Constituency	Locality(Town/Village)	Urban/Rural	EA-Number	Census Building No	Household Serial No	Household's questionnaire number	Address of Building
CODE								of total	

FOR ALL PERSONS

													C	D		E				
													For persons aged 3 to 6 years	For persons aged 6 years and above (education)		For persons aged 8 years and above				
What are the names of all the persons who spent the night of August 27 , 2001 in this household? List the names and surnames of all persons who spent the night of August 27, 2001 in this household (include usual members, babies, elderly persons and visitors) Start with head of household then the spouse and their children, etc.	What is (name)'s relationship to the head of household 01 Head 02 Spouse 03 Son/Daughter of head/spouse 04 Son/Daughter in law of head/ spouse 05 Grand child of head/spouse 06 Parent of head/ spouse 07 Other relative of head/spouse 08 Domestic worker non-relative 09 Other non-relative 99 Don't know	Is (name) female or male? 1 Female 2 Male	How old was (name) as of the census reference night? If less than one year enter 00 99 Don't know	What is (name)'s marital status? 1 Never married 2 Married with certificate 3 Married traditional 4 Co-sensual union 5 Divorced/ Separated 6 Widowed 9 Don't know	What is (name)'s citizenship? 140 Namibian 141 Angola 142 Botswana 143 RSA 144 Zambia 145 Zimbabwe 146 Other SADC countries 147 Other African countries 148 European countries 149 American countries 150 Asian and Oceanic countries 151 Other countries 999 Don't know	Where was (name)'s mother usually living when (name) was born? If Namibian give code of region and urban or rural (See code list 2)	Where does (name) usually live? If Namibian, give code of region and urban or rural (See code list 2)	Where did (name) usually live most part of last year? If Namibian, give code of region and urban or rural (See code list 2)	Where did (name) usually live most part of 1996? If Namibian, give code of region and urban or rural (See code list 2)	Is (name)'s biological mother alive? 1 Yes 2 No 9 Don't know	Is (name)'s biological father alive? 1 Yes 2 No 9 Don't know	Has (name) any type of permanent disability or limitation? 00 None 01 Blind 02 Deaf 03 Impaired speech 04 Impairment of hands 05 Impairment of legs 06 Mentally disabled / ill 07 Others, specify 99 Don't know Up to three answers is possible	Is (name) attending Early Childhood Development programme (ECD) ? If No enter 3 If Yes 1 Creche/ Kindergarten 2 Daycare Centre /Nursery School 3 Pre-Primary 9 Don't know	Can (name) write and read a message in any language? If No 00 If Yes, enter language codes from code list 4 99 Don't know	Has (name) ever been to school? 1 Never attended 2 Still at skool 3 Left school 9 Don't know If 1 or 9 go to E1	What is (name)'s highest grade/ standard or level of education completed? (See code list 3)	During the last 7 days prior to census night, did (name) work for at least one hour for pay, profit or family gain? 01 Yes, Worked 02 No, but has a job or a business 03 Unemployed (worked before) 04 Unemployed (first time jobseeker) 05 Student 06 Homemaker 07 Income recipient 08 Seviously Disabled 09 Retired 10 Old Age 11 Other, specify 99 Don't know	For those coded 01, 02 and 03 in E1 What type/kind of work did/does (name) do at his/her place of work? Write the main work done	For official use only	In your main job did you work as 01 Subsistence/ Communial farmer (with paid employees) 02 Subsistance/Communal farmer (without paid employees) 03 Other employer (with paid employees) 04 Other own account worker (without paid employees) 05 Employee (Government or parastatal) 06 Employee (private) 07 Unpaid family worker (Subsistance/ Communual farmer) 08 Other unpaid family worker 09 Other, specify 99 Don't know	What kind of activity is carried out at (name's) workplace ? Describe the activity	For official use only
B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	C1	D1	D2	D3	E1	E2	E3	E4	E5	E6

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Conditions in northern Namibia were much harder long ago than they are now, especially when major famines occurred. The people pictured here worked to build dams during a famine in 1929, and they received food in return for their labour. Some other famines had substantial impacts on local populations. For example, over 20,000 people were reported to have died in 1907/08 in central-north Namibia, and another 20,000 people died in a famine in 1915. Those losses amounted to perhaps about 40% of the total population being killed within a few years in central-north Namibia. Such tragedies are fortunately a thing of the past, and Namibia's population can look forward to health and development.


BEST GLOOMY HOUSE
NZLINZE
MBURA
135


DONT WORRY BE HAPPY
MR PART OF LIFE

An Atlas of Namibia's population presents a variety of results from recent censuses and surveys to provide a portrait of the country's people, for example: their numbers, ages, distribution, education, fertility and mortality, and housing.