PREFACE

Atlas is means of characterizing the indicators of interest on the country map. The atlas nomenclature depends on the type of indicators it portrays. Geographical, political, environmental is some of the good example of it. In the present context, the maps are depicted by most significant socio-demographic and economic characteristics of the Botswana’s population obtained through 2001 Population and Housing Census, consequently it is named as “2001 Population Census Atlas: Botswana”.

The country is divided into various administrative districts. There are ten administrative Districts and nine Districts Councils. There are City Councils for Gaborone and Francistown, Town Councils for Lobatse, Selebi-Phikwe, Jowneng and a township authority for Sowa Town. The values of indicators on maps are according to the ten administrative districts, which excludes cities and towns.

This atlas is divided into 8 major sections that are mainly based on the 2001 Census topics. These are:

1. The Country Profile
2. General Demographic and Socio-Economic Background
3. Demographic Dynamics
4. Education Level and Literacy
5. Economic Activities and Labour Force
6. Households and Housing
7. Disability
8. Community Home-Based Care

My sincere gratitude goes to the cartographic staff who tireless made it a point that the project becomes a success. Let me take this opportunity to thank the Population Census Atlas Committee for a job well done, committee members were drawn from major stakeholders within and outside Government. This committee played a pivotal role in the strategic planning of this project.

The Central Statistics Office would like to acknowledge the contribution of all stakeholders (government, parastals, private organisations, development partners and the general public) towards the success of the 2001 Population Census Atlas.

Anna N. Majelantle
Government Statistician
February, 2005
CONTENTS

PREFACE ........................................................................................................................... I

CONTENTS...................................................................................................................... II

PREAMBLE ................................................................................................................... IV

CHAPTER 1: THE COUNTRY PROFILE ..................................................................... 1
  1.1 ADMINISTRATIVE STRUCTURE ............................................................................. 1
  1.2 PHYSICAL FEATURES .......................................................................................... 1
  1.3 THE PEOPLE AND SETTLEMENT .................................................................... 1
  1.4 LAND TENURE AND LAND USE ....................................................................... 1
  1.5 CLIMATE ......................................................................................................... 2
  1.6 RELIEF AND VEGETATION ............................................................................ 2
  1.7 MINERAL AND SCENIC RESOURCES .............................................................. 3

CHAPTER 2: GENERAL DEMOGRAPHIC AND SOCIO-ECONOMIC BACKGROUND .......... 4
  2.1 POPULATION DISTRIBUTION ....................................................................... 4
  2.2 POPULATION DENSITY .................................................................................. 6
  2.3 POPULATION GROWTH RATE ....................................................................... 8
  2.4 SEX RATIO .................................................................................................. 11
  2.5 MARITAL STATUS ..................................................................................... 13

CHAPTER 3: DEMOGRAPHIC DYNAMICS ...................................................... 15
  3.1 DEPENDENCY RATIO .................................................................................. 15
  3.2 LIFE EXPECTANCY ..................................................................................... 17
  3.3 OUT-MIGRATION RATE (2000-2001) ........................................................... 19
  3.4 IN-MIGRATION RATE (2000-2001) ............................................................... 22
  3.5 IN-RATE INTERNATIONAL MIGRATION (2000-2001) ............................... 24
  3.6 OUT-RATE INTERNATIONAL MIGRATION (2000-2001) ........................... 26

CHAPTER 4: EDUCATION LEVEL AND LITERACY .................................. 29
  4.1 SCHOOL ATTENDANCE STATUS ............................................................. 29
  4.2 PRIMARY SCHOOL ENROLMENT .............................................................. 31
  4.3 SECONDARY SCHOOL ENROLMENT ....................................................... 33
  4.4 DISTRICT LITERACY RATE ...................................................................... 35
  4.5 DISTRICT LITERACY RATE BY SEX ....................................................... 37

CHAPTER 5: ECONOMIC ACTIVITIES AND LABOUR FORCE .................. 39
  5.1 EMPLOYMENT RATE BY SEX ................................................................. 39
  5.2 UNEMPLOYMENT RATE BY SEX .............................................................. 41

CHAPTER 6: HOUSEHOLDS AND HOUSING .......................................... 43
  6.1 PROPORTION OF POPULATION THAT HAD ACCESS TO WATER SOURCES ............................................ 43
6.2 ENERGY SOURCES USED FOR HOUSEHOLD LIGHTING ........................................ 45
6.3 ENERGY SOURCES USED FOR HOUSEHOLD COOKING ................................. 47
6.4 SOURCE OF ENERGY USED FOR HOUSEHOLD SPACE HEATING ................. 49
6.5 MODE OF WASTE COLLECTION AND DISPOSAL ......................................... 50
6.6 TOILET FACILITIES USED .............................................................................. 53
6.7 HOUSEHOLDS WITH MEANS OF TRANSPORT DURABLES ......................... 56
6.8 HOUSEHOLDS WITH MEANS OF COMMUNICATION DURABLES ............... 58

CHAPTER 7: DISABILITY ......................................................................................... 61

7.1 PROPORTION OF TOTAL DISABILITIES .......................................................... 61
7.2 PROPORTION OF TOTAL DISABILITIES (MALE VS FEMALE) ....................... 63
7.3 PROPORTION OF TOTAL DISABILITIES BY AGE GROUPS .............................. 65
7.4 DEFECT OF SEEING .......................................................................................... 67
7.5 PROPORTION OF POPULATION BY BLINDNESS .......................................... 69
7.6 DEFECT OF HEARING ...................................................................................... 71
7.7 PROPORTION OF POPULATION BY DEFECT OF DEAFNESS (1 & 2 EARS) .... 73
7.8 PROPORTION OF POPULATION BY DEFECT OF SPEECH ............................... 75

CHAPTER 8: COMMUNITY HOME-BASED CARE ................................................... 77

8.1 NUMBER OF HOUSEHOLDS WITH CRITICALLY ILL PERSONS ...................... 77
8.2 HOUSEHOLDS WITH CHBC PATIENTS AND SEX OF HEAD OF HOUSEHOLD .................................................................................................................. 79

APPENDIX-I: POPULATION ATLAS AUTHORS ..................................................... 81
APPENDIX-II: POPULATION ATLAS COMMITTEE ............................................... 83
APPENDIX-III: MAP PRODUCTION TEAM ............................................................ 83
PREAMBLE

This atlas portrays the most significant socio-demographic and economic characteristics of the population in Thirty-Four (34) maps for all the Administrative districts as ascertained by the 2001 Population and Housing Census. Being the first Population Census Atlas in Botswana to be produced since independence, it is therefore hoped that it will not only be much of assistance to users, but also be used as a bench-mark for future up-dates or censuses.

Primarily the Population Census was undertaken to determine, the population size, composition, distribution, levels and trends of fertility, mortality, migration and urbanization and as well as obtaining information on population characteristics such education and employment etc. The analytical work involved collaborative efforts of both Departmental staff and University of Botswana academics. In addition to other produced reports including Population of towns and associated locality, Administrative and technical report and the summary statistics on small areas, the “Population Census Atlas of Botswana” was hence deemed essential to offer a strong cartographic support to the production.

The maps contained in this document are drawn to a scale of 1:4,000,000, the scale was determined by the amount of information contained on the maps, and there are two legends one is the thematic legend and the other one is topographic legend. Text basically illustrate What the maps portray.

Cities and Towns information is not shown, because their physical boundaries are not clearly identifiable on the ground, as result the information regarding those are separately shown with bar charts outside the map.
CHAPTER 1: THE COUNTRY PROFILE

Botswana is a non-racial country and maintains freedom of speech, freedom of press and freedom of association, and affords all citizens equal rights. All these are enshrined in the Constitution of Botswana, which also provides for a unicameral legislature.

1.1 Administrative Structure

Gaborone became the capital city of Botswana at independence on 30 September 1966. The country is divided into various administrative districts. There are ten Districts and nine Districts Councils. There are City Councils for Gaborone and Francistown, Town Councils for Lobatse, Selebi-Phikwe, Jwaneng and a township authority for Sowa Town.

1.2 Physical Features

The Republic of Botswana is a semi-arid country of approximately 582,000 square kilometers, about the same size as Kenya and France, with a population of 1.7 million. With a mean altitude of 1000 meters above sea level, it is landlocked country in the center of the Southern African plateau. Over 75 percent of the country lies between longitudes 20 and 25 degrees East and three quarters of it between 20 and 25 degrees South. The country’s immediate neighbours are South Africa to the south and west, Namibia to the west and north, Zambia and Zimbabwe to the northwest.

1.3 The People and Settlement

Botswana comprises a number of ethnic mainly those whose mother language is Setswana. Other distinguishable population groups include the Bakalanga in the northeast, BaHerero in the west, the Bambukushu, Bayei and Basubiya in the north, the Babirwa and the Batswapong in the east and the Basarwa in the west. The Tswana have a three-tier settlement system comprising nucleated villages, the arable lands and the cattle posts. The other groups traditionally are sedentary and maintain a scattered settlement patterns. Only Basarwa, the earliest occupants of the country, have until recently remained non-sedentary as hunter and gatherers. Afrikaners have settled as commercial farmers in the Ghanzi and Kgalagadi districts. A small but increasing number of Asians and Europeans lives in the urban areas. Because of its habitable nature, physical infrastructure, transport networks, and various socioeconomic facilities have developed in the eastern part of the country to serve the country’s population which is concentrated in the towns and cities, urban villages and rural settlements.

1.4 Land Tenure and Land Use

There are four types of land tenure in Botswana, namely; state, tribal/customary/community, freehold and leasehold. State land makes up 23 percent of all land and is held by the government and can convert to other uses such as communal or
leasehold. Under customary tenure, every household has automatic use-rights for their homestead, arable fields, livestock grazing, gathering and hunting. Freehold tenure land is marketable and owned by individuals through title deed; most of it is farmland or urban. Leasehold land is rented by a tenant for a fee, for an agreed period of time. Some communal and state land has been leased.

Over three quarters of the land is allocated to grazing, and about 20 percent to national parks and game reserve. Only about 2 percent is used for arable and the rest is allocated to either forest or urban use. Most of the land held under communal tenure is subdivided into residential, arable and livestock sub-areas.

1.5 Climate

Because of its location on the Southern African plateau and latitudinal positioning, the country has a continental type of climate characterized by wide ranges of seasonal temperatures. Average daily maximum temperatures range between 22 degrees Celsius in July and 33 degrees Celsius in January. Average daily minimum temperatures for the same months range between 5 and 19 degrees Celsius. Bright sunshine duration varies between 8 and 10 hours daily, with generally clear skies and low relative humidity in winter.

The country’s proximity to the subtropical high-pressure belt of the southern hemisphere accounts for its largely arid or arid climatic regime. Mean rainfall ranges from over 650 mm in the extreme northeast to below 250 mm in the extreme southwest. The main rain season occurs in the summer months between October and April, with pronounced variations from year to year. Since the early 1980s, droughts have been persistent and this has affected agricultural production negatively. The eastern part of the country has a less harsh climate and more fertile soils compared to the west and it is here that most Batswana live.

1.6 Relief and Vegetation

Much of the country is flat with the hills and deep valleys of the hardveld containing the highest point at 1500 m and the lowest point at 500 m. The thick layers of the Kalahari desert are up to 120 m deep and flat sandveld has occasional rocky outcrops. Because of the extensive sand cover there is little permanent surface water. Only a few rivers are perennial, and all originate out of the country, namely; the Zambezi, Chobe Limopo and Okavango and its Delta. Most seasonal rivers are tributaries of the Limpopo River with the larger ones including the Shashe and Motloutse. To the southwest, the Molopo and Nossop rivers rarely contain any flowing water and are tributaries of the Orange River. A few seasonal rivers such as the Nata enter the Sowa Pan.

Two thirds of Botswana is covered with bush, grass and shrubs. The rest supports is deserts supporting scrub vegetation and grass. The three main types of vegetation are savanna, forest and woodland, and aquatic grassland and swamp. The savanna consists of mopane bushveld, tree and bush savanna, bush savanna, arid shrub savanna, and grass
savaan. Woodland and forest vegetation is made up of riverine woodland and forest, dry deciduous forest and hill woodland. Aquatic grassland and swamps, which occurs in the Okavango, includes water lilies, tall grass and reeds, palms, sausage tree, mokoba, mokotshong and motshaba.

1.7 Mineral and Scenic Resources

Botswana has a variety of both known and promising occurrence of minerals, which include diamonds, copper, nickel, coal, salt, soda ash gold and semi-precious stones.

The Okavango River flows through Botswana in the northwest where it fans out in a myriad of water channels to form a vast and spectacular delta covering 15000 square kilometers. It provides a unique environment, which supports a diversity of wildlife species. In the central northeast is a large area of calcrete plains bordering on the Makgadigadi pans.

Other natural resources are grazing and arable land as well as rich wildlife habitats that support large and diverse animal population from elephants and hippo Tami to large herds of zebra, wildebeest, antelopes lions, leopards and a wide variety of bird species.
CHAPTER 2: GENERAL DEMOGRAPHIC AND SOCIO-ECONOMIC BACKGROUND

2.1 POPULATION DISTRIBUTION

Botswana’s population is concentrated along the narrow strip in the eastern side of the country, running from North to South. This is contributed by the fact that there is better rainfall and better agricultural arable land in this area.

Furthermore the eastern part of Botswana is endowed with advanced infrastructure and economic development as compared to other parts of the country. These endowments tend to attract more people and thus migration from rural to urban centers is prevalent. Urban centers and their surrounding areas are more populated.

Gaborone being the capital city, which is more advanced in terms of infrastructure and economic developments, has a population of 186 007, followed by Francistown with a population of about 83 023. The population sizes of these urban centers are very high as compared to those of rural centers in the western part of the country like Ghanzi with a population of about 9934.

The western part of the country is sparsely populated, reflecting the harsh conditions of the Kalahari Desert. However, there is a considerable number of people in this area because surface water has been availed by the introduction of boreholes, and thus cattle rearing is practiced by a considerable number of people.

The population distribution pattern is basically influenced by the disparities in economic developments and climatic conditions in the country as alluded to earlier (see Map 1).
2.2 POPULATION DENSITY

The low population densities at 0.4 and 0.1 persons per km² are evident in the Kgalagadi and Ghanzi districts. This is mainly due to, not only the difficult desert conditions in these areas, and the low annual rainfalls, but also the prevalence of large areas of game reserves. As for the Chobe and Ngamiland districts, the densities are also low because of the large uninhabited wetlands of the Okavango. The low densities here are linked to the high incidence of tsetse-flies (hindering the rearing of cattle), malaria and bilharzia diseases (that are water habitat and water borne respectively), and hence restrain people to settle in these areas.

As per the 2001 census, the highest density is 34 persons per km², which is noticed in South East. This is contributed by the large population in Gaborone, as people move to surrounding areas like Tlokweng and Ramotswa. North East district had a fairly high density of 10 persons per km². The other district with a fairly high density is Kgatleng at 9 persons per km², which may be contributed by the large population in Gaborone and thus resulting in more people settling in Mochudi, Oodi and Modipe. Most of the people commute from these surrounding settlements to Gaborone, because of the accommodation problems in Gaborone.

Other fairly high-density areas include Kweneng, Southern and Central with densities of 7, 6, and 5 persons per km² respectively. These districts, together with South East and Kweneng East are situated along the railway line, which also plays an important role in attracting people to settle in these areas.

It is relevant to point out that the population densities of cities and towns are not displayed, as their areas were not known.
2.3 POPULATION GROWTH RATE

According to the 1991 Population and Housing Census the population of Botswana was 1.3 million compared to the 1.7 million recorded during the 2001 Population and Housing Census, showing an annual growth of 2.3 percent.

Looking at the administrative districts, South East experienced the highest growth rate of 3.4 percent during the inter-censal period. Other districts with fairly high growth rates were Kweneng at 3.1 percent, Kgalagadi at 3.1 percent, Ghanzi at 3.0 percent and Ngamiland at 2.8 percent. This may be influenced by the fact that these districts have experienced great developments in terms of tarred roads, communication means, schools and piped water and others between the two periods. This has made the districts to be easily accessible and hence more people were willing to live in the said districts.

Chobe and Kgatleng also recorded significant growth rates of 2.6 percent and 2.4 percent correspondingly. Central district had a growth rate of 2.0 percent, while Southern and North East districts had the least growth rates of 1.5 percent and 1.3 percent in that order.

Gaborone had the highest growth rate of 3.4 percent followed by Jwaneng at 3.1 percent. Sowa experienced a growth rate of 2.6 percent, while Francistown, Selebi Phikwe and Lobatse had 2.4 percent, 2.3 percent and 1.3 percent respectively. Orapa had experienced the lowest growth rate of 0.4 percent, mainly because the town has entry restrictions put in place.
2.4 SEX RATIO

According to the 2001 Census the districts with the highest sex ratio (males per 100 females) were Chobe, Ghanzi and Kgalagadi with sex ratios of 106, 104.1 and 101.1 respectively. Kgatleng and Kweneng districts had fairly high sex ratios of 94.6 and 94.0. South East district had a sex ratio of 92.5, whereas Southern and Central had 92.3 and 91.8 correspondingly. North East had the lowest sex ratio recorded at 88.3.

Comparing the towns, it is evident that Sowa Town, Orapa and Jwaneng emerge to be the top on the list with the sex ratio of 120.1, 112.1 and 100.7. These towns are mining towns, hence they have attracted more males than females to settle there, as mining is still a male dominated profession in Botswana. Gaborone recorded a sex ratio of 97.6, followed by Selebi Phikwe with 95.4 and Francistown with 93.6. Lobatse had the lowest sex ratio of 91.7.
2.5 MARITAL STATUS

In 2001 census, marital status was classified as ‘never married, married, living together, separated, divorced and widowed’. It is evident from the map that the ‘never married’ category is high in all the districts. The district with the highest proportion of never married population is South East, at 61.4 followed by Southern, North East and Kgatleng with 60.2, 59.0 and 58.9 respectively.

The other category with significant high proportions is the ‘married’ category. North East recorded the highest proportion of 21.3 in the married category while the lowest proportion was recorded at Kgalagadi.

The ‘living together’ category also yielded high proportions, with Kgalagadi recording the highest proportion of 24.1 whereas North East recorded the lowest proportion of 10.9.

The three categories, that is, separated, divorced and widowed got fairly low proportions with all of them being below 10. However, it is important to note that the widowed category got significant proportions higher than the other two categories (separated and divorced).

The ‘never married’ category registered very high proportions of over 50 in towns and cities. Top on the list were Gaborone, followed by Lobatse and Francistown. For the married category, Orapa got the highest proportion of 29.8, followed by Jwaneng with 22.2 and Sowa with 20.6. For the living together category, Selebi Phikwe recorded the highest proportion while Gaborone got the lowest proportion.
CHAPTER 3: DEMOGRAPHIC DYNAMICS

3.1 DEPENDENCY RATIO

Dependency ratio is a measure of the portion of population that is composed of dependents (people who are too young or too old to work). The **Youth Dependency Ratio (YDR)** is equal to the number of individuals aged below 15 divided by the number of individuals aged 15-64, expressed as percentage. The **Elder Dependency Ratio (EDR)** is equal to the number of individuals aged above 64 divided by the number of individuals aged 15-64, expressed as percentage. The **Total Dependency Ratio (TDR)** is equal to the total number of individuals aged below 15 and above 64 divided by the number of individuals aged 15-64, expressed as percentage i.e. \( TDR = YDR + EDR \).

The YDR ranged between 48.14 percent (South East) and 88.42 percent (North West). It was almost the same (64.00 to 66.39 percent) in Kgatleng, Kweneng and Kgalagadi districts. It should be noted that in Botswana, the YDR is almost six (6) times more than EDR. The EDR ranged between 6 percent (Chobe) and 15 percent (North East). It is also worth noting that both YDR and EDR were high in rural districts than cities and towns.
3.2 LIFE EXPECTANCY

The index of mortality, which is commonly used, is the “expectation of life at birth”. This measure is the average number of years that a newly born baby expects to live if the current risks of dying at each age are to remain unchanged. Looked at from a slightly different perspective, life expectancy at birth can be defined as the average age at death in a population or simply the number of years that a person born and living under particular socio-economic and mortality conditions expects to live. It is a useful measure of both mortality and health conditions in a population.

Life expectancy at birth for both sexes combined is as high as 65.3 and 68.9 years in Gaborone and the South East district respectively, all other districts in Botswana are now experiencing life expectancy at birth below sixty years. The chances of survival from birth are worse for North East, Central, Ngamiland, and Southern District, where a newly born baby expects to live for less than 50 years. Estimates of life expectancy at birth are 44.7, 45.6, 47.1, 47.6 years respectively for the aforementioned districts. In general, towns and cities are not necessarily experiencing relatively lower mortality than other districts like the situation in 1991. The data show six out of fourteen districts with life expectancy above the national average of 55.6 years. Generally, females expect to live longer than their male counterparts with the exception of South East, Ghanzi and Francistown where males expect to live longer than females.

Substantial district differences in mortality have been shown by the 2001 census results, with relatively low mortality in Gaborone and the South East district and high mortality in the North East, Central, Ngamiland and the Southern districts. Generally men experience high mortality but this trend has reversed in some districts.

The differentials in mortality between districts are usually associated with differing levels of social and economic development between districts, as well as differentials in individual living standards and their socio-economic characteristics. It appears that the HIV/AIDS epidemic has affected these differentials.
3.3 OUT-MIGRATION RATE (2000-2001)

The map contrasts administrative District of high, intermediate and low out-migration rates. The North East and Southern Districts recorded the highest out-migration rates. The Northeast District is characterized by population pressure and low rural employment prospects. Most of the out-migration must have been directed to those areas offering better employment prospects such as Francistown City. The Southern district also offers limited employment opportunities. Rural migrants were thus probably attracted to the nearby urban centers. Chobe District, because of its tourism base, typically experienced high gross migration with tourists both coming in and going out of the area.

The South East District experienced intermediate out-migration rates most likely due to employment opportunities found in Gaborone, Lobatse and Ramotswa. Both Ghanzi and Kgalagadi Districts also experienced intermediate out-migration rates. This could be due to remoteness and the friction of distance which translates to high costs incurred when moving to areas of better economic opportunities in the southeastern part of the country. Moreover, the upgrading of Ghanzi township, Tsabong and some tourism could have provided some employment opportunities locally.

The districts which experienced least out-migration rates include Kweneng, Central, Kgatleng and Ngamiland. Kweneng and Kgatleng districts enjoy and advantaged position relative to Gaborone and therefore benefit from residential, commercial and industrial spillover effects generated from the capital city.

The relatively low out-migration from Central District could be associated with employment opportunities in the major villages along the A1 highway. The upgrading of sub-district and urban villages has also brought with it employment opportunities. Apart from Selebi Phikwe, the mining towns could also have generated additional employment. Tourism related employment could have retained the population of Ngamiland District.

Out-migration rates were highest in Sowa Town, Jwaneng and Lobatse, respectively. This could reflect the uncertainty associated with the economic bases of these centers. Gaborone, Francistown, Selebi Phikwe and Orapa appear to have had the least out-migration rates. These three are fairly stable.
Out-Rate

Migration Rate

Cities and Towns

Out-Rate
3.4 IN-MIGRATION RATE (2000-2001)

The map shows that two administrative Districts experienced phenomenal in-migration, namely Chobe and the South East. The former experienced high gross migration due to tourism related activities. Moreover its geographical contiguity and connectivity to neighboring states facilitates population movements from across the border. The high immigration rates into the Southeast District reflect the collective national populationmovements from the rest of the country towards Gaborone city, in search of employment opportunities and higher order social services.

The rest of the administrative Districts do not appear to have been very attractive to migrants because they offer comparatively less employment and socioeconomic prospects.

Five urban Districts experienced exceptional in-migration rates. These include all the mining towns except Selebi Phikwe whose economic fortunes have been on the balance over the last few years. The capital and to a lesser extent Lobatse have also been important destination for migrants probably for employment and residential purposes, respectively. Francistown only experienced comparatively low immigration probably due to alternative nearby destinations for migrants such as Orapa, and Sowa Town.
3.5 IN-RATE INTERNATIONAL MIGRATION (2000-2001)

The map shows that administrative districts experienced either high, intermediate or low international migration in-rates. Chobe, the main tourist District of the country experienced the highest rate. The Southeast District also experienced a comparatively high rate. This could have been from persons coming in as professional or tourists to the nation’s capital city. They might have resided in the satellite communities of Gaborone.

Kweneng, Kgatleng, Northeast and Ngamiland District had intermediate rates. The first three administrative Districts are functionally integrated into the expanding economies of either Gaborone or Francistown. The intermediate growth of Ngamiland District could be attributed to its expanding tourist industry.

The least attractive administrative districts for international migrants include Kgalagadi, Ghanzi, Southern and Central Districts. The first two are remote. They, with the rest which belong to this group, apparently lack sufficiently developed urban-industrial, commercial and tourist attractions for international migrants.
3.6 OUT-RATE INTERNATIONAL MIGRATION (2000-2001)

The Map depicts that over three quarters of the Districts have experienced international out-migration. The most affected are the remote poorly resourced Districts of the arid sandveld. Push factors such as lack of employment and socioeconomic development probably feature strongly in the decision to relocate. The other affected areas are the densely populated well watered and most developed parts of the country. This is where most urban-industrial, commercial, educational, health, transport and communication facilities are located. The hardveld is well connected to the sub-regional and international world. Such connections expedite international out-migration for higher education, specialized health needs, tourism and employment.

Two Districts, namely Ngamiland and Kweneng District both appear to have experienced no international migration. This is highly unlikely. It could only indicate that migrants from these district move in stages through intervening opportunities found in the eastern hard veld. This would eventually translate to stepwise international migration to external destinations, probably through Gaborone.

International in-migration was highest for Orapa, Gaborone and Jwaneng. The migrants were probably expatriates recruited to provide the requisite specialized skills in these centers. Apart from Lobatse, the rest of the urban districts experienced relatively low rates of out-migration probably of those whose contracts had expired.
Out-Rate (International)

<table>
<thead>
<tr>
<th>Cities and Towns</th>
<th>Migration Rate</th>
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</thead>
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<td>Gaborone</td>
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</tr>
<tr>
<td>Francistown</td>
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</tr>
<tr>
<td>Lobaste</td>
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<tr>
<td>SiPhikwe</td>
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</tr>
<tr>
<td>Orapa</td>
<td>0.25</td>
</tr>
<tr>
<td>Jwaneng</td>
<td>0.10</td>
</tr>
<tr>
<td>Sowa Town</td>
<td>0.10</td>
</tr>
</tbody>
</table>
CHAPTER 4: EDUCATION LEVEL AND LITERACY

4.1 SCHOOL ATTENDANCE STATUS

The map shows the distribution of population aged 2 years and above by their school attendance status viz. (i) Never attended (ii) Still at school, and (iii) Left school by rural districts. It shows that population never attended school were less than to population still at school in Ngamiland, Ghanzi and Chobe districts. The population who left school were more (1.1 to 3 times) than the population never attended school in all the districts.

In Cities and towns the population who still at school were more than the population who never attended school but were less than those who left school. The extent of higher number who never attended school may due to the lower age cut off point of 2 years.
4.2 PRIMARY SCHOOL ENROLMENT

In 2001 Census for 2 years and above aged population, the question regarding school attendance was asked. The respondents who were still at school were further questioned regarding their school attainments. For primary school considered here is 5-13 years, the lower age 5 instead of 7 years is being taken because of non-government school enrolling the students at early age.

The percent population attending primary school in the rural districts ranged between 61.6 (Ghanzi) and 74.6 percent (South East). The primary school attendance for Ngamiland, Central and Kweneng districts was between 68.5 and 70 percent.

The percent population attending primary school in cities and towns ranged between 71 (Sowa) and 75.5 percent (Orapa).

Overall primary school enrolment (including Cities and Towns) was 71 percent.

As for as the percent population attending primary school by sex, it was higher in female as compared to male in all the rural districts. In cities and towns, except for Jwaneng and Sowa it followed the above trend.
4.3 SECONDARY SCHOOL ENROLMENT

In 2001 Census the respondents who were still at school were further questioned regarding their school attainments. For secondary school 13-24 age-group is considered. The percent population attending secondary school in the rural districts ranged between 19.2 (Ghanzi) and 34.3 percent (North East). The secondary school attendance for Ngamiland and Kgalagadi districts were 21.7 and 22.4 percent respectively. The percent population attending secondary school in cities and towns ranged between 24 (Gaborone) and 30 percent (Sowa). Overall secondary school enrolment (including Cities and Towns) was 27.2 percent.

As for as the percent population attending secondary school by sex, it was higher in female as compared to male in all the rural districts. In cities and towns, except for Sowa it followed the above trend.
4.4 DISTRICT LITERACY RATE

The fixed duration of census taking remains to be one of the main hurdles of including literacy questions during censuses. Therefore 1981, 1991 and 2001 the censuses did not attempt to get any direct data on the subject. However, indirect literacy estimates from school attainment information was used to estimate literacy rates during these censuses. The 1981 census rate considered literacy among citizens 10 years and over while the 1991 census, 1993 Literacy Survey referred literacy rates among population 15 years and over.

The literacy rate was calculated as the percentage ratio of those who completed at least Standard 5 over the population for 10 years and above. The lowest (53.43%) literacy rate was in Ghanzi district while South-East and Chobe districts recorded 74.84 and 74.94 percentage respectively. The literacy rates for Ngamiland, Southern and Kalagadi districts ranged between 57.25 and 59.61 percentage. It was almost same (about 62%) in Central and Kweneng districts. It is interesting to note that in 1993 National Literacy survey, the districts, which recorded the lowest and highest literacy rates were also same as observed above.

By this indirect estimation the national literacy rate was 67.5 percent in 2001 census while in 1991 census it was 54.8 percent. This national estimate also took consideration of cities and towns literacy rates.
4.5 DISTRICT LITERACY RATE BY SEX

The map for the literacy rate by sex and district shows that except Chobe, Nagamiland and North-East districts, literacy rate in female were higher than male in rest of districts. The extent of difference of literacy rates in females than male ranged between 3.51 (Kweneng) and 11.04 (Kgatleng) percentage points. In Chobe district the literacy rate in males was higher by 3.72 percentage points than in females. Overall also female (69.82%) literacy rate is higher than male (64.98) ones.
CHAPTER 5: ECONOMIC ACTIVITIES AND LABOUR FORCE

5.1 EMPLOYMENT RATE BY SEX

The map on economically active population by administration districts and employment status shows that Central district has had the highest number of employed population followed by Kweneng district, then South East. Comparison among cities and towns on the proportion of employed population shows that Gaborone emerges as the top on list regarding the employed population having 85,417 population.

The proportion of employed population according to the industry and the administrative districts reveals that a large number of people are working in the Retailing industry, followed by Public administration in all districts.

Male employment by industry and district reveals that a large number of males are employed in construction industry, Central district registering the highest number followed by South East.

Female employment by industry and district shows that a large proportion of females are employed in the retailing industry. South East emerging as the highest in registering the number of females working in retailing industry followed by Central district.
5.2 UNEMPLOYMENT RATE BY SEX

Unemployment rates by administrative district shows that Southern has the highest unemployment rate with 23.4 percent, followed by Kweneng and Central districts with 23.2 percent and 22.3 percent respectively. Unemployment is lower in Kgalagadi district having registered rate of 16.0 percent.

Map on unemployment rates by administrative district and sex shows that Kweneng district registered the highest female unemployment rate, followed by Southern district, then Kgatleng district. When considering male unemployment rates, Southern district registered the highest rate, followed by Kgatleng district, then Kweneng. When comparing unemployment between both sexes, the map shows that within all the districts unemployment is high among females.

In cities and towns unemployment is high in Lobatse with total unemployment rate of 21.5 percent, followed by Francistown and Selibe Phikwe with 17.5 percent and 17.2 percent respectively.
CHAPTER 6: HOUSEHOLDS AND HOUSING

6.1 PROPORTION OF POPULATION THAT HAD ACCESS TO WATER SOURCES

The proportion of the population that had access to piped water was 87.1 percent. A comparison between cities/towns and districts showed that 99.5 percent of the population in cities/towns had access to piped water while in the districts the proportion was 83.5 percent. It is shown that in most districts more than 80 percent of the population had access to piped water. The districts that ranked high in provision of water were South East with 95.5 percent of the population accessing tap water followed by Kgalagadi (89 percent) and North East (89 percent). The districts that had less than 80 percent of the population accessing piped water were Ghanzi (72 percent) and Ngamiland (75.3 percent).

A comparison amongst the cities/towns showed that the small mining towns of Orapa and Sowa are the best in terms of water provision as 100 percent of the towns’ population had access to piped water. The proportion of the population that had access to piped water was above 99 percent in other cities/towns except Selibe/Phikwe which had 98.4 percent.
6.2 ENERGY SOURCES USED FOR HOUSEHOLD LIGHTING

The energy sources most commonly used for lighting at both national and district levels in Botswana are electricity, paraffin and candles. At the national level, electricity uptake for household lighting during the 2001 census was 24.84 percent of the households nationally, with the level being higher in urban areas (36.97 percent) than it was in rural areas (8.08 percent). Electricity uptake was highest in the mining districts of Orapa, Sowa Town and Jwaneng where it is the primary source of energy used for lighting and the proportion of households using electricity for lighting were 98.99 percent, 98.88 percent and 57.68 percent respectively, and in the capital city of Gaborone (48.94 percent). On the other hand, paraffin is the principal source of energy used for household lighting in Francistown, Lobatse and Selebi-Phikwe towns; and in all none-town/city districts. These two energy sources are the two leading energy sources used for lighting at the district level with the exception of Ghanzi and Kgalagadi districts where the use of candles replaces electricity in secondary dominance after paraffin, perhaps due to the limited spread of the national power grid in the two districts. The other energy sources that are used for lighting include wood, gas (LPG), solar power and biogas. It is noteworthy that wood is the energy source that is prevalently used for lighting in the Central Kgalagadi Game Reserve (87.27 percent).
6.3 ENERGY SOURCES USED FOR HOUSEHOLD COOKING

The primary energy sources used for cooking in Botswana are wood and gas at the national level and in all (bar-one) none-town/city administrative districts. Wood is dominant at the national level (45.68 percent), and in small localities and villages. At individual district level, the use of wood for cooking is most prevalent in households in the North East (74.57 percent), Central (72.20 percent), Kgalagadi (65.66 percent) and Southern (63.68 percent) districts. The use of gas (LPG) for cooking is prevalent in all towns and cities (65.85 percent) and in other urban areas and villages with a population exceeding 5000 people. At individual district level, the use of gas for cooking is most prevalent in households in Orapa (85.30 percent), Jwaneng (78.40 percent), Gaborone (70.82 percent) and Lobatse (68.05 percent) towns/city (See Figure 3). The South East district is an exception to this general pattern because like towns/cities gas was the principal energy source used for cooking in 64.51 percent of its households in 2001. The dominance of wood use for cooking does not extend to towns and cities where either electricity and/or paraffin are used for cooking in more households than wood. Its worth noting that 41.57 percent of the households in Sowa Town use electricity for cooking.
2001 ENERGY SOURCES USED FOR HOUSEHOLD COOKING BY ADMINISTRATIVE DISTRICTS

Topographic Legend
- Towns
- Major Village
- City

Thematic Legend
- Type of energy source
- Electricity
- Coal (LPG)
- Wood
- Others
6.4 SOURCE OF ENERGY USED FOR HOUSEHOLD SPACE HEATING

At the national level the dominant energy source used by households for space heating is wood (57.84 percent), followed by electricity (8.30 percent). Woodfuel is the energy source that is dominantly used for household heating in all none-town/city administrative districts; and in towns and cities considered as a whole. However, as Figure shows, the dominant energy source that is used for space heating in individual towns/cities varies between woodfuel (Francistown, Lobatse and Selebi-Phikwe) and electricity (Gaborone, Orapa Jwaneng and Sowa Town). The proportion of households that use wood for space heating, varies significantly between rural (82.67 percent) and urban (39.86 percent) areas since the latter can afford to use conventional energy sources like electricity (12.54 percent).
6.5 MODE OF WASTE COLLECTION AND DISPOSAL

The most common methods of waste disposal at the national level in Botswana are collection of waste by Local Authorities (LAs). However, at the administrative district level, this is consistently true in all Botswana’s towns and cities where a proportion of the households that receive a collection service (regularly/irregularly) is 93.96 percent compared to 13.95 percent for the rest of the country. Waste collection by LAs (regularly/irregularly) is also the most common method of waste disposal in Chobe district (51.85 percent).

A total of 29.29 percent households in Botswana receive a regular waste collection service. Of this total 77.13 percent is based in towns and cities and the rest of the country accounts for only 22.87 percent of the households that receive a regular waste collection service. The proportion of households with a regular collection service ranges between 75.27 percent (Lobatse) and 99.57 percent (Orapa) in towns and cities but the same range is between 5.80 percent (Southern) and 37.30 percent (Chobe) for the remaining administrative districts. The same proportion is less than 10% for Southern, Kweneng, Central, Ngamiland and Kgalagadi administrative districts and less than 15 percent for Kgatleng, North East and Ghanzi districts.

With the exception of Chobe district, the most prevalent method of waste disposal in none-town/city districts is the dumping waste in rubbish pits. The highest proportion of households using this method is in Kgalagadi district (71.45 percent), and the smallest is in South East district (34.46 percent). The second most prevalent method of waste disposal that is commonly practiced in these districts, with the exception of Kgatleng district is roadside dumping. The proportion of households using this method ranges from 5.25 percent to 17.94 percent in Kgalagadi and South East, respectively. Burning of waste is the second most commonly practiced in Kgatleng district where it is used as a method of refuse disposal by 19.22 percent of the district’s households.
Methods of Refuse Disposal in Towns and Cities

- Gaborone
- Francistown
- Lobatse
- Selibe Phikwe
- Orapa
- Jwaneng
- Sowa Town

- Regularly Collected
- Irregularly Collected
- Roadside Dumping
- Rubbish Pit
- Others
6.6 TOILET FACILITIES USED

The progress achieved towards the attainment of Vision 2016 goals of improving health for all and of developing strong measures to enhance pollution can be measured, among other indicators, by the level of household accessibility to toilet facilities, which meet the World Health Organisation (WHO) standards and the Botswana Policy for Wastewater and Sanitation Management (BPWSM) standards. While WHO accepts the use of simple pit latrines or the use of a neighbour’s toilet as adequate, such facilities do not meet the adequacy requirements of the BPWSM.

Nationally, the main toilet facility used in Botswana’s households is the ordinary pit latrine (25.09 percent). However, on individual district level, there is variation in the use of this type of toilet facility. In all towns and cities, the most prevalent type of household toilet facility is “Own flush toilet” with the proportion of households using the facility ranging from 99.59% in Sowa Town to 32.58 percent in Francistown. In the remaining administrative districts, the dominant facilities are the ordinary pit latrine (South East, 30.85 percent; Kweneng, 32.69 percent; and North East 42.09 percent) and ventilated pit latrine (Kgatleng, 39.74 percent). The majority of the households in the rest (six) of the none-town/city districts have no toilet facilities and their respective proportions range from 25.61 percent in Chobe to over 50 percent in Ngamiland and Ghanzi.

With respect to the WHO definition of ‘adequate’ sanitation, Botswana is doing well in sanitation because 77.4 percent (includes households with communal and adequate toilet facilities that have been lumped in the ‘other’ category of facilities) of households can be classified as having access to adequate sanitation facilities. However, on the basis of BPWSM definition of adequate sanitation, only 39.9 percent (includes households with ‘Own enviro-loo’ that are classified in the ‘other’ category of facilities) of households in Botswana have access to adequate sanitation.

The proportion of households in the country with access to flush toilets has increased from 8.6 percent in 1981 to 20.7 percent in 2001. In the same period, proportion of households that have no access to any form of sanitation facility dropped from 64.1 percent to 22.5 percent nationally.
Figure 1: Proportion of households in Botswana with access to 'own flush toilet' and those with no access to a toilet facility (1981 - 2001)

Figure 2: Toilet Facilities Used in Towns and Cities
The Map depicts the proportion of households by administrative district and type of means of transport durables owned as shown by the 2001 Population and Housing Census results. Out of a national total of 404,607 households, 48,230 (11.9 percent) owned a van/bakkie; 46,576 (11.5 percent) owned a car; 65,664 (16.2 percent) owned a bicycle; 60,197 (14.9 percent) owned a donkey cart; and 2,687 (0.7 percent) owned a mokoro/boat.

In the rural administrative districts, South East had the largest percentage of households that owned a van/bakkie. It had 14.5 percent. Kgatleng and Kgalagadi districts followed with 12.8 and 11.9 percent respectively. Ghanzi district had the lowest proportion of households with a van/bakkie, 8.0 percent.

In the ownership of a car, South East, Kgatleng and North East districts had more households in that category. 15.6 percent of households in South East owned a car, while Kgatleng and North East had 11.3 and 10.0 percent respectively. Kgalagadi district trailed behind with only 6.7 percent.

Central district dominated in the proportion of households with a bicycle, followed by South East and North East. In the ownership of a donkey cart, Southern district followed by Kgalagadi and Central districts dominated. However, Ngamiland and Chobe dominated in the ownership of a mokoro/boat.
6.8 HOUSEHOLDS WITH MEANS OF COMMUNICATION DURABLES

The map presents the proportion of households by administrative district and type of means of communication durables owned. According to the 2001 Population and Housing Census results, out of a total of 404,706 households in Botswana, 273,382 households owned a radio. Showing a national radio ownership, at household level, of 67.6 percent. The results also showed that 101,713 (25.1 percent) households owned a television while 135,546 (33.5 percent) owned a phone.

As depicted by the Map, South-East had the largest proportion of households with a radio in Botswana among the rural administration districts. 75.4 percent of its households owned a radio. Kgalagadi and Chobe districts followed with 73.4 and 71.0 percent respectively. Ghanzi district trailed behind with the lowest proportion of households, 55.0 percent.

South-East district dominated in the ownership of television, with 38.4 percent of the households owning a television. Kgalagadi and Chobe followed with 26.8 and 15.9 percent respectively. Kgalagadi district trailed behind with 12.7 percent.

In the ownership of a phone, South-East still had the largest percentage of households, 49.5 percent of its households. Chobe and Kgalagadi followed with 35.8 and 35.4 percent respectively. Ghanzi and Central districts had the least with 22.7 and 22.8 percent respectively.
In cities and towns (Figure), Orapa had the largest proportion of households with communication durables. Sowa Town and Gaborone followed in the second and third places respectively. Selibe Phikwe trailed behind all other cities/towns in the ownership of the three communication durables.
CHAPTER 7: DISABILITY

7.1 PROPORTION OF TOTAL DISABILITIES

Map shows the proportion of total disabilities by districts. The results from the 2001 census show that of the total Botswana population of 1,680,863 in 2001, 3.5 percent (58,716) was disabled. The disabled population is not evenly distributed. The highest proportion (5.4 percent) of disabled persons is found in the Kgalagadi, followed by North West, Southern, Ghanzi and Central with 4.7 percent, 4.29 percent, 4.14 percent and 3.96 percent respectively. The least proportions are observed in Sowa, Orapa, Jwaneng and Chobe with .00 percent, .00 percent, .01 percent and .03 percent respectively.

The distribution of total disabilities in cities and towns is illustrated in the chart. It shows that, the highest proportion of 3.1 percent was recorded in Lobatse followed by Selibe Phikwe, Francistown and Gaborone with 1.9 percent each. The least proportion (1.3 percent) was observed in Sowa Town followed by Orapa and Jwaneng with 1.5 percent each.
7.2 PROPORTION OF TOTAL DISABILITIES (male vs female)

Proportion of total disabilities by districts (males vs females) is depicted in the Map and chart for villages and cities/towns respectively. As illustrated it shows that there is no disability differential between males (29,867) and females (28,849). In villages, the highest proportion in males is observed in Kgalagadi (5.4 percent), followed by North West, Southern, Gantsi and Central with 4.7 percent, 4.5 percent, 4.1 percent and 4.0 percent respectively. On the other hand, in females the highest proportion is noticed in Kgalagadi, North West, Southern, Ghanzi and Central with 5.3 percent, 4.7 percent, 4.1 percent and 3.8 percent respectively.

The highest proportion for both males and females was recorded in Kgalagadi with 5.4 percent and 5.3 percent respectively, followed by North West recording 4.7 percent and 4.7 percent for males and females respectively. In cities and towns total disabilities in males were more than females which reported 4,040 and 3,270 respectively. The highest proportion in males was recorded in Lobatse (3.7 percent), followed by Francistown, Selibe Phikwe and Gaborone with 2.2 percent, 2.2 percent and 2.0 percent respectively. In females, it shows that the highest proportion was observed in Lobatse (2.6 percent), followed by Gaborone, Selibe Phikwe and Francistown with 1.7 percent, 1.7 percent, and 1.6 percent respectively.
7.3 PROPORTION OF TOTAL DISABILITIES BY AGE GROUPS

Proportion of total disabilities by age group is shown in Map. For those aged 0-14 years, the Central district has the highest proportion of disabled with 35.6 percent, followed by Kweneng, Southern and North West with 13.2 percent, 11.0 percent and 10.0 percent respectively. The same trend is also observed within the 15-49 year age group. On the other hand, for the 50+ years age group, the highest proportion of disabled persons is Central district followed by Southern and Kweneng with 37.7 percent, 14.4 percent and 13.3 percent respectively.

The figures show that disability increases with age, this might be indicative that for young children, it may not be immediately obvious at younger ages and people become aware of these disabilities when the affected children fail to perform activities regarded as normal for their age. The other reason may be that the severity of the disability worsens with age, for example defects of seeing and hearing.

In cities and towns, the highest proportion was recorded in Gaborone with 10.3 percent for 15-49 years, 5.7 percent for 0-14 years and 2.5 percent for 50+ years. This was followed by Francistown with 3.9 percent (15-49 years), 3.0 percent (0-14 years) and 1.5 percent (50+ years). The least was recorded in Sowa Town.
7.4 DEFECT OF SEEING

Distribution of disabled population by type of disability shows that defect of seeing in one eye accounts for 6.1 percent while 18.1 percent for two eyes of the total disabilities (58,716). Map illustrates the proportion of disabled population by districts (per 10,000 population), it is observed that defect of seeing accounts for 21.5 and 63.1 per 10,000 population of the country (1,680,863) for one and two eyes respectively. The highest proportions were recorded in Kgalagadi for both one and two eyes with 32.3 and 130.6 population per 10,000 population respectively. The least proportion for villages was recorded in Chobe (14.8) for one eye and South East (47.7) for two eyes per 10,000 population.

In cities and towns, the minimum (7.6) was in Orapa and maximum (18.2) in Lobatse for defect of seeing in one eye while for two eyes the lowest (15.3) and the highest (50.5) was observed in Lobatse, followed by Gaborone (48.7) and Selibe Phikwe (39.5) per 10,000 population. This is illustrated in the chart.
7.5 PROPORTION OF POPULATION BY BLINDNESS

Population of disabled persons with a defect of blindness in one eye accounts for 4.9 percent of the total disabilities, and 17.1 persons per 10,000 population. The highest proportion of persons with defect of blindness one eye per 10,000 population is observed in North West (27.3) followed by Kgalagadi (25.4), and Southern (23.7) districts. Out of the total disabilities, 4.9% have a defect of blindness in one eye.

On the other hand, proportion of population with blindness in both eyes accounts for 22.7 persons per 10,000 population for all districts. The highest proportion is in North West (41.1 persons per 10,000) followed by Central (30.6), Kgalagadi (27.3) and Southern (27.3) districts. Out of the total disabilities, 6.5% have a defect of blindness in both eyes.

In cities and towns the proportion of blindness in one eye was higher than in both eyes. Lobatse had a highest proportion for both blindness in one and two eyes with 10.1 and 8.8 persons per 10,000 population respectively, while for other districts it was almost negligible.
7.6 DEFECT OF HEARING

The map presents the proportion of population with defect of hearing by districts. Overall, 3.8 percent of total disabilities (58,716) have a defect of hearing in one ear, while 10.8% have a defect of hearing in both ears. The highest proportion per 10,000 population is observed in Kgalagadi district with 25.9, followed by Chobe with 18.1 and Ghanzi with 17.5 for defect of hearing in one ear.

It shows that defect of hearing in two ears accounts for 37.6 persons per 10,000 population, with a highest proportion in Kgalagadi (62.3), followed by North West (56.2) and Central (44.6). The lowest proportion is recorded in Sowa Town (10.4) followed by Orapa (13.1) and Francistown (15.4).

The chart illustrates the proportion of population with defect of hearing in cities and towns, which accounts for 17.7 percent and 10.6 percent of total defects for hearing in one ear and two ears respectively. The proportions for defect of hearing in one ear ranged from 8.3 (Francistown) and 13.5 (Lobatse) per 10,000 population, while for hearing in both ears it ranged from 10.4 (Sowa Town) and 23.9 (Lobatse and Selibe Phikwe) per 10,000 population.
7.7 PROPORTION OF POPULATION BY DEFECT OF DEAFNESS (1 & 2 ears)

Map and chart show proportion of population with defect of deafness in villages and cities/towns respectively. It is observed that deafness in one ear accounts for 1.0% while deafness for both ears accounts for 2.6 percent of the total population with disabilities. In villages, deafness in one ear accounts for 81.4 percent while deafness in both ears accounts for 89.1 percent of total defect. The highest proportion of deafness in one ear per 10,000 population is in Chobe (8.2), followed by Kgalagadi, Southern and Kweneng with 5.9, 4.3, and 3.9 persons per 10,000 population respectively. On the other hand, for deafness in two ears Kgalagadi has the highest proportion, followed by North West and Central with 11.9, 11.5 and 11.4 persons per 10,000 population.

In cities and towns, deafness in one ear accounts for 18.6 percent and deafness in both ears is 10.9 percent. It was noted that deafness in two ears were more than in one ear except in Sowa Town. The highest proportion of deafness in one ears was recorded in Sowa with 6.9 persons per 10,000 population, on the other hand for deafness in two ears, the highest proportion was reported in Lobatse with 8.4 persons per 10,000 population.
7.8 PROPORTION OF POPULATION BY DEFECT OF SPEECH

Out of 58,716 total disabilities, the defect of speech accounts for 4.7 percent and out the total population of the country defect of speech accounts for 16.3 per 10,000 population. The Central district has the highest proportion of 21.8 persons per 10,000 population, followed by Kgatleng and Kgalagadi with 20.5 and 18.1 per 10,000 population respectively.

In cities and towns, total defect of speech was 12.6 percent out the total defects of speech. Orapa had the highest proportion of 12 persons per 10,000 population, while Sowa Town reported nothing.
CHAPTER 8: COMMUNITY HOME-BASED CARE

8.1 NUMBER OF HOUSEHOLDS WITH CRITICALLY ILL PERSONS

Out of the national total of 404,706 households, 2.2 percent (8,871) were found to have critically ill persons. In light of the high rates of HIV/AIDS infection as well as the widespread of Home Based Cares in Botswana, this figure is rather on the low side. However, this may be due to the fact that the stigma associated with AIDS prevented most households caring for the terminally ill from reporting such cases. Furthermore, the AIDS/STD unit acknowledges that the Home Based Care Programme is mainly associated with AIDS, and AIDS is always singled out when talking about activities of Home Based Care even in the unit itself.

The highest number of critically ill persons was in the Central district with a 3,254 (36.7 percent), followed by Kweneng, Southern and North West with 1,050 (11.8 percent), 975 (11.0 percent) and 899 (10.1 percent) respectively. Out of the total households (8,871) with critically ill persons, 1,150 (13.0 percent) were urban based while the rest 87.0 percent were rural based. This might be due to the fact that even though people migrate to urban areas to seek employment, those who fall critically ill tend to return to their respective home villages for support and care from relatives.

The urban districts with the lowest number of critically ill persons are Sowa Town (7), followed by Jwaneng (19) and Orapa (45), while the least rural districts are Chobe (97), followed by Ghanzi (253) and South East (208) see chart for illustration.
8.2 HOUSEHOLDS WITH CHBC PATIENTS AND SEX OF HEAD OF HOUSEHOLD

As shown in Map, out of the national total of 404,706 households, 8,871 (2.2 percent) had critically ill persons. Of these 4,858 (54.8 percent) were headed by females and the reminder 4,013 (45.2 percent) were male headed. This means that the proportion of households with critically ill persons was higher among female-headed households relative to their male-headed counterparts. In rural villages households with critically ill persons, 4,317 (55.9 percent) were headed by females compared to 3,404 (44.1 percent) headed by males. Of the 1,150 urban-based households with critically ill persons, 47.0 percent were female-headed while 53.0 percent were male headed. However, the proportion of female-headed households relative to those headed by males was higher in rural areas.

The chart illustrates the number of critically home-based care patients in cities and town. It shows that Gaborone has the highest number of patients for both males and females headed households with 212 and 182 patients respectively. The lowest number of CHBC patients for male and female-headed household was observed in Sowa Town with 4 and 3 patients respectively.
APPENDIX-I: POPULATION ATLAS AUTHORS

CHAPTER 1

The Country: Mr. T. T. Maruaton and Prof. T. Gwebu

CHAPTER 2

2.1: Population Distribution Ms. B.S. Motswagae
2.2: Population Density Ms. B.S. Motswagae
2.3: Population Growth Rate Ms. B. S. Motswagae
2.4: Sex Ratio Ms. B.S. Motswagae
2.5: Marital Status Ms. B.S. Motswagae

CHAPTER 3

3.1: Dependency Ratio Dr. V. K. Dwivedi
3.2: Life Expectancy Mr. R. G. Majelantle
3.3: Out-migration Rate (2000-2001) Prof. T. Gwebu
3.4: In-migration Rate (2000-2001) Prof. T. Gwebu
3.5: In-Rate International Migration (2000-2001) Prof. T. Gwebu
3.6: Out-Rate International Migration (2000-2001) Prof. T. Gwebu

CHAPTER 4

4.1: School Attendance Status Dr. V. K. Dwivedi/ Mr. A.P Sebeso
4.2: District Literacy Rate Dr. V. K. Dwivedi/ Mr. A.P Sebeso
4.3: District Literacy rate by Sex Dr. V. K. Dwivedi/ Mr. A.P Sebeso

CHAPTER 5

5.1: Employment rate by Sex Mr. K. Johane
5.2: Unemployment Rate by sex Mr. K. Johane

CHAPTER 6

6.1: Proportion of Population that had Access to Water Sources Mr. P. Kelekwang
6.2: Energy Sources Used for household Lighting Ms. S. Kabaija
6.3: Energy Sources Used for Household Cooking Ms. S. Kabaija
6.4: Energy sources Used for Household Space Heating Ms. S. Kabaija
6.5: Mode of Waste Collection and Disposal Ms. S. Kabaija
6.6: Toilet Facilities Used in Botswana Ms. S. Kabaija
6.7: Household with Means of Transport Durables Ms. R. Mothibi
6.8: Household with Means of Communication Durables Ms. R. Mothibi
CHAPTER 7

7.1: Proportion of Total Disability  Ms. M. Mapesa
7.2: Proportion of Total Disabilities (Males vs Females)  Ms. M. Mapesa
7.3: Proportion of Total Disabilities by Age Group  Ms. M. Mapesa
7.4: Defect of Seeing  Ms. M. Mapesa
7.5: Proportion of Population by Blindness  Ms. M. Mapesa
7.6: Defect of Hearing  Ms. M. Mapesa
7.7: Proportion of Population by Defect of Deafness  Ms. M. Mapesa
7.8: Proportion of Population by Defect of Speech  Ms. M. Mapesa

CHAPTER 8

8.1: Number of households with Critically Ill Persons  Ms. M. Mapesa
8.2: Households with CHBC Patients and Sex of Head of Household  Ms. M. Mapesa
## APPENDIX-II: POPULATION ATLAS COMMITTEE

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Institution/Office</th>
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<tbody>
<tr>
<td>1</td>
<td>Ms. E.P. Mukamaambo</td>
<td>University of Botswana (Chairperson)</td>
</tr>
<tr>
<td>2</td>
<td>Mr. A.P. Sebeso</td>
<td>Secondary Education</td>
</tr>
<tr>
<td>3</td>
<td>Prof. T. Gwebu</td>
<td>University Of Botswana</td>
</tr>
<tr>
<td>4</td>
<td>Mr. D. Buthali</td>
<td>(Census Officer at that time)</td>
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<tr>
<td>5</td>
<td>Dr. V. K. Dwivedi</td>
<td>Central Statistics Office</td>
</tr>
<tr>
<td>6</td>
<td>Mr. T. T. Maruatona</td>
<td>Central Statistics Office</td>
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<td>7</td>
<td>Mr. I. Melemo</td>
<td>Government Printer</td>
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<td>8</td>
<td>Mr. M. Mulalu</td>
<td>University of Botswana (Vice Chairperson)</td>
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<tr>
<td>9</td>
<td>Ms. N. Habangana</td>
<td>Special Education</td>
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<tr>
<td>10</td>
<td>Ms. L. Phalaagae</td>
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<td>11</td>
<td>Mr. L. Matlhodi</td>
<td>Land Utilization</td>
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<tr>
<td>12</td>
<td>Mr. K. S. Ramahobo</td>
<td>Primary Education</td>
</tr>
<tr>
<td>13</td>
<td>Mr. K. Kobedi</td>
<td>(Head of Demography at that time)</td>
</tr>
<tr>
<td>14</td>
<td>Ms. B.S. Motswagae</td>
<td>Central Statistics Office</td>
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<td>15</td>
<td>Mr. B. Thlhomelang</td>
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<td>16</td>
<td>Mr. O. Lebogang</td>
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<td>17</td>
<td>Mr. R. Ramosiane</td>
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<td>18</td>
<td>Mr. G. Mpugwa</td>
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<td>19</td>
<td>Mr. K. Johane</td>
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<tr>
<td>20</td>
<td>Ms. N. Nko</td>
<td>Central Statistics Office</td>
</tr>
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## APPENDIX-III: MAP PRODUCTION TEAM

**Cartography Unit, Central Statistics Office**

1. Thapelo T. Maruatona
2. Gift N. Mpugwa
3. Bakang S. Motswagae
4. Richard S. Ramosiane