ANALYSIS OF BOTSWANA CHILD FOCUSED INDICATORS

Based on

2001 Population and Housing Census

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PREFACE

Availability of indicators on the child population is critical for understanding the situation of the children in Botswana. Of fundamental importance in this regard is the fact that the Government of Botswana has committed itself to the Declaration and Plan of Action for Children. Periodic assessment of the levels of critical indicators is indeed a logical step.

The report is largely based on the data from the 2001 Population and Housing Census. In order to assess indicator trends, the 1991 Census figures are also used. Focus in this report is on the population aged 17 years and below. However, to provide proper context of the situation of children, some characteristics of the entire population are given.

This report contains 5 chapters which are arranged as follows: Chapter 1 provides an insight into the socio-demographics of the children population. Chapter 2 focuses on orphan children, as a special group of children that require attention. Chapters 3 and 4 give a general profile of the population and households, respectively. Lastly, for completeness, Chapter 5 concludes the report with some precautionary notes regarding the limitations of the data and implications on the indicators.

We would like to thank the many people who provided input into the report. In particular, we express appreciation to the Central Statistics Office, for providing the data used to produce the report.

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EXECUTIVE SUMMARY

The main findings for child-focused indicators from the analysis of the 2001 census are summarised below:

1. Children Socio-Demographic Analysis

Children Characteristics

The percentage share of the child population to the national population declined between 1991 and 2001, from 50.5 to 43.9 percent. Botswana's population is still relatively young, although the extent of this varies across districts. In the North East district the child population comprise 51.4 percent of the district population. Other districts with high percentage of children are Central with 49.1 and Southern with 48.5 percent.

Generally, rural districts have relatively young population compared with urban districts. Consequently census results reveal that there were more children in rural areas than in urban areas. In 2001 the percentage of children in rural areas was 52 percent compared with 48 percent for urban areas.

Overall the child population is almost equal gender wise, although this is a net result of high number of male children below age 5 years and the excess females over males from ages 5 years and above.

The age composition of the children population shows that the 55 percent of the child population were aged below 10 years whereas the age group 15 to 17 years accounted for about 17 percent. By comparison, in 1991 the population aged below 10 years accounted for 58 percent of the children population.

Childhood mortality increased between 1991 and 2001. Infant mortality rose from 48 to 55 deaths per 1000 live birth, child mortality from 16 to 19 deaths per 1000 while, the under-five mortality from 66 to 73 deaths per 1000. Gender disparities exist in all the childhood mortality, high rates being observed among male children.

The most common forms of disabilities among children are defect of sight, hearing, speech and inability to speak. These defects presented high figures for both the 1991 and 2001 censuses. Although cases of mental retardation among children were very low in 1991, probably due to under-reporting, mental retardation was quite pronounced in 2001. Gender disparities are visible in respect of disability, with male children consistently exhibiting large numbers of some form of disability compared to female children.

Children Education

Some form of early childhood learning is quite visible among children aged 3 and 4 years. Over 10 percent of children in these age groups were undergoing some form of childhood learning in 2001. Wide district variations exist, with lowest rates in rural districts and highest rates in the mining towns.

School attendance among children aged 10-14 years was 93 percent in 2001. However, against the background of the universal education drive, the figure is lower than expected. The proportion of children aged 10 to 14 years who have never attended school is quite insignificant, standing at 0.54%.

Children Living Arrangement

Most children are found in female-headed households compared to male-headed households. As a result female-headed households have large average household sizes than those headed by males.

Child-headed households account for over 2 percent of the total number of households in 2001, a drop from 3 percent in 1991. A very large majority of child-head households are in rural areas. Most of the children heads of households are male children.

Child access to communication mediums vary by type of mediums and residence. The percentage of children living in households with radios, television, personal computers and phones was 68.5, 22.7, 2.8 and 29.8 percent, respectively for the gadgets. Figures reveal that access to these communication medium is very high in cities and towns and low in rural districts.

In terms of the cleanliness of the living environment, most children live in household where solid waste is not collected for disposal. Although over 51 percent of all children live in households which dispose off its solid waste in rubbish pits, some solid waste material could be a serious hazard to children especially at very young ages.

All urban children lived in households with an improved water source as far back as 1991. Rural children's access to improved water source rose from 75.5 percent in 1991 to 93.8 in 2001.

There has been an increase in the number of children with access to latrines (ordinary or ventilated improved) over the years. Although the percentage of children living in households without any means of excreta disposal has been declining the 2001 level of 30 percent is very high.

2. Orphan-hood Analysis

Orphan District Distribution

Based on the 2001 Census, there were 111, 828 orphan children, representing 15.2 percent of the children population (737, 241). Almost 54 percent of all orphans are found in rural areas. Towns generally have low incidence of orphans compared to rural districts.

Orphan Analysis by Household Characteristics

Over 68 percent of the orphans are found in female-headed households. Generally the disproportionate gender disparity is very evident across all orphan types. Furthermore a high proportion of orphans live with grandparents, brothers/sister, nephew/niece or other relative. Almost 34 percent of the orphans are living with grandparents.

Orphans Economic Activity Outlook

Close to 56 percent of orphans live with heads of households who are not economically active. Although by implication 44 percent of orphans live with households whose heads are economically active, the majority of these heads are employed in elementary occupations.

Almost 6 percent of the orphans aged 12 to 17 are currently economically active in 2001. There are more male orphans who are economically active compared with female orphans.

Socio-demographic Variables

School attendance among the 10 to 14 year-olds is relatively high among non-orphans compared with orphans. Female children attendance rates, among either orphans or non-orphans are higher than those of males.

Although there is some differential in fertility levels of orphans and non-orphans, the figures however are not statistically significant.

Orphans and Vulnerable children

Orphan and vulnerable children constituted 10.5 of the total population in 2001, made up of 111 512 orphans and 33 380 non-orphan but vulnerable children. Incidence of orphans and vulnerable children vary markedly across districts. Towns, cities as well as districts within close proximity to Gaborone have relatively low rates when compared with the rest of rural districts.

3. General Population Analysis

General Population Characteristics

The 2001 census yielded a national population count of 1,680,863, up from 1,326,796 in 1991, reflecting an average annual increase of 2.4 percent. Considering the annul increase of 3.5 between 1981 and 1991, Botswana's population has been increasing at a decreasing rate over the years. The declining population growth was largely a result of the declining levels of fertility.

While census results show some change in the age composition, Botswana's population still remain largely youthful. The population aged 29 years and below accounted for almost 70 percent of Botswana's population. In regard to the gender dimension of the population, the sex ratio increased from 92 males per 100 females to 94 males per 100 females.

Fertility decreased during the period between the 1991 and 2001 censuses while mortality increased. The total fertility rate dropped from 4.2 children per woman in 1991 to 3.3 children per woman in 2001. On the other hand, the crude death rate rose from 11.4 deaths per 1000 population to 13.5^{1} deaths per 1000 population in 2001.

Age patterns show very high female mortality over the ages 18 to 34 years while on the other hand male mortality is very high from the mid thirties and remain very high for the rest of the ages. This pattern is likely to result from the AIDS pandemic in a setting where there is prevalence of inter-generational sexual relationships. The increase in mortality has also resulted with a reduction in life expectancy at birth, from 65 years in 1991 to 56 years in 2001.

Spatial Distribution

Over 54 percent of Botswana's population resides in urban areas, in comparison with 46 percent in 1991. This proportion is made up of population of towns and cities (comprising 22 percent) as well as that of villages classified as urban areas. There has been a phenomenal growth in the population of localities within the periphery of towns and cities.

4. Households and Housing Amenities

¹ The figure published by CSO is 12.4 which seem not to have been adjusted for the required 12 months period.

Households Characteristics

The number of households enumerated in the 2001 census was 404 706, reflecting an average annual increase of 2.89 percent over the 1991 figure of 276209. Average household size dropped by about one person per household between 1991 and 2001, from 4.7 persons per household to 4.1 persons per household. Towns and cities average household sizes dropped from 3.8 persons to 3.3 persons per household while the comparative figures for rural districts are 5.2 and 4.5 persons per household, respectively for the 1991 and 2001 census.

Household Amenities

Households with no access to a sanitary facility dropped from 45 percent in 1991 to 23 percent in 2001. Access to pit latrines and flush toilets rose between the two censuses. Inter-district variations exist in respect of the availability of toilet facilities. Households without toilet facilities in Ghanzi, Ngamiland West and Kweneng West districts represent 88 percent, 76 percent and 55 percent of each district's population.

Over 95 percent of all households have access to improved water sources compared with 89 percent in 1991. On this basis, there has been some improvements have been achieved over the 10 year-period interspacing the two censuses.

A shift in fuel used for cooking and lighting is evident from a comparative analysis of census results. Although there has been an increase in households using electricity for lighting, most households still use paraffin for lighting. There has been in a shift in the use of fuel-wood in favour of LP Gas.

With regard to refuse collection, only 36.4 percent of all households in Botswana had their solid waste collected for disposal. The use of rubbish pits is largely the most common mode of refuse disposal, accounting for 41.2 percent. This rather high figure might have serious environmental implication given that the use of a rubbish pit may lead to pollution of under ground water.

Summary Indicators

INDICATOR	1991	2001
1. CHILDREN INDICATORS		
Children Population (% of total population)	50.5 (670323)	43.0 (737 241)
0-4	14.6	11.2
5-9	14.8	12.4
10-14	13.8	12.5
15-17	7.3	7.3
Child Population (% Urban)	39.3	48.0
Child Population (% Rural)	60.7	52.0
Average Number of		
Persons per hhold (Households with Children)	6.3	5.8
Person per hhold (Households Without Children)	1.7	1.7
U5 Per household	0.7	0.5
Under-five Mortality		
Under-five Mortality Rate	63.0	74.0
Childhood Mortality rate	16.0	19.0
Infant Mortality Rate	48.0	56.0
Child Education		
Early Childhood Learning (age %)		
3 Years	0.0	7.5
4 years	0.0	13.0
Primary School Attendance Rate (% of 6-14 years)	62.8	77.4
Attendance among 10 - 14 years	87.5	92.9
Child-head households (%)	3.0 (8379)	2.1 (8660)
Children (%) Living in Household with access		
Improved Water Source	85.1	93.8
Sanitary Excreta Disposal Facility	44.6	29.9
Access to Solid Waste Collection	0.0	23.9
Children (%) Living in Household with Functioning		
Radio		68.5
Television		22.7
Phone		2.8
Personal Computer		29.8
2. ORPHAN INDICATORS		
Orphan (%) Residing in		
Urban Areas	-	46.2
Rural Areas	-	53.8
Paternal Orphans	-	63.2
0-14	-	46.3
15-17	-	16.9
Maternal Orphans	-	23.8
0-14	-	17.7
15-17		6.1
Double Orphans	-	13.0
0-14	-	9.0
15-17	-	4.0

Summary Indicators				
	1991	2001		
3. POPULATION (overall) CHARACTERSISTCS				
Life Expectancy at birth				
Male	63.0	52.0		
Female	67.0	57.0		
All	65.0	56.0		
Sex ratio at birth	92.0	94.0		
Population Density	2.3	2.9		
Dependency (Age –dependency ratio)				
Urban	45.7	54.2		
Rural	54.3	45.8		
All	93.0	71.4		
4. HOUSEHOLDS (overall) CHARACTERISTICS				
Households Heads (%)				
Male	52.9	53.9		
Female	47.1	46.1		
Average Household Size (Persons per household)				
Male	4.6	3.8		
Female	5.1	4.4		
All	4.7	4.1		
Households (%) with Functioning				
Radio	-	67.6		
Television	-	25.1		
Personal Computer		3.9		
Phone	-	33.5		

DEFINITIONS OF TERMS AND CONCEPTS

Child: Any person aged 17 years and below.

Infant: A child aged less than one year.

Child Focused Indicator: Indicators that are used to assess the situation of a child.

Infant Mortality Rate: The Infant mortality rate is the probability of a child dying before attaining the first birthday.

Child Mortality: The probability of dying between the ages 1-4 years.

Under Five Mortality Rate: The probability of dying before the fifth birthday

Age-Specific-Death Rate (ASDR): The age specific death rates (number of deaths divided by population in the age group).

Age Dependency Ratio: The ratio of the number of persons in the "dependent ages" (0-14 years + those aged 65 and over) to those in the "economically productive ages" (15-64 years) in a population.

Disability: Incapacities as a result of physical or mental deficiencies that manifest through bodily abnormalities, defects and impairment.

Household: Since the census used the de-facto approach, the definition used is "A household consists of one or more persons, related or unrelated, living together "under the same roof" (in the same lolwapa), and/or making common provisions for food and other living arrangements".

Household Head: The head of household is any person, male or female, at least 12 years old, who is regarded by other members as their head. This person may or may not be a blood relative of other members of the household. In exceptional circumstances where, amongst those who spent the census night with the particular household there is no person aged 12 and over, the eldest child was regarded as head.

Life Expectancy: An estimate of the average number of additional years a person could expect to live if the age specific death rates for a given year prevail for the rest of his or her life. Where the term is used without being qualified with respect to age, it refers to life expectancy at birth.

Orphan: The analysis adopted the definition by the Botswana Short Term Plan of Action on Orphans according to which an orphan is:

"Child below 18 years who has lost one (single parents) or two (married couples) biological or adoptive parents".

The operational definition used (paternal, maternal, and double) as described below fall short of the national definition.

Paternal Orphan: A Paternal orphan is a child below 18 years whose biological father has died but the biological mother is alive.

Maternal Orphan: A Maternal orphan is a child below 18 years whose biological mother has died but the biological father is alive.

Double Orphan: A double orphan is a child below 18 years who has lost both biological parents

Vulnerable Child: For the purpose of this analysis a "vulnerable child" is a person aged 17 years and below living in a household where there has been a recent death.

Orphans and Vulnerable Children (OVC): In the analysis "OVC" refers to a child who is *either* an orphan (paternal, maternal or double) *or* a vulnerable child as per the definition above.

Sex Ratio: The ratio of number of males per 100 females in a given population.

Urban Areas: All settlements on state land and settlements on tribal land with a population size of 5000 persons or more, with at least 75 percent of the labour force of the settlement engaged in non-subsistence agricultural activities. Any settlement that does not meet the above classification is otherwise considered rural.

1 INTRODUCTION

1.1 Background

This report was borne out of the fact that officially published census reports do not always provide all the information required by all users of statistics. In view of that, UNICEF took the initiative, following the 1991 census, to produce more detailed and focused reports. Three reports were produced based on the 1991 census; these were a national report containing district averages, district and sub-district reports containing disaggregated information by villages; and an atlas depicting inter-district disparities. These reports have proved invaluable in guiding development planning.

The 2001 census provided yet another opportunity for UNICEF to contribute to the census analyses by producing a report on child focused-indicators. This report is therefore a sequel to the three reports alluded to above. In terms of the scope of coverage, this report provides a child-focused perspective based on the 2001 census results.

The result of any analysis is not usually just an end to a process. In this regard, suffice it to note that, as a signatory to international conventions, the need to gauge Botswana's commitment to such is an imperative. A case in point in this respect is the World Summit for Children where Botswana committed herself to the Declaration and Plan of Action for Children. It is in pursuit of such commitment that periodic assessment of relevant indicators is necessary. Apart from the foregoing, the Botswana national vision (Vision 2016) is very emphatic about building a "Compassionate, Just and Caring Nation", and that inherently has a bearing on the current situation of children. In this connection child based indicators are critical for assessing the situation of children. In guaranteeing the children's rights, Government has put in place appropriate policies and supporting programmes. While periodic monitoring is necessary, a major impediment is data availability. Censuses therefore provide an important and rare opportunity for the assessment of the level of child-based indicators.

Indicators in this report and the ensuing analysis are based on the 2001 Population and Housing Census. Results from other sources, especially the 1991 census results are presented for comparison and to provide a measure of trends. For ease of comparison of the indicators, data from the two censuses have been subjected to a similar classification and analysis. This ensures that the observed changes are real rather than a result of variations in the methods of analysis. Among the indicators presented in this report are life expectancy, child population, average household size, children's living arrangements, orphanhood, child disability and household ownership of some communication mediums.

1.2 Objectives

Although the above background implicitly gives some insight into the analysis, the objectives of the analysis are summarised below.

- > To assess the situation of children in Botswana
- > To update the indicators developed after the 1991 census
- To provide time series data on the situation of children over the period 1991 to 2001

1.3 Overview of Report

The results of this analysis give a critical insight into the situation of children in Botswana. However, census data lack subject depth and therefore limits the extent to which children socio-demographics could be explored. Furthermore, there are conceptual limitations inherent in the methodology followed in the data collection. A more detailed account on this aspect is given on the last chapter.

The analysis presented in this report is presented in five chapters. Following this introductory chapter is the children's socio-demographic analysis (Chapter 2). This is followed by Chapter 2 which provides an analysis of orphans. Chapters 3 and 4 provide an overview of the characteristics of general population and households. Lastly, Chapter 5 concludes the report with some precautionary notes on the limitations or gaps in the data.

2 CHILDREN'S SOCIO-DEMOGRAPHIC ANALYSIS

2.1 Child Characteristics

a) Child Population

The percentage share of the child population to the total population has been declining over the years. In 1991 the population aged 0 to 17 years comprised 50.5 percent of the entire population, but by the year 2001 the share of the child population had dropped to 43.9 percent (Table 1). The distribution of the children population by type of residence reveals some slight differences between urban and rural areas, with 48 and 52 percent respectively. While overall the sex ratio of the children population is almost equal, this is the net result of high number of male infants and the excess of females over males from ages 5 years and above. A visual display of the age compostion of children is shown on Figure 1 below.



Children below 10 years of age accounted for 55 percent of the child population in 2001, a drop from 58 percent in 1991 (Table 1). This is due largely to the fertility decline between the two censuses.

b) Age Dependency

Households with children are carrying the heaviest burden in terms of age dependency ratios (Table 16). Among households with children, the age dependency ratio is close to 100, compared with 9 dependents for households without children. Considering the households with children, the weight of the economic burden is tilted towards households with orphan children, when compared with households without orphans. The age dependency for households with orphans is 105 per 100 persons in the working population, compared with 92 for households without orphan.

c) Under 5 Population

Attention is usually focused on the children aged below 5 years in view of child-based policy interventions. It is important therefore to establish not only the numbers but also to know their locations. Three districts account for 58.5 percent of the under 5 population - Central, Kweneng and Southern (Table 9). In towns and cities the percentage share of the under 5 children to the district population is generally below 10 percent whereas the corresponding figure in rural districts hovers around 12 percent of the district population.

d) Childhood Mortality Indicators

Childhood mortality indicators derived from the 2001 Population Census show a reversal in the trends observed in previous censuses. Childhood mortality rates were derived using an indirect² estimation approach (UN-Qfive), based on the number of women aged 15 - 49 years, the number of children ever born and the number of such children who have died.



Infant mortality based on the Coale and Demeny West Model was estimated at a level of 55 deaths per 1000 live births, compared with 48 deaths per 1000 in 1991. Child mortality rates stood at 19 deaths per 1000 births, up from 16 in 1991. The under five mortality stood at 73 deaths per 1000, a rise from the 1991 level of 66 deaths per 1000 live births. Gender disparities exist in all the childhood mortality, with high rates observed among male children.

Available data show that infant mortality rates vary quite markedly across districts, with a largest range of 54 deaths per 1000 live births. The lowest rate of 33 deaths per 1000 live birth was recorded in South East while the highest rate of 87 deaths per 1000 live births was observed in Ngamiland. Child mortality indicators are high in rural

² Current fertility figures, which are the basis for direct estimates, are not consistent with other related figures and therefore less reliable.

areas than in urban areas. With respect to infant mortality, the rural rate is 57 compared with 54 in urban areas.



e) Childhood Age-Specific Death Rates

There are 14 deaths per 1000 population children aged under 5 children years. Agespecific death rates for single ages of under 5 children reveals a real upsurge in the number of infant deaths. Figure 4 shows that for each age, the ASDR are higher in 2001 than in 1991. In 2001 infant deaths were at four times the 1991 level.



f) Childhood Disability

The interest in children with disability in Botswana is not only seen as humane, it also falls within the purview of the third pillar of the Botswana national Vision 2016 (Botswana Government,1997). According to this pillar, Botswana hopes to achieve "a compassionate, just and caring nation," which provides a social safety net for disadvantaged groups and accessibility to health treatment for all by the year 2016.

According to both the 1991 and the 2001 census, the most prevalent disabilities among children are defect of sight, hearing, speech and inability to speak (Table 5). In 2001 there were 2147 children with hearing defect, 1579 with sight effect, 1213 with speech

defect and 1043 unable to speak. Beyond the similarities in the incidence of disability between the two censuses, there has been a very high number of cases of mental retardation in 2001, compared with 19 in 1991. It is highly likely that the 1991 figure was low due to underestimation.

Most children with disabilities are found in rural areas. Male children consistently exhibit large numbers with some form of disability compared to female children.

2.2 Children's Education

a) Early Childhood Learning

Over 10 percent of the children aged 3 and 4 years were undergoing some form of childhood leaning, as per the 2001 census (Table 6. Huge variations are evident across the district, with a low of 5 percent in the North West District and a high of 43 percent in Jwaneng. Mining towns have some of the highest percentage of children aged 3 to 4 years attending school. No comparative analysis is possible since the minimum age for the education question in 1991census was 5 years.

b) Attendance by Primary School-Going Age

The official minimum age at which a child is eligible for admittance to government primary school is 6 years³. Allowing for 7 years primary education, the analysis has focused on children aged 6 to 13 years. Naturally the percentage of children attending school rises with age. While from the age of 8 years the percentage of children attending school is over 90 percent, the level only rises to 93 percent by ages 12 and 13 years (Table 7).

Attendance among female children is high (at 88 percent) compared with a level of 75.9 percent among males (Table 7). These levels yield an overall 77.4 percent of the children of primary school going age who were in school in 2001. By comparison the attendance levels in 2001 have risen over those observed in 1991, reflecting either access to education or the realisation of the importance of education.

³ The official minimum age is above the 5 years threshold used by English-medium school.



c) Attendance among 10-14 years olds

With automatic progression from primary to secondary school, the children population aged between 10 and 14 are expected to be attending school. This age range covers those children attending primary and secondary.

The proportion of children aged 10 to 14 years attending school at the time of the 2001 was 93 percent (Table 8). In view of the universal education policy the 7 percent of children aged 10 to 14 years who were not in school is a matter to be addressed. The 2001 attendance rate compares with 87.5percent in 1991, a rise by x percentage points over the ten period marked by the two censuses.

2.3 Children Living Arrangement

a) Preamble

Focus in this chapter is largely on household characteristics and housing amenities, to provide a context within which children live. Since the institutional population falls outside the domain of household and housing amenities, the term population in this section carries a restrictive connotation since it actually refers to what is often considered non-institutional population.

b) Household Situation

Almost 59 percent of the total 404706 households have at least one child living in the household (Table 4). These households contain 83 percent of the total population. This disparity is clearly manifested in household size of 5.8 and 1.7 persons per household, respectively, for households with children and those without. While the average household size of households with children has declined, from 6.7 persons per household in 1991 that of households without children remained unchanged.

c) Child-headed Households

Child-headed households account for over 2 percent (8660) of the total number of households in 2001, a drop from 3 percent (8379) in 1991 (Table 31). A very large majority of such children are in rural areas. Close to 57 percent of the child-headed households are headed by male children compared with 43 that are headed by female children.

d) Household With or Without Orphans

A total of 237,727 (or 58.7 percent) of all households in Botswana had at least one child (Table 4). Close to 53 percent of such households were in urban in areas. A breakdown of the households with children by presence or absence of orphans yields 26.6 percent having orphan children and 74.4 percent with non-orphan children.

Highest percentages of households with orphans are found in the North East and North West district, each accounting for 33 percent of all households in the district (Table 4). On the other hand, lowest percentages are in Gaborone, Jwaneng and Orapa, each with 18 percent of the number of household in the district.



There are indications that orphans live with relatively elderly persons when compared with non-orphans children. This is shown in the mean ages of 48 years and 45 years, respectively for household heads with orphan children and those with non-orphan children. Further analysis of the situation (Chapter 3) reveals a disproportionately high number of orphans live with their grandparent and thus resulting with heads with a high mean age.

e) Gender Dimensions

Gender disparities manifest in various forms in respect of the children living arrangement (Table 10). Whereas male-headed households account for 54 percent of all households, these households have only 45 percent of the children population (735 597). With 55 percent of the non-institutional children population found in female-

headed households, it is very clear that women carry more burden than males, with respect to caring for children.

f) Children by Type of Housing

Almost 86 percent of the children live in traditional, mixed or detached type of housing unit. Notwithstanding that, it is not possible to appraise the quality of the structures in which children live. According to the 2001 census results, over 7 percent of all children lived in a single room. To the extent that many of these children do not own the housing units, naturally these children are sharing a room with an adult and this has social implications on the child's development. There is therefore need for an in-depth analysis to shed more light on the situation of these children.

g) Children by Communication Mediums

Radios, televisions, personal computers and phones are very important communication and learning medium. Children's access to such mediums has a bearing on their sociopsycho development. The percentage of children living in households with such gadgets in 2001 is 68.5 percent with radio, 22.7 percent with television, 2.8 percent with personal computers and 29.8 percent with phones (Table 11).

Census figures reveal that endowment of communication mediums is high in cities and towns and low in rural districts. Ghanzi and Kgalagadi districts have the lowest percentage of children with access to all the four items.

h) Children by Mode of Solid Waste Disposal

Cleanliness of the living environment impacts on the health and safety of people living in that environment. This is even more important when considering the environment in which children live. The percentage of children by method of waste disposal is shown in the graph below (Table 12 and Figure 7). To the extent that rubbish pit does not present a safe waste disposal method, the majority of children could be considered to live in an environment that is unsafe or where health is somewhat compromised. Some solid waste material could be a serious hazard to the children especially at very young ages.



i) Children by Lighting Fuel Used

Although there has been an increase in the percentage of children living in household using electricity for lighting, paraffin is still largely the main fuel type used by households in which most children live (Table 13 and Figure 8). Use of candles remained the same over the ten-year decade marked by the two censuses, in spite of



their rather unsafe

nature. The extent to which some of the sources could be considered a hazard to the children is easy to visualize.

j) Children by Cooking Fuel Used

Usage of fuel is dependent on the availability and affordability of cooking fuel. The majority of children live in households using fuel-wood for cooking. The trend during the period interspacing the two censuses has seen a decline in the usage of firewood and paraffin, and an upsurge in usage of LP Gas (Table 14 and Figure 9).

Electricity usage by households is still very low hence a very insignificant proportion of children are living in households using electricity for cooking. In view of the move towards improved fuel quality, it could be concluded that children living arrangements have been improving, to some extent, over the years.



k) Children by Water Source

Safe drinking water is a basic necessity for good health. Unsafe drinking water can be a significant carrier of diseases such as trachoma, cholera, typhoid, and schistosomiasis. Drinking water can also be tainted with chemical, physical and radiological contaminants with harmful effects on human health. In addition to its association with disease, access to drinking water may be particularly important for women and children, particularly in rural Areas, who bear the primary responsibility for carrying water, often for long distances.

For the purposes of this report and for ease of comparison, improved water source refers to the combined total of piped water (in doors or stand pipe), borehole and well. As per this classification, all urban children lived in households with improved water source in 1991 compared with 75.5 percent in rural areas (Table 15). These yield an overall level of 85.1 percent of the children. In 2001 the figure rose to 93.8 percent, which shows some improvement in children living conditions. A comparison of the two censuses is displayed on Figure 10.



l) Children by Sanitary Facilities

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. Sanitary means of excreta disposal include: flush toilets connected to sewage systems or septic tanks, other flush toilets, improved pit latrines, and traditional pit latrines

The majority of children live in households without any means of excreta disposal. While the number children living in households without any form of excreta disposal declined between 1991 and 2001, from 55 to 30 percent, the current levels are still very high (Table 17).

Rural children living in households without any sanitary facility are in excess of 30 percent. There has been an increase in the number of children with access to latrines (ordinary or ventilated improved) over the years. However, notwithstanding the increase noted in the foregoing, pit latrines are not environmentally friendly hence children's exposure to opportunistic diseases linked to such facilities is quite high. Figure 11 presents a graphical display of children living arrangement, in respect of the percentage of children living in households using a particular mode of sanitary facility.



3 ORPHAN-HOOD ANALYSIS

3.1 Introduction

Children who are orphaned may be at increased risk of impoverishment, discrimination, denial of property rights and rights to inheritance, various forms of abuse, neglect, and exploitation of their labor or sexuality. Monitoring the level of orphanhood and the living arrangements of children assists in identifying those who may be at risk and in tracking changes over time. Orphanhood is frequently accompanied by prejudice and increased poverty- factors that can further jeopardize children's chances of completing school education and lead to adoption of strategies that increase their vulnerability to HIV. It is therefore important to monitor the extent to which AIDS support programmes succeed in securing the educational opportunities of orphaned children.

3.2 Distribution of Orphans by District

Based on the operational definition of an orphan, the 2001 census yielded 111, 828 orphans, representing 15.2 percent of the children population, which totals 737, 241 Table 18. Almost 54 percent of all orphans are found in rural areas. Seventy-three (73) percent of the total alluded to above were aged below 15 years.

Before proceeding with the analysis, it is important to note that 316 of the 111, 828 orphans were enumerated in institutions (prisons, schools, hospital, etc) and therefore a cross-analysis of orphans by household characteristics reduces the number of orphans to 111, 512.

Summary 1: comparison of orphan type and sex				
Туре	Male	Female	Total	
Paternal	35, 015	35, 696	70, 711	
Maternal	13, 301	13, 205	26, 586	
Double	7, 273	7, 258	14, 531	
Total	55, 589	56, 239	1 11,828	

In considering the spatial dimension, a useful indicator is the number of orphans as a percentage of the district population. The highest incidence of orphans is found in the North East, Central Tutume and Ngamiland West with close to 10 percent of their population being orphans. Lowest incidents of orphans are in the diamond mining towns and the capital city. The disparities in orphan incidents rate between towns/cities and rural districts are quite evident, with rural areas generally displaying higher rates.

Summary 2: Comparison of orphan type by Age Group (%)					
Туре	0-4	5-9	10-14	15-17	Total
Paternal	12.7	25.3	35.3	26.8	100
Maternal	9.2	25.7	39.5	25.6	100
Double	6.5	22.0	40.3	31.0	100
Total	11.0	25.0	36.0	27.0	100

In terms of the age composition, 36 percent of orphaned children fall below 10 years of age (Table 18). An interesting feature of the age distribution is (without exception) that the number of orphans increases with successive rise in single ages.

3.3 Orphans by Household Characteristics

a) Orphans by Household Headship

An important issue to consider in analysing data on orphan-hood is the characteristics of households in which orphans live. Over 68 percent of the orphan children are found in female-headed households (Table 19). Given that female resource endowment is less favourable vis-à-vis that of males, the vivid reality of the situation of orphans could be visualised.

Summary 3: Orphan type by sex of household head (%)				
Туре	Male	Female	Total	
Paternal	24.9	75.1	100	
Maternal	46.2	53.8	100	
Double	38.2	61.8	100	
Total	31.7	68.3	100	

The disproportionate gender disparity is very evident across all orphan types. Census results also reveal that even where the mother dies while the father was alive, most children affected tend to be under the care of a female head. This again has serious implications in terms of socio-economic burden.

b) Relationship of Orphan to Household Head

Another important variable to explore in analysing the situation of orphans is the relationship, (i.e. with who do orphan live?). Close to 64 percent of orphans live with grandparents, brothers/sister, nephew/niece or other relative. Considering maternal and double orphans, the percentage share living with these relatives is 76.2 and 84.9 percent respectively (Table 19). Almost 34 percent of the orphans are living with grandparents. It would therefore be very important to establish the employment status of caretakers such as grandparents. In the face of the HIV/AIDS scourge these results seem to confirm the sordid reality of the ensuing repercussions- children loosing their parents due to AIDS are under the care and support of these grandparents. Depending

on the age of the grandparent, the quality of childcare is likely to compromise the child's social development.

Summary 4: comparison of orphan type by Relationship to Heads (%)					
Туре	Grand Child	Brother/Sister Nephew/Niece	Other Relative	Other	Total
Paternal	29.5	15.9	9.4	45.2	100
Maternal	41.0	21.1	14.0	23.9	100
Double	41.0	27.9	16.0	15.1	100
Total	33.7	18.7	11.3	36.3	100

Incidentally, 40 percent of paternal orphans live with their mothers while by comparison only 17 percent of maternal orphans live with their fathers. This therefore seems to suggest that a child losing a mother would be more disadvantaged than having lost a father, other things being equal.

c) Orphans and Marital Status of Household Head

Most orphans live with household heads that are never married, living together or widowed. The three categories collectively account for 71 percent of the 111, 512 orphans.

Summary 5: comparison of orphan type by marital status of head (%)					
Туре	Married	Living Together +Never Married	Widowed	Other	Total
Paternal	23.1	46.3	27.9	2.7	100
Maternal	32.4	44.5	20.1	3.0	100
Double	30.6	48.5	17.5	3.4	100
Total	26.3	46.1	24.7	2.9	100

d) Orphans by Household Size

Close to 80 percent of the 111, 512 non-institutional orphans live in households of size 5 or more. To the extent that the national average household size is 4.2 persons per households, the possible prevailing living conditions to which the orphans are exposed or subjected are easy to visualise. Worse still, 24 percent of orphans live in households of size 10 or more persons. Double and maternal orphans are relatively worse off, with respect to the size of households in which they live.

3.4 Economic Activity Status

a) Orphans by Household Head's Usual Economic Activity

Over 55 percent of the orphans are found in households whose heads are not usually employed (mostly homemakers). Although usual economic activity give a more realistic picture in view of the length of the reference period⁴, the associated occupations for the 45 percent may not be established from the 2001 census.

Summary6: Orphan type by Head's economic activity status (%)						
Type Active Inactive Total						
Paternal	44.0	56.0	100			
Maternal	45.4	54.6	100			
Double	42.6	57.4	100			
Total	44.2	55.8	100			

Notwithstanding the foregoing, data on current⁵ economic activity reveal that these heads are likely to be engaged in low-level or low paying occupations (elementary occupations, craft and related workers, service and market workers). There is therefore less burden on high paying occupations – legislators, professionals etc, with respect to orphans care. Further analysis also reveals that as the household size increases so does the number of orphans. This again has serious implications in terms of socio-economic burden.

b) Orphans by Household Head Current Economic Activity Status

The 2001 census results show that about 56 percent of orphans live with heads of households who are not currently economically active. The remaining 44 percent of the orphan children live with households whose heads are economically active. This is made up of 39 percent living with currently employed and 5 percent whose heads are actively seeking work.

As a follow up, the summary table below gives the employment status of the household heads living with the 39 percent orphan children alluded to above. Of the number in reference (43 728), over 63 percent live with household heads that are employed in elementary occupations.

⁴ Usual Economic Activity is measured over 12 months.

⁵ In terms of current economic activity, working for at least one hour in the past seven days

Summary 7: Orphan by occupation group of household					
heads (%)					
Туре	Service	Craft	Elementary	Other	Total
Paternal	15.5	14.7	34.8	35.0	100
Maternal	12.5	17.4	29.9	20.2	100
Double	13.8	17.3	29.6	39.3	100
Total	14.5	15.7	33.0	36.9	100

c) Orphans Economic Activity Status

Almost 6 percent or 3472 of the orphans aged 12 to 17 were currently economically active in 1991. The picture barely changes irrespective of usual or current economic activity. However, there is a marked gender differential in that 8 percent of male orphans are economically active compared with 4 percent among female orphans. The disproportionate participation in household activities, which fall outside the domain what is considered economic activities, coupled with higher education uptake by females, may explain the gender disparity.

Census results reveal that the situation of joblessness among the child population (agedn12- 17 years) is worse for female orphans than their male counterparts. Unemployment rate among female orphans stood at 52 percent in 2001 compared with 34 percent among male orphans. This leads to an overall unemployment rate of 41 percent for orphans.

3.5 Analysis of Orphans by Socio-Demographic Variables

a) Education

Children aged 10 to 14 years are normally expected to be in school. As a special group, orphans are usually at a disadvantage compared with other children, in respect of their needs. It is important therefore to make a comparison between of education attainment of orphans and non-orphans.



School attendance among the 10 to 14 year-olds (Table 8) is slightly higher among non-orphans (at 92.8 percent) compared with orphans (at 91.9 percent). Female children attendance rates, among either orphans (at 93.8 percent) or non-orphans (94.3 percent) are higher than those of males, at 90.0 and 91.3 percent, respectively for male orphans and non-orphans. For all the orphans, school attendance is generally high. There is not much difference in school attendance amongst the different categories of orphans.

Generally, towns and district exhibit relatively higher school attendance percentages than rural districts. A district-wise comparison of school attendance shows that Ghanzi has the lowest levels, among either orphans or non-orphans. Bringing the gender dimension into the picture also reveals that female children have relatively high school attendance rates than their males counterparts, irrespective of residence or whether a child is an orphan or not.

b) Orphans by Fertility

There exists some differential in fertility levels of orphans and non-orphans. While there are about 3 births per 1000 non-orphans aged 12 to 17 years, the corresponding age-specific fertility rate (ASFR) for orphans is about 4 births per 1000. Apart from the overall rate, child bearing is higher among orphans at each age compared to their counterparts. However, the difference in the rates is not statistically significant.

Evidence suggests that children with surviving mothers have lower fertility than those with only their fathers surviving. The situation with regard to orphan fertility gets even worse when such children have lost both parents. Orphans are vulnerable to many socio-economic hardships and this therefore predisposes them as prey for sexual predators that lure them with gifts and other luxuries. Common knowledge suggests that some of these sexual predators are in fact guardians, or worse still, step fathers of these orphans.

3.6 Orphan and Vulnerable Children

For operational convenience, vulnerability has been considered in the context of the occurrence of a death in the household. The depth in the content of the census questions on the variables that are normally used to characterize vulnerability, limits the extent of the analysis.

Orphans and vulnerable children constitute 10.5 of the total population in 2001, made up of 8.1 percent (111 512) orphans and 2.4 percent (33 380) non-orphan children. Incidence of orphans and vulnerable children vary widely across districts. Low percentages are found in the diamond-mining towns of Orapa and Jwaneng, each with 5.3 of their population constituting orphans and vulnerable children. On the extreme end, the North East district has the highest cases of orphans and vulnerable children, with close to 14.6 of its population being orphans and vulnerable children. Towns, cities as well as districts within close proximity to Gaborone have district rates that fall below 10 percent whereas the rest of rural districts have OVC cases in excess of 10 percent.

4 GENERAL POPULATION ANALYSIS

a) Preamble

Attention in this report is mainly on child-focused indicators rather than the general population. This chapter and the subsequent one provide a complementary analysis and most importantly give proper context within which the situation of orphans in Botswana should be viewed and interpreted. In view of that, the ensuing analysis does not employ the requisite demographic zest that is normally used for the various topics that follow but rather provides just an overview.

4.1 **Population Characteristics**

a) Growth

Population change is attributed to three principal factors, fertility (births), mortality (deaths) and migration. The direction and indeed the magnitude of each of these determinants, in turn, depend on interplay of a myriad of other factors.

The 2001 Population and Housing Census yielded a de-facto count of 1,680, 863 (Table 27). This figures compares with a population total of 1,326, 796 in 1991, giving an average growth rate of 2.4 percent per annum between the two censuses. Of the 2001 population total, 23 427 persons were enumerated in institution and are generally referred to as the "institutional population".

Over the years Botswana's population has been increasing at diminishing rates. A comparison of the inter-census annual growth reveals that the rate dropped from 3.5 percent in 1991 to 2.4 percent in 2001. With the AIDS pandemic, there is a high likelihood that the trends observed might even drop further in future.

b) Age Composition

Botswana's population still remain relatively youthful. Close to 70 percent of the population is aged 29 years or below (Table 26 and Figure 12). Close to 40 percent of the population comprise persons aged below 15 years. Overall, the children population (17 year or below) contribute 43.9 percent to the total 2001 population, down from 50.5 percent in 1991. Although the situation has been improving over the years, in terms of reduction in percentage share of the children, current levels are still relatively high. These levels have serious implications with respect to economic burden since a high proportion of these children are largely dependents.

Incidentally 51.4 percent of the population of the North East district comprise children (population aged 17 years and below). Other high district percentages are found in the Central district (with 49.1 percent), Southern district (with 48.5 percent) and the North West, with about 46 percent (Table & Table 27)

The reduction in proportion of children between the 1991 and 2001 censuses has resulted with the mean population age rising by about two years – from about 23 to 25 years. Moreover, to the extent that the elderly population (aged 65 years and over) has remained stagnant at 5 percent for the two censuses, the aged group 15 to 64 years has experienced a high increase.



A change in the age characteristics is also revealed when examining the population pyramids for the two censuses. There has been some narrowing of the base of the 2001 population pyramid, indicating a decline in the number of young children (0-4 and 5-9 years), over the previous census figures. This is due largely to declining fertility levels that occurred between the two censuses. For instance, the total number of children born to a woman during her reproductive ages dropped from 4.2 children in 1991 to 3.3 children in 2001.

A useful indicator (crude though) of the economic burden implicit in and also based on the age composition is the age dependency ratio. The age dependency ratio improved between the two censuses, from 92 percent in 1991 to 71 percent in 2001. Essentially this means that in 2001 there were 71 "dependents" per 100 persons in the working ages.

c) Sex Composition

The sex ratio increased from 92 males per 100 females in 1991 to 94 males per 100 females in 2001 (Table 27). Notwithstanding that increase, the sex ratio in all the towns and cities has invariably declined between the two censuses. However, the mining towns still exhibit the highest district ratios. This overall pattern observed could be a result of migratory trends among females from rural to towns.
Considering the urban/rural scenarios, the urban areas sex ratio remained constant at 89 males per 100 females whereas by contrast the rural ratio rose from 94 in 1991 to 100 males per 100 females in 2001.

d) Fertility Trends

All the fertility indicators point to a decline in fertility rate between 1991 and 2001. Also noteworthy is the decline observed between 1981 and 1991.

The average number of children ever born to a woman (Total Fertility Rate) during her reproductive ages⁶ declined, from 4.2 children per woman in 1991 to 3.3 children per woman in 2001. As regards crude birth rate, the trend is similar.



e) Mortality Trends

The effect of the HIV/AIDS pandemic seems to have reversed the health gains realised over the years, resulting in increased mortality between 1991 and 2001. In contrast to the fertility trend, crude death rate (CDR) increased between 1991 and 2001, from 11.5 to 12.4 deaths per 1000 population. In absolute terms the number of deaths in 2001 was 22716^7 .

Age-specific-deaths rates (ASDR) show some very interesting observations (Table 28 and Figure 14). The ASDRs for ages 20 to 44 have doubled during the ten-year interval marked by the two censuses while among elderly persons the rate declined. Another important feature of the age distribution of deaths is best revealed by a graphical display of ASDRs on gender basis. Female ASDRs are high compared to that of males between the ages 20 to 34 years. Beyond ages 34 years a reversal pattern

⁶ Total fertility rate (TFR) is based on birth occurring to women aged 15 to 49 years.

 $^{^{7}}$ The reported figure of 20823 cover 11 months hence was adjusted by a factor of 12/11 months to bring it to 12 months.

emerges, in respect of males and females mortality. The mortality pattern observed above is the resulting impact of the HIV/AIDS epidemic.



Consistent with the trend noted above, children mortality indicators similarly rose between the two censuses. Under 5-mortality rate rose from 66 deaths per 1000 births in 1991 to 73 deaths per 1000 live births in 2001

A useful summary measure closely linked to mortality rate is the expectation of life at birth. The general trend shows that life expectancy has declined. As expected, life expectancy has followed the trends exhibited by both infant and child mortality rates. The life expectancy at birth had improved from 57 years in 1981 to 65 years in 1991. However it declined to 56 years in 2001, a drop of about 9 years between the last two censuses.



Not only has the 2001 life expectancy at birth dropped over the 1991 level, the rate is at par with the level observed 30 years earlier, in 1971.

4.2 Settlement Patterns/Spatial distribution

a) Distribution by District

Population distribution by district is similar for the two censuses, in percentage terms (Table 27). The population resident in the Central District accounted for the largest district share in both censuses, with a share of around 30 percent. Also important is the fact that there are proportionately more children in rural districts than in urban ones. At the national level, 52 percent of the child population was in rural areas in 2001, down from 61 percent in 1991.

b) Densities

The increase in population between the last two censuses resulted in a marked change in settlement patterns. Notably among the changes was the increase in population density by one person per square kilometre, from 2 persons in 1991 to 3 persons per square kilometre in 2001. Population densities in the two cities rose to over 1000 people per square kilometre. The sparsely populated districts have no discernable change in population densities between the two censuses.

c) Urbanisation

Over 54 percent of Botswana's population reside in urban areas in comparison with 46 percent in 1991. This proportion is made up of population of towns and cities (at 22 percent) as well as that of 27 large villages classified as urban. With regard to villages, there has been an addition of 8^8 villages to the list of 19^9 classified as urban villages following the 1991 census.

d) Town and Cities Peripheral Areas

Some phenomenal growth was witnessed in the villages within the periphery of towns and cities. Around Gaborone some villages recorded annual growth rates of close to 11¹⁰ percent while around Francistown and Lobatse a number of villages have annual growth rates of over 9 percent. With regard to Gaborone peripheral villages, Mogoditshane, Morope, Mmopane, Metsimotlhaba and Gaphatshwa doubled their

⁸ The 8 villages are Mmadinare, Shoshong, Tsabong, Gumare, Letlhakeng, Lerala, Kopong, and Maitengwe.

⁹ The 19 villages are Molepolole, Serowe, Kanye, Maun, Mahalapye, Mochudi, Palapye, Ramotswa, Mogoditshane, Moshupa, Thamaga, Tlokweng, Letlhakane, Ghanzi, Kasane, Tonota, Bobonong, Tutume, and Gabane.

¹⁰ An average annual growth rate over 7 percent indicates that the population of a given locality at least doubled in size.

population between 1991 and 2001. In the Francistown area, Borolong village doubled its population while Tati Siding almost doubled its population in size between 1991 and 2001. As regards the Lobatse satellite areas, Molapowabojang's population more than doubled between 1991 and 2001.

There appears to be some push factors in towns and cities, which must be identified for effective planning. Shortage of housing in towns is probably one of the push factors.

5 HOUSEHOLDS AND HOUSING AMENITIES

5.1 Household Characteristics

a) Growth

A total of 404, 706 households were enumerated in the 2001 census, reflecting a 3.9 percent annual growth on the 1991 figure of 276, 209 (Table 30). By comparing the population growth rate with the rate just alluded to, it appears there has been accelerated household formation in the years interspacing the two censuses.

b) Household Size

Average household size dropped by one person per household between 1991 and 2001, from 4.7 persons per household to 4.1 persons per household (Table 30). Towns and cities average household sizes dropped from 3.8 persons to 3.3 persons per household while the comparative figures for rural districts are 5.2 and 4.5 persons per household, respectively for the 1991 and 2001 census. Looking at the urban population divide, the average household size for urban was 3.9 in 2001 compared with 4.2 persons per household, respectively for 2001 and 1991.

Wide differences exist between average household size for households with children and those without. In 2001 the average household size for households with children was 5.8 persons per households compared with 1.7 persons per household in households without children. comparative figure for 1991 are 6.2 and 1.7 persons per household, respectively for household with and those without children.

c) Gender Disparity in Household Characteristics

Gender disparities exist between household sizes (Table 30). Whereas male-headed households' accounted for 53 percent of all households in 2001, by contrast the average household size is disproportionately larger for female-headed households. Average household size for female-headed households was 4.4 persons per household in 2001 compared with 3.8 persons per household among male-headed households. Similar disparities are observed from the 1991 census.

Gender disparity is also visible in the distribution of orphan children by heads of households. Sixty-nine (69) percent of orphan children live in female headed households. Once again the burden is heavily tilted towards females.

5.2 Housing and Amenities

a) Preamble

A more detailed situational analysis of children's living arrangement as well as their profile is given in the chapters 2 and 3. This section is aimed at providing supplementary details for contextual completeness. This overview focuses on a few indicators at national level, from a household viewpoint.

b) Number of Persons per Room

The number of persons per living room is a useful indicator of overcrowding. Comparing the figures for the last two censuses, it seems there has not been much improvement in this aspect. In 1991 the average number of persons per living room was 1.9 persons while in 2001 the figure was 1.8 persons per room, reflecting a very insignificant change. In terms of the persons per room, the living condition of children has not improved over the period 1991 to 2001.

c) Improved Water Supply

The 2001 Population and Housing Census indicate that 95 percent of all households have access to improved¹¹ water sources compared with 89 percent in 1991 (Table 25). On this basis, some improvements have been achieved over the 10 year-period interspacing the two censuses. The increase in access to improved water sources augurs well for the conditions in which children live.

d) Sanitary Facilities

Census results point to some improvements in access to sanitary facilities. Households with no access to a toilet facility dropped from 45 percent in 1991 to 23 percent in 2001 (Table 23) Access to pit latrines has risen, from 40 percent to 56 percent. By comparison, households with access to flush toilets rose from 13 percent in 1991 to 22 percent in 2001. Whilst in most of the districts only a few households have no access to toilet facilities, Ghanzi, Ngamiland West and Kweneng West districts have very high figures – 88 percent, 76 percent and 55 percent respectively. The situation in which children in these areas live could be visualised on that basis. Morevover, household level figures tend to downplay the severity of the situation when viewed against the percentage of children living in the associated households.

e) Energy Fuel

A shift in fuel used for cooking and lighting is evident from a comparative analysis of results from the two censuses. Fifty-nine percent of households used paraffin for lighting in 1991 compared with 64 percent in 2001 (Table 21 & 22). As regards electricity usage,

¹¹ Improved in this context refers to piped water indoors, stand pipe, and borehole/well.

the figure has risen from 10 percent to 25 percent, in terms of the percentage of households using that fuel for lighting. There has been a reduction in the percentage of households using wood for cooking over the ten-year period, in favour of LPG gas - a decline from 64 to 46 percent and a rise from 22 to 41 percent, respectively for households using firewood and LPG Gas. Amid concerns from environmentalist regarding the usage of firewood, the observed reduction is a positive development for the usage of natural resources.

f) Households Ownership of Communication Facilities

Household ownership of communication mediums (radio, television, personal computer and phones) depends to a large extent on their necessity as well as affordability of the particular item. Households ownership of these items therefore varies widely across district, with disproportionately high percentages in towns and cities.



Figure 16 above (and Table 20) shows that there are gender disparities in respect of ownership of radios, television, personal computers and phones. Male-headed households invariably are in the majority of households owning the gadget in reference, when compared with female-headed households. To the extent that most children live in female-headed households, the degree with which these disparities affect children's access to such gadgets is evident.

g) Refuse Disposal

Collection of solid waste for disposal remains largely a town and cities undertaking. Almost all households in towns and cities have their solid waste collected (either regularly or irregularly). At national level, 36.4 percent of all households in Botswana have solid waste collected from their households for disposal (Table 24). The use of rubbish pit for refuse disposal is largely the most common mode of disposal, accounting for 41.2 percent. This rather high figure might have serious environmental implication given that the use of a rubbish pit may lead to pollution of under ground water. Moreover in using of these pits, household seldom assess the suitability of the soil for the purpose at hand.

6 LIMITATIONS AND IMPLICATIONS ON THE INDICATORS

a) Preamble

Generally data from Botswana censuses are fairly reliable and therefore resulting indicators are fairly accurate. However, some limitations need to be outlined to give users of statistical information a feel regarding the perceived accuracy and reliability of the data.

b) Level of Detail

Census data do not provide enough details of the circumstances of the children, but rather only give a snapshot of the situation of children at the time of the census. It is not possible to establish whether the conditions of the child, as given during the census, represent the usual (de jure) or the situation as at the census (de facto) situation. There is need to collect detailed information on the de jure characteristics of the child.

c) Changes in sub-district Boundaries

It is usually better to provide indicators at the lowest administrative levels possible, i.e. sub-district level. However some changes occurred in some sub-district boundaries between the 1991 and the 2001 census. This renders comparison of indicators impossible at that level, for successive censuses. Apart from that, sub-district boundaries are often established on the basis of administrative convenience and this effectively means very little attention is paid to the identification of the boundaries.

d) Changes in Question Between Censuses

Information collected from one census to another tends to be variable, making the comparison of the data difficult. It is imperative to collect similar information across censuses to assess trends directly and accurately. While improvements in questions should be accommodated in successive censuses, the extent to which they affect indicator trend need due consideration.

e) Parental Survival and Orphans

In the case of parental survival, the connotation of real parent and biological parent may seem close but they are very distinct. In translating the parental survival question into Setswana the emphasis usually carries a practical connotation rather than the biological concept. Furthermore, even when the interpretation is correct, for cases where children were born out of wedlock and the biological father having abandoned the child, actual survivorship of the father might distort the picture regarding the classification of the affected child. The extent to which the resulting data could be affected by these issues is a matter to be considered in looking at derived indicators.

f) Deaths

In an effort to avoid the multiple recording of the same death by more than one household, only deaths of persons who stayed with the household for at least 14 days before the occurrence of the deaths were recorded. Thus non-household members who die in a household in reference would qualify to be recorded by the household provided they meet the 14-day criterion. There are lot of imperfection with the approach since there would be cases of deaths of persons who stayed less than 14 days with the household and also institutional deaths. The issue is, to what extent has the 14 days qualification been correctly understood or recalled accurately by the respondent.

g) Household Durables

Households were asked about their ownership of household durables. For obvious reasons, a qualification was made to restrict the ownership to durables in the housing unit in reference. Avoiding multiple counting of durable goods has a bearing on the quality of the results. While only items in good working condition were to be recorded, for items with component parts, does missing a part disqualify a durable good under the working condition criterion?

h) Reference Period For Ease of Recall

The reference period for economic activity, fertility and mortality questions was Independence Day 2000, which fell short of a year. While this arrangement is very useful for ease of memory recall, the resulting data must be adjusted accordingly. In making comparisons with other published indicators, it is not obvious when adjustment were made and when they were not. For instance the Crude Death Rate based on the unadjusted 2001 figure is 12.4 deaths per 1000 whereas adjusting results with a slightly higher level of 13.5.

i) Disability among children

Examining the disabilities at young ages seems to suggest a high degree of misclassification. For instance delayed speech might have been considered inability to speak. Furthermore, comparing the huge figure of mental disability recorded in 2001 with that observed in 1991 would suggest a high degree of inaccuracy in the figures. Also looking suspicious is the consistently high incidence of disability among males than females in spite of the fact that females account for a larger proportion of the totals number of children.

Apart from the issues raised above, there are cases of multiple disabilities hence the figures must be interpreted with caution. In view of that, percentages derived from the figures would be misleading.

j) Orphan and Vulnerable Children

Vulnerability is essentially a multidimensional phenomenon. Therefore attempting to measure or assess the levels of the phenomenon is a complicated matter. Against the background on the accuracy and the reliability of deaths data, only a superficial assessment of the situation is possible. This limitation actually is compounded by the defacto enumeration approach, which could result with a death reported by all persons who think they are affected by the death.

Recognizing the limitation an attempt was made during the 2001 census to ascertain the place of residence of the person prior to the occurrence of the death. However, even if the place of usual residence is ascertained in as far as the district, the death could not be linked¹² to the associated household.

k) Current Fertility Figure

Questions on current fertility seem not to have been answered correctly. Comparing the births with the number surviving should give an direct estimate of infant mortality but the number of deaths is not consistent with the figure obtain from the deaths by age.

¹² Linking is only possible up to the district level rather than the household

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APPENDICES

Age Group of Child							
District	0-4	5-9	10-14	15-17	Total	District %	
Gaborone	14,879	15,882	15,697	10,382	56,840	30.6	
Francistown	8,773	8,395	8,508	5,474	31,150	37.5	
Lobatse	2,906	2,913	2,859	1,879	10,557	35.6	
Selebi Phikwe	4,771	5,092	4,938	3,364	18,165	36.4	
Orapa	729	820	814	504	2,867	31.3	
Jwaneng	1,279	1,537	1,500	936	5,252	34.6	
Sowa Town	248	291	255	167	961	33.4	
Southern	21,812	23,675	24,194	13,621	83,302	48.5	
South East	5,939	6,396	6,481	4,116	22,932	37.8	
Kweneng	27,362	28,986	29,267	17,592	103,207	44.8	
Kgatleng	8,328	9,041	9,295	5,238	31,902	43.4	
Central	65,230	69,959	70,890	39,938	246,017	49.1	
North East	6,291	7,216	7,678	4,190	25,375	51.4	
North West	17,717	18,444	18,485	10,791	65,437	45.8	
Ghanzi	4,029	4,235	4,154	2,189	14,607	44.0	
Kgalagadi	5,353	5,414	4,953	2950	18,670	44.4	
Total	195,646	208,296	209,968	123,331	737,241	43.9	
%	26.5	28.3	28.5	16.7	100.0		
Urban	95,338	99,098	97,473	62,254	354,163		
Rural	100,308	109,198	112,495	61,077	383,078		
All	195,646	208,296	209,968	123,331	737,241		
Carr							
JEX	00.005	404 400	404 000	00.000	200.000		
	98,635	104,129	104,636	60,696	368,096		
⊦emale	97,011	104,167	105,332	62,635	369,145	_	
All	195,646	208,296	209,968	123,331	737,241	=	

Table 1: Child Population by Age Group and District 2001

Arra of		1,991			2,001	
Age of Child	Male	Female	Total	Male	Female	Total
00	20,880	21,092	41,972	21,755	21,090	42,845
01	16,663	16,615	33,278	18,245	17,888	36,133
02	18,951	19,150	38,101	18,588	18,446	37,034
03	19,824	19,862	39,686	19,790	19,703	39,493
04	20,358	20,270	40,628	20,257	19,884	40,141
05	19,368	19456	38,824	20,660	20,305	40,965
06	19,609	19751	39,360	21,147	20,666	41,813
07	19,635	19714	39,349	21,597	21,087	42,684
08	19,655	20069	39,724	20,458	21,034	41,492
09	19,296	20061	39,357	20,267	21,075	41,342
10	19,718	20400	40,118	22,179	22,286	44,465
11	18,387	18791	37,178	21,567	21,201	42,768
12	18,023	18809	36,832	20,428	20,736	41,164
13	16,600	17274	33,874	20,862	21,018	41,880
14	17,159	18,322	35,481	19,600	20,091	39,691
15	16,354	17,500	33,854	20,200	20,721	40,921
16	16,065	17,541	33,606	20,478	21,193	41,671
17	13,858	15,243	29,101	20,018	20,721	40,739
TOTAL	330,403	339,920	670,323	368,096	369,145	737,241

Table 2: Distribution of Children by Age and Sex 1991 and 2001

Distribution of Children by Age and Sex

Age of Child	1,991	%	2,001	%
00-04	193,665	28.89	195,646	26.54
05-09	196,614	29.33	208,296	28.25
10-14	183,483	27.37	209,968	28.48
15-17	96,561	14.41	123,331	16.73
TOTAL	670,323	100.00	737,241	100.00

District	Orphans	Non-orphans	Total
Gaborone	6,595	50245	56,840
Francistown	4,735	26415	31,150
Lobatse	1,496	9061	10,557
Selebi Phikwe	2,572	15593	18,165
Orapa	269	2598	2,867
Jwaneng	565	4687	5,252
Sowa Town	131	830	961
Southern	11,594	71708	83,302
South East	3,067	19865	22,932
Kweneng	14,664	88543	103,207
Kgatleng	4,086	27816	31,902
Central	40,905	205112	246,017
North East	4,855	20520	25,375
North West	11,403	54034	65,437
Ghanzi	2,091	12516	14,607
Kgalagadi	2,800	15870	18,670
Total	111828	625413	737,241
%	15.17	84.83	100.00

Table 3: Number of Children (Orphans and Non-orphans) by District

		Numbers			Percentage	l.
	With	Without	Total	With	Without	Total
District	Orphans	Orphans	Number	Orphans	Orphans	Number
Gaborone	4,393	20,247	24,640	17.83	82.17	100.00
Francistown	2,837	8,850	11,687	24.27	75.73	100.00
Lobatse	939	3,166	4,105	22.87	77.13	100.00
Selebi Phikwe	1,616	5,392	7,008	23.06	76.94	100.00
Orapa	210	929	1,139	18.44	81.56	100.00
Jwaneng	384	1,730	2,114	18.16	81.84	100.00
Sowa Town	91	294	385	23.64	76.36	100.00
Southern	6,554	18,861	25,415	25.79	74.21	100.00
South East	1,803	6,357	8,160	22.10	77.90	100.00
Kweneng	8,340	24,783	33,123	25.18	74.82	100.00
Kgatleng	2,298	7,872	10,170	22.60	77.40	100.00
Central	22,246	50,774	73,020	30.47	69.53	100.00
North East	2,399	4,975	7,374	32.53	67.47	100.00
North West	6,304	12,915	19,219	32.80	67.20	100.00
Ghanzi	1,234	3,185	4,419	27.92	72.08	100.00
Kgalagadi	1,665	4,084	5,749	28.96	71.04	100.00
Total	63,313	174,414	237,727	26.63	73.37	100.00
Urban	30,474	95,241	125,715	24.24	75.76	100.00
Rural	32,839	79,173	112,012	29.32	70.68	100.00

Table 4: Number of Households (with children) by Orphan Type by District

Table 5a: Disability among Children Aged 0 to 17 Years (2001)

Disability	00-04	05-14	15-17	Total
Defect of Seeing in 1 Eye	47	230	104	381
Defect of Seeing in 2 Eyes	99	706	393	1,198
Blindness in 1 Eye	18	154	57	229
Blindness in 2 Eyes	14	105	47	166
Defect of hearing in 1 Ear	68	417	106	591
Defect of hearing in 2 Ears	137	1,091	328	1,556
Deafness in 1 Ear	10	74	25	109
Deafness in 2 Ears	44	248	85	377
Defect of Speech	113	864	236	1,213
Inability to Speak	178	675	190	1,043
Inability to use 1 Leg	122	395	152	669
Inability to use 2 Legs	227	440	124	791
Inability to use 1 Arm	105	438	146	689
Inability to use 2 Arms	57	202	46	305
Moderate Retardation	81	616	263	960
Severe Retardation	75	284	63	422
Mental Illness	35	209	112	356
Epilepsy	86	444	128	658

Table 5b: Disability Among Children Aged 0 to 17 Years (1991

Disability	00-04	05-14	15-17	Total
Sight Defect (1 Eye)	35	185	65	285
Sight Defect (2 Eyes)	65	407	168	640
Blindness in 1 Eye	39	197	69	305
Blindness in 2 Eyes	46	87	33	166
Hearing defect (1 Ear)	55	285	96	436
Hearing defect (2 Ears)	118	1,008	239	1,365
Deafness in 1 Ear	7	47	22	76
Deafness in 2 Ears	44	213	56	313
Speech defect	131	747	179	1,057
Speaking inability	149	477	109	735
Inability to use 1 Leg	109	318	125	552
Inability to use 2 Legs	180	323	67	570
Inability to use 1 Arm	85	310	99	494
Inability to use 2 Arms	52	115	20	187
Mental Retardation	6	2	5	13
Severe Retardation	3	0	3	6

Table 6: Early Childhood Learning Programme (Ages 3 and 4 years): 2001

District	Total Number Children	Attending	% Attending
Gaborone	5778	1682	29.11
Francistown	3417	542	15.86
Lobatse	1121	258	23.02
Selebi Phikwe	1883	375	19.92
Orapa	280	117	41.79
Jwaneng	492	212	43.09
Sowa Town	82	30	36.59
Southern	9097	591	6.50
South East	2314	513	22.17
Kweneng	10966	789	7.19
Kgatleng	3279	452	13.78
Central	26911	1587	5.90
North East	2663	253	9.50
North West	7439	353	4.75
Ghanzi	1704	263	15.43
Kgalagadi	2208	191	8.65
Total	79634	8208	10.31
Sex			
Male	40047	3939	9.84
Female	39587	4269	10.78
All	79634	8208	10.31
Age			
03	39493	2976	7.54

40141

79634

5232

8208

13.03

10.31

04

All

Male			Female		Total		
Age	Number of Children	% Attending	Number of Children	% Attending	Number of Children	% Attending	
6	21147	37.50	20666	41.13	41813	39.29	
7	21597	79.29	21087	83.10	42684	81.18	
8	20458	89.24	21034	91.33	41492	90.30	
9	20267	91.32	21075	93.06	41342	92.20	
10	22179	91.55	22286	94.00	44465	92.78	
11	21567	91.73	21201	94.58	42768	93.14	
12	20428	91.74	20736	94.78	41164	93.27	
13	20862	90.82	21018	94.47	41880	92.65	
Total	168505	75.86	169103	88.45	337608	77.41	

Table 7a: Percentage of Children of Primary School Going Age Attending School, 2001

Table 7b:Percentage of Children of Primary School Going Age Attending School, 1991

	Male		Female		Total	
Age	Number of Children	% Attending	Number of Children	% Attending	Number of Children	% Attending
6	19609	13.66	19751	15.76	39360	14.72
7	19635	53.37	19714	61.05	39349	57.22
8	19655	78.06	20069	84.10	39724	81.11
9	19296	84.51	20061	89.74	39357	87.18
10	19718	85.46	20400	90.97	40118	88.26
11	18387	86.35	18791	92.28	37178	89.35
12	18023	82.97	18809	91.80	36832	87.48
13	16600	82.84	17274	91.17	33874	87.08
Total	150923	62.79	154869	68.71	305792	65.78

	Orphans		N	lon-Orpha	All Children		
District	Male	Female	All	Male	Female	All	
Gaborone	80.05	79.48	79.74	74.59	75.03	74.82	75.45
Francistown	76.58	77.59	77.13	67.07	68.38	67.76	69.33
Lobatse	77.31	76.85	77.06	69.36	71.16	70.31	71.37
Selebi Phikwe	77.85	78.64	78.29	69.43	72.10	70.86	72.01
Orapa	83.33	86.21	84.91	80.15	82.84	81.61	81.95
Jwaneng	86.78	81.23	83.51	79.56	77.30	78.35	78.95
Sowa Town	92.00	81.25	85.38	73.75	77.69	75.83	77.29
Southern	71.20	77.25	74.19	62.24	65.00	63.60	65.19
South East	82.04	84.02	83.06	71.89	74.03	72.96	74.43
Kweneng	69.97	74.10	72.05	60.55	64.99	62.77	64.21
Kgatleng	75.61	78.98	77.24	68.39	69.71	69.04	70.18
Central	72.24	75.16	73.67	61.41	63.44	62.41	64.44
North East	77.55	78.88	78.19	67.79	68.29	68.04	70.12
North West	69.86	73.29	71.57	59.68	61.40	60.55	62.64
Ghanzi	58.45	64.29	61.30	53.30	59.97	56.62	57.35
Kgalagadi	71.15	75.17	73.14	60.07	62.94	61.49	63.41
Total	72.80	75.96	74.39	63.6	66.10	64.87	66.44
Urban	76.26	78.48	77.45	67.66	70.32	69.06	
Rural	70.18	73.52	71.76	60.26	61.81	61.00	
Age							
Below 10	50.53	53.59	52.05	42.10	44.45	43.27	44.28
10-14	89.99	93.76	91.88	91.26	94.30	92.78	92.61
15-17	77.11	78.72	77.93	80.57	81.56	81.07	80.30
All	72.80	75.96	74.39	63.63	66.10	64.87	66.44

Table 8: Percentage of Children (Aged 2-17 Years) Still School Attendance by District and Sex

Table 9a: Percent Distribution of Under 5 Population 2001

	2001			2001 Percentage					Percentage		
District	Male	Female	Total	Male	Female	Total	Population				
Gaborone	7,492	7,387	14,879	7.60	7.61	7.61	8.00				
Francistown	4,409	4,364	8,773	4.47	4.50	4.48	10.57				
Lobatse	1,506	1,400	2,906	1.53	1.44	1.49	9.79				
Selebi Phikwe	2,363	2,408	4,771	2.40	2.48	2.44	9.57				
Orapa	366	363	729	0.37	0.37	0.37	7.97				
Jwaneng	632	647	1,279	0.64	0.67	0.65	8.43				
Sowa Town	132	116	248	0.13	0.12	0.13	8.61				
Southern	11,022	10,790	21,812	11.17	11.12	11.15	12.71				
South East	3,024	2,915	5,939	3.07	3.00	3.04	9.80				
Kweneng	13,923	13,439	27,362	14.12	13.85	13.99	11.88				
Kgatleng	4,286	4,042	8,328	4.35	4.17	4.26	11.33				
Central	32,703	32,527	65,230	33.16	33.53	33.34	13.01				
North East	3,155	3,136	6,291	3.20	3.23	3.22	12.74				
North West	8,818	8,899	17,717	8.94	9.17	9.06	12.39				
Ghanzi	2,046	1,983	4,029	2.07	2.04	2.06	12.15				
Kgalagadi	2,758	2,595	5,353	2.80	2.67	2.74	12.73				
Total	98,635	97,011	195,646	100.00	100.00	100.00	11.64				

Table 9b:Percent Distribution of Under 5 Population 1991

				F	Percentage	%	of Dist.
District	Male	Female	Total	Male	Female	Total	Population
Gaborone	6,410	6,661	13,071	6.63	6.87	6.75	9.79
Francistown	4,324	4,335	8,659	4.47	4.47	4.47	13.27
Lobatse	1,506	1,605	3,111	1.56	1.65	1.61	11.94
Selebi Phikwe	2,259	2,288	4,547	2.34	2.36	2.35	11.43
Orapa	424	443	867	0.44	0.46	0.45	9.82
Jwaneng	577	660	1,237	0.60	0.68	0.64	11.06
Sowa Town	85	68	153	0.09	0.07	0.08	6.87
Southern	11,443	11,523	22,966	11.84	11.88	11.86	15.58
South East	2,844	2,844	5,688	2.94	2.93	2.94	13.05
Kweneng	13,202	12,956	26,158	13.66	13.36	13.51	15.35
Kgatleng	4,257	4,221	8,478	4.40	4.35	4.38	14.68
Central	33,039	33,000	66,039	34.17	34.02	34.10	15.99
North East	3,753	3,608	7,361	3.88	3.72	3.80	16.98
North West	8,367	8,564	16,931	8.65	8.83	8.74	15.58
Ghanzi	2,019	1,984	4,003	2.09	2.05	2.07	16.19
Kgalagadi	2,167	2,229	4,396	2.24	2.30	2.27	14.12
Total	96,676	96,989	193,665	100.00	100.00	100.00	14.60

Table 10: Child Population by Sex of Household Head

District	Male	Female	Total
Gaborone	31982	24690	56672
Francistown	15355	15661	31016
Lobatse	5119	5406	10525
Selebi-Phikwe	9711	8418	18129
Orapa	1932	900	2832
Jwaneng	3344	1873	5217
Sowa Town	610	351	961
Southern	36855	46357	83212
South East	10875	11849	22724
Kweneng	48710	54451	103161
Kgatleng	14267	17591	31858
Central	99094	146466	245560
North East	9582	15750	25332
North West	26207	38986	65193
Ghanzi	8116	6440	14556
Kgalagadi	9275	9374	18649
Kgalagadi South	5934	5740	11674
Kgalagadi North	3341	3634	6975
Total	340309	413937	754246
Percentage	45.1	54.9	100.0

	Percentage Children in Households with: Total Child								
District	Radio	Television	Computer	Phone	Population				
Gaborone	83.4	63.7	15.3	68.6	56,672				
Francistown	82.5	45.0	5.8	52.3	31,016				
Lobatse	78.8	48.0	5.5	50.7	10,525				
Selebi-Phikwe	78.5	42.2	3.5	49.1	18,129				
Orapa	90.7	92.3	13.3	83.3	2,832				
Jwaneng	82.9	59.6	9.7	63.8	5,217				
Sowa Town	82.2	70.6	12.1	66.1	961				
Southern	64.3	15.7	1.0	21.2	83,212				
South East	79.6	41.3	5.1	52.1	22,724				
Kweneng	66.2	19.0	1.8	23.2	103,161				
Kgatleng	76.6	29.0	2.0	38.2	31,858				
Central	65.3	12.8	1.0	20.8	245,560				
North East	68.9	14.8	1.3	24.4	25,332				
North West	62.3	12.2	1.3	22.5	65,193				
Ghanzi	52.8	10.3	1.3	16.5	14,556				
Kgalagadi	56.2	9.9	0.5	19.0	18,649				
Total	68.5	22.7	2.8	29.8	735,597				

Table 11: Percentage of Child Population Living in Household with Communication Medium

Table 12a: Distribution of Child Population by Method of Solid Waste Collection used by Household

		Burnt/					
District	Collected I	ncinerated	Dumping	Rubbish Pit	Other	Not Stated	Total
Gaborone	52,784	418	715	1,153	1,550	52	56,672
Francistown	28,797	131	899	963	194	32	31,016
Lobatse	10,008	80	236	137	38	26	10,525
Selebi-Phikwe	17,418	75	166	384	80	6	18,129
Orapa	2,810	-	14	-	8	-	2,832
Jwaneng	4,999	-	23	183	10	2	5,217
Sowa Town	956	-	-	. 3	-	2	961
Southern	5,645	6,521	9,677	56,616	4,670	83	83,212
South East	7,396	1,737	4,286	8,301	983	21	22,724
Kweneng	8,480	10,242	15,220	63,273	5,790	156	103,161
Kgatleng	4,086	6,023	3,004	17,625	1,078	42	31,858
Central	19,495	29,027	40,902	138,148	17,563	425	245,560
North East	3,748	1,723	1,979	16,819	997	66	25,332
North West	5,769	5,177	5,570	44,095	4,454	128	65,193
Ghanzi	1,929	934	1,591	8,754	1,321	27	14,556
Kgalagadi	1,470	1,160	980	14,723	312	4	18,649
Total	175,790	63,248	85,262	371,177	39,048	1,072	735,597
Percentage	23.9	8.6	11.6	50.5	5.3	0.1	100.0

Table 12b: Distribution of Child Population by Method of Solid Waste Collection used by Household

		Burnu					
District	Collected	Incinerated	Dumping	Rubbish Pit	Other	Not Stated	Total
Gaborone	93.1	0.7	1.3	2.0	2.7	0.1	100.0
Francistown	92.8	0.4	2.9	3.1	0.6	0.1	100.0
Lobatse	95.1	0.8	2.2	1.3	0.4	0.2	100.0
Selebi-Phikwe	96.1	0.4	0.9	2.1	0.4	0.0	100.0
Orapa	99.2	-	0.5	-	0.3	-	100.0
Jwaneng	95.8	-	0.4	3.5	0.2	0.0	100.0
Sowa Town	99.5	-	-	0.3	-	0.2	100.0
Southern	6.8	7.8	11.6	68.0	5.6	0.1	100.0
South East	32.5	7.6	18.9	36.5	4.3	0.1	100.0
Kweneng	8.2	9.9	14.8	61.3	5.6	0.2	100.0
Kgatleng	12.8	18.9	9.4	55.3	3.4	0.1	100.0
Central	7.9	11.8	16.7	56.3	7.2	0.2	100.0
North East	14.8	6.8	7.8	66.4	3.9	0.3	100.0
North West	8.8	7.9	8.5	67.6	6.8	0.2	100.0
Ghanzi	13.3	6.4	10.9	60.1	9.1	0.2	100.0
Kgalagadi	7.9	6.2	5.3	78.9	1.7	0.0	100.0
Total	23.9	8.6	11.6	50.5	5.3	0.1	100.0

Burnt/

District	Electricity	Solar Power	Gas	Bio- gas	Wood	Paraffin	Candle	Candle/ Paraffin	Other	Not Stated	Total
Gaborone	30937	65	434	23	28	20615	2224	2292	43	11	56672
Francistown	11666	45	223	27	106	14000	2845	1991	86	27	31016
Lobatse	3424	11	106	4	24	4404	1499	1020	9	24	10525
Selebi- Phikwe	8551	14	87	3	57	7964	742	677	23	11	18129
Orapa	2806	0	26	0	0	0	0	0	0	0	2832
Jwaneng	3495	13	38	1	4	1305	243	106	8	4	5217
Sowa Town	956	0	4	0	0	0	0	0	0	1	961
Southern	5989	228	256	27	6805	47379	14496	7742	212	78	83212
South East	8281	32	127	14	83	10971	1711	1446	42	17	22724
Kweneng	13219	167	621	63	10814	64815	5452	7663	258	89	103161
Kgatleng	7784	37	141	23	621	19652	1509	1984	78	29	31858
Central	24773	347	713	109	23562	165915	11108	17312	1444	277	245560
North East	2165	54	83	42	461	18414	1760	2238	81	34	25332
North West	8839	141	153	31	5505	35172	7485	6268	1328	271	65193
Ghanzi	1396	36	43	5	3200	5369	2288	1463	741	15	14556
Kgalagadi	1402	97	41	2	2026	8688	4335	1785	264	9	18649
Total	135683	1287	3096	374	53296	424663	57697	53987	4617	897	735597
Percentage	18.4	0.2	0.4	0.1	7.2	57.7	7.8	7.3	0.6	0.1	100.0

Table 13 a: Distribution of Child Population by Lighting Source Used by Household

Table 13b: District Distribution of Child Population by Lighting Source Used by Household

		Solar						Candle/Par			
District	Electricity	Power	Gas	Bio-gas	Wood	Paraffin	Candle	affin	Other	Not Stated	Total
Gaborone	54.6	0.1	0.8	0.0	0.0	36.4	3.9	4.0	0.1	0.0	100.0
Francistown	37.6	0.1	0.7	0.1	0.3	45.1	9.2	6.4	0.3	0.1	100.0
Lobatse	32.5	0.1	1.0	0.0	0.2	41.8	14.2	9.7	0.1	0.2	100.0
Selebi-Phikwe	47.2	0.1	0.5	0.0	0.3	43.9	4.1	3.7	0.1	0.1	100.0
Orapa	99.1	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Jwaneng	67.0	0.2	0.7	0.0	0.1	25.0	4.7	2.0	0.2	0.1	100.0
Sowa Town	99.5	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	100.0
Southern	7.2	0.3	0.3	0.0	8.2	56.9	17.4	9.3	0.3	0.1	100.0
South East	36.4	0.1	0.6	0.1	0.4	48.3	7.5	6.4	0.2	0.1	100.0
Kweneng	12.8	0.2	0.6	0.1	10.5	62.8	5.3	7.4	0.3	0.1	100.0
Kgatleng	24.4	0.1	0.4	0.1	1.9	61.7	4.7	6.2	0.2	0.1	100.0
Central	10.1	0.1	0.3	0.0	9.6	67.6	4.5	7.1	0.6	0.1	100.0
North East	8.5	0.2	0.3	0.2	1.8	72.7	6.9	8.8	0.3	0.1	100.0
North West	13.6	0.2	0.2	0.0	8.4	54.0	11.5	9.6	2.0	0.4	100.0
Ghanzi	9.6	0.2	0.3	0.0	22.0	36.9	15.7	10.1	5.1	0.1	100.0
Kgalagadi	7.5	0.5	0.2	0.0	10.9	46.6	23.2	9.6	1.4	0.0	100.0
Total	18.4	0.2	0.4	0.1	7.2	57.7	7.8	7.3	0.6	0.1	100.0

District	Electricity	S/Power	Gas	B/as	Wood	Paraffin	Other	Not Stated	Total
Gaborone	7738	224	42656	263	1150	4389	200	52	56672
Francistown	1767	64	16914	167	9213	2737	109	45	31016
Lobatse	442	20	7382	40	892	1684	30	35	10525
Selebi- Phikwe	3858	61	8298	89	4652	1091	57	23	18129
Orapa	127	0	2700	3	0	2	0	0	2832
Jwaneng	197	11	4383	21	93	487	8	17	5217
Sowa Town	317	4	553	18	49	14	4	0	959
Southern	451	67	18251	498	60428	2448	1011	58	83212
South East	1136	77	14504	86	5556	1140	211	14	22724
Kweneng	1254	163	35241	907	61328	3829	393	46	103161
Kgatleng	525	33	11451	208	18501	961	157	22	31858
Central	1932	172	34488	904	203039	3921	815	289	245560
North East	187	18	2672	150	21791	451	46	17	25332
North West	900	60	10002	173	52738	1089	156	75	65193
Ghanzi	80	13	3266	57	10800	154	184	2	14556
Kgalagadi	95	17	3052	69	15170	175	63	8	18649
Total	21006	1004	215813	3653	465400	24572	3444	703	735595
Percentage	2.86	0.14	29.34	0.50	63.27	3.34	0.47	0.10	100.00

Table 14a: Distribution of Child Population by Cooking Source Used by Household

Table 14b: District Percentage Distribution of Child Population by Cooking Source Used by Household

District	Electricity	S/Power	Gas	B/gas	Wood	Paraffin	Other	Not Stated	Total
Gaborone	13.65	0.40	75.27	0.46	2.03	7.74	0.35	0.09	100.0
Francistown	5.70	0.21	54.53	0.54	29.70	8.82	0.35	0.15	100.0
Lobatse	4.20	0.19	70.14	0.38	8.48	16.00	0.29	0.33	100.0
Selebi-Phikwe	21.28	0.34	45.77	0.49	25.66	6.02	0.31	0.13	100.0
Orapa	4.48	0.00	95.34	0.11	0.00	0.07	0.00	0.00	100.0
Jwaneng	3.78	0.21	84.01	0.40	1.78	9.33	0.15	0.33	100.0
Sowa Town	33.06	0.42	57.66	1.88	5.11	1.46	0.42	0.00	100.0
Southern	0.54	0.08	21.93	0.60	72.62	2.94	1.21	0.07	100.0
South East	5.00	0.34	63.83	0.38	24.45	5.02	0.93	0.06	100.0
Kweneng	1.22	0.16	34.16	0.88	59.45	3.71	0.38	0.04	100.0
Kgatleng	1.65	0.10	35.94	0.65	58.07	3.02	0.49	0.07	100.0
Central	0.79	0.07	14.04	0.37	82.68	1.60	0.33	0.12	100.0
North East	0.74	0.07	10.55	0.59	86.02	1.78	0.18	0.07	100.0
North West	1.38	0.09	15.34	0.27	80.90	1.67	0.24	0.12	100.0
Ghanzi	0.55	0.09	22.44	0.39	74.20	1.06	1.26	0.01	100.0
Kgalagadi	0.51	0.09	16.37	0.37	81.34	0.94	0.34	0.04	100.0
Total	2.86	0.14	29.34	0.50	63.27	3.34	0.47	0.10	100.0

						I	mproved So	ource %
District	Piped	Well	Borehole	Other	Not Stated	Total	2001	1991
Gaborone	56,672	0	0	0	0	56,672	100.0	100.0
Francistown	31,016	0	0	0	0	31,016	100.0	100.0
Lobatse	10,525	0	0	0	0	10,525	100.0	100.0
Selibe Phikwe	18,129	0	0	0	0	18,129	100.0	100.0
Orapa	2,832	0	0	0	0	2,832	100.0	100.0
Jwaneng	5,217	0	0	0	0	5,217	100.0	100.0
Sowa Town	961	0	0	0	0	961	100.0	100.0
Southern	71,107	1,081	4,193	6,778	53	83,212	91.8	78.4
South East	21,640	16	307	759	2	22,724	96.7	94.3
Kweneng	89,089	1,531	5,998	6,478	65	103,161	93.7	90.7
Kgatleng	28,500	468	1,493	1,381	16	31,858	95.6	76.9
Central	192,871	12,185	24,250	15,999	255	245,560	93.4	88.1
North East	22,884	265	180	1,985	18	25,332	92.1	84.0
North West	47,851	2,676	5,890	8,734	42	65,193	86.5	88.4
Ghanzi	9,876	143	3,158	1,374	5	14,556	90.5	73.0
Kgalagadi	15,505	55	1,784	1,305	0	18,649	93.0	92.5
Total	624,675	18,420	47,253	44,793	456	735,597	93.8	85.1
2001 (%)	84.9	2.5	6.4	6.1	0.1	100.0	93.8	
1991 (%)	69.5	9.6	6.0	0.0	0.3	100.0	85.1	

Table 15: Child Population by Water Source Used in Household

Table 16a: Dependency by Presence of Children (orphans and non-orphans) in Household

	0-14	15-64	65+	Dependency
With Orphan Child	196013.1	206,132	21109.0	105.3
With Non-orphan Child	418,750	495,597	39,292	92.4
Without Children	-	257,877	22,666	8.8
Total	614,763	959,607	83,067	72.7

Table 16b: Dependency Ration by Urban Rural

	0-14	15-64	65+	Dependency
Urban	292671	584556	33253	55.8
Rural	323379	396712	50292	94.2
Total	616050	981268	83545	71.3

	Flush	Pit Latrine	None	Not Stated	Total	% Flush
Gaborone	31,828	24,793	45	6	56,672	56.2
Francistown	9,956	20,969	83	8	31,016	32.1
Lobatse	3,873	6,636	7	9	10,525	36.8
Selibe Phikwe	e 7,812	10,284	28	5	18,129	43.1
Orapa	2,824	8	0	0	2,832	99.7
Jwaneng	4,268	767	180	2	5,217	81.8
Sowa Town	961	0	0	0	961	100.0
Southern	3,264	54,744	25,136	68	83,212	3.9
South East	5,048	16,398	1,278	0	22,724	22.2
Kweneng	7,461	65,546	30,075	79	103,161	7.2
Kgatleng	2,797	24,990	4,044	27	31,858	8.8
Central	13,445	136,584	95,329	202	245,560	5.5
North East	1,425	17,117	6,733	57	25,332	5.6
North West	3,580	21,566	39,989	58	65,193	5.5
Ghanzi	1,048	3,573	9,918	17	14,556	7.2
Kgalagadi	1,129	10,629	6,886	5	18,649	6.1
Total	100,719	414,604	219,731	543	735,597	13.7
%	13.7	56.4	29.9	0.1	100.0	13.7

Table 17a: Number of Children living in Households by Toilet Facility Used (2001)

District	Flush	Pit Latrine	None	Not Stated	Total	% Flush
Gaborone	17,153	26,541	165	561	44,420	38.6
Francistown	5,185	14,966	6,042	235	26,428	19.6
Lobatse	2,609	7,084	680	196	10,569	24.7
Selebi Phikwe	5,853	7,176	2,473	129	15,631	37.4
Orapa	3,566	2	2	19	3,589	99.4
Jwaneng	3,582	450	10	20	4,062	88.2
Sowa Town	369	6	61	0	436	84.6
Southern	1,250	33,402	47,784	670	83,106	1.5
South East	1,859	14,417	4,620	145	21,041	8.8
Kweneng	2,689	31,916	57,230	564	92,399	2.9
Kgatleng	959	17,064	12,466	170	30,659	3.1
Central	4,992	66,696	155,277	1,179	228,144	2.2
North East	531	6,914	17,977	207	25,629	2.1
North West	1,394	8,807	43,639	295	54,135	2.6
Ghanzi	462	1,414	10,068	67	12,011	3.8
Kgalagadi	454	3,497	12,153	125	16,229	2.8
Total	52,907	240,352	370,647	4,582	668,488	7.9
%	7.9	36.0	55.4	0.7	100.0	7.9

	Ν	lumbers			Percentages			
District	Paternal	Maternal	Double	Total	Paternal	Maternal	Double	Total
Gaborone	4,271	1,440	884	6,595	6.04	5.42	6.08	5.90
Francistown	3,020	1,079	636	4,735	4.27	4.06	4.38	4.23
Lobatse	958	355	183	1,496	1.35	1.34	1.26	1.34
Selebi Phikwe	1,587	667	318	2,572	2.24	2.51	2.19	2.30
Orapa	152	84	33	269	0.21	0.32	0.23	0.24
Jwaneng	338	163	64	565	0.48	0.61	0.44	0.51
Sowa Town	83	28	20	131	0.12	0.11	0.14	0.12
Southern	7,354	2,901	1339	11,594	10.40	10.91	9.21	10.37
South East	2,043	615	409	3,067	2.89	2.31	2.81	2.74
Kweneng	9,507	3,247	1910	14,664	13.44	12.21	13.14	13.11
Kgatleng	2,500	1,075	511	4,086	3.54	4.04	3.52	3.65
Central	26,090	9,660	5155	40,905	36.90	36.33	35.48	36.58
North East	3,058	1,050	747	4,855	4.32	3.95	5.14	4.34
North West	7,164	2,619	1620	11,403	10.13	9.85	11.15	10.20
Ghanzi	1,058	711	322	2,091	1.50	2.67	2.22	1.87
Kgalagadi	1,528	892	380	2,800	2.16	3.36	2.62	2.50
Total	70,711	26,586	14,531	111,828	100	100	100	100
Urban	33,206	11,758	6,650	51,614	46.96	44.23	45.76	46.15
Rural	37,505	14,828	7,881	60,214	53.04	55.77	54.24	53.85
	70,711	26,586	14,531	111,828	100	100	100	100
Sex								
Male	35,015	13,301	7273	55,589	49.52	50.03	50.05	49.71
Female	35,696	13,285	7258	56,239	50.48	49.97	49.95	50.29
All	70,711	26,586	14,531	111,828	100	100	100	100
Age								
0-4	8,947	2,441	962	12,350	12.65	9.18	6.62	11.04
5-9	17,888	6,831	3,203	27,922	25.30	25.69	22.04	24.97
10-14	24,948	10,504	5,861	41,313	35.28	39.51	40.33	36.94
15-17	18,928	6,810	4,505	30,243	26.77	25.61	31.00	27.04
All	70,711	26,586	14,531	111,828	100	100	100	100

Table 18: Distribution of Orphans BY Orphan Type by District

				Pe	ercentages	
Relationship To Head	Sex of He	ad	Total	Sex of H	ead	Total
	Male	Female		Male	Female	
Head	1,183	1,045	2,228	3.4	1.4	2.0
Spouse/Partner	78	12	90	0.2	0.0	0.1
Son/Daughter	5,215	28,625	33,840	14.8	37.6	30.3
Child-in-Law	24	24	48	0.1	0.0	0.0
Step Child	491	461	952	1.4	0.6	0.9
Grand Child	11,371	26,203	37,574	32.2	34.4	33.7
Brother/Sister	3,789	5,825	9,614	10.7	7.6	8.6
Nephew/Niece	5,676	5,600	11,276	16.1	7.3	10.1
Other Relative	5,355	7,267	12,621	15.2	9.5	11.3
Not Related	2,118	1,150	3,268	6.0	1.5	2.9
Total	35,300	76,212	111,512	100.0	100.0	100.0
%	31.7	68.3	100.0			

Table 20: Percentage of Households Owing Functioning Communication Mediums

					Perc	Percentage Ownership per Dist			
District	Radio	Television	Computer	Phone	Radio	Television	Computer	Phone	
Gaborone	44,540	28,401	I 7,371	34,137	76.17	48.57	12.61	58.38	
Francistown	17,853	8,644	1,262	10,783	77.21	37.38	5.46	46.63	
Lobatse	6,392	3,319	9 412	3,697	75.00	38.94	4.83	43.38	
Selebi Phikwe	11,128	5,077	7 528	6,354	72.93	33.27	3.46	41.64	
Orapa	2,036	1,785	5 322	1,694	78.98	69.24	12.49	65.71	
Jwaneng	3,458	2,120) 394	2,570	73.87	45.29	8.42	54.90	
Sowa Town	771	606	6 101	602	78.75	61.90	10.32	61.49	
Southern	22,987	6,058	3 470	8,416	61.79	16.28	1.26	22.62	
South East	11,147	5,672	2 929	7,309	75.42	38.38	6.29	49.45	
Kweneng	34,501	10,777	7 1,187	13,728	65.62	20.50	2.26	26.11	
Kgatleng	12,513	4,578	3 411	6,043	73.37	26.84	2.41	35.43	
Central	70,067	16,118	3 1,372	25,105	63.53	14.61	1.24	22.76	
North East	7,063	1,722	2 163	2,810	65.19	15.89	1.50	25.94	
North West	19,193	4,585	5 648	8,253	62.09	14.83	2.10	26.70	
Ghanzi	4,274	1,028	3 120	1,762	54.96	13.22	1.54	22.66	
Kgalagadi	5,459	1,223	3 105	2,283	56.49	12.66	1.09	23.63	
Total	273,382	101,713	15,795	135,546	67.55	25.13	3.90	33.49	
Urban	174691	82728	3 13990	109099	74.41	35.24	5.96	46.47	
Rural	98689	18990) 1805	26440	58.07	11.17	1.06	15.56	
Rural	98689	18990) 1805	26440	58.07	11.17	1.06	15.	

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		1991			2001	
Energy Source	Urban	Rural	Total	Urban	Rural	Total
Electricity	17.5	2.1	10.1	37	8.1	24.8
Solar	-	-	-	0.1	0.4	0.2
Gas (LPG)	1.2	0.3	0.8	0.7	0.4	0.5
Biogas	-	-	-	0.1	0.1	0.1
Wood	0.8	23.1	11.4	0.6	12.5	5.6
Paraffin	65.7	63.1	64.5	49.2	59.2	53.4
Candle	14.1	9.3	11.8	7	10.9	8.6
Paraffin/Candle	-	-	-	5.2	7.1	6
Other	0.7	2.1	1.4	0.1	1.3	0.6
Not Stated	-	-	-	0.1	0.2	0.1
	100	100	100	100.1	100.2	100.0

 Table 21: Percentage of Households by Principal Energy Source Used for Lighting (1991 and 2001)

Number of Households

145,106 131,103 276,209 234,757 169,949 404,706

Table 22: Percentage of Households by Principal Cooking Energy Source Used

		1991		2001			
Energy Source	Urban	Rural	Total	Urban	Rural	Total	
Electricity	4.8	0.3	2.7	7.6	1.08	4.86	
Solar	-	-	-	0.28	0.08	0.19	
Gas (LPG)	35.6	6.3	21.6	57.65	17.01	40.59	
Bio-gas	-	-	-	0.66	0.44	0.57	
Wood/charcoal	40.6	90.6	64.3	22.83	77.34	45.72	
Paraffin	18.2	2.5	10.7	10.47	3.47	7.53	
Cow dung	-	-	-	0.02	0.23	0.11	
Coal	0.1	0.5	0.1	0.12	0.11	0.12	
Crop Waste	-	-	-	0.1	0.06	0.08	
Other	0.6	-	0.5	0.12	0.09	0.11	
Not Stated	-	-	-	0.14	0.1	0.12	
Total	100	100.2	100	100	100.01	100	
Number of H/Holds	145,106	131,103	276,209	234,757	169,949	404,706	

	Urban		Rura	I	Total		
	1991	2001	1991	2001	1991	2001	
Flush Toilet	33395	74801	4153	12496	37547	87297	
Pit Latrines	85326	137696	27330	64543	112656	202240	
Other	96	12096	175	11846	271	23942	
None	26289	10163	99445	81064	125735	91227	
Total	145106	234757	131103	169949	276209	404706	

Table 23 Households Access/Ownership of Toilet Facilities by Urban/Rural (1991 & 2001)

		Percentages									
	Urban		Rural		Total						
	1991	2001	1991	2001	1991	2001					
Flush Toilet	23.0	31.9	3.2	7.4	13.6	21.6					
Pit Latrines	58.8	58.7	20.8	38.0	40.8	50.0					
Other	0.1	5.2	0.1	7.0	0.1	5.9					
None	18.1	4.3	75.9	47.7	45.5	22.5					
Total	100	100	100	100	100	100.0					

	Regularly	Irregularly	Incinerated	Roadside	Rubbish	Other	Not		%
District	Collected	Collected	Burnt	Dumping	Pit		Stated	Total	Collected
Gaborone	44525	9723	362	768	1053	1973	72	58476	92.8
Francistown	20308	1349	93	534	666	143	31	23124	93.7
Lobatse	6416	1704	44	186	119	32	22	8523	95.3
Selebi Phikwe	12196	2539	49	98	290	65	21	15258	96.6
Orapa	2567	1	1	6		3		2578	99.6
Jwaneng	4448	10	1	37	173	6	6	6 4681	95.2
Sowa Town	969	3			2	4	1	979	99.3
Southern	2159	1490	2811	4457	23923	2308	54	37202	9.8
South East	4292	1021	963	2651	5094	743	16	14780	35.9
Kweneng	4314	1980	5318	7313	30618	2960	75	52578	12.0
Kgatleng	1944	776	3277	1849	8452	736	20	17054	15.9
Central	7592	4860	12735	17998	59123	7752	227	110287	11.3
North East	1609	626	683	888	6551	456	21	10834	20.6
North West	3384	1519	2130	2512	19461	1838	69	30913	15.9
Ghanzi	1043	626	517	757	4289	523	21	7776	21.5
Kgalagadi	773	599	676	507	6904	200	4	9663	14.2
Total	118539	28826	29660	40561	166718	19742	660	404706	36.4
%	29.3	7.1	7.3	10.0	41.2	4.9	0.2	. 100.0	
Residence									-
Urban	45.96	10.26	5.49	6.18	29.13	2.83	0.15	100.00	
Rural	6.27	2.80	9.87	15.33	57.86	7.71	0.17	100.00	-
Total	29.29	7.12	7.33	10.02	41.19	4.88	0.16	100.00	

Table 24: Households By Method of Refuse Disposal, 2001

Table 25: Household Source of Water Supply by Urban Rural (1991 and 2001)

	Urban		Rural		Total		
	1991	2001	1991	2001	1991	2001	
Piped or tapped	145,106	230,273	67,627	124,652	212,733	354,925	
Well	-	93	11,487	7,145	11,487	7,238	
Borehole	-	128	20,759	20,676	20,759	20,804	
Other	-	4,263	31,230	17,476	31,230	21,739	
Total	145,106	234,757	131,103	169,949	276,209	404,706	

	Urban		Rural		Total	
	1991	2001	1991	2001	1991	2001
Piped or tapped	100.00	98.09	51.58	73.35	77.02	87.70
Well	-	0.04	8.76	4.20	4.16	1.79
Borehole	-	0.05	15.83	12.17	7.52	5.14
Other	-	1.82	23.82	10.28	11.31	7.87
Total	100.00	100.00	100.00	100.00	100.00	100.00

	Male		Fer	nale	Тс		
Age	Number	Percent	Number	Percent	Number	Percent	1991 (%)
0-4	99242	12.20	97087	11.19	196329	11.68	14.60
5-9	104770	12.88	104248	12.02	209018	12.44	14.82
10-14	105280	12.94	105414	12.16	210694	12.53	13.83
15-19	100239	12.32	104160	12.01	204399	12.16	11.50
20-24	80668	9.91	90510	10.44	171178	10.18	8.81
25-29	72337	8.89	75931	8.76	148268	8.82	7.53
30-34	55343	6.80	58797	6.78	114139	6.79	6.08
35-39	44935	5.52	50722	5.85	95657	5.69	4.99
40-44	35457	4.36	41165	4.75	76622	4.56	3.63
45-49	29757	3.66	33931	3.91	63688	3.79	2.94
50-54	21723	2.67	23528	2.71	45251	2.69	2.54
55-59	15776	1.94	17640	2.03	33415	1.99	2.09
60-64	13461	1.65	15248	1.76	28709	1.71	1.72
65-69	11184	1.37	14369	1.66	25554	1.52	1.50
70+	23454	2.88	34487	3.98	57940	3.45	3.44
Total	813625	100.00	867238	100.00	1680863	100.00	100.00
%	48.41		51.59				

Table 26: Population Distribution By Sex and Age Group

	1991				2001			
District	Male	Female	Total	Sex Ratio	Male	Female	Total	Sex Ratio
Gaborone	68248	65220	133468	105	91,851	94,156	186007	98
Francistown	31665	33579	65244	94	40,147	42,876	83023	94
Lobatse	12541	13511	26052	93	14,205	15,484	29689	92
Selebi Phikwe	20343	19429	39772	105	24,336	25,513	49849	95
Orapa	4713	4114	8827	115	4,837	4,314	9151	112
Jwaneng	5895	5293	11188	111	7,616	7,563	15179	101
Sowa Town	1462	766	2228	191	1,571	1,308	2879	120
Southern	68377	79012	147389	87	82,368	89,284	171652	92
South East	20591	22993	43584	90	29,129	31,494	60623	92
Kweneng	80328	90109	170437	89	111,547	118,788	230335	94
Kgatleng	27348	30422	57770	90	35,734	37,773	73507	95
Central	193545	219425	412970	88	240,000	261,381	501381	92
North East	19920	23434	43354	85	23,164	26,235	49399	88
North West	51959	56701	108660	92	69,056	73,914	142970	93
Ghanzi	12401	12318	24719	101	16,916	16,254	33170	104
Kgalagadi	15064	16070	31134	94	21,148	20,901	42049	101
Total	634400	692396	1326796	92	813625	867238	1680863	94
Urban	285340	320899	606239	89	428856	481624	910480	89
Rural	349060	371497	720557	94	384769	385614	770383	100

Table 27: Percentage Population Distribution by Sex (1991 & 2001

Percentage Population Distribution by Sex (1991 & 2001)

District	Male	Female	Total	Sex Ratio	Male	Female	Total	Sex Ratio
Gaborone	10.76	9.42	10.06	105	11.29	10.86	11.07	98
Francistown	4.99	4.85	4.92	94	4.93	4.94	4.94	94
Lobatse	1.98	1.95	1.96	93	1.75	1.79	1.77	92
Selebi Phikwe	3.21	2.81	3.00	105	2.99	2.94	2.97	95
Orapa	0.74	0.59	0.67	115	0.59	0.50	0.54	112
Jwaneng	0.93	0.76	0.84	111	0.94	0.87	0.90	101
Sowa Town	0.23	0.11	0.17	191	0.19	0.15	0.17	120
Southern	10.78	11.41	11.11	87	10.12	10.30	10.21	92
South East	3.25	3.32	3.28	90	3.58	3.63	3.61	92
Kweneng	12.66	13.01	12.85	89	13.71	13.70	13.70	94
Kgatleng	4.31	4.39	4.35	90	4.39	4.36	4.37	95
Central	30.51	31.69	31.13	88	29.50	30.14	29.83	92
North East	3.14	3.38	3.27	85	2.85	3.03	2.94	88
North West	8.19	8.19	8.19	92	8.49	8.52	8.51	93
Ghanzi	1.95	1.78	1.86	101	2.08	1.87	1.97	104
Kgalagadi	2.37	2.32	2.35	94	2.60	2.41	2.50	101
Total	100	100	100.00	92	100	100	100.00	94
Age Group	Male 19	91	Female	1991	Male 2	001	Female	2001
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	Рор	Deaths	Рор	Deaths	Рор	Deaths	Рор	Deaths
0-4	96676	1457	96989	1410	99242	1644	97087	1486
5-9	97563	321	99051	262	104770	284	104248	264
10-14	89887	188	93596	157	105280	129	105414	153
15-19	73112	245	79413	237	100239	203	104160	235
20-24	54261	324	62622	258	80668	439	90510	796
25-29	45408	422	54440	310	72337	960	75931	1409
30-34	36620	403	44013	280	55343	1398	58797	1294
35-39	30487	431	35741	260	44935	1282	50722	1028
40-44	23197	388	25001	236	35457	1030	41165	777
45-49	18553	382	20496	236	29757	922	33931	590
50-54	16192	374	17519	243	21723	599	23528	373
55-59	12746	376	15003	250	15776	471	17640	287
60-64	10485	453	12271	297	13461	437	15248	286
65+	29213	2723	36241	2295	34638	1983	48856	1957
Total	634400	8488	692396	6733	813625	11782	867238	10934

Table 28: Age Distribution of Deaths (1991 & 2001)

Age Specific Deaths Rates (Per 1000)

ASDR 1991				ASDR 2001			
Age Group	Male	Female	-	Total	Male	Female	Total
0-4		15.1	14.5	14.8	16.6	15.3	15.9
5-9		3.3	2.6	3.0	2.7	2.5	2.6
10-14		2.1	1.7	1.9	1.2	1.5	1.3
15-19		3.4	3.0	3.2	2.0	2.3	2.1
20-24		6.0	4.1	5.0	5.4	8.8	7.2
25-29		9.3	5.7	7.3	13.3	18.6	16.0
30-34		11.0	6.4	8.5	25.3	22.0	23.6
35-39		14.1	7.3	10.4	28.5	20.3	24.2
40-44		16.7	9.4	12.9	29.1	18.9	23.6
45-49		20.6	11.5	15.8	31.0	17.4	23.7
50-54		23.1	13.9	18.3	27.6	15.9	21.5
55-59		29.5	16.7	22.6	29.9	16.3	22.7
60-64		43.2	24.2	33.0	32.5	18.7	25.2
65+		93.2	63.3	76.7	57.2	40.1	47.2
Total		13.4	9.7	11.5	14.5	12.6	13.5

		1991			2001			
Age Group	Male	Female	Total	Male	Female	Total		
5-9	0.00	0.00	0.00	0.00	0.00	0.00		
10-14	0.86	0.75	5 0.81	0.59	0.49	0.55		
15-19	3.93	4.23	3 4.07	3.55	3.57	3.56		
20-24	8.30	9.30	8.77	8.10	8.55	8.31		
25-29	11.85	5 12.89	9 12.34	12.86	11.86	12.40		
30-34	12.05	5 13.00) 12.49	13.09	12.05	12.61		
35-39	11.86	6 11.77	7 11.82	12.04	11.81	11.93		
40-44	9.86	8.78	9.35	10.64	10.72	10.68		
45-49	8.40) 7.57	8.01	9.59	9.41	9.51		
50-54	7.65	6.70	7.20	7.26	6.66	6.98		
55-59	6.28	6.08	6.19	5.40	5.21	5.32		
60-64	5.22	5.22	2 5.22	4.71	4.64	4.68		
65-69	4.42	4.67	4.54	3.94	4.50	4.20		
70-74	3.45	5 3.33	3 3.39	3.22	4.05	3.60		
75+	5.88	5.70	5.80	5.01	6.47	5.69		
Total	100	100) 100	100	100	100		
Rural	53.59	48.10) 51.01	57.99	58.02	58.01		
Urban	46.41	51.90) 48.99	42.01	41.98	41.99		
All	100.00	100.00	100.00	100.00	100.00	100.00		

Table 29: Distribution (%) of Households by Age Group and Sex of Head

		1991			2001	
District	Male	Female	Total	Male	Female	Total
Gaborone	24,361	12,278	36,639	35,671	22,805	58,476
Francistown	10,280	6,509	16,789	13,384	9,740	23,124
Lobatse	4,215	2,477	6,692	4,918	3,605	8,523
Selebi Phikwe	7,226	3,369	10,595	9,210	6,048	15,258
Orapa	1,296	509	1,805	1,675	903	2,578
Jwaneng	2,266	695	2,961	3,099	1,582	4,681
Sowa Town	454	176	630	682	297	979
Southern	12,580	15,061	27,641	19,274	17,928	37,202
South East	4,620	4,252	8,872	8,148	6,632	14,780
Kweneng	15,543	17,358	32,901	28,476	24,102	52,578
Kgatleng	6,286	5,933	12,219	9,209	7,845	17,054
Central	36,177	41,452	77,629	53,828	56,459	110,287
North East	3,497	4,588	8,085	4,923	5,911	10,834
North West	10,964	10,691	21,655	15,046	15,867	30,913
Ghanzi	2,850	2,146	4,996	4,825	2,951	7,776
Kgalagadi	3,519	2,581	6,100	5,639	4,024	9,663
Total	146,134	130,075	276,209	218,007	186,699	404,706
Household Size	4.45	5 5.05	5 4.73	3 3.82	2 4.41	4.10
Urban	78314	62569	9 140883	3 126,42	5 108,332	2 234,757
Rural	67820	67506	6 135326	91,582	2 78,367	7 169,949

Table 30: Household Distribution by Sex of Household Head (1991 & 2001)

Percentage (of each sex) Household Distribution by Sex of Household Head (1991 & 2001)

		1991			2001	
District	Male	Female	Total	Male	Female	Total
Gaborone	16.67	9.44	13.26	16.36	12.21	14.45
Francistown	7.03	5.00	6.08	6.14	5.22	5.71
Lobatse	2.88	1.90	2.42	2.26	1.93	2.11
Selebi Phikwe	4.94	2.59	3.84	4.22	3.24	3.77
Orapa	0.89	0.39	0.65	0.77	0.48	0.64
Jwaneng	1.55	0.53	1.07	1.42	0.85	1.16
Sowa Town	0.31	0.14	0.23	0.31	0.16	0.24
Southern	8.61	11.58	10.01	8.84	9.60	9.19
South East	3.16	3.27	3.21	3.74	3.55	3.65
Kweneng	10.64	13.34	11.91	13.06	12.91	12.99
Kgatleng	4.30	4.56	4.42	4.22	4.20	4.21
Central	24.76	31.87	28.11	24.69	30.24	27.25
North East	2.39	3.53	2.93	2.26	3.17	2.68
North West	7.50	8.22	7.84	6.90	8.50	7.64
Ghanzi	1.95	1.65	1.81	2.21	1.58	1.92
Kgalagadi	2.41	1.98	2.21	2.59	2.16	2.39
Total	100	100	100.00	100	100	100.00

District	Male	Female	Total	%
Gaborone	197	361	558	6.4
Francistown	126	187	313	3.6
Lobatse	37	58	95	1.1
Selebi-Phikwe	78	104	182	2.1
Orapa	13	26	39	0.5
Jwaneng	7	37	44	0.5
Sowa Town	6	12	18	0.2
Southern	734	350	1084	12.5
South East	82	85	167	1.9
Kweneng	814	463	1277	14.7
Kgatleng	244	119	363	4.2
Central	1858	1390	3248	37.5
North East	142	147	289	3.3
North West	362	323	685	7.9
Ghanzi	94	46	140	1.6
Kgalagadi	98	60	158	1.8
Total	4892	3768	8660	100.0
Percentage	56.5	43.5	100.0	

Table 31: Child Head Households by District