

DEMOGRAPHIC TRENDS AND THEIR IMPLICATIONS IN BOTSWANA

G.N. SHASTRI

Introduction

Botswana is a land-locked country with an area of 582,000sq. Kms. It shares borders in the North with Zambia, in the North East with Zimbabwe, in the East and South with the Republic of South Africa, and in the West and North West with Namibia. The Eastern region, which straddles the North-South railway line, has more fertile soils than the rest of the country, and it is here that most Batswana live (NDP 1985 - 91, p.1). In fact, four out of every five Batswana live in the Eastern part of the country.

At the national level, the population density works out to be less than two persons per sq.Km. However, Botswana is one of the countries with the fastest growing populations in the World. With an average annual growth rate of 3.7 percent, it is above the African average of 2.8 percent, the average for the less developed countries of 2.0 percent and far above the World average of 1.7 percent (see Table A1 - Appendix). Botswana's high population growth rate is attributed to high levels of fertility and declining mortality. With the continuation of present demographic trends, Botswana's population should double within a short period of 20 years. It is a well known fact that, all things being equal, the higher the rate of population growth, the greater the investment required to maintain a constant standard of living.

Population Size and Growth

Botswana's population is characterized by high fertility, high dependency ratio and declining mortality. The various population censuses and estimates of population give a picture of population growth trends in the last eight decades. Table 1 shows that the population of Botswana has increased more than ninefold over the last 82 years. While it took 30 years for the 1904 population to double and another 30 years to redouble, the 1964 population doubled within only two decades. The annual growth rate works out to 1.8 percent for the 1964-1971 period. This rose to 4.9 percent during the 1971-1981 inter-censal period, giving an average annual growth rate of 3.6 percent for the 1964-1981 period.

Table 1: Population Growth in Botswana 1904-1986

<u>Year</u>	<u>Population</u>
1904	120 776
1911	125 350
1921	152 983
1936	265 756
1946	296 310
1956	309 175
1964	514 876
1971	584 644
1981	941 027
1986 (Estimate)	1 131 700

Source: CSO, 1981 Population and Housing Census
(Draft Report)

At the administrative district level, the size and growth of population varied from one district to another. Table A2 (Appendix) gives the population of administrative districts for the last three census years as well as growth rates of these

districts during the inter-censal periods. The growth of rural areas was relatively high during 1971-81 than the corresponding growth during 1964-71. The growth of urban districts was rapid (13.8 percent per annum) between 1964 and 1971 as compared to the average annual growth rate of 10.7 percent for districts during the next intercensal period, 1971 - 1981. Gaborone has been growing at an unprecedented rate of 17.1 percent per annum between 1964 and 1981.

The growth rate during the inter-censal period 1971-81 was highest for Selebi-Phikwe, followed by those for Orapa and Gaborone. It was lowest for Ghanzi and Ngamiland districts. During the periods 1964-71 and 1971-81, there was a convergence towards the national average among all the districts with movements towards high growth rates for rural districts and lower growth rates for urban districts.

The Central District accounted for more than one-third of the entire country's population in 1981. The district recorded an annual growth rate of 4.2 percent between 1971 and 1981, and only 2.8 percent per year over the period 1964-81. The remaining districts in Eastern Botswana registered growth rates ranging from 3.5 to 4.4 percent per annum between 1971 and 1981, except for Kweneng District where the corresponding rate was 5.9 percent. The fairly high growth of Kweneng (which shares borders and a good road connection with Gaborone) is attributed partly to the overspill population from Gaborone to nearby (Kweneng) villages. Districts in the western part of Botswana have been growing less rapidly than the rest of the country. The growth of these districts between 1964 and 1981 ranged from 1.0 percent for Ghanzi to 2.8 percent for Ngamiland (Chobe and Kgalagadi districts falling between these two points).

Population Density and Distribution

The population density in 1981 was very low (1.6 persons per sq.Km) nationally. However, this fact conceals regional,

district, and urban-rural variations. For example, the western part of the country (Kgalagadi, Ghanzi, Ngamiland and Chobe) is sparsely populated (about 14 - 15 persons per 100sq.Kms in 1971 and in 1981). In fact, one-third of this part of Botswana is constituted as game reserves. Among rural districts in 1981 (and in 1971), the South East District and the Barolong Farms area had the highest population density (17.2 and 14.1 persons per sq.Km, respectively in 1981) followed by North East District with 7.2 persons per sq.Km and Kgatleng District with 5.6 persons per sq.km. All the other districts had a density of less than four persons per sq.Km in the 1971 and 1981 census years. In comparison, the population density in urban areas increased from 204.6 persons per sq.Km in 1971 to 410 persons per sq.Km in 1981 as shown in Table 2.

Table 2: Population Density by Administrative District: 1971 and 1981

District/Area	<u>Population Density (persons/sq.km)</u>	
	1971	1981
Ngwaketse	2.6	3.8
Barolong	10.0	14.1
South - East	11.3	17.2
Kweneng	1.8	3.3
Kgatleng	3.9	5.6
Central	1.5	2.2
North - East	5.0	7.2
Ngamiland	0.5	0.6
Chobe	0.2	0.4
Ghanzi	0.1	0.2
Kgalagadi	0.2	0.2
Urban Areas*	204.6	409.9
All Areas (Country)	1.0	1.6

*Urban areas include Gaborone, Francistown, Lobatse, Selebi-Phikwe, Orapa and Jwaneng.

Source: Compiled from 1981 Population and Housing Census Results.

As a result of differential growth among districts, the relative spatial distribution of population by administrative districts has changed, with the share of urban districts increasing and the share of rural districts decreasing in the period 1964-81. The Western part of Botswana, covering four administrative districts (Kgalagadi, Ghanzi, Ngamiland and Chobe), accounted for 61 percent of the land area but only 13 percent of the population in 1981.

Due to continuous increases in the urban population between 1964 and 1981, the percentage share of Central District (constituting rural areas only) decreased from 38.8 percent in 1964 to 34.4 percent in 1981. One-fourth of the country's area is covered by this district (see Table 3). It can also be seen from Table 3 that the seven rural districts in the eastern part of Botswana ("line-of-rail" belt) account for 39 percent of the land area and over 71 percent of the population in 1981. In fact, the strip of land running from South to North East, along the railway line, accounted for 83 percent of the entire country's population in 1981 (NDP VI, p.12). Thus, not only is the total population size changing rapidly, its distribution in different districts is also changing rapidly. As stated earlier, a great deal of the flow of population is from rural areas to urban areas. A major reason for the movement of people to urban areas might be prospects of job opportunities in these areas.

Urbanisation

The Fifth National Development Plan noted that the urban population is growing very rapidly. From a figure of 63,000 in 1971, it had reached 120,000 by 1978 and may reach 197,000 by 1984 if present trends continue. According to the 1981 Census, a settlement of 5,000 or more people with 75 percent of its labour force engaged in non-agricultural employment is considered as an urban area. According to this definition of 'urban', there were eight urban settlements in 1981. The urban proportion of the total population grew from 11.2 percent in

Table 3: Population Distribution by Administrative District: 1964, 1971 and 1981

District	Area		Proportion of Population (%)		
	sq.km	%	1964	1971	1981
Ngwaketse	27 370	4.7	12.6	12.1	11.1
Barolong	1 100	0.2	1.9	1.9	1.6
South East	1 780	0.3	3.6	3.4	3.3
Kweneng	35 890	6.2	13.2	11.3	12.4
Kgatleng	7 960	1.4	5.7	5.3	4.7
Central	147 730	25.4	38.8	37.0	34.4
North East	5 120	0.9	4.9	4.4	3.9
Ngamiland	109 130	18.8	8.1	8.8	7.2
Chobe	20 800	3.6	1.0	0.9	0.8
Ghanzi	117 910	20.3	3.1	2.9	2.0
Kgalagadi	106 940	18.4	3.0	2.8	2.6
Urban Areas	366	0.1	4.0	9.3	15.9*
All Districts (Country)	581 730	100.0	100.0	100.0	100.0

*Excluding urban areas, Tlokweng and Palapye

Note: The total of columns may not add to 100% due to rounding.

Source: C.S.O., 1981 Population and Housing Census (Draft Report).

1971 to 17.7 percent in 1981 due to significant amounts of rural to urban migration. The United Nations Mission Report noted that the annual rate of urbanisation in Botswana is one of the highest in Africa. Between 1971 and 1981, the annual growth rate of urban settlements varied from 4.8 percent for Lobatse to 19.6 percent for Selebi-Phikwe. The rate of urban growth is at least twice as high as the rate of increase of the country's overall population.

A striking feature of urbanisation in Botswana is that 36 percent of the country's total urban population was concentrated in the capital city, Gaborone, in 1981. The population density in Gaborone for 1981 works out to be 615 persons per sq.Km. This figure is very high compared to the national average of 1.6 persons per sq.Km. During the period 1971-1981, the population of the capital city, Gaborone, increased by 237 percent, from 17,718 to 59,657 (UNFPA, 1984). As reflected in Table 4, Gaborone and mining towns (Selebi-Phikwe, Orapa and Jwaneng) have grown more rapidly during 1971 - 81 than all other parts of the country. The absorption capacity of some of these towns (particularly that of mining towns) is unlikely to be increasing at the same pace as before. Growth points such as big villages are also expected to grow and attain 'urban' status in the near future. These big villages might attract part of the rural-urban migration stream which otherwise would have gone to the towns.

It is estimated that by 1991, nearly one-third of the country's population will be living in urban areas. The high rate of urbanisation will have an impact on education, employment, housing and health facilities. The faster growth of urban population expected in future is mainly due to: 1) natural increase of population in urban areas, 2) rural-urban migration and 3) inclusion of new townships from time to time.

Age and Sex Composition

The age-sex data from the last two censuses show that Botswana has a very high proportion of the population under 15 years of age (around 48 percent). The age distribution shows that Botswana's population is acquiring a large child base. This implies a high growth potential for the years to come. The proportion of population by sex and broad age groups is shown in Table 5.

Table 4: Population of Towns, 1971 and 1981

Urban Area	1971 Census	1981 Census	Average Annual Growth Rate for 1971 - 1981 (%)
Gaborone	17 718	59 657	12.9
Francistown	18 613	31 065	5.3
Lobatse	11 936	19 034	4.8
Selebi-Phikwe	4 940	29 469	19.6
Orapa	1 209	5 229	15.9
Jwaneng	-	5 568	-
Palapye	5 217	9 593	6.3
Tlokweng	5 906	6 653	5.4
Total Urban	65 539	166 268	9.8
Total Large Villages	89 379	161 574	6.1
All other areas	429 726	613 185	3.6
Percentage Urban	11.2	17.7	-

Source: Population and Housing Census (Draft Report), 1981

Table 5: Percentage Distribution of Population by Sex
and Broad Age Groups, 1971 and 1981

Age Group (years)	Male		Female	
	1971	1981	1971	1981
0 - 14	51.4	49.9	45.3	45.0
15 - 64	43.0	45.1	49.0	49.6
65+	5.6	5.0	5.7	5.4
All Ages	100.0	100.0	100.0	100.0

Source: Compiled from 1981 Population and Housing Census Reports.

The pattern of age distribution shown in Table 5 is characteristic of populations with high fertility over a long period. This pattern means that a large proportion of the population is dependent on a relatively small proportion of the economically active population.

In fact, the age dependency ratio (number of young and old dependents per person in the working ages of 15-64 years) is estimated to be 1.07 for the year, 1986. This means that every 100 persons in the labour force age group will have to support 107 dependents on an average. If we consider the broad age groups shown in Table 5, it can be seen that there is very little difference between the 1971 and 1981 age structures. However, the 1981 Census data is considered to be of better quality than the 1971 data. The present age structure also implies a higher population growth rate as more and more people enter reproductive ages.

Sex composition is another important demographic characteristic of a population. A significant feature of Botswana's population composition is the low sex ratio (89 males per 100 females). For the country as a whole, the sex ratio has improved from 84 in 1971 to 89 in 1981. The increase in the sex ratio, nationally, is also reflected at the district level. The sex ratio in urban areas is favourable to males indicating sex selective migration (of males) from rural to urban settlements. Between 1971 and 1981 the sex ratio of urban areas, taken as a whole, has dropped from 117 to 104. This is partly due to increasing numbers of females moving from rural areas to urban areas, especially to mining towns.

At the national level, the sex ratio in the 20-40 years age group was only 75 percent in 1981. The predominance of women in these age groups was due to the fact that a high proportion (25 percent) of men in these age groups were working abroad. But, the number of Batswana working abroad has been declining, and this trend is expected to continue (NDP VI, 1985 - 91).

Table 6: Sex Ratio by Administrative Districts 1971 and 1981

District	Sex Ratio (Males per 100 Females)	
	1971	1981
Ngwaketse	82	84
Barolong	88	91
South East	82	87
Kweneng	76	84
Kgatleng	84	85
Central	83	86
North East	80	83
Ngamiland	84	87
Chobe	93	95
Ghanzi	97	99
Kgalagadi	86	93
Urban Areas	117	104
Total (country)	84	89

Source: Population and Housing Census (Draft Report) 1981

Appendix A2: Population by District, 1964 - 1981

Administrative						
Districts	Population			Growth Rate (% per year)		
	1964	1971	1981	1964-71	1971-81	1964-81
Gaborone	3 812	17 718	59 657	23.0	12.9	17.1
Francistown	9 534	18 613	31 065	9.4	5.3	7.0
Lobatse	7 499	11 936	19 034	6.5	4.8	5.5
Selebe-Phikwe	-	4 940	29 469	-	19.6	-
Orapa	-	1 209	5 229	-	15.9	-
Ngwaketse	64 927	70 758	104 182	1.2	3.9	2.8
Barolong	9 554	10 973	15 471	1.9	3.5	2.8
South East	18 686	20 090	30 649	1.0	4.3	2.9
Kweneng	68 106	65 951	117 127	-0.4	5.9	3.2
Kgatleng	29 579	31 150	44 461	0.7	3.6	2.4
Central	199 757	216 058	323 328	1.1	4.1	2.8
North East	25 102	25 806	36 634	0.4	3.6	2.2
Ngamiland	41 855	51 323	68 063	2.8	2.9	2.9
Chobe	4 982	5 097	7 934	0.3	4.5	2.7
Ghanzi	16 132	16 685	19 096	0.5	1.4	1.0
Kgalagadi	15 351	16 337	24 059	0.8	3.9	2.6
COUNTRY	514 876	584 644	941 027	1.7	4.9	3.5

Source: Central Statistics Office, 1981 Population and Housing Census
(Draft Report)

Appendix A3: Salient Demographic Features of Botswana

	1981 Census	1986 (Estimate)	2001 (Estimate)
Population: Total	941 027	1 131 700	1 896 800
Male	443 104	539 900	917 450
Female	497 923	591 800	979 350

Annual Growth Rate: 3.5 percent (1964 - 1981)

Time required for doubling of population: 20 years

	<u>1981 Census</u>	<u>1986 (Estimate)</u>	
Density of population: (persons per sq.km)	1.6	1.9	
Proportion of urban to total population (%)	17.7	20.6	
Sex Ratio (1981 Census):	89 males per 100 females.		
Dependency Ratio (1981 Census)	109.8		
Broad age composition (1981 Census)	% of total population aged		
	<u>0 - 14 yrs</u>	<u>15 - 64 yrs</u>	<u>65+ yrs</u>
	47.3	47.5	5.2
Crude Birth Rate (1981 Census)	47.2 per 1000		
Crude Birth Rate (1981 Census)	13.0 per 1000		
General Fertility Rate (1981 Census)	210 per 1000 women aged 15-49yrs		
Total Fertility Rate (1981 Census)	7.1		
Expectation of Life at Birth: (1981 Census)	Males - 52.7 years Females - 59.3 years		

Source: Central Statistics Office, (various publications)

Fig 1: POPULATION GROWTH
IN BOTSWANA, 1904-2001.



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