

# COMPARISON OF 2011 CENSUS COUNT WITH POPULATION PROJECTION & POSTCENSAL POPULATION ESTIMATES FOR DISTRICTS

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# STATISTICS BOTSWANA

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### 1.0 Introduction<sup>1</sup>

The objective of this Stats Brief is to compare the 2011 census count with the projected population based on 2001 census and also to provide the postcensal estimates for districts for planning purposes.

In 2011, Statistics Botswana conducted a decennial Population and Housing Census to provide an update of the population and its characteristics for public and private sector policymaking, planning, administration and research purposes. The last census before the current one was in 2001. Hence, a comparison of the information was made available in a fixed ten year sequence.

Following the completion of the 2001 PHC, a thirty year population projection of up to 2031 was made based on the 2001 actual population count and future assumptions of the three demographic processes of mortality, fertility and international migration based on prevailing national scenarios.

The 2011 Population and Housing Census results gave a population figure which was much higher than the projected population for the same year. This stats brief therefore gives a synopsis of the reason for differentials between the projected 2011 figures and the 2011 actual census count, and provides estimated population figures by districts and sex from 2011 to 2014 using the 2011 Population and Housing Census actual figures as the baseline.

# 2.0 Comparison of 2011 Census total with Population Projection

The 2011 Population and Housing Census figure is 175,223 more than the 2011 Population projections figure. The difference is made up of 78, 662 more males and 96,561 more females. In total, the 2011 projections amounts to 91 per cent of Botswana population actual count of 2011. The table below illustrates the accuracy of population projection.

Table 1: 2011 Population projections and the Census Population Actual Count

	2011	2011	Difference	Proportion of projected
	Population	Census		population against
	Projections			census count
Male	910,409	989, 071	78,662	0.04
Female	939,272	1,035,833	96,561	0.05
Total	1,849, 681	2,024,904	175,223	0.09

The 2011 projections were made based on the cohort component method. The following three effects affected the methodology used for projections, the

<sup>&</sup>lt;sup>1</sup> Reviewed by Professor K. Navaneetham, Ph.D. – Department of Population Studies: University of Botswana

intercensal births, deaths, and international migration. These led to variations among different sub-groups during the 2001 – 2011 period.

### 2.1.1 Fertility Rate

Projected age specific fertility rates were based on surveys and census from 1971-2001. With the introduction of PMTCT in hospitals, clinics and health posts in the country, there has been a reduction in infant mortality rate over the decade. At the same time live births have increased.

### 2.1.2 Mortality Rate

The 2001 Population projections incorporated the mortality effects of HIV/AIDS. The HIV prevalence was used to determine the number dying each year based on the Botswana AIDS Impact Surveys. However, as a result of Government's effort to increase access to ARVs, the number of those dying from HIV related diseases decreased considerably.

## 2.1.3 International Migration

For net international migration, migration flows were projected on the assumption that net flows gradually decline in the future towards zero. In the era of increased bilateral relations, Botswana has welcomed investments from the industrialised world. Botswana has also seen a significant growth of non-citizens between 2001 and 2011 which meant that the original assumption did not hold, leading to underestimation of net international migration over the decade.

### 3.0 Population Estimation: 2011-2014

The population estimates for the period 2011 - 2014 are based on extrapolations using the annual national population growth rate. The cohort component method which takes into account the population change processes would be applied at a later stage once 2011 Population data is verified.

Table 2 shows estimated national population figures for all districts whereas Tables 3 and 4 indicate the estimated female and male population respectively. The estimated population in all districts increased between 2011and 2014. Female population remain slightly higher than male population.

Table 2: Botswana National Population Projections2011-2014						
	2011	2012	2013	2014		
Gaborone	231,592	235,944	240,377	244,894		
Francistown	98,961	100,820	102,715	104,645		
Lobatse	29,007	29,552	30,107	30,673		
Selebi-Phikwe	49,411	50,339	51,285	52,249		
Orapa	9,531	9,710	9,893	10,078		
Jwaneng	18,008	18,346	18,691	19,042		
Sowa Town	3,598	3,666	3,734	3,805		
Ngwaketse	129,247	131,676	134,150	136,670		
Barolong	54,831	55,861	56,911	57,980		
Ngwaketse West	13,689	13,946	14,208	14,475		
South East	85,014	86,611	88,239	89,897		
Kweneng East	256,752	261,576	266,491	271,499		
Kweneng West	47,797	48,695	49,610	50,542		
Kgatleng	91,660	93,382	95,137	96,925		
Central Serowe Palapye	180,500	183,892	187,347	190,867		
Central Mahalapye	118,875	121,109	123,384	125,703		
Central Bobonong	71,936	73,288	74,665	76,068		
Central Boteti	57,376	58,454	59,552	60,671		
Central Tutume	147,377	150,146	152,967	155,842		
North East	60,264	61,396	62,550	63,725		
Ngamiland East	90,334	92,031	93,761	95,522		
Ngamiland West	59,421	60,538	61,675	62,834		
Chobe	23,347	23,786	24,233	24,688		
Okavango Delta	2,529	2,577	2,625	2,674		
Ghanzi	43,095	43,905	44,730	45,570		
Central Kgalagadi	260	265	270	275		
Game Reserve (CKGR) Kgalagadi South	30,016	30,580	31,155	31,740		
Kgalagadi North	20,476	20,861	21,253	21,652		
Total	2,024,904	2,062,952	2,101,715	2,141,206		

Table 3: Female Population Projection 2011-2014

District	2011	2012	2013	2014
Gaborone	118,048	120,266	122,526	124,828
Francistown	50,855	51,811	52,784	53,776
Lobatse	14,862	15,141	15,426	15,716
Selebi-Phikwe	24,678	25,142	25,614	26,095
Orapa	4,801	4,891	4,983	5,077
Jwaneng	8,188	8,342	8,499	8,658
Sowa Town	1,638	1,669	1,700	1,732
Ngwaketse	66,985	68,244	69,526	70,832
Barolong	28,150	28,679	29,218	29,767
Ngwaketse West	6,815	6,943	7,074	7,206
South East	44,315	45,148	45,996	46,860
Kweneng East	131,538	134,010	136,528	139,093
Kweneng West	23,395	23,835	24,282	24,739
Kgatleng	47,088	47,973	48,874	49,793
Central Serowe Palapye	91,611	93,332	95,086	96,873
Central Mahalapye	61,327	62,479	63,653	64,849
Central Bobonong	37,687	38,395	39,117	39,852
Central Boteti	29,229	29,778	30,338	30,908
Central Tutume	77,037	78,485	79,959	81,462
North East	31,669	32,264	32,870	33,488
Ngamiland East	45,924	46,787	47,666	48,562
Ngamiland West	31,497	32,089	32,692	33,306
Chobe	11,324	11,537	11,754	11,974
Okavango Delta	1,252	1,276	1,299	1,324
Ghanzi	20,827	21,218	21,617	22,023
Central Kgalagadi Game				
Reserve (CKGR)	67	68	70	71
Kgalagadi South	14,897	15,177	15,462	15,753
Kgalagadi North	10,129	10,319	10,513	10,711
Total	1,035,833	1,055,296	1,075,125	1,095,327

Table 4: Male population P	2011 -2014			
District	2011	2012	2013	2014
Gaborone	113,544	115,677	117,851	120,065
Francistown	48,106	49,010	49,931	50,869
Lobatse	14,145	14,411	14,682	14,957
Selebi-Phikwe	24,733	25,198	25,671	26,154
Orapa	4,730	4,819	4,909	5,002
Jwaneng	9,820	10,005	10,193	10,384
Sowa Town	1,960	1,997	2,034	2,073
Ngwaketse	62,262	63,432	64,624	65,838
Barolong	26,681	27,182	27,693	28,213
Ngwaketse West	6,874	7,003	7,135	7,269
South East	40,699	41,464	42,243	43,037
Kweneng East	125,214	127,567	129,964	132,406
Kweneng West	24,402	24,861	25,328	25,804
Kgatleng	44,572	45,410	46,263	47,132
Central Serowe Palapye	88,889	90,559	92,261	93,994
Central Mahalapye	57,548	58,629	59,731	60,853
Central Bobonong	34,249	34,893	35,548	36,216
Central Boteti	28,147	28,676	29,215	29,764
Central Tutume	70,340	71,662	73,008	74,380
North East	28,595	29,132	29,680	30,237
Ngamiland East	44,410	45,244	46,095	46,961
Ngamiland West	27,924	28,449	28,983	29,528
Chobe	12,023	12,249	12,479	12,714
Okavango Delta	1,277	1,301	1,325	1,350
Ghanzi	22,268	22,686	23,113	23,547
Central Kgalagadi Game Reserve (CKGR)	193	197	200	204
Kgalagadi South	15,119	15,403	15,693	15,987
Kgalagadi North	10,347	10,541	10,739	10,941
Total	989,071	1,007,656	1,026,589	1,045,879

### 4.0 Conclusion

In conclusion, the count of population in the 2011 census was more than the expected or projected. The projected population in the year 2011 was a deficit accounting for a proportion of around 0.09 when compared with the census 2011 census total. The higher count in the 2011 census mainly attributed to improvement in the infant and child mortality and life expectancy at birth due to efficiency of the ARV programme. The district-wise postcensal estimates are also provided for use during the 2012 – 2014 period.

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