Patterns and Differentials of Migration in Botswana

K Navaneetham^{*} and VK Dwivedi[§]

Abstract

Migration is an important component of population growth and it has significant social and economic implications for a country. In this paper we analyse the patterns and differentials of internal migration in Botswana using the 2011 Population and Housing Census (PHC) data. Both lifetime migrations and short-duration migration have been analysed. The study noted that the volume of internal migrations has increased over the years and patterns also changed over time. During the period 2010-2011, there were about 165 thousands in-migrations and 149 thousands out-migrations in Botswana. As regards the international migrations, the study noted that an emigration of 1203 persons and immigration of 17,375 persons during 2010-2011 was realised. The major destinations for immigration are Gaborone and Kweneng East. Among the immigrations more than 50% of them were from Zimbabwe. As regards the migrations differentials the propensity to migrate is almost the same for both males and females. This is in contrast to most developing countries. The propensity to migrate is greater among adults (15-34 age), the educated, those who have never married, those living together, Christians, the employed, jobseekers and students. To conclude, the flow of movements among the population is likely to increase in the future and therefore appropriate policies needs to be developed to meet the demands created due to migrations. These demands are in the form of services such as housing, water, sanitation and other infrastructural facilities.

Introduction

The study on migration is gaining importance globally due to its nature, causes and consequences as well as diverging demographic trends and patterns among developed and developing countries. More than a billion people, 215 million international migrants and 750 million internal migrants, rely on migration to escape poverty and to improve the income, health and education of their families (Sutherland 2014). Migration is an important component of population growth and it has significant social and economic implications for a country. In recent years, both internal and international migration has become a concern for policy makers. The research on migration is attracting policy makers since it has various social and economic implications. For instance, the movement of people from rural to urban areas increases the level of urbanisation and creates demand for various services in the urban areas. On the other hand, remittances from international migrations or internal migrations benefit the households at the place of origins for social and economic opportunity inducing the overall development of the regions.

Botswana has conducted the decennial census in 2011 and the data were made available to these researchers to understand the demographic, social and economic patterns. This is the first study using 2011 census data to analyse population movements in the country. The main objective of this paper is to estimate the volume of internal migrations as well as to understand migration patterns and differentials in the context of Botswana using the 2011 census data. This paper gives a snapshot of migration patterns and differentials in Botswana from the contributed paper presented at the 2011 census dissemination conference held on 9-12 December 2013, Gaborone.

^{*}K Navaneetham, Department of Population Studies, University of Botswana. Email: Kannan.Navaneetham@mopipi.ub.bw [§]VK Dwivedi, Department of Statistics, University of Botswana. Email: vijai.dwivedi@mopipi.ub.bw

Definition and Methods

The United Nations defines migration as a move from one migration-defining area or geographical unit to another (or a move of some specified minimum distance) that was made during a given migration interval and that involved a permanent change of residence (United Nations 1970). For the purpose of this paper, geographic unit for internal migration is all cities, towns and districts and sub-districts as per the geographic boundary defined in the Botswana census. The census questions used for estimating migrations are: i) place of usual residence on the census date; ii) place of birth; iii) place of usual residence 1 year ago. Using the responses of the above questions in the census, this paper makes a modest attempt to estimate the lifetime migrations and period migrations such as migration during the last five years from census date and migration during the last but one year from the census date.

Lifetime migrations

A person whose place of residence at the census date differs from his place of birth is a lifetime migrant and the number of such persons are referred to as 'lifetime migration' (United Nations 1970). The limitation of this method for estimating migration is that it gives gross underestimates. For instance, it excludes to mention if there were more than one movement between place of birth and place of current residence. Also it does not include those migrants who have moved away from and subsequently returned to their place of birth. Further, the lifetime migrants are only those persons who were survivors on the census date and exclude those who died before the census date.

Period migrations

We have used period migration such as migration during the interval 2006-11 and migration during the interval 2010-2011. If a person's place of current usual residence is different from the place of usual residence five years ago or one year ago, he/she is a migrant and that move occurred during the interval of five years or one year. However, this method too has the same limitation as that of life time migrations. This estimate gives the survivors of the migrants on the census date and does not take into account of those persons who move away and died during the interval. Similarly, if a migrant has made more than one move before the census date, those moves would not be taken into account while computing the migration during the interval. For more details on the concepts, definition and estimation of migration refer to Manual VI of the United Nations (United Nations 1970).

Results and Analysis

Lifetime migrations

Figure 1 below gives the estimate of the lifetime migration in Botswana by district. As discussed earlier, this has been estimated using the place of current residence and place of birth. According to the 2011 census data the lifetime migration is estimated at about 697,479 persons. The same was about 520,957 persons using the estimates from the 2001 census data (Gwebu 2003a). This implies that the number of lifetime migration that occurred during the census interval of 2001-2011 is about 176,522 persons.

As regards the district-wise lifetime migrations, it is observed from Table 1 that the volume of lifetime net in-migration is significant in Gaborone, Kweneng East, South East and Francistown as on 2011 census date. Among all the districts, the largest share of in-migration to Gaborone is from Kweneng East (14%); Ngwaketse (11%) and Central Serowe-Palapye (11%). The three districts accounted for 36% of the total in-migration to Gaborone. The remaining 64% of the in-migration to Gaborone is spread (ranges between 0-7.6%) across the remaining 24 districts/sub-districts. In the case of Francistown, the largest share of life time in-migration is from the two districts namely Central

Tutume (23%) and from Ngamiland East (20%), constituting about 43%. About 57% of lifetime inmigration to Francistown was from the remaining 26 districts/sub-districts. The districts/sub-districts such as Central Serowe-Palapye, Ngwaketse, Central Mahalapye; Ngamiland East and Central Tutume seems to have experienced a significant net-outmigration as on 2011 census date (see Table 1). Though the patterns remain the same until 2001 census, there are some exceptions in 2011 census (see Table 1). The Central, North East and Ngamiland continue to send migrants whereas Gaborone and Francistown continue to receive the migrants. Interestingly, until 2001 Lobatse was a net receiving town but by 2011 it became a net sending town to some extent. Until 2001 the net life time in-migration to Kweneng East was negligible at about 1,434 persons, however, during 2001-2011 the district experienced significant net in-migration of 31,394 persons as on 2011 census date. The in-migrants to this district were seemingly from Gaborone (20%) followed by Ngwaketse (12%). The district Ngwaketse was net in-migration district until the 2001 census with 8,580 net-immigrants. However, the district Ngwaketse has experienced significant net-outmigration during the period 2001-2011 mostly to Gaborone (28%) and Kweneng East (17%).

		2001 Census		2011 Census				
District	In-migration	Out-migration	Net-migration	In-migration	Out-migration	Net- migration		
Gaborone	137447	22911	114536	146468	52755	93713		
Francistown	52497	23778	28719	61655	47859	13796		
Lobatse	19367	11896	7471	17419	20303	-2884		
Selebi_Pikwe	36546	10762	25784	31336	23729	7607		
Orapa	6861	2021	4840	7919	5150	2769		
Jwaneng	12013	2328	9685	14915	6017	8898		
Sowa Town	2801	91	2710	3263	448	2815		
Ngwaketse	13828	5248	8580	25491	57740	-32249		
Barolong	9200	16146	-6946	15491	20159	-4668		
Ngwaketse West	2454	4146	-1692	3463	4695	-1232		
South East	18313	12933	5380	36679	17144	19535		
Kweneng East	43022	41588	1434	81528	50134	31394		
Kweneng West	7834	10329	-2495	10925	11618	-693		
Kgatleng	11899	24015	-12116	22694	26119	-3425		
Central Serowe-Palapye	25810	64664	-38854	39926	73996	-34070		
Central Mahalapye	20139	44649	-24510	25494	55850	-30356		
Central Bobonong	10333	27745	-17412	17366	32448	-15082		
Central Boteti	10340	7864	2476	15018	12528	2490		
Central Tutume	18566	26536	-7970	34428	60405	-25977		
North East	10855	33430	-22575	19749	30557	-10808		

Table 1: Lifetime Migration by District as on 2001 and 2011 Census

Ngamiland East	23697	11459	12238	23757	50640	-26883
Ngamiland West	4626	17508	-12882	7132	13234	-6102
Chobe	5312	2363	2949	9875	3673	6202
Okavango Delta	1366	429	937	1492	967	525
Ghanzi	7275	3354	3921	11467	4841	6626
CKGR	89	1017	-928	216	1435	-1219
Kgalagadi South	4295	4747	-452	5797	6933	-1136
Kgalagadi North	8557	4966	3591	6516	6102	414

Source: For 2001 Census see (Gwebu, 2003a); For 2011 Census, estimated by the authors.

Migration During 2006-2011

Due to the limitation of the lifetime migration and also due to the need to understand the recent patterns of internal migration between districts/towns, an attempt has been made to estimate the internal migration that occurred during the recent period of 2006-2011. As explained earlier, this has been estimated using the information on place of residence on the census date and place of last residence five years ago from the census date. It was estimated that there were about 205, 989 flow of in-migrations and 187,080 flows of out-migrations during 2006-2011 including international migrations (see Table 2). During the 2011 PHC enumeration, each member of the households were asked about their place of usual living now and five years ago. Apart from the districts in Botswana, the category also includes other countries. When cross classifying these information it was found that about 1,359 persons had migrated to other countries and 20,268 persons came from other countries to Botswana during the period 2006-2011. Among the total migrations that occurred during the interval, three fourths of them belonged to an age above five and one fourth of them belonged to children of less than age five who seems to have migrated along with their parents. The districts/towns such as Gaborone, Francistown and Ngamiland East were significant net-outmigration during 2006-2011. On the other, the districts/ towns such as Kweneng East, South East, Serowe-Palapye, Kweneng West, Central Tutume and North East were significant net-immigration during 2006-2011 (see Figure 1 and Table 2).

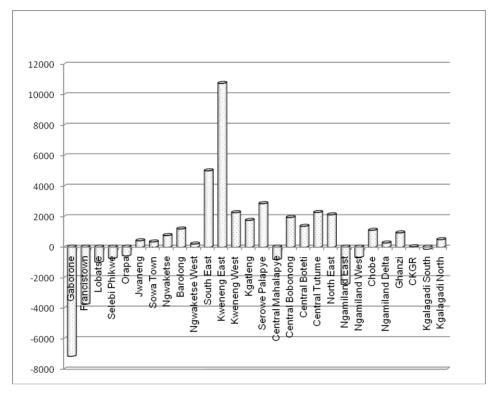


Figure 1: Net Migrations by District in Botswana, 2006-2011

Source: Statistics Botswana (2011)

District	Popula- tion	No. of in-mi- grants	No. of Out-mi- grants	No. of N e t – m i - grants	Annual rate of in-mi- gration (%)	Annual rate of out-mi- g r a - tion(%)	Annual rate of net-mi- g r a - tion(%)
Gaborone	231592	31564	38720	-7156	2.73	3.34	-0.62
Francistown	98961	13108	16855	-3747	2.73	3.41	-0.02
Lobatse	29007	4114	5090	-976	2.84	3.51	-0.67
Selebi Phikwe	49411	6274	7001	-727	2.54	2.83	-0.29
Orapa	9531	1834	2398	-564	3.85	5.03	-1.18
Jwaneng	18008	4035	3615	420	4.48	4.01	0.47
Sowa Town	3598	1028	684	344	5.71	3.80	1.91
Ngwaketse	129247	10730	9965	765	1.66	1.54	0.12
Barolong	54831	5202	4010	1192	1.90	1.46	0.43
Ngwaketse West	13689	1255	1050	205	1.83	1.53	0.30
South East	85014	12275	7266	5009	2.89	1.71	1.18
Kweneng East	256752	25786	15041	10745	2.01	1.17	0.84
Kweneng West	47797	2918	653	2265	1.22	0.27	0.95
Kgatleng	91660	7849	6092	1757	1.71	1.33	0.38
Serowe-Palapye	180500	16151	13295	2856	1.79	1.47	0.32
Central Mahalapye	118875	8600	9408	-808	1.45	1.58	-0.14
Central Bobonong	71936	7145	5195	1950	1.99	1.44	0.54
Central Boteti	57376	4923	3553	1370	1.72	1.24	0.48

Table 2: District-wise Migration During the Last Five Year (2006-2011)

Botswana Notes and Records, Volume 46

Source: Statistics Botswana (2011)							
Total	2024904	205989	187080	18909			
tion							
International migra-		20268	1359	18909	0.20	0.01	0.19
Kgalagadi North	20476	2018	1524	494	1.97	1.49	0.48
Kgalagadi South	30016	1822	1955	-133	1.21	1.30	-0.09
Central Kgalagadi Game Reserve	260	135	104	31	10.38	8.00	2.38
Ghanzi	43095	3177	2239	938	1.47	1.04	0.44
Ngamiland Delta	2529	415	141	274	3.28	1.12	2.17
Chobe	23347	3239	2131	1108	2.77	1.83	0.95
Ngamiland West	59421	2339	2999	-660	0.79	1.01	-0.22
Ngamiland East	90334	6131	8573	-2442	1.36	1.90	-0.54
North East	60264	6923	4801	2122	2.30	1.59	0.70
Central Tutume	147377	13640	11363	2277	1.85	1.54	0.31

Source: Statistics Botswana (2011)

Migration During 2010-2011

Table 3 below gives the estimates of district-wise migrations during 2010-2011. This has been estimated using the information on place of current usual residence and place of last residence one year ago. Children born during the period 2010-2011 were excluded. The estimate shows that there were about 165,397 in-migrations and 149,225 out-migrations during 2010-2011 including international migrations (see Table 3). As regards the international migration the study noted that an emigration of 1,203 persons and immigration of 17,375 persons during the same period.

Table 3 and Figure 2 also indicate that the following towns/districts were significant net outmigration districts during 2010-2011 namely Gaborone, Francistown and Ngamiland East. Similarly, the districts such as Kweneng East, South East, Serowe-Palapye, Kweneng West, Central Tutume, Kgatleng, Central Bobonong and North East were significant net in-migrations during the same period. There were about 30,000 persons out migrations from Gaborone town during the period 2010-2011. The majority of them out-migrated to Kweneng East (24%) followed by South East (10%). Gaborone is also received large scale in-migration of about 27,000 persons. Among the in-migration to the district, large share of them were from the Kweneng East (20%) followed by migrations from other countries (18%). This shows that there is a large scale population movement between Gaborone and the neighbouring district Kweneng East.

Francistown recorded about 11,000 persons in-migrations and about 13,000 persons outmigrations. From Francistown the majorited migrated to Central Tutume (23%) and North East (12%). Among those migrated to Francistown, around 21% of them were from Central Tutume and about 16% of them from Gaborone. Again this shows that population movements between Francistown and Central Tutume, a neighbouring district is notable. The other notable district is Kweneng East where the district has received 19,000 persons in-migrants and sent 13,000 persons out-migrants to other districts during the period 2010-2011. Among those in-migrants to Kweneng East the majority of them were from Gaborone (37%). Among those out-migrated from Kweneng East the majority (40%) had moved to Gaborone. The other prominent district for significant flow of migration is Central Serowe-Palapye with 13,000 persons in-migrations and about 11,000 persons out-migrations. Among the inmigrations to the district Central Serowe-Palapye the majority were from Gaborone (19%) followed by Central Mahalapye (16%). Again, among the out-migrations from the district Central Serowe-Papapye the majority went to Gaborone (16%) and Central Mahalapye (14%).

As regards the international migration, about 17,375 persons migrated to Botswana from other

countries and 1,203 persons migrated from Botswana to other countries, resulting in net immigration of 16,172 persons. Among international immigrants to Botswana the major destinations were the districts of Gaborone (28%) followed by Kweneng East (13%). It was also noted that more than 50% of them were from Zimbabwe and about 18% came from South Africa while the remaining were from other countries. The share of immigrations from Zimbabwe to the total immigrations to the country seems to have increased in recent years. In the 1991 PHC among the total immigration to the country the share of South African immigrants was about 34% followed by Zimbabwe about 29 per cent (Oucho *et al* 2000). As noted earlier, the immigration to Botswana during 2006-2011 was about 20,268 persons, of which 17,375 persons (85%) immigrated during the period 2010-11. This clearly shows that immigrations to Botswana seem to have increased in recent years and the majority of them from Zimbabwe who migrate to Botswana for employment in unorganised sectors.

						of .	of (
	Popula- tion	No. i n - m grants	No. out-m grants	nts	Rate (in-mi gra tion(%)	Rate of Out-mi- g r a - tion(%)	Rate of Net-mi- g r a - tion(%)
District	Pop tion	No. i n - grai	No. o u t grai	No. net gra	i n ga i n tio	tio O R3	R3 0 SI
Gaborone	231592	27076	29797	-2721	11.69	12.87	-1.17
Francistown	98961	10797	13001	-2204	10.91	13.14	-2.23
Lobatse	29007	3411	3798	-387	11.76	13.09	-1.33
Selebi Phikwe	49411	5136	5281	-145	10.39	10.69	-0.29
Orapa	9531	1525	1807	-282	16	18.96	-2.96
Jwaneng	18008	3544	2981	563	19.68	16.55	3.13
Sowa Town	3598	897	658	239	24.93	18.29	6.64
Ngwaketse	129247	8368	8242	126	6.47	6.38	0.1
Barolong	54831	3961	3348	613	7.22	6.11	1.12
Ngwaketse West	13689	1016	889	127	7.42	6.49	0.93
South East	85014	10174	5757	4417	11.97	6.77	5.2
Kweneng East	256752	19407	13311	6096	7.56	5.18	2.37
Kweneng West	47797	2132	174	1958	4.46	0.36	4.1
Kgatleng	91660	6544	5115	1429	7.14	5.58	1.56
Serowe-Palapye	180500	13196	10931	2265	7.31	6.06	1.25
Central Mahalapye	118875	6847	7404	-557	5.76	6.23	-0.47
Central Bobonong	71936	5530	4304	1226	7.69	5.98	1.7
Central Boteti	57376	3824	3043	781	6.66	5.3	1.36
Central Tutume	147377	10959	9460	1499	7.44	6.42	1.02
North East	60264	5191	4065	1126	8.61	6.75	1.87
Ngamiland East	90334	4824	6246	-1422	5.34	6.91	-1.57
Ngamiland West	59421	1850	2516	-666	3.11	4.23	-1.12
Chobe	23347	2798	1951	847	11.98	8.36	3.63

Table 3: District-wise migration during the last one year from the date of Census 2011(age 1+)

Botswana Notes and Records, Volume 46

International mi- gration 2323 336 166 216 1167 Ghanzi 43095 2711 1961 750 6.29 CKGR 260 128 56 72 49.23 Kgalagadi South 30016 1445 1723 -278 4.81 Kgalagadi North 20476 1730 1300 430 8.45		2024904	165397	149225	16172			
Ghanzi43095271119617506.29CKGR260128567249.23Kgalagadi South3001614451723-2784.81			17375	1203	16172	0.86	0.06	0.8
Ghanzi43095271119617506.29CKGR260128567249.23	gadi North	20476	1730	1300	430	8.45	6.35	2.1
Ghanzi 43095 2711 1961 750 6.29	gadi South	30016	1445	1723	-278	4.81	5.74	-0.93
	R	260	128	56	72	49.23	21.54	27.69
	zi	43095	2711	1961	750	6.29	4.55	1.74
Ngamiland Delta 2529 376 106 270 14.87	iland Delta	2529	376	106	270	14.87	4.19	10.68

Source: Statistics Botswana (2011)

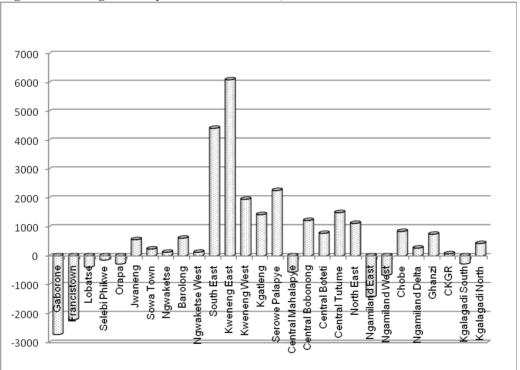


Figure 2: Net-Migrations by district in Botswana, 2010-2011.

Source: Statistics Botswana (2011)

Migration Differentials

In this section we discuss the internal migration differentials in Botswana during the period 2010-2011. These differentials provide a clue to understand the causes and consequences of migration. The 2011 PHC data indicates that the propensity of migration is marginally higher for males compared to females, but not very significant (see Figure 3a). In developing countries males usually outnumber females in the migration streams. However, in Botswana males and females migrations are in equal number implying that there is no sex selective migration stream in Botswana. Though overall sex ratio of the population is favourable to females, the sex ratio of migration does not show similar pattern.

There is a clear age patterns of migration observed in Botswana in the 2011 census (see Figure 3b). The age pattern of migration follows the inverted U shape as observed in many developing countries. In general, migration in Botswana is selective to young age groups (15-34 years). As expected the propensity to migrate (percentage of migrants within the age group) is greater in the age group 15-24 (13.7%) followed by 25-34 (11.5%). The propensity to migrate is declining as age increases from age 35 onwards. It was also noted that among the total migrations, the share in these two age groups

accounted for about 60%.

The level of education is an important determinant of migration. The propensity to migrate is greater among persons with tertiary education (14.9%) followed by secondary education (10.5%) as shown in Figure 3c. The propensity to migrate is lowest among persons with primary education or less (4.3%). It was also noted that among the total migrants about 50% of them had secondary education and about 30% had tertiary education.

The 2011 PHC data also indicate that propensity to migrate differ with respect to marital characteristics. The propensity of migration is greater among those who never married and those who are living together which is about 10% each (see Figure 3d). The propensity of migration is lowest among the married, the separated and the divorced. Among total migrants the never married category constitutes about 62% followed by living together at 23%.

Around 81% of the migrants were Christians. People who have not reported any religion constitute about 14% of the total migrations. As expected, the nomads religion Rastafarian (17%) has the greater propensity to migrate, however, they constitute only 0.2% of the total migrants. Apart from the Rastafarians the propensity to migration is also greater among Christians and Bahai at 9% each as indicated in Figure 3e.

With respect to economic activity, the characteristics of migrants are likely to be different from non-migrants. Among the migrants 72% of them were working as paid cash after migrations. Among the non-migrants this percentage was only 64%. The propensity of migration seems to be greater among those works for paid cash employment followed by jobseekers. For every 100 job seekers, 10 of them are migrants. As expected, those who work at own land and self-employed have lower propensity to migrate. As regards the economically inactive population, among the total migrants, more than 50% of them were students and at around 36% were home workers. The propensity to migrate is also highest among the students.

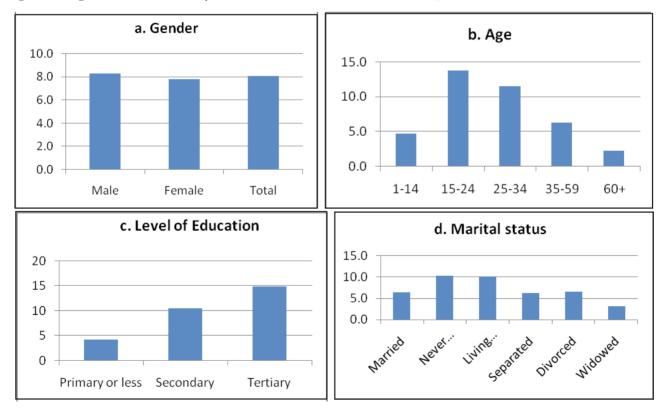
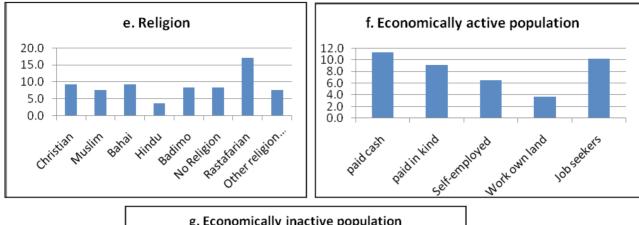
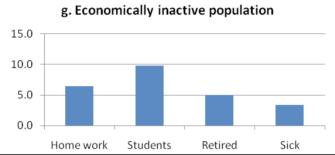


Figure 3: Migration Differentials by Individual Characteristics in Botswana, 2011 (%)





Source: Statistics Botswana (2011)

Table 4: Changing Patterns of District-wise	e Migrations in Botswana, 2011
---	--------------------------------

Migration interval	Net in-migration districts	Net out-migration districts
	Gaborone	Serowe-Palapye
	Kweneng East	Ngwaketse
Lifetime migrations	Southeast	Central Mahalapye
	Francistown	Ngamiland East
		Central Tutume
	Kweneng East	Gaborone
	South East	Francistown
Migrations during 2006 11	Serowe-Palapye,	Ngamiland East
Migrations during 2006-11	Kweneng West	
	Central Tutume	
	North East	
	Kweneng East	Gaborone
	South East	Francistown
	Serowe-Palapye	Ngamiland East
Migrations during 2010-11	Kweneng West	
	Central Tutume	
	Kgateng	
	Central Bobonong	
	North East	

Source: Statistics Botswana (2011)

Policy Implication

The flow of movement in the population is likely to increase in the future and therefore, an appropriate policy needs to be designed. As the reasons for migration are not recorded in the census, it would be better if the census schedule includes the reason for migration in the future to understand the causes. The net out-migration from urban districts such as Gaborone and Francistown could be due to changing settlement patterns factored into increase in land prices or family return migration. There is a need to create education facilities or employment opportunities in the areas from where net out-migration is quite high. Appropriate policy needs to be developed to meet the demands such as housing, water, sanitation, educational opportunities and other infrastructural facilities invoked from the population movements.

Conclusion

This paper has analysed and explained the patterns and differentials of internal migration in Botswana using the 2011 PHC data. The study observed that a pattern of migration has been changing in Botswana over the years. For instance, the two cities namely Gaborone and Francistown, which were of net in-migration before 2001, have become net out-migration as of 2011 (see Table 4). Similarly, the districts such as Serowe-Palapye and Central Tutume, which were of net out-migration before 2001, have become net in-migration districts as of 2011. The district Kweneng East has continued to receive migrants from other districts, notably from Gaborone. It is possible that the people from Gaborone city may be moving out to the suburban fringe in the Kweneng East. The district Ngamiland East continued to send people to other districts. Also the flow of population movements is significant between Gaborone and Kweneng East and between Francistown and Central Tutume. Obviously, the distance is a crucial factor for population movements in the country. Also increasing urbanisation might have put the pressure on the people to move to the sub-urban areas in the neighbouring districts.

With regard to international in-migration into Botswana, the major destinations are to Gaborone and the district Kweneng East, and the majority of them were from Zimbabwe. The study noted that the emigration from Botswana to other countries is negligible. Similar findings were also observed in the 2001 PHC as the volume of emigration showed a declining trend since 1971 (Gwebu 2003b) and therefore no brain drain. This seems to indicate that opportunities are available in the country and the majority of the people appear not interested in migrating to other countries. The survey conducted in 2000 as a part of the Southern African Migration Project, the Batswana reported that they were not interested in long-term emigration (Oucho *et al* 2000).

As regards the migrations differentials, the propensity to migrate is almost the same for both males and females. This is in contrast to most developing countries. The propensity to migrate is greater among adults (15-34 age), educated, never married, living together, Christians, paid employed, jobseekers and students.

References

Gwebu, TD 2003a. 'Internal Migration in Botswana', paper presented at the 2001 Population and Housing Census Dissemination Seminar', held in Gaborone, 8-11 September 2003.

Gwebu, TD 2003b. 'International Migration in Botswana', paper presented at the 2001 Population and Housing Census Dissemination Seminar, held in Gaborone, 8-11 September 2003, Gaborone.

Navaneetham, K, Dwivedi, VK and Singh, R 2013. 'Patterns and Differentials of Migration in Botswana: Evidence from 2011 Census', paper presented at the 2011 Population and Housing Census Dissemination Conference, held in Gaborone, 9-12 December 2013.

Oucho, J, Campbell, E and Mukamaambo, E 2000. Botswana: Migration Perspectives and Prospects.

Migration Policy Series No. 19. The Southern African Migration Project, Idasa, Cape Town and Queen's University, Canada.

Statistics Botswana 2011. Population and Housing Census, 2011. Gaborone: Statistics Botswana.

Sutherland, PD 2013. 'Migration and Development: How Migration Matters to the Post-2015 Debate', Migration and Development, vol. 2 (2), pp.151-156.

United Nations 1970. Manual VI: Methods of Measuring Internal Migration. Population Studies No. 47. New York: United Nations.