

Characteristics and Determinants of International Migration: The Recent Phenomenon of Migration of Bhutanese to International Destinations

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Abstract

The trend in international migration has always been increasing. However, in Bhutan, the rising number of international migrants, which has surged in recent years, is a new phenomenon. This paper explores the recent development of international migration of Bhutanese to countries, such as India, Australia, USA and countries in Middle-East Asia. It examines the characteristics of Bhutanese international migrants. The study also analyses the underlying reasons that drives international migration in Bhutan. As such, this study is one of the first comprehensive investigations on international migration of Bhutanese that leverages data from the two major Population and Housing Censuses conducted in the country thus far. In doing so, this paper seeks to provide an insight into the impact of international migration on the demographic structure and the policies that influence such migration.

Keywords: international migration, push and pull factors, urbanisation, rural development, Bhutan

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Introduction

Human migration has been an enduring facet of history, driven by social, economic, and political factors (Koser, 2016). Migration is a concept often analysed through the dimensions of time and space. It is typically defined as the movement of individuals involving a shift from their usual place of residence, often crossing administrative boundaries, such as villages, towns, districts, or even international borders (Kok, 1999). International migration, as Skeldon (2017, p. 2) argues, is a complex concept, as its definition and measurement cuts across the concepts of time and geography. The International Organization for Migration (IOM, 2019) offers a simple, yet comprehensive, definition of international migration as the movement of people across international borders with the intent to establish a new residence in a foreign country for a variety of reasons, such as employment opportunities, family reunification, education, humanitarian reasons, or other motivations. Migration can be explained through the traditional, and commonly used, approach of the demand-pull and supply-push factors. It is generally assumed that modern sectors of production which are located in urban areas have higher rates of productivity and monetary rewards than rural agricultural areas (Barrios et al., 2006). The key pull factors that migration responds to are economic incentives and better economic opportunities in the host countries (Brueckner & Lall, 2015; Duranton et al., 2015). Supply push factors of international migration point to factors other than productivity improvements that influence population movements to other countries. Some of the common supply push factors are due to: increase in population pressure in the country of origin (Buhaug & Urdal, 2013); displacement of population due to civil conflicts (Barrios et al., 2006); and climate change (Brueckner & Lall, 2015).

In 2017, there was a significant observation regarding population mobility in Bhutan, a small landlocked country located in the Himalayas. Out of its total of approximately 750,000 population, about 50% of its population had altered their usual place of residence. This change involved various

types of movements, including migration from rural to urban areas (19.8%), between rural areas (16.8%), from urban to rural areas (3.0%), and between different urban areas (5.0%). During the same year, approximately 16,000 people from Bhutan chose to emigrate to countries such as India, the USA, Australia, and various other international destinations. The primary aim of this paper is to comprehensively explore international migration in Bhutan. In doing so, the study focuses on two main aspects. Firstly, we analyse the level, trends and patterns of the origins and destinations of these Bhutanese international migrants and examine some of its impact on shaping the demographic landscape of the country. In this part of the study, we investigate whether or not there are significant variations in the level of migration across different age groups, educational levels, and gender, providing insights into demographic disparities. Secondly, the study analyses the underlying reasons driving international migration in Bhutan. In this part of the study, we examine the socio-economic factors that serve as drivers for international migration, shedding light on the forces motivating individuals to relocate internationally.

Bhutan's history reveals distinct phases of both inbound and outbound migration. Historically, there have been at least five notable waves of inbound migration into Bhutan: two from ancient times and three more recent waves since the 19th century. The first recorded influx of people into Bhutan dates back to the establishment of the region by Tibetan Buddhists, known as *ngalop*, who had firmly settled by 600 CE. The second wave involved the arrival of the *sharchops* from either Burma or Assam, which occurred during the first millennium (The third wave of migration saw the arrival of Nepalis and Indians, who came to Bhutan as craftsmen, migrant workers and slaves during the late 19th and early 20th centuries. A fourth, albeit smaller, wave consisted of Tibetans who began arriving in Bhutan in 1959. This was followed by a fifth wave characterized by continued immigration from India and Nepal, primarily driven by Bhutan's development projects in the 1960s (Worden, R.L. & Savada, A.M., 1991). With the outbound

migration, the historical trend is not as prolific as the inbound migration waves. There have been practices of migrants into Bhutan from neighbouring regions, such as India, Nepal and Tibet. This influx was primarily a result of robust trade and commerce ties between Bhutan and its neighbours (Choden, 2004, pp. 112–128). There were also a few outbound movements of Bhutanese to India in present day states, such as Pemako in Arunachal Pradesh in 1913 and Shillong in Meghalaya (Grothmann, 2012, pp. 21–52). It is only in more recent years that international migration of Bhutanese have increased, and destinations, such as, Australia, Canada, United Kingdom, USA, amongst others. Although our study focuses on data collected in two specific years (that is, 2005 and 2017) when Bhutan conducted its two population and housing census, data as of October 2023 reveal that there are close to 43,000 Bhutanese now living across 112 countries (Lhamo, 2023). Australia has the most Bhutanese (17,000) with India (13,800) and Kuwait (4,000) following closely. Therefore, the significance of this study is to provide a deeper understanding of these Bhutanese international migrants and address some of the dynamics and issues associated with this phenomenon. In doing so, our study seeks to provide an insight into the impact of international migration on the demographic structure and the policies that influence such migration.

Determinants of International Migration

Migration constitutes the third key component of population change, alongside mortality and fertility. While mortality relates to the number of deaths within a population, and fertility pertains to the number of births, migration focuses on the movement of people from one place to another. In the realm of migration, individual wishes and intentions play a pivotal role. In most cases, migratory movements are intentional and deliberate choices made by individuals or groups. However, there can be exceptional cases where migration may occur involuntarily or due to factors beyond individual control, such as forced displacement or environmental disasters. Migration, fundamentally, reflects the responses of human beings to a range of economic, social, and demographic forces within their

environment. These forces can include economic opportunities, the pursuit of a better quality of life, family reunification, escape from conflict or persecution, and other factors that motivate individuals to change their place of residence. Therefore, migration is a dynamic process shaped by a complex interplay of individual aspirations and external influences, making it a significant factor in shaping the demographic landscape of regions and countries.

Migration is a complex phenomenon driven by a combination of factors that either push individuals away from their home countries or pull them toward host countries. Understanding why some people choose to migrate while others do not is a critical aspect of migration research. Ravenstein (1889) says that people migrate primarily for pragmatic reasons such as the pursuit of better job opportunities or higher wages, remains highly relevant in understanding migration patterns worldwide. This principle holds true for both domestic and international migration flows. As countries experience economic growth and improved standards of living, more individuals find themselves in a position to invest in migration, both in terms of the financial costs involved and the skill composition of their working-age populations. In particular, the proportion of college graduates within the resident population tends to increase with economic development. It is this group of highly educated individuals that exhibits the strongest propensity to emigrate (Jaupart, 2023). In essence, economic factors continue to be a driving force behind migration, and as societies progress economically, the desire and ability to seek better employment opportunities elsewhere often grow stronger. This phenomenon underscores the enduring significance of Ravenstein's law in understanding contemporary migration dynamics.

Lee (1966) made significant contributions to the field of migration theory, particularly through the development of the push-pull model. While the original focus of this model was on labour or economic migration, it has since been expanded to

include various groups of migrants, including refugees (James & Mayblin, 2016).

The driving economic factors behind migration can be categorized into two main components - “push” and “pull” factors. The concept of push factors revolves around the notion that people migrate due to compelling circumstances or adverse conditions in their place of origin, effectively pushing them to seek better opportunities elsewhere. Conversely, pull factors revolve around the idea that individuals are drawn to new locations by the allure of favourable conditions and opportunities. In essence, voluntary migration, especially in the context of developing countries, is primarily an economic phenomenon characterized by people seeking improved economic prospects in areas with more promising employment opportunities. This dynamic involves a complex interplay of push and pull factors, shaping the decisions of individuals to migrate in pursuit of a better economic future. The push factors are those that compel or force a person, due to various reasons, to leave that place and go to some other place. For example, adverse economic conditions caused by poverty, low productivity, unemployment, exhaustion of natural resources and natural calamities may compel people to leave their native place in search of better economic opportunities.

Lee (1966, p. 50) also identified four sets of factors associated with the area of origin, destination, intervening obstacles and personal factors that influence individuals' decisions to migrate. The factors associated with the area of origin, often referred to as push factors, play a significant role in motivating individuals to leave their home countries. Among these push factors, conflict and economic insecurity are particularly influential drivers of international migration (Sirkeci, 2005; UNCHR, 2017). The motivations behind migration can be broadly classified into four categories namely economic, demographic, socio-cultural and political, which provide a comprehensive framework for understanding why people choose to move. The primary driver of voluntary migration, particularly in developing countries, is economic in nature.

Within these nations, factors such as low agricultural income, agricultural unemployment, and underemployment serve as prominent catalysts propelling individuals toward regions offering more abundant job opportunities. Consequently, numerous studies consistently emphasize that a significant majority of migrants undertake their journeys in pursuit of improved economic prospects. This holds true for both internal migration within a country and international migration between countries. Overall, the push-pull model and the four sets of factors provide a valuable framework for understanding the complex interplay of circumstances and motivations that drive migration. It helps shed light on why people choose to leave their home countries and why they select particular destinations for migration.

Methods

Our study utilizes data from two major Population and Housing Censuses of Bhutan (PHCB) conducted by the National Statistics Bureau (NSB). The first PHCB was conducted in 2005, followed by the second in 2017. The NSB, serving as the apex body for all statistical services in the country, coordinated the census activities. This coordination involved the formation of the National Census Steering Committee, which oversaw the planning and execution of the census. The NCSC consisted of representatives from relevant government secretaries, with the Prime Minister serving as the Chairperson. The district statistics officers played a crucial role, supporting the NSB in their capacity as the member secretary of the District Census Committee. All 20 districts established their own committees, and officials from various government sectors actively participated as census enumerators. The first PHCB in 2005 gathered essential information about 634,982 individuals, while the second PHCB in 2017 collected data on 735,553 individuals across the country. Both censuses collected a wide range of information, including general demographic characteristics, migration patterns, education, employment, fertility among women aged 15 to 49, housing conditions and amenities, and other valuable household-related data. Based on the results of the 2005 PHCB and 2017 PHCB, the total

population in 2005 was recorded as 634,982 individuals, while it increased to 735,553 individuals in 2017.

For our study, we analysed data from 634,982 individuals in the 2005 PHCB and 681,686 individuals in the 2017 PHCB. Individuals with missing information in relation to their district of birth in the census were excluded from the analysis. Additionally, information about the status and whereabouts of household members, including their country of residence if they were living abroad during the census, was included in our analysis. Furthermore, the duration of absence (if the household members was residing outside Bhutan on the Census Night, the name of the country of current residence with total number of months were recorded), measured in completed months as provided in the census, served as the basis for determining whether a person had migrated during the census reference period. All other socio-demographic variables, including age, gender, marital status, education, district of birth, and reasons for migration, were considered in our study. We also examined a number of socio-economic variables to analyse the factors that influence rural urban migration in Bhutan. To make consistent comparisons, we sought information from the statistical yearbook released by NSB each year. Except for those factors specifically mentioned below, all data were based on the Statistical Yearbook 2005 (SYB 2005) and Statistical Yearbook 2017 (SYB 2017): for health, we compared the number of health facilities (for e.g., number of hospitals, basic health units); for education, we compared the number of education facilities; for agriculture, we examined the area of land holding; for economic activity, we compared the number of firms (both by type and by size of firms); and for roads, we compared the length of roads. For the variables on finance and poverty, we had to use different sources of information. Based on the government's five-year plan document (9th Five-Year Plan (2002-2007) and 11th Five-Year Plan (2013-2018)), we compared the five-year plan outlay for each district. To compare the poverty rates, the poverty gap index for the years 2007 and 2017 from the Poverty Analysis Report for those years published by NSB were used.

We employed multivariable logistic regression analysis, and adjusted odds ratios (AOR) with 95% confidence intervals (CI) were used to determine the correlates of different independent variables. To ensure the robustness of our model, we also tested all independent variables for multicollinearity.

Results

Our study reveals that in 2017, 15,756 people, which accounts for 2% of the population in Bhutan, migrated (refer to Table 1). Among these migrants, males (55.4%, 8,732) outnumbered females (44.6%, 7,024). The largest age groups among migrants were 20-24 years (27.9%, 4,389), 25-29 years (23.5%, 3,708), and 30-34 years (14.0%, 2,205). Conversely, those in the 60-64 years age group migrated the least (0.7%, 103). Notably, individuals with a single marital status constituted the majority of migrants (64.5%, 10,074) compared to married or cohabiting individuals (32.9%, 5,130), those divorced or separated (2.2%, 344), and widows or widowers (0.4%, 68). In terms of education, approximately 43% (6,843) of migrants held bachelor's degrees or higher, followed by 32.6% (5,133) with education up to the higher secondary level. Similar patterns were observed in the 2005 PHCB census data, where 8,979 people (1% of the population) migrated, and similar socio-demographic characteristics were noted.

Table 1. *Summary of study variables*

Variables	Year=2017				Year=2005			
	Total (N= 681,686)		Migrated (n=15,756)		Total (N= 634,982)		Migrated (n=8,979)	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Sex								
Female	339,825	49.9	7024	44.6	301,387	47.46	2,559	28.5
Male	341,861	50.2	8732	55.4	333,595	52.54	6,420	71.5
Age								
0-14	187,132	27.5	878	5.57	209,959	33.07	1,118	12.45
15-19	66,643	9.78	1049	6.66	75,236	11.85	1,216	13.54
20-24	66,509	9.76	4389	27.9	70,574	11.11	2,285	25.45
25-29	69,764	10.2	3708	23.5	57,358	9.03	1,611	17.94
30-34	58,621	8.6	2205	14	42,806	6.74	1,015	11.3
35-39	50,478	7.4	1,477	9.37	38,729	6.1	686	7.64
40-44	37,527	5.51	814	5.17	29,900	4.71	394	4.39
45-49	32,277	4.73	539	3.42	27,662	4.36	281	3.13
50-54	27,236	4	300	1.9	22,047	3.47	164	1.83
55-59	22,889	3.36	167	1.06	16,392	2.58	76	0.85
60-64	20,262	2.97	103	0.65	14,574	2.3	54	0.6
65+	42,348	6.21	127	0.81	29,745	4.68	79	0.88
Marital Status								
Single	338,200	49.6	10,074	64.5	350,005	55.12	6,358	70.81
Married/living together	311,214	45.7	5,130	32.9	275,033	43.31	2,540	28.29
Divorced/separated	16,671	2.45	344	2.2	9,226	1.45	76	0.85
Widow/er	15,249	2.24	68	0.44	717	0.11	5	0.06
Education								
No education	271,743	39.9	1,593	10.1	384,560	60.56	2744	30.56
Primary	164,174	24.1	1,560	9.9	143,160	22.55	1522	16.95
Up to higher secondary	164,603	24.2	5,133	32.6	89,382	14.08	2430	27.06
Vocational training institute	3,763	0.55	74	0.47	...	...	...	...
Diploma	8,442	1.24	357	2.27	4,507	0.71	322	3.59
Bachelor and higher	46,765	6.86	6,843	43.4	13,373	2.11	1,961	21.84
Others	22,196	3.26	196	1.24	...	...	...	...

The most common destination countries for migrants between 2005 and 2017 were Australia (17.3%, 2,724), the United States of America (USA) (8.3%, 1,312), and the Middle East (6.0%, 938). An intriguing finding was the increased migration of females in recent years, especially to the USA and Australia. More than one-third of migrants during this period were young individuals actively participating in the labour force. A similar pattern was observed in 2005, where 39% migrated.

The marital status of migrants correlated with their choice of destination countries. Married or cohabiting individuals tended to migrate more to Australia and the United States of America, while those with a single marital status were more likely to migrate to the Middle East and other countries. Detailed information on migrants by destination country and socio-demographic characteristics is provided in Table 2.

Table 2. Demographics of migrants by destination country

Variables	2017										2005									
	USA (n=1,312)		Australia (n=2,724)		Middle East (n=938)		India (n=7,747)		Others (n=3,035)		USA(n=495)		Australia (n=183)		India (n=6,905)		Others (n=1,396)			
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%		
Sex																				
Female	711	54.19	1,383	50.77	604	64.39	2,937	37.91	1,389	45.77	228	46.06	73	39.89	1,819	26.34	439	31.45		
Male	601	45.81	1,341	49.23	334	35.61	4,810	62.09	1,646	54.23	267	53.94	110	60.11	5,086	73.66	957	68.55		
Age																				
0-14	104	7.93	269	9.88	2	0.21	383	4.94	120	3.95	30	6.06	15	8.20	946	13.70	127	9.10		
15-19	72	5.49	99	3.63	12	1.28	649	8.38	217	7.15	23	4.65	1	0.55	1,093	15.83	99	7.09		
20-24	159	12.12	254	9.32	273	29.10	2958	38.18	745	24.55	61	12.32	26	14.21	1,957	28.34	241	17.26		
25-29	156	11.89	526	19.31	439	46.80	1,830	23.62	757	24.94	109	22.02	42	22.95	1,201	17.39	259	18.55		
30-34	212	16.16	719	26.40	140	14.93	761	9.82	373	12.29	99	20.00	52	28.42	607	8.79	257	18.41		
35-39	211	16.08	508	18.65	39	4.16	430	5.55	289	9.52	68	13.74	36	19.67	414	6.00	168	12.03		
40-44	168	12.80	220	8.08	15	1.60	221	2.85	190	6.26	59	11.92	7	3.83	227	3.29	101	7.23		
45-49	121	9.22	76	2.79	10	1.07	191	2.47	141	4.65	30	6.06	3	1.64	172	2.49	76	5.44		
50-54	63	4.80	25	0.92	3	0.32	110	1.42	99	3.26	6	1.21	0	-	117	1.69	41	2.94		
55-59	33	2.52	8	0.29	2	0.21	71	0.92	53	1.75	5	1.01	0	-	59	0.85	12	0.86		
60-64	7	0.53	15	0.55	1	0.11	56	0.72	24	0.79	1	0.20	1	0.55	44	0.64	8	0.57		
65+	6	0.46	5	0.18	2	0.21	87	1.12	27	0.89	4	0.81	0	-	68	0.98	7	0.50		
Marital status																				
Single	556	42.64	862	31.73	696	74.36	6,084	79.51	1,876	62.39	256	51.72	72	39.34	5,221	75.61	809	57.95		
Married/living together	662	50.77	1,814	66.76	198	21.15	1,415	18.49	1,041	34.62	222	44.85	109	59.56	1,641	23.77	568	40.69		
Divorced/separated	83	6.37	32	1.18	42	4.49	107	1.40	80	2.66	16	3.23	2	1.09	40	0.58	18	1.29		
Widow/er	3	0.23	9	0.33	0	-	46	0.60	10	0.33	1	0.20	0	-	3	0.04	1	0.07		
Education																				
No education	84	6.40	110	4.04	14	1.49	1,122	14.48	263	8.67	76	0.15	23	0.13	2,276	32.96	369	26.43		
Primary	128	9.76	236	8.66	33	3.52	945	12.20	218	7.18	42	0.08	5	0.03	1,318	19.09	157	11.25		
Up to higher secondary	495	37.73	603	22.14	458	48.83	2,681	34.61	896	29.52	182	0.37	29	0.16	1,886	27.31	333	23.85		
VIT	9	0.69	13	0.48	1	0.11	34	0.44	17	0.56	...	...	...	...	...	...	...	...
Diploma	29	2.21	126	4.63	8	0.85	136	1.76	58	1.91	17	0.03	14	0.08	240	3.48	51	3.65		
Bachelor and higher	553	42.15	1,609	59.07	421	44.88	2,700	34.85	1,560	51.40	178	0.36	112	0.61	1,185	17.16	486	34.81		
Others	14	1.07	27	0.99	3	0.32	129	1.67	23	0.76	...	...	...	...	...	...	...	...

Migration of Bhutanese to International Destinations

Thimphu, Paro, and Trashigang emerged as the primary origin districts (see Table 3), accounting for over two-fifths of all migration between 2005 and 2017. This pattern remained consistent with the migration flow observed in 2005.

Table 3. *Migrants by origin district and by destination country*

District of Birth	2017					2005			
	USA	Australia	Middle East	India	Others	USA	Australia	India	Others
	%	%	%	%	%	%	%	%	%
Bumthang	4.50	2.47	1.40	2.76	4.18	6.10	2.94	2.59	5.31
Chhukha	4.58	4.54	9.04	7.91	5.47	3.92	5.29	6.47	5.00
Dagana	1.05	1.54	3.34	3.00	2.24	0.65	4.12	0.93	1.08
Gasa	-	0.15	0.32	0.09	0.07	-	1.76	0.20	0.31
Haa	2.65	1.76	2.05	1.76	2.04	2.61	2.94	1.33	1.85
Lhuentse	2.89	4.46	3.12	3.86	4.08	3.70	2.94	5.26	5.54
Monggar	2.81	5.77	3.23	4.48	4.96	2.83	6.47	4.54	5.46
Paro	8.44	9.22	8.50	4.41	6.15	6.97	8.24	4.46	6.08
Pema Gatsel	3.30	3.22	3.12	5.15	3.40	1.31	2.35	3.39	3.77
Punakha	2.97	3.64	3.66	2.19	3.09	4.14	2.94	1.20	1.85
Samdrup	1.29	3.45	3.44	7.83	4.42	3.05	5.88	9.17	3.85
Jongkhar	-	-	-	-	-	-	-	-	-
Samtse	3.14	3.34	7.64	8.36	4.62	1.31	0.59	9.19	5.62
Sarpang	1.77	3.11	8.83	5.46	3.60	2.61	1.76	4.78	3.15
Thimphu	38.10	30.47	18.62	17.32	28.29	36.38	25.88	22.01	26.00
Trashigang	8.12	8.81	7.97	11.02	8.67	10.68	7.06	10.95	11.38
Trashi Yangtse	2.41	2.47	2.69	2.84	3.03	1.31	4.12	3.52	2.31
Trongsa	4.50	2.89	1.94	2.32	2.92	3.49	4.71	2.93	3.00
Tsirang	1.61	2.14	3.23	2.91	2.38	0.44	1.76	1.74	1.62
Wangdue	-	-	-	-	-	-	-	-	-
Phodrang	3.54	4.39	4.31	3.45	3.57	5.01	7.65	2.50	3.08
Zhemgang	2.33	2.17	3.55	2.88	2.79	3.49	0.59	2.83	3.77

Note: There were no migrants to the Middle East in 2005 as per 2005 PHCB data.

Additionally, we examined various socio-economic factors to analyse potential migration determinants. Data were gathered from the statistical yearbook of the National Statistics Bureau. For instance, data included the number of health facilities, users of family planning methods, educational institutes, and population figures in each district as social variables. Economic variables encompassed land use for agriculture, the number of contract firms by type and size, government budget allocations in five-year plans, road length, and the poverty gap index in each district. Information closely matched the population census reference years of 2005 and 2017, and in cases where specific data was unavailable for those years, the closest available information was used (see Table 4).

Table 4. *Details of socio-economic variables from Statistical Yearbook of Bhutan (SYB)*

Variables	Year	Mean	SD
Number of Health Facilities in each district	2004	39.11	20.50
	2016	47.47	19.01
Number of users of family planning method in each district	2004	85,972.75	102,369.40
	2016	88,801.44	41,739.73
Number of education institutes in each district	2004	49.19	19.64
	2016	37.90	12.44
Land under agriculture use (in hectares) in each district	1995	17,274.20	10,841.10
	2010	6,379.06	4,083.11
Number of contract firms (by type) in each district	2003	843.17	1,155.30
	2017	369.47	499.12
Number of contract firms (by size) in each district	2003	840.72	1,185.44
	2017	2,046.92	2,442.48
Five-Year-Plan capital outlay budget (in million Nu.) in each district	2002-2007	564.21	176.97
	2013-2018	465.41	96.14
Length of road (in km) in each district	2005	276.06	122.84
	2020	999.40	346.55
Poverty gap index in each district	2007	6.07	4.74
	2017	1.60	1.87
Population in each district	2005	46,956.31	26,697.58
	2017	54,731.69	38,255.40

Trends in the International Migration of Bhutanese

The trend in international migration among Bhutanese has surged in recent years. Between January 1, 2018, and March 22, 2023, approximately 13,583 Bhutanese departed for Australia, utilizing Paro International Airport (Karma, 2023). This study reveals that 2% of the population had already migrated to other countries in 2017. Moreover, given the increasing number of Bhutanese citizens choosing to go abroad, it is likely that the proportion of migrants has risen even further in recent times. Regression analysis in Table 5 revealed that males were 6% more likely to migrate between 2005 and 2017 than females, and this difference was statistically significant. People aged 30-49 years were more likely to migrate compared to children aged 0-14 years. Married or cohabiting individuals were less likely to migrate than single individuals. All levels of education were associated with higher migration compared to those without formal education. Individuals with bachelor's degrees or higher were 18 times more likely to migrate than those without formal education. All 20 districts saw migration to Australia, the USA, the Middle East, and other countries. Migration was most prominent from Thimphu, followed by Paro and Trashigang. Different reasons were associated with migration, except for natural calamities, security, and tourism. Family relocation was 14% more likely among migrants compared to single individuals, and all other reasons were less likely to result in migration compared to single status, and these differences were statistically significant.

Table 5. Regression results of migration with the socio-demographic drivers

Variables	2017		2005	
	AOR	95% CI	AOR	95% CI
Sex				
Female	Ref			
Male	1.0626**	(1.0260 1.1006)	1.8849***	(1.7825 1.9933)
Age groups (years)				
0-14	Ref			
15-19	1.8261***	(1.6473 2.0243)	1.9951***	(1.8035 2.2070)
20-24	8.4055***	(7.6983 9.1777)	5.5005***	(4.9975 6.0542)
25-29	11.8473***	(10.8220 12.9698)	11.3190***	(10.2252 12.5298)
30-34	15.5342***	(14.0858 17.1316)	17.8109***	(15.8762 19.9814)
35-39	17.6959***	(15.9603 19.6203)	15.8198***	(13.9022 18.0018)
40-44	17.7440***	(15.8420 19.8743)	12.6658***	(10.8600 14.7720)
45-49	15.8158***	(13.9523 17.9283)	9.4436***	(7.9134 11.2697)
50-54	12.1276***	(10.4642 14.0553)	6.6256***	(5.3070 8.2719)
55-59	9.0319***	(7.5246 10.8412)	4.3462***	(3.1976 5.9073)
60-64	6.1702***	(4.9256 7.7292)	2.9074***	(1.9772 4.2752)
65+	4.1178***	(3.3302 5.0916)	2.3001***	(1.6950 3.1213)
Marital status				
Single	Ref			
Married/living together	0.3066***	(0.2919 0.3219)	0.2142***	(0.1979 0.2318)
Divorced/separated	0.3702***	(0.3290 0.4167)	0.2958***	(0.2314 0.3782)
Widow/er	0.2800***	(0.2167 0.3619)	0.1762***	(0.0712 0.4360)
Education				
No education	Ref			
Primary	2.443***	(2.2576 2.6437)	1.1338***	(1.0499 1.2245)
Up to higher secondary	5.1731***	(4.8218 5.5501)	1.2227***	(1.1313 1.3214)
Vocational training institute	3.5344***	(2.7711 4.5079)	...	...
Diploma	6.3061***	(5.5531 7.1611)	5.2585***	(4.5646 6.0579)
Bachelor and higher	18.2952***	(17.0378 19.6454)	6.5575***	(6.0263 7.1355)
Others	1.4681***	(1.2578 1.7136)		
Reasons for migration				
Never moved	Ref			
Employment	0.4605***	(0.4341 0.4884)	0.8166	(0.7283 0.9157)
Education	0.8534***	(0.8075 0.9019)	6.6162***	(6.1399 7.1293)
Training	0.7188***	(0.6285 0.8221)	3.4525***	(3.0044 3.9676)
Marriage	0.3877***	(0.3394 0.4429)	0.9854	(0.8183 1.1866)
Family move	1.1380***	(1.0863 1.1922)	1.8295***	(1.6838 1.9878)
Transfer of work place	0.2316***	(0.2105 0.2547)	0.6723***	(0.5864 0.7708)
Resettlement	0.6264***	(0.5230 0.7501)	0.6167***	(0.4408 0.8627)
Natural Calamities	0.7913	(0.4245 1.4752)	0.7083	(0.2905 1.7268)
Security	0.5870	(0.3082 1.1178)	0.4705*	(0.2089 1.0600)
Health	0.2280***	(0.1502 0.3462)	1.5679***	(1.1201 2.1947)
Business/official tours	0.2417***	(0.1958 0.2985)	1.2694**	(1.0493 1.5358)
Retirement	0.3751***	(0.2703 0.5205)	0.5274**	(0.2966 0.9380)
Tourist	0.8852	(0.3366 2.3284)	19.6049***	(10.0431 38.2701)
Visiting only	0.1246***	(0.1011 0.1535)	0.9411	(0.7950 1.1140)
Other	0.3478***	(0.2868 0.4218)	2.0786***	(1.8227 2.3705)
Don't know	1.6300***	(1.2187 2.1801)		
Birth District				
Thimphu	Ref			
Bumthang	0.7632***	(0.6875 0.8472)	0.4724***	(0.4079 0.547)
Chhukha	0.6102***	(0.5658 0.6581)	0.3680***	(0.3289 0.4117)
Dagana	0.4563***	(0.4080 0.5103)	0.1233***	(0.0970 0.1567)
Gasa	0.1955***	(0.1186 0.3222)	0.2420***	(0.1498 0.3908)
Haa	0.5488***	(0.4832 0.6233)	0.2359***	(0.1927 0.2887)
Lhuntse	0.8938**	(0.8127 0.9830)	0.5243***	(0.4637 0.5928)
Monggar	0.5392***	(0.4943 0.5883)	0.2475***	(0.2185 0.2803)
Paro	0.7401***	(0.6843 0.8004)	0.3996***	(0.3535 0.4516)
Pema Gatshel	0.5167***	(0.4702 0.5678)	0.3473***	(0.3004 0.4015)
Punakha	0.5591***	(0.5021 0.6224)	0.2039***	(0.1671 0.2489)
Samdrup Jongkhar	0.7145***	(0.6588 0.7748)	0.4403***	(0.3967 0.4886)
Samtse	0.5151***	(0.4771 0.5561)	0.3597***	(0.3248 0.3984)
Sarpang	0.5874***	(0.5385 0.6409)	0.2925***	(0.2574 0.3323)
Trashigang	0.7244***	(0.6774 0.7746)	0.3777***	(0.3442 0.4143)
Trashigang Yangtse	0.5619***	(0.5045 0.6258)	0.3141***	(0.2713 0.3636)
Trongsa	0.8294***	(0.7424 0.9266)	0.4031***	(0.3460 0.4696)
Tsiring	0.5052***	(0.4526 0.5638)	0.1630***	(0.1346 0.1975)
Wangdue Phodrang	0.5403***	(0.4913 0.5942)	0.2107***	(0.1810 0.2452)
Zhemgang	0.5202***	(0.4671 0.5794)	0.2755***	(0.2374 0.3198)

Note: AOR- Adjusted Odds Ratio; CI- Confidence Interval; Ref-Reference category; and ***p<0.01, **p<0.05, *p<0.10.

The primary destination countries for most migrants were Australia, the United States of America, and the Middle East. Approximately one-third of these migrants were young and economically active individuals, and this trend can potentially have various economic impacts. Firstly, the increasing number of young Bhutanese going abroad may have adverse effects on the domestic labour market. Our study reveals that married or cohabiting migrants tended to migrate more to Australia and the United States of America, while migrants with single marital status predominantly chose the Middle East and other destination countries. Secondly, the rising migration of young and single Bhutanese to the Middle East and other destinations could potentially slow down the population growth, as they are less likely to marry and start families promptly. Such young migrants might exacerbate the declining total fertility rate of the country. Notably, the total fertility rate decreased from 2.5 in 2005 (NSB, 2005, p. 178) to 1.7 in 2017 (NSB, 2017, p. 33).

All levels of education showed a notable association with increased rates of international migration, particularly in comparison to individuals without formal education. Our findings underscore education as a primary driver of international migration, with individuals holding bachelor's and higher degrees being significantly more likely to migrate than those lacking formal education. The growing number of international migrants with bachelor's and higher-degree qualifications raises concerns about potential brain drain and its impact on service delivery efficiency. While a higher number of educated international migrants may be seen as an endorsement of our education system's success, the repercussions for the country could be profound.

An interesting finding from this study is the substantial volume of international migrations originating from Thimphu and Paro districts. This phenomenon could be attributed to factors such as land availability, capital resources, and entrepreneurial opportunities specific to these districts. Moreover, the accessibility of education loans secured with mortgage

collateral (land and building) appears to benefit these districts disproportionately relative to others. The quantum of education loans varies among financial institutions. For instance, Tashi Bank Limited extends a maximum of 75% of the collateral value, not exceeding Nu.3 million, for overseas education, while the Bank of Bhutan Limited provides 70% of the collateral value, with a cap at Nu.1 million. This financial opportunity likely contributes to the higher numbers of international migrations observed in Thimphu and Paro districts.

Determinants of International Migration of Bhutanese

A debate on the causes or drivers of migration persists (Black et al., 2022), and the decision to migrate is complex, influenced by a multitude of factors (Selod & Shilpi, 2021). An online survey of Bhutanese migration has unveiled several pull factors, including higher income, improved economic prospects, enhanced financial security, a more stable future, an elevated standard of living, and access to superior education (Ura, 2023). Notably, countries such as Australia, the USA, and the Middle East appear to attract migrants with the allure of higher wage rates and greater demand for unskilled laborers. About 12.4% (NSB, 2022b, p. 6) of the total population in Bhutan is below the poverty line of Nu. 6,024 with 17.5% being in rural areas. The unemployment rate of 5.9% in 2022 (NSB, 2022a, p. 32) has significantly increased over time and pushed people to the place where there are opportunities in abundance. The non-availability of alternative sources of income is also another factor for migration. The pursuit of improved economic opportunities, often involving the movement from lower-income regions to higher-income destinations, continues to be a dominant factor influencing migration decisions.

Table 6 analyses the potential drivers of international migration, considering key socio-economic push factors extracted from the Statistical Yearbook of Bhutan's National Statistics Bureau. Interestingly, several factors stood out as statistically significant at different levels. Notably, the percentage change in the poverty gap, utilized as a proxy for

income in each district, along with the percentage change in the total floating population within each district, and the percentage change in the native-born population within each district, were all found to be statistically significant at the 1% significance level.

Table 6. *Regression results of migration with other potential socio-economic variables from SYB*

Variables	Coefficients	95% CI
Number of Health Facilities in each district (% change)	0.0015	(-0.0017 0.0048)
Number of users of family planning method in each district (% change)	-0.0012*	(-0.0024 0.0001)
Number of education institutes in each district (% change)	-0.0073*	(-0.0161 0.0014)
Land under agriculture use (in hectares) in each district (% change)	-0.0113*	(-0.0232 0.0006)
Number of contract firms (by type) in each district (% change)	0.0182**	(0.0005 0.0359)
Number of contract firms (by size) in each district (% change)	-0.0006	(-0.0036 0.0025)
Five-Year-Plan capital outlay budget (in million Nu.) in each district (% change)	0.0110*	(-0.0013 0.0234)
Length of road (in km) in each district (% change)	0.0001	(-0.0011 0.0013)
Poverty gap index in each district (% change)	-0.0158***	(-0.0252 -0.0064)
Population in each district (% change)	0.0275***	(0.0079 0.0472)
Population born in each district (Birth district) (% change)	0.0061***	(0.0040 0.0083)

Note: SYB-Statistical Yearbook of Bhutan; Natural logarithm of the % change in the migrated population was taken as the dependent variable; CI- Confidence Interval; and ***p<0.01, **p<0.05, *p<0.10.

On the other hand, other drivers, as detailed in Table 6, such as the percentage change in the number of family planning methods employed in each district (serving as a proxy for health indicators), the percentage change in the number of educational institutes in each district, the percentage change in land dedicated to agricultural use, and the percentage change in the number of contract firms categorized by size in each district, were all significant at the 10% significance level.

Notably, the percentage change in the poverty gap within each district, acting as an income proxy, emerged as the most highly

significant variable. This finding supports the hypothesis suggesting a negative relationship between the income gap and overall migration levels. However, further analysis and research are warranted to gain a deeper understanding of the increasing trend in international migration among Bhutanese citizens. It is important to recognize that the government's conventional approaches to mitigating international migration often rely on factors, such as “push-pull” dynamics. Nevertheless, it is imperative to view migration as an integral component of broader development processes, rather than merely a problem to be immediately “solved” (De Haas, 2010, p. 40).

It was often viewed that people who are attracted to cities and the high wages and salaries in urban areas are involved in migration. Lee (1966), for the first time explained that, apart from pull factors, there are also push factors for migration. The pull factors refer to those factors which attract the migrants to an area, such as, opportunities for better employment, higher wages, better working conditions and better amenities of life. There is generally city-ward migration, where rapid expansion of industry, commerce and business takes place. In recent years, the high rate of movement of people from Bhutan to Australia, Middle East, the USA, and now to Canada and UK reflect international migratory global trends. Bhutanese migrate due to better employment opportunities, higher wages and better amenities of life, variety of occupations to choose from and the possibility of attaining higher standard of living while they pursue education at the same time. Sometimes the migrants are also attracted to cities in search of better cultural and entertainment activities or bright city lights. Oftentimes, the push factor is stronger than the pull factor as it is associated with the problems in the sending country rather than the attractions of the receiving country. While on the other hand, the pull factors can be due to high rates of return in investments made, more employment and business opportunities and greater attraction for the city way of life. However, sometimes migration may occur not by push or pull factors alone but as a result of the combined effect of both.

Conclusion

This study is one of the first comprehensive investigations on international migration of Bhutanese that leverages data from the two major Population and Housing Censuses. It not only presents a demographic overview of international migration among Bhutanese but also delves into an analysis of the factors driving this phenomenon. More specifically, it examines the causes and effects of international migration in Bhutan, shedding light on the underlying reasons that drive individuals to migrate and the consequences of their movements. Notably, the top destination countries for most migrants include Australia, the USA and Kuwait. It was also interesting to note that the concentration of international migration of Bhutanese originated from Thimphu and Paro districts. The study of Bhutan's international migration trends contributes towards the understanding of migration, its causes, effects, and associated challenges. Such contributions ultimately advancing knowledge in the area and guiding future research endeavours related to international migration (Hart, 1998; Watson & Webster, 2002). What is of particular practical significance to Bhutan is the fact that about one-third of the international migrants comprise young, economically active individuals with higher levels of education. This demographic category is potentially bringing about major socio-economic impacts in the country. As such, these developments hold paramount importance for policymakers, as they provide a comprehensive understanding of international migration trends and potential drivers. Armed with this knowledge, policymakers can better plan for the country's development.

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