FROM VILLAGES TO CITIES

INTERNAL MIGRATION AND LABOUR MOBILITY IN BHUTAN

NATIONAL STATISTICS BUREAU
Royal Government of Bhutan

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ACKNOWLEDGEMENT

This report, *From Villages to Cities: Internal Migration and Labour Mobility in Bhutan*, is prepared with the support of the UNFPA Country Office. The National Statistics Bureau (NSB) acknowledges the assistance that made the preparation of this report possible.

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1. INTRODUCTION

Bhutan is experiencing one of the most significant demographic shifts in its modern history. Internal migration from rural areas to urban centres has accelerated, with more than 110,000 people leaving rural communities between 2005 and 2017, and the share of the urban population increased from 30.9% to 37.8% over the same period. Alongside this internal movement, international migration has also grown, with over 66,000 Bhutanese now living or working abroad (State of the Nation Report, 2025); nearly one in every ten citizens. These trends have resulted in visible demographic imbalances, including declining school enrolment and ageing populations in some rural Dzongkhags, as well as increasing pressure on urban infrastructure and services.

This report examines these emerging migration patterns and their implications for Bhutan and further introduces the use of migration expectancy, a life-table–based measure that summarizes lifetime migration behavior using age-specific migration rates. Applying this approach to Labour Force Survey data provides new insights into the timing and intensity of internal migration.

2. DATA & METHODS

This report draws on microdata from the Quarterly Labour Force Survey (QLFS) conducted in May 2025. The survey employed a nationally representative stratified sampling design and covered 3,018 households, with 58% from rural areas and 42% from urban areas. The sample was designed to produce reliable labour estimates at the Dzongkhag level.

Analyses were conducted for persons aged 15 years and above, using the survey weights to ensure population-level representativeness and account for the sampling design. The study is primarily descriptive, employing summary statistics, cross-tabulations, and migration indicators to examine the magnitude, direction, and reasons for migration, as well as the demographic and socio-economic characteristics of migrants and non-migrants.

Migration related indicators by employment characteristics were analyzed with concepts and definitions based on International Labour Organization (ILO) standards. Migration expectancy measures were estimated to assess age patterns in internal migration, using the number of people surviving to each age and the total years lived within each age group, derived from life tables. The results reveal a strongly age-selective migration regime in Bhutan.

3.LIMITATIONS

The Quarterly Labour Force Survey (QLFS) covers 3,018 households and 10,526 individuals, with analysis limited to persons aged 15 years and above. Although the survey is designed to produce reliable labour market indicators, the relatively small sample size limits the precision of migration-related estimates, resulting in higher sampling variability.

The survey weights are primarily calibrated to produce representative employment and unemployment indicators rather than migration outcomes. As a result, migration estimates may not be sufficiently robust for detailed disaggregation or for direct comparison with population censuses or administrative records, which differ in methodology, coverage, and weighting design.

Recent migration in this analysis is defined based on previous place of residence rather than a specific reference period. Therefore, individuals classified as recent migrants may include lifetime migrants who have moved only once prior to their current residence. Hence, users are cautioned when interpreting findings related to recent migration.

Internal migration in this report is limited to inter-Dzongkhag movements. Migration occurring within Dzongkhags, including movements between Gewogs, is not captured. As a result, comparisons of migration patterns by urban and rural residence are incomplete and should be interpreted carefully.

For the estimation of migration expectancy, some indicators were drawn from the 2017 Population Projections. Differences in reference periods and data sources may have contributed to variations in the results and should be considered when interpreting the findings.

4.CONCEPTS AND DEFINITION

Internal migration is defined as the change of residence from one geographical unit (place of origin) to the place of destination crossing defined territorial boundaries or communities within a country. For this report, level of geographical units will refer to Dzongkhag which is to say that internal migration is the change in residence across Dzongkhag.

Various parameters such as place of birth, reasons for migration, duration of stay, and place of previous residence are commonly used to measure internal migration. While the Quarter 3 Labour Force Survey collected information on all these aspects, the present analysis is limited to place of birth and place of previous residence to assess the level of internal migration in the country.

The use of place of birth enables the identification of lifetime migrants, whereas place of previous residence captures recent migration. However, as the set of variables associated with lifetime migrants is limited in the survey, the analysis places greater emphasis on recent migration patterns, which are derived from information on previous residence.

While international standards on migration are referenced, the concepts and definitions adopted in this report are adapted to the available data and therefore may not fully conform to international recommendations.

Lifetime Migrant: A lifetime migrant is a person whose place of usual residence at the time of the survey differs from their place of birth.

Recent Migrants: Recent migrants are identified based on previous place of residence.

In-migrant: A person who entered a Dzongkhag by crossing its boundary from another Dzongkhag within the country during the reference period.

Out-migrant: A person who left a Dzongkhag by crossing its boundary to another Dzongkhag within the country during the reference period.

Place of Birth: It is place of the mother's usual place of residence at the time of birth. For persons born outside Bhutan, the country of birth is recorded. Migration status (migrant or non-migrant) is classified based on place of birth.

Net Migration: It is the difference between in-migration and out-migration for a given geographical area.

Place of Enumeration: It is the location where an individual is found and enumerated at the time of the survey.

Usual place of Residence: It is place where one usually resides.

Unemployed: a person is considered 'unemployed' if:

a. He/she is without work during the reference period (person who did not work during the last one week);
b. He/she has actively looked for the work in the last four weeks; and
c. He/she is available to work within the next two weeks.

Employed: a person is considered to be 'employed' if:

a. He/she did any work for pay, profit or family gain during the reference period (person who worked during the last one week) or
b. He/she has a job or business from which he/she was absent during the reference period.

Area of Residence: The urban areas are classified as defined by the Department of Human Settlement, the erstwhile Ministry of Works and Human Settlement (MoWHS) and while the rural areas is comprised of *gewogs* and *chiwogs* from all twenty *dzongkhags.*

Region: For the purpose of this report, Dzongkhags are grouped into four regions as presented in the table.

Table 1 Dzongkhag Distribution across different Region

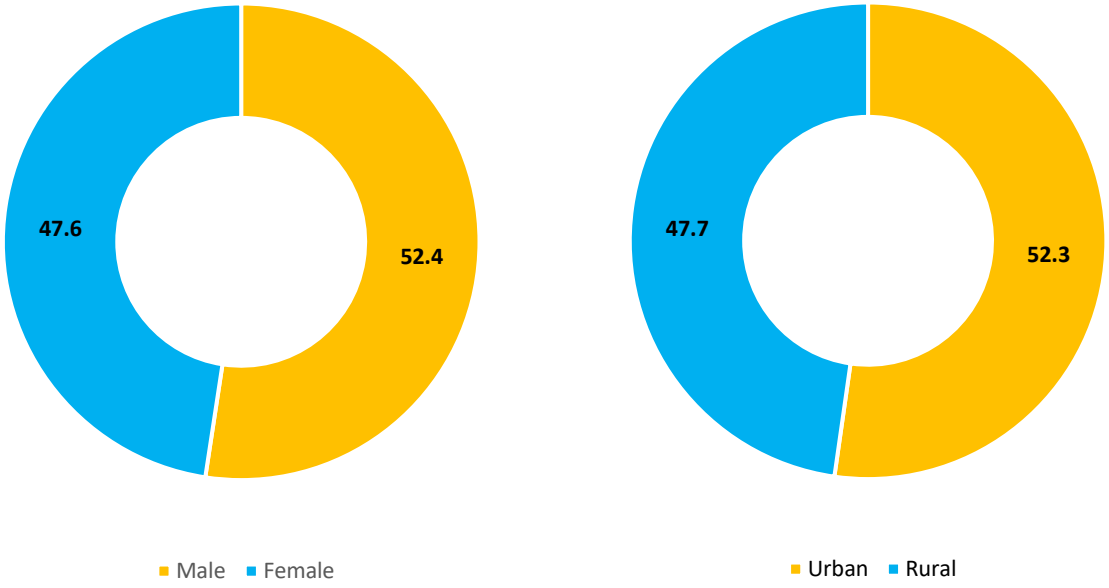
Eastern Region	Central Eastern Region	Central Western Region	Western Region
Lhuentse	Bumthang	Dagana	Chhukha
Monggar	Sarpang	Gasa	Haa
Pema Gatshel	Trongsa	Punakha	Paro
Samdrup Jongkhar	Zhemgang	Tsirang	Samtse
Trashigang		Wangdue Phodrang	Thimphu
Trashi Yangtse			

5. FINDINGS

5.1. Lifetime Migrants

A lifetime migrant is defined as a person whose Dzongkhag of usual residence at the time of the survey differs from their Dzongkhag (place) of birth. Out of 608,117 persons aged 15 years and above, about 27% reported having changed their Dzongkhag of residence since birth. Among lifetime migrants, 52.4% are male and 47.6% are female. In terms of current residence, 52.3% of lifetime migrants are residing in urban areas, while 47.7% are residing in rural areas.

Figure 1 Life time Migrants by sex and their current area of residence



The table 2 presents the distribution of lifetime migrants aged 15 years and above, with columns indicating place of birth and rows showing current place of residence. Among individuals born in the eastern region, 48.0% are currently residing in the western region, indicating a substantial lifetime shift from east to west. Only 21.5% remain in the eastern region, reflecting limited retention, while the rest are distributed across the central eastern (13.8%) and central western (16.8%) regions.

Similar patterns are observed for other birth regions, where a large share of individuals is currently residing in the western region and comparatively fewer remain in their place of birth. Western-born individuals, however, show relatively higher retention within the western region.

Table 2 Matrix of Lifetime Migrants between/within Regions, Bhutan 2025

Place of birth	Place of Enumeration				
	Eastern	Central Eastern	Central Western	Western	Total
Eastern Region	21.5	13.8	16.8	48.0	100
Central Eastern Region	7.9	27.2	18.5	46.5	100
Central Western Region	3.7	8.6	35.8	51.9	100
Western Region	5.3	9.5	15.6	69.7	100
Outside Bhutan	6.8	2.6	1.6	89.0	100
Total	11.7	13.3	19.9	55.1	100

5.2. Migrations based on Previous Place of Residence

In this report, recent migration is defined based on an individual's previous place of residence. Respondents were asked about the place they lived immediately prior to their current place of residence, unlike lifetime migration, which is based on place of birth. For some persons, the previous place of residence may be the same as their place of birth, in which case they would also be considered lifetime migrants.

The table 3 presents previous place of residence-based migration patterns in Bhutan by comparing individuals' previous place of residence with their current place of residence. It shows that the Western region is the main destination, attracting people from all other regions and from outside Bhutan as well. While a substantial proportion of individuals remain in their original region, interregional migration is evident, particularly towards the western region. For instance, 50.5% of people from the eastern region and 57.5% from the central eastern region have moved to the Western region. Migration from outside Bhutan is also predominantly towards the Western region (80%). Overall, the data reflects a strong westward migration trend within the country.

Table 3 Distribution of Migrants in Bhutan by Previous and Current Residence (%)

Previous Residence	Place of Enumeration				
	Eastern	Central Eastern	Central Western	Western	Total
Eastern Region	19.4	15.3	14.9	50.5	100.0
Central Eastern Region	9.8	18.0	14.7	57.5	100.0
Central Western Region	7.7	12.2	26.8	53.4	100.0
Western Region	9.0	11.9	22.9	56.3	100.0
Outside Bhutan	7.9	1.2	11.0	80.0	100.0
Total	11.7	13.3	19.9	55.1	100.0

Figure 2 Current Dzongkhags of the Migrants

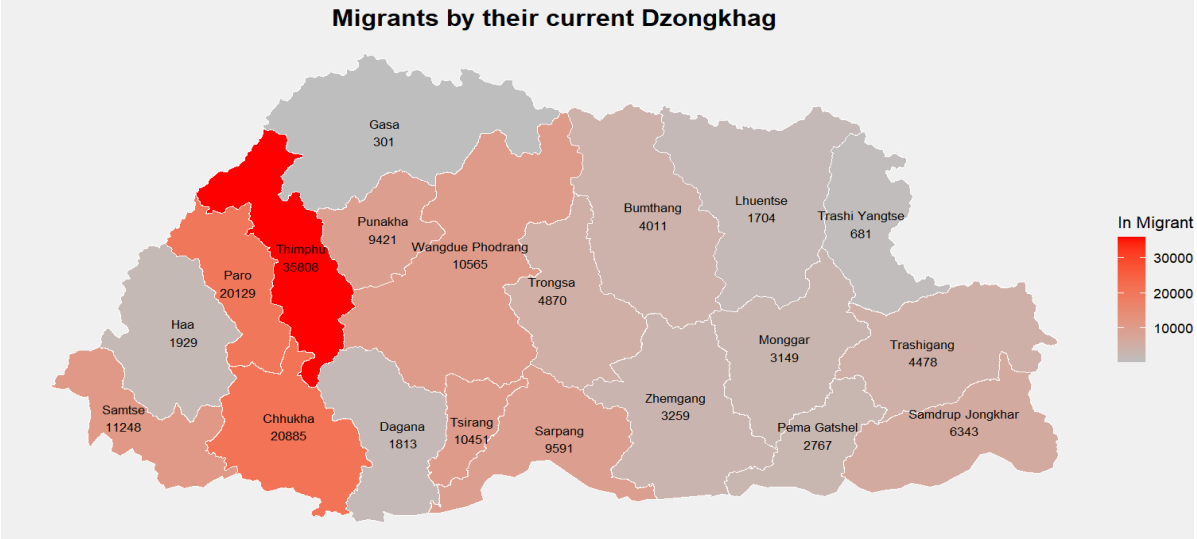
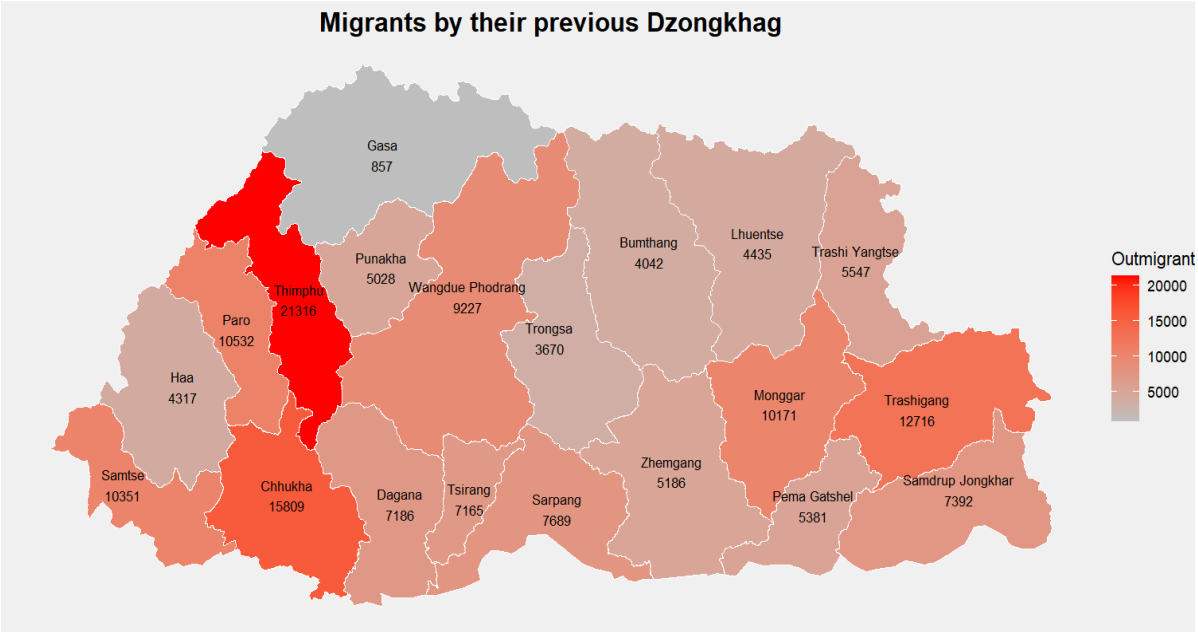


Figure 3 Number of Migrants by their Previous Place of Residence

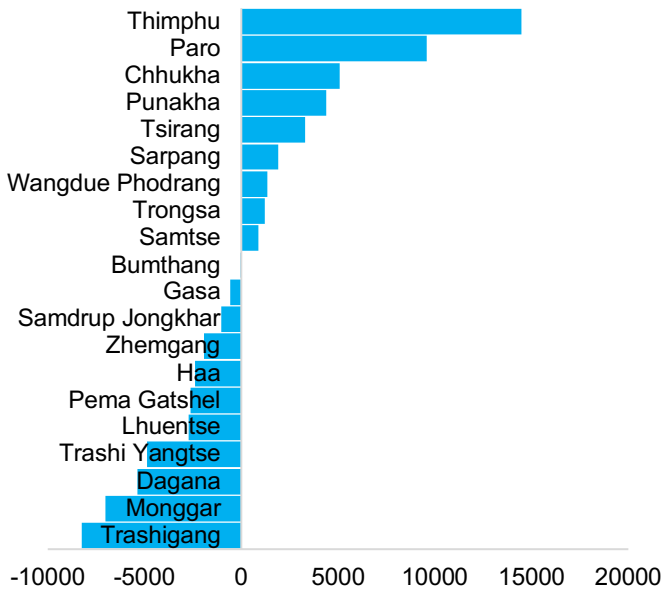


Population movement across Bhutan highlights the growing concentration of people in urban and economically vibrant areas. Dzongkhags such as Thimphu, Chhukha, and Paro continue to attract the largest number of in-migrants, reflecting their roles as key centers of employment, education, and services. Other Dzongkhags, including Punakha, Tsirang, and Wangdue Phodrang, also see moderate population inflows, signaling sustained opportunities in these areas (Figure 2).

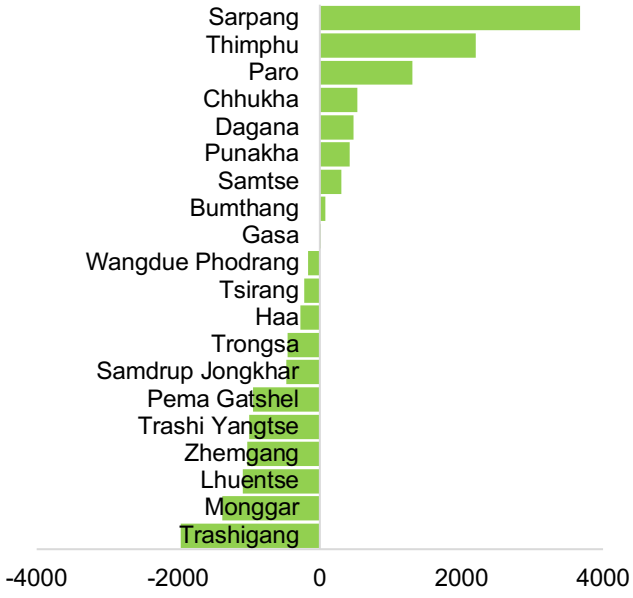
In contrast, several eastern and less urbanized Dzongkhags such as Trashigang, Monggar, Lhuentse, and Zhemgang, experience higher levels of out-migration, pointing to a gradual population shift away from peripheral regions. Net migration figures illustrate these differences clearly: Thimphu leads with a net gain of +14,491 residents, followed by Paro (+9,596) and Chhukha (+5,076), while Trashigang (−8,238), Monggar (−7,022), Dagana (−5,373), and Trashi Yangtse (−4,866) face the largest net population losses.

Figure 4 Net Migrations by Dzongkhags

4a: Net Migrations by Dzongkhags



4b Net Migrations (Census Transfer) by Dzongkhags[1]



Similarly, the analysis of civil registration and census data (Figure 4b) reveals clear patterns of internal migration across Dzongkhags. Both datasets consistently show net out-migration from eastern Dzongkhags, including Trashigang, Monggar, and Lhuentse, and net in-migration toward western and southern Dzongkhags such as Thimphu, Sarpang, Paro, and Chhukha. Central Dzongkhags, including Punakha and Dagana, experience modest net population gains.

Overall, the comparison of bar charts from both the civil registration and census and survey data confirms a consistent trend: populations are increasingly moving from sparsely populated eastern regions to more economically vibrant and urbanized western and southern Dzongkhags. This migration pattern underscores the growing concentration of people in areas with greater economic opportunities and highlights the need for balanced regional development policies.

[1] *The data are sourced from the Department of Civil Registration and Census and cover all persons during the reference period.*

The table 4 shows the distribution of migrant's current place of residence by their previous residence. Among migrants who previously lived in urban areas, about 54% currently reside in urban areas, while 46% live in rural areas. Similarly, among those who previously lived in rural areas, just over half (51%) currently live in urban areas. Overall, a slightly higher share of migrants currently lives in urban areas compared to rural areas, indicating movement in both directions, with a modest tendency toward urban residence.

Table 4 Migration by Place of Residence[2] (%).

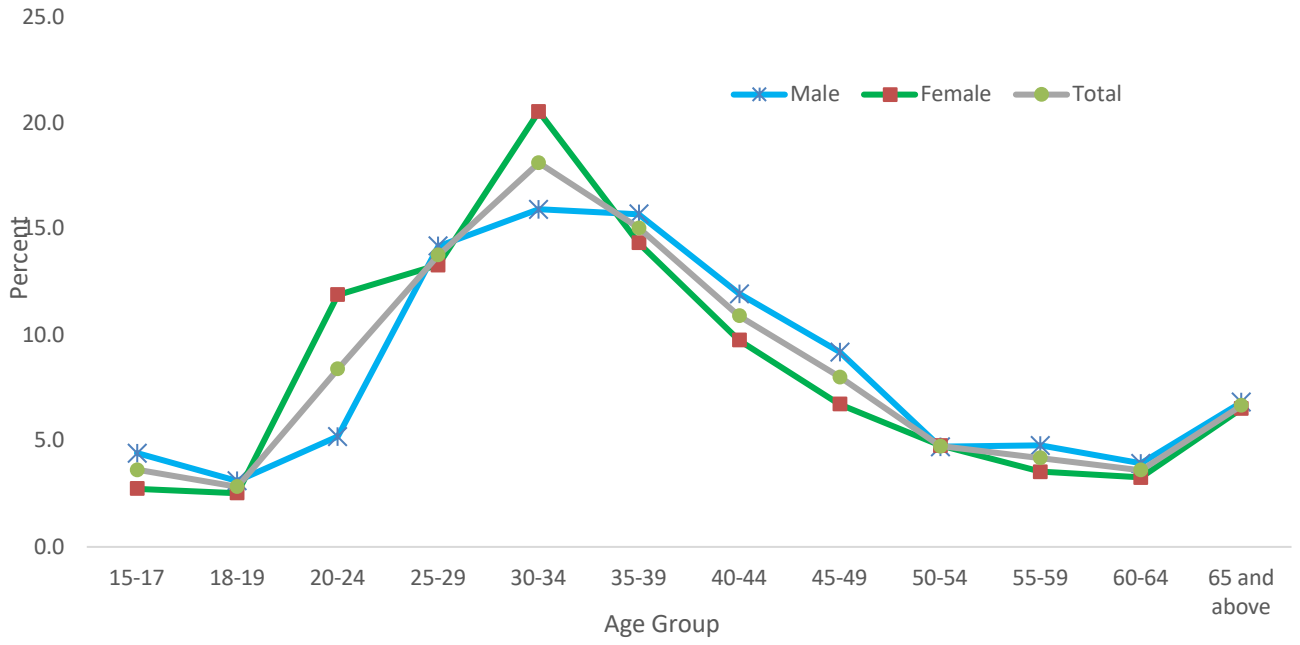
Previous Residence	Current Residence		
	Urban	Rural	Total
Urban	53.9	46.1	100.0
Rural	50.9	49.1	100.0
Total	52.3	47.7	100.0

Migration is mainly concentrated among the working-age population, particularly those aged 25–39 years, with the highest proportion observed in the 30–34 age group. It should be noted that the age groups represent the current age of migrants at the time of the survey, rather than their age at the time of migration. The observed pattern nonetheless reflects the predominance of economically active individuals among the migrant population.

Gender differences are evident across age groups. Female migrants are relatively more represented in the 20–24 and 30–34 age groups, while male migrants are more prominent in the 25–29 and 35–39 age groups. Migration shares decline steadily after age 40 for both sexes, indicating lower mobility among older populations.

[2] The table considers migrations between Dzongkhags only. Movements between urban and rural areas within the Dzongkhags were not captured in the survey.

Figure 5 Age Specific Migration rate by Age group and by sex



The figure 6 shows that family-related moves are the most common reasons for overall migration (27.6%), particularly among females (36.6%). Marriage is also a significant driver of female migration (19.8%), highlighting the importance of family and social factors in women's migration decisions.

The age-specific migration profile exhibits the classic unimodal labour-dominated pattern described in the Rogers–Castro standard migration schedule. Migration intensities rise sharply from the late teens, peak in young adulthood (25–34 years), and decline progressively thereafter, with a small secondary increase at older ages. This pattern reflects education- and employment-related mobility in early adulthood, occupational stabilization in Middle Ages, and return or dependency-related migration at retirement ages (Rogers & Castro, 1981; Rogers, Raquillet & Castro, 1978; Rogers, 1990). The higher female migration rates in the young adult ages are consistent with marriage-related and spouse-reunification mobility commonly observed in Asian populations, while the rebound at 65 years and above reflects return migration and family-support driven relocation in later life (Rogers, 1990).

Figure 6 Reasons for Migration

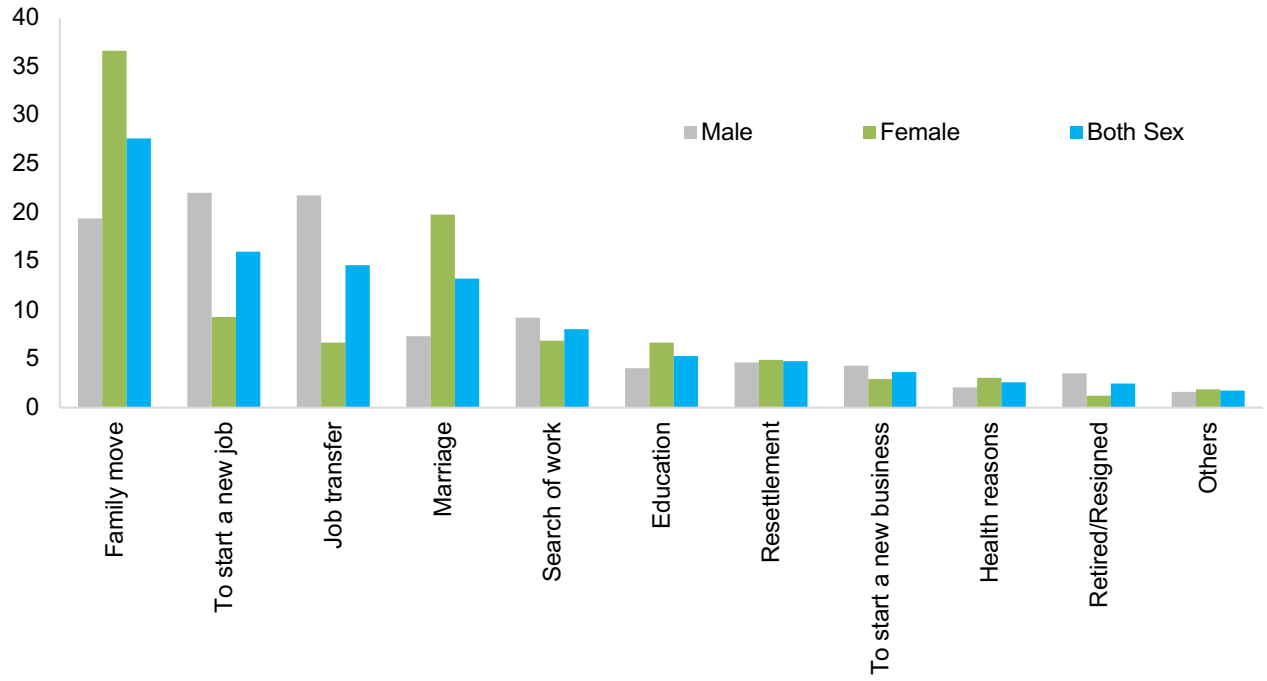


Figure 6 indicates that family-related mobility constitutes the single most important driver of internal migration in Bhutan, accounting for over a quarter (27.6%) of all moves and rising sharply among females (36.6%). Marriage alone explains nearly one-fifth (19.8%) of female migration, underscoring the centrality of family formation and spouse reunification in shaping women's mobility behavior. This gendered pattern is consistent with the early female peaks observed in the age-specific migration schedule and reflects well-documented life-course migration processes, whereby women tend to migrate earlier and more frequently for family and marital reasons (Rogers & Castro, 1981; Rogers, Raquillet & Castro, 1978).

In contrast, male migration is predominantly labour-driven. Males are substantially more likely to migrate for employment-related reasons, particularly to start a new job (22.0%) or due to job transfers (21.8%), compared to much lower proportions among females. This dominance of employment motives among men corresponds closely with the strong male presence in the prime working ages observed in the migration age profile, highlighting the central role of labour-market restructuring and occupational mobility in shaping male migration streams. Other motives such as job search, education, and resettlement account for comparatively smaller shares for both sexes, indicating that internal migration in Bhutan is primarily structured around family formation and employment consolidation rather than distress-driven or speculative movement. Collectively, these patterns reflect a mature, life-course driven migration system in which mobility is closely linked to marriage, employment transitions, and long-term settlement dynamics.

Overall, the heatmap highlights that youthful migration is driven primarily by employment and education, whereas older-age migration tends to be connected to family movement, health, and retirement factors.

Figure 7 Reasons for Migration by Age group

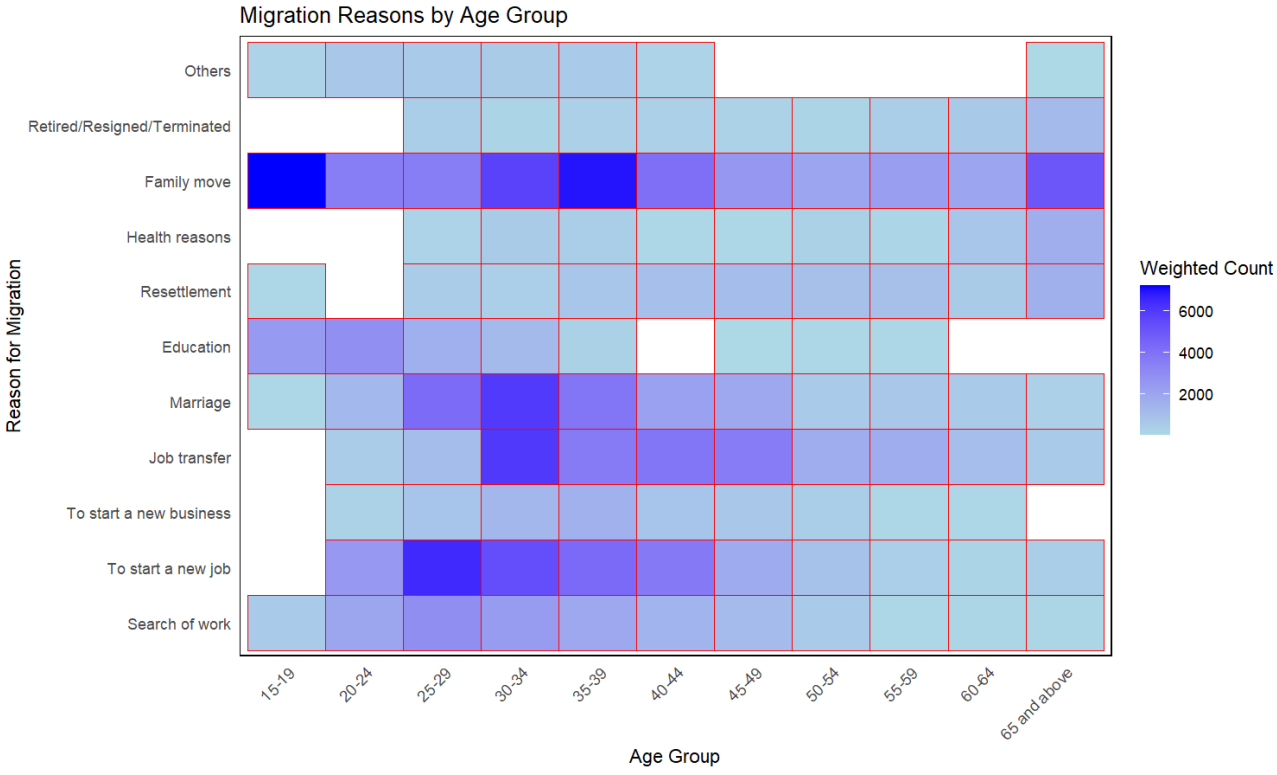


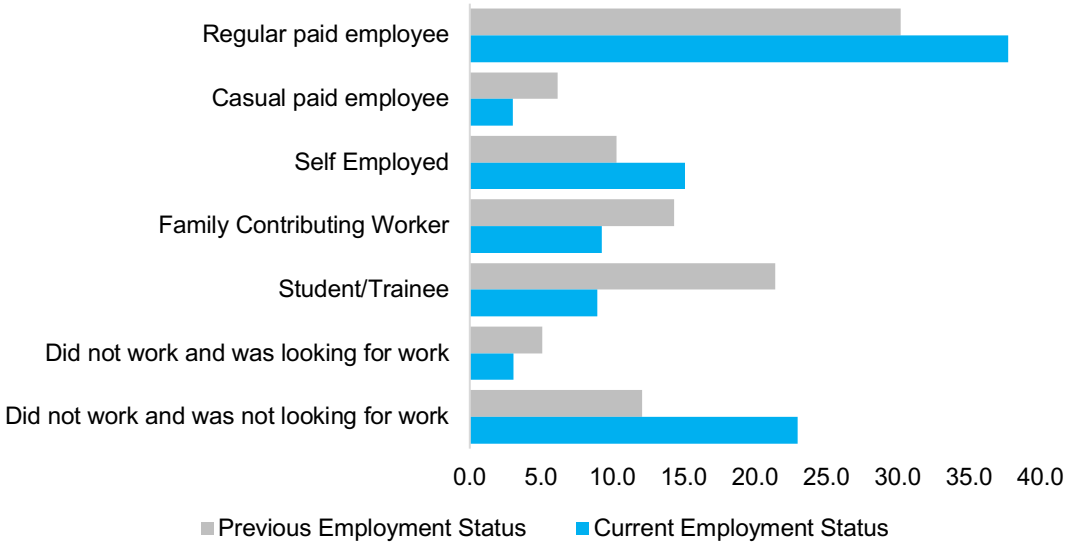
Table 5 presents the distribution of educational attainment by migration status. The findings indicate that migration is more prevalent among individuals with higher levels of education, particularly those who have completed middle secondary education through to a master's degree and above. In contrast, non-migrants are predominantly concentrated at lower levels of educational attainment, especially primary and non-formal education. This pattern suggests that internal migration in Bhutan is more common among individuals with higher educational attainment.

Table 5 Migration by the Level of Education

Level of Education	Non-Migrant	Migrant	Total
None	34.6	23.3	31.6
Primary	10.4	8.7	9.9
Lower Secondary	7.7	7.4	7.6
Middle Secondary	14.5	19.1	15.8
Higher Secondary	15.8	19.2	16.7
Certificate/Diploma	1.2	3.3	1.8
Bachelor's Degree	7.3	11.7	8.5
Master's Degree and Above	0.6	2.4	1.1
Monastic Education	3.7	2.6	3.4
Non-Formal Education	4.1	2.4	3.7
Total	100.0	100.0	100.0

The bar graph compares the employment status of migrants at their previous place of residence with their current employment situation. The results indicate that a higher proportion of migrants are currently employed as regular paid employees, while smaller proportions are engaged in casual work, unpaid family work, or are students or trainees. Variations are also observed in the share of migrants who are not working. These patterns illustrate differences in the employment composition of the migrant population before and after migration; however, they should not be interpreted as reflecting employment transitions of the same individuals over time.

Figure 8 Current and Previous Employment Status of Migrants



The table 6 shows the distribution of migrant's current employment status by their previous employment situation. Many migrants remain in the same type of activity, especially regular paid employees, self-employed workers, and those previously not working and not looking for work. Regular paid employment is the most common current status across most previous groups, while casual employment is less common. Overall, the table highlights differences in current employment patterns among migrants based on their previous employment status.

Table 6 Migration by Employment Status (%)

Previous Employment Status	Current Employment Status							
	Regular paid employee	Casual paid employee	Self-employed	Contributing family worker	Student/ Trainee	Did not work and was looking for a job	Did not work and was not looking for a job	Total
Regular paid employee	71.3	1.6	10.2	4.3	0.6	1.4	10.7	100
Casual paid employee	40.7	20.1	16.8	10.8	0.0	3.4	8.2	100
Self-employed	7.2	2.9	48.8	8.2	0.6	2.7	29.6	100
Contributing family worker	16.2	0.9	20.2	29.8	0.0	2.7	30.1	100
Student/Trainee	35.1	2.0	5.0	5.0	38.2	4.5	10.2	100
Did not work and was looking for a job	43.3	2.9	9.7	6.1	3.9	9.6	24.6	100
Did not work and was not looking for a job	6.0	2.0	11.3	5.8	2.6	2.4	69.9	100
Total	37.7	3.0	15.1	9.2	8.9	3.0	23.0	100

5.3. Migration by Employment Characteristics

Migration and employment are closely connected, as people often move across regions or from rural to urban areas in search of better economic opportunities, education, or family reasons. Such movements can influence labor market outcomes, with migrants sometimes facing higher unemployment than non-migrants, particularly in urban areas where competition for jobs is greater. This section presents the employment profile of migrants and non-migrants, highlighting how migration patterns relate to labor market participation and the distribution of economic activity.

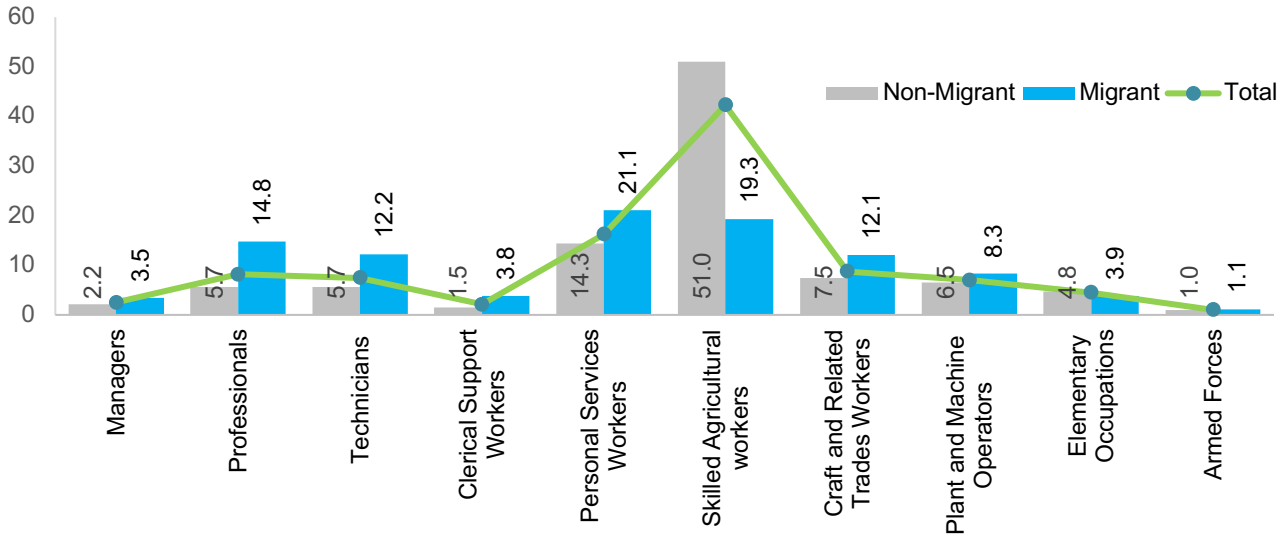
The table 6 shows the distribution of employed persons across major sectors by migrant status. Migrants are predominantly employed in the service sector (58.3%), followed by industry (22.0%) and agriculture (19.8%). In contrast, non-migrants are largely concentrated in agriculture (51. 4%), with smaller shares in service (34.0%) and industry (14.6%). Overall, this indicates that migrants are more likely to work in industry and services, while non-migrants remain primarily in agricultural employment.

Table 7 Migration by Employment and by Major Sector

Migrant	Major Sector			
	Agriculture	Industry	Service	Total
Migrant	19.8	22.0	58.3	100.0
Non-Migrant	51.4	14.6	34.0	100.0
Total	42.7	16.6	40.7	100.0

The table presents the distribution of migrants and non-migrants across major occupational groups. Migrants are more heavily represented in BSCO 2 (14.8%), BSCO 3 (12.2%), BSCO 5 (21.1%), and BSCO 7 (12.1%), suggesting a greater concentration in skilled, technical, and service-related occupations. In contrast, non-migrants are predominantly employed in BSCO 6 (51.0%), indicating a higher concentration in elementary and agricultural occupations. Overall, the occupational distribution reveals distinct labour market patterns between migrants and non-migrants, with migrants more likely to be engaged in higher-skilled and service-oriented work.

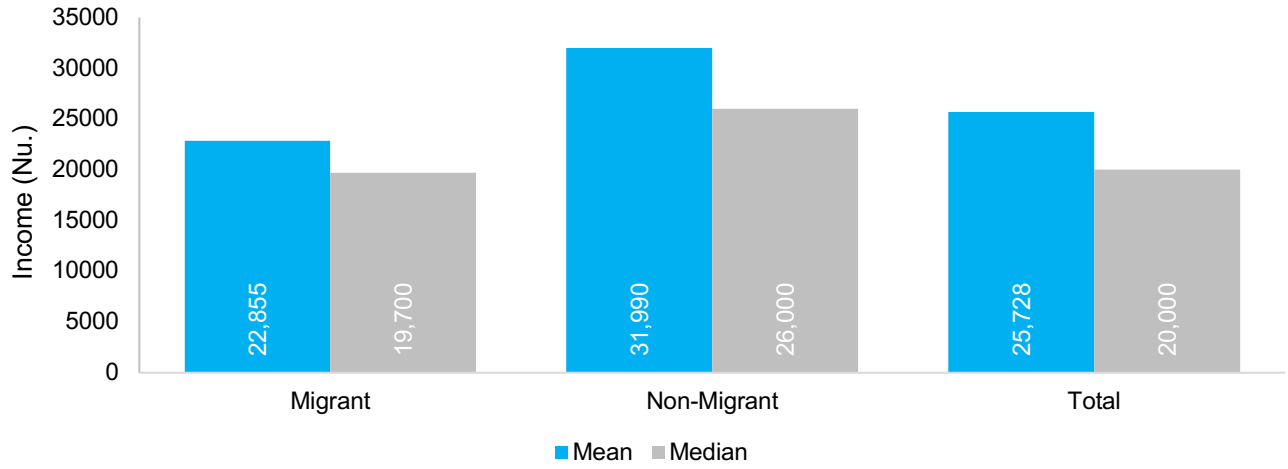
Figure 9 Migration by Major Occupation Groups



The comparison of mean and median monthly income, combining earnings from both primary and secondary jobs, shows that non-migrants earn more than migrants on average. The mean monthly income of non-migrants is Nu. 31,990, compared with Nu. 22,855 for migrants. A similar pattern is observed for median income, with non-migrants earning Nu. 26,000 per month, while migrants earn Nu. 19,700. For the total population, the mean monthly income is Nu. 25,728 and the median is Nu. 20,000. Overall, these results indicate that migrants tend to earn less than

non-migrants, likely reflecting differences in employment characteristics, sectoral distribution, and access to labour market opportunities.

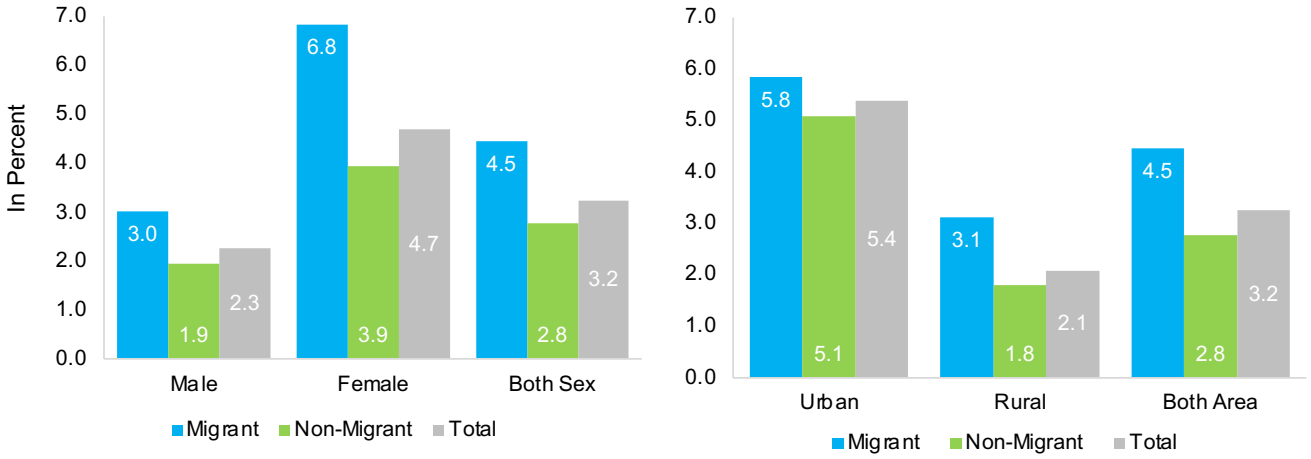
Figure 10 Migrants and Non-Migrants by Monthly Labour Income



Unemployment is higher among migrants (4.5%) compared with non-migrants (2.8%), highlighting the additional labor market challenges faced by those who move. Among migrants, females experience the highest unemployment rate at 6.8%, while male migrants are lower at 3.0%. For non-migrants, females also have higher unemployment (3.9%) than males (1.9%), though overall rates remain lower than for migrants.

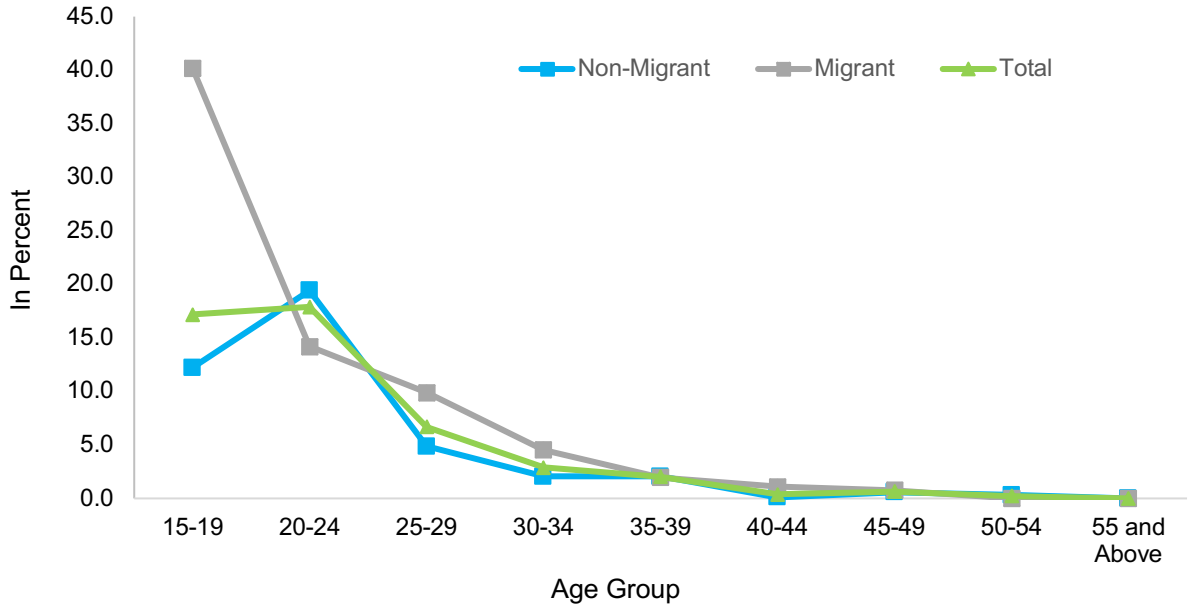
Examining unemployment by area shows a similar pattern: migrant unemployment is higher in urban areas (5.8%) than in rural areas (3.1%), whereas non-migrant unemployment is 5.1% in urban areas and 1.8% in rural areas. These patterns indicate that migration, particularly to urban centers, is associated with increased unemployment risk, reflecting greater competition for jobs and possible barriers to labor market integration.

Figure 11 Migrants by Unemployment Rate over Sex and Area



Unemployment is highest among younger age groups, particularly among migrant youth aged 15–19, who record a substantially higher rate than non-migrants, reflecting challenges during the school-to-work transition. The difference between migrants and non-migrants narrows in the 20–24 age group, after which unemployment declines sharply for both groups. From age 30 onwards, unemployment remains very low regardless of migration status, indicating stronger and more stable attachment to the labour market at older ages.

Figure 12 Migration by Unemployment Rate and Age Group



5.4. Migration Effectiveness

Migration efficiency measures how effectively migration redistributes a population across different regions. It captures the net impact of migration relative to the total migration flow. Essentially, it tells us whether migration is resulting in substantial population redistribution or if the movements largely cancel each other out.

The migration efficiency ratio (MER) is expressed as:

$$MER = \frac{|\ I - O\ |}{I + O}$$

where *I* and *O* represent in-migration and out-migration, respectively (Lowry, 1966; Plane, 1984). Values range from 0, indicating perfectly balanced flows, to 1, indicating entirely one-directional migration.

Migration efficiency is estimated at the dzongkhag level to evaluate how internal migration is reshaping Bhutan's spatial population structure.

To interpret the demographic implications of MER, dzongkhags are grouped into three analytically meaningful categories:

MER Level	Interpretation
High (≥ 0.50)	Structural population loss or gain
Moderate (0.20 – 0.49)	Directional but buffered migration
Low (< 0.15)	Circular migration and labour turnover

High MER values indicate highly directional flows where migration results in persistent net population decline or concentration. Moderate values reflect stepwise or transitional migration systems, while low values indicate circulatory mobility that produces little long-term redistribution.

Table 8 Migration Efficiency by Dzongkhag

Dzongkhag	In-Migration	Out-Migration	Total Migration	Migration Effieciency
Bumthang	4,011	4,042	8,053	0.00
Chhukha	20,885	15,809	36,694	0.14
Dagana	1,813	7,186	9,000	0.60
Gasa	301	857	1,158	0.48
Haa	1,929	4,317	6,246	0.38
Lhuentse	1,704	4,435	6,138	0.44
Monggar	3,149	10,171	13,320	0.53
Paro	20,129	10,532	30,661	0.31
Pema Gatshel	2,767	5,381	8,148	0.32
Punakha	9,421	5,028	14,450	0.30
Samdrup Jongkhar	6,343	7,392	13,736	0.08
Samtse	11,248	10,351	21,599	0.04
Sarpang	9,591	7,689	17,280	0.11
Thimphu	35,808	21,316	57,124	0.25
Trashi Yangtse	681	5,547	6,228	0.78
Trashigang	4,478	12,716	17,194	0.48
Trongsa	4,870	3,670	8,540	0.14
Tsirang	10,451	7,165	17,616	0.19
Wangdue Phodrang	10,565	9,227	19,793	0.07
Zhemgang	3,259	5,186	8,445	0.23

Dzongkhags such as Trashi Yangtse (0.78), Dagana (0.60), Monggar (0.53), Trashigang (0.48), and Gasa (0.48) exhibit very high migration efficiency. In these dzongkhags, migration is strongly one-directional, meaning that even modest volumes of movement translate into substantial net population loss. These areas are not merely experiencing temporary mobility but are undergoing structural depopulation, particularly of younger working-age populations. This pattern signals the emergence of long-term demographic hollowing, with implications for labour availability, service sustainability, and population ageing.

While, Dzongkhags such as Pema Gatshel (0.32), Paro (0.31), Punakha (0.30), Haa (0.38), and Zhemgang (0.23) fall into the moderate efficiency category and function as secondary attraction or transit zones, where migration is directional but counter-flows remain significant. Population redistribution is occurring, but more gradually. These dzongkhags likely represent intermediate nodes in stepwise migration pathways, where migrants relocate temporarily before moving onward to major urban centers.

However, Dzongkhags including Bumthang (0.00), Samdrup Jongkhar (0.08), Wangdue Phodrang (0.07), Sarpang (0.11), Trongsa (0.14), and Samtse (0.04) display very low migration efficiency. In these dzongkhags, in- and out-migration flows are largely balanced, indicating circulatory mobility, seasonal movement, or labour turnover rather than permanent population redistribution. Despite high mobility volumes, these dzongkhags remain demographically stable**,** as migration does not significantly alter their population size or age structure.

5.5. Migration Expectancy

Migration expectancy is a life-table–based measure that summarizes lifetime migration behavior under prevailing migration conditions.

This is widely used in demographic research to translate age-specific migration rates into an intuitive summary measure of lifetime mobility (Rogers & Willekens, 1986; Rogers A. , 1975). This section presents one of the first applications of migration expectancy using Labour Force Survey (LFS) data for Bhutan, offering new insights into the timing, intensity, and policy relevance of internal migration.

Migration expectancy represents the expected number of internal migration events an individual will experience over the remainder of their lifetime, conditional on surviving to a given age and assuming that current age-specific migration rates remain constant. Conceptually analogous to life expectancy in mortality analysis, migration expectancy replaces years lived with migration events as the outcome of interest.

Migration expectancy at age *x* is defined as:

$$ME_x = \frac{TM_x}{l_x}$$

where TM_x is the total number of migration events expected to occur at age *x* and above within a synthetic cohort, and l_x is the number of individuals surviving to age *x*.

The analysis uses age-specific internal migration rates estimated from the Quarterly Labour Force Survey (QLFS). These rates are incorporated into a migration life table constructed for a hypothetical cohort of 100,000 individuals. Standard life-table functions are used to estimate survivorship (l_x), person-years lived (L_x), expected migration events ($R_x \times L_x$), cumulative expected migration (TM_x), and migration expectancy (TM_x / l_x). The limitation is, the estimates

are based on the assumption that current age-specific migration patterns remain constant over time. Further, the measure does not distinguish between short and long-distance moves and does not capture international migration. These limitations should be considered when interpreting the results.

The resulting migration life table summarizes lifetime migration behavior under current migration patterns and provides age-specific estimates of remaining lifetime mobility.

Table 9 Migration Expectancy

Age Group	Mobility rate, (Rx)	Population still living per 100,000 born (lx)	Stationary population in age interval (Lx)	Expected Movers		Number of expected moves (TMx/lx)
				This Age (Rx * Lx)	Cumulative (TMx)	
15-19	0.16183	95559	476365	77089	1233856	12.9
20-24	0.20144	94987	472414	95162	1156766	12.2
25-29	0.32378	93979	467504	151367	1061604	11.3
30-34	0.38361	93023	461646	177092	910237	9.7
35-39	0.33657	91635	452836	152410	733145	8.0
40-44	0.30127	89499	441668	133060	580735	6.5
45-49	0.27308	87168	429257	117222	447675	5.1
50-54	0.21214	84535	413574	87735	330452	3.9
55-59	0.22126	80895	393645	87096	242718	3.0
60-64	0.24014	76563	369781	88799	155621	2.0
65+	0.19674	71349	339653	66823	66823	0.9

The migration expectancy estimates reveal a strongly age-selective migration regime in Bhutan. Migration expectancy is highest at younger ages and declines monotonically with age, indicating that internal migration is concentrated early in the life course.

At ages 15–19, individuals are expected to experience approximately 13 internal migration moves over their remaining lifetime. Migration expectancy declines steadily thereafter, falling to around 10 expected moves by ages 30–34, approximately 6 moves by ages 40–44, and fewer than 3 moves after age 55. By older ages, migration expectancy approaches very low values, suggesting limited scope for additional migration.

The declining pattern of migration expectancy (TM_x / l_x) reflects the progressive accumulation of migration events over the life course and the concentration of migration in early adulthood. High values at younger ages indicate substantial remaining exposure to migration, while lower values at older ages indicate that most lifetime migration has already occurred.

This monotonic decline confirms that internal migration in Bhutan is front-loaded, with the majority of mobility occurring before mid-life. The results suggest that migration is not a sporadic or exceptional event, but rather a repeated and structured component of the life course, particularly during transitions from education to employment and during early career stages.

The observed migration expectancy profile is consistent with life-course and human capital theories of migration, which posit that migration is most likely to occur during periods of skill acquisition, labour market entry, and early career mobility (Sjaastad, 1962; Kulu & Milewski, 2007). The steep decline in migration expectancy after early adulthood indicates that later-life migration, including return or retirement migration, plays a relatively limited role in Bhutan.

Compared with findings from other countries using similar methodologies (e.g. ACS-based studies in the United States), the Bhutanese migration expectancy profile shows a broadly comparable age pattern, though shaped by country-specific institutional and spatial contexts, including urban concentration of employment opportunities and limited higher education locations.

6. CONCLUSION & WAY FORWARD

This report highlights clear and persistent patterns of internal migration in Bhutan based on data from the 2025 Quarterly Labour Force Survey. Migration is predominantly directed toward the western region, particularly Thimphu, Paro, and Chhukha, with about one-quarter of persons aged 15 years and above identified as lifetime migrants. Family and employment-related reasons are the primary drivers of migration, with females more likely to migrate for family or marriage and males mainly for employment. Migrants are more concentrated in industry and services and experience higher unemployment rates than non-migrants, particularly in urban areas.

The migration expectancy and migration efficiency provides additional insights into the timing and impact of internal migration. Migration expectancy indicates that migration is strongly age-selective and concentrated early in the life course, declining steadily with age. Migration efficiency results show pronounced one-directional out-migration from several eastern and peripheral dzongkhags and structural population gains in major urban centres, while some dzongkhags exhibit largely balanced, circulatory migration flows. Overall, the findings indicate that internal migration is a systematic and enduring process reshaping Bhutan's population distribution and labour market.

The current survey design provides valuable insights into internal migration patterns in Bhutan and offers a robust basis for analyzing population mobility across Dzongkhags. While the analytical scope focuses on inter-dzongkhag movements, the results present a coherent picture

of migration trends that can inform policy at both national and Dzongkhag levels. The survey's sampling framework, primarily designed to produce reliable employment indicators and covering approximately 3,000 households, also supports meaningful analysis of migration dynamics. Future survey rounds could further enhance this analytical potential through the explicit integration of migration-related modules. In parallel, census-based data will continue to play a complementary role in providing a comprehensive understanding of internal migration processes (International Labour Organization, 2025; United Nations, 2017).

The analysis focused on reported reasons for migration and does not examine underlying determinants. Future studies could apply more advanced statistical methods to identify push and pull factors and better capture migration dynamics. Greater use of administrative data such as vital statistics, immigration, labour market information system from relevant agencies would support triangulation, validation, and a more comprehensive understanding of migration and migrant characteristics (United Nations, 2017).

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Table 8 Inter-Dzongkhag Migration Matrix Showing Flows from Previous to Current Residence[3]

	Current Residence																				
Previous residence	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**Total**
Bumthang	0	208	0	0	136	27	0	510	79	0	378	130	503	1,133	380	0	74	140	266	77	4,042
Chhukha	213	0	78	12	0	27	462	2,792	191	459	320	1,622	652	4,746	295	0	1,065	668	2,118	89	15,809
Dagana	125	1,224	0	0	0	52	0	796	0	469	0	163	392	2,538	104	0	107	955	206	56	7,186
Gasa	47	0	0	0	99	0	0	0	0	501	42	0	0	0	0	0	0	0	167	0	857
Haa	76	191	101	0	0	0	0	902	79	166	31	368	0	1,059	0	0	0	515	713	116	4,317
Lhuentse	529	498	371	0	0	0	505	443	102	254	153	123	0	1,225	0	81	0	94	21	37	4,435
Monggar	516	1,275	106	0	23	191	0	1,562	195	629	293	305	609	1,705	427	148	762	57	1,199	169	10,171
Paro	455	2,870	0	0	244	242	76	0	0	248	307	749	268	3,223	104	40	270	446	788	202	10,532
Pema Gastehl	113	326	77	30	176	0	293	193	0	0	1,017	288	654	1,288	335	0	27	137	326	100	5,381
Punakha	168	505	105	104	359	114	146	776	0	0	0	35	239	397	121	0	218	705	1,037	0	5,028
Samdrup Jongkhar	90	1,156	0	0	54	150	76	244	697	448	0	618	470	1,603	461	0	252	436	324	312	7,392
Samtse	194	2,465	0	0	242	73	382	2,431	26	510	328	0	330	2,470	158	0	0	285	317	139	10,351
Sarpang	170	1,566	77	0	57	36	0	171	74	394	347	1,279	0	1,380	179	60	114	612	395	778	7,689
Thimphu	227	4,441	227	94	128	279	337	2,718	359	2,453	681	1,405	1,341	0	635	159	1,077	2,273	1,785	699	21,316
Trashigang	61	958	67	0	50	188	463	1,821	632	422	864	1,102	1,436	2,933	0	30	122	1,211	325	29	12,716
Trashi Yangstse	254	1,078	67	0	0	102	201	659	167	0	238	25	344	1,312	830	0	0	0	199	71	5,547
Trongsa	155	127	0	35	136	70	0	121	0	0	176	384	531	1,148	0	0	0	543	132	112	3,670
Tsirang	0	639	173	0	0	0	0	359	0	620	510	827	883	2,539	104	61	110	0	247	94	7,165
Wangdue Phodrang	329	803	291	14	137	116	207	868	93	1,364	215	258	160	2,416	266	103	474	934	0	180	9,227
Zhemgang	288	340	72	0	0	0	0	603	73	160	133	1,417	715	1,000	0	0	197	189	0	0	5,186
Outside Bhutan	0	216	0	12	87	36	0	2,160	0	326	309	152	63	1,691	79	0	0	252	0	0	5,385
Total	4,011	20,885	1,813	301	1,929	1,704	3,149	20,129	2,767	9,421	6,343	11,248	9,591	35,808	4,478	681	4,870	10,451	10,565	3,259	163,404

[3] *Rows represent the current Dzongkhag of residence, while columns indicate the previous Dzongkhag of residence. Each cell shows the count of migrants moving from the origin Dzongkhag (column) to the destination Dzongkhag (row).*

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