

# Space of Hope or Despair? Well-Being, Precarity, and Adaptive Capacity of Migrant Labourers in Thimphu and Pasakha

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**Abstract:** Every urban space in Bhutan is simultaneously a place of potential opportunity and deep-seated precarity. Low-skilled migrant workers navigate these two complex landscapes to make opportunity outweigh precarity with the best possible means and strategies. This article analyses precarity, well-being, and adaptive capacity of low-skilled migrants in Thimphu and Pasakha. The low-skilled migrants encounter complex challenges as they enter the labour market at the lowest possible point, associated with limited space, economic tensions, workplace safety hazards, and substandard housing issues. To draw logical inferences, a questionnaire survey administered to 461 participants (161 in Pasakha and 300 in Thimphu) was analysed with five different themes taken into consideration. The article

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delves into how migration shapes well-being through complex interaction with, and implication for, climate change, adaptive capacity, and precarity. The result indicates a mixed outcome but relatively low level of well-being and a precarious livelihood characterised by housing problems, employment insecurity, and environmental concerns, among others.

**Key words:** *Climate change, migration, precarity, adaptive capacity, Thimphu, Pasakha, Bhutan*

## Introduction

‘The history of humanity is made up of a succession of migrations’ (Geigl, 2021) and the progress of mankind has been propelled by pollinating new ideas through migration for hundreds of years (Goldin, 2024). Notwithstanding the age of the world civilisations and modernity of different societies, ‘corporeal travelling remains a constitutive of the structures of social life and it is in these mobilities that social life and cultural identity are recursively formed and reformed’ (Urry 2000, p. 49). What has been inherent in human migration and dispersal is the role of the environment (Black et al. 2011; Carto et al. 2009; Timmermann & Friedrich, 2016) which has been intensified by climate change impacts in the current time. Climate change is widely recognised as a ‘threat multiplier’ (WHO, 2023) rather than a mere driver of human migration, it affects both physical environments and human systems, including socio-cultural, economic, and political systems. In light of these changing climate phenomena, the historical development of the contemporary socio-cultural and landscape, urban space for instance, and its dynamism is fundamentally intertwined with nature, a product of a long complex interplay between culture and nature. Urban space, where low-skilled migrants tenuously negotiate for a living, is therefore considered as a palimpsest of layers of historical interplay between human and nature. In this

complex migrants' space-making process within the larger domain of urban space, some migrants integrate successfully and thrive while others struggle to make ends meet which necessitates reverse migration or secondary migration. What comes into play for successful integration or failure to integrate within the given space is the 'adaptive capacity', mainly translated and determined by skills, knowledge, and resources. The degree of migration and resilience of the migrants, regardless of what the destination offers, are significantly influenced by their adaptive capacity. Adaptive capacity is deemed crucial to understanding the daily lived experience of the low-skilled migrants as it plays a crucial role in making adaptation decisions and actions (Parry et al. 2007). The Intergovernmental Panel on Climate Change (IPCC) considered 'adaptive capacity' as one of the critical components of vulnerability assessment (McCarthy et al. 2001).

Urban precarity is widespread but marginalised sections in society suffer disproportionately mainly because of their low adaptive capacity (Ahmed et al. 2023; Md et al. 2022; Parry et al. 2007; Rahman, 2013; Rahaman et al. 2023) and with the rising climate change impacts, the ability of adaptation responses to offset risk has also substantially reduced (Pörtner et al. 2022). Low adaptive capacity is often accompanied by absence of skills required in the labour market. This is one of the rising concerns in Bhutan as skill mismatch has resulted in high youth unemployment rate while some are forced into the informal sector (NSB, 2020; Rabten, 2014; UNDP, 2022). Low-skilled labourers are generally engaged in the micro-enterprises that do not grow over time as they cannot compete with the large state-owned enterprises which consequently weakens the prospects of micro-enterprise, private enterprises, in Bhutan (Alaref et al. 2025). Prospects and productivity remain low with low-skilled employment and limited employability in the private sectors. In light of this situation, migration in pursuit of better livelihood has become quite significant in Bhutan (Alaref et al. 2025) yet these migrants encounter

complex challenges, as they enter the labour market at the lowest possible point, associated with limited space, economic tensions, safety issues at work, and substandard housing, *inter alia*, making them even more vulnerable at the destination (Fellini et al. 2007; Oswald et al. 2020; Shepherd et al. 2021). In the backdrop, this article examined whether migration enhanced well-being, reduced precarity, and increased adaptive capacity.

## **Climate change, migration and adaptation – A paradigm**

What makes people migrate links to multiple drivers across historical time and space, and the phenomena of any form of human migration are discussed traditionally within the theoretical frameworks of social, political, economic, and environmental perspectives. Migration is a key adaptive strategy for people facing environmental crises, such as sudden disasters, creeping processes, or cyclical climate conditions (Warner et al. 2010), a response to shocks and global imbalances (Word Bank, 2023). Environmental migration however, is also a primary threat magnifier or threat multiplier for modern societies (IPCC, 2023). It has intensified scarcity of resources, social inequality, and environmental stress and eventually aggravated geo-political conflict and insecurity across the world (Sultana & Scheffran, 2025). In the current literature of climate change and adaptation, migration is a well-established subject (Natarajan et al. 2019; Yea, 2025) and a widely discussed subject in policy and development planning at all levels – local and international.

Migration as a spatial phenomenon is deeply embedded in the 'man-environmental relationship dichotomy',F deemed central to human history, progress and development. For decades, however, despite early recognition of environmental influence on human mobility by scholars like Friedrich Ratzel (as early as 1812), the mainstream migration theories seldom captured

‘environmental dimensions of human migration’, and there has been excessive theoretical focus on the patterns, trends, and impacts of migration, underpinning primarily economic aspects of migration. The topic of ‘natural environment’ has checkered the corpus of empirical research in migration studies, with a gradual resurgence since the second half of the 19th century, directed mostly at assessments of the impacts of the natural environment on migration (Piguet, 2013). The first UN development decade of the 1960s reoriented several approaches within development practice, accompanied by a gradual shift of the global concerns towards the less developed countries. In the aftermath, climate change studies gradually started taking centre stage in development discourse, and the last decade of the 20th century brought many environmental migration-related topics to the international forum notably following the publication of a report commissioned by the United Nations Environmental Programme in 1985 (Ionesco et al. 2017).

The first decade of the 21st century witnessed a new turn in migrations studies with newer approaches directed towards assessing climate migration engaging on migration as adaptive measure and adaptive strategy. Human migration as a consequence of climate change was captured in the Cancun Adaptation Framework established at the 2010 UNFCCC in Cancun (UNFCCC, 2010). What followed is the gradual shift in the climate migration scholarship labeling migration merely as a consequence of climate impacts to describing it as a form of human adaptation (Ober & Sakdapolrak, 2017; Vinke et al. 2020).

In the literature of climate changes studies, migration is considered as one possible proactive adaptation solution that should be governed and facilitated (Piguet, 2013). Mobility and migration are considered key responses to environmental and non-environmental transformations and pressures (Tacoli, 2009). ‘Migration is understood as a way to manage the insecurity created by

climate change and the promotion of migration management by international organisations is a way to manage the insecurity created by climate change' (Felli 2013, p. 355). Migration hence should not be seen as a tragedy in itself but that, on the contrary, it can form part of a proactive adaptation strategy that should be encouraged (Bilsborrow 1992; Thornton & Manasfi, 2010). The reframing of migration as a possible means for adaptation was taken up by major actors like the Intergovernmental Panel on Climate Change (IPCC) and is reflected in strategic documents such as the Cancun Adaptation Framework (UNFCCC, 2010), the Sendai Framework for Disaster Risk Reduction (UNISDR, 2015), and the Global Compact for Migration (UNGA, 2018). A shift observed during these decades is also the development of mobility theories and approaches grounded in the climate change impacts and human development (Adger et al. 2015; Cattaneo et al. 2019; Chung et al. 2022; Cundill et al. 2021; Hermans & Kizilkaya, 2025; Hunter & Simon, 2023; Piguet, 2021; Rao et al. 2020).

In the migration-climate change discourse, migration is seen as a proof of the necessity to act against climate change (Piguet, 2021). In Bhutan, while there is a plethora of literature on climate studies with a major focus on areas such as impacts on environment, vulnerability assessment, agricultural practices, livelihood, *inter alia*, 'migration and climate change nexus' has been understudied and drew little attention from researchers and policy makers compared to other drivers of migration. Only recently, it has made entry into the corpus of migration research (Katel et al. 2024; Lhamo et al. 2025; Paldon et al. 2025; Rao et al. 2024).

## **Materials and methods**

The study adopted a quantitative research approach. Data were collected

through questionnaire surveys from 461 participants (161 in Pasakha and 300 in Thimphu). Based on the research questions, five themes were formulated. Discussions and analysis of each theme were done by developing a composite index, with component variables standardised using Z-score techniques. Conceptually, a Z-score (the standard score) measures the departure of individual observations from the arithmetic mean of all observations. The magnitude of the Z-score thus indicates how far, and in which direction (above or below), a specific data point is from the mean. In other words, the standard score indicates the exact location of every observation within a distribution.

For observation  $i$  on any variables, the standard score ( $Z_i$ ) is given by:

$$Z_i = \frac{x_{ij} - \bar{x}_j}{s_j}$$

Where,

$Z_i$  is the Z scores for  $i^{\text{th}}$  unit

$x_{ij}$  is the X variable in the  $i^{\text{th}}$  unit and  $j^{\text{th}}$  variable

$\bar{x}_j$  is mean of the  $j^{\text{th}}$  variable

$s_j$  is standard deviation of the  $j^{\text{th}}$  variable

Composite Z-score for each theme was obtained by taking the average of the individual scores, viz. by summing the individual Z-scores for each variable divided by the number of variables, as follows:

$$Z_c = \frac{\sum_{i=1}^p Z_i}{p}$$

Where,

$Z_c$  is the composite Z – score

$Z_i$  is the Z score for  $i^{\text{th}}$  unit (individual Z – scores)

$\sum$  is the sum of individual Z – scores

$p$  is the number of variables being combined

Categorisation of the z-score was then made based on the common threshold (empirical rule) of Z-score as follows:

Mean ( $\mu$ ):  $Z = 0$

Standard deviation ( $1\sigma$ ):  $Z = \pm 1$

Standard deviation ( $2\sigma$ ):  $Z = \pm 2$

Standard deviation ( $3\sigma$ ):  $Z = \pm 3$

Based on the empirical rule of the Z-score, four levels (five levels in some cases subject to Z-score) were established to explain the well-being, precarity and adaptive capacity of the low-skilled migrants. A Z-score of 0 indicates that the data point is exactly at the mean of the distribution whereas a positive Z-score indicates that data point is above the mean and a negative Z-score indicates that the data point is below the mean.

## **Results and discussion:**

### **Economic wellbeing, precarity, and adaptive capacity**

Table 1 shows the economic condition of the migrants. A varying degree of precarity prevails amongst the migrants in both the areas characterised by high precarity (low level of economic condition) with a skewed distribution. The largest group of respondents (62.5 %) have a Z-score cluster around the mean while 13.9 % of the respondents have a Z score greater than mean ( $z>0$ ). Economic severity and precarity appear to be more prominent in Pasakha. Results shows 15.5% of the respondents have a negative Z-score of  $Z<-2$  below the mean and another 10.6% have a negative score of  $Z<-1$  below the mean. Likewise, 18.6% of the respondents have a Z-score of  $Z< +1$  above the mean. Thimphu, in contrast, shows only 0.7% of the respondents have a negative Z-score of  $Z<-2$  below the mean and a considerable proportion (21.7%) of the migrants have a negative Z-score of  $Z<-1$  below the mean. As many as 11.3% of the respondents in Thimphu have a positive Z-score greater than 1.

The economic situation of the migrants reflects similar trends and patterns of other developing countries. Low-skilled migrants are generally confined to the informal sector without legal protection, social security, and any other benefits. Migrant

workers in India commonly face a triple form of exclusion—welfare, economic, and political, making their lives highly precarious (Rajan & Nizam, 2025) despite the fact that they constitute a crucial backbone of the country’s economy. They are systematically denied and excluded from social protection. The economic plights of the migrants are captured in some of the national reports of Bhutan.

*Table 1. Distribution of Respondents by Levels of Economic Precarity (Z-Scores)*

Settlements		-2 and below (Very low)	-1 (Low)	0 (Average)	+1 (High)	Total
Pasakha	n	25	17	89	30	161
	%	15.5%	10.6%	55.3%	18.6%	100.0%
Thimphu	n	2	65	199	34	300
	%	0.7%	21.7%	66.3%	11.3%	100.0%
Total	n	27	82	288	64	461
	%	5.9%	17.8%	62.5%	13.9%	100.0%

The National Statistical Bureau report 2018 highlighted a skewed labour force participation between migrants and non-migrant, considerably lower work participation rate amongst the migrant population (49.6%) as compared to non-migrants (68.2%) despite the fact that the migrant population is concentrated in the prime working age span (NSB, 2018). Quite often, economic precarity triggers reverse migration and secondary migration at places where migrants are unable to negotiate and sustain. Precarity, any form of precarity for that matter, at times acts as both a cause and consequence (Natarajan et al. 2019; Yea, 2025). With no proper system in place, precarity like that of low paid jobs, unstable jobs and lack of job security, and social protection become normalised features within the excluded urban space.

## Environmental well-being, precarity, and adaptive capacity

Threats to human well-being are multifaceted but the climate change related threats are deemed the most destructive ones, they are the leading factors of human degeneration. The factors include extreme weather events, such as heatwaves, storms and floods, the disruption of food systems, increases in zoonoses and food, water- and vector-borne diseases, and mental health issues (WHO, 2023). These phenomena herald impending global disaster. Understandably, while climate change is a global phenomenon the impacts are not, the poor and marginalised sections of the society are disproportionately affected by the climate change impacts as they are less resilient and lack access to adaptation options and institutional support (Birkmann et al. 2022). One of the concerns associated with the poor and low-skilled migrant workers is that they are often compelled to live and work in an unhealthy and physically uncomfortable environment.

Settlements		-1 (Low)	0 (Average)	+1 (High)	Total
Pasakha	n	10	137	14	161
	%	6.2%	85.1%	8.7%	100.0%
Thimphu	n	19	273	8	300
	%	6.3%	91.0%	2.7%	100.0%
Total	n	29	410	22	461
	%	6.3%	88.9%	4.8%	100.0%

*Table 2. Distribution of Respondents by Levels of Environmental Precarity (Z-Scores)*

Table 2 shows challenges related to the environment amongst the low-skilled

migrants. The distribution shows high concentration of respondents (88.9%) around the mean score which highlights conditions of 'low variability' and consistency in terms of the survey responses – neither decrease nor increase in terms of the associated factors of environmental precarity. A few of the respondents nonetheless in both the places perceive some sense of environmental threats. Based on the distribution of respondents, Pasakha appears to have relatively more severe environmental precarity as compared to Thimphu. This is explained by combined indicators such as drying up of fresh water sources, occurrence of sickness due to weather patterns, incidence of hazards, and air quality, to mention a few. In Pasakha, 8.7% of the respondents have a positive Z-score above the mean ( $Z > 0$ ) whereas in the case of Thimphu, only 2.7% of the respondents have a positive Z-score above the mean. A staggering proportion (91%) in Thimphu have a Z-score clustered around the mean ( $Z = 0$ ) indicating homogeneity in the responses. Similarly, the largest group of the respondents in Pasakha (85.1%) have the Z-score cluster within the mean value. This further indicates similarity in terms of the environmental precarity respondents are currently facing in both places. It can be inferred that environmental precarity is not a serious concern in either place. That said, qualitative insights, based on fieldwork, as appear in various articles in this special issue, nevertheless emphasize that environmental precarity is a concern of low-income migrants. This seeming discrepancy could be due to the way questions were framed differently in the quantitative and qualitative research tools.

## **Housing condition, precarity, and adaptive capacity**

Affordable housing is a global concern and Bhutan is no exception. There are about 1.5 billion people living in slums or informal settlements across the globe (UN, 2024). Considering the affordable housing shortage in Bhutan,

particularly in urban areas, the National Key Result Area 15 (NKRA) of the 12th Five-Year Plan (2018–2023) aimed at improving livability, safety and sustainability of human settlements through access to adequate affordable housing, efficient and effective municipal services, and clean and green public spaces for social engagement (GNHC, 2019). Housing shortage in urban areas like Phuentsholing is quite evident, compelling many Bhutanese to live across the border in Jaigaon, India (Cabinet Secretariat, 2024). This concern was reinforced in Bhutan’s 2020 housing policy that aims to provide secure, safe, affordable, and adequate rental housing for all, promote home ownership, encourage public–private partnerships, improve the governance system, and integrate green and energy-efficient features (MoWHS, 2020). Akin to housing precarity that surrounds many developing societies, the specific affordable housing shortage is particularly acute for low- and middle-income households, women and poor in Bhutan (CDIA, 2023).

Housing precarity looks very severe (Table 3). A staggering proportion of the migrants (74.4%) lived in a rented house. A few families even lived in a squatter (n = 19) while only 3 respondents reported to live in their own house, the distribution being 4.7% in Thimphu and 3.1 % in Pasakha respectively. Some of the major concerns include services and amenities, ventilation, safe building structure, and overcrowding, to mention a few. While these two places have certain concerns in common, the situation looks worse in the case of Pasakha in all the determinants of housing condition identified (Table 3). The lack of services and facilities appears to be quite acute in Pasakha where only 34.5% reported having easy access to services and facilities.

Settlement	Easy access to energy resource	Easy access to services and	Safe building structure	Ventilation	Overcrowded	Waste management issues
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	s	facilities	ure			
Pasakha	56.5%	34.8%	65.8%	52.2%	26.1%	33.5%
Thimphu	82.0%	74.0%	74.7%	57.7%	20.7%	11.7%
Both	73.1%	60.3%	71.6%	55.7%	22.6%	19.3%

Table 3. Distribution of Respondents by Housing condition and access to amenities

The level of housing condition of the migrants is also determined using Z-score (Table 4). A staggering proportion of the respondents (72%) fall within the 'low' category and 12.4% of the respondents fall in the 'very low' category (Table 4) indicating unhealthy living conditions. This suggests that most of the migrants surveyed have no access to adequate housing as per the international human rights law and standard. The concerns look more severe in Pasakha. A staggering 81% of the respondents in Pasakha have a negative Z-score ( $Z = -1$ ) below the average and 14.3% have a negative Z-score ( $Z = -2$ ) below the mean score whereas in Thimphu, 67% of the respondents have a negative Z-score ( $Z = -1$ ) below the mean and 11.3 % have a Z-score ( $Z = -2$ ) below the mean.

Settlements		-2 and below (Very low)	-1 (Low)	0 (Average)	+1 (High)	Total
Pasakha	n	23	131	7	0	161
	%	14.30%	81.40%	4.30%	0.00%	100.00%
Thimphu	n	34	201	64	1	300
	%	11.30%	67.00%	21.30%	0.30%	100.00%
Total	n	57	332	71	1	461
	%	12.40%	72.00%	15.40%	0.20%	100.00%

Table 4. Distribution of Respondents by levels of Housing condition (Z-Scores)

Affordable housing is a recurring issue in Bhutan, particularly in urban areas. As per National Housing Development Corporation Limited (NHDCL), an estimated 10% of Thimphu city's population lives in informal settlements. About a quarter of households (41,039) lacks access to improved sanitation and waste management (NHDCL, 2025). These concerns are not, however, encountered by all city dwellers, it is always the marginalised section of the society that bear the brunt of any lopsided developmental impact. It is pertinent to recall that 'most of the urban contract workers (cleaners, waste collectors, and semi-skilled workers) reside in informal squatter settlements in Thimphu and Phuentsholing as they are unable to afford decent housing elsewhere' (NHDCL, 2025, p.1). The GNH report 2022 shows a decline in the level of happiness on 'sufficiency in housing indicator' from 53.7% in 2025 to 47/9% in 2022 (Ura et al. 2022). Housing issues are characterised by absence of basic infrastructure, lack of affordable housing, uncertainty in duration housing lease, forcible relocation and limited number of dwelling places. Such is the case in a country like India and other developing countries that the low skilled migrants are always compelled by their economic necessity coupled with lack of institutional support system to land up in informal settlement, dilapidated housing and unhygienic living condition with gross lack of basic amenities (Babu et al. 2017).

## **Satisfaction, happiness, and adaptive capacity**

Unlike other countries in the world, 'happiness' is an important measure of Bhutan's growth and development. The country focuses on balancing spiritual well-being and material well-being to understand the country's progress and development buttressed by the philosophy of Gross National Happiness (GNH). Article 9 of the 2008 Constitution of the Kingdom of Bhutan directs the State to 'promote those conditions that will enable the

pursuit of Gross National Happiness' (GNH). GNH at its core comprises a set of values that promote collective happiness as the end value of any development strategy (Ura et al. 2012). In its essence, it is a renaissance of the legacy of Bhutan's government 1729 legal code by Zhabdrung Rimpoche which stated 'if the government cannot create happiness (*dekidk*) for its people, there is no purpose for the government to exist' (Ura et al. 2012, p.6). As claimed, 'Gross National Happiness measures the country's growth and progress in a more holistic way [than GNP] and believes that the beneficial development of human society takes place when material and spiritual development occur side by side to complement and reinforce each other' (Ura et al. 2012, p.7).

Settlements		-3 (Extremely low)	-2 (very low)	-1 (Low)	0 (Average)	+1 (High)	Total
Pasakha	n	0	1	17	120	23	161
	%	0.0%	0.6%	10.6%	74.5%	14.3%	100.0%
Thimphu	n	1	4	47	230	18	300
	%	0.3%	1.3%	15.7%	76.7%	6.0%	100.0%
Total	n	1	5	64	350	41	461
	%	0.2%	1.1%	13.9%	75.9%	8.9%	100.0%

*Table 5. Distribution of Respondents by Levels of Satisfaction and Happiness (Z-Scores)*

Despite multiple challenges and precarities that characterise living conditions of the migrants, the majority of the respondents reported quite satisfied with their living condition. The Z-score distribution for life satisfaction and happiness (Table 5) shows most of the data points (75.9%) cluster around the

mean. In Thimphu, 76.7% of the respondents have a Z-score close to the mean. Similarly, in Pasakha, 74.5% of the respondents indicate a similar level of life satisfaction and happiness. No significant variation is observed between Pasakha and Thimphu. Comparatively, Pasakha shows a higher level of satisfaction (14.3%).

The magnitude and degree of life satisfaction and happiness however reveal slight variation with higher degree ( $Z > +1$ ) of life satisfaction and happiness in Pasakha (14.3%) as compared to Thimphu (6%). A few migrants also expressed concerns but with a varying degree of dissatisfaction. Of the total respondents, 13.9% have a negative Z-score of  $Z < -1$ , 1.1% have a negative Z-score of  $Z < -2$ , and 0.2% have a negative Z-score of  $Z < -3$ , most of which are from Thimphu. This can be construed that life in Thimphu is more stressful and challenging as compared to Pasakha. This supports the argument that happiness is not necessarily associated with material well-being, rather it reflects on the principle of contentment which is the core teaching of Buddhism. It may be pertinent to mention that the core principle of the philosophy of Gross National Happiness (NGH) is built on the notion of Mahayana Buddhist view of happiness (Givel, 2015). The notion of Bhutanese happiness is quite distinct from the western notion of happiness because it is multidimensional in nature, not focuses only on subjective wellbeing to the exclusion of other dimensions, and it internalises responsibility and other regarding motivations explicitly (Ura et al. 2012).

## **Adaptive capacity**

Enhancement of adaptive capacity is a necessary condition for reducing vulnerability, particularly for the most vulnerable regions, nations, and socioeconomic groups (McCarthy et al. 2001). Ability to deal or negotiate with

the happenings and condition of the destinations is crucial to their sustenance. Table 6 shows different levels of adaptive capacity amongst the migrants. A staggering 88.7% have the Z-score value clustered within the mean score ( $Z = 0$ ), 5.6% of the respondents have a positive z-score above the mean ( $Z > +1$ ) while similar proportion of the respondents have a negative Z-score below the mean ( $Z < -1$ ). Adaptive capacity shows more asymmetric in Pasakha as compared to Thimphu, the distribution being 8.7% with a Z-score less than -1, 80.1% with a Z-score = 0, and 11.2% with a Z-score greater than +1.

Settlements		-1 (Low)	0 (Average)	+1 (High)	Total
Pasakha	n	14	129	18	161
	%	8.7%	80.1%	11.2%	100.0%
Thimphu	n	12	280	8	300
	%	4.0%	93.3%	2.7%	100.0%
Total	n	26	409	26	461
	%	5.6%	88.7%	5.6%	100.0%

*Table 6. Distribution of Respondents by Levels of Adaptive Capacity (Z-Scores)*

The proportion of respondents with a strong adaptive capacity in Thimphu is negligible constituting only 2.7% to the total respondents. This is further evidence from the perception of respondents on 'positive impacts' of migration. A considerable proportion of the respondents (62.9%) reported a positive impact of migration, the percentage being 71.4% in Pasakha and 58.3% in Thimphu respectively. The level of adaptive capacity is more or less similar amongst the respondents. A staggering proportion (93.3%) of the respondents have a positive Z-score cluster around the mean. Delving further, it may be argued that high level (in relative sense) of adaptive capacity in the

present context may attribute to social capital, community vitality, and Bhutanese notion of happiness, which inherently shape the Bhutanese way of life, rather than economic notion of adaptive capacity.

Conceptually speaking, the 'dynamic nature of adaptive capacity', in its essence, provides sufficient room and logical support to place such subjective parameters within the dominant discourse. The fluidity of adaptive capacity in terms of its scope is very much recognised in the IPCC 2001 where it says 'the adaptive capacity of less-developed countries in the tropics is limited by financial and technological constraints that are not equally applicable to more temperate, developed countries' (Chapagain et al. 2025; McCarthy et al. 2001, p.86). This suggests the fact that accounting for local context is always needed when it comes to selection of parameters for adaptive capacity. Following such conceptual adaptability, adaptive capacity of the low-skilled migrants was assessed based on the subjective indicators, such as, preparedness of the migrants if climate change occurs, opinion employment option available, ability to deal with any eventuality in the event of climate change, active plan in case of climate change, personal interest in learning new things, and so on.

### **Conclusion**

The intersection of climate change and migration has attracted a great deal of interest amongst scholars, planners and policy makers, not only because of its dynamism and potential destruction but largely because of the realisation of migration as a potential adaptation strategy to climate change impacts. This study analysed the intersection between climate change, migration and resilience of the low-skilled migrants. While climate-induced migration as such is rare in Bhutan, the results show that low-skilled migrants encounter multiple challenges associated with climate change besides other socio-economic challenges. The positive impact of migration is also quite significant

in both places, yet uncertainty about the future dominates the livelihoods of the low-skilled migrants. This raises questions about how secure they are in the current position. Job satisfaction and future prospects at the destinations appear low, making them aspire to migrate to other places. This suggests that internal migration does not really help them become economically stable. Only a small number of migrants are faring well on some of the well-being parameters. This is evident from the remittance some of the migrants regularly send. While some migrants reject the idea of reverse or secondary migration, a large proportion are uncertain about the future course. Common adaptive measures and adaptive capacity are driven by non-economic parameters which suggest a strong affiliation and loyalty of the migrants to the country's development philosophy, Gross National Happiness (NGH).

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