

Scientific article

УДК 314.7(549.1)

DOI: 10.47475/1994-2796-2026-512-6-67-77

EXPLORING RURAL-URBAN MIGRATION AND LIVELIHOOD SUSTAINABILITY IN PAKISTAN

Sidra Nazir^{1✉}, Hafiz Shoaib Khan Bazai²

¹Ural Federal University, Yekaterinburg, Russia; Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS), Quetta, Pakistan, sidra.nazir@urfu.ru, 0000-0002-6732-1875

²Ural Federal University, Yekaterinburg, Russia, shoaibbazai7@gmail.com

Abstract. This study examines the push and pull factors and the livelihood status of rural-urban immigrants in Quetta city, Pakistan. Rural-urban migration represents a critical socioeconomic phenomenon in developing countries, where pronounced disparities in living standards between rural and urban areas drive population movements. The study uses survey data collected from 202 households on the framework of sustainable livelihood assets, using convenience and snowball sampling methods. For data analysis, descriptive statistics and weighted least square estimation were employed to address heteroscedasticity detected in the dataset. Results show that better job opportunities and living standards were the most common pull factors, while average economic activity and non-accessible basic needs were the most common push factors driving migration to Quetta. Regression analysis shows that financial, human, and physical capital have a significantly positive effect on the livelihood of immigrant households, as measured through food security outcomes. Although social capital and natural capital also positively influence food security, their effects are statistically insignificant. The study contributes to the literature on sustainable livelihoods and internal migration in Balochistan province, Pakistan, and offers actionable policy recommendations for government authorities seeking to support rural-urban migrants through targeted financial assistance, skills development, and improved housing accessibility.

Keywords: Rural-urban migration, push and pull factors, Quetta city, sustainable livelihood assets, weighted least square estimation

For citation: Nazir S, Bazai HSK. Exploring Rural-urban Migration and Livelihood Sustainability in Pakistan. *Bulletin of Chelyabinsk State University*. 2026;(6(512):67-77. (In Russ.). DOI: 10.47475/1994-2796-2026-512-6-67-77.

Научная статья

ИССЛЕДОВАНИЕ СЕЛЬСКО-ГОРОДСКОЙ МИГРАЦИИ И УСТОЙЧИВОСТИ СРЕДСТВ К СУЩЕСТВОВАНИЮ В ПАКИСТАНЕ

Сидра Назир^{1✉}, Хафиз Шоаиб Хан Базай²

¹Уральский федеральный университет, Екатеринбург, Россия; Белуджистанский университет информационных технологий, инженерии и управления (BUITEMS), Кветта, Пакистан, sidra.nazir@urfu.ru, 0000-0002-6732-1875

²Уральский федеральный университет, Екатеринбург, Россия, shoaibbazai7@gmail.com

Аннотация. Изучаются факторы, выталкивающие и привлекающие мигрантов из сельской местности в города Кветта (Пакистан), а также условия их жизни. Сельско-городская миграция является значимым социально-экономическим явлением в развивающихся странах, где разрыв между уровнем жизни в сельской и городской местности остается значительным. В исследовании использованы данные опроса, собранные у 202 домохозяйств в рамках концепции устойчивых средств к существованию (Sustainable Livelihood Approach), с применением методов удобной и «снежной» выборки. Для анализа данных использовались описательная статистика и метод взвешенных наименьших квадратов. Результаты показывают, что лучшие возможности трудоустройства и более высокий уровень жизни были наиболее распространенными факторами, привлекающими иммигрантов, тогда как средняя экономическая активность и недоступность основных потребностей — наиболее распространенными выталкивающими факторами. Регрессионный анализ показывает, что финансовый, человеческий и физический капитал оказывают значительное положительное влияние на средства к существованию домохозяйств иммигрантов. Вместе с тем социальный

и природный капитал также влияют на продовольственную безопасность положительно, однако данное влияние статистически незначимо. Исследование вносит вклад в изучение устойчивого жизнеобеспечения мигрантов и предлагает практические рекомендации для органов государственного управления по поддержке сельско-городских мигрантов в Белуджистане (Пакистан).

Ключевые слова: сельско-городская миграция, факторы притяжения и отталкивания, город Кветта, устойчивые активы для обеспечения средств к существованию, метод взвешенных наименьших квадратов

Для цитирования Назир С., Базаи Х. Ш. Х. Исследование сельско-городской миграции и устойчивость средств к существованию в Пакистане // Вестник Челябинского государственного университета. 2026. № 6 (512). С. 67–77. DOI: 10.47475/1994-2796-2026-512-6-67-77.

Introduction

Migration is the process of moving from one place to another. This change may be temporary or permanent. People decide to relocate differently¹. Modern migration studies emphasize its global and multidimensional nature [10]. Two forms of migration exist: internal and international. Internal migration is relocating inside a nation, whereas external migration is traveling between countries. Rural-urban mobility occurs when individuals relocate to cities for better jobs. Push and pull factors produce this movement. Push factors including poverty, hunger, and unemployment cause rural residents to flee. Pull forces, such as greater pay, employment possibilities, and better schools for children, drive people from the countryside to the city. In developing countries, rural-urban migration has increased at a much higher magnitude compared to developed countries. Similar regional labor movements are observed across Asia [20]. A major reason is the socioeconomic gap between rural and urban livelihoods. Pakistan, as a developing country, has seen an increase in rural-urban migration trends. Such rapid increase in urban population has surpassed the rate of urban development, which has caused social and economic issues in the country [7, 23]. The 2017 population census data reflect those 12 mega cities of Pakistan have a total of 31 percent migrant population². Since the 1960s, urban population has increased by more than 2583 percent, while its rural population has dropped from 83 percent in 1951 to only 60 percent in 2017³. Such rapid increase in urban population has surpassed the

rate of urban development, which has caused social and economic issues in the country.

Among the four provinces of Pakistan, Baluchistan is its largest. It covers 43 percent of the country landscape. Quetta is the capital as well as the most developed city of Baluchistan. People from rural Baluchistan migrate to Quetta in search of improved livelihood opportunities. Such migration presents both opportunities and challenges to immigrants well as host communities. For rural-urban immigrants, it is vital to adapt to the socioeconomic environment of Quetta city through sustainable livelihood. There is a need to assess rural-urban migration in Baluchistan via its causes and outcomes.

To address this issue, the study addresses the following questions:

1. What is the push and pull factors of rural-urban migration in Quetta city?
2. What is the livelihood status of rural-urban immigrants in Quetta?

Literature Review

Rural-Urban Migration

Migration has long been recognized as a fundamental demographic process [9]. According to Harris & Todaro [16], the rate of rural to urban migration is determined by the difference between expected urban wage and rural wage. The key influence of Todaro's framework is to relate urban unemployment with migration flows. According to this model, migrants with human capital avail better employment opportunities in the formal sector. Later on, Todaro and Smith developed the Harris and Todaro model by presenting that disparities in projected income in both sectors rather than real earnings cause rural-urban mobility. Earlier economic perspectives also emphasized migration as a driver of development and urban growth [8]. People mostly move to metropolitan areas to improve their standard of living and employment⁴. According

¹ National Geographic Society. Human Migration Guide. Washington, DC: National Geographic Society. URL: <https://education.nationalgeographic.org/resource/human-migration> (date of access: 28.03.2026).

² Pakistan Bureau of Statistics. Population and Housing Census of Pakistan. Islamabad: Government of Pakistan. URL: <https://www.pbs.gov.pk> (date of access: 28.03.2026).

³ Todaro M., Smith S. Economic Development. 8th ed. New York: Pearson Education. URL: <https://www.pearson.com> (date of access: 28.03.2026).

⁴ Rwelamira J. K. Effects of Rural Inequality on Migration among the Farming Households. 2008. URL: <https://www.researchgate.net/publication/> (date of access: 28.03.2026).

to the paradigm of Todaro and Harris, migration is an economic phenomenon. The Todaro-Harris model implies that families decide to relocate, but the changing economics of rural-urban mobility have altered that. New Economics replaces 'individual' with 'household.' New Economics analyses family cost-benefit instead of individual costs [24]. Transfers regulate labor migration, including its causes and benefits, according to New Economics.

Push and Pull Factors of Rural Urban Migration

According to Aliyev [3], determinants of rural-urban migration are two in number: Push factors and pull factors. Push factors are concerned with the place of origin which compels people towards migration. Whereas pull factors are concerned with the destination place which pulls migrants towards it. Push factors overrule the pull factors of migration¹. Primarily these causes are family issues, economic factors, and political factors in the home country. Personal values and beliefs, knowledge, and intelligence may cause a person to migrate or otherwise [1]. Various social, economic, and cultural issues occur in the region due to migration [5]. Migrants from the rural to the urban areas' present danger threats to the urban economy and geography. Sex and age were the major factors that dictated rural-to-urban migration, as seen through various research studies and results. Gendered migration patterns, such as female labor migration, have also been observed elsewhere [18]. Both of these factors were determining factors in turning around the rural and urban population [17; 22].

Implications of Rural-Urban Migration

There are two conflicting views of the effects of migration on either the destination or origin. The first school of thought is in favor of the positive effects of rural-urban migration on both the destination and origin. They believe that it is a method of ensuring linkages between the migrant and his/her household. The second school of thought opposes migration viewing it to have negative impacts on both the origin and destination. The positive impacts are the benefits the household gains in the form of monetary remittances, skills, and new ideas [21]. Remittances are often critical for sustaining household livelihoods [24; 25]. International frameworks such as the UN Convention on Migrant Workers also highlight protection and socio-

economic implications [15; 17]. When people migrate to urban regions there is a marginal rise in professional, technical, and sales-related occupations [19; 22]. Kumar [19] found that both employment status and workers' share of income were improved following migration. On the other hand, many researchers have pointed out negative effects of migration on sending areas in terms of loss of manpower [14; 3; 4]. Development studies similarly highlight both economic and social trade-offs of migration². Rural communities lose educated and young manpower through immigration. Similar patterns have been observed in other developing countries³. As a result, there are more individuals who are dependent on low-skilled labor that is inefficiently productive. Similar educational and out-migration dynamics are noted by Corbett [12, 27].

Methodology Data Collection

As noted by Aliyev [3], the reasons for rural-urban migration are divided into two categories: Push factors and pull factors. Push factors are associated with the areas of origin that force people to migrate, while pull factors are associated with the destination area that attract migrants to it. Push factors have dominance over the pull factors of migration [2; 13]. Usually, they are familial issues, socio-economic conditions, and political circumstances in the origin. Migration may be affected by one's own emotions and thoughts, knowledge, and intellect [1; 3]. Migration creates social, economic, and cultural issues in the region [5; 6]. Rural to urban migrants present considerable hazards to the urban economy and urban geography. Sex and age emerged as the strongest predictors in migration to rural and urban locations, based on several research studies and their respective results. These two variables were accountable for redefining the population trends within the rural and urban locations [4; 22; 28].

Sampling

Participants were selected using convenience and snowball sampling, two non-probability sample methods introduced by Cook and Frank [11]. This sampling

¹ International Development Research Centre (IDRC). Social Change and Internal Migration: A Review of Research Findings from Africa, Asia and Latin America. Ottawa: IDRC, 1977. URL: <https://idl-bnc-idrc.dspace-direct.org> (date of access: 28.03.2026).

² Dang N. A., Tran T. B., Nguyen N. Q., Dao T. S. Development on the Move: Measuring and Optimizing Migration's Economic and Social Impacts. Viet Nam country report. URL: <https://www.gdn.int> (date of access: 28.03.2026).

³ International Fund for Agricultural Development (IFAD). Migration and Rural Employment. Rome: IFAD, 2007. URL: <https://www.ifad.org/en/web/knowledge/publication/asset/39136149> (date of access: 28.03.2026).

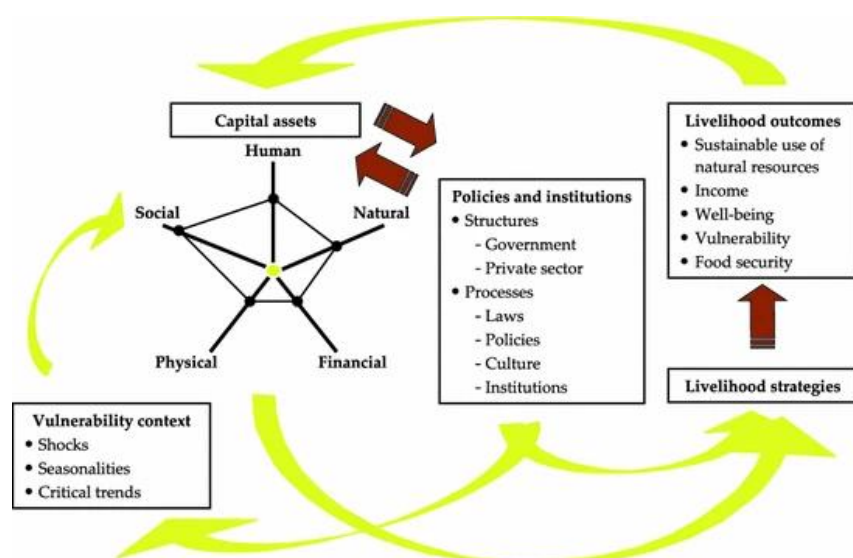


Fig. 1. Sustainable Livelihood Approach

Source: Serrat [26]

method is utilized when data is unavailable. It also aids respondent identification. Each union council's local real estate agents helped find and contact households for data collection. Six of Quetta's 54 union councils participated in the household survey. The number of immigrant families in these six union councils determined their selection. Union council Nawa Killi has 52 other union councils. Only 1987–2017 migrants were considered.

Theoretical Framework

The Sustainable Livelihood Approach was used to analyze rural-urban mobility in this study. The Livelihood Monitoring Unit modifies the SLA created by DFID. DFID defines livelihood as the skills, assets, and activities needed to survive¹. The sustainable livelihood framework specifies livelihood analysis scope and analysis [28]. Major livelihood factors are identified. SLA uses livelihood asset indices to identify big determinants affecting immigrant households' livelihoods.

The SLA framework was further modified with the Livelihood Monitoring Unit approach (see Figure 1). According to Livelihood Monitoring Unit, there are assets on which households depend for their livelihoods². Therefore, to evaluate the livelihood status

of any group of people, Livelihood Monitoring Unit (LMU) framework can be used. To assess livelihood outcome, food security was selected as it integrates household spending pattern on food, which is the basic component of household wellbeing.

Data Analysis

Data is analyzed in three parts: Firstly, the profile of the respondent is descriptively analyzed to understand their demographics. Secondly, push and pull factors are presented in the form of graphical analysis. Thirdly, weighted least square regression analysis is used to assess the effect of livelihood assets on food security.

Model specification

For regression analysis the following model is constructed:

$$\text{Food Security} = \beta_0 + \beta_1 \text{Financial Capital} + \beta_2 \text{Natural Capital} + \beta_3 \text{Social Capital} + \beta_4 \text{Human Capital} + \beta_5 \text{Physical Capital} + \varepsilon. \quad (1)$$

In equation (1), food security is the dependent variable. It includes questions regarding food sufficiency and accessibility, developed by the United States Department of Agriculture³ and has been also used in different studies [29]. β_1 , β_2 , β_3 , β_4 , and β_5 are the coefficients of the independent variables. Financial cap-

¹ Department for International Development (DFID). Sustainable Livelihoods Guidance Sheets. London: DFID, 1999. URL: <https://www.eldis.org/document/A6167> (date of access: 28.03.2026).

² Livelihoods Monitoring Unit. Measuring Livelihood Impacts: A Review of Livelihoods Indicators. Dhaka: CARE Bangladesh / TANGO International, 2004. URL: <https://www.livelihoodscentre.org/>

documents/114097690/114438878/Measuring+Livelihood+Impacts.pdf (date of access: 28.03.2026).

³ United States Department of Agriculture (USDA). U. S. Household Food Security Survey Module: Six-Item Short Form. Washington, DC: USDA Economic Research Service. URL: <https://www.ers.usda.gov> (date of access: 28.03.2026).

ital is a measure of the financial resources available to individuals or households, such as income, savings, or access to credit. Natural capital is a measure of the natural resources available to individuals or households, such as land, water, or crops. Social capital is a measure of the social networks and relationships available to individuals or households. Human capital is a measure of the knowledge, skills, and education of individuals or households. Physical capital is a measure of the physical assets available to individuals or households, such as housing, infrastructure, or tools.

Asset Indexing

Since the study uses livelihood assets, each livelihood asset comprised of many sub-components. Therefore, it was necessary to transform each asset into its respective composite index. The following formula was used (equation 2), developed by Filmer and Scott¹, to generate livelihood indices by assigning weights to each variable:

$$I = \sum_{i=1}^n W_i X_i. \quad (2)$$

Where I presents weighted index, W contribution of each variable and X value given by each respondent.

The asset indices basic form is given in equation 3 given below.

$$A_i = b_1 a_{1i} + b_2 a_{2i} + \dots + b_k a_{ki}. \quad (3)$$

Where A_i is the asset index for food security “ i ”, ($a_{1i}, a_{2i}, \dots, a_{ki}$) are k indicators of asset ownership and food security variables, and ($b_1, b_2, \dots, b_k$) are weights used to aggregate the indicators into an index.

Regression Diagnostics

Data was tested for heteroscedasticity and multicollinearity. For heteroscedasticity, Breusch-Pagan test was used which showed that data was heteroscedastic. To treat this issue, weighted least regression model was used. To detect multicollinearity, Variance Inflation Factor test was used, data did not show any sign of multicollinearity. As none of the capital indexes had a VIF value greater than five.

Results

Demographic profile and immigration year

The table 1 above reveals that all responders are males (100%) and none are women. 86% of respondents are married, 14% are not. Five percent of respon-

dents are 16–30, while 42 percent are 31–44. Only 5% are 45–65. The average age of respondents is 30.38 years, with an 8.56-year error. The majority of the respondents (80%) have a household size of 1–10, while the remaining 20% have a household size of 11–20. The mean household size is 10.81 ± 5.01 . 62% of the respondents live in cemented houses, 20% live in semi-cemented houses, and 18% live in mud houses. 42.3% of the respondents have an income in the range of 1–20, while 50.0% have an income in the range of 21–40. Only 7.69% of respondents have an income in the range of 40–60. The mean income of the respondents is $14.46k \pm 5.99k$. The majority of respondents have completed 5–9 years of schooling (30.7%), followed by 0–4 years (32.3%), and 10–14 years (27%). Only 10% of respondents have completed 15–18 years of schooling. The mean years of schooling of the respondents is 7.9 ± 3.94 years. Half of the respondents (50%) have experience in the range of 1–10 years, while 46.15% have experience in the range of 11–20 years. Only 3.58% of respondents have experience in the range of 20–30 years. The mean experience of the respondents is 10.88 ± 5.18 years.

Overall, the data suggests that the sample consists of young male migrants with relatively large households, primarily residing in urban areas in cemented houses, with a moderate level of education and work

Table 1

Demographic profile			
Variables	Category	Percentage	Mean $\pm$ SD
Gender	Male	100	
	Female	0	
Marital status	Married	86	
	Non married	14	
Age	16–30	53	30.38 ± 8.56 years
	31–44	42	
	45–65	5	
Household size	1–10	80	10.8 ± 5.01
	11–20	20	
House type	Cemented	62	
	Semi-Cem	20	
	Mud-House	18	
Income	1–20	42.3	$14.46k \pm 5.99k$
	21–40	50.0	
	40–60	7.69	
Years of schooling	0–4	32.30	7.9 ± 3.94 years
	5–9	30.7	
	10–14	27	
	15–18	10	
Experience	1–10	50	10.88 ± 5.18 years
	11–20	46.15	
	20–30	3.58	

Source: author own compilation from data.

¹ Filmer D., Scott K. Assessing Asset Indices: Demographic and Health Survey Data and Methodology. Washington, DC: World Bank, 2012. URL: <https://documents.worldbank.org> (date of access: 28.03.2026).

experience. Majority of respondents have an income in the range of 21–40 PKR.

As shown in Figure 2, in Quetta city, 57 percent of immigrant households migrated during 2005–2014. 23% migrated in 2015 and later. 13% migrated during 1994–2004. Additionally, 7% migrated during 1985–1994. The reason for the increased migration trend during 2005 to 2014 can be attributed to increased urbanization and the influx of Afghan refugees in Quetta city during the late 1990s, which impacted the real estate industry and gave birth to new markets for commodities and services, attracting migrants from rural Balochistan [7].

Pull and push factors

The above results shown in figure 3, the percentage of respondents who selected each pull factor as

a reason for migration. The most frequently selected pull factor was “Better Job Opportunity,” which was selected by 36% of respondents. This suggests that job opportunities played a significant role in the decision to migrate. The second most frequently selected pull factor was “Employment Opportunities,” which was selected by 16% of respondents. This further supports the importance of job-related factors in the decision to migrate. The third most frequently selected pull factor was “Better Standards of Living,” which was selected by 15% of respondents. This suggests that respondents were seeking a better quality of life in terms of their living conditions, amenities, and access to resources. “Bright Future for Children” was selected by 15% of respondents, indicating that many families may have migrated to provide better opportunities and a better future for their children.

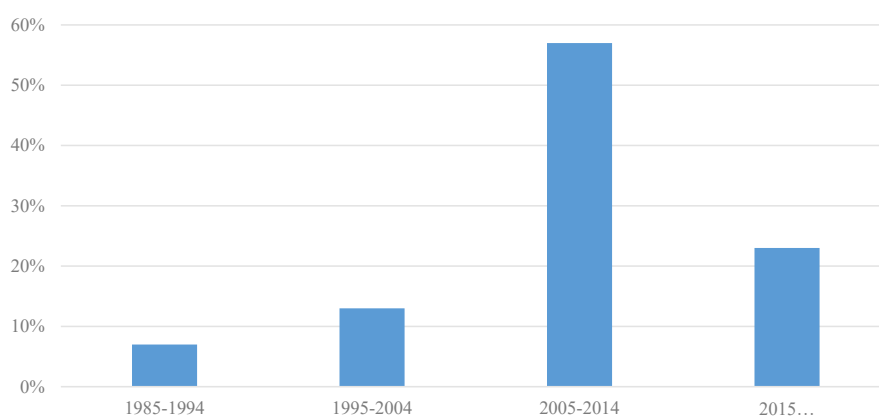


Fig. 2. Respondents Immigration year

Source: author own compilation from data.

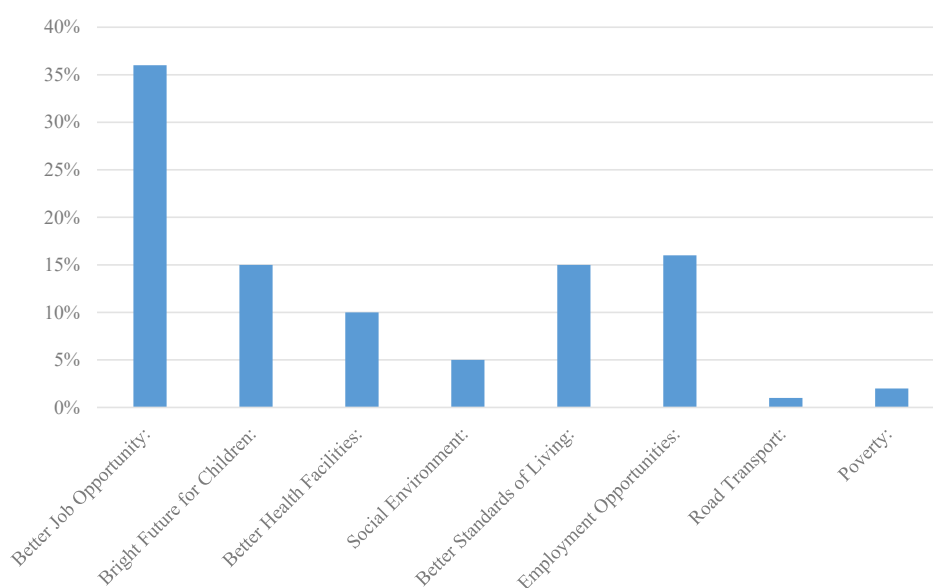


Fig. 3. Pull factor affecting Migration

Source: Author's compilation from questionnaire results.

Other pull factors such as “Better Health Facilities,” “Social Environment,” “Availability of Technical / Professional Training for Children,” and “Poverty” were selected by smaller percentages of respondents, indicating that they were not as important in the decision to migrate. The low percentage for “Road Transport” suggests that access to transportation may not have been a significant concern for respondents. Overall, the data suggests that job-related factors and the desire for a better quality of life were the primary drivers of migration.

The data provided in figure 4 illustrate the percentage distribution of different push factors responsible for people’s migration from their hometowns to Quetta city. Among these push factors, the lack of opportunities is the most significant with 30% of people citing it as the reason for their migration. This is followed by non-accessible basic necessities at 19% and family size at 16%. Other factors that contributed to people’s migration include average economic activity (18%), difference in availability of social infrastructure (5%), present position about employment of family member (8%), domestic dissents (3%), and basic necessities (1%).

Overall, the data suggests that people were pushed to migrate to Quetta city due to a lack of opportunities and basic necessities in their hometowns, as well as the desire for better economic prospects and improved family conditions.

Livelihood Outcome

The model’s R-square value is 0.699, indicating that PC, FC, HC, NC, and SC explain 69.9% of food security variations (see table 2). The adjusted R-square value of 0.511, somewhat lower than the R-square value, shows this. This suggests that certain independent elements may not be contributing much to the model. The model’s strong R-square score suggests it fits the data well.

The ANOVA table demonstrates the regression model works effectively (see table 3). The regression’s highly significant F-value of 33.826 and p-value of 0.000 indicate that at least one independent factor greatly affects the dependent variable. The regression model as a whole identifies food security well, according to the ANOVA table. Food security is strongly linked to one of the independent factors such as PC, FC, HC, NC, or SC.

The results in table 4 shows that the constant term coefficient is 2.321, indicating what food security will be when all other components are zero. A t-value of 6.902 and p-value of 0.000 make this number statistically significant. If all other parameters remain the same, a 0.434 index for financial capital (FC) indicates that food security will likely grow by 0.434 units per unit of FC. Its t-value of 9.281 and p-value of 0.019 make this coefficient statistically significant. The values for natural and social capital are 0.078 and 0.161, respectively. They don’t affect food security as much as financial capital. Because their p-values are over 0.05, these ratios are not statistically significant. Hu-

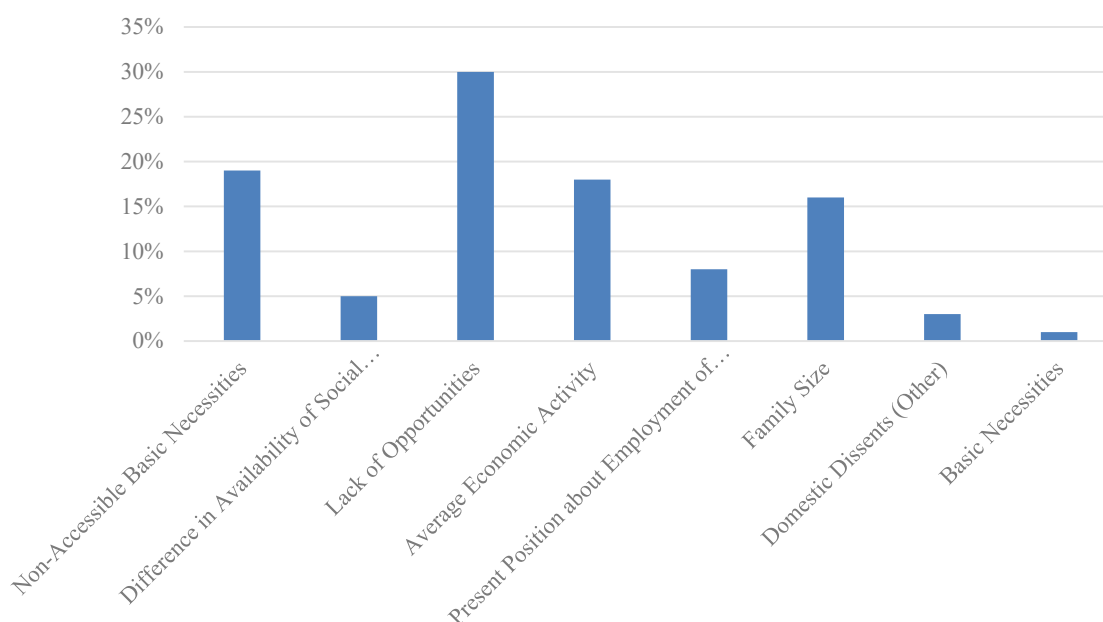


Fig. 4. Push Factors affecting Migration

Source: Author’s compilation from questionnaire results.

Table 2

Model summary of the regression model

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.699 ^a	0.527	0.511	0.110

a. Predictors: (Constant), PC, FC, HC, NC, SC

b. Dependent Variable: Food Security

c. Weighted Least Square Regression — Weighted by weight

Source: Author's own compilation of data.

Table 3

ANOVA results

ANOVA ^{a, b}						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	104.552	5	20.910	33.826	.000 ^c
	Residual	296.439	196	1.512		
	Total	400.991	201			

a. Dependent Variable: Food Security

b. Weighted Least Squares Regression — Weighted by weight

c. Predictors: (Constant), PC, FC, HC, NC, SC

Source: Author's own calculations.

man capital (HC) is 0.221, therefore food security increases 22% every unit. Food security is less affected by it than financial and physical prosperity. The p-value is 0.006, making it statistically significant. A 0.344 index for physical capital (PC) suggests food security will increase by 0.344 units per unit of PC growth if

all other parameters remain the same. Its t-value of 7.970 and p-value of 0.000 make this coefficient statistically significant. Financial, human, and physical capital all improve food security statistically. Natural and social capital improve food security but are not statistically significant.

Table 4

Weighted Least Square Regression Output

Coefficients ^{a, b}						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.321	0.336		6.902	0.000
	Financial Capital	0.434	0.148	0.617	9.281	0.019
	Natural Capital	0.078	0.057	0.085	1.357	0.176
	Social Capital	0.161	0.050	0.079	1.222	0.082
	Human Capital	0.221	0.146	0.429	4.455	0.006
	Physical Capital	0.344	0.243	0.518	7.970	0.000

a. Dependent Variable: Food Security

b. Weighted Least Squares Regression — Weighted by weight

Source: Author's own calculations.

There are a number of limitations that must be noted, even though this research offers insightful information on the connection between various types of capital and food security among rural families in the study area. The study's cross-sectional design, for starters, restricts our capacity to infer causal correlations between the variables of interest. To determine the direction of causation and the temporal link between capital and food security, longitudinal studies that monitor changes over time may be required. Second, the research only looked at one location, which could have limited how broadly the results can be applied to other areas or demographics. To improve the external validity of the findings, future research should try to duplicate this study in other settings. Third, only five types of capital financial, human, physical, natural, and social — were examined in this research. Awareness food security in rural families may also need an awareness of other types of capital, such as intellectual, political, and cultural capital.

Conclusion and Policy Recommendations

This study offers insights into the push and pull variables of rural-urban migration in the context of Quetta city, the research contributes to the body of knowledge. Additionally, it identifies livelihood assets that influence food security in immigrant families residing in rural and urban areas. This research looked at migration from rural to urban areas from two different angles. It first examines the forces that drive migration from rural to urban areas. Second, it uses food security as the evaluation criterion to evaluate the sustainability of livelihoods.

Push and pull factors were determined for the first section. Lack of opportunity, lack of basic requirements, and ordinary economic activity were major motivators. Whereas, major pull factors selected by the respondents were better jobs, employment oppor-

tunities, and better living standards. These factors show that it is hard to survive in the rural areas of Balochistan province. Therefore, people tend to move to Quetta city to avail better livelihood opportunities.

For the second part, assessing the livelihood status of the rural-urban immigrant households' regression analysis was used. Since the data was cross sectional in nature the data was only diagnosed for heteroscedasticity and multicollinearity. The diagnostic tests showed that data was heteroscedastic but did not have multicollinearity. To deal with heteroscedasticity, weighted least square regression technique was used. The regression results showed that among all the livelihood assets (capitals) only financial capital, human capital and physical capital affected food security positively and significantly. Although, social capital and natural capital affected food security positively but they were statistically insignificant. The regression results align with push and pull factors showing that rural-urban immigrant households face difficulties in achieving financial stability, lacks improved housing facilities and are under-utilized considering their labor market potential.

The government need to finance initiatives such as loans and skill development for those transitioning from rural to urban areas. It will enable immigrants to establish their own enterprises, so enhancing their overall quality of life. Many respondents do not feel secure residing in their own houses due to their rental status. If the financial situations of these families improved, they may own their own houses and enhance their economic assets. Adhering to these recommendations would effectively mitigate the migration of individuals from rural areas to urban centers within the research region and Quetta at large. These recommendations will also assist in maintaining individuals who are actively engaged in society and foster sustained development.

References

1. Acharya AK, Cervatus JJ. Female Migration and Urban Informal Sector in Monterrey Metropolitan Region. *Journal of Social Science*. 2009;21(1):13-24.
2. Adewale AO. Socio-Economic Factors Associated with Urban-Rural Migration in Nigeria: A Case study of Oyo State. *Journal of Human Ecology*. 2005;17(1):13-16.
3. Aliyev I. Rural-Urban Labor Migration in Azerbaijan. MA Thesis in Public policy. Budapest, European University; 2008.
4. Andersen LE. Rural-Urban Migration in Bolivia: Advantages and Disadvantages. Bolivia, Institute for Socio-Economic Research. Universidad Católica Boliviana La Paz; 2002.
5. Anwar MM, Breuste JH, Ahmad A, Aziz A, Aldosari A. Quantifying the impacts of urbanization on urban agriculture and food security in the megacity Lahore, Pakistan. *Sustainability*. 2023;15(16):12143. DOI:10.3390/su151612143.
6. Aziz A, Anwar MM. Assessing the level of urban sustainability in the capital of Pakistan: A social analysis applied through multiple linear regression. *Sustainability*. 2024;16(7):2630. DOI:10.3390/su16072630.

7. Borthakur A. Urbanization and migration trends in South Asia: A case of Quetta City. *Asian Journal of Urban Studies*. 2017;12(3):45-59.
8. Bhattacharya PC. Rural-Urban Migration in Economic Development. *Journal of Economic Surveys*. 1993;7(3):243-281.
9. Bogue DJ. Internal Migration. In: Duncan OD, Hauser PM, editors. *The Study of Population: An Inventory and Appraisal*. Chicago; 1959. Pp. 490–752.
10. Castles S, Miller MJ. *The age of migration: international population movements in the modern world*. London, Macmillan; 1993.
11. Cook C, Frank I. *Sampling methods in social research*. New York, McGraw-Hill; 2008.
12. Corbett M. Rural Education and Out-Migration: The Case of a Coastal Community. *Canadian Journal of Education/Revue canadienne de l'éducation*. 2005;52-72.
13. Gimba ZM. Causes and effects of rural-urban migration in Borno State: A Case Study of Maiduguri Metropolis. *Asian Journal of Business and Management Sciences*. 2010;1:168-172.
14. Habib N, Rankin P, Alauddin M, Cramb R. Determinants of livelihood diversification in rural rain-fed region of Pakistan. *Environmental Science and Pollution Research*. 2022;29:50732-50745. DOI: 10.1007/s11356-022-23040-6.
15. Hamza A, Shi G, Hossain B. Migration as an adaptation measure to achieve resilient lifestyle in the face of climate-induced drought. *Water*. 2024;16(18):2692. DOI: 10.3390/w16182692.
16. Harris JR, Todaro MP. Migration, unemployment and development: A two-sector analysis. *American Economic Review*. 1970;60(1):126-142.
17. Iredale R, Piper N, Ancog A. Impact of Ratifying the 1990 UN Convention on the Rights of All Migrant Workers and Members of Their Family. APMRN Working Paper No. 15. Canberra, Australian National University; 2005.
18. Jamilah MA. Industrial Development and Malay Female Rural-Urban Migration in Malaysia. SEAPRAP Research Report No. 58. Singapore, Institute of Southeast Asian Studies, Southeast Asia Population Research Awards Program (SEAPRAP), 1981.
19. Kumar A. Poverty in India: Between Politics of Poverty and Poverty of Politics. Working Paper 3. Manchester and New Delhi, CPRC and IIPA; 2003.
20. Manning C, Bhatnagar P. *Coping with cross-border labor flows within South East Asia*. In: Kaur A, Metcalfe I, editors. *Mobility, Labor Migration and Border Controls in Asia*. New York, Palgrave MacMillan; 2006. Pp. 52–72.
21. Mendola M. *Rural Out-migration and Economic Development at Origin*. Sussex Migration Working Paper No. 40. Falmer, University of Sussex; 2006.
22. Montgomery MR, Stren R, Cohen B, Reed HE. *Cities Transformed: Demographic Change and Its Implications in the Developing World*. Washington DC, National Academies Press; 2004.
23. Nazeer M, Alam S, Fatima A. Sustainability of urban regions and migration in Pakistan: A GIS analysis. *International Journal of Economic and Environmental Geology*. 2023;12(3):59-72. DOI:10.46660/ijeeg.v12i3.59.
24. Samal CA. Remittances and Sustainable Livelihoods in Semi-Arid Areas. *Asia-Pacific Development Journal*. 2006;13(2).
25. Serrat O. The Sustainable Livelihoods Approach. In: *Knowledge Solutions: Tools, Methods, and Approaches to Drive Organizational Performance*. Springer; 2017. Pp. 21–26. DOI:10.1007/978-981-10-0983-9_5
26. Siddiqui T. *Impact of Migration on Poverty and Development*. Dhaka, Refugee and Migratory Movements Research Unit (RMMRU); 2012.
27. Timalisina KP. *Rural Urban Migration and Livelihood in the Informal Sector: Study of Street Vendors of Kathmandu Metropolitan City Nepal*. PhD Dissertation, Norwegian University of Science and Technology; 2007.
28. Todaro M, Smith S. *Economic Development*. 8th ed. New York. New York University and Population Council; 2003.
29. Zada M, Zada S, Ali M, et al. Contribution of small-scale agroforestry to local economic development and livelihood resilience. *Land*. 2022;11(1):71. DOI:10.3390/land11010071

Information about the authors

S. Nazir — Research Engineer, Aspirant (Postgraduate Researcher), Graduate School of Economics and Management, Ural Federal University, Russia; Lecturer, Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS), Pakistan.

H. S. K. Bazai — Master's Student, Graduate School of Economics and Management.

Информация об авторах

С. Назир — инженер-исследователь, аспирант, Высшая школа экономики и менеджмента, Уральский федеральный университет, Россия; преподаватель, Белуджистанский университет информационных технологий, инженерии и управления (BUITEMS), Пакистан.

Х. Ш. К. Базан — магистрант.

Статья поступила в редакцию 13.01.2026; одобрена после рецензирования 22.03.2026; принята к публикации 15.06.2026.

The article was submitted 13.01.2026; approved after reviewing 22.03.2026; accepted for publication 15.06.2026.

Conflict of interest. Author has no conflict of interest. This research did not involve any intervention or experimental treatment. The study was carried out in accordance with the ethical principles outlined in the Declaration of Helsinki and the guidelines for social research ethics. At the time of data collection, no formal ethics approval process existed at the author's institution; however, all procedures complied with general ethical standards of voluntary and informed participation, privacy protection, and data confidentiality.

Consent to Participate. All respondents were briefed about the study's aims and assured that their participation was voluntary. Participants were informed that their responses would remain anonymous and used solely for academic purposes. Informed verbal consent was obtained from each participant before completing the questionnaire.

Конфликт интересов. Авторы не имеют конфликта интересов. Данное исследование не включало в себя каких-либо вмешательств или экспериментального лечения. Исследование проводилось в соответствии с этическими принципами, изложенными в Декларации Хельсинки и руководящих принципах этики социальных исследований. На момент сбора данных в учреждении авторов не существовало формальной процедуры этического одобрения; однако все процедуры соответствовали общим этическим стандартам добровольного и информированного участия, защиты частной жизни и конфиденциальности данных.

Согласие на участие. Все респонденты были проинформированы о целях исследования и заверены в том, что их участие является добровольным. Участникам сообщили, что их ответы останутся анонимными и будут использоваться исключительно в академических целях. Перед заполнением анкеты у каждого участника было получено устное информированное согласие.