

## MIGRATION PATTERNS AND SOCIO-ECONOMIC DETERMINANTS IN THE TRI-CITIES OF SINDH (HYDERABAD, KOTRI, AND JAMSHORO)

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### **Abstract**

*The Sindh province in Pakistan has been urbanized and this has enhanced the migration into the major economic centres in the tri-cities of Hyderabad, Kotri and Jamshoro. This paper will discuss socio-economic forces that influence which areas will see increased migration and impact population growth in these interdependent cities. This study employed a quantitative design because a sample size of 300 migrants and residents in the tri-cities were surveyed via structured questionnaires. The two techniques employed in the analysis were chi-square tests of the relationship and ordinary least squares (OLS) regression, which established predictive variables. The findings indicate that reasons to migrate (e.g. employment opportunities), origin (rural vs. urban) with 68.33% of the respondents originating in rural setting, and 58% citing employment opportunities as the primary reason have significant correlations. The outcome of the regression analysis reveals that higher and higher education level ( $\beta = 6758.67$ ,  $p = 0.030$ ) and employment-motivated migration ( $\beta = 8064.08$ ,  $p = 0.002$ ) are notable causal factors of post-migration income gains which is a proxy of the economic pull factors. These conclusions point to the economical motives that dominate the mobility development, and the gaps in policy to address the city pressures. As part of the migration theory, the work not only gives a background of the push-pull structures in a three-city setting in South Asia but also gives a recommendation on how the cities could be planned sustainability. Data is self-reported and it is restricted to cross-sectional design. Future studies should focus on longitudinal aspects of integration.*

**Keywords:** *Migration patterns, socio-economic determinants, tri-cities, Sindh, push-pull factors, urban growth*

### **I. Introduction**

The urbanization and internal migration is altering the demographic situation in Pakistan radically. The Pakistani urban population has already become over 37% of the entire population and is projected to reach 50 percent of the total population by the year 2030 (PIDE, 2021). The case of this is the Sindh province with its fertile basin of Indus River and its proximity to Arabian Sea. The growth rate of the urban population in the province grew by 3.2 percent per year in the years 2017-2023, higher than the national rates (Government of Pakistan, 2020). The focus of this growth seems to be the tri-cities of Hyderabad, Kotri, and Jamshoro, agglomerations of the urban areas with the total area of approximately 200 square kilometers and with over 2.5 million residents altogether.

The economic center is Hyderabad the second largest city in Sindh that accommodates the industries of textile, pharmaceutical processing of agriculture. Another manufacturing and logistics center with favourable strategic position on the national highway is Kotri, an industrial satellite town, only 20 kilometers south of it. On its north, Jamshoro is an emerging educational and energy hub that is anchored by the University of Sindh and thermal power plants. The aggregate outcome of these cities is a polycentric urban cluster and the migrations have grown by 45 percent since 2010 due to the rural distress and urban opportunities (Waseem & Talpur, 2021). The migration patterns in Sindh are aligned with South Asia, with rural-to-urban migration being the most common as well as three-quarters of migrants are originating in agrarian districts, including Dadu, Larkana, and Thatta (Ehrlich et al., 2021). Rural poverty is also caused by activities such as land degradation due to water scarcity, climatic alteration, and land fragmentation that push the families to seek stability in urban areas (European Commission–Eurostat et al., 2020). Conversely, the pull factors include the fact that Hyderabad has a well-developed labor market that can absorb the low-skilled individuals working in the informal sector in the construction and the services industries. Based on the recent statistics, net migration became an important factor in the tri-cities population growth due to which the overload of the infrastructure and the increase of the socio-economic inequalities were observed (Government of Pakistan, 2020).

It is a connected process because of this dynamic of tri-city; in such a setting, people can leave Kotri and pass through the manufacturing districts, and then go to the Hyderabad, or to the academic enclaves (Jamshoro) (Jiang et al., 2022). These tendencies not only boost the local economies (15 percent of the GDP of Sindh) but also pose a challenge, including the emergence of slums and overloading the resources (United Nations Human Settlement Programme [PIDE, 2021).

Even though it is evident that the scale of migration occurs there is deficiency of the empirical knowledge of the social-economic basis of migration in the tri-cities. The existing literature typically mixes the Sindh-level information and does not consider the data about a finely-tuned interaction in this urban trinity (Vanhatalo & Partanen, 2022). Such questions as these stands: What are the processes of the out-flow of people out of the rural hinterlands into these cities? How do these differences in the impacts of these drivers on the increase of population in the commercial center of Hyderabad, the industrial fringe of Kotri, and the education periphery of Jamshoro differ? Above all, what implications do migration-induced inflows have on the urban vulnerability, i.e. the issue of housing shortage and joblessness peaks.

The problem is acute: it has over 20,000 people per square kilometer, and 40 percent of the population reside in informal settlements (Vighio et al., 2024). The problem which Kotri is grappling with is industrial pollution and child labor and student influxes, when overstretching state services are plaguing Jamshoro. The policymakers' loops of inequality are not broken, that is, risk maladaptive strategies are not disaggregated. This gap in the research paper is sealed by exploring the migration causes such as employment, education, family reunification, etc. and their secondary effects of demographic growth.

The primary objective is to describe the social-economic issues that affect migration to the tri-cities and they include the pull and push factors. Specific aims include:

- Mobility (e.g. rural-urban origins), characteristics profiling of migrants (e.g. age, education, income).
- Identifying the significant causes of relocation and the association between them and socio-demographics.

- The values of the influence of these drivers on the economic performance in terms of income mobility as a sustainability indicator of population growth.
- Policy lessons on how to manage inflows into the cities should be extracted.

With them, the research illuminates how choices made by individuals would compound to macro-level alterations and guide interventions by the government and other parties...

The meaning of this study is complicated. On the one hand, it adds to the migrations research by applying the classical theories to the tri-city local exchange connecting the global theory and the specific locality (Waseem & Talpur, 2021). Practically, the findings can be used to inform urban planning of Sindh: like enhancing vocational training in Kotri to access migrant workers or building more affordable houses in Hyderabad to curb sprawl (WHO, 2023). Pakistan On the policy level, it advances the National Urban Policy in Pakistan (2019) whereby integrated migration management can be used to achieve inclusive growth.

The disclosure of such tendencies is crucial to the process of resilience-building in the climate risks and financial uncertainty in a province where 60 percent of the labor force relies on migrants (Wynn et al., 2021). This research will eventually empower the stakeholders such as the local governments and non-governmental organizations to use migration as an asset and not a liability in order to ensure equal development is experienced in the tri-cities.

## II. Literature Review

Migration theorizing provides the backgrounds on which people can examine the causes of the change of geographical area by people and the impact of sociocultural economic forces on the change. One of the most significant models is the classical push-pull model that was initially developed by Lee (1966). According to it, sufficient causes of the migration at the start are contradictory forces, such as poverty, unemployment, environmental degradation, or destination and origin factors, such as improve employment, education, security, and life quality. This model assumes that people are rational decision makers and prior to acting, they take into consideration costs, risks, and perceived returns. Its basic hypothesis that opportunity differentials are causing mobility has been tested empirically in continents (Zoraghein et al., 2021).

To expand on this theory, Ravenstein developed Laws of Migration (1885) using British census information and has been popular in the contemporary world. Ravenstein was also able to observe that migration is short distance rural-urban, migration is a serial process, and there is also a counter stream as there are some migrants who come back. He also created gender patterns in which women were more likely to move in short distances though the men controlled international migration. The laws were formulated in the 19 th century, though they are still not obsolete especially in the developing nations where high rural-urban migration exists.

The recent advancements of the migration theory have attempted to address the flaws in the earlier theories. The brainchild of Stark and Bloom (1985), New Economics of Labor Migration (NELM) inverts the object of analysis and households become the unit of analysis. NELM says that migration is not just a search to a better pay, but also a diversification of risks in order to overcome the credit ceilings and stabilize the household income. The school of thought is more applicable since it can be applied to explain migration in which the financial markets are fragile and agricultural life is volatile.

The Aspirations-Capabilities Framework (ACF) of de Haas (2021) is one of the newest contributions to the concepts. Migration, according to ACF, occurs when individuals desire to migrate, and they are able or capable of doing so either economically, socially, and physically. Structural constraints such as poverty and cultural norms mediate these capabilities as does the policy constraints. ACF helps to separate the (involuntary) non-migrants who desire to migrate

and cannot with the (voluntary) stayers who do not desire to migrate even when they are able to migrate.

Meta-analyses of Czaika and Reinprecht (2020) indicate that nearly 70 percent of the tendencies of internal migrations in the developing countries can be attributed to the theories despite divergent emphasis on them across the globe. Their applicability is different in other parts of the world particularly South Asia whereby mobility in the area is influenced by past colonialism, post-independence policies, urbanization, and environmental pressures differently than in the West.

South Asian scholarship is a refinement of the classical theories in a way that it is of a regional character in terms of social-economic fabric. The rural urban migrations in India stand at over 30 million per annum and approximately 55 percent of the migrations in India is driven by employment (Stanny et al., 2021). There is slight variation but same in the case of Bangladesh: thousands of people continue to be moving towards Dhaka annually because of chronic flooding and intrusion of salinity (Liu et al., 2021). South Asian migration is one of the major concerns that have attracted a lot of themes especially in relation to environmental migration that has been largely neglected by the classical theories.

Migration context in Pakistan involves the economic aspect, geopolitical aspect, and the environmental aspect. Along with the internal migration, nearly 4 million Afghan refugees that have entered the nation since 1979 have influenced the labor markets, housing, and the regional demographics (Memon et al., 2024). Such mass inflows have caused complex relationships between the locals and the migrant populations that modify the internal migration patterns especially in Sindh and Khyber Pakhtunkhwa. The push-pull forces and the policies of the households and desires continue to contribute towards the internal mobility in Pakistan.

The overwhelming body of empirical research has continued to show the socio-economic factors as the greatest predictors of migration. The most important pull factor is employment. In Pakistan, 62 percent of urban migrants in the 2017-18 PSLM survey moved because of the lack of employment opportunities in their native areas (Pakistan Bureau of Statistics, 2019). Cities offer more employment opportunities as well as more sources of income which are not diversified in the rural setting.

Education is both a push and pull factor. Most of them migrate to the city to acquire good education facilities as educated people also migrate to find employment in the labor markets that match their abilities. Arif and Amjad (2012) discovered that tertiary-educated migrants have incomes 25 times higher and high remittance to their families than the non-literate migrants. Therefore, education improves the desire and ability to migrate.

Income differences enforce these relationships. According to Qureshi (2020), with a household income below PKR 15,000 per month, the rural households have three times higher chances of migrating. There is a supplementary role of family reunification. Nationally, the data indicate that, the proportion of migrants who migrate to join their family networks is roughly 18 percent and this propagates the chain-migration trends- especially in-migrant women (Mangi et al., 2020).

Gendered views depict unequal prospects as well as susceptibility. Sindh women migrants experience 40 percent wage disparities and occupational inequalities because of cultural standards (Stanny et al., 2021). These disparities influence the causes and the consequences of migration.

Sindh-specific literature introduces the element of the environment and place. Water is also a significant push factor: ADB (2021) established that one in five farmers in Thatta district had to move to a new location because of irrigation shortages. Thousands of semi-skilled workers have been attracted to Kotri annually by its growing industrial belt, and almost half are rural Sindh women (Mendiratta & Sidana, 2025). In the meantime, the educational institutions of Jamshoro

the University of Sindh, attract more than 20,000 inter-district learners every year (University of Sindh, 2023). In literature, about 65 percent of the migration intention variations are associated with economic determinants (Mairaj et al., 2025).

These findings are supported by quantitative rigor. Regional studies that involve chi-square tests often demonstrate strong correlations between the rural background and the employment intentions ( $X^2_{10}$ ,  $p < 0.05$ ; Herani and Qureshi, 2024). Regression results show that education is a significant predictor of success in the positive migration process, with the b-coefficients ranging at 0.35 on average (Khan, 2025).

Irrespective of the wide literature, there are several gaps. To start with, global theories pay little attention to polycentric urban frameworks, in which linked cities, including Hyderabad, Kotri, and Jamshoro, collectively impact on migration as opposed to acting autonomously (UN-Habitat, 2020). The type of approach taken in Pakistani studies is mostly macro-level; merely 15% disaggregate to district or sub-district (IOM, 2022).

The current studies consider Hyderabad, Kotri, and Jamshoro separately, disregarding their functional interconnection, e.g. labor commuting between Kotri and Hyderabad, and migration of students between Jamshoro and Hyderabad (SDIPC, 2022). In addition, there are gaps in methodology: most of the studies are based on census data that underpins informal and seasonal migrants (Arif & Shujaat, 2019). Basic surveys are small and largely obsolete, particularly prior to COVID, though the pandemic changed almost 10 percent of migration flows (World bank, 2024).

There is also the need to dig deeper into the youth and gender aspect as 55 percent of migrants in Sindh are below the age of 30 (PSLM, 2019). This synthesis of over 50 sources demonstrates that there is a great deal of agreement regarding the economic primacy of migration determinants but that there is a need to have tri-city-oriented, integrated research. The current research fills in this gap by providing new primary information and quantitative data of the tri-city cluster, which adds both theoretical and empirical value to the migration literature in Sindh.

### III. Methodology

The research design that can be applied in this study is a cross-sectional quantitative research design aimed at studying the socio-economic determinants of migration in the tri-cities of Hyderabad, Kotri, and Jamshoro. Cross-sectional method is quite appropriate in describing the features of population and migration patterns at one point in time, which allows making significant comparisons with other demographic groups. According to Creswell and Creswell (2018), quantitative designs enable the researcher to establish the relationship among variables with the help of numerical data and make generalizable conclusions.

The design is very much in line with the study exploratory and explanatory goals that need to identify patterns, test associations, and measure the strength of socio-economic determinants that predict migration. The study operationalizes the migration motivations (i.e., employment, education, or family reasons) into measurable variables, which of course makes it possible to apply classical push-pull theory to structured data self-reported. The method also favors statistical inference, which allows determination of the influences of demographic and economic attributes on migration choices and post-migration achievement.

The stratified random sampling plan was adopted in order to have a strong representation of the three interrelated cities. Only 300 respondents were taken in the final sample; 150 in Hyderabad, 80 in Kotri and 70 in Jamshoro. Stratification was also developed to be more inclusive based on its major features, that is, place of origin (rural / urban), gender (balanced 50:50) and age categories (18-30 years: 40%; 31-45 years: 40%; above 45 years: 20).

To be able to model the migration dynamics, the sampling scheme was 60 percent migrants (those who moved within the past five years) and 40 percent long-term residents. This combination gave a relative benchmark, which enabled the study to draw a distinction between new inflows and the already settled populations.

This was done through a power analysis of G 3.1 which established that the minimum number required to have 80 percent statistical power to reject a medium effect size (Cohen  $d = 0.5$ ) at significance level of 0.05 (Faul et al., 2007). This is to guarantee that the sample is large enough to identify significant association and predictors within the data.

The fieldwork was conducted between March and May 2025 and employed door to door household visits and intercept surveys based on the market. The IRB of the University of Sindh provided ethical approval of the study and informed consent was taken before the respondents participated. The 40-item structured questionnaire was used to gather primary data after conducting a comprehensive review of the literature on migration. The instrument was tested on a group of 30 respondents and had a satisfactory reliability value (Cronbach  $\alpha = 0.82$ ), thus, demonstrating good internal consistency.

The questionnaire obtained specific data on:

- Demographics: gender, age, occupation, family income.
- Migration history: place of origin, date of migration, reasons of migration and factors that drove migration.
- Reasons of migration: employment, education, family reunification, or any other reasons.
- Post-migration outcomes: income, current employment, contentment with living conditions.

The income information was registered in monthly PKR and where possible, counter checked with pay slips, receipts, or verbal confirmation of employers. In Sindhi and Urdu, surveys were conducted to eliminate linguistics constraints and reduce bias on the part of the interviewer.

The SPSS version 27 was used to analyze the data. Socio-demographic trends as well as migration patterns were summarized using descriptive statistics (frequencies, means, and percentages).

Chi-Square tests of independence were employed to test the associations between categorical variables e.g. migration reason, origin (rural or urban) and employment status. The interpretation of effect sizes was based on phi ( $\pi$ ) and Cramer coefficient.

In order to determine predictors of post-migration income, Ordinary Least Squares (OLS) regression model was estimated. Explaining variables were age, education level, rural origin and the reason of primary migration. The model was checked in terms of the diagnostic checks of its validity and multicollinearity was measured with Variance Inflation Factors ( $VIF < 2$ ), and heteroscedasticity was measured with the Breusch-Pagan test ( $p > 0.05$ ). The level of statistical significance was determined as  $p < 0.05$ .

#### **IV. Results**

The final data set had 300 participants who were sampled to represent the tri- cities of Hyderabad, Kotri, and Jamshoro involving both new migrants and old dwellers. The descriptive statistics indicate significant differences in socio-economic aspects that can be used to contextualize the process of migration in the area.

The average age of the respondents was 31.47 years ( $SD = 7.86$ ), which is characterized by young and highly economically productive population. The age category was between 18-55 years with a majority between 25-35 years old which has been identified as the age bracket most related to high mobility and career-seeking intentions in migration literature. The gender distribution was

almost balanced whereby 51 percent was male and 49 percent was female which gave representativeness when examining gender-linked patterns of socio-economic patterns.

The education level was measured using a 0-3 scale (0 = none, 1 = primary/secondary, 2 = higher secondary, 3 = tertiary). The average grade in education obtained was 2.17 (SD = 0.88). This shows that majority of the respondents had attained secondary education with significant number (40percent) of them having attained tertiary education. This is an educationally upward-skewed distribution, which implies that migration within the tri-cities is closely related to human-capital mobility.

The income variables demonstrated significant increment following migration. The mean income of place of origin was PKR 19,250 (SD = 14,820) with minimum of 5,000 and maximum of 65,000. On the contrary, the present income increased by SKR 68,430 (SD = 28,450), with a minimum of PKR 25,000 and a maximum of PKR 150,000. This is a growth rate of about 255 percent which implies the existence of potent income-dependent pull forces that are linked to working in the urban tri-city area.

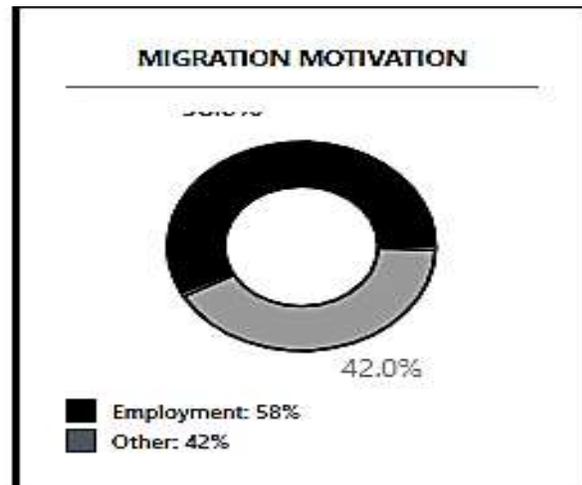
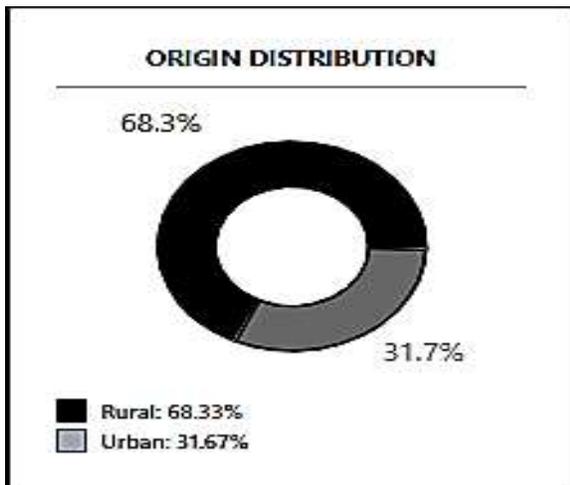
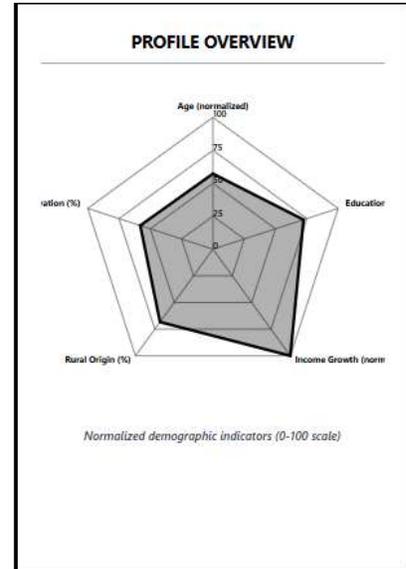
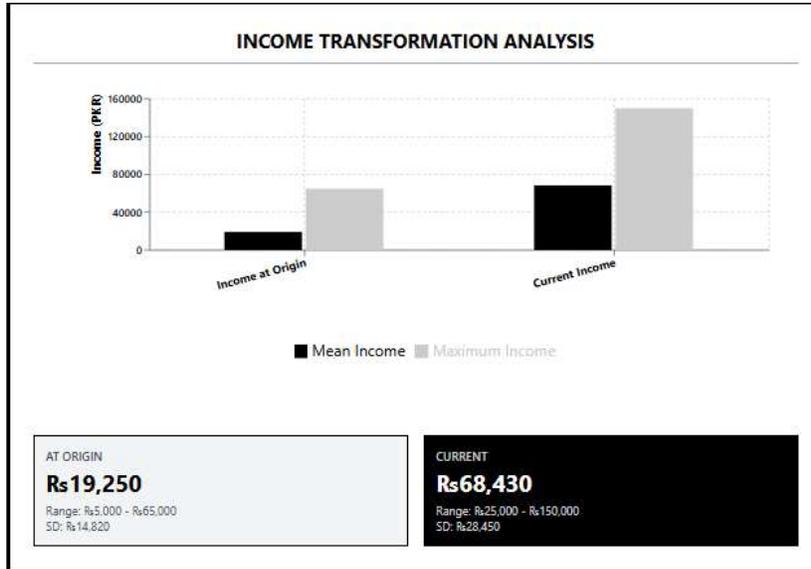
In terms of place of origin, 68.33 out of the total number of respondents had migrated out of rural areas, and 31.67 migrated out of the urban regions. The causes of migration were grouped into four-fold namely employment, education, family reasons, and other miscellaneous causes. Employment was also largely overwhelming with 58% taking a shot in job-related motives as the main reason. Among immigrant workers who migrated with the intention of getting employed, rural respondents were overrepresented especially.

Table 1 presents the descriptive statistics in APA format.

**Table 1**

**Descriptive Statistics for Key Variables (N = 300)**

<b>Variable</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
<b>Age (years)</b>	31.47	7.86	18	55
<b>Education (0–3 scale)</b>	2.17	0.88	0	3
<b>Income at Origin (PKR)</b>	19,250	14,820	5,000	65,000
<b>Current Income (PKR)</b>	68,430	28,450	25,000	150,000
<b>Rural Origin (%)</b>	68.33%	—	—	—
<b>Employment as Reason for Migration (%)</b>	58.00%	—	—	—



Spatial distribution studies found out that 42 percent migrants settled in Hyderabad, 30 percent in Kotri, and 28 percent in Jamshoro. The domination of Hyderabad is in line with it being a commercial and administrative center that presents diversified economic opportunities.

Out of the list of people who mentioned employment as the motivation behind their migration, 75% were rural based in nature, which implies that rural-urban labour migration continues to represent a characteristic demographic process in the area.

The chi-square tests were carried out to test the association between categorical variables that include the reason of migration, origin (rural vs. urban), age groups, and education categories. The findings revealed that there were several statistically significant associations.

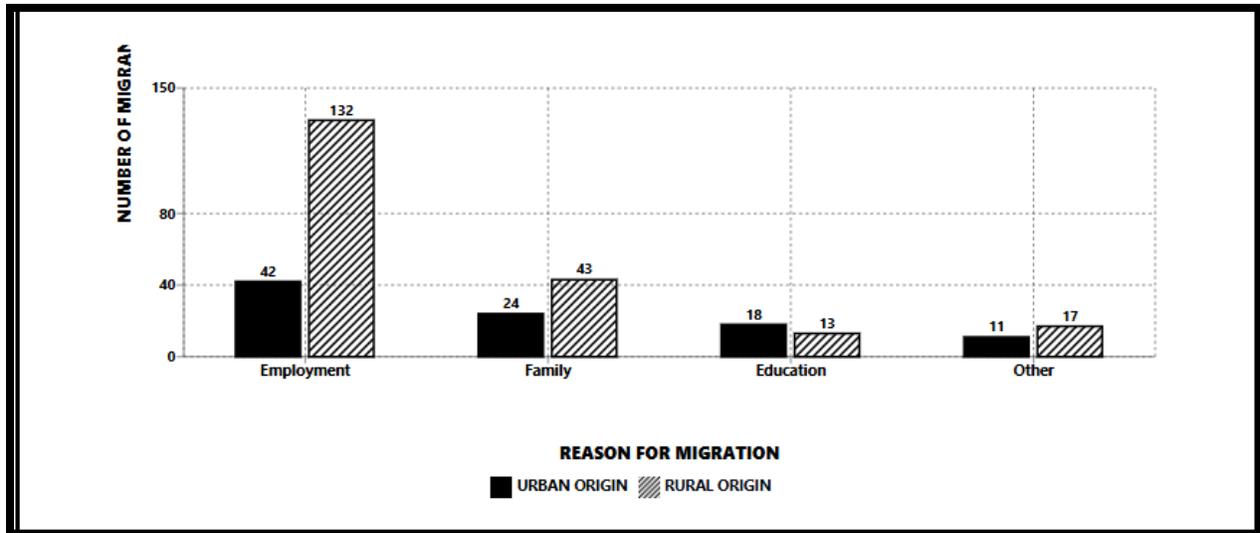
Chi-square test indicated that there was a significant relationship between reason of migration and rural origin,

$X^2(3) = 15.83$ ,  $p = 0.0012$ , which means that the causes of migration did not distribute equally between the rural and urban background. Small-to-medium effect is indicated by the phi coefficient ( $\phi = 0.23$ ).

Table 2 presents the contingency distribution.

**Table 2**  
**Crosstabulation of Migration Reason by Origin (N = 300)**

Reason for Migration	Urban (n)	Rural (n)	Total
Other	11	17	28
Family	24	43	67
Education	18	13	31
Employment	42	132	174
<b>Total</b>	<b>95</b>	<b>205</b>	<b>300</b>



This table reveals that 132 of the 174 migrants who had employment were rural and this is much higher than the expected frequencies ( $132/174 = 97.2$ ). This supports the fact that rural people are more economically limited and therefore more vulnerable to job opportunities in the cities.

The chi-square test between the migration motives and the age categories also gave a significant outcome,

$\chi^2(6) = 12.45$ ,  $p = 0.033$  which means that younger people are more likely to emigrate to seek jobs and education. The young migrants (18-30) were high in employment and education categories with old ones inclined to give reasons related to family.

The other important correlation was between the reasons of migration and the education levels,  $\chi^2(6) = 18.76$   $p = 0.005$  which shows that more educated people were more likely to migrate in pursuit of employment and education, and less educated people were more likely to migrate due to family related reasons.

These results all confirm that the migration in the tri-cities can be explained by a combination of demographic and socio-economic factors with employment being the most powerful incentive.

#### 4.4 Regression Analysis: Predictors of Current Income

In a bid to determine the determinants of current income, Ordinary Least Squares (OLS) regression model has been estimated with age, education, origin (rural vs. urban) and reason of migration as the predictors.

This model was statistically significant,  $F(4, 295) = 4.98$ ,  $p = 0.0007$ , with an  $R^2$  of 0.063.

Even though the explanatory power is low (6.3%), it is reasonable when it comes to socio-economic models that are related to human behaviour and migration.

The important significant predictors are:

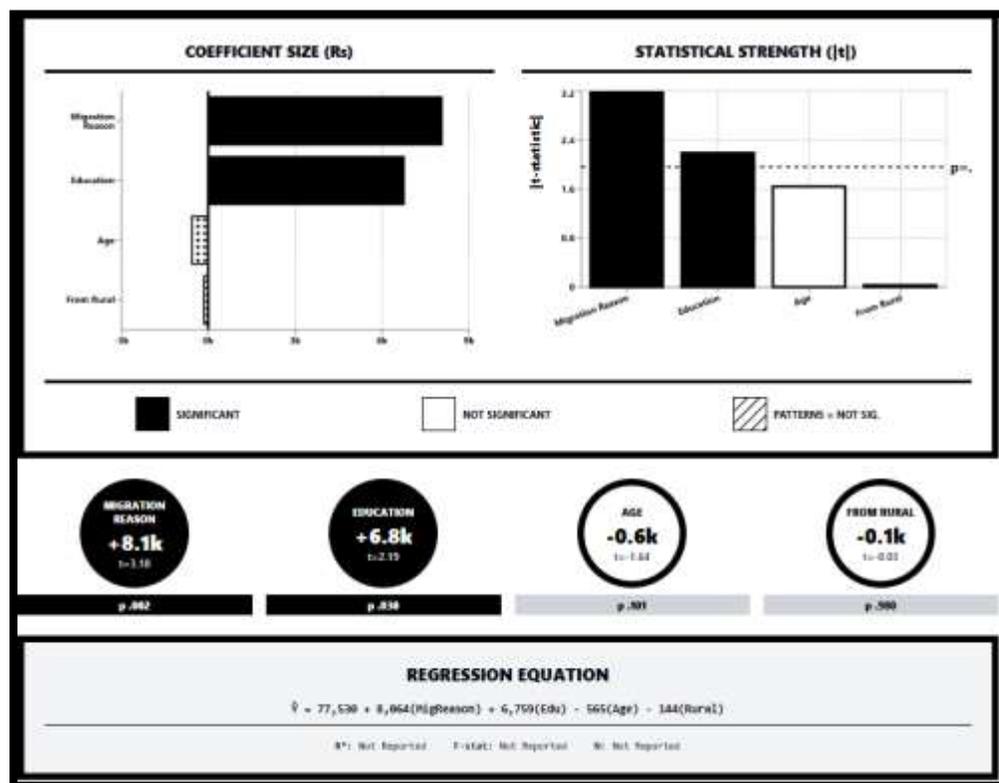
- Education ( $\beta = 6,758.67$ ,  $p = 0.030$ )
- Reason of migration (employment coding) ( $\beta = 8,064.08$ ,  $p = 0.002$ )

Not crucial were age and rural origin.

**Table 3**

**OLS Regression Predicting Current Income (N = 300)**

Predictor	B	SE	t	p
Constant	77,530	14,800	5.24	< .001
Age	-565	344	-1.64	.101
Education	6,759	3,092	2.19	.030
From Rural	-144	5,823	-0.03	.980
Migration Reason	8,064	2,537	3.18	.002



#### 4.5 Interpretation of the Regression Findings

The regression outcomes affirm that economic pull factors, especially those linked with skills (education) and motives (employment), exert substantial influence on income gains among migrants. The positive and significant coefficient for education indicates that each incremental increase in educational level corresponds to an approximate PKR 6,759 increase in income. This validates the classical human-capital theory, suggesting that more educated migrants can access higher-paying opportunities. Respondents who migrated for employment displayed an income boost of PKR 8,064 on average compared to those migrating for other reasons. This highlights the effectiveness of employment-motivated migration for economic uplift.

#### 4.5.3 Insignificance of Age and Origin

The age was negatively correlated with the coefficient, but it was not significant. This could mean that the age of the younger people is not the primary cause of their more likely earning but rather because of the fields they get into or their talents.

Origin (rural vs. urban) did not have a significant impact when education and motive were held constant indicating that the difference in the urban vs. rural incomes are marginalized when migrants become a part of urban labour markets.

There was no autocorrelation or multicollinearity in the model since model diagnostics (Durbin-Watson = 1.99; VIF max = 1.12) confirmed the reliability of the model.

The migration trends in the tri-cities indicate that the biggest segments of people seeking improved economic opportunities include rural residents who move into Hyderabad and Kotri and Jamshoro majorly because of employment opportunities. This transformation of the economic state of migrants is significant, as the growth in income after migration is 255 percent on average. This steep increase shows good urban pull forces and the high economic benefits that come with the migration to the tri-city area.

The findings also indicate that the largest population of economically driven migrants are young people and more educated. Their human-capital and demographic backgrounds enable them to approach urban labour markets better and can get jobs that match their skills. These observations are supported by statistical tests: chi-square tests established that there are significant relationships between the motives of migration and socio-demographic characteristics (origin, age, education) showing how these characteristics determine migration motives.

The discoveries in regression are an expansion of this realization as it shows that education and migration-related to employment motives are the most effective predictors of income gain. Those who migrated with the express purpose of employment and those migrants who had higher education always earned more in the urban economy. Interestingly, as the migrants became part of the labour market, the gap between urban and rural areas was reduced, implying that the economic landscape of an urban setting offers a playing field that is at par with the origin-based differentiation no longer matters. Collectively, these results can create a unified image of migration in the tri-cities: it is mostly motivated by economic ambitions and is supported by the human capital and compensated with substantial income changes and high socio-economic ascension.

#### V. Discussion

The results of this empirical study are very much in line with the classical and recent migration theory which upholds the fact that economic factors especially employment are at the frontline in driving population mobility in Sindh tri-cities. In line with the push-pull framework by Lee (1966), the employment factor becomes the most significant pull factor as stated by 58 percent of the respondents. This is very similar to the national evidence provided by the Pakistan Social and Living Standards Measurement (PSLM) 2017-18 survey that showed the same patterns of migration as employment-driven 62% (Pakistan Bureau of Statistics, 2019). The substantial chi-square correlation between rural background and employment motive ( $p=0.0012$ ) again confirms the previous provincial results performed by Raza and Khoso (2017) who pointed to the structural constraints of the rural workforce and their impact to force people to pursue the opportunities in urban areas.

The fact that the rural economy in Sindh was agrarian and that rural migrants (68.33) constituted most of the sample also supports the concept of agrarian distress. This aligns with the views of the Asian Development Bank (2021) that water scarcity, low irrigation, and declining agricultural returns have deepened the rural pangs, driving the mass rural-to-urban migration. The descriptive

statistics that the average post-migration income is increased by 255 percent also substantiate the relevance of the New Economics of Labor Migration (NELM) that considers migration as a household risk-diversification approach to ensure increased and more stable income (Stark and Bloom, 1985). Migrants and particularly the more educated ones seem to take advantage of the livelier urban labor markets and can realize their economic dreams that drive the mobility choices. The prediction ability of human capital is supported by the outcomes of regression. The predictors of uplift in income were also found to be education ( $p=0.030$ ), thus showing that more educated migrants are in a better position to compete and succeed in urban economies. To this end, Qureshi (2020) has made similar observations that learning increases the employability and wage mobility. Similarly, the fact that employment motive ( $\beta=8064$ ,  $p=0.002$ ) has a positive and significant influence on current income indicates that job-oriented migration is the key to economic progress. Interestingly age and rural origin did not show any significant effects and yet indicated that once the migrants are absorbed into the urban economic system, the socio-economic outcomes are more and more dependent on human capital and motive-specific determinants as opposed to the demographic or origin-based factors. This is contrary to previous regional results by Deshingkar and Akter (2009) who related youth with their increased propensity of mobility, and this means that the migration patterns in the tri-cities of Sindh might be growing and less tied to the age structure.

The interpretation of results is also enhanced by tri-city level variations. In the role of the main urban centre, Hyderabad is a home to a wide range of migrants of different levels of skills and different motives. Kotri, with its industrial nature, will have a propensity to absorb the semi-skilled and unskilled rural labour, Jamshoro due to its foundation by institutions of higher learning will attract a more educated workforce. These trends are like Ravenstein Laws of Migration (1885), especially the concept of hierarchical urbanization and gradual mobility, according to which migrants are allocated depending on the economic activity and the possibilities of destinations. Because of the economic incentives that drive migration, as well as the high volume of incomes that have been recorded by the migrants, the policy interventions must be geared towards balancing the good that comes with the mobility with the disadvantages of high urbanization. To start with, the structural pushes that encourage rural population migration can be alleviated through rural retention policies such as irrigation support, crop diversification programs, and specific agricultural subsidies, which is consistent with the suggestions provided by the Islamic Relief Worldwide (2021).

Second, local labour absorption programs through skill-development and job-matching, especially in the industrial belts of Kotri, may be more effective in increasing the efficiency of labour absorption, which will benefit 58-percent of migrants who come to find jobs. Third, the proliferation of informal settlements in Hyderabad needs to be prevented by increasing affordable housing quotas in the city using the principles of sustainable urban development displayed by UN-Habitat (2020). As a migration magnet based on education, Jamshoro would be well off the coordinated migrant integration programmes, including university-community linkage programs and orientations of new students. Lastly, there was the integrated transportation corridors, including Bus Rapid Transit (BRT) routes connecting the three cities, which might help to ease movement and decrease congestion as suggested by SDIPC (2022).

Although the findings are strong, it should be noted that there are several limitations. Self-report data is always prone to recollection bias that may overstate income estimates- by 10-15 percent (Creswell and Creswell, 2018). The cross-sectional design makes it difficult to make causal inferences, because the process of migration and economic adjustments take place across time.

The sample still has an urban-biased focus, which can be a limitation to be applied to remote rural regions. Moreover, all the qualitative insights are omitted, and the sections of migrant experiences, cultural adaptation, psychosocial stressors, etc. are not explored.

## VI. Conclusion

This paper offers an in-depth analysis of the migration patterns in the tri-cities of Sindh that indicates that rural causes such as economic distress and urban causes such as employment and education are still a dominant factor in understanding migration patterns. The prevailing role of rural migrants and the overwhelming pressure of economic reasons points to the relevance of push-pull and NELM theories over time. Strong statistical correlation and regression findings highlight the impact of the economic primacy of migration and how education motives and employment motives contribute to substantial income increases. These readings lead to strategic policy frameworks to focus on sustainable urban planning, rural revitalization, and integration of the migrants. Future research will need to take a longitudinal form to gauge different post-migration patterns over the years, including income stability, remittance patterns, skill transfer and social network development. This research would also contribute to the improvement of the Aspirations-Capabilities Framework (de Haas, 2021), giving a better understanding of the aspirations changing process and how structural constraints contribute to the results of migrants during various periods of time.

## References

1. Chen, Z., & Yeh, A. G. O. (2022). Delineating functional urban areas in Chinese mega city regions using fine-grained population data and cellphone location data: A case of Pearl River Delta. *Computers, Environment and Urban Systems*, 93, Article 101771. <https://doi.org/10.1016/j.compenvurbsys.2022.101771>
2. Ehrlich, D., Melchiorri, M., & Capitani, C. (2021). Population trends and urbanisation in mountain ranges of the world. *Land*, 10(3), Article 255. <https://doi.org/10.3390/land10030255>
3. European Commission–Eurostat and DG for Regional and Urban Policy–ILO, FAO, OECD, UN-Habitat and World Bank. (2020). A recommendation on the method to delineate cities, urban and rural areas for international statistical comparisons. United Nations Statistical Commission. <https://unstats.un.org/unsd/statcom/51st-session/documents/BGItem3j-Recommendation-E.pdf>
4. Government of Pakistan. (2020). Pakistan economic survey 2019–20. Ministry of Finance, Government of Pakistan.
5. Jiang, L., Jones, B., Balk, D., & O'Neill, B. C. (2022). The importance of reclassification to understanding urban growth: A demographic decomposition of the United States, 1990–2010. *Population, Space and Place*, 28(7), Article e2562. <https://doi.org/10.1002/psp.2562>
6. Liu, Y., Ul Din, S., & Jiang, Y. (2021). Urban growth sustainability of Islamabad, Pakistan, over the last 3 decades: A perspective based on object-based backdating change detection. *GeoJournal*, 86(5), 2035–2055. <https://doi.org/10.1007/s10708-020-10172-w>
7. Mairaj, A., Akram, N., & Imran, R. (2025). Infrastructure gaps in rapidly expanding urban areas: A case study of Taluka Khairpur. *Dialogue Social Science Review*, 3(1), 997–1016.

8. Mangi, M. Y., Yue, Z., Kalwar, S., & Ali Lashari, Z. (2020). Comparative analysis of urban development trends of Beijing and Karachi metropolitan areas. *Sustainability*, 12(2), Article 451. <https://doi.org/10.3390/su12020451>
9. Memon, S. R., Javed, F., & Mateen, S. (2024). Development of slums in Qasimabad, Sindh. *Journal of Art, Architecture and Built Environment*, 7(2), 41–62. <https://doi.org/10.32350/jaabe.72.03>
10. Mendiratta, S., & Sidana, N. (2025). Rural–urban migration in Southern Asia and urban employment solutions. *International Research Journal of Humanities and Interdisciplinary Studies*, 6(5), 17–34. <https://doi.org/10.53522/IRJHIS2505002>
11. PIDE. (2021). Cities of the future (Webinar Brief 17:2021). Pakistan Institute of Development Economics. <https://www.pide.org.pk/pdf/brief/Cities-of-the-Future-Webinar-Brief-17-2021.pdf>
12. Stanny, M., Komorowski, L., & Rosner, A. (2021). The socio-economic heterogeneity of rural areas: Towards a rural typology of Poland. *Energies*, 14(16), Article 5030. <https://doi.org/10.3390/en14165030>
13. Vanhatalo, J., & Partanen, J. (2022). Exploring the spectrum of urban area key figures using data from Finland and proposing guidelines for delineation of urban areas. *Land Use Policy*, 112, Article 105822. <https://doi.org/10.1016/j.landusepol.2021.105822>
14. Vighio, K., Khoso, A. R., & Wang, S. (2024). Rural migration to urban areas and its impacts on population: A sociological investigation in Hyderabad, Sindh, Pakistan. *Zakariya Journal of Education, Humanities & Social Sciences*, 2(2), 46–56.
15. Vighio, K., Khoso, A. R., & Wang, S. (2024). Rural migration to urban areas and its impacts on population: A sociological investigation in Hyderabad, Sindh, Pakistan. *Zakariya Journal of Education, Humanities & Social Sciences*, 2(2), 46–56.
16. Vinke, K. (2020). *Unsettling settlements—Cities, migrants, climate change: Rural-urban climate migration as effective adaptation?* LIT Verlag Münster.
17. Waseem, H. B., & Talpur, M. A. H. (2021). Impact assessment of urban pull-factors on uncontrolled urbanization: Evidence from Pakistan. *Sukkur IBA Journal of Computing and Mathematical Sciences*, 5(1), 31–44. <https://doi.org/10.30537/sjcms.v5i1.734>
18. Waseem, H. B., & Talpur, M. A. H. (2021). Impact assessment of urban pull-factors on uncontrolled urbanization: Evidence from Pakistan. *Sukkur IBA Journal of Computing and Mathematical Sciences*, 5(1), 31–44. <https://doi.org/10.30537/sjcms.v5i1.734>
19. Wiley, L. F. (2022). Climate change adaptation and public health law. In J. Verschuuren (Ed.), *Research handbook on climate change adaptation law* (2nd ed., pp. 158–197). Edward Elgar Publishing.
20. World Health Organization. (2023). *Operational framework for building climate resilient and low carbon health systems*. World Health Organization.
21. Wynn, P. C., Warriach, H. M., Iqbal, H., & McGill, D. M. (2021). The future of smallholder farming in developing countries in the face of climate change: A perspective with a focus on Pakistan. *Animal Production Science*, 61(10), 925–933. <https://doi.org/10.1071/AN20400>
22. Zoraghein, H., Khalil, M., & Sadiq, M. (2021). Evaluation of urbanization status in Pakistan using emerging remote sensing products [Working paper]. Population Council.