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# Statistical analysis of international labour migration strategy from India to the Gulf countries



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ARTICLEINFO	A B S T R A C T		
Keywords: Migration cost Gulf migration Fund raising India Visa sources Migrant worker	This study investigates the economic implications of migration, specifically focusing on the monetary expenses incurred during the migration process and the fundraising methods employed by the Gulf migrant workers from Bihar. The research involved a sample of 400 participants obtained using a three-stage cluster sampling method. The participants were Gulf migrant labourers originating from the Siwan and Gopalganj districts of Bihar. The findings of the chi-square test indicate that both technical education and prior job experience have a significant impact on reducing migration expenses. However, it is worth noting that the process of getting visas through agents is costly, even though the majority of migrant workers rely on the services of agents. The average overall expense for Gulf migration exceeds three times the earnings acquired in the destination country. The regression analysis revealed that several factors, such as the age of migrant workers, technical education, source of visa, level of education, and prior job experience, had a statistically significant influence on the cost of migration. For the fund-raising strategy, migrant labourers rely largely on their parents and social networks. The practice of obtaining funds from moneylenders is still prevalent among migrants. The study sheds light on the key de- terminants of migration. Additionally, this study offers policy recommendations aimed at reducing the financial burden associated with migration and it proposes that the government should engage in partnerships with financial institutions to establish dedicated lending initiatives for migrant workers, referred to as migration loans.		

#### 1. Introduction

Migration across borders is a challenging problem with many effects. It can help both the receiving and the sending countries' economies, and it can also help people from different cultures learn to understand and accept each other. The Indian diaspora is vast and leading globally, with millions of people (around 18 million) making valuable contributions to their host countries while maintaining strong ties to their countries of origin (Rajan, 2023; McAuliffe & Triandafyllidou, 2022). The oil boom of the 1970s led to an increase in demand for labour resulted migration from India to the Gulf countries. The oil-rich Gulf countries needed a large number of workers to build and maintain their infrastructure, and India was a major source of labour supply (Khadria, 2006). The Migrant labourers from the southern Indian states of Kerala and Tamil Nadu began travelling to the Gulf countries initially. Subsequently, the burden of migration has also been borne by the northern Indian states of Uttar

Pradesh and Bihar (Azeez and Begum, 2009; Taukeer, 2020). Migration from the northern Indian state of Bihar to the Gulf countries has emerged as a prominent and transformative phenomenon over the past few decades. Bihar, a region steeped in history and culture, has witnessed a significant exodus of its workforce to the Gulf Cooperation Council (GCC) countries, including Saudi Arabia, the United Arab Emirates, Qatar, Kuwait, Oman, and Bahrain (Khan, 2021; Chanda and Gupta, 2018). This migration, driven primarily by economic aspirations and employment opportunities, has had profound socio-economic, familial, and cultural implications for both Bihar and the Gulf states. The motivations behind this mass movement are diverse, ranging from the search for higher-paying jobs to the desire to escape economic disparities and unemployment prevalent in Bihar (Khan et al., 2023; Mandal et al., 2018). As a result, Bihar has become one of India's leading sources of international migrant labour, particularly in the construction, manufacturing, and service sectors of the Gulf economies. This

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phenomenon of Bihar-Gulf migration reflects not only the individual dreams of economic betterment but also the broader dynamics of global labour markets and the strategies employed by both sending and receiving nations to meet their economic needs (Srivastava, 2020). Migration not only entails the aspiration to attain economic prosperity, but it also imposes a financial burden on migrants and their families, necessitating substantial savings or loans to fulfil the associated expenses (Prakash, 1998). The global dissemination of the COVID-19 pandemic has resulted in a notable decline in labour mobility, hence generating significant financial losses and mental health challenges for migrant workers (Khan et al., 2021; Khan et al., 2023). This study examines three crucial research questions. (1) What are the demographic characteristics of migrant labourers from Bihar to Gulf countries? (2) What is the impact of migrant workers' age, visa acquisition methods, technical education, presence of relatives, educational attainment, and prior work experience from Bihar on the costs associated with their migration to Gulf countries?" and (3) What are the most common sources of fundraising utilized by migrant labourers from Bihar to finance their migration to Gulf countries? The remaining sections of this paper will follow this structure: Section 2 will describe the research methodology, Section 3 will provide a detailed interpretation of the findings obtained from the sample data, Section 4 will present conclusions and policy suggestions, and Section 5 will discuss the limitations and recommendations for future research.

#### 2. Material and method

#### 2.1. Review of literature

The migration theories emphasize the significance of conducting a comprehensive cost-benefit analysis that takes both monetary and nonmonetary factors into consideration. In addition to short-term economic gains, migration is motivated by the accumulation of human capital through the acquisition of skills and experience in new environments (Sjaastad, 1962). Migrant networks establish links between prospective migrants residing in their home communities and individuals residing in host countries, which plays a crucial role in reducing the financial and logistical burdens associated with international migration (Massey and España, 1987). The decision to migrate is complex and would be seen as the outcome of a balancing of the benefits of migration against the costs of migration (Bogue, 1977). The inclination to engage in migration is also influenced by various factors that indicate the costs associated with migration, such as the level of education attained by the father and the presence of extended family members in the destination area (Mills and Hazarika, 2001). Workers will relocate to different locations solely if they anticipate receiving greater salaries, as well as considering disparities in amenities. Research confirms that the elimination of all barriers leads to an improvement in labour productivity (Bryan and Morten, 2019). In order to incentivize individuals to migrate from their home nation, a substantial salary disparity would be required to offset the associated expenditures and encourage relocation (Hodge, 1985). Migration entails not only financial strain but also psychological distress, particularly in the case of undocumented migration (Campbell-Staton et al., 2021). Due to the significant expense of moving to the city, a recent empirical study found that rural workers would rather stay in the village and earn a considerably lower income (Imbert and Papp, 2020). A study examining labour mobility confirms that the average expense associated with migrating falls within a range of 0.8-1.2 times the mean income earned by migrant workers (Morten and Oliveira, 2016). Another significant study, utilizing the KNOMAD data set, examines the returnee migrants from Saudi Arabia. The findings indicate that the average migration cost for these migrants in India was equivalent to at least nine months' worth of typical earnings, whereas in Saudi Arabia it was equivalent to 4.5 months' worth of earnings. The analysis additionally confirms that the majority of the variation in overall cost may be attributed to significant variability in recruitment cost. The only

expenditure on recruitment constituted almost 75 % of the overall expenditure (Sasikumar, 2019).

#### 2.2. Research gap

The previous research has focused on examining the causes of migration, specifically in terms of push and pull forces, as well as the effects of migration on both families and society. There is a dearth of research on the monetary expenditures and fund-raising strategies associated with migration. The scope of the proposed study is to investigate the financial expenditures related to migration and the tactics employed for fundraising.

#### 2.3. Objective

- 1. To explore the demographic profile of the sample migrant labourers from Bihar to Gulf countries.
- 2. To analyze the demographic determinants of the cost of migration from Bihar to Gulf countries.
- 3. To investigate the various sources of fundraising employed by migrant labourers in Gulf migration

#### 2.4. Hypothesis

1. "Age, visa sources, technical education, presence of friends and relatives, level of education and prior work experience of the migrant labourers are not significant determinants of the cost of migration".

#### 3. Research methodology

The present study utilized quantitative methodology and crosssectional research design in order to collect data from a diverse group of individuals. Cross-sectional research facilitates the analysis of relationships and attributes within a specific point in time (Levin, 2006). The data for this study were obtained through a structured questionnaire that encompassed demographic information and information about the expenses associated with Gulf migration. The research method adhered to ethical principles, which encompassed safeguarding participant privacy, maintaining confidentiality, and obtaining informed consent. The study comprised a sample of 400 individuals who were Gulf migrant labourers hailing from the Siwan and Gopalganj districts of Bihar. The data collection process employed a three-stage cluster sampling technique (Cochran, 1977). In the initial phase, the district with the biggest influx of migrants has been chosen (Siwan and Gopalganj). In the second stage, a random selection process was employed to choose two blocks from each region and two villages from each block. Moreover, during the third stage, a total of 25 migrant households were randomly picked from each village (16 villages). By adopting a clustered sampling methodology that divides the population into smaller subsets, threestage cluster sampling expedites data collection and enables researchers to construct a representative sample without requiring them to survey the entire population. The primary data collection period spanned from May to September 2022. The participants were requested to furnish the aggregate amount of money spent on travel-related expenses, visa charges, documentation charges, and agent fees. The study's sample encompassed respondents of diverse gender, age, educational attainment, and religious backgrounds. The data that was gathered underwent various analytical procedures. Descriptive statistics were employed to summarize demographic data, including gender, age, education, and religion, with the "Statistical Package for Social Science" version 26 (IBM, 2019). A multivariate ordinal logistic regression analysis was performed to examine the determinants of the cost of migration. The dependent variable (Yi) was the cost of migration, while independent variables included age, visa sources, technical education, presence of relatives, education and prior work experience.

$$Yi = \beta 0 + \beta 1age + \beta 2visasource + \beta 3technical education + \beta 3presence of relatives + \beta 4education + \beta 5prior work experience + e_i$$
(1)

#### 4. Result and discussion

#### 4.1. Demographic profile of the respondent migrant labourers

Demographic information is a powerful tool that can be used to gain a deeper understanding of the targeted population. It can be used to compare different groups of people, different age groups, occupations and income levels. Table 1 illustrates the demographic information of the sample migrant labourers. The data shows the distribution of religion, age, income, occupation, and educational background of the migrant labourers. The data reveals that the majority of persons in the sample (90 %) adhere to the Muslim faith, However, it is worth highlighting that the home state of the migrant labourers is primarily populated by individuals practicing the Hindu religion (Alam, 2012). Approximately 64 % of sample migrant labourers in Gulf countries were employed as blue-collar workers, such as labourers, electricians, plumbers, carpenters, welders, mechanics, construction workers, factory workers, and drivers and 29 % were engaged in white-collar occupations, while the remaining 6 % were self-employed, operating their businesses within the Gulf region. Blue-collar workers primarily engage in hands-on activities or physical labour, while white-collar workers typically handle administrative, professional, or managerial tasks (Toppinen-Tanner et al., 2002). The sample consists of 75 individuals, representing 18 % of the total, who are below the age of 30. Additionally, there are 191 persons, accounting for 47 %, who fall within the age range of 30-40. The age group between 40 and 50 consists of 100 individuals, accounting for 25 % of the overall sample. Additionally, 8 % of the sample data corresponds to persons above the age of 50. The majority of the sample population (66 %) falls in the younger age group

#### Table 1

Variable	Levels	Data in Numbers	Percentage
Religion	Hindu	39	9.8 %
	Muslim	361	90.2 %
Age	Below 30	75	18.8 %
0	30–40	191	47.7 %
	40–50	100	25.0 %
	Above 50	34	8.5 %
Occupation	Blue-collar	259	64.75 %
	White-collar	116	29.00 %
	Businessman	25	6.25 %
Income (In INR)	Below 30,000	43	10.75 %
	30,000-40,000	116	29.00 %
	40,000-50,000	113	28.25 %
	Above 50,000	128	32.00 %
Education	No Formal Education	90	22.5 %
	High School	118	29.5 %
	Intermediate	60	15.0 %
	Bachelor's Degree	94	23.5 %
	Master's Degree	38	9.5 %
	0.0		

Source: Calculated by Author's.

#### Table 2

Sources of Visa and Cost of Migration.

of below 40 years. The educational background helps us to understand the composition of the sample in terms of the level of education attained. The data on the income distribution of sample migrant labourers that the majority of migrant labourers (67.25 %) earn less than 50,000 rupees per month. Only 32 % of migrant labourers earn more than 50,000 rupees per month in the Gulf countries. This information is crucial for creating a comprehensive profile of the participants and ensuring that the sample is representative of the larger population being studied. There are 90 participants within the sample who lack formal education, constituting 22 % of the overall population. Conversely, 29 % of the sample possess a 10th-grade education. A total of 60 individuals, accounting for 15 % of the overall population, have completed their 12thgrade education. Additionally, it is observed that 23 % of the population are graduates. A mere 9 % of the migrant labourers in the sample possess a master's degree level of education.

#### 4.2. Sources of visa and cost of migration

Migrant labourers often obtain visas via diverse channels to engage in employment opportunities within Gulf countries. The sorts of visas acquired by individuals can exhibit variability contingent upon factors such as the nature of their employment, period of stay, and specific agreements in place. The predominant sources utilized are agents or agencies, Family, friends or relatives, and government agencies. Table 2 illustrates the responses of the sample migrant labourers revealing the various sources through which they obtained their visas. A significant portion of migrant labourers, comprising 76 % of the respondents, obtained their visas through agents or private agencies. These agents or agencies might act as intermediaries between the workers and the employers. Family members, friends and relatives already working in Gulf countries are another important source for the migrant labourers to obtain the visas which account for approximately 21 % of the total sample migrants. A smaller percentage of respondents, approximately 2 %, indicated that they obtained their visas through a government agency. The researcher has also asked the respondents about the total money expenditure on Gulf migration. The response from migrant labourers is shown in Table 2 which sheds light on the range of money expenditure in Indian Rupees for Gulf migration. A significant proportion of sample migrant labourers, constituting 46 % of the respondents. reported spending below 60,000 INR for their migration to the Gulf countries, however, a notable number of respondents, accounting for 36 %, mentioned spending between 60,000 and 80,000 INR. A relatively smaller but significant percentage of respondents, approximately 17 %, stated that they spent above 80,000 INR for their migration to the Gulf. The distribution across these expenditure categories suggests that there is diversity in the financial commitments made by migrant labourers for their migration endeavours (Agbor, 2021).

## 4.3. Bivariate analysis of cost of migration with prior work experience, sources of visa obtained and type of education of the migrant labourers

Labour Migration from one country to another countries often comes with a range of costs that individuals and families need to consider. These costs, collectively known as the "cost of migration," encompass

Variable	Levels	Data in Numbers	Percentage
Source of Visa	Agent/Private Agency	306	76.5 %
	Family, Friends & Relatives	85	21.2 %
	Government Agency	9	2.2 %
Cost of Migration (in INR)	Below 60,000	186	46.5 %
	60,000 - 80,000	146	36.5 %
	Above 80,000	68	17.0 %

Source: Calculated by Author's.

#### Table 3

Chi-Square Test Result.

Variable	Levels	Cost of Migration (in INR)			
		Below 60,000	60,000–80,000	Above 80,000	
Experience	No Experience	5.3 %	46.7 %	48.0 %	
	Below 3	41.0 %	52.0 %	7.0 %	
	3 – 6	30.0 %	43.0 %	27.0 %	
	Above 6	37.5 %	37.5 %	25.0 %	
Chi-Square Value = 19.2096, P	P-Value = 0.004				
Source of Visa	Agents	8.2 %	39.2 %	52.6 %	
	Others	18.0 %	43.6 %	38.4 %	
Chi-Square Value = 16.1673, P	P-Value = 0.013				
Technical Education	No	17.3 %	40.2 %	42.5 %	
	Yes	41.0 %	52.0 %	7.0 %	
Chi-Square Value = 12.408, P-	Value = 0.015				

Source: Calculated by Authors.

various financial, social, and emotional expenditures associated with the process of moving from one place to another. The cost of migration can vary widely based on factors such as the destination country, mode of transportation, legal requirements, and personal circumstances. The researcher has tried to explore the monetary cost of migration of labour from India to the Gulf countries, aiming to establish an association between the cost of migration and prior work experiences of migrant labourers, the type of education migrant labourers possess and the various sources they received their visas. The chi-square test is used to test the null hypothesis that "there is no significant difference in the cost of migration with prior work experience of the migrant labourers". Table 3 illustrates the result of the Chi-square test. The null is rejected as the Chi-square value is estimated as 19.2096 and significant at a 5 % level of significance. It means that the higher the prior work experience with migrant labourers lower the cost of migration. It is because, with prior work experience, migrant labourers are likely to have acquired a specialized skill set and valuable job-related knowledge. Employers' investment in training curricula might be minimized due to the preexisting possession of requisite skills by individuals. This reduces the initial financial obligation for both the company and the migrant labourers. The researcher has also tried to find out the association between the cost of migration and various sources from which migrant labourers received their visas. The study confirms that the majority of the migrant labourers obtained their visas with the help agent or private agency. Based on this finding the researcher has formulated another null hypothesis that "there is no significant difference in the cost of migration with various sources that migrant labourers received their visas". The chi-square test result rejects the null hypothesis as the Chi-square value is 16.1673 and significant at a 5 % level of significance. It means that the

#### Table 4

#### Regression Result.

cost of labour migration is higher for those who obtained their visas through an agent. This is because recruitment agencies and agents frequently charge fees for their services, which can include visa processing, job placement, and documentation assistance. These fees can substantially increase the total cost of migration for an individual. The educational background of the migrant labourers may also affect the cost of migration. The researcher has classified the education of the labourer as technical education and non-technical education. Based on this classification, the researcher has formulated the null hypothesis that "there is no significant difference in the cost of migration with different types of education. The result of the Chi-square test rejects the null hypothesis as the Chi-square value is 12.408 and significant at a 5 % level of significance. It means that the cost of migration is less for the migrant labourer with technical education. This is because migrant labour possessing technical education frequently exhibits reduced training or onboarding needs when entering their new employment positions. The reduction in expenses for businesses associated with this phenomenon has the potential to facilitate expedited integration of individuals into the labour market.

# 4.4. Determinants of cost of migration: A multivariate ordinal logistic regression analysis

An ordinal, logistic regression was conducted to examine the association between the dependent variable (Cost of Migration) and independent variables (age, technical education, level of education, presence of relatives and friends and prior work experience). The null hypothesis is "there is no association between cost of migration and age, level of education, technical education, presence of relatives and friends and

	Estimate	Odds Ratio	Std. error	Sig.	95 % Confidence Interval	
					Lower	Upper
Age*	-0.065	0.937	0.014	0.000	-0.092	-0.038
Visa Source*	-0.953	0.385	0.246	0.000	-1.436	-0.471
Technical Education*	-0.647	0.523	0.245	0.009	-1.126	-0.167
Presence of Relatives**	0.393	1.481	0.205	0.043	-0.008	0.794
Education						
No Formal education	0.159	1.172	0.617	0.797	-1.050	1.367
School Education ***	-0.907	0.403	0.468	0.053	-1.199	0.502
Graduation	-0.348	0.706	0.434	0.423	-1.132	0.621
Post-Graduation	-0.256	0.774	0.447	0.568	-1.129	0.494
Prior Work experience						
Below 3 years	-0.445	0.640	0.460	0.33	-1.346	0.456
3–6 years***	-0.881	0.414	0.465	0.058	-1.792	0.030
Above 6 Years	-0.312	0.731	0.473	0.510	-1.239	0.616

Source: Calculated by Author's.

Cox and Snell = 0.151, Nagelkerke = 0.178, McFadden = 0.086, Chi-Square = 65.610, P = 0.000.

\* = Significant at 1 %, \*\* = Significant at 5 %, \*\*\* = Significant at 10 %.

prior work experience of the migrant labourers ". The regression result is shown in Table 4; the pseudo-R-square value is = 0.178 (Nagelkerke), and McFadden. = 0.086, which measures that 8.6 % change in the dependent variable accounted by the independent variable in the model. The Chi-square test (65.610) is significant at a 1 % level of significance which indicates the estimated model adequately fits the data and these predictors had a significant impact on the cost of migration. The regression result showed that the age of the migrant labourers has a statistically significant and negative impact on the cost of migration ( $\hat{\beta}_1$ = -0.065, P = 0.000). This is because younger migrants are frequently more prepared to accept the risks and challenges of migration despite having fewer financial resources to cover the costs of migration. Similarly, a visa obtained through an agent has also a significant and negative impact on the cost of migration ( $\hat{\beta}_2 = -0.953$ , P = 0.000). Those who obtained the visa through an agent will have to bear the high cost of migration. It is because migration agents charge fees for their assistance with visa applications, documentation, and navigating the migration process. Migrant labourers with technical education are another significant predictor ( $\hat{\beta}_3 = -0.647$ , P = 0.009) in the model. The migrant labourers without a technical education will have to bear the higher cost of migration. This is primarily due to the willingness of some employers in destination countries to sponsor migrants with technical education. The presence of relatives or friends of migrant labourers is also an important significant predictor ( $\hat{\beta}_4 = 0.393$ , P = 0.043) of the cost of migration. The presence of relatives or friends will lower the cost of migration. The network effect can provide information, assistance, and guidance on how to navigate the migration process, thereby decreasing the perceived costs and risks. The educational attainment of the migrant labourers is a statistically insignificant predictor in the model however school level of education is significant. Similarly, prior work experience has an insignificant and negative impact on the cost of migration, however, those who have 3-6 years of work experience have a significant impact on the cost of migration. This is because migrants with prior work experience are more likely to find employment in their destination countries that match their skills and qualifications and are also able to access networks of other migrants with similar skills (Mintchev et al., 2017). Human capital theory suggests that investments in human capital, such as expenditure on education and training, can lead to increased productivity and efficiency (Nafukho et al., 2004). The findings of this study suggest that technical education and prior job experience can reduce the cost of migration, which could lead to increased human capital in Gulf countries.

#### 4.5. Sources of fund raising

Migration from India to Gulf countries is expensive, and employees and their families frequently rely on a variety of funding sources. Loans from banks (Personal loans or loans against gold) or other financial institutions are common sources of capital; these loans may require collateral or a guarantor. At present there is no migration finance by financial institutions and hence they take either gold loans or personal loans to finance their migration. Friends and family are also provided financial assistance through loans or by pooling their resources. For some migrants, the sale of assets such as land or jewellery can also be a source of funds. In addition, some workers may save for years to finance their migration, while others may work multiple jobs or undertake additional work to save enough money to cover the migration costs. As a method for migrant labourers to raise funds for their migration, online crowdfunding platforms are gaining popularity in some parts of the country (Bai et al., 2023). Overall, raising funds for the migration of Indians to the Gulf requires meticulous planning and consideration of a variety of financial options and sources of support. Because it is also possible that migrant labourers had used more than one source to raise the funds, The researcher asked the respondents open-ended questions about the various sources of fundraising they had used at the time of

Source of Raising Funds	Responses
Parent's Savings	40.6 %
Borrowing from Friends or Relatives	31.5 %
Own Savings	18.7 %
Sale or Mortgage of Property	4.2 %
Borrowing from Moneylenders	2.6 %
Borrowing from Banks	2.0 %
Employers Help to Cover the Cost	0.4 %

Source: Calculated by Authors.

migration. Table 5 displays the results of the analysis performed on the sample data. The results of the multiple responses show that the majority of migrant labourers (around 40 %) rely on their parents' savings to cover the cost of migration, but friends and relatives also play a significant role in financing migration. More than 30 % of those who responded to the survey said they had borrowed money from friends or family to fund their migration. According to the study, approximately 40 % of migrant labourers were not working before migration; thus, approximately 18 % of migrant labourers used their savings to cover the cost of migration; however, approximately 4 % of respondents either sold or mortgaged their assets to cover the cost of migration. Based on the study, borrowing from moneylenders is higher (2.6 %) than borrowing from commercial banks (2 %). Employers contribute to the cost of relocating migrant labourers in less than 1 % of cases.

#### 5. Conclusions and policy implications

The demographic profile of migrant labourers includes their age, religion, occupation and educational background. Migration from Bihar is more prominent among men in the young age group, and most of them follow the faith of Islam. The study confirms that 64 % of sample migrant labourers in Gulf countries were blue-collar workers, 29 % were whitecollar workers, and 6 % were self-employed working for their own businesses. The sample migrant labourers' income distribution shows that 67.25 % earn less than 50,000 rupees per month. Only 32 % of Gulf migrant workers earn over 50,000 rupees per month. The general level of education is low in the state of Bihar as well as in both the districts selected for the study, around 22 % of the sample migrant labourers have no formal education and 45 % have only school-level education. Out of the total number of migrant labourers, only one-third of them hold technical education. The expenses associated with migration, such as recruitment fees, travel costs, and other related expenditures, can pose a significant financial burden for low-income families. The average overall expense for Gulf migration exceeds three times the earnings acquired in the destination country. The chi-square test result confirms that technical education and previous work experiences have a notable impact on reducing migration expenses whereas, Obtaining visas through agents incurs a substantial financial burden for migrant labourers, notwithstanding the fact that the majority of migrant labourers rely solely on agents for visa procurement. The regression result showed that the age of the migrant labourers, technical education, visa sources, level of education and prior work experience have a statistically significant impact on the cost of migration. In general, the research indicates that migrant labourers heavily depend on the financial resources of their parents and the assistance of their social network to fund their migration. The practice of obtaining funds from moneylenders is still prevalent among migrants and the cost of borrowing from moneylenders is higher than borrowing from the bank, while the provision of financial assistance by employers for relocation expenses is infrequent.

The study confirms that the cost of migration from Bihar to Gulf countries through a private agency or agent is greater than other visa sources. Therefore, urgent regulation of recruitment agencies is required. The study recommends that there should be strict licensing and monitoring procedures for recruitment agencies, ensuring that they adhere to ethical standards and labour laws. The study also confirms that borrowings from moneylenders are greater than bank borrowings. Therefore, there is a need to provide access to microfinance or other forms of credit which can help migrants cover the costs of migration, such as recruitment fees, visa fees, and travel expenses. The study also highlights the importance of policymakers investing in technical education programs to reduce the financial barriers associated with migrating from semi-skilled to skilled positions. This could incentivise labour movement at a lower cost. Furthermore, governments should streamline visa acquisition processes to make it easier and more affordable for skilled workers to migrate. To cover the cost of migration, governments should collaborate with financial institutions to establish specialized loan schemes for migrant labourers in the name of migration loans. To facilitate the unique financial circumstances of migrants, these schemes must provide loans at affordable or concessional interest rates, flexible repayment options, and reasonable loan terms.

#### 6. Limitations and recommendations for future research

The current study has some important limitations which list out recommendations for further analysis. The study does not explore potential gender disparities in migration experiences and fundraising strategies. The study may be limited by its snapshot approach, capturing migration and fundraising strategies at a specific point in time. Longitudinal studies tracking migrant labourers over extended periods could offer insights into how these behaviours evolve over time and in response to changing economic and social conditions. The study does not incorporate an examination of the social and psychological implications of migration, which is recommended for further analysis. Furthermore, the statistical analysis employed in this study is limited to a small number of variables and tests.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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