

## **Exodus from Rural Punjab: Analysing its Drivers**

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### **Abstract**

*Migration of the most productive population with greater outflow of money will made a serious dent on the whole socio-economic fabric of Punjab. The present study focussed on the drivers of migration. A sample of 1300 households was selected from all the districts of Punjab. Logistic regression was used for the identification of different factors responsible for migration. Migrant households were headed more by females (8.56%) compared to non-migrant households (5.61%). The education level of households head of migrants (20.78%) senior secondary level & above was higher than non-migrant households (15.46%). Age, caste, gender of household head, farm category and income were parameters identified for overseas migration. Low income, less employment opportunities, and corruption normlessness, prevalence of drugs, and social insecurity were the main factors perceived by the migrant families. Unemployment, systemic disorganization and fear of drug traps were compelling rural households to send the young susceptibles to foreign shores. Hence, it is high time to correct the social order before it is too late.*

**Keywords:** Migration, Factors, Rural households, Punjab

**JEL Classification:** F22, F24, J61

### **Introduction**

Migration is an equilibrium process that reduces disparities at different stages of development and a process that is as old as human civilization. Overseas migration happens when citizens of a country migrate to other countries, voluntarily or involuntarily, and settle there permanently or for some time for different reasons. Involuntary migration includes refugee flows, asylum seekers, internal displacement, and development-induced displacement, which is an intimidating movement of people away from their homes or place of origin. Voluntary migrants are those people who shift their places within or outside their country of origin at their judgment, mostly a rational economic decision. The migrants decide to improve their economic conditions by seeking more favorable employment conditions, even if the decision is being taken under distress.

Migration has been a common phenomenon in many economies in the past, but the recent massive movement of people from their native countries has assumed a new dimension. The number of international migrants doubled

between 1980 and 2010 from 103 million to 214 million and further to approximately 258 million in 2017, about 3.4% of the world's population according to the United Nations (UNDESA, 2017). In response to improvements in markets, communication, and transport, migration is of great importance in constructing livelihood strategies for the people and economy of the country. While the outflow of workers is recorded in both the developing and developed countries, the magnitude from developing is quite substantial, whose populace leave for work in first world countries.

Punjab, India's leading agricultural state, is also home to a vast share of Indians living abroad. Punjab ranks second in terms of sending international migrants after Kerala (Nanda, 2019). Emigration from Punjab has been consistently growing over the last many decades. Almost 11 per cent households of the state had one member emigrated to abroad (Nanda and Veron 2015). As per the Annual Report (2018-19) of the Ministry of External Affairs, Punjab had six per cent emigrants in 2018. Punjab emerged as a testimony to the culture of migration as the proportion of households sent to international migrants improved from three per cent in 1992-93 to about 11 per cent in 2015-16. Understanding immigrants presupposes the examination and analysis of the reasons and intentions behind immigration that should also take cognizance of the conditions prevailing at their place of origin. Various issues that are posed could be

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understood in terms of the place of origin of the immigrants and identification of specific circumstances that caused emigration from that region, their choice of a particular destination, and their relationship with the host society. In a way, the sociology of immigration is inseparably linked with the demography and economics of emigration.

Punjab state, the granary of India with just 2.5 per cent of the cultivable area of the country is the major contributor of the cereals to the central pool (half of wheat and one-fourth of rice 2021-22). The state had a dominant agro-based economy till the mid-1980s with an impressive growth rate of 5.7 per cent per annum which slipped to 3 percent by 2004-05. Growth dismally dropped further to 1.9 during the period from 2005-06 to 2018-19, which was greatly due to the unanticipated post-green revolution problems. In an attempt to make the nation food secure, the state consistently lost its heterogeneity in the cropping pattern and natural resources (most importantly water and soil). The tremendous pressure of agriculture becoming highly mechanized, and rising costs of variable inputs, weakening of the support system have made Punjab agriculture in general and small farming in particular unremunerative. According to NSSO, almost 2 lakh small and marginal farmers have left farming in the last one and half decades. On the other hand, due to the unfavorable nature and structure of the industrial sector, the small farmers released by the agricultural sector were not being absorbed outside agriculture. As a result, unemployment is at its all-time high level and as a consequence, there is widespread distress among farmers and agricultural labor in rural Punjab. Thirty-one percent of the aged 18-29 years are doing nothing. (7.3% for Punjab compared to 4.8% of the national average, 2021). The level of debt both individual and public is the highest among all the states of India. The debt burden on Punjab farmers was estimated to be Rs. 5700 crore in 1997 which increased to Rs 80,000 crores in 2016 and further estimated at Rs 1 lakh crore in 2020. Public debt which was 1.78 lakh crore in 2017-18 rose to 2.48 lakh crore in 2019 – 20, to a further 2.8 lakh crore in 2020-21, and presently to 3 lakh crore in 2022 (Verma, 2021).

Migration though is a historical phenomenon but the recent magnitude explicitly is not the “pull factor” of developed countries, rather pointing towards the grievous rural agrarian crisis which is “pushing” youth. Losing its past glory, Punjab has slipped down from the number one state to 16<sup>th</sup> rank as far as average income is concerned. The per capita capital expenditure is the lowest in the country i.e. spending just Rs. 869 per person against the national average (of major states) at Rs. 3509. The neighboring state of Haryana spends Rs. 6038. Per capita, social expenditure is Rs. 6981 against the national average of Rs 8962 (Khanna, 2021). Migration becomes the mitigating strategy for the state whose public debt crossed Rs 3 lakh crore by 2022-23 (Vasdev, 2023).

Many studies examined that the major push factors of Punjabi migration are high unemployment, population pressure, high cost of living and emigration based new social hierarchy. The pull factor comprises job availability, high wage rate, high standard of living, and family and kinship network. In this back drop, the present study examined the factors behind migration from rural Punjab.

## Data Sources and Methodology

The present study was based on primary data. The study pertained to all 22 districts of the state. Multi stage random sampling technique was used for the selection of sample households. In first stage, two blocks from each district were selected. One village from each block was selected in the next stage. In last stage, 15 migrant and 15 non-migrant households were selected from the each village. In some villages, the number of migrant households was less than 15, resulting in a sample size of less than 15 households from that village. In this way, the sample size comprised 44 blocks, 44 villages, 640 (MHs), 660 (NMHs), making a total of 1300 sample households from Punjab. Descriptive statistics and percentages were used to interpret the results.

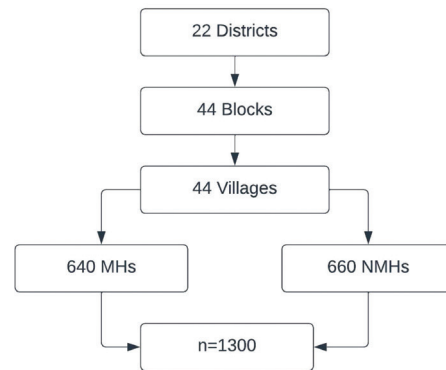


Figure 1 Selection of Sample

Logistic regression was employed to analyze the variables significantly influencing migration. To represent migration, a qualitative response variable was created, where a value of one was assigned to migrant households and zero to non-migrant households. The response variable represents qualitative data in a dichotomous form, taking a value of 1 to signify the occurrence of an event and a value of 0 to denote the non-occurrence of an event. The logistic regression equation model is commonly expressed in the following general form:

$$\pi_j = P\left(Y = \frac{1}{X}\right) = \frac{e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}{1 + e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}$$

The logit function is defined as the natural logarithm of the probability parameter ( $\pi$ ):

$$\pi_j = P\left(Y = \frac{1}{X}\right) = \frac{e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}{1 + e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}$$

**Table 1 Description of the variables used in the Logit Model**

Variables	Scale of the variable	Description
Dependent variable		
Migration	Nominal Scale	If any family member migrated=1, 0 otherwise
Independent variables		
Age	Ratio scale	Age of the household head in years
Male	Nominal Scale	Gender of the household heads, Male=1, 0 otherwise
Year of schooling	Ratio scale	Educational level of household head in years
<i>Jat Sikh</i>	Nominal Scale	If the respondent belongs to <i>Jat Sikh</i> =1, 0 otherwise
Nuclear family	Nominal Scale	If the respondent belongs to a nuclear family =1, 0 otherwise
Landless households	Nominal Scale	If the respondent is landless=1, 0 otherwise
Medium farmers	Nominal Scale	If the respondent is a medium farmer (5-10 acres)=1, 0 otherwise
Large farmers	Nominal Scale	If the respondent is a large farmer (more than 10 acres)=1, 0 otherwise
Gross family income	Ratio scale	The sum of income from all sources in Rupees

The logistic regression model is utilized to assess the likelihood or probability of an event or situation occurring. Unlike linear regression, logistic regression captures non-linear relationships between the independent variables (X) and the dependent variable (Y). The marginal effect was also estimated to examine the magnitude of the respective coefficient.

The major factors affecting the migration considered in the analysis are age, gender, and education of the household head, caste, family type, farm size, and family income. The description of the variables is given in the Table 1.

The objective of this study is to identify the factors that influence migration using the following equations.

Model I: Migration:  $f(\text{age}, \text{age}^2, \text{male}, \text{year of schooling}, \text{Jat Sikh}, \text{Nuclear family})$

Model II: Migration= $f(\text{age}, \text{male}, \text{year of schooling}, \text{Landless}, \text{Medium}, \text{Large}, \text{Gross family income})$

## Results and Discussion

In this section, demography of migrants and non-migrants households, drivers of migration and functional analysis to identify the factors responsible for migration were discussed in detail.

### Demographic Characteristics of Selected Households

*Jat Sikh* is locally dominant caste in Punjab, majority adhering to the ideology of Sikhism. Caste-wise distribution of migrant and non-migrant households revealed that migration was higher among *Jat Sikh* compared to other castes (Table 2). This pattern was indicated by high percentages of *Jat Sikh* in the migrant households compared to non-migrant households. Heads of migrant families were comparatively more older and educated than non-migrant families. This substantiates the fact that old-aged members were left by

migrants to head the households. Another reason behind the trend may be that dependent children in non-migrant households were too young to be eligible for independent migration.

Migrant households were headed more by females (8.56%) compared to non-migrant households (5.61%). The education level of households head of migrants (20.78%) senior secondary level & above was higher than non-migrant households (15.46%).

More migration was observed in farming households especially having large size holdings. About 30 per cent of migrant households belonged to joint family. More migration was found in female headed households. Income of migrant households was 1.7 per cent more as compared non migrant households. Remittances contribute about 7 per cent in total annual income of migrant households.

### Drivers of Migration: Perceptions

Migration is a complex and multifaceted reality. People who migrate are motivated by a complex set of reasons often called drivers of migration. Exploring the linkages between migration, agriculture and the rural social fabric of Punjab requires a deep understanding of migration's drivers and of many interactions they have with each other. Migrants or their family members across different regions divulged various economic, social, and systemic push factors which they held responsible for migration (Table 3). Overall, less employment opportunities (72.9%) and low income (72.8%) were major economic factors, and widespread corruption (72.9%) in the political and bureaucratic arena was held responsible for migration.

Punjab becoming infamous for the prevalence of drugs (52.6%) came out to be another driving factor behind migration. Factionalism (50.9%) and lack of social security

**Table 2 Demography of migrant and non-migrant households (%)**

Particulars	Migrant households	Non migrant households
Age of household head (years)	54	50
Caste ( <i>Jat Sikh</i> )	51.88	41.52
Education (Sr. Secondary and above)	20.78	15.46
Occupation (Agriculture)	71.88	52.88
Farm Size (Large)	21.56	8.18
Family type (Joint)	29.53	22.42
Female headed households#	8.59	5.61
Share of remittance in Income	7.11	-
Gross family income (Rs. Lakhs/annum/ha)	7.31	4.30

#household headed by female who is either widow or divorcee

(50.6%) against old aged and unemployment were other factors behind migration followed by small size of land holdings (35.6%) and landlessness (28.9%). In spite of the whopping debt of one lakh crore rupees on Punjab farmers, indebtedness was cited as a reason for migration by just one-fourth of the migrants and their families. Similar responses were recorded for non-migrants who opined that due to systemic irregularities, migration was becoming a culture in Punjab. Besides systemic disorder, low income (59.39%) and underemployment (51.36%) were pushing people from Punjab.

Data substantiate the fact that though economic reasons were the dominant ones but factors like substance use, normlessness, corruption and factionalism that emerged due to systemic failure were accounted as equally important push factors behind migration. Various studies (Nanda

and Varon, 2015; Ghuman *et al.*, 2023 and Gupta *et al.*, 2023) also brought forth the unholy nexus between police, criminal, politicians and bureaucratic tacit support behind the prevailing structural and functional disorder in Punjab.

### Functional Analysis

The Logit model was employed to analyze the variables influencing migration. To represent migration, a qualitative response variable was created, where a value of one was assigned to households that migrated and zero to non-migrant households. The findings from Model I indicate a positive and statistically significant relationship between the age of household heads and migration (Table 4). As the age of the household head increases, the probability of migration also increases. However, the negative coefficient of the squared term suggests that after reaching a certain age, the likelihood of migration starts to decline.

**Table 3 Opinion of migrant and non-migrant households regarding factors behind migration, Punjab (per cent)**

Particulars	Migrants	Non migrants
Landlessness	28.91	31.97
Small size of holding	35.63	29.85
Low income	72.81	59.39
No employment opportunity/underemployment	72.97	51.36
Indebtedness	24.22	18.94
Prevalence of drugs	52.66	36.21
lack of social security	50.63	32.88
Unpleasant relations in the family	13.44	7.73
Relatives in the foreign country	11.88	6.97
Demonstration effect	15.16	10.00
Law and order	62.34	55.91
Corrupt system	72.97	63.48
Factionalism	50.94	46.36

Table 4 Results of Logit regression

Particulars	Model I		Model II	
	Coefficient	Marginal effect	Coefficient	Marginal effect
Intercept	-3.233 (0.999)		-1.603 (0.443)	
Age of the household head	0.088*** (0.035)	0.022	0.032*** (0.006)	0.008
Square of age of household head	-0.001* (0.0002)	-0.000	-	
Male headed household	-0.520** (0.227)	-0.128	-0.697*** (0.233)	-0.169
Year of Schooling of household head	0.065*** (0.014)	0.016	0.052*** (0.015)	0.013
<i>Jat Sikh</i> household	0.361*** (0.115)	0.090	-	
Nuclear family	-0.261** (0.137)	-0.065	-	
Landless household	-	-	-0.620*** (0.145)	-0.153
Medium farmer	-	-	-0.093 <sup>NS</sup> (0.177)	-0.023
Large farmer	-	-	0.482** (0.235)	0.119
Annual family income (Rs)	-	-	4.02E-07*** (1.52E-07)	1.00E-07
Log-likelihood	-864.425		-830.702	
LR chi <sup>2</sup> (6)	73.030		140.47	
p value > chi <sup>2</sup>	0.000		0.000	
Number of observation	1300			

Note: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$  and NS-Non significant  
Figures in parenthesis indicate standard errors

The value of the male headed household coefficient was found to be negative and significant indicating that the extent of migration in female-headed households was more than in male-headed households. The education level of the household head has a positive and significant relationship with migration. The results showed that with the increase in the schooling of household head by one year leads to an increase of the probability of migration by 0.065. Among different castes, *Jat Sikh* exhibited a higher degree of migration, with a probability of migration that was 0.361 more than other castes. The extent of migration was also more significant in joint family as compared to the nuclear family.

As per model II, in comparison to small farmers (used as the base category), the level of migration was lower among landless households, higher among large farmers, and statistically similar among medium farmers within different farm size categories. The family income also shows a positive

and significant relationship with the extent of migration. The value of log-likelihood was significant in both model I and II, indicates the model is the best fit.

### Conclusion and Policy Implications

Low income (72.81%), less employment opportunities (72.97%), and corruption (72.97%) were the main factors reported behind overseas migration as stated by migrants' family. Along with that, normlessness (62.34%), drugs prevalence (52.66%), factionalism (50.94%), and social insecurity (50.63%) also played a significant role to strengthen the determination of rural households to send their youngsters abroad. The logit model employed to identify the factors responsible for migration found a significant and positive relationship between age, income and education of household heads and the probability of migration. Probability of migration increases if the household is headed by female.

*Jat Sikh* had 0.361 times more probability of migration than other castes; probability of migration increases with the increase in farm size. Setting up agro-processing units in rural Punjab could provide a viable alternative to unviable and economically sluggish agricultural sector to counter the problem of unemployment. Investment in the human capital through improved quality of rural education, skill and entrepreneurship development, and vocational training needs urgent state intervention so that the 'youth exodus' could be curtailed by enhancing their employability.

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