

# Impact of Push and Pull Factors of Migration on Rural-Urban Migration in Punjab

## Abstract

The present paper was planned to discuss the impact of push and pull factors on rural-urban migration in Punjab. Both migrants as well as non-migrants were taken for the study. It was highlighted by the analysis that rural-urban migration was significantly affected by push and pull factors. The push factors exerting significant effect on rural-urban migration included lack of employment opportunities at native place, unviable land holding, indebtedness and family conflict. The pull factors affecting rural-urban migration included better employment opportunities in cities, higher wages in cities and job security in cities as compared to those in villages.

**Keywords:** Rural-Urban, Migration, Push, Pull, Factors, Attitude, Impact, Regression.

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## Introduction

Rural-urban migration is an integral part of the development process. For, when a nation follows high growth trajectory, rural-urban migration is an obvious consequence. Rapid transformation in terms of improvements in the levels of education, transport and communication facilities, shifting of workforce from agriculture to industry and tertiary activities etc, influence mobility pattern of people in due course (Mahapatro, 2010).

The decision to migrate depends on a wide range of factors (UN, 1980; Bilsborrow et.al, 1984). Decision of rural-urban migration is taken for the better economic and non-economic opportunities as well as with an expectation of increased economic welfare in the urban areas (Mazumdar, 1987). According to Mazumdar, the "push" factor that pushing individuals from rural areas to the urban areas is a hope of subsistence living in the urban areas. On the other hand, the "pull" hypothesis emphasizes the attractiveness of the urban life and the rural-urban wage gap. People migrate due to compelling circumstances which pushed them out of the place of origin, or they are lured by the attractive conditions in the new place (Kainth, 2010). Todaro (1969) and Harris-Todaro (1970) developed a model based on a probability. They described that migrants are attracted to the urban areas with the expectation of a higher wage than they receive in agriculture.

## Review of Literature

Farid et al. (2006) analyzed the determinants of and personal factors in rural-urban migration. Main reasons of rural-urban migration in this study are desire of employment and lack of educational facilities in the rural area, opportunities of high income in the city and worst-off condition of the individuals. Study also revealed demographic characteristics like age, sex, education, occupation, marital status etc. and found that the young, male, educated, high occupational and unmarried persons were largely migrating to the city. Study also concluded though the more educated people shift to urban area and

achieve advantageous position from better job opportunities but due to economic hardships the less educated and illiterate people also move towards the urban areas. Thus, the process of migration affects people of all socioeconomic categories.

Singh and Aggarwal (1998) analyzed of push and pull factors in rural-urban migration, based on the data collected from 1991 census for 25 districts of north-western Uttar Pradesh. The study applied the OLS regression model to examine the impact of different variables on rural-urban migration. The study observed that farm size and irrigation facilities are significant variables in abating the outflow of rural workforce.

Anju (1991) tried to explain the comprehensive analysis of inter-state migrants' problems in Faridkot district of Punjab. The push factors were more significant than the pull factors. Unemployment, poverty, social and family disputes, terrorist activities and unviable land holdings were the push factors which motivated the migrants to move.

#### **Research Methodology**

The sample of the study was based on multistage stratified random sampling technique. Districts provided the 1<sup>st</sup> stage of sampling unit, while blocks provided the 2<sup>nd</sup> stage. Villages and cities became the 3<sup>rd</sup> stage of sample, while two strata of respondents i.e. migrants (living in cities) and non-migrants (living in villages) were at the 4<sup>th</sup> stage of sampling unit. Total number of migrants selected for the study came to be 350 and that of non-migrants 160. Primary data were collected on two specially structured pre-tested questionnaires from migrants and non-migrants through personal interview method. Regression Analysis and Factor Analysis techniques were used to analyze the data.

#### **Results and Discussion**

##### **Determinants of Migration**

The determinants of migration were identified through factor analysis and multiple regression analysis. Factor analysis of push and pull factors was carried out to identify the factors out of 20 statements related to push factors and 15 statements related to pull factors. Then these factors were taken as independent variables in two separate regression models; one for push factors and second for pull factors.

#### **Analysis of Push Factors**

Push factors included the following list of factors

S. No.	Push Factor
1	Insufficient working condition
2	No regular employment
3	Heavy workload
4	Longer working hours
5	Lack of liking job
6	Land scarcity and population pressure
7	Not having land/home
8	Sold out the land/home
9	Decline profitability and productivity
10	Boredom of agriculture
11	Insufficient wages
12	No proper distribution of wages
13	Discrimination in payment
14	No repayment of debt
15	Heavy debt on assets
16	Conflict with neighbours
17	Caste discrimination
18	Conflict with employer
19	Family feud
20	To enjoy the nuclear family

#### **Factor Analysis of Push Factors**

Factor analysis is defined as the method of analyzing multi-variables in order to highlight the relationship between them and the specific phenomenon (Al-Ma'ayn and Nagaraj, 2009). Before going for factor analysis, it is crucial to check and test whether the data set is fit for factor analysis. For this purpose, the Kaiser-Meyer-Okin (KMO) measure of sampling adequacy coefficient was calculated, which came to be 0.887 with the test value of Bartlett's Test of Sphericity 5123.64. The test value conveyed that the KMO-MSA was highly significant, which affirmed that the data set was fit for factor analysis. The KMO-MSA and the test value have been shown in Table 1.

**Table 1: KMO-MSA and Bartlett's Test of Sphericity in Factor Analysis of Push Factors**

Particular	Coefficient
KMO-MSA	0.887
Bartlett's Test of Sphericity	5123.64
Significance	0.000

#### **Eigen Values and Variance Explained**

A perusal of Table 2 showed that the Eigen value of Factor-1 was 5.04, while it was 4.29 for Factor-2, 3.33 for Factor-3, 2.68 for Factor-4, 2.15 for Factor-5 and 1.37 for Factor-6. As much as 22.76 percent of the variance in different push

factors was explained by Factor-1, 17.82 percent by Factor-2, 11.93 percent by Factor-3, 7.75

percent by Factor-4, 6.13 percent by Factor-5 and 4.99 percent by Factor-6.

**Table 2: Eigen Values and Explained Variance By Each Factor**

Particular	Factor-1	Factor-2	Factor-3	Factor-4	Factor-5	Factor-6
Eigen Value	5.04	4.29	3.33	2.68	2.15	1.37
% Variance	22.76	17.82	11.93	7.75	6.13	4.99
Cumulative % Variance	22.76	40.58	52.51	60.26	66.39	71.38

In this way, all the 6 factors could explain 71.38 percent of the variance in push factors.

#### Component Matrix

The component matrix between statements and factors along with communalities is given in Table 3.

**Table 3: Component Matrix and Communalities in Factor Analysis of Roll Stress**

Statement	Factor-1	Factor-2	Factor-3	Factor-4	Factor-5	Factor-6	Communalities
S1	<b>0.642</b>	-0.289	-0.065	0.239	-0.013	0.002	0.557
S2	<b>0.548</b>	0.117	0.172	0.270	0.090	0.102	0.435
S3	<b>0.644</b>	-0.197	0.221	0.269	0.169	0.077	0.609
S4	<b>0.470</b>	0.119	-0.123	0.152	0.185	0.154	0.331
S5	<b>0.645</b>	0.119	0.303	0.225	-0.034	0.099	0.584
S6	0.102	<b>0.612</b>	-0.289	0.325	0.097	-0.203	0.625
S7	0.010	<b>0.679</b>	-0.279	0.059	0.142	0.153	0.586
S8	0.188	<b>0.507</b>	0.345	0.040	0.119	-0.110	0.439
S9	0.261	<b>0.567</b>	0.282	-0.033	0.154	0.110	0.506
S10	0.181	<b>0.603</b>	0.109	0.357	0.240	0.018	0.594
S11	0.210	0.124	<b>0.613</b>	0.037	0.111	0.050	0.451
S12	-0.161	-0.189	<b>0.631</b>	-0.233	0.126	-0.093	0.539
S13	0.381	0.205	<b>0.464</b>	0.122	0.081	0.316	0.524
S14	0.146	0.111	-0.175	<b>0.505</b>	-0.121	0.098	0.344
S15	0.230	-0.102	0.113	<b>0.502</b>	0.310	0.101	0.546
S16	0.190	0.069	0.079	0.307	<b>0.574</b>	0.232	0.201
S17	0.235	-0.080	0.130	-0.171	<b>0.547</b>	0.217	0.454
S18	0.061	0.098	-0.099	0.024	<b>0.701</b>	0.238	0.572
S19	0.434	0.159	0.239	-0.007	0.101	<b>0.598</b>	0.639
S20	0.127	0.011	-0.124	0.170	0.064	<b>0.502</b>	0.317

The analysis given in Table 3 showed that 6 factors were identified out of 20 statements related to push factors.

#### Factor Analysis of Push Factors

##### Name of the Factors

There were 6 factors emerged out of several statements related to roll stress. These factors are given in Table 4.

**Table 4: Name of Different Factors of Push Factors**

Factor No.	Factor Name	% Variance Explained
Factor-1	Lack of Employment	22.76
Factor-2	Unviable Land Holding	17.82
Factor-3	Low Income	11.93
Factor-4	Indebtedness	7.75
Factor-5	Social Conflict	6.13
Factor-6	Family Conflict	4.99
	Total	71.38

**Source:** Computed data based on field survey

### Impact of Push Factors on Attitude of Migrants towards Migration

An attempt was made to evaluate the impact of push factors on the attitude of migrants towards migration in the study area. Multiple regression analysis was applied to identify the impact of push factors. The function in the log-form is as follows:

#### Algebraic Form Regression Model for Push Factors

$$\text{Log } Y = \text{Log } a + b_1 \text{ Log } X_1 + b_2 \text{ Log } X_2 + b_3 \text{ Log } X_3 + b_4 \text{ Log } X_4 + b_5 \text{ Log } X_5 + b_6 \text{ Log } X_6 + eu$$

Where

Y = Attitude of migrants towards migration

a = Constant term

X<sub>1</sub> = Lack of employment opportunity

X<sub>2</sub> = Unviable land holding

X<sub>3</sub> = Low wages

X<sub>4</sub> = Indebtedness

X<sub>5</sub> = Social conflict

X<sub>6</sub> = Family conflict

b<sub>1</sub> – b<sub>6</sub> = Regression coefficients of X<sub>1</sub> – X<sub>6</sub>

eu = Error term

**Table 5: Impact of Push Factors on Attitude of Migrants Towards Migration: Multiple Regression Analysis**

Push Factors	Regression Coefficient	t-value
Constant	2.412	6.34
Lack of Employment Opportunities	0.814**	11.24
Unviable Land Holding	0.123**	4.57
Low Wages	0.030	1.13
Indebtedness	0.221**	5.39
Social Conflicts	0.113	1.34
Family Conflicts	0.114**	2.64
R <sup>2</sup>	0.843**	
F-ratio	306.95	

**Source:** Computed data based on field survey

\*\* : significant at 1% level

It is clear from Table 5 that magnitude of R-square was 0.843, which indicated that 84.3 percent of the variation in attitude of migrants towards migration was explained by the 6 factors of push factors. This showed that the regression model was much powerful.

The regression coefficients of lack of employment opportunities (0.814), unviable land holding (0.123), indebtedness (0.221) and family conflicts (0.114) were significantly positive at 1 percent level of significance. This indicated that an enhancement of one percent in lack of employment opportunities would lead to an increase of 0.81 percent in the rural-urban migration. Similarly, one percent increase in unviable land holding would

lead to an increase of 0.12 percent in rural-urban migration. There would be 0.22 percent increase in rural-urban migration with one percent increase in indebtedness.

The significantly positive regression coefficient of family conflicts indicated that one percent increase in family conflicts would lead to an increase of 0.114 percent in rural-urban migration. The regression coefficients of lack of employment opportunities (0.814), unviable land holding (0.123), indebtedness (0.221) and family conflicts (0.114) were significantly positive at 1 percent level of significance. This indicated that an enhancement of one percent in lack of employment opportunities would lead to an increase of 0.81

percent in the rural-urban migration. Similarly, one percent increase in unviable land holding would lead to an increase of 0.12 percent in rural-urban migration. There would be 0.22 percent increase in rural-urban migration with one percent increase in

#### Analysis of Pull Factors

Pull factors included the following list of factors

S. No.	Pull Factor
1	Better job opportunity
2	Job availability for all the family members
3	Easy to get the job
4	Higher wages paid
5	Proper distribution of wages
6	Advance given by the employer/owner
7	Proximity to place of work
8	Working hours are limited
9	Continuous regular job
10	Come with pre-arrangement
11	More secured for entire life
12	No risk in doing
13	Previous experience
14	No experience needed
15	Skill development in short period

#### Factor Analysis of Pull Factors

Before going for factor analysis, it is crucial to check and test whether the data set is fit for factor analysis. For this purpose, the Kaiser-Meyer-Oklin (KMO) measure of sampling adequacy coefficient was calculated, which came to be 0.796 with the test value of Bartlett's Test of Sphericity 4378.29. The test value conveyed that the KMO-MSA was highly significant, which affirmed that the data set was fit for factor analysis. The KMO-MSA and the test value have been shown in Table 6.

indebtedness. The significantly positive regression coefficient of family conflicts indicated that one percent increase in family conflicts would lead to an increase of 0.114 percent in rural-urban migration.

**Table 6: KMO-MSA and Bartlett's Test of Sphericity in Factor Analysis of Pull Factors**

Particular	Coefficient
KMO-MSA	0.796
Bartlett's Test of Sphericity	4378.29
Significance	0.000

#### Eigen Values and Variance Explained

A perusal of Table 7 showed that the Eigen value of Factor-1 was 2.98, while it was 2.37 for Factor-2, 2.19 for Factor-3, 1.69 for Factor-4 and 1.14 for Factor-5. As much as 19.34 percent of the variance in different pull factors was explained by Factor-1, 15.98 percent by Factor-2, 14.81 percent by Factor-3, 11.24 percent by Factor-4 and 7.71 percent by Factor-5.

**Table 7: Eigen Values and Explained Variance by Each Factor**

Particular	Factor-1	Factor-2	Factor-3	Factor-4	Factor-5
Eigen Value	2.98	2.37	2.19	1.69	1.14
% Variance	19.34	15.98	14.81	11.24	7.71
Cumulative % Variance	19.34	35.32	50.13	61.37	69.08

In this way, all the 5 factors could explain 69.08 percent of the variance in pull factors.

**Component Matrix**

The component matrix between statements and factors along with communalities is given in Table 8.

**Table 8: Components Matrix of Factor Analysis of Pull Factors**

Statement	Factor-1	Factor-2	Factor-3	Factor-4	Factor-5	Communalities
S1	<b>0.531</b>	0.293	0.214	0.093	0.167	0.456
S2	<b>0.640</b>	-0.232	0.091	0.020	-0.350	0.595
S3	<b>0.516</b>	0.147	-0.018	-0.112	0.361	0.431
S4	0.309	<b>0.658</b>	0.133	0.161	0.349	0.755
S5	0.157	<b>0.544</b>	0.032	0.275	-0.304	0.508
S6	0.108	<b>0.510</b>	0.442	0.178	0.149	0.524
S7	0.247	0.148	<b>0.487</b>	0.182	0.240	0.435
S8	0.191	0.120	<b>0.561</b>	0.247	0.283	0.698
S9	0.179	-0.026	0.365	<b>0.731</b>	0.151	0.733
S10	0.032	-0.026	0.351	<b>0.564</b>	0.364	0.587
S11	0.166	0.109	0.342	<b>0.593</b>	0.031	0.509
S12	0.444	0.396	0.087	<b>0.557</b>	0.067	0.691
S13	0.138	0.054	0.225	0.021	<b>0.656</b>	0.506
S14	0.024	0.193	0.161	-0.007	<b>0.653</b>	0.627
S15	0.214	0.100	0.030	0.092	<b>0.685</b>	0.581

The analysis given in Table 8 showed that 5 factors were identified out of 15 statements related to pull factors.

**Factor Analysis of Pull Factors**

**Name of the Factors**

There were 5 factors emerged out of several statements related to pull factors. These factors are given in Table 9.

**Table 9: Name of Different Factors of Pull Factors**

Factor Number	Factor Name	% Variance Explained
Factor-1	Better employment opportunity	19.34
Factor-2	Higher wages	15.98
Factor-3	Favourable nature of job	14.81
Factor-4	Job security	11.24
Factor-5	Skill development at work	7.71
	Total	69.08

**Source:** Computed data based on field survey

**Impact of Pull Factors on Attitude of Migrants towards Migration**

An attempt was made to evaluate the impact of pull factors on the attitude of migrants towards migration. Multiple regression analysis was applied to identify the impact of pull factors. The function in the log-form is as follows:

**Algebraic Form Regression Model for Pull Factors**

$$\text{Log } Y = \text{Log } a + b_1 \text{ Log } X_1 + b_2 \text{ Log } X_2 + b_3 \text{ Log } X_3 + b_4 \text{ Log } X_4 + b_5 \text{ Log } X_5 + eu$$

Where

Y = Attitude of migrants towards migration

a = Constant term

X<sub>1</sub> = Better employment opportunity

X<sub>2</sub> = Higher wages

X<sub>3</sub> = Favourable nature of job

X<sub>4</sub> = Security of job

X<sub>5</sub> = Skill development at work

b<sub>1</sub> – b<sub>5</sub> = Regression coefficients of X<sub>1</sub> – X<sub>5</sub>

eu = Error term

**Table 10: Impact of Pull Factors on Attitude of Migrants Towards Migration: Multiple Regression Analysis**

Pull Factors	Regression Coefficient	t-value
Constant	0.541**	3.62
Better Employment Opportunities	0.354**	4.89
Higher Wages	0.471*	2.38
Favourable nature of job	-0.109	1.49
Job security	0.813**	12.69
Skill development at work	0.037	0.31
R <sup>2</sup>	0.734**	
F-ratio	189.85	

**Source:** Computed data based on field survey

\*\* : significant at 1% level; \* : significant at 5% level

It is clear from Table 10 that magnitude of R-square was 0.734, which indicated that 73.4 percent of the variation in attitude of migrants towards migration was explained by the 5 factors of pull factors. This showed that the regression model was much powerful. The regression coefficients of better employment opportunities (0.354), higher wages (0.471) and job security (0.813) were significantly positive at 1 and 5 percent level of significance. This indicated that an enhancement of one percent in better employment opportunities would lead to an increase of 0.354 percent in the rural-urban migration. Similarly, one percent increase in higher wages would lead to an increase of 0.471 percent in rural-urban migration. There would be 0.813 percent increase in rural-urban migration with one percent increase in job security.

#### Conclusion

Rural-urban migration was significantly affected by push and pull factors. The push factors exerting significant effect on rural-urban migration included lack of employment opportunities at native place, unviable land holding, indebtedness and family conflict. The pull factors affecting rural-urban migration included better employment opportunities in cities, higher wages in cities and job security in cities as compared to those in villages.

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