

The Factors Affecting Rural Migration: A Holistic Study

Anannya Chakraborty¹, S.K. Acharya² and K. Chethana³

1. Asstt. Prof. (Agril. Ext.), LPU, Jalandhar, Punjab, 2. Prof. (Agril. Ext.), (Agril. Ext.),
3. P.G. Scholar (Agril. Ext.), BCKV, Mohanpur, Nadia, WB

Corresponding author e-mail : chakraborty.ext@gmail.com

Paper Received on February 10, 2021, Accepted on March 20, 2021 and Published Online on April 01, 2021

ABSTRACT

Rural to urban migration is a very common phenomenon as far as the social, economic and demographic changes are concerned. There are various causes regarding massive rural to urban migration which create a subsequent impact on urban population imbalance and extreme urban decay in India. The present study is conducted in Sira block of the Tumkur district. The area of the study is comprised of villages namely Devarahalli, Chikkanahalli, under Chikkanahalli gram panchyath. The numbers of respondents were 60 and they were selected randomly. The data were collected through pilot survey, structured interview and focused group interview. The statistical tools used for data analysis are correlation coefficient, step down regression, path analysis and factor analysis. Family size (X_5), family material possession (X_{10}), per capita area (acre) (X_{15}), Per capita income from Agriculture and livestock (X_{16}) and per capita annual other expenditures (X_{19}); these are the independent variables which are significant with respect to dependent variable i.e. Y: Push Factor.

Key words: Migration; Social change; Demographic change; Economic change; Income;

The Figure shows that distress-push rural urban migration would dominate in rural areas which have one or more of the following characteristics: geographical isolation, low quality physical infrastructure, low human capital, underdeveloped markets, resource scarcity, or incidence of some natural disaster. Demand-pull rural urban migration would be possible in the presence of expanding technological innovations (whether within or outside agriculture) market development, or intensifying links with markets outside of the local economy. It is to be expected that distress-push rural urban migration would characterise households in a rural population, which are less endowed, or which have lower incomes. Srivastava and Sasikumar (2003) examined the factors by primary survey of migrants using a Probit Model. Analysis indicated that the lower the level of education of the migrant, the greater the importance of the push factors whereas with increasing level of education of the migrant, pull factors become more important in migration. Following the same path in India. Pandey (2002) finds that the expanding employment opportunity and higher wages in urban area and declining

employment opportunities and relatively low wages in the villages are respectively the pull and push factors in the rural-urban migration. Herrendorf et. al. (2016) has established some of the evidences which shows that workers in urban areas – and rural-urban migrants – tend on average to be those with more education and higher returns to schooling. A study of Chakraborty and Acharya (2019) has revealed that the most important aspects of impoverishment of the farming community are cropping intensity, communication variables, livestock possession and stress perception. The most important aspect among them is stress. Due to the unbearable stress about the life and livelihood, the rural people sometimes quit agriculture, leave their villages and come to the urban society in search of jobs. According to the study of Kumari and Shirisha (2021) agriculture is and was the backbone of India, but rapid urbanization and high population density have impacted agriculture sector greatly. Agriculture is now faced with the problems of low availability of water for cultivation, land availability, nutrient depletion in soil, migration, non-agricultural jobs; consequent to this per cent age of

people engaged in agriculture sector is gradually declining. This also a cause for the agricultural community to leave their rural habitat and to come in urban areas.

Positive results :

- The migrants are able to send money home.
- With more money from the urban workers, school fees may be paid or livestock bought.

Negative results :

- It is often the young males who move - the remaining family may be less physically able to carry out heavy tasks.
- With the absence of the young males, children may have to work on the farm, rather than going to school.

METHODOLOGY

The study was conducted in Sira block of Tumkur district in Karnataka. The state, district, sub division, block, panchayet and village were selected through purposive sampling. Sixty respondents were selected through random sampling procedure. Here, in this study we have considered 19 independent variables against one dependent variable that is push factors (Y). The statistical tools used for data analysis were correlation coefficient, step down regression, path analysis and canonical covariate analysis.

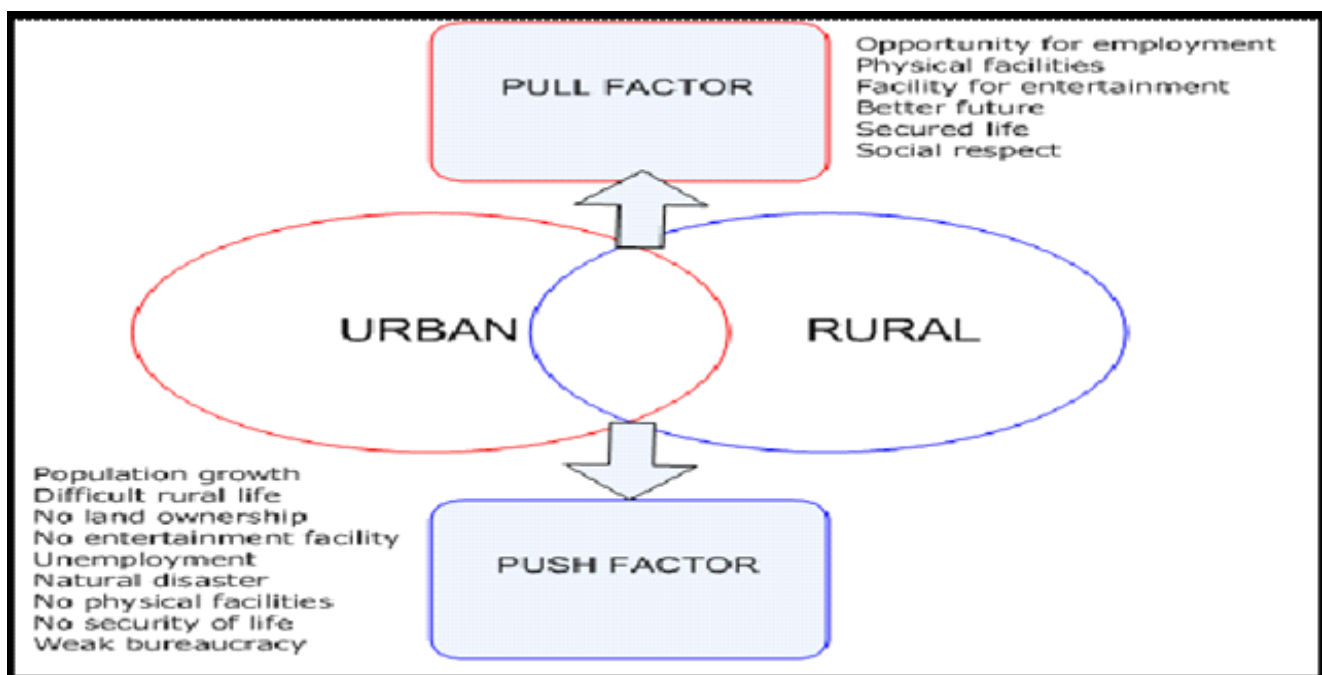
RESULTS AND DISCUSSION

Table 1 presents the coefficient of correlation between Y: Push factor vs. 19 independent variables (x_1-x_{19}). It has been found that following variables viz. family size- (X_5) , family material possession- (X_{10}) , Per capita area (acre)- (X_{15}) , Per capita area (acre)- (X_{15}) and per capita annual other Expenditures- (X_{19}) have recorded significant correlation with the dependent variable Y_7 : Push factor. The large family size having scattered land holding with low production and low inventory leading to poor returns from farm enterprise which cannot fulfil financial obligations and other aspiration of family. The unable condition pushes one to search of choices for better livelihood. The table shows what is the level of significance of each and every independent variables against the dependent variable push factor (Y).

Table 2 presents the multiple regression analysis between exogenous variable Y: push factors 19 Causal variables(x_1-x_{19}) : It has been found that the variable X_5 :family size and X_{19} : per capita Family annual Expenditure has contributed to the substantive variance embedded with the consequent variable Y:Push factor.

The R^2 value being 0.7964, it is to infer that 79.64 per cent of variation in the consequent variable has been explained by the combination of these 19 causal variables.

Table 3 presents the step wise regression and it



Source : Research Gate, Factors for rural - urban migration in Nepal

Table 1. Coefficient of Correlation (r): Y: Push factor vs. 19 independent variables (x₁-x₁₉).

Variable	r value
Age at the time of migration-(X ₁)	0.24
Schooling of Migrant(number of years)-(X ₂)	-0.112
Family Education(in years)-(X ₃)	-0.166
Caste-(X ₄)	0.176
Family size-(X ₅)	0.452**
Number of years since Marriage-(X ₆)	0.159
Change in no. of occupations after migration (X ₇)	-0.153
No.of source information acquired-(X ₈)	0.169
number of source of money for migration-(X ₉)	-0.158
family material possession-(X ₁₀)	-0.251*
family house type-(X ₁₁)	-0.178
family Social participation-(X ₁₂)	-0.091
Cosmopolitaness-(X ₁₃)	-0.162
Mass media exposure-(X ₁₄)	-0.227
Per capita area(acre)-(X ₁₅)	-0.272*
Per capita income from Agri. and livestock -(X ₁₆)	-0.258*
Per capita income from other source-(X ₁₇)	0.144
Per capita annual Expenditure on education-(X ₁₈)	-0.012
Per capita annual other Expenditures-(X ₁₉)	0.315*

r>0.250 and 0.320 are significant at 5% and 1% level respectively

has been depicted that the 2 causal variables, X₅: family size and X₁₉: per capita family annual expenditure has been retained at the last step.

The R² value being 0.7750, it is to infer that 77.50 per cent of variation in the consequent variable has been explained by the combination of these 2 causal variables.

So the Y: push factor has been well estimated X₅: family size and X₁₉: Per capita other Family annual Expenditure

The larger households process high aspiration and needs which requires financial resource to fulfil. The lack of financial resource at their disposal creates push condition, which leads to search for opportunities to earn living and secure livelihood.

The variable X₁₉: Per capita other Family annual Expenditure has enrooted the highest indirect effect (for 7 times) on the consequent variable. Table 6.32 presents the path analysis to decompose the TE into direct, indirect and residual effect. It has been found that the variable X₉: number of source of money for migration (-0.501) has highest direct effect, while the variable X₅:family size (0.873) has exerted the highest indirect effect on the Y: push factor.

The residual effect being 0.2036 per cent, it is to

Table 2. Regression Analysis: Push factor (Y) vs 19 Causal variables(X₁-X₁₉)

Variables	Beta	Beta × R	Reg Cofe-B	S E of B	T-Val of B
X ₁ : Age at the time of migration	-0.233	-2.276	-0.052	0.048	1.085
X ₂ : schooling of Migrant(number of years)	0.063	-2.556	0.032	0.091	0.353
X ₃ : family Education(in years)	-0.097	0.929	-0.061	0.032	0.508
X ₄ : caste	-0.102	-2.803	-0.132	0.229	0.575
X ₅ : family size	0.257	44.134	0.230	0.175	2.315
X ₆ : number of years since Marriage	0.345	1.966	0.059	0.037	1.680
X ₇ : change in number of occupations after migration	-0.101	0.633	-0.077	0.124	0.616
X ₈ : number of source information acquired	0.123	0.754	0.127	0.170	0.746
X ₉ : number of source of money for migration	-0.355	1.819	-0.477	0.218	2.082
X ₁₀ : family material possession	-0.062	4.966	-0.017	0.052	0.321
X ₁₁ : family house type	-0.200	6.294	-0.026	0.247	0.106
X ₁₂ : family Social participation	-0.108	0.356	-0.128	0.117	0.720
X ₁₃ :cosmopolitaness	-0.246	4.452	-0.099	0.086	1.154
X ₁₄ : mass media exposure	-0.260	15.289	-0.071	0.043	1.641
X ₁₅ : Per capita area(acre)	1.056	1.774	-0.134	0.397	0.340
x ₁₆ : Family income (Agriculture and livestock)	0.058	-0.596	0.152	0.147	0.232
x ₁₇ : per capita family income from other sources	0.122	1.516	0.783	0.276	0.684
X ₁₈ : Per capita Family annual Expenditure (education)	0.194	-0.868	0.563	0.134	2.103
X ₁₉ : per capita Family annual Expenditure	-0.169	24.217	-0.641	0.123	2.644

Multiple R²=79.64%; S.E=2.79

Table 3. Regression Analysis, Y: Push factor vs 2 Causal variables (X5, X19): The table shows the variables which have retained at the last step of regression analysis

Variables	Beta	Beta × R	Reg Cofe-B	S E of B	T-Val of B
X ₅ : family size	0.284	67.204	0.365	0.160	2.275
X ₁₉ : per capita Family annual Expenditure	0.212	32.796	0.058	0.034	1.693

Multiple R²=77.50%; S.E=0.6

Table 4. Path analysis: decomposition of total effect (r) into direct, indirect and residual effect Y : push factor VS 19 consequent variables (X₁-X₁₉)

Variables	TE	TDE	TIE	HIE
X ₁ : Age at the time of migration	0.24	-0.232	0.472	0.193(X ₆)
X ₂ : Schooling of Migrant(number of years)	-0.112	0.062	-0.174	-0.064(X ₃)
X ₃ : Family Education(in years)	-0.166	-0.096	-0.07	0.076(X ₁)
X ₄ : Caste	0.176	-0.102	0.278	0.083(X ₉)
X ₅ : Family size	0.452	-0.421	0.873	0.066(X ₁₉)
X ₆ : Number of years since Marriage	0.159	0.344	-0.185	-0.130(X ₁)
X ₇ : Change in number of occupations after migration	-0.153	-0.101	-0.052	0.073(X ₁₉)
X ₈ : Number of source information acquired	0.169	0.123	0.046	-0.090(X ₁₉)
X ₉ : Number of source of money for migration	-0.158	-0.301	0.143	0.041(X ₁₉)
X ₁₀ : Family material possession	-0.251	-0.061	-0.19	-0.086(X ₁₃)
X ₁₁ : Family house type	-0.178	-0.02	-0.158	-0.111(X ₁₃)
X ₁₂ : Family Social participation	-0.091	-0.107	0.016	0.042(X ₁₄)
X ₁₃ : Cosmopoliteness	-0.162	-0.245	0.083	0.043(X ₁)
X ₁₄ : Mass media exposure	-0.227	-0.559	0.332	0.061(X ₉)
X ₁₅ : Per capita area(acre)	-0.272	-0.056	-0.216	-0.077(X ₅)
X ₁₆ : Per capita Family income (Agriculture and livestock)	-0.258	0.058	-0.316	-0.111(X ₁₉)
X ₁₇ : Family income (other per capita)	0.144	0.121	0.023	0.065(X ₁₉)
X ₁₈ : Family annual Expenditure Per capita(education)	-0.012	0.193	-0.205	-0.061(X ₁₉)
X ₁₉ : Per capita other Family annual Expenditure	0.315	0.496	-0.181	-0.100(X ₅)

TE=Total effect TDE=Total direct effect TIE=Total indirect effect HIE=Highest indirect effect

infer that with the combination of these 19 exogenous variables, 100 per cent of variance can be explained.

So, the predominated factors, as formed by internationally accommodating them based on factor loading, can offer a strategic implication by effectively downsizing the sphere of variables into well textured factors.

The low land holders receive less return from farm enterprises, as they grow only cereals and pulses rather than commercial or exportable horticultural crops. When the family size is more, the inventory need to feed and full fill their needs and aspirations become the necessity to find other options for income generation. Along with it when resource at disposal is less makes push condition for migration to flee to urban areas to earn livelihood.

The variable X₁₉: per capita other family annual

expenditure has enrooted the highest indirect effect (for 7 times) on the consequent variable. Table 6.32 presents the path analysis to decompose the TE into direct, indirect and residual effect. It has been found that the variable X₉: number of source of money for migration (-0.501) has highest direct effect, while the variable X₅: family size (0.873) has exerted the highest indirect effect on the Y: push factor.

The residual effect being 0.2036 per cent, it is to infer that with the combination of these 19 exogenous variables, 100 per cent of variance can be explained.

So, the predominated factors, as formed by internationally accommodating them based on factor loading, can offer a strategic implication by effectively downsizing the sphere of variables into well textured factors.

In statistics, CCA is a way of inferring information from cross-covariance matrices. If we have two vectors, $X=(X_1, X_n)$ and $Y=(Y_1, Y_n)$ of random variables and there are correlations among the variables, then canonical correlation analysis will find linear combinations of the X_i and Y_j which have maximum correlation with each other. Virtually all of the commonly encountered parametric tests of significance can be treated as special cases of canonical correlation analysis, which is the general procedure for investing the relationships between two sets of variables. The method was first introduced by *Harold Hotelling (1936)*.

CCA for this study (Table 5) has been applied to extract the canonical covariates between two sets of variables. The left side variables and the right side variables. It has been observed that the LS variables again has formed two conglomerations further. Here, Y_2 : distance of migration, Y_3 : Remittance (per capita), Y_4 : climate change and Y_5 : Personal perception on social issue has gone closest to Rural-Urban migration and both have picked up four exogenous variables viz. X_2 : schooling of Migrant (number of years), X_3 : family Education (in years), X_5 : family size, X_8 : number of source

information acquired, X_{10} : family material possession, X_{11} : family house type, X_{12} : family social participation, X_{15} : per capita area (acre) and X_{17} : family income (other per capita).

On the other hand, the rest of the LS variables viz. Y_1 : duration of migration (in years), Y_6 : perceived benefit of migration, Y_7 : push factor and Y_8 : pull factor have formed another conglomeration keeping simultaneous interpretation with Y_2 : distance of migration, Y_3 : Remittance (per capita), Y_4 : climate change and Y_5 : Personal perception on social issue and this second conglomeration has picked up eleven exogenous variables.

So, from CCA we have come to know that the groups of Y variables have got precise selectivity to ultimately form a splendid strategy as to cater component related interaction to characterise the perception of Rural-Urban migration.

CONCLUSION

Singh & Aggarwal (1998) reported in his the study finds inadequate irrigation facilities, lack of employment opportunities in rural non-household manufacturing

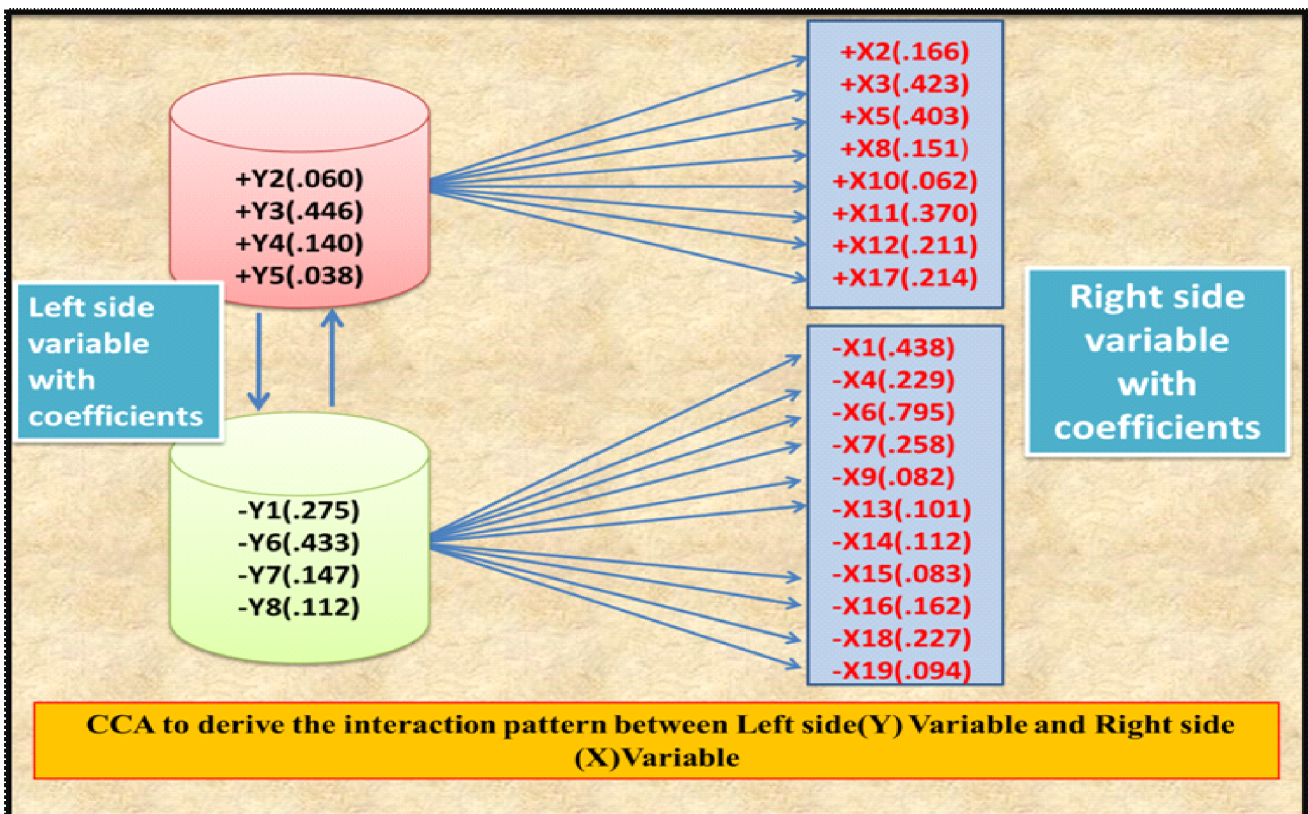


Table 5. CCA to derive the interaction pattern of Dependent and Independent variable

activities and decline in the average size of operational holdings as the major 'push' factors; and increase in rural literacy and expansion of non-household manufacturing and construction activities in urban areas as the leading 'pull' factor in rural-urban migration.. Richard Rhoda(1983) studied with close focus on push factors, concludes that the common belief that rural interventions reduce urban migration is not justified. Rural-urban migration may be reduced by interventions which increase cultivatable land, equalize land or income

distribution, or decrease fertility. On the other hand, migration is stimulated by interventions which increase access to cities, commercialize agriculture, strengthen rural-urban integration, raise education and skill levels, or increase rural inequalities. Here in this study we have also found that size of the family, expenditure, family possessions are the main factors which are creating a significant impact on the tendency of migration. In other words higher the liabilities and responsibilities and lower the assets, higher would be the chances of migration.

REFERENCES

- Acharya, S.K.; Chethana, K.; Chakraborty, Anannya and Biswas, A. (2018). Migration: the dream, destination and destiny: Delhi, Nirmal Publications.
- Chakraborty, A. and Acharya S. (2019). Impoverishment and vulnerability of the farmers: a harsh reality, *Indian Res. J. of Ext. Edu.*, **19** (2&3) : 95-98
- Richard Rhoda (1983). Rural development and urban migration: can we keep them down on the farm? *Intl. Migration Review*, **17** (1) : 34-64.
- Herrendorf, B. and Schoellman, T. (2016). Wages, human capital, and structural transformation, Unpub. Manuscript, Arizona State University.
- Pandey, R. (2002). Rural non-farm employment in Nayagarh district of Orissa: Findings from a participatory rural appraisal, Chatham: NRI (draft).
- Singh, S.P. and Aggarwal, RK (1998). Rural-urban migration: the role of push and pull factors revisited', *The Indian J. of Labour Eco.*, **41** (4) : 653-667.
- Srivastava, R. and Sasikumar, S.K. (2003). An overview of migration in India: its impact and key issues, Migration, Development and Pro Poor Policy Choices in Asia.
- Kumari, Vineeta and Shirisha J. (2021). Socio-economic profile and expenditure pattern of the practitioners of urban agriculture. *Indian Res. J. of Edu. Ext.*, **21** (1) : 71-77

