# Study On The Diversity And Predictors Of Internal And International Migration In Bangladesh: A Panel Data Approach

Sabbir Tahmidur Rahman, Dr. Md. Zakir Hossain, Mohammad Mahmood Riad

Abstract: In Bangladesh, migration across the national boundary is not far behind from migration within the country. This study has made an attempt to compare and contrast between these two types of migration and drag out the determinants of migration towards internal and international destination based on their household characteristics. The study found considerable differences between internal and international migration according to present age of the migrants, age at migration, sex of the migrants, educational status of the migrants, purpose of migration, relationship of the migrants with the household head, pre-migration occupation of the migrants and job informants at the time of migration. Multiple binary logistic regression models and Poisson regression models have been developed separately for determining the predictors of internal and international migration at household level. Two different techniques were adopted to do same thing in order to check whether predictors vary according to techniques and find out the common determinants. Both the techniques were almost identical in predicting the determinants of internal and international migration as the results indicate that landholding, education of the household head, age of the household head and household size have had significant effect on the decision of internal migration. On the other hand, occupations of the household head, annual income of the households and economic status of the household were found to have significant impact in case of international migration.

Index Terms: Panel data, Household, Migration, Profile, Predictor, Logistic Regression, Poisson Regression.

# 1. Introduction

Human migration is an elementary characteristic of people since the beginning of mankind. The Universal Declaration of Human Rights recognized the right to movement globally over a half century ago which states in Article 13 that "Everyone has the right to freedom of movement and residence within the borders of each state" and "Everyone has the right to leave any country, including his own, and to return to his country". The reasons and dimensions of migration have changed with the passage of time. The historic ties that relate the various populations across the regions, emphasized by the dynamics of migration has given rise to multiple forms of population movement varying internal to international, long-term to temporary. Migration has been the livelihood strategies for Bangladeshi people for centuries. In these days, migration management in Bangladesh becomes complex and difficult endeavor due to the shifting trends and patterns of movements of the migrants.

Migrants are diversified in terms of their dimension of movements. International migration refers to the movement of people across the national border of mother country to a location outside that origin country generally with the purpose of higher income, better living conditions and existing there for an extended period of time either legally or illegally. On the other hand, the migrants who moved to a location within the geographical boundary of the country for any cause but remain part of the income pooling unit directly or continue to exercise influence over the household dynamics or being influenced by the household members are internal migrants. The objective of this study is to explore diversity between this two migration behaviors and drag out the predictors of internal and international migration based on some socio-demographic household characteristics.

#### 2. Review of Literature

The comparison of these two behaviors has given rise to an enthusiastic argument in literature that, whether international migration is simply one end of a scale that ranges from short distance local moves to cross border moves and whether a single theory can successfully cover both types of migration or not. There are large amount of literatures on the determinants of migration home and abroad, but they deal either with internal migration or international migration. There is hardly any literature that dealt with both the migration behavior. Arnold & Abed (1985) explored the ways that relate both the processes and found important linkages between internal and international migration at both individual and aggregate level. They found same kind of influencing factors in both cases. Nabi (1992) demonstrated the dynamics of internal migratory movements and found the determinants of internal migration by using the ordinary least square technique. In a study, Mitra and Murayama (2008) analyzed the district level rural-urban migration rates for males and females separately by using 2001 Census data of India. The study concluded that social networks played an important role in the context of migration and is prevalent

Research Student, Department of Statistics, Shahjalal University of Science & Technology. E-mail: sabbi 01@yahoo.com

Professor, Department of Statistics, Shahjalal University of Science & Technology.
 E-mail: mzhossain.bds@gmail.com

Ph.D Fellow, Department of Statistics, Shahjalal University of Science & Technology.
 E-mail: mmr.pstu@gmail.com

among the short distance migrants but tend to lose their significance with a rise in the distance between the place of origin and destination. The predictors of internal and international migration were examined by Bohra & Massey (2009) in case Chitwan, a valley of Nepal and it goes very much with the migration laws. Mahapatro (2009) made an attempt to understand the emerging migration patterns in India by using the NSS data (2007/08). The migration trend emerged from this study revealed that male migration showed a declining tendency due to short term employment opportunities in urban areas and steady increase of urban migrants in lower economic class indicated migration is dominated by poorer communities. Islam & Siddigui (2010) found that, internal migration is caused due the sociodemographic characteristics of the migrants but different opinions also exist. Internal migration is strongly influenced by household characteristics (Hossain 2011) and economic dissatisfaction (Zohry 2005). International migration has more significant effect at the origin in terms of economic perspective (Alam et al. 2011, Liang & Morooka 2005). Environmental change was found to be a major determinant of migration (Siddiqui, 2010, Beine & Parsons, 2012) over the recent years. This study attempted to explore the dimension of diversification between internal international migrants and identify the predictors of migration by different techniques.

# 3. Methodology

#### The Data

The basic data for this study is extracted from panel survey conducted in 2000 and 2008 by international rice research institute (IRRI) and Socio-consult limited respectively under the supervision of Dr. Mahbub Hossain. Panel data are generally free from endogeneity problem and typically more informative. A multi-stage cluster random sampling procedure was adopted in which 62 villages from 57 districts have been selected to gather the data. About 30 households from each village were surveyed resulted in total of 1880 sample households. From the panel survey 2000 round, the study considered a cohort of 1526 nonmigrant households and identified the internal and international migrant sending households from 2008 round survey. During this period, 283 internal and 96 international and 14 mixed migrant sending households were traced out. This study has omitted the mixed migrant sending households for avoiding complexity in determining the predictors of both form of migration.

#### **Analytical Techniques**

The study compared the internal and international migrants by analyzing and assessing the available data based on their socio-demographic characteristics. The predictors of both form of migration had been determined by using multiple binary logistic regression models and Poisson regression models.

# **Multiple Binary Logistic Regression Model**

When the dependent variable is dichotomous, logistic regression model is widely used not only to identify risk factors but also to predict the probability of success. The simple linear logistic regression model can be expressed as

$$\log_{e} \left[ \frac{\pi(X_{i})}{1 - \pi(X_{i})} \right] = \beta_{0} + \beta_{1} X_{i}$$

Where the quantity  $\pi(X) = E(y_i \mid X)$  represent the conditional probability that Y=1 given X and expressed as,

$$\pi(X_{i}) = \frac{e^{\beta_{0} + \beta_{1}X_{i}}}{1 + e^{\beta_{0} + \beta_{1}X_{i}}}$$

If one consider a collection of p independent variables denoted by the vector  $X'=(X_1,\ X_2,\ ...,\ X_p)$  then the multiple logistic regression model is given by the equation as

$$\log_{e}\left[\frac{\pi(X_{i})}{1-\pi(X_{i})}\right] = \beta_{0} + \beta_{1}X_{1i} + ... + \beta_{p}X_{pi}$$

#### **Poisson Regression**

Poisson regression model is used to estimate the effect of selected predictors on number of migrants (response variable) which is essentially count data. A Poisson regression model is similar to an ordinary linear regression model with two differences (i) the errors follow a Poisson and (ii) the natural log of the response variable is a function of the independent variables. Poisson Regression model may be appropriate if it is assumed that the mean and variance of the errors to be equal for each observation. The model can be expressed as:

$$\mu_i = e^{a + X_{1i}b_1 + X_{2i}b_2 + \dots + X_{ki}b_k}$$

Where  $\mu_i$  is the mean of the distribution, which is estimated from observed values of the independent variables, a is the constant, bi represents the deviation from mean of the reference category for each group (i=1,2,3......k). The relationship between the predictor (X) variables and mean of the distribution ( $\mu$ ) is nonlinear. In this study  $\mu_i$  is the number of migrants for a given set of predictor variables. The variables included in the Poisson model are initially screened for statistical differences and to ascertain the direction of relationship between the dependent variable and the predictor variables.

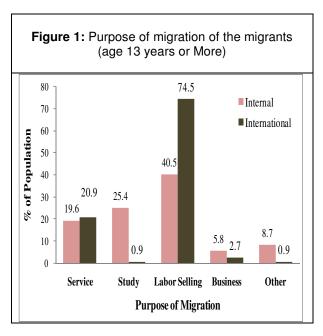
# 4. Results and Discussions

The first section discusses the comparative profile of internal and international migrants and the second section determines the predictors of migration in both forms.

# 4.1 Comparative profile of the migrants

This study examined the diversity of internal and international migration by comparing the profile of the migrant personnel. To accomplish this, 421 internal migrants and 113 international migrants from the traced out households were compared according to their sociodemographic characteristics. Analyzing the age distribution

of the migrants, it is evident that around two-thirds of the internal and international migrants ranging from 15 to 29 years age group (Appendix Table 1). A significant (p<0.05) variation has been observed for the proportion of international and internal migrants belonging to the (30-44) years age group. The average age of internal migrants at the time of migration were found 18.96 years with standard deviation 9.02 years which is significantly (p<0.01) lower than that of international migrants (average age 24.27 years with standard deviation 8.33 years). Over one-fourth of the internal migrants were found to be female while the proportion of female international migrants was marginal. According to IOM (2010), the percentage of female international migrants was 13.9% which are higher than our findings of 4.4%.



About seven out of ten household heads send their first blood for internal and international destination. The findings indicate that more than three-fifth of the international migrants have had secondary level education (6-12 years of schooling) while this corresponding percentage was found about 45% for internal migrants. The proportion of higher educated internal migrants were found significantly (p<0.01) higher than that of the international migrants. About 16% of the internal migrants were found graduate while only 1% of the international migrants were found to be academically graduated. Among the Graduate internal migrants, either studying or completed, over three-fifths were migrated for higher study and about 36% of them migrated to join or continue job in the destination places (Appendix Table-2). Majority (51%) of the internal migrants (age >12 years) were found involved with study at the origin which is also in common with international migrants but in small scale (33%). Migrants largely differ in terms of their purpose of migration. Majority of the international migrants recognized labor selling at destination as their purpose while for internal migrants it was much lower. Beside this a considerable proportion of internal migrants moved due to continue their study but study is not a significant cause for international migration. On the basis of findings, family members and relatives are the principal job informants at the time of both type of migration. A large amount of international migrants went through the channel of broker and agencies at the time of migration.

# 4.2 Predictors of Migration

In order to run the migration management and understand the necessities of migrants adequately, the identification of the predictors of migration is of immense importance in terms of policy makers. But it is difficult to predict the factors differentiating between migrant and non-migrant households because the socio-economic position of a migrant household may change considerably after receiving remittances from the migrant member(s). It is therefore not justified to compare the present position of migrant households with their non-migrant counterparts. Keeping this fact in mind, this section discusses the determinants of migration by employing Binary logistic regression model and Poisson regression models considering the household level characteristics of surveyed households at the year 2000 (before migration). A question may arise why this study has applied two different models to do the same thing. There lie three arguments in favor of this; (a) to examine whether the determinants vary as a result of using different techniques of analysis, (b) to identify the common determinants that can be the vital ones to explain the migration behavior at household level and (c) to verify the relevance of the determinants identified by this study with those identified by other similar studies previously done at home and abroad.

# **Logistic Regression Model**

The logistic regression model is considered an appropriate tool to analyze such data since the dependent variable, type of household, is dichotomized (non-migrant or migrant). Therefore two binary logistic regression models Model-1a and Model-2a have been developed where the models represent the relative risks of internal and international migration respectively. On the basis of descriptive analysis the model considers the covariateslandholdings, occupation of the household head, education of the household head, sex of the household head, age of the household head, NGO membership of the household, debt status, economic status, household income and family size. Both the binary logit models were found significantly fitted on the basis of all available tests including Hosmer and Lemeshow (p-values are 0.786, 0.233 for the two models respectively). The estimated regression coefficients, associated statistics and relative risk from the binary logistic regression models for identifying the predictors of internal migration and international migration in terms of nonmigrant households are shown in Table 1. The results indicate that a considerable number of predictors were found to have significant effect on migration behavior. And the relative risks of each of the predictors are found to vary among different models (Model 1a to Model 2a) that are developed according to the migration behavior. The variation of impacts of selected predictors on migration behavior in terms of relative risks is discussed below:

# NGO membership of the household

Many Non Government Organizations (NGO's) are working actively in Bangladesh. They provide loans and different trainings for interested persons in the rural Bangladesh.

The findings reveal that the NGO membership of households works reverse way in predicting the migration behavior. The Household being member of any NGO have 25.4% less risk of sending internal migrants while 52.2% more risk of sending international migrants.

#### Landholding of the household

Landholding is supposed to play an important role in the migrant sending decision of a household. Landholding has a significant effect in migration decision. It was found from the study that small/medium land owner (≤ 2 ha) households are 1.97 times more likely to send internal migrants and 2.975 times more likely to send international migrants. For the large land owner (≥ 2 ha) households the risk of sending internal migrants and international migrants are almost same. The findings indicate that large land owner households had 68.5% and 68.3% more risks of sending internal and international migrants respectively.

#### Occupation of the household head

The occupation of the household head has an impact on migration decision of the member. The household heads are broadly classified into four occupational groups namely service, farmer, business, and laborer. It is to be mentioned about 44% of the surveyed household heads were farmer, 27% household heads were laborer, and 15% heads were engaged in business and service each. From the study it is evident that, farmer headed households have 5.2% more chance of sending internal migrants and 28.9% less chance of sending international migrants than the service headed households. The risk of sending international migrants for business headed households decreases significantly (p<0.05) while the risk of sending internal migrants increases. Business headed households had 25.3% more risk sending internal migrants and 54.5% less risk of sending international migrants comparing to the reference category. Beside this, households having laborer head had 13.7% more risk of sending internal migrants and 65.3% less risk of sending international migrants.

# **Education of the household head**

Education of household head was found to be the most significant factor in sending the internal migrants. It may be due to the fact that educated household head want his family members to be educated and probably sending them internally for higher education. This study reveals that the probability of sending internal migrants increases proportionally with the increase in the educational qualification of the household heads. In case of international migration it goes the other way. It is evident that household heads having SSC/HSC level education are 3.617 times more likely to send internal migrants than the illiterate household heads. It was also found that heads having secondary education and graduate level education are 2.455 times and 2.416 times more likely to send internal migrants than the illiterate headed households. On the other hand, household heads having primary level education had 1.6% less risk of sending international migrants. As the educational qualification increases the risk decreases. It was found that household heads having secondary level education, SSC/HSC level education and tertiary level education had 33.3%, 49.7%, and 54.6% less risk of sending international migrants.

#### Sex of the household head

It was also found from the study that the male headed households have 12% and 17.2% less risks of sending internal migrants and international migrants respectively than the female headed households.

# Age of the household head

Age of the household head has a significant impact on migrant sending decision. It was found from the study that mid-aged (41-55 years) household heads have 9% more chance of sending internal migrants and 67.9% more risk of sending international migrants than the young (up to 25 years) household heads. It was an interesting finding of this study that household heads aged (26-40) years and (56 & above) years have 55% and 17.7% less risk of sending internal and international migrants respectively than that of the young household heads. For the households having aged (56 & above years) heads the risk was reverse. They have 1.4% less risk of sending internal migrants and 24.4% more risk sending international migrants.

#### Household income

Income is one of the key factors that influence migration decision. It was found from our study that with the increase in income the risks of sending internal migrants and international migrants increase. Households possessing annual income of Tk. (50001-150000), Tk. (150001-220000) and Tk. (220001 & above) have 10%, 22% and 45% more risk of sending internal migrants than that of the households having annual income Tk.50000 or less. Income has a significant impact on sending international migrants and as income ladder increases the risk also increases. The study indicates that, households possessing annual income of Tk. (50001-150000), Tk. (150001-220000) and Tk. (220001 & above) are 2.235, 3.944 and 7.979 more likely to send international migrants than that of the households having annual income Tk.50000 or less.

# Table1: Estimated Relative Risk of Migration by Binary Logistic Regression Models

Model 1a: Internal Migration; Model 2a: International Migration

Γ		Andrew 1.1	fan malany die				
Variables			for migration				
1 11 (11		Model-1a	Model-2a				
NGO membership of the	nou		1.000				
Non-member®		1.000	1.000				
Member		0.746	1.522				
Landholding (in hectare	)						
Absolutely landless/only		1.000	1.000				
homestead <sup>®</sup>							
Small/Medium land		1.971**	2.975				
owner (≤ 2 ha)							
Large land owner (> 2		1.685	1.683				
ha)	- 1 1	4114					
Occupation of the House	enoi		4.000				
Service®		1.000	1.000				
Farming		1.052	0.711				
Business		1.253	0.455**				
Labor	<u> </u>	1.137	0.347***				
Education of the Housel	nold						
Illiterate <sup>®</sup>		1.000	1.000				
Primary		1.319	0.984				
Secondary		2.455***	0.667				
SSC/HSC		3.617***	0.503				
Graduate		2.416**	0.454				
Sex of The Household H	lead						
Female®		1.000	1.000				
Male		0.880	0.828				
Age of the household he	ead						
Up to 25 years®		1.000	1.000				
26-40 years		0.446**	0.823				
41-55 years		1.090	1.679				
56 and above years		1.244					
Household income							
≤Tk. 50000 <sup>®</sup>		1.000					
Tk. (50001-150000)		1.000 1.100	2.235***				
Tk. (150001-220000)		1.218	3.944**				
Tk. (220001 & above)		1.453	7.979***				
Debt Status of the Hous	ehol						
No <sup>®</sup>		1.000	1.000				
Yes		1.099	0.968				
Economic status of the	hous		0.000				
Vulnerable <sup>®</sup>		1.000	1.000				
Solvent		0.991	1.807*				
Family Size	1.069**		1.038				
Constant	1	0.029***					
Model-1a	<u> </u>	0.080***	0.023				
Wodel-1a		Model2a					
-2 log likelihood=1317.019; C	hi-	-2 log likelihood=605.54; Chi					
square=99.120; Nagelkerke I	R	square=68.123; Nagelkerke R					
Square=0.107; Hosmer and		Square=0.128; Hosmer and					
Lemeshow Chi-Square= 4.72	28;	Lemeshow Chi-Square=					
p-value=0.786	at 10/	10.486; p-value=0.233					
® Reference; *** Significant at 1% level; ** Significant at 5% level; * Significant at 10% level							
Organicant at 10/0 iever							

# Debt status and economic status of the households

Debt is normally supposed to remove financial constraint for the time being and in addition if the debt is used in productive investment it improves the financial condition of the debtor for a long time (Hossain, 2011). The study reveals that the households who received debt had 9.9% more risk of sending internal migrants and 3.2% less risk of sending international migrants than that of the households didn't receive debt. In this study the households are categorized regarding the economic status on the basis of the self perception of the household head. It was found that solvent households recognized by the household heads have 0.9% less risk of sending internal migrants while 80.7% more risk of sending international migrants than the vulnerable households.

#### Family size

In addition to the above-mentioned categorical predictors, the study included one continuous covariate in the model namely family size. The findings show that the family size has significant impact on the internal migration decision and the odds of migrating internally is 1.07 times greater for one unit increase in family size. It has also an impact, although not significant, on the decision of sending international migrants. The study reveals that the odds of migrating internationally are 1.04 times greater for one unit increase in family size.

# **Poisson Regression Model**

Poisson regression model is used to identify the determinants of migration at household level considering the dependent variable is in count form (No. of Migrant). All the statistics along with Deviance goodness-of-fit (p=0.235, 1.00)) assures the goodness of the fitted model. The findings of the Poisson regression model (Table 2) shows that total operative land of the household, illiterate and primarily educated household heads were found to have significant negative impact while age of the household head and family size have significant positive impact in case of internal migration. On the other hand occupation of the household head, age of the household head, annual household income, family size and households' economic status were found to have significant positive impact in the decision of sending international migration.

Table 2: Predictors of Migration by Poisson Regression Models

Model 1b: Internal Migration; Model 2b: International Migration

Evalenatory	Poisson Regression						
Explanatory Variables	Model-1b	Model-2b					
variables	Coefficients	Coefficients					
NGO Membership of Household (Yes=1)	-0.3392 (0.3314)	0.2769 (0.4053)					
Total operative land of Household	-0.1650** (0.0731)	-0.1966 (0.1549)					
Occupation of HH (Service)	-0.1017 (0.2317)	1.1411*** (0.4275)					
Occupation of HH (Farmer)	-0.1762 (0.1868)	0.7826** (0.4055)					
Occupation	0.0631	0.5479					

of HH (Business)	(0.2269)	(0.4766)
Occupation of HH	Omitted	Omitted
(Laborer) Education of HH	-0.8572***	0.7745
(Illiterate)	(0.3022)	(0.6149)
Education of HH (Primary)	-0.7384** (0.3108)	0.8655 (0.6215)
Education of HH	-0.0050 (0.2858)	0.5204 (0.5905)
(Secondary) Education of HH	0.1809	0.3478
(SSC/HSC) Education of	(0.3366)	(0.8005)
HH (Graduate)	Omitted	Omitted
Age of Household Head	0.0190*** (0.0057)	0.0140** (0.0080)
Male headed Household (Male=1)	-0.4145 (0.4607)	0.0740 (0.5497)
Family Size	0.0884*** (0.0259)	0.0834** (0.0412)
Household Income (in TK.)	1.27e-06 (7.89e-07)	3.85e-06*** (1.21e-06)
Economic Status (Solvent=1)	0.1712 (0.1901)	0.6309** (0.3123)
Debt status of Household (Yes=1)	0.1610 (0.1345)	0.0027 (0.2407)
Constant	-1.5820** (0.6438)	-5.146774*** (0.9741)
No. of observations	1408	1228
Wald chi2 (15)	122.41	101.92
Prob > chi2	0.0000	0.0000
Pseudo R2	0.0665	0.0993
Log likelihood	-1031.4542	-399.85395
◆Deviance	1429.826	590.3256
goodness-	Prob >	Prob >
of-fit	chi2(1392)=0.235	chi2(1212)=1.00
The figure in the	parenthesis indicates	

The figure in the parenthesis indicates the robust standard error of the estimates, \*\*\* Significant at 1% level; \*\* Significant at 5% level; \* Significant at 10% level.

♣ The deviance goodness-of-fit test tells us, given the model, we accept the hypothesis that these data are Poisson distributed.

## 4. Conclusions

The internal and international migrants differs according to present age of the migrants, age at migration, sex of the migrants, educational status of the migrants, purpose of migration, relationship of the migrants with the household head, pre-migration occupation of the migrants and job informants at the time of migration. The multiple binary

logistic regression model and Poisson regression model almost invariably determines that landholding, level of education of the households heads, age of the households heads and family size are the significant predictors of internal migration at household level. On the other hand, the results from international migration models determine that occupation of the household head, age of the household head, household annual income and economic status of the households are significant predictors for international migration at the household level according to both the techniques.

#### References

- [1]. Arnold F. & Abed R.J. 1985. Linkages between Internal and International Migration, The Ilocos Norte Experience, Vol.1 No.2.
- [2]. Nabi A.K.M. 1992. Dynamics of internal migration in Bangladesh, Canadian Studies in Population, VOL. 19(1), 1992, pp 81-98
- [3]. Bohra P. & Massey D.S. 2009. Process of internal and international migration from Chitwan, Nepal, Princeton University.
- [4]. Islam R. and Siddiqi N.A 2010. Determinants and Modeling of Male Migrants in Bangladesh, Current Research Journal of Economic Theory 2(3): 123-130, 2010.ISSN: 2042-485X, Maxwell Scientific Organization, 2010, August 30, 2010
- [5]. Hossain M.Z. 2011. A comprehensive study on the causes and consequences of rural-urban migration in Bangladesh- what should be the next step and strategy? Department of Statistics, Shahjalal University of Science & Technology, Bangladesh; Sponsored by Social Science Research Council (SSRC) of Ministry of Planning, GoB.
- [6]. Zohry A. 2005. Interrelationships between Internal and International Migration in Egypt: A Pilot Study, Forced Migration & Refugee Studies program, American University in Cairo.
- [7]. Alam F., Siwar C., Talilb B. and Islam R. 2011. Impacts on International Migration and Remittances Growth, American Journal of Environmental Sciences 7 (1): 20-25, 2011, ISSN 1553-345X
- [8]. Liang Z. & Morooka H. 2005, International Migration and Development: The Case of China. University at Albany, State University of New York.
- [9]. Beine M. & Parsons C. 2012. Climatic Factors as Determinants of International Migration, University of Luxembourg, CREAM and CES-Ifo; University of Nottingham, UK.
- [10]. Siddiqui 2010. Impact of Climate Change: Migration as an Adaptation Strategy, Department of Political Science, University of Dhaka.

- [11]. Mitra A. and Murayama Mayumi 2008. IDE DISCUSSION PAPER No. 137. INSTITUTE OF DEVELOPING ECONOMIES. ETRO 3-2-2, WAKABA, MIHAMA-KU, CHIBA-SHI CHIBA261-8545, JAPAN.
- [12]. Sandhya Rani Mahapatro 2009. Institute for Social and Economic Change(ISEC), Bangalore, India.

**Appendix Table 1: Comparative Profile of the Migrants** 

	Internal	%	International	%	Both	%			
Present age of the migrant	Migrant		Migrant						
	0-14 yr. 58 13.8 3 2.7 61 11.4								
	286	67.9	73	64.6	359	67.2			
15-29 yr.			31						
30-44 yr.	64 13	15.2 3.1		27.4 5.3	95 19	17.8			
45 & Above		7±9.29	6			3.6			
Mean ± SD			27.50±8.4	49	23.53:	19.35			
Age of the migrant at the time			1 4	0.5	440	04.7			
0-14 yr.	112	26.6	4	3.5	116	21.7			
15-29 yr.	268	63.7	86	76.1	354	66.3			
30-44 yr.	32	7.6	20	17.7	52	9.7			
45 & Above	9	2.1	3	2.7	12	2.2			
Mean ± SD		6±9.02	24.27±8.3	33	20.09:	<u>±9.14</u>			
Relationship of migrant with H									
Household Head	4	1.0	4	3.5	8	1.5			
Husband/Wife	24	5.7	18	15.9	42	7.9			
Son/Daughter	296	70.3	83	73.5	379	71.0			
Father/Mother	1	0.2	0	0	1	0.2			
Brother/Sister	10	2.4	3	2.7	13	2.4			
Son-In-Law/Daughter-In-Law	29	6.9	1	0.9	30	5.6			
Grandson/Daughter	29	6.9	4	3.5	33	6.2			
Nephew/Niece	20	4.8	0	0	20	3.7			
Brother's Wife/Sis's Husband	4	1.0	0	0	4	0.7			
Others	4	1.0	0	0	4	0.7			
Sex of the migrant									
Male	313	74.3	108	95.6	421	78.8			
Female	108	25.7	5	4.4	113	21.2			
Total	421	100.0	113	100.0	534	100.0			
Educational Qualification (Age	>7 years)								
Illiterate	15	3.8	11	9.9	26	5.1			
Primary	140	35.0	29	26.1	169	33.1			
Secondary	97	24.2	46	41.4	143	28.0			
SSC/HSC	84	21.0	24	21.6	108	21.1			
Graduate	64	16.0	1	0.9	65	12.7			
Total	400	100.0	111	100.0	511	100.0			
Pre-Migration Occupation (Age	> 12 years)								
Farming	23	6.3	20	18.3	43	9.1			
Business	25	6.9	12	11.0	37	7.8			
Labor	50	13.8	21	19.3	71	15.0			
Service	15	4.1	3	2.8	18	3.8			
Unemployed	17	4.7	12	11.0	29	6.1			
Student	188	51.8	36	33.0	224	47.5			
Children	19	5.2	2	1.8	21	4.4			
Others	26	7.2	3	2.8	29	6.1			
Total	363	100.0	109	100.0	472	100.0			
Purpose of Migration(Age> 12			•	•		•			
Service	74	19.6	23	20.9	97	19.9			
Study	96	25.4	1	0.9	97	19.9			
Agri-Wage Laborer	25	6.6	16	14.5	41	8.4			
Non-Agri Wage Laborer	128	33.9	66	60.0	194	39.8			
Business	22	5.8	3	2.7	25	5.1			
Other	33	8.7	1	0.9	34	7.0			
00.00		0.7	<u>'</u>	0.0	UT	7.0			

Total	378	100.0	110	100.0	488	100.0		
Job Informants (Age > 12 years)								
Family Member	164	44.8	25	22.7	189	39.7		
Uncle/Aunt	92	25.1	26	23.6	118	24.8		
Relatives Of Father-In-Law	14	3.8	6	5.5	20	4.2		
Society/Member/Neighbor/Frien d	60	16.4	13	11.8	73	15.3		
Chairman/ Hon'ble Person Of Area	2	0.5	2	1.8	4	0.8		
Broker/Agency	0	0.0	36	32.7	36	7.6		
Political Leader/Member	2	0.5	1	0.9	3	0.6		
Service In High Position/Industrialist/Businessm an	2	0.5	0	0.0	2	0.4		
Others	30	8.2	1	0.9	31	6.5		
Total	366	100.0	110	100.0	476	100.0		

Appendix Table 2: Percentage Distribution of internal migrants according to the purpose of migration (age > 12 years) and educational qualification of the migrants \*

Purpose of	Educational Qualification of the migrants								
migration	Illiterate	Primary	Secondary	SSC/HSC	Graduate	Total			
Comico	0.0	2.7	2.7	63.5	31.1	74			
Service	0.0	1.6	2.1	56.0	35.9	(19.6)			
Ctudy	0.0	9.4	28.1	21.9	40.6	96			
Study	0.0	7.3	28.7	25.0	60.9	(25.4)			
Labor selling	6.5	64.7	28.1	0.7	0.0	153			
	76.9	80.5	45.7	1.2	0.0	(40.5)			
Business	9.1	27.3	50.0	13.6	0.0	22			
Dusiness	15.4	4.9	11.7	3.6	0.0	(5.8)			
Others	3.0	21.2	33.3	36.4	6.1	33			
	7.7	5.7	11.7	14.3	3.1	(8.7)			
Total	13	123	94	84	64	378			
	(3.4)	(32.5)	(24.9)	(22.2)	(16.9)	(100.0)			
$\chi^2 = 285.62^{\circ}$ , d.f=16									

<sup>\*</sup> Figures in upper line of each cell represent the percentages of row total, lower line indicates the percentages of column total, and figures within parentheses indicate the percentages of total.

Significant at 1% level of significance