# Female Migration Pattern in India: Do Economic Factors Matter?

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### Introduction

The analysis of Census and The National Sample Survey Organisation (NSSO) data reveals that there has been a progressive increase in female migration over the year. The latest information available from NSSO (2007-08) shows that female migrants account nearly half (47.16 per cent) of the total female population in the country while it was 35.4 per cent in 1983. Therefore, in recent years the term "feminization" of migration is being used commonly. Despite this, migration in India, like other parts of South Asia, has been studied primarily from a male perspective treating female as an associational migrant. Several studies indicate that until recently, migration was dominated by single men (de Haan, 2000).

However, in the contemporary phase of globalisation, the pattern of female migration is changing and women are no longer the passive actors in migration process. Not only in terms of magnitude but also the pattern of female migration is slowly gravitating towards economic reason in response to the socio-economic development of the country. Various micro level studies indicate that like males, migration of females also takes place for economic reasons (Lingam, 1998; Teerink, 1995). Although, marriage continues to be the predominant reason for the overwhelming presence of women amongst the migrants, studies also suggest an increase in the migration of women with primary purpose of engaging in work (Phizackela, 1983). In this regard Agarwal (2006) states that by considering women as dependents in the migration process, one may often ignore their individual

economic contribution, since an increasing proportion of working women in the world are migrants (Oishi, 2002). Consequently, the traditional image that women are tied to family doesn't seem to be true over time. Undoubtedly, the dominance of marriage as the reason is also slowly changing in the context of transition of the country. The recent NSSO figures show that employment as a factor for migration has declined slightly, however, analysis of migration pattern across various socio-economic group can tell us whether migration is due to economic or non-economic factors. Therefore, it is important to examine the extent to which the migration pattern of females is influenced by economic forces as against the conventional patterns of migration that is mostly attributed to marriage.

Given this context, the main objective of the paper is to explore the underlying factors associated with female migration, specifically the significance of economic factors in shaping migration decision of females. The major hypothesis of the study is that economic factors have significant influence on females' migration in India. Besides, an attempt has also been made to bring to light the changes taking place in the pattern of female migration in terms of their socio-economic characteristics over time.

Female migration and the factors associated with it can be examined in two ways—female in-migration and female out-migration. Conceptually female in-migration and out-migration are two different processes and also influenced by a different set of factors. The factors at the place of origin associated with out-migration of female are the push factors of migration. It is evident from various studies that destruction of traditional work structure, poverty and lack of employment opportunities becomes the fundamental push factors for women's migration (Sharma 1986; Shanti 1991; Sundari 2004; Sandbergen 1995; Kottegoda 2006). Similarly, factors at the place of destination, such as opening up of employment opportunities in urban areas, development of transport and communication, better educational opportunities etc. that attracts female to migrate to different places are the pull factors of migration. For instance, with trade liberalization and opening up of export processing zones there is increase in female migration to urban areas (Sassen-Koob, 1984; Ghosh, 2002; Shanti, 2006). At the same time female migration takes place in order to enhance the level of education, improve the quality of life and in some cases to loosen the parental and societal control (Kaur, 2006).

Hence, neither the push factors nor the pull factors alone results in migration of female rather a combination of both leads to female migration and may even accentuate with the occurrence of socio-economic changes. In this regard, it can

be argued that the pattern of female migration changes from associational reasons to economic ones.

## Data and Methodology

### Data Source:

To understand the importance of economic factors in explaining female mobility, National Sample Survey Data for both 64th (2007-08) and 55th (1999-00) round is used. Census of India is a rich source of information about migrants, but it does not provide information at the household level and also on consumption pattern, poverty level etc. As a result, it becomes difficult to control the per-capita income or poverty in an analysis. NSSO, on the other hand, has the major advantage over Census, because it provides information at household level and also provides information about monthly per capita expenditure of the household, important information to measure poverty. Hence, in the present study, NSSO data is used for an in-depth understanding of female migration behaviour.

### Method

Since, migration is considered to be the outcome of the interaction of push and pull forces; the theoretical approach for the study is drawn from the push-pull framework. To explore the economic motivation, individual female migrant is taken as the unit of analysis. The empirical analysis comprises the estimation of migration rate as well as includes multivariate procedure.

Migration rate is defined as the proportion of migrants to the total population expressed in terms of percentages. The multivariate analysis involves logistic regression model constructed to explore the socio-economic and demographic correlates of female migration. The functional form of the logistic regression model as presented here is:

$$z = \ln\left(\frac{p}{1-p}\right) = \beta 1 + + \beta_2 X_2 + \beta_3 X_3 + \ldots\ldots\ldots\ldots + \beta_k X_K + \mu \ldots\ldots\ldots\ldots \textbf{(1)}$$

The explanatory variables are continuous and categorical in nature. All the variables are classified into four groups: individual, household, labour market, and regional variables. The variables in each group represent relative attractiveness of different places. Individual characteristics of the migrants include variables, such as age, education, and marital status. Monthly per capita expenditure, (MPCE) household size, caste, religion, number of aged and children etc., are taken as household level indicators. Regarding labour market variable, occupational status

of the female is included. Region captures the socio-economic development as well as cultural factors influencing female migration.

Since marriage is deeply set in female migration, it is difficult to study the actual behaviour of females in migration process and the factors associated with it. A woman employed prior to marriage may intend to get married to an urbanite so as to enhance her chances of getting employment, but it does not get captured in the data (Shanti, 2006). The household socio-cultural pressure sometimes prevents females from divulging the actual motivation for migration. At the same time, females join with their husbands if they get employment opportunities in the place of destination. Thus, it is their economic motive that underlies the pretext of associational movement. To overcome this problem, female migrants stating 'other than marriage' along with those joining the labour force after migration (though stated marriage as the reasons for migration) are taken into consideration and a multivariate analysis has been carried out in respect of those females.

The literature has assigned a great deal of importance to the factors at the place of origin as factors determining out-migration. However, while dealing with the secondary data on migration it is difficult to show the relation between female out-migration with other socio-economic variables since out-migration information is not collected from NSSO. The recent data provides information on out-migration, but to make a comparative analysis of the two NSSO rounds, the study is limited to female in-migration. Hence, in this paper attempt is made to assess only the influence of various socio-economic factors at the place of destination.

**Analysis and findings of the study**

Female migration in India shows an increasing trend over time and marriage seems to be the most important reason for this. According to the latest NSSO survey, the most prominent reason for migration among female is marriage (84 per cent). The data also shows that employment as the reason for migration among the female has declined from 1.47 per cent in 1999-00 to about 1 per cent in 2007-08. In this context, it can be argued that in order to pursue higher education women may temporarily withdraw themselves from the labour force. The recent 2009-10 employment-unemployment survey also reflects declining female labour force participation and the studies attributed this decline to education or changes in employment pattern ( Rangrajan *et al.* 2011; Indrani *et al.*). As the increasing level of education will bring long-term benefits to females by enhancing their employment potentiality in future, current employment, as a reason, shows

marginal decline. The 2007-08 information shows that 29.13 per cent female migrants in the age group of 15–19 years and 4 per cent in the age of 20–24 years reported attending educational institution that becomes the principal activity status which was 18 per cent and 2.4 per cent for the respective age groups in 1999/00. Thus, it may affect female mobility stating employment reasons also. In this context, it is not rational to say that the economic motive is not significant in recent years rather for future growth and enhancement of their economic situation they are migrating for education.

Thus, for the present analysis female reporting reasons other than marriage and those female who reported marriage but joined labour force after migration has been taken for the analysis. To understand the economic motivation underlying female mobility, the study is divided in two sections: The first section deals with the socio-economic characteristics of female migrants and its changes over time. This will help to understand who migrates and for what reasons. The second section deals with econometric analysis to understand the significance of economic factors to explain female mobility.

**Economic characteristics and female migration pattern:**

To understand the economic orientation behind female migration, the type of employment and monthly per capita expenditure is used for the analysis.

**Employment status**

To understand the economic motivations (migration due to economic vulnerabilities or for improving quality of life) underlying female migration, proportion of female migrant engaged in different employment activities are analysed. Table-1 presents the distribution of migrants in different employment activities. The table shows that of the total female migrants about 70 per cent female are in the labour force (69.19 per cent), it is 84.5 per cent for rural area and 31.34 per cent for urban area. The lower participation of female in labour force in urban area could be because of their more engagement in higher education for getting better job opportunities in the long run. In this context, it can be argued that as in the case of males, employment motivation is largely seen to be inherent in the mobility of females as well. Based on these findings, one can understand that the economic motivation underlies mobility of females as well. The distribution of female migrant across the types of employment shows that most of the female migrant worked as self-employed followed by casual labour, specifically in rural area. However, in urban area the proportion of female engaged in salaried class is high (40 per cent) followed by self-employed.

**Table-1: Migration Rate by Employment Status, Sex and Place of Residence**
**(Currently employed female + reasons other than marriage)**

| Employment Type | Total | | Rural | | Urban | |
|---|---|---|---|---|---|---|
| 2007-08 | M | F | M | F | M | F |
| Self- employed | 34.92 | 50.18 | 41.61 | 52.33 | 31.45 | 35.81 |
| Salaried/wage earner | 44.32 | 9.28 | 24.16 | 4.66 | 54.77 | 40.08 |
| Casual Labourer | 18.55 | 39.16 | 31.96 | 41.94 | 11.6 | 20.64 |
| Unemployed | 2.21 | 1.38 | 2.27 | 1.06 | 2.18 | 3.47 |
| **Female migrant in** | 71.04 | 69.19 | 67.69 | 84.52 | 72.91 | 31.34 |
| **labour force** | (29,491) | (33,376) | (11,757) | (26,643) | (17,734) | (6,733) |
| 1999-00 | M | F | M | F | M | F |
| Self- employed | 35.72 | 58.21 | 42.38 | 59.88 | 30.63 | 45.62 |
| Salaried/wage earner | 40.21 | 5.71 | 22.63 | 2.65 | 53.64 | 28.75 |
| Casual Labourer | 21.68 | 35.2 | 32.83 | 36.94 | 13.16 | 22.1 |
| Unemployed | 2.39 | 0.88 | 2.16 | 0.53 | 2.57 | 3.52 |
| **Female migrant in** | 72.3 | 75.59 | 73.22 | 87.72 | 71.61 | 37.04 |
| **labour force** | (28,594) | (39,904) | (9,776) | (31,927) | (18,818) | (7,977) |

Source: Computed from NSS unit level data, 2007-08, 1999-00

Note: female not in the labour force are not presented in the table

A comparison of figures for two NSSO rounds show that LFPR , irrespective of sex and place of residence, declines. The decline in participation of female in labour force as already pointed out is attributed to the ongoing development process of the country. However, the share of female in salaried/wage earning and casual labour shows increasing trend accompanied by decline in self-employment category. For salaried/ wage earning class, it increases from 2.65 per cent in 1999-00 to 4.66 per cent in 2007-08 in rural area and from 28 per cent in 1999-00 to 40 per cent in 2007-08 in urban area. Creation of gender segregated labour market through the process of globalization create demand for female labourer in export processing zones, garment industries (informal labour market), which act as a pull factor for female migration (Shanti, 2006). The increase in the proportion of migrants in the salaried class, however, does not imply their better off economic condition, as the salaried/wage earning class consist of varied occupations, and as such, it is difficult to ascertain whether the increase in migration in respect of this class is in response to poverty or better employment.

A cross classification of migrant workers by their mpce class shows that the proportion of migrants has increased after migration from 11 per cent to 22 per

cent in Q1 class, whereas in the case of Q5 class, the share shows a decline after migration from 42 per cent to 35 per cent. Perhaps a higher mobility of workers from the lower economic classes tends to increase the migration trend towards the salaried class after migration. Likewise the proportion of female engaged as casual labour has increased from 36.9 per cent to 41.9 per cent in rural area but has declined marginally from 22 per cent to 20.6 per cent in urban area. This gives an impression that migration is largely confined to the lower strata of the society.

The economic orientation behind migration of female can be further understood by examining the labour force participation rate of females before and after their migration. Figure-1 shows the percentage of migrants in economic activity by their migration status. It is seen from the figure that the percentage of migrants engaged in economic activity increases after their migration. In the case of male, the percentage of workers has increased from 51 per cent before migration to 63 per cent after migration in rural areas and from 46 per cent to 70 per cent in urban areas, from before migration to after migration, respectively.

Similarly, for female it increases from 20 per cent to 33 per cent in rural areas and from 8 per cent to 14 per cent in urban areas. An increase in employment after migration also indicates the expected manifestation of the employment



Fig-1: Percentage of migrants in economic activity by their migration status 2007-08
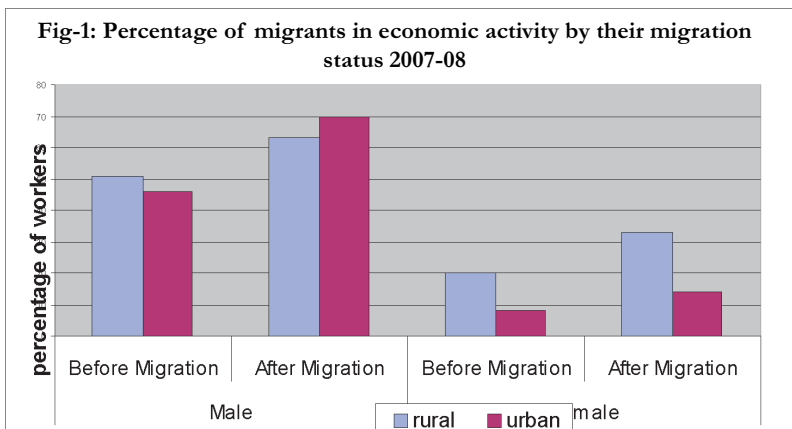
prospective at the time of migration. The increasing proportion of females in employment after migration indicates that although females migrate because of marriage, at post migration, the circumstances in the place of destination allows them to join the labour force.

All these findings show that employment motivation is largely seen to be inherent in the mobility of females. Increasing economic opportunities, family responsibility or a sense of economic independence motivates female to migrate

and join the labour force.

## Household poverty

To examine the relationship between female migration and poverty, many studies have used Monthly Per capita Consumption Expenditure (MPCE) as an indicator of economic status of household particularly in the absence of (direct measurement). For analysis, by taking cumulative frequency, total samples are divided into equal five economic classes (20 per cent for each category).

In Table-2, the percentage distribution of migrants according to their economic class by sex is presented. It is clear from the table that in the case of male, the incidence of migration is higher among the high MPCE group followed by the lowest economic class. This fact may be because migrants are from better off economic groups rather from poorer economic strata, which is consistent with the finding of de Hann and Dubey (2002). The other possibility may be that after migration, significant improvements have occurred in the economic status of the migrant (as the study includes in-migrants).

**Table-2: Migration Rate Across Economic Class by Sex and place of Residence**
**(Currently employed female + reasons other than marriage)**

| Economic class | Total | | Rural | | Urban | |
|---|---|---|---|---|---|---|
| 2007-08 | M | F | M | F | M | F |
| Poorest (Q1) | 9.08 | 24.33 | 5.50 | 24.03 | 39.12 | 27.38 |
| Poor (Q2) | 6.59 | 19.19 | 4.11 | 18.82 | 21.83 | 21.44 |
| Middle (Q3) | 7.82 | 17.34 | 4.42 | 16.77 | 21.18 | 19.59 |
| Richer (Q4) | 11.75 | 17.19 | 6.01 | 15.76 | 23.45 | 20.17 |
| Richest(Q5) | 18.37 | 19.78 | 7.50 | 16.04 | 27.30 | 22.81 |
| Total | 10.72 | 19.58 | 5.28 | 18.79 | 25.76 | 21.83 |
| | (291,457) | (280,797) | (190,313) | (18,398) | (101,144) | (96,816) |
| 1999-00 | | | | | | |
| Poorest (Q1) | 4.39 | 19.95 | 3.81 | 20.48 | 10.44 | 14.54 |
| Poor (Q2) | 5.71 | 20.85 | 4.56 | 21.47 | 13.32 | 16.82 |
| Middle (Q3) | 7.86 | 21.91 | 5.68 | 22.61 | 17.30 | 18.92 |
| Richer (Q4) | 12.28 | 23.38 | 8.14 | 24.75 | 21.87 | 20.26 |
| Richest(Q5) | 26.35 | 27.24 | 15.49 | 27.94 | 34.83 | 26.66 |
| Total | 11.51 | 22.60 | 6.66 | 22.81 | 25.45 | 21.97 |
| | (307,609) | (289,709) | (190,143) | (181,045) | (117,466) | (108,034) |

Source: Computed from NSS unit level data, 2007-08 and 1999-00

However, in the case of females, the proportionate share of migrants decline with increase in mpce implies that migration is mostly used as a survival strategy. The data presented for 2007-08 shows that the percentage of female migrant is higher for Q1 class (24.33 per cent) followed by Q2 and Q5 class that is roughly accounting for 20 per cent. The same pattern is noticed for both rural and urban

areas respectively.

Comparison of figures over the period brings a completely different picture for migration and mpce relation. The relation between female migration and mpce is direct and linear for the period 1999-00 while the scenario is reversed for 2007-08. This indicates a downward slope in the migration rates across the high economic class. This signifies that over time migration trend is directed more towards lower economic class.

The rural-urban difference in migration pattern over time shows that compared to rural area, migration to urban area takes place largely from the poorest class. Migration rate of male in urban area is highest in lowest quintiles (39 per cent) followed by richest quintiles (27.3 per cent). A similar pattern is also noticed in the case of females as well. Figure-2 presents female migration rate in urban area and its change over the period.

The figure show that in urban area migration rate of female is 14.54 per cent (1999-00) for poorest class (Q1), which shows a spurt increase to 27.38 per cent for the period 2007-08 accompanied by a decline in highest economic quintile from 26.66 per cent in 1999-00 to 22.8 per cent in 2007-08. At the same time for the period 1999-00, one observes a large difference in migration rate of female



Fig-2: Female migration rate in urban area by MPCE, 1999-00 & 2007-08
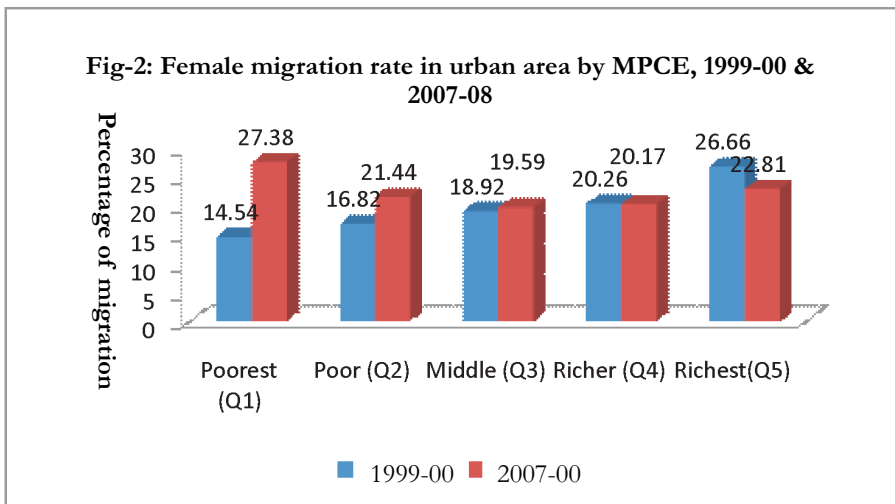
Note: MPCE: Monthly Per capita Consumption Expenditure

between (Q1) class with 14.54 per cent and (Q5) class with 26.66 per cent while for 2007-08 the difference is narrowed down from 27.38 per cent for (Q1) class to 22.81 per cent for (Q5) class. This clearly reflects that in recent years female migration has been higher from both economic classes but certainly the poorest

are contributing more to migration over time. This finding is supported by studies where it is pointed out that large majority of female migrants are from poorer sections of the society (Arya & Roy, 2006;). This finding strengthens the fact that household poverty is one of the reasons for increase in the migration of female.

## Education

It is pointed out by many studies that a majority of female migrants belong to poorer sections of the society (Hugo, 1993; Arya and Roy, 2006; Rao, 1982) with very low levels of literacy; mobility is not a choice rather a thrust on them (Shanti, 1991).

Table-3 illustrates migration rate across the educational group by sex and place of residence. It reveals that female migration rate is higher in illiterate category (22.7 per cent) followed by secondary and higher education. This pattern holds true in rural areas. About 23 per cent migrant females are illiterate followed by higher education. However, in the case of urban area, migration rate is more from the higher education group followed by illiterate though the difference is not significant. This signifies that female largely migrate for economic reasons. Singh (1984), in this context, observes that in the case of female migration, the levels of education are polarised; there are migrants who are literate and employed in modern occupations and also illiterate migrants who are mostly found in occupations generally with a low status. That a majority of female migrants are illiterate supports the hypothesis that female migration is largely influenced by economic reasons, On the other hand, in the case of male, migration rate increases with increase in the educational level. This pattern also holds true for irrespective of rural and urban area.

Table-3: Migration Rate Across Educational Ggroup by Sex & Place of Residence
(Currently employed female + reasons other than marriage)

| Educational status | Total | | Rural | | Urban | |
|---|---|---|---|---|---|---|
| 2007-08 | M | F | M | F | M | F |
| Illiterate | 5.73 | 22.66 | 3.62 | 22.78 | 16.29 | 22.11 |
| Primary | 7.96 | 14.41 | 4.49 | 13.28 | 20.44 | 18.11 |
| Secondary & above | 17.23 | 20.36 | 8.00 | 17.32 | 31.78 | 24.01 |
| Total | 10.72 | 19.58 | 5.28 | 18.79 | 25.76 | 21.83 |
| | (291,457) | (280,797) | (190,313) | (18,398) | (101,144) | (96,816) |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1999-00 | | | | | | |
| Illiterate | 6.32 | 25.96 | 4.46 | 26.53 | 16.41 | 22.97 |
| Primary | 9.85 | 15.85 | 6.28 | 15.06 | 21.27 | 17.94 |
| Secondary and above | 19.45 | 22.63 | 10.84 | 20.97 | 32.38 | 24.38 |
| Total | 11.51 | 22.60 | 6.66 | 22.81 | 25.45 | 21.97 |
| | (307,609) | (289,709) | (190,143) | (181,045) | (117,466) | (108,034) |

Source: Calculated from NSS unit level data, 2007-08 & 1999-00

The rural-urban difference in migration rate shows that compared to rural, migration rate is higher for urban female from all educational categories. For the illiterate category the share of female migration is same (22 per cent), irrespective of place of residence. With respect to education there is no significant variation in the pattern between the two rounds of NSSO.

The following are the major changes that come out from the inter-temporal analysis:

1.  The inter-linkage between migration and poverty provides a completely different picture of the two consecutive NSSO rounds. For the period 1999-00, the migration pattern follows a straight line with an upward trend, indicating that with an increase in the economic status of an individual, the likelihood of migrating also increases. Contrary to this finding, the period 2007-08 provides a different picture in terms of a downward slope in the migration rates across high economic classes with a slow increment at the highest end. This shows that migration is increasingly used as a survival strategy among the poor.

2.  An increase in the proportion of migrants in salaried class is observed especially in urban areas and the increase is largely from lower economic sections of the society.

3.  The rural-urban difference in migration between NSSO rounds, for the period 1999-00, show that the migration rate of female in rural area is high. On the contrary, for 2007-08 it is higher in urban area. The female migration rate shows a slight decline in rural area while in urban area it remains the same.

**Empirical Findings from Regression Model**

Table-4 presents empirical results from the logistic analysis to understand the significance of economic factors associated with female migration. Regression results from two data points has been presented not only to understand the importance of economic factors but also to understand if there is any variation

in the relation between female migration and the socio-economic factor in terms of direction and magnitude.

**Table-4: Logistic Regression Model Predicting the Likelihood of Female Migration (currently employed female though reported marriage + Female migrated for reason other than marraige), NSS,1999-00 & 2007-08**

| Female Migration | 1999-00 | | | 2007-08 | | |
|---|---|---|---|---|---|---|
| | Odds Ratio | Std. Err. | Z | Odds Ratio | Std. Err. | Z |
| **Individual level** | | | | | | |
| Age(less than 25) | | | | | | |
| 25-34 | 2.428*** | 0.117 | 18.4 | 1.825*** | 0.043 | 25.73 |
| 35-44 | 2.412*** | 0.130 | 16.39 | 1.870*** | 0.049 | 24.06 |
| 45-54 | 2.350*** | 0.139 | 14.44 | 1.804*** | 0.050 | 21.2 |
| 55 & above | 2.247*** | 0.184 | 9.9 | 2.475*** | 0.073 | 30.68 |
| Education (Illiterate) | | | | | | |
| Primary | 0.772*** | 0.030 | -6.67 | 0.857*** | 0.015 | -8.69 |
| Secondary & Above | 0.912** | 0.044 | -1.94 | 0.972 | 0.019 | -1.47 |
| Marital status | | | | | | |
| (Never Married/others) | | | | | | |
| Currently married | 4.789*** | 0.231 | 32.41 | 3.016*** | 0.068 | 49.09 |
| Relation to head(Self) | | | | | | |
| Spouse | 0.595*** | 0.042 | -7.32 | 0.770*** | 0.021 | -9.57 |
| Others | 0.535*** | 0.036 | -9.18 | 0.594*** | 0.017 | -18.19 |
| **Household variable** | | | | | | |
| **Caste** (Others) | | | | | | |
| ST | 0.572*** | 0.029 | -11.19 | 0.742*** | 0.018 | -12.08 |
| SC | 1.048 | 0.052 | 0.96 | 0.819*** | 0.018 | -9.27 |
| OBC | 0.968 | 0.041 | -0.76 | 0.826*** | 0.014 | -11.32 |
| **Religion** (Hindu) | | | | | | |
| Muslim | 0.620*** | 0.051 | -5.85 | 0.444*** | 0.010 | -36.59 |
| Others | 0.819*** | 0.039 | -4.21 | 0.822*** | 0.021 | -7.73 |
| HHSIZE | 1.002 | 0.006 | 0.36 | 0.862*** | 0.004 | -32.06 |
| Children | 1.306*** | 0.042 | 8.23 | 1.112*** | 0.007 | 15.92 |
| Elder | 1.402*** | 0.126 | 3.76 | 0.874*** | 0.011 | -11 |
| MPCE | 1.001*** | 0.000 | 13.6 | 1.000*** | 0.000 | 21.75 |
| **Labour Market** | | | | | | |
| **variable** (Not in LF) | | | | | | |
| Self-employed | 8.183*** | 0.313 | 55.01 | 5.548*** | 0.104 | 91.53 |
| Wage/salary | 8.385*** | 0.807 | 22.08 | 3.834*** | 0.114 | 45.35 |
| Casual labourer | 7.031*** | 0.338 | 40.6 | 5.365*** | 0.121 | 74.19 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Unemployed | 4.383*** | 0.828 | 7.82 | 3.692 | 0.195 | 24.77 |
| **Regional variable** | | | | | | |
| North® | | | | | | |
| Central | 1.151* | 0.092 | 1.75 | 1.121* | 0.022 | -1.81 |
| East | 0.537*** | 0.027 | -12.19 | 0.455*** | 0.010 | -34.63 |
| Northeast | 0.091*** | 0.006 | -38.63 | 0.117*** | 0.003 | -74.52 |
| West | 1.313*** | 0.060 | 5.98 | 1.217*** | 0.028 | 8.46 |
| South | 0.442*** | 0.022 | -16.28 | 0.618*** | 0.013 | -22.28 |
| *North* | 42,488 | | | 183.710 | | |
| *Pseudo R²* | 0.4525 | | | 0.4299 | | |
| *Mean VIF* | 1.55 | | | 1.89 | | |
| *Conditional Index* | 27.088 | | | 26.256 | | |
| *Log likelihood* | 14,800.539 | | | 75,328.767 | | |

*** <= 1% level of significance, **<= 5% level of significance * <= 10% level of significance

### Individual Level Variables

The impact of age on female migration indicates that with increase in the age, the likelihood to migrate increases and is consistent over the period of time. With increase in the age females join the job markets where the chances of getting employment is more and at a later stage they migrate to join their family members

Education as such has a negative and significant effect on female migration. The lower odds of education in respect to female migration indicate the likelihood of their migration decreasing with an increase in the levels of education. This implies that at low levels of education, mobility is not a choice, rather a forced necessity for the survival of the family. It is found that education as an explanatory variable on female migration becomes consistent; however, the impact of higher education is not significant in recent period.

In terms of marital status, the odds of migration is higher for currently married female in comparison to never married and widows and it is consistent over time. No doubt, marriage becomes the most dominate cause but higher migration of currently married women may be attributed to other possibilities. Now-a-days it is increasingly realized that married females migrate along with their husbands not only as passive actors but also in search of employment for which labour force participation of female migrant increases after migration. At the same time the economic needs of households, such as meeting the consumption of needs, education and health of children, may also push females to migrate independently for employment purpose. Thus, it can be said that rather than as mere associational movers, the latest trend is that both males and females from a household migrates in search of employment opportunities.

**Household Level Variables**

Caste as a significant predictor of female migration gains importance over the time. In 1999-00, Scheduled Caste (SC) and Other Backward Castes (OBC) do not show any impact on female migration, whereas in 2007-08, the caste effect seems to be prominent. After controlling for other factors, it has been found that odds of migration are higher for females belonging to higher castes as compared to lower caste groups, In terms of pursuing higher education and better employment opportunities, females from higher economic groups show a higher migration rate. Further, as compared to Hindus, Muslims and others are less likely to migrate. This signifies that socio-cultural constraints tend to restrict female mobility.

The household size has a significant impact on female migration. For the period 2007-08, with an increase in the size of the household, the likelihood of female migration decreased. To manage the household responsibilities aged female are less likely to migrate. The result is further consistent when the relationship holds true in the case of elderly members in the household that with increase in elderly the likelihood to migrate decreases. However, the impact of household size on female migration does not have any significant impact for the period 1999-00. The findings show that if the number of children in the household increases, female mobility also increases. In order to provide children with better education and better quality life, female migrate to other places for employment reasons.

MPCE representing the economic status of household has positive and significant impact on migration but the impact on migration is quite negligible may be due to the influence of other controlling variables like education.

**Labour Market Variables**

Compared to those females who are not in labour force, women engaged in different employment activities are more likely to migrate. Rapid expansion of gender segregated labour market, changing pattern of life style etc., results in demand for women centered jobs that provide more employment opportunities to females. At the same time poverty and lack of employment opportunities force females to join as casual labourers in the informal labour market (Arya and Roy 2006; Shanti, 2006). In order to come out of poverty as well as to enhance quality of life female likes to migrate and get involved in economic activities. The impact of employment on female migration is persistently consistent over time.

**Regional Level Variables**

For the purpose of analysis the states are classified into six regions similar to the classifications made in the National Family Health Survey. The states constituting the Western regions are the most attractive regions of the female migrants. The findings show that the likelihood to migrate is higher in the western region compare to other region across the period and it is consistent over time. The odds of migration are lower for females in other regions. This outcome is consistent with the suggestions that social and economic development in terms of industrialization, creation of employment, etc., taking place in Indian states positively influence female migration.

The above findings shows that a combination of socio-economic and demographic factors significantly influence the female migration decision. Thus, to examine establish the extent to which economic factors have an impact on both households (MPCE) and the labour market (type of employment), the likelihood ratio test has been carried out. The results of the statistical test show the inclusion of economic variables as a better fit to the model. All this shows that to overcome poverty and to fulfill the immediate needs of the family most of the females adopt migration as the livelihood strategy.

**Conclusion**

This study made an attempt to understand the importance of economic factors in explaining female migration. Although, employment may not always be the driving force behind female migration, the socio-economic characteristics of migrants reveal the underlying motive behind migration of female is economic, in terms of increasing level of education, increasing labour force participation after migration, etc. The findings suggest that economic factors play a significant role in explaining female migration.

The findings from bivariate analysis show that over time the pattern of female migration is changing certain dimensions. An inter-temporal analysis of the socio-economic characteristics of migrants shows that the proportion of females across low socio-economic groups, especially in urban areas, is not only significantly higher but has steadily increased over the years. A spurt increase in the migration of females from the lowest economic class at least in urban areas between 1999-00 to 2007-08 indicates contribution of poor to migration is increasing. A substantial concentration of females in low paid jobs reveals not only their economic motivations but also the crucial role women play in the survival of their families. It signifies that migration is largely used as a strategy for the poor over the time and economic deprivation as the major determinant of migration.

    The estimated results from logistic regression suggest the relation between all economic variables and female migration hypothesized in the study gives expected results. Economically poor and illiterate females are more likely to migrate as compared to others. Apart from that household demographic indicator like large household size and presence of dependents increases the probability of female migration. Compared to females who are not into the labour force, females engaged in different type of employment or searching for work exhibit higher migration tendency. The relationship between female mobility and the socio-economic factors is consistent over time for many indicators with varying degree of magnitude. However, indicators such as the household size do not have any impact for 1999-00, while for 2007-08 it explains female migration. The post estimation statistical test that is the likelihood ratio test reveals that inclusion of economic variables as predictors of female migration result in statistically significant improvement in the model. Hence, it can be said that like non-economic factors, economic factors also play a significant role in explaining female migration.

Therefore, one can state that females are no longer passive movers in the migration process and like male they are also motivated by economic factors. Hence, it become imperative in future research to throw more light on economic aspects of female migration.

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