

Full Length Research Paper

Impact of socio-economic and demographic characteristics on female migrants of Meherpur sadar thana at Meherpur district, Bangladesh

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The purpose of this paper is to identify the effects of socio-economic and demographic characteristics on female migrants. The data was collected using multi-stage sampling technique at Meherpur sadar thana at Meherpur district, Bangladesh. The logistic regression analysis has been used to determine the influential factors of migration. In this paper, it is identified that most of the female migrants are migrated due to marriage. The logistic regression analysis indicated that respondents age, age at first marriage, education status, occupation and type of family have significant effects on causes of migration among the selected variables. The risk of migration is higher times for migrants aged 20-25 years than the migrants aged less than 20 years.

Keywords: Female migrants, socio-economic factors, demographic characteristics, chi-square test, logistic regression model.

INTRODUCTION

Bangladesh is one of the most densely populated countries of the world. The population of Bangladesh is mostly poor and most of them live in rural areas. At the same time as international migration has been receiving more attention in recent decades on migration, internal migration is far more significant in terms of the numbers of people involved and perhaps even the quantum of remittances and poverty reduction potential of these. With some exceptions, the facts suggest that internal movements are increasing gradually over time. The classic push and pull forces that resulted in population from poor regions migrating to richer rural and urban locations still exist and may even be accentuated with rising population pressure and deteriorating land and water availability. But a lot of new patterns have also emerged including urbanization and manufacturing.

Migration is a routine livelihood strategy of poor households which helps to smooth seasonal income

fluctuations and earn extra cash to meet contingencies or increase disposable income. Internal migration is important almost everywhere and in some countries is far greater than international migration. Although still not the main form of migration in many developing countries, rural-urban migration is rapidly gaining in importance especially in the urbanizing economies of Asia as rural-urban wage differential grow and returns from migration increase. In Bangladesh, two-thirds of all migration currents from rural areas is to urban areas and are increasing very rapidly (Afsar, 2003). On the other hand rural-rural migration has been decreasing, while the share of rural-urban migration has been increasing.

Rural-urban migration differentials have significant and core role in identifying the nature and strength of the socio-economic and demographic impacts of the population concerned. Many researchers as well as academicians are tried to establish some uniformly applicable migration patterns and trends for all countries at all times. Nevertheless both these categories are preponderantly driven by economic reasons. Information, technology and communication also influence the decision of migration

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(CUS, 1990). Generally, the differentials migration has been studied mainly by age, sex, marital status, education, occupation and economic status. Several studies reported that determinants of migration vary from country to country and even within a country, it varies depending on the socio-economic, demographic and cultural factors. High unemployment rate, low income, high population growth, unequal distribution of land, demand for higher schooling, prior migration patterns and dissatisfaction with housing have been identified as some of the prominent determinants of rural out migration (Bilsborrow et al., 1987; Kadioglu, 1994; Nabi, 1992; Sekhar, 1993; Yadava, 1988; Singh and Yadava, 1981). They also find that out migration of young male leads to decline in fertility at the place of origin.

The accelerating rate of rural-urban migration is high among the least developed countries of Asia. Hugo (1981) estimated the loss of young adults through migration from village leads to undermining of agricultural production by way of agricultural laborer. People migrated to cities and towns because they are attracted by livelihood opportunities. Studies on migration have been established with positive association between levels of infrastructure development of a region and the magnitude of out-migrations (CUS, 1990).

Urbanization has been one of the dramatic global social transformation of the 20th century. The propensity of migration is usually influenced by a combination of push-pull factors. In Bangladesh, adequate attention to migration aspects has not given which may be due to lack of national level data. The existing micro-level studies mostly investigate the characteristics of migrants at destination places mainly Dhaka city (CUS, 1988, 1990 and 1996), giving a little attention to the causes of out-migration from villages (Afsar, 1995; Chowdhury, 1978). Majumder et al. (1989) and Amin (1986) studied the economic consequences of migration based on sample surveys conducted in Dhaka city. Chowdhury (1980) found that out-migration is generally higher from the villages characterized by land scarcity, unequal distribution of land, and high proportion of agricultural laborer. Afsar (1995) argued that migrants often benefited more than non-migrants because of their innovative, risk taking and desperate nature. The benefits included higher or regular income, gain in wealth, greater access to public services and education.

The study of migration is the key importance in population studies. Migration is considered to be the stage of development. Migration is not only correlated to development but also to urbanization and industrialization. Thus, it is important to study the demographic and socio-economic characteristics of migrants to get an idea about the influences and consequences of migration. This study tries to answer the question of why some families participate in migration process while others not? Therefore, it is important to

understand intentions of migration, extent of migration and its effect on the growth of urban population for proper urban planning as well as for furthering rural development.

Therefore, the objective of this paper is to identify the determinants of migration and hence also to investigate the main factors affecting causes and types of migration.

Sources of data

To fulfill the aforementioned objectives, the data were collected from Meherpur district under seven wards at Meherpur Sadar thana during 5th to 27th January in 2008 using multistage sampling technique. Actually, in this paper, three-stage sampling technique was adopted, that is, Meherpur district was chosen as 1st stage and then, Meherpur Sadar thana out of three thana of Meherpur district was taken as second stage. Thereafter, seven wards out of nine wards of Meherpur Sadar thana was considered as third stage.

METHODOLOGY

The logistic regression model can be used not only to identify risk factors but also to predict the probability of success. This regression is useful when the dependent variable is dichotomous. The interpretation of the parameters in logistic regression has another interesting aspect. To describe this, we first consider that the dependent variable Y is dichotomous and independent variables (X_j) are categorical. The logistic regression model is addressed by the following:

$$Y = \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k}} \quad \text{where } \beta_0, \beta_1, \dots, \beta_k \text{ are}$$

parameters and x₁, x₂,....., x_k are explanatory variables. The dependent variables considered in this study are as follows:

For model 1: Y = causes of migration = 1, if migration is occurred due to marriage and

0, otherwise

For model 2: Y = type of migration = 1, if rural to urban migration

migration =

0, otherwise

The independent variables used in these models are presented in the respective tables.

RESULTS AND DISCUSSION

The background characteristics of the respondents are demonstrated in table 1. In this table, it is seen that most of female migrants (21.4%) are in the age group 35-39

Table 1. Percentage distribution of the female migrants based on background characteristics

Background characteristics	Number of migrants	Percentage	Background characteristics	Number of migrants	Percentage
Age group:			Occupational status:		
15-19	10	1.4	Farmer	-	-
20-24	52	7.4	Housewife	567	81.0
25-29	147	21.0	Job	100	14.3
30-34	142	20.3	Business	10	1.4
35-39	150	21.4	Labor	6	.9
40-44	132	18.9	Others	17	2.4
45-49	44	6.3	Per-Monthly income(Tk):		
50-54	17	2.4	<1000	579	82.7
55+	6	0.9	1000-2000	14	2.0
Causes of migration:			2001-3000	17	2.4
Political			3001-4000	11	1.6
Economical	26	3.7	4001-5000	18	2.6
Education	55	7.9	5001-6000	16	2.3
Marriage	-	-	6001-7000	21	3.0
Environment	412	58.9	7001-8000	9	1.3
Job	29	4.1	8000+	1	2.1
Business	56	8.0	Type of family:		
Others	-	-	Single	554	79.1
Education status:			Joint	146	20.9
Illiterate	122	17.43	Religion:		
Signatory	122	17.4	Muslim	664	94.86
Primary	67	9.6	Non-Muslim	36	5.14
Secondary	161	23.0	Age at first marriage:		
H. secondary	180	25.7	<18	348	49.7
Graduation and above	87	12.4	18+	352	50.3
	83	11.9			

Table 2. Chi-square value and significant level of some socio-economic and demographic variables for female migrants

Characteristics	Causes of migration			Stream of migration		
	Chi-square value		Significant level	Chi-square value		Significant level
	Calculated value	Tabulated value		Calculated value	Tabulated value	
Respondents age	1.648	5.991	Insignificant	14.603	5.991	Significant
Place of birth	0.504	3.841	Insignificant	302.894	3.841	Significant
Religion	2.800	3.841	Insignificant	14.656	3.841	Significant
Age at first marriage	105.709	5.991	Significant	57.800	5.991	Significant
Education	45.643	5.991	Significant	50.054	5.991	Significant
Occupation	23.929	5.991	Significant	7.898	5.991	Insignificant
Monthly income	23.886	7.815	Significant	13.286	7.815	Significant
Type of family	9.071	3.841	Significant	0.443	3.841	Insignificant

years. From table 1 it is observed that most of female migrants (58.9%) migrated due to marriage. Most of the female migrants (25.7%) are secondary level educated. It is also observed that maximum number of female migrants (81%) is housewife and more than 50.3% of

female migrants are married who belong to the age 18+ years. From table 1 it is seen that most of the migrated family (79.1%) are single family.

The results of chi-square test are presented in table 2. It is found that, age at marriage, education, occupation,

Table 3. Logistic regression estimates for the effect on causes of migration with socio-economic and demographic variables

Characteristics	Coefficient (β)	S.E. of estimates (β)	Wald	Odds ratio
Respondent's age:				
<20 (R)	-	-	-	1.00
20-25	1.894*	0.582	10.595	6.645
25+	0.240	0.288	0.692	1.271
Place of birth:				
Rural (R)	-	-	-	1.00
Urban	0.251	0.210	1.429	1.286
Religion:				
Muslim (R)	-	-	-	1.00
Non-Muslim	-0.747	0.472	2.509	0.474
Age at first marriage:				
<15 (R)	-	-	-	1.00
15-20	-3.878*	0.494	61.655	0.21
20+	-0.586	0.245	5.736	0.556
Education status:				
Illiterate (R)	-	-	-	1.00
Primary	-0.901*	0.259	12.077	0.406
Secondary and above	-0.130	0.265	0.242	0.878
Occupation:				
Housewife (R)	-	-	-	1.00
Service	-0.578	0.718	0.647	0.561
Others	-1.774*	0.606	8.577	0.170
Monthly income:				
<1000 (R)	-	-	-	1.00
1000-3000	0.997	0.786	1.611	2.711
3001-5000	-0.338	0.622	0.295	0.713
5000+	0.438	0.486	0.812	1.549
Type of family:				
Single family (R)	-	-	-	1.00
Joint family	0.972*	0.224	18.878	2.643
Constant	1.129	0.805	1.964	3.092

*Significant at $\rho < 0.10$ and R means reference category

monthly income and type of family are significantly correlated to causes of migration. It is also found that respondent age, place of birth, religion, age at first marriage, education and monthly income are significant with stream of migration.

The result of logistic regression model is presented in table 3 and table 4. Table 3 shows that five variables are statistically significant at 10% level among the selected variables. The age is the most important demographic characteristics of migrants that influence migration. Table 3 shows that the estimated regression coefficient for the age groups 20-25 years and 25+ years are 1.894 and 0.240 which means that positive effects on migration for female migrants. The odds ratio for the age group 20-25 and 25+ years are 6.645 and 1.271. It is indicated that

6.645 and 1.271 times higher risks of migration than that of age under 20 years.

The estimated regression co-efficient of the age groups 15-20 and 20+ years for the age at first marriage of the female migrant's are -3.878 and -0.586 that is negatively affect on migration. The odds ratio for the age groups 15-20 and 20+ years are 0.021 and 0.556 which indicated that 0.021 and 0.556 times' lower risks of migration than that of under age 15 years. From the table, it is observed that the estimated regression co-efficient of education for primary and secondary and above are -0.901 and -0.130 which means has negative effects on migration. The risks of migration for primary and secondary and above are 0.406 and 0.878 times lower than that of illiterate.

Table 4. Logistic regression estimates for the effects on type of migration with socio-economic and demographic variables

Characteristics	Coefficient (β)	S.E. of estimates (β)	Wald	Odds ratio
Respondent's age:				
<20 (R)	-	-	-	1.00
20-25	0.053	0.635	0.007	1.055
25+	0.964	0.544	3.142	2.622
Place of birth:				
Rural (R)	-	-	-	1.00
Urban	-4.062*	0.304	178.918	0.017
Age at first marriage:				
<15 (R)	-	-	-	1.00
15-20	2.127*	0.363	34.410	8.392
20+	2.489*	0.442	31.650	12.053
Religion:				
Muslim (R)	-	-	-	1.00
Non-Muslim	-0.414	0.549	0.570	0.661
Education status:				
Illiterate (R)	-	-	-	1.00
Primary	1.244*	0.369	11.398	3.470
Secondary and above	0.787*	0.325	5.854	2.197
Occupation:				
Housewife (R)	-	-	-	1.00
Service	1.673*	0.980	2.915	5.329
Others	3.867*	0.954	16.417	47.804
Monthly income:				
<1000 (R)	-	-	-	1.00
1000-3000	-1.095	1.100	0.990	0.335
3001-5000	-2.530*	1.095	5.337	0.080
5000+	-1.150	1.027	1.253	0.317
Type of family:				
Single family (R)	-	-	-	1.00
Joint family	0.636*	0.306	4.312	1.889
Constant	-2.079	0.592	12.345	0.12

*Significant at $\rho < 0.10$ and R means reference category

Occupation is an important factor for causes of migration. The estimated regression co-efficient of occupation for female migrants are -0.578 and -1.774 which indicated that it has negative effects on migration. The odds ratio for services and others group are 0.561 and 0.170 times lower risks of migration than that of housewife. The estimated regression co-efficient of family type is 0.972 which has positive effects on migration. The odds ratio for joint family is 2.643. It is indicated that the risks of migration for joint family 2.643 times higher than that of single family.

In table 4, place of birth, age at marriage, educational qualification, occupation and type family are statistically significant at 10% level. It is found that the estimated regression co-efficient for urban area is -4.062 which means it has negative effects on migration. The odds

ratio of urban area is 0.017, it is indicated that the risks of migration is 0.017 times lower than that of rural areas. The estimated regression co-efficient for age at first marriage of female migrant's belongs to the age group 15-20 and 20+ years are 2.127 and 2.489 which indicated that it has positive effects on migration. The risks of migration that belongs to the age groups (15-20) and 20+ years are 8.392 and 12.053 times higher than that of under age 15 years.

The estimated regression co-efficient of primary and secondary and above are 1.244 and 0.787 which means that it has positive effects on migration. The risks of migration for primary and secondary and above are 3.470 and 2.197 times higher than that of illiterate. Occupation plays an important role on migration. The estimated regression co-efficient of occupation of female migrant's

are 1.673 and 3.867 which means that it has positive effects on migration. The odds ratio of service and others occupation are 5.329 and 47.804 times higher risks of migration than that of housewives. The regression coefficient of family type is 0.636 which means it has positive effects on migration. The odds ratio of joint family is 1.889. It is indicated that the risks of migration are 1.889 times higher than that of single family.

CONCLUSION

Migration is an important factor to study population dynamics. It also contributes to population change of a country or sub region of a country. In fact, it is the third basic component of population dynamics. This paper focuses some important features of internal migrants based on our collected data. In this paper, it is focused that most of the female migrants are migrated due to marriage. Although they migrated due to several causes but most of them are housewife. The logistic regression analysis suggested that respondent's age, age at first marriage, education status, occupation and type of family have been found to be the significant influence on causes of migration. The risk of migration is significantly lower for female migrant's having service and others occupation than housewife. It gives an overview that most of the migration occurs due to marriage.

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