

Effects of Some Selected Socio-demographic Variables on Male Migrants in Bangladesh

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Abstract: The purpose of this study is to identify the intensity of the effects of various socio-economic and demographic factors on migration. The data was collected by multi-stage sampling technique at Meherpur sadar thana at Meherpur district, Bangladesh. This paper shows exact causal links between various selected socio-economic and demographic variables. Multivariate technique like as path analysis has been used to find out the direct, indirect, total and implied effects of the selected socio-economic and demographic factors on migration. This study find out that religion, educational qualification and occupation of the household head have positive direct effects on migration.

Key words: Male migrants, socio-economic and demographic variables, path model and direct and indirect effects

INTRODUCTION

The population of Bangladesh is mostly poor and maximum of them lives in rural areas. It is one of the most densely populated countries of this modern world. Migration has become an important livelihood strategy for many poor groups across the world. While it is no panacea for the poor it brings many benefits and this is being recognized in some policy and research circles. Population mobility is a necessary condition for sustainable development and poverty alleviation. Anh (2003) concludes that migration is a driver of growth and an important route out of poverty with significant positive impact on people's livelihoods and wellbeing. Afsar (2003) also argues that migration has reduced poverty directly and indirectly in Bangladesh as remittances have expanded the area under cultivation and rural labour markets by making land available for tenancy. The potential of migration is also attracting attention in Bangladesh. Anderson (2002) argues that rural-urban migration can bring many benefits where the low population density, poverty and mountainous terrain make it expensive and difficult to provide services in rural areas.

Migration is a process that occurs between two places of people with many objectives. Bangladesh is poverty stricken and agrarian based country. Due to increasing poverty and landless as well as underemployment and unemployment, Bangladesh rapidly goes through deteriorating conditions. In such a situation, a large number of people seek overseas employment especially, internal migration has occurred to unlock the opportunity of employment status. According to the population

census 2001 (BBS, 2003) the total enumerated population of the country stood 123,851,120 of which 63,874,740 were males and 59,956,380 were females. Of the total population, 28,605,200 live in urban areas and 95,245,920 live in rural areas. Rural-urban migration differentials have significant role in identifying the nature and strength of the socio-economic and demographic impacts of the population concerned. Nevertheless both these categories are preponderantly driven by economic reasons. Information and communication also influence the decision of migration (CUS, 1990). Generally, the differentials migration has been studied mainly by age, sex, marital status, education and occupation. Several studies reported that determinants of migration vary from country to country, continent to continent, developed countries to developing countries 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, previous migration patterns and displeasure with housing have been identified as a number of of the prominent determinants of rural out migration (Billsborrow *et al.*, 1987; Nabi, 1992; Sekhar, 1993; Yadava, 1988; Singh and Yadava, 1981) finds that out migration of young male leads to decline in fertility at the place of origin.

The accelerating rate of rural-urban migration (urbanization) 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-migration (CUS, 1990). Urbanization has been one of the theatrical 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). 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 key importance in population studies. Migration is the primary stage of development. Migration is not only related to development but also related to urbanization and industrialization. Thus, it is important to study the socio-economic characteristics of migrants to get an idea about the background characteristics of migrants. This study provide a better understanding as to why some families participate in migration process while others not. Therefore, it is important to understand intention of migration, extent of migration and its effect on the growth of urban population for proper urban planning in addition to for furthering rural development.

The aim of this paper is to study the direct, indirect and joint contributions of the selected socio-economic and demographic factors on migration using path model analysis.

Area of study: This scientific research is performed by primary data. The data was collected from Meherpur district under seven wards at Meherpur sadar thana by Multistage sampling technique during 5th to 27th January in 2008. The socioeconomic and demographic characteristics of migrants are considered at the time of data collection.

METHODS

Path analysis is a standardized multiple regression analysis (using a standardized form of dependent and predictor variables with mean zero and unit variance) in which a chain of relationships among the variables, arranged in an orderly manner, is examined through a series of regression equations.

The path analysis employed in this paper was developed by Alwin and Hauser (1975). The Alwin and Hauser method requires the following steps. “For each

Table 1: The variables which have been used in path analysis

Causes of migration of household head (X ₁)	Dependent variable
Age of household head (X ₁)	
Income of household head (X ₂)	
Family member (X ₃)	Exogenous
Type of house (X ₄)	
Land property (X ₅)	
Religion (X ₆)	
Educational qualification (X ₇)	Endogenous
Occupation of household head (x ₈)	

endogenous variable in the model, obtain the successive reduced from equation”. First regress the endogenous variables only on the exogenous variables. Next regress the endogenous variables on the exogenous variables and the intervening endogenous variables that come in sequence from cause to effect. While the first reduced form of equation of a particular endogenous variable gives the total effects, the last equation gives the direct effects. Successive deduction of path coefficients from first to second equation, from second to third equation etc. gives the indirect effects. The characteristics which have been used in this analysis are exposed in Table 1.

Model specification: In path diagram, the causal links among the variables are assumed to be a conceptual framework conceived in advance. It is to be noted that data set has no role to play in deciding either the causal links between the variables or the variables to be included in the path analysis. According to the causal ordering of variables, we may denote the set of selected variables into three groups (exogenous, endogenous and dependent) that are given in the following:

- Exogenous variable: X₁, X₂, X₃, X₄, X₅
- Endogenous variable: X₆, X₇, X₈
- Dependent variable: X₉

The given model is a recursive path model in which each variable is measured to be dependent upon all prior causal variables. Under additional assumption of linearity and additively the system of equations for the model can be written as

$$Y_6 = P_{61}Y_1 + P_{62}Y_2 + P_{63}Y_3 + P_{64}Y_4 + P_{65}Y_5 + P_{6u}Q_u$$

$$Y_7 = P_{71}Y_1 + P_{72}Y_2 + P_{73}Y_3 + P_{74}Y_4 + P_{75}Y_5 + P_{76}Y_6 + P_{7v}Q_v$$

$$Y_8 = P_{81}Y_1 + P_{82}Y_2 + P_{83}Y_3 + P_{84}Y_4 + P_{85}Y_5 + P_{86}Y_6 + P_{87}Y_7 + P_{8w}Q_w$$

$$Y_9 = P_{91}Y_1 + P_{92}Y_2 + P_{93}Y_3 + P_{94}Y_4 + P_{95}Y_5 + P_{96}Y_6 + P_{97}Y_7 + P_{98}Y_8 + P_{9x}Q_x$$

Where, P_{ji}’s are path coefficients from Y_i to Y_j and Q_u, Q_v, Q_w and Q_x are random disturbance terms. These equations are known as structural equations. These selected variables give the estimates of path coefficients and helps in understanding the important links between various variables considered in the causal model. Now, all the variables are transformed into normal forms by subtracting the respective means and dividing by the

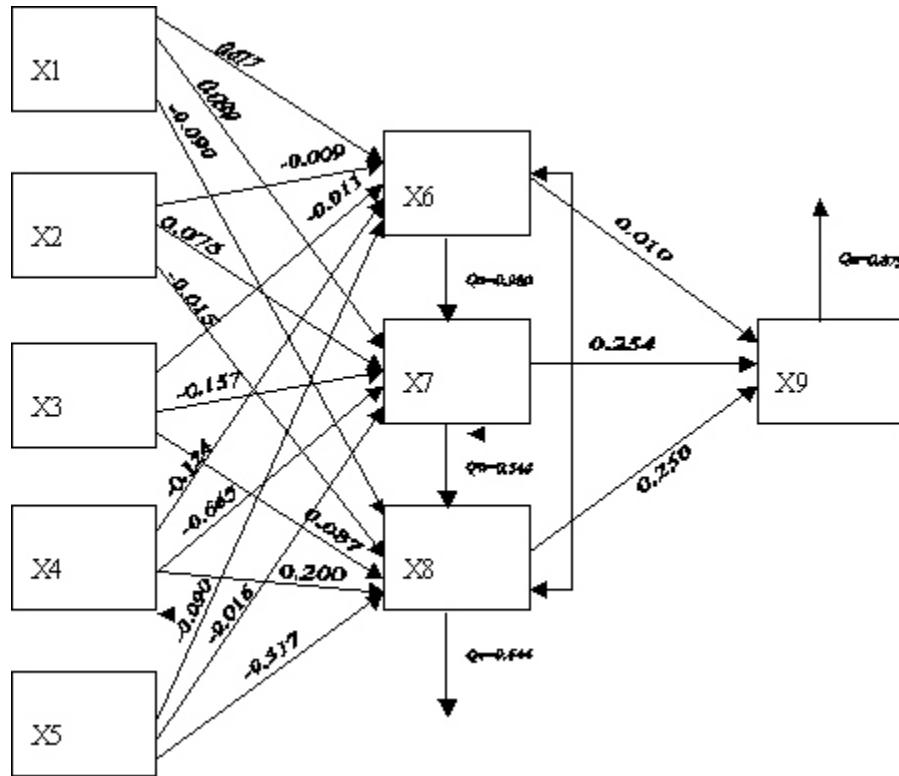


Fig 1: Interrelationships between various socio-economic and demographic variables of the migrants.

respective standard deviation. The regression coefficients thus obtained are the path coefficients.

RESULTS AND DISCUSSION

The results of zero order correlation coefficients of various socio-economic and demographic variables are demonstrated in Table 2. Path coefficients are shown in Fig. 1 and the different types of effects are presented in Table 3. Also Table 4 is showed their percentage values. In path analysis, we obtain path coefficients direct, indirect, implied effects of the selected explanatory variables. From Table 2, it is observed that four variables are statistically significant out of nine variables. This table is also showed that interrelationships among the selected characteristics.

In this model, out of 8 variables 5 variables are exogenous variables or have indirect effects on migration and 3 variables are endogenous variables or have direct effects on causes of migration. It is also observed that variables [income (X₂), type of house (X₄), land property (X₅), and educational qualification (X₇)] are found to have significant effect on migration and variables [age of respondent (X₁), family member (X₃), religion (X₆), and occupation (X₈)] are found to have insignificant effect on migration.

Total effects of exogenous variables like as family member (X₃), type of house (X₄), and land property (X₅)

are observed negative direction. The total effects of the remaining variables are shown positive direction on migration. Total effects of endogenous variables like as religion (X₆), and educational qualification (X₇) are observed negative direction. The remaining of the total effects is shown positive direction on migration.

Total effect of age of respondent (X₁) on migration is 0.036, of which about 45.20% is transmitted through its implied effect and about 6.80% is transmitted through religion in the same direction then about 12.0% is transmitted through educational qualification in the same direction and about 36.0% is transmitted through occupation in the same direction. Total effect of income (X₂) on migration is 0.083, of which about 24.42% is transmitted through its implied effect and about 6.87% is transmitted through religion in the same direction then about 57.25% is transmitted through educational qualification in the same direction and about 11.45% is transmitted through occupation in the same direction. Implied effects of exogenous variables like as family member (X₃), type of house (X₄), and land property (X₅), are observed negative direction. The remaining of the implied effects is shown positive direction on migration. Direct effects of endogenous variables like as religion (X₆), educational qualification (X₇), and occupation (X₈), are observed positive direction. Total effect of family member (X₃) on migration is -0.160, of which about 23.65% is transmitted through its implied effect and about

Table 2: Zero order correlation coefficients among selected socio-economic and demographic variables

Variable	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
X ₁	1.000	.114**	0.445**	-0.127**	0.213**	-0.026	0.052	-0.163**	0.061
X ₂		1.00	0.151**	-0.387**	0.197**	0.017	0.307**	-0.239**	0.099**
X ₃			1.00	-0.174**	0.411**	-0.035	-0.020	-0.117**	-0.055
X ₄				1.00	-0.249**	-0.094*	-0.658**	0.463**	-0.205**
X ₅					1.00	-0.069	0.112**	-0.390**	-0.090*
X ₆						1.00	-0.019	0.074	0.042
X ₇							1.00	-0.466**	0.249**
X ₈								1.00	0.066
X ₉									1.00

**Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed)

Table 3: Analysis of direct and indirect effects on migration through endogenous and exogenous variable

Dependent variable	Exo.Var.	Total association	Total effect	Non-causaleffect*	Indirect effect via			Other variables (Implied effect)	Direct effect
					X ₆	X ₇	X ₈		
X ₉	X ₁	0.061	0.036	-0.025	-0.017	0.030	-0.090	0.113	--
	X ₂	0.099	0.083	-0.016	-0.009	0.075	-0.015	0.032	--
	X ₃	0.055	-0.160	-0.105	-0.011	-0.157	0.087	-0.079	--
	X ₄	-0.205	-0.743	-0.538	-0.124	-0.665	0.200	-0.154	--
	X ₅	0.090	-0.479	-0.389	-0.090	-0.016	-0.317	-0.056	--
	X ₆	0.042	-0.013	-0.055	--	0.089	0.066	--	0.010
	X ₇	0.249	-0.033	-0.282	--	--	0.287	--	0.254
	X ₈	0.066	0.250	0.184	--	--	--	--	0.250

Table 4: Percentage of the total absolute effect on migration through endogenous and exogenous variables

Dependent variable	Selected variable	Percentage of indirect effect via			Other variables (Implied effect)	Direct effect
		X ₆	X ₇	X ₈		
X ₉	X ₁	6.80	12.00	36.00	45.20	--
	X ₂	6.87	57.25	11.45	24.42	--
	X ₃	3.29	47.00	26.04	23.65	--
	X ₄	10.84	58.18	17.49	13.47	--
	X ₅	18.78	3.34	66.17	11.69	--
	X ₆	--	53.93	40.00	--	6.06
	X ₇	--	--	53.04	--	46.95
	X ₈	--	--	--	--	100.0

3.29% is transmitted through religion in the opposite direction then about 47.0% is transmitted through educational qualification in the opposite direction and about 26.04% is transmitted through occupation in the opposite direction. Total effect of type of house (X₄) on migration is -0.743, of which about 13.47% is transmitted through its implied effect and about 10.84% is transmitted through religion in the opposite direction then about 58.18% is transmitted through educational qualification in the opposite direction and about 17.49% is transmitted through occupation in the opposite direction. Total effect of land property (X₅) on migration is -0.479, of which about 11.69% is transmitted through its implied effect and about 18.78% is transmitted through religion in the opposite direction then about 3.34% is transmitted through educational qualification in the opposite direction and about 66.17% is transmitted through occupation in the opposite direction.

CONCLUSION

It is evident from the foregoing discussions that path analysis is essentially a method for reducing the inter-correlation matrix for a specified set of variables, on the basis of a framework of postulated causal relationships, to measure strength of the several causal chains. From the study it is observed that religion, educational qualification and occupation of household head have positive direct

effects on migration. Most of the person wants to migrate due to better educational facility and due to better job opportunity. For this rationale, education and occupation have directly influence on migration process.

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