Factors affecting rural-urban migration of agricultural laborers

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ARTICLE INFORMATION	ABSTRACT
	Rural-urban migration is an important issue regarding the availability of manpower both in rural and urban areas of Bangladesh. It's a dynamic issue and depends on various changing factors over time. The present study is an attempt to explore the present factors that cause laborer migration. It purports to inquire into push and pull factors of migration of agricultural laborer in Dumuria upazila of Khulna district. Data were collected from the purposively selected 80 respondents during August to September 2019 through a structured interview schedule on a number of eleven selected socioeconomic and demographic characteristics and the (push-pull) factors affecting migration. Relationships between the concerned independent variables and dependent variable (migration to urban area) were ascertained using Pearson's Product Moment Coefficient of Correlation (r) [for parametric data] and Spearman's Rank Order Coefficients (ρ) [for non-parametric data] of Correlation. The majority of the respondents (58.75%) were middle aged, 27.50% had higher secondary level of education, 76.25% were married, 60% belonged to the medium sized family, 65% had small sized farm, and 46.25% had low experience in farming. The majority (58.75%) of the respondents had low annual family income, 78.75% had no training, 56.25% had no organizational participation, 56.25% had low scale of extension media contact, and 46.25% had high cosmopolitanism. More than half (53.75%) of the respondents made a decision by themselves to migrate with a properly planned way (67.5%). About half of the migrants (48.75%) are presently involved in works which are permanent in nature. The majority (63.25%) of the respondent indicated that the place of migration is more improved than the previous residence. 60% of the respondents were moderately affected by push factors and 66.25% were affected by pull factors of rural-urban migration. The respondents had a high migration index of push factors regarding landlessness (67.50%) and pull factors regarding most attractive quality life (82.08%). Among other push factors extreme poverty (65.83/%) and searching for work (63.75%) ranked 2nd and 3rd respectively. Among other pull factors more wealth (81.25%) and better service (79.17%) ranked 2nd and 3rd respectively. Among the selected characteristics of the respondents, there was a significant negative relationship between farming experience and migration. The study concludes that rural-urban migration occurs not for ignoring agricultural activities, but it happens for searching improvement of overall life status by a farmer.

Keywords: Agricultural laborers, migration, push-pull factors, relationships |

1   Introduction

Migration is a very old phenomenon. From the very beginning of human civilization, people migrated for food and security. Now people migrate for economic opportunity and income security. From the thirteenth century European people had migrated one place to another for trade. During that time some people migrated for short-term and some migrated for long-term. Bangladesh is an agrarian country and about 65% of its population lives in rural areas (WB, 2016). Considering the massive population, till now the main focus of the Government of Bangladesh is being consistently given on food production for feeding this massive mass. A considerable quantity of this population is frequently migrating everyday by being affected by lots of factors. Seasonal migration is a common phenomenon in the Southwestern region of Bangladesh. Migration, natural hazards and crop diversification are subsequently interlinked to rural poverty. Disasters affected people often migrate to cope with seasonal food crisis.

Migration is radically changing the socioeconomic, demographic and development profile of developing countries, with far-reaching implications for agriculture-based economies. According to United Nations estimates, 50% of the projected increase in the world's urban population will come from rural-to-urban migration, so that by 2025, over 1.1 billion urban people in Less Developed Regions will be rural migrants (Guerny, 1995). Agricultural laborer migration is also one type of laborer migration from one place to another place for their livelihood. Agricultural laborers, especially in smaller villages away from towns and cities, are generally unskilled workers carrying on the agricultural operation in the centuries old traditional ways. Most agricultural workers belong to the depressed classes, which have been neglected for ages. The depressed classes have been socially handicapped and they never had the courage to assert themselves. In some parts of Bangladesh, agricultural laborers are migratory; moving in search for jobs at the time of harvesting. This movement has some time helped them to get the benefits of growth and development.

In Bangladesh 66% rural migration is directed towards urban centers, whereas 10% account for rural-rural migration and 24% for overseas migration (Afsar, 2003). Massive rate of rural to urban migration and excessive pressure in urban labor force has been a major concern to all. Bangladesh at the present is 7th most populous country in the globe. Based on the current rate of growth of population, the country's population is expected to reach 190 million in 2025 (ESCAP, 2007). Like many countries, the rate of urban poor people in Bangladesh is increasing. People mostly migrate in order to find better jobs. Rural life is changing fast. People are far less dependent on agriculture and related works. They increasingly depend on off-farm livelihoods, which often involve some form of migration (Afsar, 2003).

Agricultural laborers are vital contributors to the agricultural production in Bangladesh. However, due to the scanty wages received from the land owning farmers after selling labor is not sufficient enough to fulfill their daily requirements. Mainly for this reason, the wage-workers frequently migrate to the urban areas in search of improved and secured livelihoods. However, this is not the single reason for rural-urban migration. There might be many other associated factors which are responsible for rural-urban migration that are merely known. Thus, the present piece of research work was conducted to find out those responsible factors for rural-urban migration.The specific objectives were, (a) to explore the socioeconomic characteristics of the migrants, (b) to portray the patterns and processes of the migration, (c) to identify the factors which are responsible for rural-urban migration, and (d) to ascertain the relationships between the farmers' selected characteristics with the factors affecting migration.

2   Materials and Methods

The study was conducted at Dumuria upazila under Khulna district. Purposive sampling was followed to select 80 migrants from Dumuria upazila who have been migrated from agricultural works and continued their livelihood in urban areas.The selected factors affecting rural-urban migration were considered as the dependent variables of the study. Rural-urban migration index scores were computed for each respondent on the basis of one's extent of factors with 15 selected "push" issues and 15 selected "pull" issues of rural-urban migration as ascertained from one's responses in the interview schedule. The respondents gave their opinion against 4-point rating scale as 'extremely', 'moderately', 'rarely' and 'not at all'. The scores were assigned as 3, 2, 1 and 0, respectively for a statement. Thus, the factors of rural-urban migration score could range from 0 to 45 where 0 indicating no factors of rural-urban migration and 45 indicating highest factors of rural-urban migration.

To compare among the statements related to factors related to the migration a Migration Score (MS) was calculated. MS was calculated by using the following formula:

$$MS = (N_3 \times 3) + (N_2 \times 2) + (N_1 \times 1) + (N_0 \times 0)$$

Where, MS = Migration Score, N_3, N_2, N_1 and N_0 denote the number of respondents rated the migration as 'extremely', 'moderately', 'rarely', and 'not at all'. The score for extent of individual pull or push factor could be ranged from "0-240", calculated by

multiplying the total number of respondents with the lowest and highest possible score.The extent of each could be calculated by the following formula:

$$MI = \frac{M_O}{M_H} \times 100$$

where, MI = Migration Index, and M_O and M_H denote observed and highest possible migration score. Based on MIS, the 15-selected factors were ranked from each category (i.e., push and pull).

Ten questions were asked to the respondents to know about their migration patterns and process. Knowledge was measured in a qualitative way in which ten questions were asked to the respondents about the patterns and processes of migration of the migrants. Against each question, each respondent answered multiple answers. This is later converted into percentage. The appropriate scoring technique was followed to convert the data into a quantitative form in case of qualitative data. Local units of measurements were converted into standard units. All personal characteristics were categorized and arranged into simple tables for interpretation and discussion. Statistical treatments such as range, means, standard deviation, maximum, minimum, rank order, etc. were used to interpret data. To explore the relationship between the concerned variables Pearson's Product Moment Coefficient of Correlation (r) and Spearman's Rank Order Coefficient (ρ) of Correlation were employed. 5% level of probability was the basis for rejecting any null hypothesis throughout the study. Here for age, educational qualification, marital status, family size, farm size, farming experience and annual family income Pearson's product moment correlation was used because these value could be zero, and for other variables that means agricultural training, organizational participation, cosmopolitanism, extension media contact was computed with Spearman's rank order coefficient of correlation.

3 Results and Discussion

3.1 Socioeconomic characteristics

The characteristics of the migrants were classified into suitable categories for description and interpretation in relation to factors affecting migration (Table 1). About half (58.75%) of the respondents were middle aged as compared to young aged 30% and old aged 11.25%. The highest proportion (27.50%) of the respondents had higher secondary level of education followed by secondary (18.75%), primary (13.75%), illiterate (12.50%), junior (11.25%), graduate or above (8.75%) and can sign only (7.50%), respectively. About three-forth (76.25%) of the respondents were married as compared to single (12.50%), widowed (10%) and divorced (1.25%). The majority (60%) of the respondents belonged to the middle sized family while 25%

and 15% of the respondents belonged to small sized family and large sized family, respectively. The majority (65%) of the respondents had small sized farm. However, 32.50% of the respondents had marginal sized farm and 2.50% had medium sized farms. None of the respondents had the large sized farm.Highest proportion (46.25%) of the respondents was low experienced in farming followed by medium experience (35%) and high experience (18.75%). The majority of the respondents had low family income (58.75%) followed by extremely low (15%), medium (15%), high (11.25%) income.About three-fourth (78.75%) of the respondents had no training. However, the respondents had low training (13.75%) on organic farming followed by medium (6.25%) and high (1.25%) training.The majority (56.25%) of the respondents had no organizational participation. On the other hand, about two-fifth (43.75%) of the respondents had low organizational participation and none of the respondents had medium and high organizational participation. The majority (56.25%) of the respondents had low scale extension media contact followed by medium scale extension media contact (43.75%). None of respondents belonged to no and high scale of extension media contact categories. The majority (46.25%) of the respondents had high cosmopolitanism followed by medium cosmopolitanism (41.25%), and only 12.50% had low cosmopolitanism. Most of the respondents (89.17%) used to visit local market (1st) regularly, followed by own district headquarter (i.e., Khulna city) (85%, 2nd), own upazila sadar (i.e. Dumuria) (3rd, 76.67%), and so on.

3.2 Patterns and processes of migration

Most (80%) of the respondents addressed that none from their birth place come with them likely, most (80%) of the respondents told that none moved with them from their family members during migration. Less than half (46.25%) of the respondents said that previous knowledge was the main source of information to migrate. More than half (53.75%) of the respondents made a decision by themselves to migrate. The majority (67.5%) of the respondents migrated with a properly planned way. About half of the migrants (48.75%) presently involved in works which are permanent in nature. More than two-fifth (43.75%) of the respondent's monthly present income is between 10,000-15,000 BDT. The majority (63.25%) of the respondent indicated that the place of migration is better or improved than the place of origin of residence. Majority (48.75%) of the respondents claimed that they would encourage others to migrate as they perceived that the life has been better here.

Table 1. Distribution of the migrants according to the selected characteristics

Characteristics	Range	Categories	Respondents		Mean	SD
			Number	Percentage		
Age (year)	23-60	Young (≤35)	24	30	42.09	9.89
		Middle (36-55)	47	58.75		
		Old (>55)	9	11.25		
Educational qual.	0-16	Illiterate (0)	10	12.5	8.2	4.95
(Schooling yr)		Can sign only (0.5)	6	7.5		
		Primary (1-5)	11	13.75		
		Junior (6-8)	9	11.25		
		Secondary (9-10)	15	18.75		
		Higher secondary (11-12)	22	27.5		
		Graduate or above (>12)	7	8.75		
Marital status		Single	10	12.5		
		Married	61	76.25		
		Divorced	1	1.25		
		Widowed	8	10		
Family size		Small (≤4)	20	25	5.26	1.27
(member no.)	2-9	Medium (5-6)	48	60		
		Large (>6)	12	15		
Farm size (ha)	0.08-1.34	Landless (<0.02)	0	0	0.36	0.25
		Marginal (0.02-0.2)	26	32.5		
		Small (0.21-1)	52	65		
		Medium (1.01-3)	2	2.5		
		Large (>3)	0	0		
Farming exper.	3-40	Low (≤10)	37	46.25	14.16	7.87
(years)		Medium (11-20)	28	35		
		High (>20)	15	18.75		
Family income/yr	85-540	Extremely low (≤120)	12	15	2,07,867.50	95,184.65
('000' Tk)		Low (120-240)	47	58.75		
		Medium (240-360)	12	15		
		High (>360)	9	11.25		
Agril. training	0-5	No (0)	63	78.75	0.51	1.17
(number)		Low (1-2)	11	13.75		
		Medium (3-4)	5	6.25		
		High (≥5)	1	1.25		
Org. particip.	0-6	No (0)	45	56.25	0.95	1.38
		Low (1-6)	35	43.75		
		Medium (7-12)	0	0		
		High (>12)	0	0		
Extn. media contact	0-19	No (0)	0	0	10.96	3.8
		Low (1-11)	45	56.25		
		Medium (12-22)	35	43.75		
		High (>22)	0	0		
Cosmopolitanism	2-22	No (0)	0	0	15.31	4.92
		Low (1-8)	10	12.50		
		Medium (9-16)	33	41.25		
		High (>16)	37	46.25		

Table 2. Relative position (Rank order) of the selected 15-issues about push factors faced by migrants during migration based on migration score (*MS*) and migration index (*MI*) (N=80)

Factors	Extent of responsibility for migration				MS	MI	Rank
	Extreme (3)	Moderate (2)	Rare (1)	Not at all (0)			
1. Searching for work	27 × (3)	22 × (2)	28 × (1)	3 × (0)	153	63.75	3
2. Extreme poverty	24 × (3)	34 × (2)	18 × (1)	4 × (0)	158	65.83	2
3. Homelessness	0 × (3)	4 × (2)	18 × (1)	58 × (0)	26	10.83	15
4. Landlessness	29 × (3)	29 × (2)	17 × (1)	5 × (0)	162	67.5	1
5. River erosion	4 × (3)	4 × (2)	34 × (1)	36 × (0)	54	22.5	12
6. Natural disasters	6 × (3)	41 × (2)	26 × (1)	7 × (0)	126	52.5	8
7. Crop failure	22 × (3)	32 × (2)	22 × (1)	4 × (0)	152	63.33	4
8. Drought	7 × (3)	37 × (2)	29 × (1)	7 × (0)	124	51.67	9
9. Flooding	2 × (3)	18 × (2)	33 × (1)	23 × (0)	75	31.25	11
10. Marital factors	4 × (3)	9 × (2)	19 × (1)	48 × (0)	49	20.42	13
11. Loosened family bondage	7 × (3)	21 × (2)	25 × (1)	27 × (0)	88	36.67	10
12. Too many family members	15 × (3)	45 × (2)	15 × (1)	5 × (0)	150	62.5	5
13. Failure to repay loans	9 × (3)	33 × (2)	36 × (1)	2 × (0)	129	53.75	7
14. Unemployment	16 × (3)	36 × (2)	18 × (1)	10 × (0)	138	57.5	6
15. Escaping from village enemy	2 × (3)	7 × (2)	21 × (1)	50 × (0)	41	17.08	14

Table 3. Relative position (Rank order) of the selected 15-issues about pull factors faced by migrants during migration based on migration score (*MS*) and migration index (*MI*) (N=80)

Factors	Extent of responsibility for migration				MS	MI	Rank
	Extreme (3)	Moderate (2)	Rare (1)	Not at all (0)			
1. Higher employment	26 × (3)	25 × (2)	26 × (1)	3 × (0)	154	64.17	8
2. More wealth	42 × (3)	32 × (2)	5 × (1)	1 × (0)	195	81.25	2
3. Better service	36 × (3)	39 × (2)	4 × (1)	1 × (0)	190	79.17	3
4. Good climate	5 × (3)	43 × (2)	32 × (1)	0 × (0)	133	55.42	9
5. Safer or less crime	2 × (3)	8 × (2)	30 × (1)	40 × (0)	52	21.67	14
6. Political stability	5 × (3)	18 × (2)	25 × (1)	31 × (0)	76	31.67	13
7. More fertile land	0 × (3)	5 × (2)	38 × (1)	37 × (0)	48	20	15
8. Lower risk from natural hazard	2 × (3)	39 × (2)	29 × (1)	10 × (0)	113	47.08	11
9. Good food supplies	20 × (3)	38 × (2)	19 × (1)	3 × (0)	155	64.58	7
10. More attractive quality of life	44 × (3)	29 × (2)	7 × (1)	0 × (0)	197	82.08	1
11. Easy access of information sources	20 × (3)	41 × (2)	19 × (1)	0 × (0)	161	67.08	6
12. Higher price of agril. commodities	8 × (3)	34 × (2)	25 × (1)	13 × (0)	117	48.75	10
13. Scientific agril. production system	21 × (3)	42 × (2)	17 × (1)	0 × (0)	164	68.33	5
14. Avail. of suffic. no. of consumers	0 × (3)	33 × (2)	36 × (1)	11 × (0)	102	42.5	12
15. Easier access to market	28 × (3)	36 × (2)	16 × (1)	0 × (0)	172	71.67	4

Table 4. Computed coefficients of correlation (r and ρ) between the selected characteristics of the respondents and their factors affecting migration

Dependent variable	Characteristics (Independent variables)	Push factor	Pull factor	Correlation type
Factors responsible for migration	Age	0.051 NS	−0.202 NS	r
	Educational qualification	0.094 NS	0.158 NS	r
	Marital status	0.103 NS	−0.186 NS	r
	Family size	0.034 NS	−0.035 NS	r
	Farm size	−0.131 NS	−0.065 NS	r
	Farming experience	0.095 NS	−0.227*	r
	Annual family income	−0.176 NS	0.039 NS	r
	Agricultural training	−0.102 NS	0.075 NS	ρ
	Organizational participation	−0.206 NS	−0.060 NS	ρ
	Extension media contact	0.027 NS	−0.036 NS	ρ
	Cosmopolitanism	−0.085 NS	0.068 NS	ρ

NS= Non-significant * Correlation is significant at the 0.05 level (2 -tailed)

3.3 Factors affecting migration

3.3.1 Push factors

The selected 15-push factors were responsible for migration to different extent. Among the 15-selected factors the ownership of the land (landlessness) was the most responsible factor which affects migration to the highest extent followed by extreme poverty, searching for a job, crop failure and so on. Homelessness was a less important factor responsible for migration (Table 2). The observed push factor score of the migrants ranged from 9-33 where the mean and standard deviation were 19.81 and 5.60 respectively. On the basis of the score of push factors obtained by the respondents factors were classified into three groups as less responsible (up to 15), moderately responsible (16-30), and highly responsible (>30). The distribution of the respondents according to scores of push factors is shown in the Table 2. The majority (60%) of the respondents said that push factors were moderately responsible for migration, whereas 30% and 10% of the migrants addressed that push factor as less and highly responsible factors for migration respectively (Fig. 1a).

3.3.2 Pull factors

The pull factors perceived to attract migrants include the following:more job chances, better health services, better educational services, urban facilities and way of life, easy access to economic sectors, higher income possibility and positive information about the city. The selected 15-pull factors were responsible for the migration to the different extent. Among the 15-selected factors more attractive quality of life was the highest responsible factor which affects migration followed by intention of more wealth, better services,
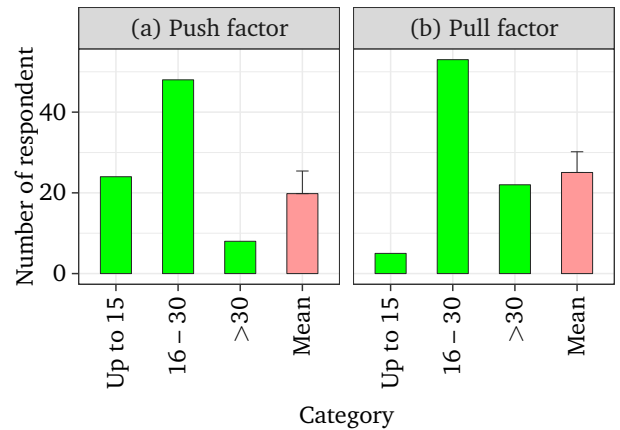

Figure 1. Distribution of respondents according to their extent of score of (a) push factors and (b) pull factors

easy access to the information sources, scientific agricultural production system and so on. More fertile land was the least important pull factor responsible for migration (Table 3). The observed pull factor scores of the migrants ranged from 14-33 where the mean and standard deviation were 25.05 and 5.13 respectively. On the basis of the score of pull factors obtained by the respondents factors were classified into three groups as less responsible (upto 15), moderately responsible (16-30), and highly responsible (>30). The distribution of the respondents according to scores of push factors is shown in the Table 3. The majority (66.25%) of the respondents addressed that pull factor as moderately responsible for migration (Fig. 1b). On the other hand 27.50% and 6.25% of the respondent said that pull factors as higher and less responsible for the migration respectively. Ahmad (2002) found that 39.3% migrants migrate from rural area to urban for better income, 31.3% for better living standards and 29.3% for education. Karim (2015) and Karim

and Thiel (2017) found that around 50% households' members migrated to a nearby town or capital city because of natural disaster. Rashid (2013) argued that most (78.43%) of respondents specify that 'unemployment in village' had been the main cause of migration. He also found that searching employment opportunity; whatever odd, irregular or underpaid,had been the main pull factors of female migration because they do not have ample employment opportunities round the year in village. Zafar et al. (2013) showed that descriptive analysis reflects that better education, employment, living status, and health facilities as reported by 80%, 78.3%, 75% and 72.5% of the respondents respectively were the causes of their migration to the urban areas.

3.4 Relationship between factors

The relationship between eleven selected characteristics of the migrants and their factors affecting migration has been shown in Table 4. To explore the relationships between the selected characteristics of the respondents and their factors affecting migration, Pearson's Product Moment Coefficient (r) of correlation as well as Spearman's Rank Order Coefficient (ρ) of correlation was used. Here for age, education, marital status, family size, farm size,farming experience and annual family income, Pearson's Product Moment Correlation was used because these values could be zero; and for other variables that means agricultural training,organizational participation, extension media contact and cosmopolitanism Spearman's Rank Order Correlation was used. Among 15-pull factors only farming experience of the migrants had negative significant effect on migration. It means that the higher is the farming experience of the respondents the lower is the effect of pull factors on migration. Saleheen (1980) and Rokib and Islam (2009) found from their study that education has a direct effect on migration. They also found that education, age and marital status have not any significant influence over migration status, however, their study agrees with Afsar (2000) and Rokib and Islam (2009) that, occupation at rural origin has significant impact on migrants. Islam and Rokib (2011) argues that age, place of birth, occupation, monthly income and land property have significant effects on the causes of migration among the selected variables in the case of considering dependent variable as causes of migration. Rahman et al. (2007) and Islam and Siddiqi (2010) also found the similar results.

4 Conclusions

The present investigation explored the relationships of eleven selected characteristics of the respondents with their factors affecting rural urban migration of agricultural labor. But besides these characteristics,

there might be several other characteristics and situational factors which might influence respondent's migration. Therefore, there is further need for exploring the relationships of other characteristics of the respondents with their factors affecting rural urban migration.This study was conducted on the population of Dumuria upazila in Khulna district. Findings of this study need to be verified by undertaking similar research in other parts of the country so that the identified factors could be generalized for migration policy formulation.

Acknowledgements

Conflict of Interest

The authors declare that there is no conflict of interests regarding the publication of this paper.

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