

Rural-urban Migration in Bangladesh and Its Nexus with Some Socioeconomic Indicators at Origin and Destination

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ABSTRACT

The study on the link between rural-urban migration and socioeconomic development is very essential. The model-based inferential analysis on the flow of migration on the ground of East-West divide of Bangladesh is non-existent in the literature. This paper attempts to bridge up these two lacunas such as diagnosing the pattern of rural-urban migration and discovering the linkage. The study used the household survey dataset covering 2255 units of analysis (1509 cases and 746 controls) at origin and 750 at destinations. The present study explores that internal rural-urban migration plays a vital role in the socioeconomic development process of Bangladesh economy; functions as a transition route out of agriculture; and reallocates the rural work force at destination. Mainly the male and youth section of the rural population are found to participate in the process. A phenomenal portion of migrants tends to go to district and upazilla headquarters apart from the capital city of Dhaka. The qualitative ordinal scale assessment consisting of "positive impact", "no change", and "negative impact" explores that migration has both positive and negative impacts at origin and destination for some major socioeconomic indicators. The aggregate positive impact triumphs over aggregate negative impact resulting in a net positive outcome.

Key Words: Rural-urban Migration, Socioeconomic Indicators, Food Security, Origin and Destination, Working-Leser Model

1. INTRODUCTION

The act of migration whether international or internal is a commonplace in Bangladesh and shows an increasing trend. Notwithstanding the phenomenally upward trend of both international and internal migration in Bangladesh during the recently past three decades, the policy-makers as well as the researchers have been found to pay little attention to the latter. It is well documented that international migration and foreign remittances have a strong bearing on the economy of Bangladesh through contributing to GDP, alleviating poverty and reducing food insecurity in the recipient rural households and communities; but the contribution of internal migration to the economy as well as the migrants' households and communities still remains unexplored to a greater extent despite a much larger number of internal migrants within rural or urban areas. It is reported that 21.1% households received remittances from domestic migration in contrast with 8.8% households from international migration [55]. For this very reason, in the wake of rapid urbanization as a challenge for policy-makers, scant recent information is available about household-level impacts of these moves in rural origin and urban destination [1; 5; 25]. That is, focus and intervention remain neglected towards internal migration management and its comprehensive outcomes on life and livelihood, except rapid urbanization, also remain obscure.

It is documented that rural-urban migration, both in short and long term, has increased considerably in recent years as a result of urbanization and industrialization in South-East and East Asia [2; 6; 13; 15; 21; 22; 29; 31; 40; 45]. Most of the studies demonstrate that the short term and circular migration dominate over long term and permanent migration in Indonesia, Vietnam, China, Cambodia and Java [29; IIED, 2004; 40; 45].

In recent years a sharply increasing trend in rural-urban migration has been observed in India for work in the expanding informal sector [18; 33; 35; 52]. It is also noted that worsening population pressure, environmental limits, falling agricultural commodity prices and rapid urbanization are the major causes for internal migration [15; 16; 37; 54]. It is also documented that migration became the prime source of the livelihood for the inhabitants of tribal regions [35]. Studies explore that movement is high from drought-prone and environmentally fragile areas [37; 54]. A number of village studies in India show that mobility has increased tremendously by tribal people, Muslims, lower caste people and people from remote and hilly village with infertile soils [17; 43; 54]. In Pakistan it is found out that recent increases in internal migration are associated with urbanization [20].

Studies in different countries, mainly Vietnam, Thailand and China, reveal that shorter distance rural-urban migration are generally adopted by poorer people due to their limited resources, skills, networks and market information and their nature of migration is temporary [21; 22; 31; 36]. Rural-urban migration exerts the impacts that are potentially the greatest especially where urban incomes are higher [2; 51].

In comparison with other south Asian countries, the rate of urbanization is high in Bangladesh: the average annual growth rate of urban population was recorded as 6.5 percent for Bangladesh, 3.4 percent for India and 4.2 percent for both Pakistan and Sri Lanka during 1970 to 1990 [30]. It is observed that rural-urban migration dominates over other processes in bringing about urban population growth and it contributes between three-fifths to two-thirds to this growth [28]. The migration from rural to urban areas has shown an increasing trend [25], first due to the work opportunity to the urban informal sector and more recently to garments manufacturing units [5]. It is documented that nearly two-fifths of rural households of Bangladesh send adult members to seek work in towns [25; 49] and in some areas, over 80% of the household income is derived from outside the villages [49; 53]. The recurrent flooding of coastal districts can also 'push' people into migration. It is argued that the poorer people adopted migration as safety net for search of supplementary livelihoods and they got deprived of many formal and informal sources of support [1]. Some micro-level studies in Bangladesh covers a wide range of issues on social protection and livelihood [19; 41; 44] with particular emphasis on female migration [46].

Seasonal migration is also a common feature for livelihood strategy in Bangladesh, especially in lean season. Based on a survey of 1600 households in Northwest Bangladesh, it is documented that 19% of households migrate in the lean agricultural season [26] and concluded that seasonal migration is an important livelihood strategy for about 25% of chronic poor households. It is also reports that in some villages, members may temporarily reside away from the village in order to secure desirable work [53]. Khandker and Mahmud have studied the role of seasonal migration by collecting data on *monga*-affected areas of Rangpur region and found the seasonal migration as the single most important coping strategy to address food insecurity during *monga* (seasonal hunger) adopted by poor households [34].

Research about migration is limited in Bangladesh due to lack of adequate data from national surveys and population censuses. Studies so far conducted on migration based on census data cannot identify differentials, determinants and causes of migration [39]. On the other hand, the existing micro-level studies in Bangladesh have a limited scope and scale implying that they test only a few hypotheses and their poor coverage constrains strong inference. Besides, most of these studies are destination specific and ignored the impact on rural households [8; 14; 38] and there are few studies explaining the causes of migration from villages to Dhaka [5; 11; 12]. A few studies investigated the links between rural-urban migration, development and urbanization in Bangladesh [5; 32; 47; 50]. It is pointed out that migration can be beneficial to all, the sending areas, the receiving areas and the migrants themselves [47]. In a study, Afsar investigated the relationship between internal

migration and the development for Bangladesh by reviewing the existing studies and data from different sources like UN, ILO and BBS [5]. Skeldon discussed the relationship between migration and poverty in various aspects in some Asian countries including Bangladesh [49]. A number of studies document that labor depletion did not affect household's productivity due to compensation of labor loss through remittances [5; 7]. This review of literature reveals that an intensive study is necessary to understand migration diversity and its effect on the socioeconomic indicators at both the ends simultaneously.

This study makes a rigorous attempt to bridge the aforesaid knowledge gap related to internal migration. More specifically and explicitly speaking, this study has focused on identifying the selectivity of internal rural-urban migration, mapping internal migration flow, exploring the poverty reduction outcomes/impacts of this migration, discovering the underlying causes/motives of migration, and thus unearthing the overall rural-urban migration patterns and its nexus with some socioeconomic indicators in Bangladesh at both ends of migration with a view to providing policy suggestions.

2. METHODOLOGY

2.1 Data and Sample Design

The study has used primary data collected under the project **Rural-urban Migration and its Implications for Food Security in Bangladesh** financed by USAID and EU under National Food Policy Capacity Strengthening Program (NFPCSP) of the Government of Bangladesh. The study has collected data from 60 rural clusters adopting cluster sampling methodology. For providing the main indicators according to the East-West divide following World Bank poverty assessment study of Bangladesh [55], the sample size is estimated for the 2 rural domains. The recognized sample size determination formula yields that about 750 migrant households are required in each domain. The 30 clusters in each domain have been selected using systematic PPS sampling procedure. Besides, a representative number of non-migrant households (controls) has also been covered from each rural cluster to evaluate the effect of migration on some socioeconomic indicators including food security. At the place of destination, key migrants, representative of the one-third migrant households surveyed at the origin in each cluster, are interviewed under tracer survey. These migrant households/individuals have been selected from each rural cluster considering their occupation and destination. Thus the total number of units of analysis stands at 3000 for the study consisting of 1500 cases and 750 controls for origin survey, and 500 cases and 250 controls for tracer survey.

2.2 Analytical Tools and Techniques

This section provides a brief description of the tools and techniques used in the analysis. The flow of rural-urban migration is explored in different dimensions including flow mapping of the rural-urban migration rate for each selected cluster and domain. The selectivity of migration has been assessed to seek the answer regarding who migrate, which households are more prone to migration, which factors are acting behind migration etc. along with other diversity of migration. The flow of migration according to destination and causes has been analyzed by using Working-Leser model.

Working-Leser Model

This study has resorted to a special type of regression model named Working-Leser Model after its proponents. The beauty of this model is that it relates the share of some variable linearly to the logarithm of that variable on the assumption that the summation of all the shares becomes one. The sign of the coefficient of the variable, logarithm of the concerned variable, determines the changing behavior of the response share variable with the change of the concerned variable. If the sign of the coefficient is positive, it means that with the increase in the concerned variable, the value of the response variable increases as well and vice versa. In this model, shares are considered as independent variables. This study has adopted the three-stage version of the Working-Leser Model and along with the independent variables; this model has considered some interactive, demographic and regional variables. The three-stage version of Working-Leser Model is:

$$\frac{C_{ij}}{y_i} = \beta_i + \gamma_i (\log y_i) \dots \dots \dots (1)$$

where C_{ij}/y_i is the fraction of the concerned variable for jth unit of analysis on item i and y_i is the concerned variable. Adding up requires that $\sum(C_{ij}/y_i)$ equals 1. This modified version of the Working-Leser Model in semi-log ratio form along with the interactive, demographic and regional variables is as follows:

$$\frac{C_{ij}}{y_i} = \beta_i + \gamma_i (\log y_i) + \sum \lambda_i (z_i) \dots \dots \dots (2)$$

Where, C_{ij}/y_i is the fraction of the concerned variable for jth unit of analysis on items i and y_i is the concerned variable. Adding up requires that $\sum (C_{ij}/y_i)$ equals 1. Here z_i denote household and community characteristic variable. This modified Working-Leser model allows the demographic and regional variables as covariates.

Measurement of consequence of migration at origin and destination

The consequences basing on a qualitative ordinal scale of positive impact, neutral and negative impact on some selected socioeconomic indicators and/or assets due to migration between pre-migration and post-migration periods have been estimated by analyzing the responses of the heads of the migrant-households both at origin and destination regarding the status of those indicators or assets over the two periods.

3. RESULTS AND DISCUSSIONS

3.1 Basic Characteristics of the Surveyed Households

The origin survey data shows that 55.6% fell into the functionally landless category (households having less than 50 decimals of landholdings), while 2.4% households owned no land including homestead, and 11% owned land 250 decimals or more. The proportion of functionally landless households was found higher for non-migrant households. The average landholding per household was 114.3 decimals for migrant households and 73.9 decimals for non-migrant households. Based on East-West divide, there is no significant difference in the possession of landholdings between the non-migrant households of the two regions but the difference is significant regarding migrant sending households.

The findings indicate that migrants fared better than the non-migrants regarding living conditions and asset score. The 'asset score' index shows that one-third of the households were asset-poor (score 11-20) and 24% owned some assets (score 21-30). Based on the origin survey data, the average on-farm income was estimated at Tk.51,408 (1\$=Tk.75 approximately) and off-farm income at Tk.106,824. The average annual food and non-food expenditures were estimated Tk.71,535 and Tk.62,708 respectively. Both food and non-food expenditures of the migrant households were significantly higher than those of non-migrant households.

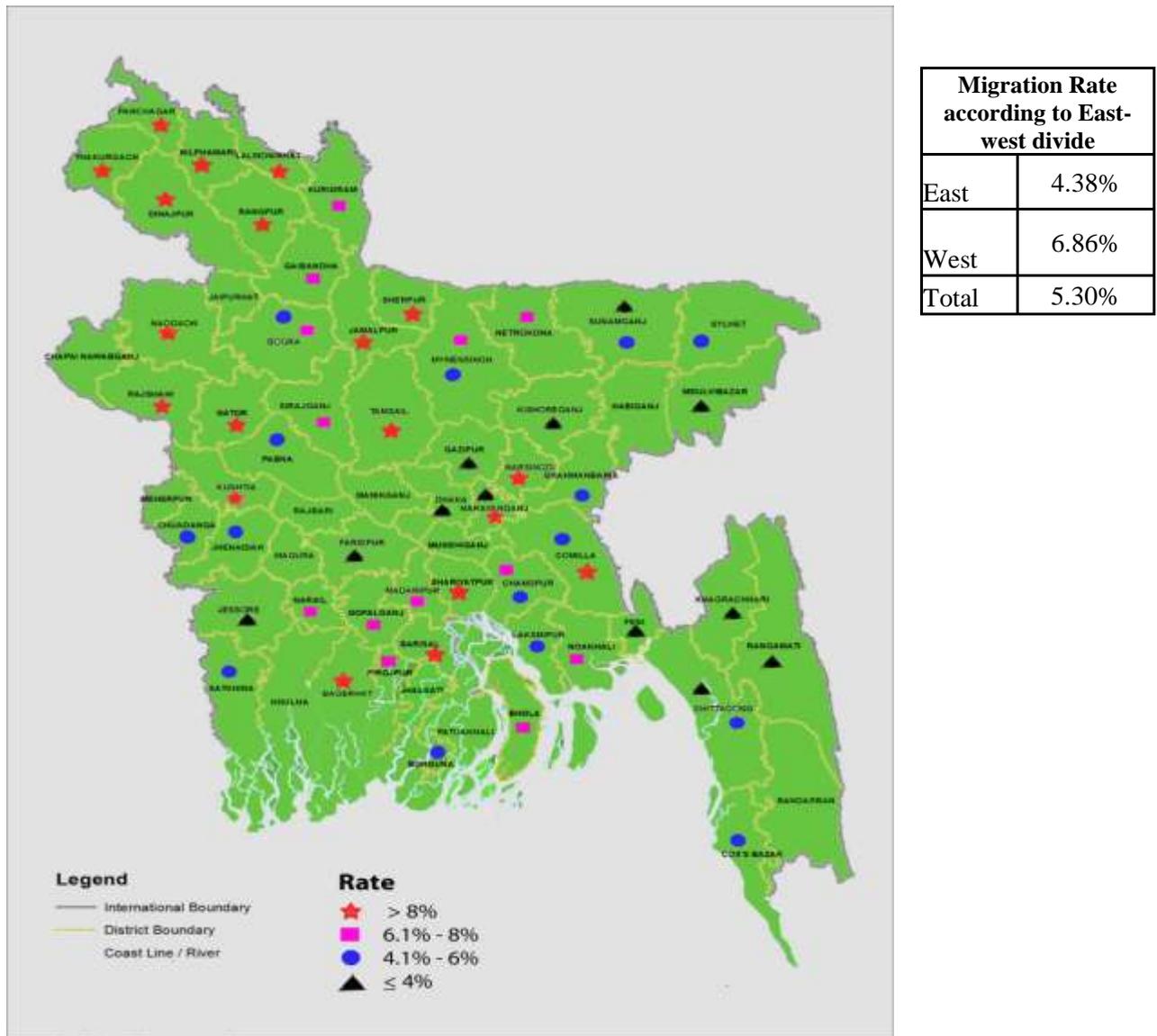
3.2 Selectivity of Migrants: Age, Sex, Education, Occupation

The age distribution of migrants shows that the majority of them were very young (nearly 70% of migrants were between 15 and 29 years) at the time of their first migration. Other age groups included 0-14 years (18%) and 30-44 years (10.1%). No regional variations were observed in this pattern except for 0-14 years age group. The average age of the migrants at the time of first migration was about 20.6 years. It is found that male accounted for 83% of the migrants and about 44% of the migrants were married. Regarding the relationship of migrants with household head, the findings indicate that most of the migrants (63.9%) are the sons/daughters of the household heads. The findings indicate that near three-fifths of the migrants (age 7 years or more) had secondary level of education and only about 7% had tertiary level education. Nearly 74% of the migrants, ages 16 years or above, brought no relevant work experience to destination. Over one-third of the migrants reported to have been in school or college, 14.6% were unemployed, about 21% were engaged in farming and/or labor selling in agriculture, and 15% were involved as non-agricultural laborer in the pre-migration period. The occupations of the migrants at destination were found very diverse: about 30% were employed in the formal sector, about 11% were wage laborers, about 13% worked in readymade garments factories, and about 18% were students.

3.3 Flow of Migration: Rural-urban Migration Rate in Bangladesh based on Survey Data

The rural-urban migration rate has been computed for different *mauzas*/villages and east-west divide to get an in-depth understanding of the rural-urban migration patterns in Bangladesh. The rates from different *mauzas*/villages are computed on the basis of the total number of migrants and total population found at the survey point. The overall rural-urban migration rate during the period 2001 to 2011 was estimated at 5.3%. Figure 1 illustrates the flow of rural-urban migration from the study clusters and four different signs indicate different levels of migration rate. The rural-urban migration rate was found significantly ($p < 0.01$) higher in the west region (6.86%) than the east region (4.38%).

Figure 1: Rural-Urban Migration Flow in Bangladesh



In addition, the survey indicates that households sending internal migrants were 22.25%, international migrants were 11.47% and mixed migrants were 1.9% during 2001-2011. The percentage of households with internal migrants was significantly higher in the western region (27.22%) than that in the eastern region (19.19%). By contrast, the percentage of households with international migrants was remarkably higher in the eastern region (15.67%) than in the western region (4.65%).

3.4 Migration Stream by Destination and Cause

The process of migration is incepted by some factors related to origin and ends up with some factors related to destination. The former ones are called push factors and the latter ones are called pull factors. Actually, these two types of factor complement each other in the sense that what lacks in origin is perceptibly fulfilled at destination. For example, if a person wants to migrate for the reason of unemployment, he/she perceives that there must be the scope of employment at his/her targeted destination. Rural to urban migration in Bangladesh flows to some recognized places and for some typical causes. Though some previous studies (for example, Hossain *et al.*, 2013) discussed this migration flow by destination and cause with the help of only descriptive statistics, those did not do this by inferential statistics. Against this backdrop, this study tries to explore the changing pattern/behavior of migration flow by destination and cause through the inferential tool of Working-Leser model.

Flow of Migration by Destination

The destination of the migrants has broadly been categorized into five places: Dhaka city, Chittagong city, other divisional cities, District headquarters and Upazilla headquarters. Figure 2 shows the distribution of migrants according to the major destinations. The results indicate that about two-fifths of the migrants were found to migrate to the capital city Dhaka, about three-in-ten migrants were found to migrate to the district headquarters. Beside these two kinds of place, almost similar percentages of migrants migrated to Chittagong, other divisional headquarters and upazilla headquarters.

Figure 2: Distribution of migrants according to major destinations

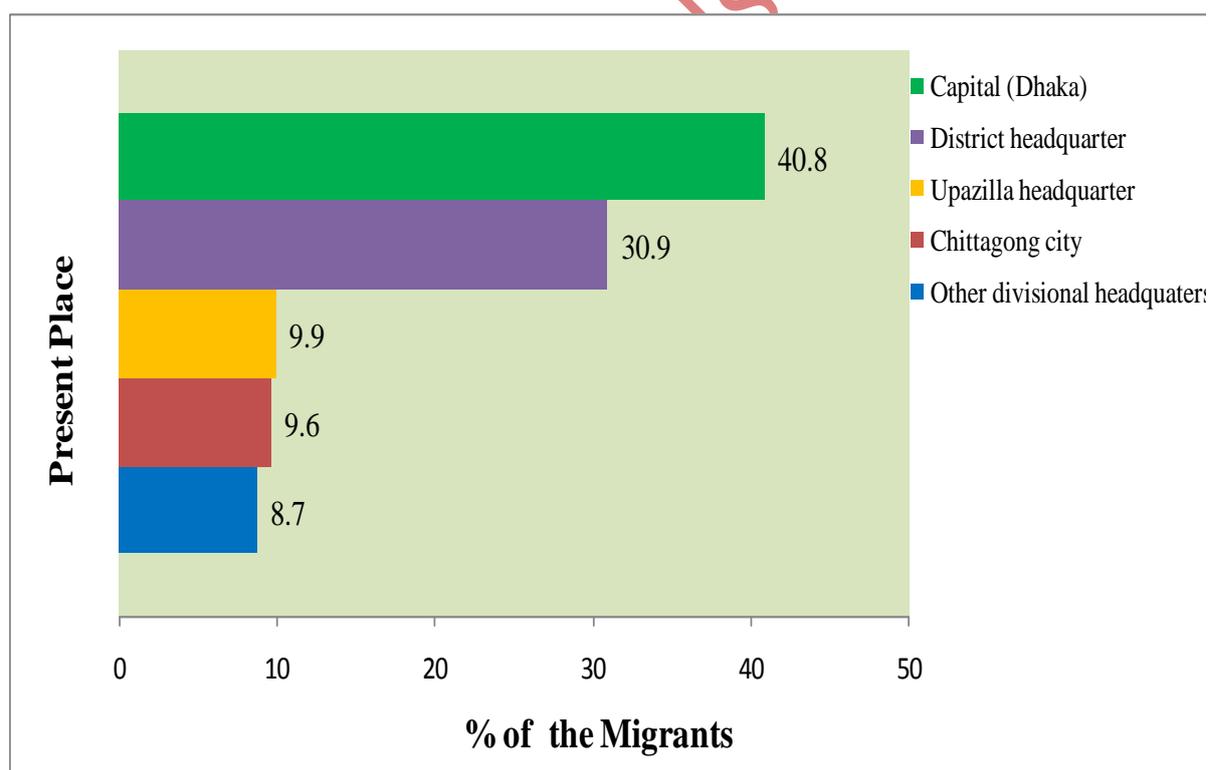


Table 1: Estimated Coefficients of Working-Leaser Model (using OLS) to measure the Flow of Migration according to Major Destinations

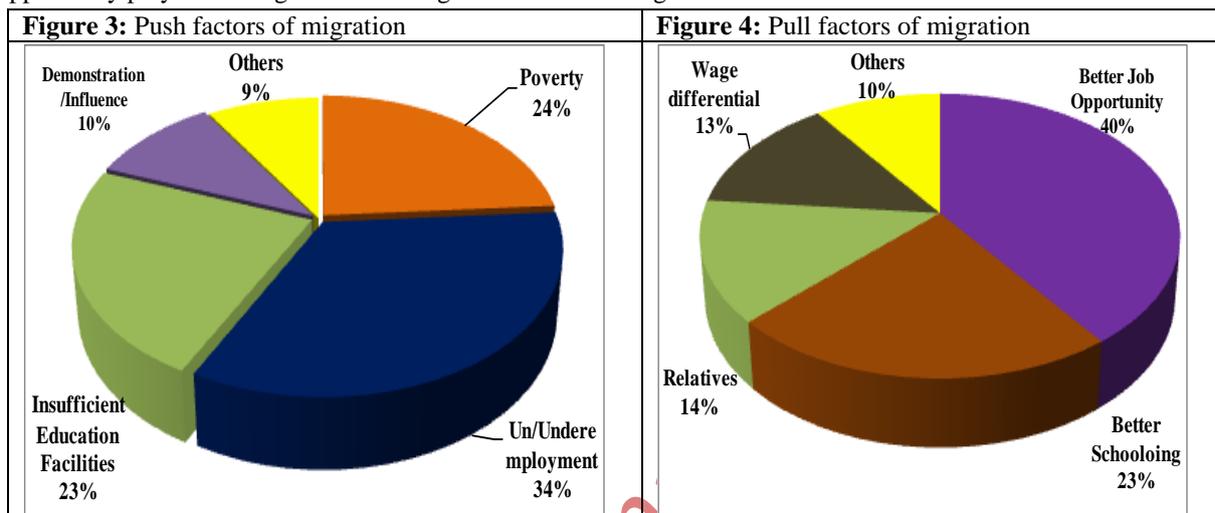
Explanatory Variables	Estimated Models for the Major Destinations of Migration				
	Dhaka	Chittagong	Other division	District HQ	Upazilla HQ
Logarithm of total migrants	-0.4518*** (0.906)	-0.03666 (0.118)	0.080822 (0.102)	0.209943* (0.128)	0.19768** (0.08)
Logarithm of Per Capita Income of Community	-0.1947*** (0.145)	0.03425 (0.061)	-0.000621 (0.053)	0.094883 (0.067)	0.06616 (0.044)
Logarithm of Percentage of International Migrant HHs in Community	0.03812* (0.022)	0.00892 (0.018)	0.006160 (0.0156)	- 0.048801** (0.0196)	-0.00440 (0.0128)
Distance to Train Station	-0.00201** (0.0009)	0.00010 (0.0007)	0.001084* (0.0006)	-0.000343 (0.0008)	0.00117** (0.001)
Distance of Commercial/ Industrial area	- 0.00493*** (0.0017)	0.00373*** (0.0014)	0.000825 (0.0012)	0.000279 (0.002)	0.00010 (0.001)
Percentage of Farmer Households	0.00113 (0.00133)	-0.0030*** (0.0011)	-0.000087 (0.0009)	0.001688 (0.001)	0.00033 (0.001)
Distance to Dhaka	-0.00014 (0.00021)	0.00029* (0.00018)	0.000147 (0.0002)	0.000342* (0.0002)	0.00004 (0.0001)
Education level of community (at least 12 years of schooling)	0.00881** (0.00405)	-0.00467 (0.0033)	0.002248 (0.003)	-0.003683 (0.004)	-0.00271 (0.002)
Land Tilling Technology (Mechanized=1, Non-Mechanized=0)	0.09551 (0.126)	-0.19846** (0.1025)	0.058540 (0.088)	0.086369 (0.111)	-0.04196 (0.07)
Constant	3.91009*** (0.906)	0.05726 (0.738)	-0.360050 (0.637)	-1.339* (0.800)	-1.268** (0.523)
Adjusted R ²	0.422	0.381	-0.034	0.190	0.127
F statistic	5.779***	5.038***	0.787	2.542**	1.955*

Note: Figures within parenthesis indicate the Standard Error *** $p < 0.01$ ** $p < 0.05$ and * $p < 0.10$

As mentioned earlier, the study applied modified version of the Working-Leaser Model (equation 2) to explore the migration flow by destination considering the household and community characteristics along with main variables. The covariates include Logarithm of per-capita income of community, Logarithm of proportion of international migrant households in community, Distance to railway station, Distance to commercial/industrial area, Percentage of farmer households, Distance to Dhaka city, Educational level of community and Land tilling technology of community. Table-1 shows the estimated coefficients of modified Working-Leaser Model including necessary statistics. The value of adjusted R² and its p-value indicate that the model significantly fit for all variables except *other divisional Headquarters*. According to the destination, the result shows that the share/proportion of migrants to Dhaka tends to decrease significantly as the total migration flow increases. The study found that the shares of migrants to District headquarters and Upazilla headquarter increase significantly with the increase in total migration flow. This finding clearly gives the message that proportionately, not absolutely, the migration flow shows a declining tendency to the capital city, while the opposite tendency gets started towards the upazilla and district headquarters. The plausible explanation for this finding is that the inconveniences resulted from the already existed population pressure in Dhaka city discourage the rural people to migrate to this city, whereas the newly developed nearby upazilla and district level growth-centers attract them to migrate to these towns.

Flow of Migration according to Major Causes (Push factors & Pull factors)

Literature suggests that push factors and pull factors are simultaneously act for migration decision and closely related with the socioeconomic conditions at origin and destination. It is argued that people tend to be pulled to the areas of prosperity and pushed from the areas of adversity [9]. The percentage of migrants according to the push factors and pull factors are shown in Figures 3 and 4 respectively. Among the push factors, it is found that over half of the migrants migrated due to poverty and un/under employment. In addition, near one-quarter of the migrants migrated due to poor education facilities. Among the pull factors, 40% reported to migrate to find out a better job opportunity and 23% did so for better schooling facility. The findings show that poor economic opportunity plays a leading role in making the rural-urban migration decision.



The Working-Leser model according to the major causes (push factors) of migration considered the covariates Female wage labor in lean season, Logarithm of per capita income of community, Number of crops in community and Percentage of land under irrigation of community. Table 2 represents the estimated coefficients of Working-Leser model to measure the flow of migration according to major push factors. The model is found significantly fit for the variables (causes) poverty, insufficient education facilities and other causes. The negative log coefficient of the total migrants indicate that the share of migrants due to poverty significantly decrease with the increase in total migrants from the surveyed households. A reverse scenario is found for the other causes (natural calamities, reluctance to agricultural work, social/political victimization). These findings reveal that relatively, rural to urban migration because of poverty is on decline, while the relative migration flow due to factors of natural calamities, reluctance to agricultural work and social/political victimization is on rise. Probably, this happens because of decreasing rate of poverty and increasing trend of negative socio-political condition and climate change in rural Bangladesh.

The Working-Leser model according to the pull factors of migration considers the variables - Education level of the community, Logarithm of per capita income of community, Proportion of international migrant households in community, Percentage of Muslim households of the community and Average household size of community. The estimated coefficients of Working-Leser Model to measure the flow of migration according to major pull factors are presented in Table 3. It is found that the model significantly fits for the variables *Better schooling*, *Existence of relatives* and *Wage differentials*. The negative coefficient of the total migrants for the variable *Better schooling* indicates that, with the increase in total migrants the share of migrants due to better schooling criteria decreases significantly. In contrast, the positive coefficient of the total migrants for the variable *Existence of relatives* reveals that the share of migrants due to having relatives at their desired destination increases highly significantly with an increase in the total number of migrants. The findings reveal that the scope of better education at urban destination cannot keep pace with increasing number of migrants for this purpose because of which the migration flow for this very reason decreases significantly in relative sense and

networking at destination plays a vital role for rural-urban migration strongly supporting the social capital theory of migration.

Table 2: Estimated Coefficient of Working-Leser Model (using OLS) to measure the Flow of Migration according to Major Causes

Explanatory Variables	Major causes of migration (Push Factors)				
	Poverty	Un/under employment	Poor education facilities	Demonstration effect	Others
Logarithm of total migrants	-0.32846** (0.133)	0.10545 (0.145104)	-0.05172 (0.108337)	0.08213 (0.100750)	0.19260*** (0.064805)
Wage Labor of Female in Lean Season	-0.00086** (0.0004)	-0.00024 (0.000478)	0.00046 (0.000357)	0.00067** (0.000332)	-0.00003 (0.000213)
Logarithm of per Capita Income of Community	-0.2889*** (0.069)	0.01497 (0.075497)	0.29487*** (0.056367)	-0.06347 (0.052420)	0.04259 (0.033718)
No. of Crops (≤ 2 crops=1, Otherwise=0)	-0.09611* (0.049)	0.11425** (0.054557)	-0.02008 (0.040733)	0.02151 (0.037881)	-0.01958 (0.024366)
% of land of community under irrigation	-0.00132 (0.001)	0.00257* (0.001482)	-0.00116 (0.001106)	-0.00047 (0.001029)	0.00038 (0.000662)
Constant	4.67300*** (0.823)	-0.45051 (0.899113)	-2.55537*** (0.671292)	0.38154 (0.624282)	-1.04946** (0.401553)
Adjusted R ²	0.387	0.026	0.360	0.024	0.117
F statistic	8.440***	1.321	7.638 ***	1.294	2.569**

Note: Figures within parenthesis indicate the Standard Error *** $p < 0.01$ ** $p < 0.05$ and * $p < 0.10$

Table 3: Estimated Coefficient of Working-Leser Model (using OLS) to measure the Flow of Migration according to Major Causes (pull factors)

Explanatory Variables	Major causes of migration (Pull factors)				
	Better Job opportunity	Better Schooling	Existence of Relatives	Wage differentials	Others (Transfer/Weakness for destination/Others)
Logarithm of total migrants	0.0185 (0.1708)	-0.1947* (0.105)	0.3185*** (0.086)	-0.0587 (0.109)	-0.08347 (0.08177)
Education level of community (at least 12 years of schooling)	0.0036 (0.005)	-0.0031 (0.0028)	0.0003 (0.002)	-0.0003 (0.003)	-0.00047 (0.0022)
Per Capita Income of Community	-0.0233 (0.0804)	0.340*** (0.049)	-0.0223 (0.04)	-0.237*** (0.051)	-0.05732 (0.03851)
Proportion of international migrant sending HHs	0.0367 (0.024)	-0.023 (0.015)	-0.0019 (0.012)	-0.0182 (0.015)	0.00606 (0.01140)
Average household size of community	-0.0287 (0.0503)	0.0516* (0.0309)	-0.0614** (0.0252)	0.0163 (0.032)	0.02229 (0.02406)
% of Muslim HHs in community	0.0008 (0.001)	0.0008 (0.001)	0.0003 (0.001)	0.0007 (0.001)	-0.00040 (0.0006)
Constant	0.561 (0.972)	-2.692*** (0.598)	-0.410 (0.488)	2.649*** (0.619)	0.892* (0.465)
Adjusted R ²	-0.038	0.455	0.142	0.253	-0.019
F statistic	0.640	9.224***	2.626**	4.326***	0.817

Note: Figures within parenthesis indicate the Standard Error *** $p < 0.01$ ** $p < 0.05$ and * $p < 0.10$

3.5 Consequence of Migration on different Household Indicators and Fulfillment of Expectations

This section discusses the descriptive statistics of the perceptions of respondents both at origin and destination on consequence of different household indicators as a result of migration. In addition, issues such as the labor compensation of migrant households at origin due to migration, fulfillment of expectations, involvement of women and children in economic activities at origin households due to migration and effect on households' food security have also been analyzed and discussed.

Consequence of Migration on different Household Indicators (Perception-based): Comparison between Pre-migration and Post-migration period

In order to find out the consequences of migration both at origin and destination, information on selected socioeconomic indicators has been collected for pre-migration period and present period from migrant households. The consequences on some selected socioeconomic indicators due to migration has been explored in terms of positive impact, neutral and negative impact by analyzing the perceptions of the heads of the migrant-households both at origin and destination between pre-migration and post-migration periods.

Table 4 shows the impact of rural-urban migration on some selected household indicators both at origin and destination. At origin, about 5% migrant households reported that their meal frequency increased due to migration, only 0.7% reported that their meal frequency decreased due to migration. On the other hand, at destination, a higher percentage (3.4%) of migrant households/individuals viewed that their meal frequency decreased due to migration. Regarding the food security condition, about 18% migrant-sending households at origin and about 30% migrant households/individuals at destination reported that their food security condition increased due to migration. The findings indicate that the rural-urban migration had a positive impact on the educational status of the household members: 14.5% migrant-sending households at origin and 16.6% migrant households/individuals at destination reported to have positive impact.

Table 4: Impact of Migration on Different Household Indicators (Perception-based)

Economic indicators and/or assets	Impact/Change due to migration (% of households)					
	At Origin			At Destination		
	Positive	Negative	No Change	Positive	Negative	No Change
Frequency of meal	4.8	0.7	94.5	4.4	3.4	92.2
Quality of food	12.0	3.2	84.8	26.5	11.4	62.1
Food security condition	17.8	5.2	77.1	29.7	10.6	59.7
Educational status of the migrants/ family members	14.5	0.0	85.5	16.6	0.0	83.4
Occupation of the household head	-	-	72.8	-	-	24.2
Main source of household income	-	-	63.7	-	-	29.3
Working hours of the household members	25.7	10.6	63.7	35.7	12.2	52.1
Land Size Operated (in Decimal)	5.4	70.8	23.7	1.8	31.7	66.5
Type of House	6.1	1.1	92.8	58.1	12.2	29.7
Number of rooms	5.3	0.9	93.8	11.2	40.1	48.7
Type of toilet	6.2	1.4	92.4	47.9	10.2	41.9
Mechanized agricultural instrument	-	-	100.0	-	-	100.0
Television	9.0	2.5	88.5	16.8	17.4	65.7
Fridge	2.9	0.5	96.6	8.4	4.8	86.8
Economic condition of the household	13.4	2.6	84.0	17.8	4.6	77.6

The findings indicate that the occupation of the household heads changed for 27.2% households at origin as a consequence of migration. Conversely, about three-quarters of the household heads were found to change their occupation at destination due to migration. This change is very much logical due to the variation of the occupations between origin and destination. The main source of household income is closely related with the occupation of the household heads and thus the findings indicate that the changes of main sources of income are closely related to changes in the household heads' occupation. Regarding changes in working hours as a result of migration, 25.7% origin households and 35.7% migrants/households at destination reported that their working hours had been increased. The changes of land size (operated) as a result of migration indicate that about 71% migrant households of origin and about 32% migrant households/individuals at destination had reported to reduce their total land. Such findings occurred due to multiple reasons such as the migrant households may leased-out their land for sharecropping.

A comparison of type of house between pre-migration and post-migration period indicates that the type of house has improved for 6.1% households in the origin, however it has improved for 58% households/individuals at destination. Almost similar consequence has been observed in case of types of toilet. Both the positive and negative consequences as a result of migration regarding the number of rooms for living were found significantly higher for the migrant households/individuals living at the destination than for those living at origin places (Table 4). The result shows that 9% migrant-sending households at origin and about 17% migrant households/individuals from urban destination reported to have a positive impact on the ownership of Television. Almost similar percentage of migrant households/individuals from urban destination reported to have a negative impact on the ownership of Television, maybe due to the fact that these migrants come from the well-off households from rural origin where they had easy access to television before their migration. Approximately similar findings have been observed regarding the ownership of fridge. The findings also indicate that a considerable percentage of migrant households/individuals at destination reported to have a positive impact on the ownership of Television and Fridge and this percentage is significantly higher than that of the households who reported the same at rural origin. Regarding the economic status as a consequence of rural-urban migration, about 13% migrant households from rural origin reported that their economic status increased and only 2.6% households reported that their economic condition decreased due to migration. A higher percentage (17.8%) of migrant households/individuals from urban destination viewed that their economic status increased with 4.6% reporting negative impact. The overall findings indicate that rural-urban migration put significant positive impact on the life and livelihood of the migrant households/individuals both at origin and destination. The findings extracted from FGDs also reveal that household condition ultimately improves as a result of migration.

Labor compensation, fulfillment of expectations, involvement of women and children in economic activities and effect on households' food security

Table 5 shows the consequences of migration on some important issues for the migrant-sending households at origin. The information regarding annual cost of labor compensation due to migration indicates that about 88% cases there were no labor compensation. The proportion of migrants for whom labor compensation was done was found higher in the east region (19.8%) than the west region (4.5%). The average cost of labor compensation was estimated at Tk.5760 for east region, while it was Tk.4157 for west region.

As consequence of migration in terms of the fulfillment of expectations, over half of the households at origin were found fully satisfied and near one-third were partially satisfied. Only 7% expressed dissatisfaction. The information regarding involvement of women and children in economic activities due to migration has been collected and analyzed (Table 5). It is found that the involvement of women and children in economic activities due to migration has increased for 27.2% households, decreased for 8.8% households, and remained constant for 59% households. This involvement was found to increase for a higher percentage of households in the east region (32.2%) than in the west region (22.3%). In support of this quantitative finding, the qualitative finding from FGDs explores that in some cases migration raises women and children chores and distorts the care arrangements of the vulnerable household members; but in most of the cases chores and care arrangements do not change to a considerable extent and even at all.

About 55% of the households who reported an increase in the involvement of women and children in economic activities due to migration viewed an improvement of their food security condition, while 27% witnessed a worsening of their food security condition (Table 5). This situation may happen for the households who had low number of earners, less scope for compensating the depleted labor due to migration through hiring labor, high number of dependents, etc.; which forced the women and children to take-up economic activities. On the other hand, 75% of the households viewed to increase their food security condition, 21.1% viewed to decrease their food security condition among the households who have reported to decrease the involvement of women and children in economic activities due to migration. These households might have faced the situation reverse to the above one; which caused the involvement of women and children in economic activities to decrease.

Table 5: Labor compensation, fulfillment of expectations, involvement of women and children in economic activities and effect on households' food security

Characteristics	East		West		Both	
	No	%	No	%	No	%
Annual cost of labor compensation due to migration						
None	906	80.2	986	95.5	1892	87.5
≤Tk.1500	38	3.4	8	0.8	46	2.1
Tk.1501-Tk.3000	44	3.9	16	1.5	60	2.8
Tk.3001-Tk.4500	13	1.2	2	0.2	15	0.7
Tk.4501 & above	128	11.3	21	2.0	149	6.9
Total	1129	100	1032	100.0	2161	100
Average ±SD; Median	5760±4741		4157±2976		5481±4521	
Fulfillment of expectations (based on responses against key migrants)						
Don't know	53	7.1	21	2.8	74	4.9
Satisfactory	387	51.5	467	61.6	854	56.6
Partially satisfactory	250	33.3	226	29.8	476	31.5
Unsatisfactory	61	8.1	44	5.8	105	7.0
Total	751	100.0	758	100.0	1509	100.0
Involvement of women and children in economic activities due to migration (based on responses against key migrants)						
Don't know	53	7.1	21	2.8	74	4.9
Increase	242	32.2	169	22.3	411	27.2
Decrease	50	6.7	83	10.9	133	8.8
Constant	406	54.1	485	64.0	891	59.0
Total	751	100.0	758	100.0	1509	100.0
Effect on food security due to increase of involvement of women and children						
Increase	106	43.8	119	70.4	225	54.7
Decrease	83	34.3	28	16.6	111	27.0
Constant	53	21.9	22	13.0	75	18.2
Total	242	100.0	169	100.0	411	100.0
Effect on food security due to decrease of involvement of women and children						
Increase	23	46.0	77	92.8	100	75.2
Decrease	23	46.0	5	6.0	28	21.1
Constant	4	8.0	1	1.2	5	3.8
Total	50	100.0	83	100.0	133	100.0

4. CONCLUSION AND RECOMMENDATION

The adult males are more exposed to rural-urban migration. Majority of the migrants are the first generations of the household heads and are school graduates. Rural-urban migration restructures the rural labor market towards off-farm economic activities and reallocates this labor force in urban areas as a route out of agriculture. A considerable number of migrants are students pursuing for better and higher education. The portion of the migrants employed in the urban sector is inexperienced to a greater extent and get engaged in non-corresponding jobs with respect to their pre-migration occupations in rural sector. The flow of rural-urban migration from the Western part of Bangladesh is significantly greater than that from the Eastern part. This flow tends to decline proportionately to Dhaka, the capital city, and tends to increase proportionately to districts headquarters and upazilla headquarters. This flow also shows a proportionately decreasing tendency for the factor of poverty and increasing tendency for the factors of networking, natural calamities and socio-political unrest. This process of migration tends to appear as a mixed blessing for its stakeholders in terms of exerting both negative and positive effect on the concerned indicators resulting in an overall net positive result.

This paper recommends the policy-makers using rural-urban migration as a means for managing rural labor market in a win-win way for both rural and urban sectors. It also suggests that since there is no effective way to stop the flow stemming from revealed preference, the opportunities and challenges resulted from this process deserve well-planned management for optimum outcomes.

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