

## Local Economic Impacts of Human Capital Migration

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### Abstract

International Human Capital migration is one of the key components of micro economic development in a labour supplying country. The returns of migration play a significant role in the economic development and growth of the source country. The remittance causes a positive Balance of Payment as well as poverty eradication in Bangladesh. These Human Capital migrations also have impacts on micro economic issues like local and household economy, which have received very little attention in existing studies. The purpose of this paper is to describe the impacts of international labour migration on local economic development. Therefore, to check the issue, this study collected primary data based on a questionnaire survey from 306 Bangladeshi workers who are engaged in wage-earning employment in Malaysia during the period of Nov-Dec 2010. This study analysed the data based on the Path Measurement Model. This empirical study found that international Human Capital migration significantly improves the local and household economy of Bangladesh such as house ownership, improvement of economic conditions, donation towards local institutes and infrastructure, new work experience, new skills, and poverty reduction. Some initiatives such as communication skills, maintaining and improving economic diplomacy and discouraging the Hundi System (Illegal remittance transfer system) are suggested to improve these rising consequences of international migration in Bangladesh.

**Keywords:** International migration; Human Capital; Remittance; Local and households impacts; SEM

### 1. Introduction

Once a person crosses the borders of his/her native country and stays in a different country for a period of time, it is called international migration (Stanat & Christensen, 2006). There are several forms of international migrants such as, temporary migrants; undocumented migrants; highly skilled and business migrants; forced migration; irregular migrants; asylum seekers; family members; refugees; return migrants; and long-term, low-skilled migrants (OECD, 2006). These international migrants generally send back a portion of their income to the home country, which is called remittance. It is the second largest financial inflow, exceeding global aid in various developing countries. It plays an enormous role in the

economy in many developing countries, and contributes to economic growth and livelihoods; it is often represented as a channel for better jobs, better salaries, etc. (Mamun and Nath, 2010).

The trade of human capital migration awards considerable benefit to the individuals as well as the country as a whole. It brings remittances, investments, trade relations, newer knowledge & ideas, foreign attitudes, and information. Indirectly, remittances create a scope for more consumption and have different effects on education and business. Moreover, non-migrant households also benefit from remittances (Adams, 1991; Taylor, 1999).

Remittances influence poverty most directly by raising the income of households with the overseas earnings. Migration can alleviate poverty according to a research conducted by Adams and Page (2005) on data from 71 developing countries, which showed a 10 percent rise in the split of remittances in a country's GDP on average with a 1.6 percent decrease in the share of people living in poverty.

At present, it is recognized that at the micro level, remittances are a key source of household income in general for the beneficiary families in developing countries. A major part of remittances is commonly used for every day expenses on food, clothing, health care, education (Edwards and Ureta, 2003; Ghosh, 2006; Islam et al. 2013; Cordova, 2004), going on pilgrimage (Kuhn and Menken, 2002), and basic needs for provisions. Some of these remittances are also spent on construction of new houses or refurbishment of existing houses (Alderman, 1996; Crawford, 2001; Kuhn and Menken, 2002; Gardner, 1995), acquisition of land, livestock, and consumer commodities such as refrigerators, televisions, air-conditions, washing machines, and other electronic devices. Nevertheless, a small part of remittances is saved and used for investment purposes such as opening a small enterprise and other income and employment spawning deeds with multiplier effects. The study try to find out the impacts of international labour migration on local economic development in Bangladesh.

## 2. Litareture Review

The microeconomic determinants of remittances inflows are socio demographic features of migrants along with their families; these include migrant income, household income, gender, marital status, age, education level, duration level, migration costs, risk, wealth, shock, and dependency ratio (Agarwal and Horowitz, 2002; Amuedo-Dorantes and Pozo, 2006; Holst and Schrooten, 2006).

Furthermore, remittances can encourage entrepreneurship, generate significant employment and income and influence economic development and poverty mitigation by encouraging microenterprise development (Woodruff and Zenteno, 2001).

An additional prospective benefit at the household level is that remittances may offer safety against natural disasters or economic recession; when migrants' households face economic difficulties, migrants can avail extra support by escalating the volume of remittances sent and this countercyclical cash flow can afford a type of insurance for poor households in Bangladesh (World Bank, 2006).

The inflow of remittances can have very positive effects on intra-family or intra-community resources. At the household level, remittances have been playing a vital role. These remittances unswervingly become an element of the household budget, which can either be saved or spent on fundamental needs of both durable and non-durable goods by the receivers' households.

Workers' remittances aid in alleviating credit constraints and as mentioned earlier, offer working capital for the recipient families to commence business activities. This leads to job creation and develops the development procedure of the remittance-receiving locality.

McDowell and de Haan (1997) and De Haas (2006) mentioned migration along with growth of agricultural products and other local non-farming activities as the main strategies to ensure livelihoods.

Yang and Martinez (2005), Yang (2006), Yang (2008), and De Haas (2006) revealed that the developmental effects of migration could be far more positive than assumed. They drew the conclusion that migrant households have a higher tendency to invest in comparison to the non-migrant households.

Migrant's remittance has become a major source of income to many households in Bangladesh. Migration is an effective tool for poverty reduction and it is important for the local development of labour-intensive countries such as Bangladesh (Rahman and Rahman, 2008), as it improves the living standard as well as family welfare (Ahmed, 2012). However, it also has some adverse consequences in the society. Sabur and Mahmud (2008) mentioned that the connection of migrants has increased local political activities. Moreover, Afsar et al. (2002) pointed out that remittances have an optimistic impact on keeping school-going children in schools in Bangladesh. Though there is very little study on the impact of remittances on a child's health, the few available studies show the helpful impact of remittances on child mortality.

Several studies (Ali, 1981; Salim, 1992; Matin, 1994; Mahmud, 1989; Hussain and Naeem, 2009) have demonstrated the contributions of remittance to the national economic development, economic growth, and poverty reduction, etc., but very few studies have been conducted on the local economic development of migration in the case of Bangladesh. The present study is an attempt to find out the impacts of international human capital migration on local economic development in Bangladesh.

### 3. Data and Models

This study uses primary data that was collected in Nov-Dec 2010 from the Bangladeshi labor working in Malaysia. The stratified random sample methodology was used to select samples. A total of 306 samples were collected from the area of Bangi, Kajang industrial area, Nilai, and Cameron Highlands in Malaysia.

This study conducted the Path Modeling analysis to determine the reason for the improvement of local and household economic condition of NRBs based on the primary data. The variables of the path modeling are: (X<sub>31</sub>) = Providing zakath and charity; (X<sub>36</sub>) = Influence on local or national politics; (X<sub>37</sub>) = Donate to local institutes; (X<sub>38</sub>) = Donate to improve the infrastructure; (X<sub>39</sub>) = Generate employment; (X<sub>41</sub>) = New work experience and new skills; (X<sub>42</sub>) = Know a new language; and (X<sub>43</sub>) = Boost up their mentality and positive attitude.

### 4. Results and Discussions

#### 4.1 Demographic Characteristics of the Respondents

Among the respondents in the survey, 94% of them are male (Table 1). Most of them are young people, where around 61% of the respondents are within the age range of 20-30, and 40.4% are within the age range of 30-40 years.

**Table 1:** Gender and Age Distribution of the Respondent

Gender	Age				Total	%
	Below 20	20-30	30-40	40-50		
Female		14	3		17	6%
Male	3	172	90	24	289	94%
Total	3	186	93	24	306	
%	1.0%	60.8%	30.4%	7.8%		

Most of the respondents have a very low level of education. Around 15% are illiterate, 44% passed primary education, and 30% passed the secondary education level (Table 2). Most of the respondents originated from the Dhaka and Rajshahi division of Bangladesh.

**Table 2:** Home District and Educational Level Distribution of the Respondent

Home District	Education					Total	%
	Graduate	HSC	Illiterate	Primary	SSC		
Barisal			2	5	2	9	3%
Chittagong	1	3	7	18	4	33	11%
Dhaka		9	10	48	24	91	30%
Khulna		8	14	28	23	73	24%
Rajshahi		11	11	35	36	93	30%
Rangpur		3			2	5	2%
Sylhet			1	1		2	1%
Total	1	34	45	135	91	306	
%	0%	11%	15%	44%	30%		

Among the respondents, 39% work in the manufacturing sectors, 34% work in the agricultural sector, and 26% work in the construction sector in Malaysia (Table 3). Only less than 1% of the respondents have never switched jobs in Malaysia. However, most of the respondents have changed their jobs 1-3 times.

**Table 3:** Job Sectors of the Respondent

Job Sectors	Total	%
Agriculture	105	34%
Construction	79	26%
Manufacturing	119	39%
Service	3	1%
Total	306	

#### 4.2 Descriptive Statistics

Among the respondents, 74% mentioned that NRBs are providing Zakath, Fitra, and Charity (Table 4). They contribute to their local development as well as follow the necessary religious subscription. They also participate in social welfare as well as in helping the poor people in their own country.

On the other hand, according to 80% of the respondents, NRBs influence local or national politics with the help of the financial support. NRBs also help local institutes and this is mentioned by 51% of the respondents. They try to pool money and send it to the particular areas of their homes for charity or community advancement. The money is given for the purpose of establishing social clubs, hospitals and health care and religious projects such as masjid/mosques, madrasa (religious school) or educational projects like Schools, Colleges and scholarships to students in the villages as well as many vocational institutes for social interest and wellbeing of those from the NRBs' hometowns. 60.5% of the respondents agree that the Non Resident Bangladeshis (NRBs) donate to improve the infrastructure, while 31.4% of the respondents are neutral. They make new roads and repair old roads and culverts for the villagers. 80.4% of the respondents agree that NRBs generate employment when they are staying abroad. NRBs help others to work abroad and create financial support for their family members to generate their own businesses.

**Table 4:** Descriptive Statistics of the Respondent

Issues	Disagree	Neutral	Agree
(X31) Providing zakath and charity	53 (17.3)	27 (8.8)	226 (73.9)
(X36) Influence local or national politics	244 (79.7)	43 (14.1)	19 (6.2)
(X37) Donate for local institute	157 (51)	74 (24)	75 (24)
(X38) Donate to improve the infrastructure	185 (60.5)	96 (31.4)	25 (8.2)
(X39) Generate employment	35 (11.4)	25 (8.2)	246 (80.4)
(X41) New work experience and new skills	10 (3)	15 (5)	281 (92)
(X42) Learned new language	27 (8.8)	17 (5.6)	262 (85.6)

**Source:** Authors' analysis on primary survey 2010

**Note:** percentage in parenthesis

91.8% of the respondents agree that NRBs have achieved new work experiences and skills when they are staying abroad. 85.6% of the respondents mentioned that the NRBs have learned a new language while staying abroad. Due to lack of education, availability of skilled workers in Bangladesh is very limited. Bangladesh mainly exports unskilled workers. It is noticed that most of the workers gather skills during their overseas employment i.e. unskilled workers turn into skilled workers due to overseas employment, which means that transfer of technology, is taking place silently into the country.

#### 4.3 Path Modeling

This study also conducted the path measurement model to determine the relationships between the Local and Human Development (HD) impacts of international migration in Bangladesh. Social, culture, and others are the three important dimensions that are considered to determine the level of influences.

The Squared Multiple Correlation result shows that there is 0.11 or 11% variance for X<sub>39</sub> (Generate employment), 0.24 or 24% for X<sub>41</sub> (New work experience and new skills), 0.08 or 08% for X<sub>42</sub> (Learn a new language), 0.05 or 05% for X<sub>43</sub> (Boost up their mentality and positive attitude), 0.13 or 13% for X<sub>31</sub> (Providing Zakath and Charity), 0.04 or 04% for X<sub>36</sub> (Influence local or national politics), 0.80 or 80% for X<sub>37</sub> (Donate to Local institute), and 0.32 or 32% variance for X<sub>38</sub> (Donate to improve the infrastructure) that was produced by the model.

In determining the Goodness-of fit for the generated structured model, the criterion suggested (Bentler, 1990; Bentler & Bonnett, 1980; Hair et al., 1998) shows that several types of goodness-of fit indicators need to be fulfilled such as the Chi-square,  $\chi^2$ s analysis (< 3 is the better), Root Mean Square Residual, RMSR [ $<.08$ ], Root Mean Square Error of Approximation, RMSEA [ $<.08$ ], Adjusted Goodness-of fit Index, AGFI [ $>.90$ ], Tucker-Lewis Index, TLI [ $>.90$ ], Normed Fit Index NFI, [ $>.90$ ], Relative Fit Index, RFI [ $>.90$ ], Incremental Fix Index, IFI, [ $>.90$ ], and Comparative Fit Index, CFI [ $>.90$ ] (Table 5). All of these results confirm the reliability of the path measurement model.

**Table 5:** Goodness of Fit Index for Path Measurement Model Estimation

Absolute fit measures	Incremental fit measures
Chi-square = 1.98;	AGFI =0.94
P-value =0.01	GFI=0.97
RMSEA= 0.06	NFI = 0.82
	TLI = 0.84
	IFI= 0.90
	CFI= 0.90

**Source:** Primary data from survey 2010

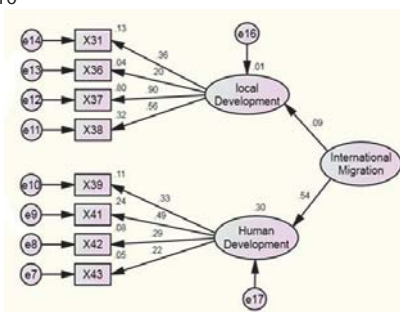
The Cronbach's Alpha is valued at 0.565 for the Local Development latent variables while the Cronbach's Alpha is valued at 0.305 for the Human Development's latent variables consisting of '(X<sub>39</sub>) Generate employment'; '(X<sub>41</sub>) New work experience and new skills'; '(X<sub>42</sub>) Know a new language'; and '(X<sub>43</sub>) Boost up their mentality and positive attitude'. These show that all latent variables used in the model are lower than the suggested value, which is at least 0.7 (Hair et. al., 1998). Furthermore, De Vaus (2002) suggested that the relationship between one item and the rest of the items in the scale should be at least 0.30, as such these results are acceptable.

Table 6 shows that the Local Development latent variable to the observed variable path coefficient of X<sub>37</sub> obtained the highest value, which is 0.90; the X<sub>38</sub> has 0.56 value of path coefficient and the X<sub>31</sub> has 0.36, which is considered very poor. On the other hand, the other latent variable is Human Development where the X<sub>41</sub> observed variable has the highest path coefficient value, which is 0.49, and X<sub>39</sub> has a 0.33 value. SEM results show that Human Development has the highest effect (Coefficient 0.54) on International Migration compared to Local Development.

**Table 6:** Summary Output of the Path Measurement Model Diagram

Unobserved Variables	Observed Variables	Correlation (Coefficient)	Effect (Variance)	Correlation (Coefficient)	Effect (Variance)
Local Development	X <sub>31</sub>	.36	.13	.09	.01
	X <sub>36</sub>	.20	.04		
	X <sub>37</sub>	.90	.80		
	X <sub>38</sub>	.56	.32		
Human Development	X <sub>39</sub>	.33	.11	.54	.30
	X <sub>41</sub>	.49	.24		
	X <sub>42</sub>	.29	.08		
	X <sub>43</sub>	.22	.05		

**Source:** Primary data from survey 2010



**Figure 1:** Path Measurement Model to estimate the contributions of Local and Human Development

**Source:** Primary data from survey 2010

## 5. Conclusion and Recommendation

Remittances constitute an important phenomenon in the Bangladesh economy. At the same time, it also has some micro level contributions such as significantly improving the status of the migrants and increasing financial contributions to other local issues such as donating towards local institutes, and donating to improve the infrastructure of the local community. Moreover, the returning NRBs have become experienced and have achieved more skills. There should be scopes and facilities to utilize these skills after the NRBs return to Bangladesh. The government needs to provide various investment benefits, financial and credit support, insurance facilities, and advisory support, etc. The government policy needs to consider the local and family issues of the NRBs such as to establish training and counselling services.

The remittances have various possible effects on poverty reduction. The utilization of remittances has been a major area of research in Bangladesh. Migrant families around the world are dependent upon remittances to protect their livelihood. De Bruyn and Kuddus (2005) discovered that the savings rate of remittance-receiving households is significantly higher than that of non-receiving households.

For the betterment of the prospective expatriates, communication skills should be improved. The 'Hundi System' (illegal remittance transfer system) should be discouraged while making it easier to transfer remittances formally at a lower cost.

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