Migration to Big Cities from Coastal Villages of Bangladesh: An Empirical Analysis

By Mohammed Mamun Rashid

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Keywords : *climate change, coastal communities, migration, vulnerabilities.*

I. Introduction

Migration from one area to another in search of improved livelihoods is a key feature of human history. Begum (1999) asserts that migration is not new to Bangladesh. In this country, large-scale movement of the population has been a feature for a very long time. Increasing population is not the only factor responsible for rural-urban migration in Bangladesh since evidence shows that the overall lack of opportunities, lack of development seems to be increasingly associated with the rural areas. Afsar (2000) cites that rural-urban which has played a key role in the rapid urbanization process of Bangladesh will continue to increase in scale, complexity and diversity. Young

adults, men and women, illiterate and highly educated who have support from social networks in the places of destination will migrate to maximize income opportunities generated by the city and minimize risks of uncertainties in the places of origin. However, Bangladesh is already vulnerable to many gradual change phenomena of climate change as well as climate change related extreme events. United Nations High Commissioner for Refugees (UNHCR) states, "The impacts of climate change are already causing migration and displacement. People in the least developed countries and island states will be affected first and worst. Most people will seek shelter in their own countries. Some displacement and migration may be prevented through the implementation of adaptation measures. However, poorer countries are under-equipped to support widespread adaptation. As a result, societies affected by climate change may find themselves locked into a downward spiral of ecological degradation, towards the bottom of which social safety nets collapse while tensions and violence rise. In this worst-case scenario, large populations would be forced to migrate as a matter of immediate survival." Unfortunately, there is lack of adequate and reliable data on climate induced migration in Bangladesh. In general, there is also lack of comprehensive national data, union or sub-district based accurate figure and exact trends regarding rural-urban migration in Bangladesh. Based on primary research done by the author, this paper describes phenomenon of migration to big cities from coastal villages of Bangladesh. Migration is approached from the perspective of coastal communities. Though it is difficult to show trends of migration from whole coastal villages by only five village study but will provide evidence-based picture of migration in narrow scale. An attempt is made to pinpoint some characteristics of Bangladesh and lives and livelihoods scenario of coastal areas. Views and experiences of local people about climate change and its relationship with scientific research findings are administered to find out responses and adaptive measurements. This paper takes a closer look on climate induced forced migration and man-made causes that influence for migration decision. Vulnerabilities of migrants and family members have also been analyzed. A set of recommendations is given for consideration of policy makers.

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II. Objectives of the Paper

This paper aims to understand the changing causes of migration and how climate change affects migration. It describes the pushing and pulling factors of migration to big cities, contribution of migration and conditions after migration in big cities. Therefore, there are three research questions that researcher is going to answer in this paper. These are:

1. What are the causes and nature of migration from coastal villages to big cities? How does climate change affect migration?
2. In what ways does migration contribute to reduce or increase vulnerability?
3. What are the conditions of lives and livelihoods after migration in big cities?

III. Data and Methods

This study has been conducted in five coastal villages of Chittagong, Laxmipur, Noakhali, Patuakhali and Barguna districts in 2009. Data collection was started on September 2009 through door to door visit of 1,489 households. Name of the selected villages under particular union, *upazila* (sub-district) and district are shown in Table 1.

Table 1 : Name of Selected Villages

SL	District	Upazila	Union	Village
1	Chittagong	Chandanaish	5 no. Barama	Modhyam Char Barama
2	Laxmipur	Ramgati	7 no. Char Alexandar	Shebagram
3	Noakhali	Subarna Char	5 no. Char Jubile	East Modhyabagya
4	Patuakhali	Kalapara	7 no. Latachapli	Mombipara
5	Barguna	Patharghata	3 no. Charduani	Kaliar Khal

The five villages were selected randomly. The main methods used in this research were observation of respondents, Focus Group Discussion (FGD), complemented with semi-structured interviewing. The questionnaire for household survey comprises address of household in the village, member of households, age, sex, educational qualification and ownership of land. The questionnaire also contains the queries about types and nature of migration, age, sex, marital status, education and occupation of migrants, the causes of migration, specific place (destination) of migration, job in big cities, communication with area of origin, use of money and vulnerabilities of family members in the village. Biographic case studies were documented to portray pains and pleasures of migrants.

a) Bangladesh and Coastal Communities

Geographic area of Bangladesh is 147,570 square kilometers. Total population of Bangladesh was 123.85 million in 2001 (BBS 2001). As per UNFPA, population of Bangladesh was 164.4 million in 2010 (UNFPA 2010). According to the provisional results of 2011 Population and Housing Census, the enumerated population on 15th March 2011 was 142,319,000 (BBS 2011). Approximately 25 percent of current population lives in urban areas.

Bangladesh is predominantly an agricultural country. Gross National Income (GNI) is US$ 645 in 2010 (WB 2010). Bangladesh ranked 129th, out of 169 countries, of the UN Human Development Index and has been improving over the last decade (HDR 2010). Based on the upper poverty line, in HIES-2010 incidence of poverty is estimated at 31.5 percent at the national level, 35.2 percent in rural area and 21.3 percent in urban area. In 2005, these rates were 40.0 percent at the national level, 43.8 percent in rural area and 28.4 percent in urban area. Based on the lower poverty line, in 2010 the incidence of poverty is estimated at 17.6 percent at national level, 21.1 percent in rural area and 7.7 percent in urban area. In 2005 these rates were 25.1 percent at national level, 28.6 percent in rural area and 14.6 percent in urban area (HIES 2010). An estimated 60 million people are living below the poverty line with a significant proportion living in households which are female headed, in remote areas, and consisting of socially excluded and other vulnerable people. Most of the labor force is engaged in informal low productivity and low income jobs (BSFYP 2011-2015).

Bangladesh has a coastline of 710 kilometers and an Exclusive Economic Zone (EEZ). There are different views on the delimitation of the coastal areas. The conventional view is that the land that is inundated by the high and low tides is called the coastal belt. There are total 19 coastal districts and 147 *upazilas* (sub-district). A total of 48 *upazilas* (sub-district) in 12 districts are defined as exposed coast and remaining 99 *upazilas* (sub-district) are termed as interior coast. Table 2 shows geographical coverage, households, population of coastal zone and comparison with mainland of Bangladesh. It is found that 28.32 percent of total populations of Bangladesh lived in coastal areas in 2001. At present, 26.71 percent of total populations live in coastal areas where they mostly depend on fishery, agriculture, forest, local transportation, salt production and so on for their lives and livelihoods.

The coastal zone is relatively income-poor in comparison to the rest of the country. Among the occupational groups, the incidence of poverty is the highest among agriculture laborers. Their wages are low

and employment is also not regular because of the seasonal character of agriculture. The proportion of the population below the officially acknowledged "extreme poverty" level (income below $1/day) is 29 percent in Bangladesh (World Bank 2003; Islam 2004). According to poverty map; trends of extreme poverty have increased and decreased as well in coastal sub-districts in between 2000 and 2005. But the situation in the coastal area remains disappointing, even in some areas poverty higher than 60 percent. Sixth Five Year Plan 2011-2015 of Bangladesh declared 21 districts as poorest districts in 2005. Out of them, seven are coastal districts like other districts of Rajshahi division. This national plan also listed 21 sub-districts as poorest sub-districts. Nine coastal sub-districts are included in these lists which are located in poverty pocket.

Table 2 : Area, Households and Population of Coastal Zone and Bangladesh

District	Area (km²)	Households		Population	
		2001	2011	2001	2011
Bagerhat	3,959	321,640	354,700	1,516,820	1,461,000
Barguna	1,831	180,060	214,600	845,060	882,000
Barisal	2,785	475,680	509,800	2,348,440	2,291,000
Bhola	3,403	328,540	371,700	1,703,200	1,758,000
Chandpur	1,704	422,740	506,600	2,241,020	2,393,000
Chittagong	5,283	1,228,880	1,523,000	6,543,860	7,509,000
Cox's Bazar	2,492	294,460	417,700	1,759,560	2,275,000
Feni	928	213,040	276,800	1,205,980	1,420,000
Gopalgonj	1,490	217,440	247,300	1,151,800	1,149,000
Jessore	2,567	521,360	656,200	2,469,680	2,742,000
Jhalokathi	749	145,700	139,400	692,680	596,000
Khulna	4,394	494,800	546,400	2,357,940	2,294,000
Laxmipur	1,456	287,880	364,100	1,486,540	1,711,000
Narail	990	140,020	162,700	694,900	715,000
Noakhali	3,601	460,240	590,800	2,570,640	3,072,000
Patuakhali	3,221	280,980	346,900	1,464,800	1,517,000
Pirojpur	1,308	233,160	255,300	1,099,780	1,103,000
Satkhira	3,858	390,080	470,800	1,845,120	1,973,000
Shariatpur	1,182	213,240	247,800	1,080,680	1,146,000
Coastal Zone	47,201	6,849,940	8,202,600	35,078,500	38,007,000
Bangladesh	147,570	25,307,600	32,067,700	123,851,120	142,319,000
Percentage	31.99	27.07	25.58	28.32	26.71

Source : Population & Housing Census: Preliminary Results 2011 and Census 2001

Coastal areas of Bangladesh face with several natural disasters like cyclone, tidal, flood etc. In addition, there have man-made different disasters like arsenic, water logging and salinity in water & agricultural land. Now days the threat of cyclonic storm like *Sidr*, *Aila* and tidal wave and cyclone of 1970, 1991, 2007 and 2008 has become a permanent phenomenon in their life. Beside these, smaller storms and tidal bore occur almost every year. Every disaster brings about extensive loss of life and property. Still people are compelled to go to the sea for fishing during rough weather only for their survival or to meet the demand of moneylender. Depletion or degradation of the natural resources affects millions of people since majority of population depend on agriculture, aquaculture and fishing for their livelihood.
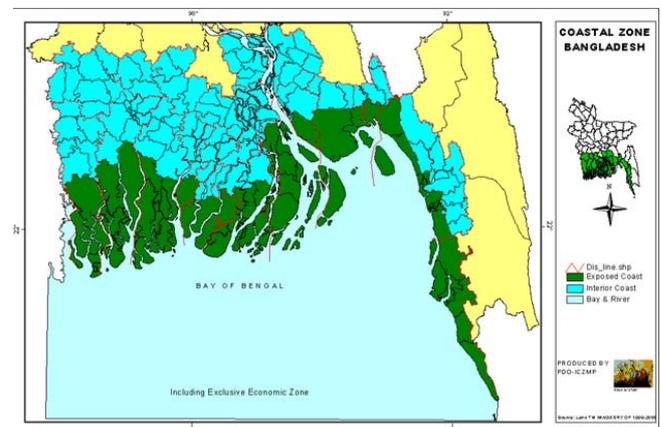
Map 1 : Coastal Zone of Bangladesh. *Source:* Islam M. Rafiqul (2004)

b) *Study Villages*

This study has been conducted in five coastal villages. Basic facts and figures are recorded at the time of village study. Characteristics of villages are given briefly in Table 3 which is ground of migratory outflow:

Table 3 : Characteristics of Villages

Village	Characteristics
Modhyam Char Barama	Area: nearly 1.50 square kilometers; No. of households = 270; Household members = 1,607; No. of landless households = 227. Major occupations: 42% agriculture and agricultural labor, 13% day labor.
Shebagram	Area: nearly 2.00 square kilometers; No. of households = 239; Household members = 1,410; No. of landless households = 214. Major occupations: 59% fishing, 11% agricultural labor, 8% day labor.
East Modhyabagya	Area: nearly 3.00 square kilometers; No. of households = 407; Household members = 2,376; No. of landless households = 328. Major occupations: 36% day labor, 32% agriculture and agricultural labor.
Mombipara	Area: nearly 1.20 square kilometers; No. of households = 221; Household members = 1,037; No. of landless households = 168. Major occupations: 33% agriculture and agricultural labor, 28% fishing.
Kaliar Khal	Area: nearly 2.50 square kilometers; No. of households = 352; Household members = 1,492; No. of landless households = 299. Major occupations: 56% fishing, 15% agricultural labor.

Most of the study villages are located in remote area where hardly any industrial development takes place. People have poor access to drinking water, health services and sanitation coverage. There is dearth of cyclone shelter. 1,236 households, out of total 1,489, are landless. The term 'landless' in Bangladesh does not necessarily mean being entirely without land and a household in this category can have up to 0.49 acres, that is, approximately 2,000 square meters (DAE 2007). However, 422 households have neither cultivatable land nor even homestead land.

c) Out Migration

Defining and classifying migration is no longer easy and straightforward. The traditional definition of migration, i.e. 'movement of people from one place to another, temporarily or permanently, in search of better life, livelihood, or, to avoid threat to life and livelihood', faces the challenge of incorporating the notion of transnationalism. New definitions of migration are required to embrace the simultaneous stay of a person in more than one space (Siddiqui).

Confusion was raised about calculation of existing households in the selected villages. During door to door data collection, different nature of migrations was discovered. A section of migrants lose their homestead, assets or sell those and usually do not come in village and in many cases their neighbors or relatives do not know their destination. Few of such section of migrants occasionally come in village. Simply, they were not included during calculation the number of households in the village. On the other hand, a group of migrants who live in town or city with whole family but house in village is usually locked or looked after by domestic worker, neighbor but they come in village occasionally or certain intervals. Moreover, some migrants are somehow settled at destination by marriage or other means but their family circle live in village. Many of them are voters at their destination. It was a confusion to include them or not during

households and population calculation. Union Parishad (UP), lowest tier of administrative unit in Bangladesh, would like to characterize it as settlement in town or city rather than permanent migration. Union Parishad (UP) also advised to include them under respective village and judged that they have address in village. Therefore, the applied definition of permanent migration from the village refers such households who lose, sell (or other mode) their homestead i.e. simply do not have homestead in the village and do not live there also.

Seasonal migration refers migration for one to four months with seasonal work purpose. The duration of seasonal migration vary on nature of work and also has variation considering the characteristics of different areas. Therefore, the standard duration of seasonal migration has been fixed-up through consultation with participants in FGD. It is also found that some migrants relocate from village to do higher study, white or blue color job, and to be self-employed in town or city. Majority of them live at dormitory or rented house and family members living in village. Though it is very difficult to make boundary line between permanent migration and settlement and other classifications, but it has been done from thoughts of local people. This paper makes scope of wider discussion and quite flexible for re-classification. Table 4 shows village-wise migration picture.

Table 4 : Village-wise Statistics of Migration

Categories	Modhyam Char Barama	Sheba Gram	East Moddambaga	Mombi para	Kaliar Khal	Total	%
Households	270	239	407	221	352	1,489	-
Permanent migration	36	141	14	17	29	237	-
Settled in town or city	4	3	39	10	38	94	-
Seasonal migration	1	61	121	46	56	285	19%
Migration for regular work or study	19	6	6	13	9	53	4%

It is very difficult to find out actual figure of permanent migration due to lack of proper information. One respondent told in Bengali, "*Ami Janina Amar Protibeshi Gram Chere Kotai Chale Geche*" (I do not know where my neighbor goes away from the village). However, a total of 237 households permanently migrated from the village during last one year, i.e., 2008-2009. Seasonal migration is controlled by an extended period of low labor demand in the home village, combined with alternative and accessible labor demand elsewhere. A total of 476 migrants from 285 households migrate seasonally from the village. The rate of outflow from the villages is not same with inflow in big cities because some migrants move to sub-district centers, small towns, outskirts and richer villages. As for example, only 39 households, out of river eroded 141 households, of Shebagram village migrated to Chittagong and Dhaka city. Others migrated to nearby villages for immediate shelter and still find out hope of source of income. Majority of seasonal migrants go to Dhaka and Chittagong city. Destination and occupation of seasonal migrants are not static in nature. One year some seasonal migrants work at brickfield which is not so far from the village but in another year same people go to big city to work at restaurant or for rickshaw pulling. Even nature and types of work of day labor is changed within a week. However, it is proved that majority of migrants are pouring to big cities. A large number of women and adolescent girls migrate from respective village. They usually come in city through contact with relatives or neighbors. As for example, elder sister brings her younger sister or cousin. Sister brings the wife of her brother or sister-in-law. Aunt brings nephew, one brings her ex-classmate who drop out from school. Such mixing relationships are found that is used as a social capital to come in the city and secure job at garments factory. It is apparent that more girls and females are migrating now and not just as accompanying spouses. As for example, total 107 members from 38 households of Kaliar Khal village migrate to Chittagong city, Dhaka city and nearby areas. Out of them, 85% go to Chittagong city and most of them are female and girl. They work in garments factory and live at Kalshi Dighir Par, Pre Port, Chittagong. It is happened due to economic hardship, demand of female labor, cheap labor, growing social acceptance of women's economic independence and mobility. They mainly live at rented house in city but bulk number of relatives and neighbors of village are living in cluster. They are used to sharing food, practice own language and culture in city. There is little chance to back of such migrants to the village.

d) Push Factors

Push factors are differed from village to village. As for example, river erosion is the main push factor of permanent displacement from Shebagram and Modhyam Char Barama village. But this factor does not work in rest of the villages. Unemployment for a particular period is another push factor of seasonal migration. Lack of employment during *jatka* (juvenile hilsha fish) preservation period i.e. from *Kartik* (October-November) to *Baisakh* (April-May) is main cause for seasonal migration of people who mostly depend on fishing. Unemployment during *Kartik* (October-November) to *Jaistha* (May-June) is the main cause of seasonal migration from east Moddambaga village where most of the people are engaged in agricultural work. Agricultural poverty (of which lack of cash crop is often a sign) stimulates migration. However, major push factors found in this study are losing homestead and cultivatable lands due to river erosion, natural disasters, sea level rising, plunge of low land, water logging, drainage problem, salinity, depletion of fishing resources, low yield in agricultural lands, decreasing the productivity of per labor in agricultural sector, single crop production, destruction of crops by natural calamities, lack of knowledge to cultivate climate change adaptation crops, tortured by sea pirates, vicious cycle of *dadander* (moneylender), pressure from few NGOs to repay loan, no hope in village, food insecurity, inadequate access to *khas* (government) land and resources, very little access to safety nets program and so on.

e) Climate Change

Temperature, rainfall, wind pattern and solar radiation mainly characterize the climatic systems of Bangladesh and determine the seasons (Islam et al., 2010). Brammer (2002) and Islam et al. (2010) classified Bangladesh into four distinct climatic seasons. These are: 1) Pre-monsoon (March to May) with high temperatures with high evaporation rates, 2) Monsoon

characterized as hot and humid period with decreasing rainfall, and 4) Dry or winter seasons (December to February) portrayed as the coolest, driest and sunniest period of the year. Bangladesh is at the risk of climate change. The average rate of heat of Bangladesh increased over the last 14 years (1985-1998) and in May it is 1°C and in November it is 0.5°C increased. Soil salinity increased and as a result, 830,000 hectares cultivable land have been affected. Severe floods have been repeated in 2002, 2003, 2004 and 2007. The number of cyclones in the Bay of Bengal has increased. In dry and hot summer, salt water from the sea enters within the mainland up to 100 kilometers. By 2050, the productions of rice and wheat will decline by about 8% and 32%, respectively (against a base year of 1990). The impacts of climate change on Bangladesh have significant implications for its development because reliance of many livelihoods on climate sensitive sectors, particularly agriculture and fisheries (AR4 2007).

Migration occurs in response to multiple pressures, and it is difficult to isolate environmental pressures from ongoing economic ones. Issues and concerns of climate change have been portrayed, in nutshell manner, through views of local people and coinciding with secondary research findings for scientific validation. Climate change affects on lives and livelihoods at study villages and breeding causes of migration.

Local people opine that the environment has been changing over the years. Salinity intrusion deteriorates water quality. Drainage congestion and water logging are common in these villages. Villagers perceive that increasing of salinity may make saline desert in the arable lands. They also state that there has been changed in seasonal rainfall pattern. Rainfall is erratic. Temperature has been increased over the years. FGD participants of Mombipara and Kaliar Khal village told that during cyclone *Aila* water entered into village and flow of water was higher than the height of embankment. Root of trees beside embankment became weak due to long time staying of water and it washed soil from lower domain. Such episodic inundations by cyclones turn arable lands of the village into water-logged areas. The village is not properly protected by embankment. On 15 November 2007 and 25 May 2009, cyclone *Sidr* hits the southern coast and cyclone *Aila* swept across the south-western coastal belt of Bangladesh respectively. The scale of the damage caused by *Aila* is much larger than the damage caused by cyclone *Sidr*. Cyclone *Sidr* had damaged homes, crops, and livestock overnight. But *Aila*, with its stagnant, saline flood waters, is like a slow poison that is steadily, but surely, killing vegetation, fish and fruits, destroying arable land, and leaving behind a trail of homeless, internally displaced people whose homes have either been water-logged, completely inundated, or destroyed by the flood and livelihoods- their assets and occupations- have been destroyed.

FGD findings are differed from village to village. Participants of Modhyam Char Barama and Shebagram village are extremely concern on permanent displacement due to river erosion. Intrusion of saline water, severe salinity, drainage congestion, wetness and water logging are major problems of Mombipara and Kaliar Khal village. Production of crops like groundnut, chili, watermelon and mustard is declined. Scarcity of irrigation water, drought, drainage congestion and water logging are major problems of East Modhyabagya village. Pulse crops (soybean, *mungbean* and *khesari*) are affected. BCAS (2010) research findings reveal that there is an increasing trend of maximum and minimum temperature both in *rabi* and *kharif* seasons affecting the cultivation of *rabi* crops in Noakhali and Patuakhali districts. Changes in temperature during 1975-76 to 2005-06 in coastal districts are considered for analysis. During same period, the decreasing trend of rainfall in *kharif* season affects the cultivation of rain fed crops. But increasing trend of rainfall in *rabi* season favors the cultivation of *rabi* crops in Patuakhali district. Total rainfall pattern in *kharif* season is decreasing that affects the cultivation of rain fed crops in Noakhali district. Scientific research findings are harmonized with views of local people.

Climate change has effect on river erosion and displacement of the villagers. Climate change is likely to increase rainfall in the Brahmaputra-Ganges-Meghna basin in the monsoon season. This will result in higher river flows and possibly increased velocities. This is likely to cause further instability in the already unstable river system. Higher rainfall in upper catchments may also cause increases in sediment movements. Overall, river systems are expected to become more unstable as a result of climate change. River bank erosion is likely to become more frequent (BCCSAP 2009). River erosion is one of the causes of displacement of many households from two study villages.

Climate change has direct and indirect adverse effect on fish flora and fauna for their reproduction, migration and survival. During last two decades *hilsha* production from inland water declined about 20%, whereas marine water yield increased about three times. Major *hilsha* catch has been gradually shifted from inland to marine water. *Hilsha* fish ascend for spawning migration from sea into estuaries and most of the river systems of Bangladesh. Where, all the essential exogenous semi-saline or freshwater ecological parameters trigger the reproduction of *hilsha* parental stocks. The river water nurses the millions of larvae where they grow and revert to juvenile and adult *hilsha*. At that stage they again migrate towards the sea. But the recent siltation problem on the upstream part of Padma and other river systems affected the normal course of spawning and migration of the fish. Availability

of *hilsha* stock is gradually declining in the Padma and Meghna River catchments areas. As a result, the trend of *hilsha* production in the rivers has been decreased and alternatively, the production trend in marine water as mentioned above has comparatively been increased (M.G. Hussain et al., 2010). It is reported from the fishermen that they must generally travel much further from their village to make their catches.

It is complicated to draw line between voluntary and forced migration. Migration of student for higher study is voluntary in nature. But displacement due to river erosion is forced migration. Though it is needful to think deliberately whither migration, itself, is an adaptation strategy or just a failure of adaptation; but it is noted that lack of shelter, unemployment, lack of adaptive cropping patterns, lack of capital, insufficient level of awareness and knowledge about climate change are the hindering factors to adaptation within these villages.

f) Pull Factors and Vulnerabilities

Population of Dhaka city corporation is 5.40 million, Chittagong city corporation is 1.99 million and Khulna city corporation is 0.78 million respectively (BBS 2001). However, as per different sources present population of Dhaka city shows more than double of 2001 census. As for example, the report title as "Dhaka: Improving Living Conditions for the Urban Poor" mentions that the population is currently around 12 million and is projected to grow to 20 million in 2020, making it the world's third largest city. Approximately 25 percent of Bangladesh's current population lives in urban areas. Of this urban population, more than half lives in the four largest cities: Dhaka, Chittagong, Khulna and Rajshahi. The population density is now believed to have reached around 34,000 people per square kilometer, making Dhaka amongst the most densely populated city in the world (BSFYP 2011-2015).

It is found that permanent migrants migrate to seek shelter and employment opportunities in big city though pull factors do not significantly magnetize them. Searching employment opportunities; whatever odd, irregular or underpaid, is the main pull factor of seasonal migration because people do not have ample employment opportunities round the year in village. Moreover, scope of employment particularly in garments factory, dream of better living conditions, communication with relatives living in city, social networks, access to facilities and amenities such as higher education and better medical care are other forms of pull factor. Two cases of migrated households are given herein for an idea about lives and livelihoods picture in Dhaka and Chittagong city respectively.

i. Let Case: 1

a. Background

Name: Majeda Khatun; Husband's Name: Panu Miah; Father's Name: Ali Hossain Faraji; Mother's

Name: Jobeda Bibi; Address: Mombipara, Latachapli, Kalapara, Patuakhali; Age: 30 years; Educational Qualification: III; Marital Status: Married; Children: 03 daughters; Occupation: Business; Nature of Migration: Permanent; Place of Migration: Dhaka City.

Majeda Khatun migrated from the village to Dhaka city in 2007. She lives in Notun Bazar slum. Her husband and three daughters also live with her. She has old mother, five brothers and five sisters. They live in village.

She says, "My husband was a day labor in the village. He also involved in rickshaw-van driving, fish fry collection and agricultural work. I used to make handicrafts in the village. We realized that, day by day, it was becoming very difficult for us to live in the village due to low income. I took loan from an NGO but failed to repay installment on time. Then we decided to migrate from village to search better earning option."

After migration in Dhaka city, Majeda Khatun started work in Boroitola brickfield as a day labor. Her husband was also employed in the same brickfield. They rented one house in Notun Bazar slum and still living in the same house. They have to pay monthly Taka 1,200. She says, "Environment in slum is worse than village though our house was on *khas* (government) land i.e. outside of embankment. Slum is densely populated and rapidly proliferating due to migration from village. Sometimes people are killed by cutting under train. There is also serious crisis of drinking water."

Now Majeda Khatun has small tea stall in slum i.e. beside rail line. She sells tea, biscuit, cigarette and betel leaf. Her husband works as a day labor i.e. loading and unloading goods in the truck. Her elder daughter, Aklima, works in a garments factory. She says, "I came to Dhaka with my parents. I work in a garments factory and earn Taka 1,600 monthly. My parents encouraged me to work in garments factory. I give some of my earning to my parents and the rest I spend for myself."

Elder daughter of Majeda Khatun read up to class two in village and now works in a garments factory. Other two daughters do not go to school. Majeda Khatun says, "After few years they will be sent to garments factory or employed as housemaid." She also mentions that the environment in village is better than the city but has limited scope of job opportunities. That's why they migrated from village to Dhaka city.

b. Learning

Though the environment of the village is better than the city but due to limited scope of job Majeda Khatun and her family migrate from the village. The reality of squeezing employment scope due to environmental degradation enforces them to leave the village. To survive with city struggle, Majeda Khatun runs a tea stall; her husband is employed as a day labor and elder daughter works in a garments factory. She has

also planned to send younger daughters in garments factory.

ii. *Let Case: 2*

a. *Background*

Name: Abul Kalam; Father's Name: Late Abdul Mannan; Mother's Name: Late Tahera Khatun; Address: Shebagram, Char Alexandar, Laxmipur; Age: 29 years; Educational Qualification: Illiterate; Marital Status: Married; Children: 04 sons and 02 daughters; Occupation: Rickshaw pulling; Nature of Migration: Permanent; Place of Migration: Chittagong City.

Abul Kalam is a rickshaw puller. He migrated along with whole family members to Chittagong city in 2008. Now his family members live in very low quality house like a temporary thatched shack beside the canal of fishery *ghat* (landing centre), Chittagong.

Occupationally Abul Kalam was a fisherman. He lost three acres land by erosion of the Meghna. He says, "I shifted house three times due to erosion. My family members lived on other land after losing assets. Erosion changes everything; our home, livelihood and the society as well. River erosion is the curse for us." He has four sons and two daughters. His elder son (20) was a day labor in village and now working in fishery *ghat*, Chittagong. His second (17) and third son (14) dropped from school due to migration and not doing anything in city. Elder daughter (11) also dropped from school. Other son and daughter are under aged.

Abul Kalam had a small boat of *hilsha* net, which was broken down by the devastation of cyclone *Sidr*. He was also attacked by sea pirates. After losing his homestead for the last time, he decided to migrate with all of his family members to Chittagong city. He says, "We are erosion victim. We are landless and aimless. River not only erodes our lands but also our lives. We do not get access in *char* (lands accreted by the river sediment). There are the land dacoits and illegal grabbers."

After migration to Chittagong city, they started living in one house beside the canal which is adjunct to the river Karnafully. The house is elevated above the water flow and debris. More than 20 households share hanging latrine. Garbage, along with excreta, is dumped in canal which congests sewage system. Moreover, low laying area is submerged during tidal surge of the Karnafully. Rats and cockroaches scurry across the floor of the damp, dark and poorly-ventilated room.

Abul Kalam earns Taka 250 to 300 daily. He has to pay Taka 70 per day to owner as a rent. He changes his profession from fisherman to rickshaw puller. Though he found pulling the rickshaw quite hard on his body, he is now used to it. His income is not regular because rickshaw pulling depends on physical strength. He is not able to admit his children (dropped from school of village) into school due to extreme poverty.

The dream and life of Abul Kalam has been shattered due to river erosion. He survives in big city; however still he is dreaming about a good shape of life for his children.

b. *Learning*

Once Abul Kalam was a fisherman but river erosion compels him to change his profession. He shifted his house three times and at last he permanently migrates from the village. Now his family members live in a temporary thatched shack in Chittagong. Once he had a dream to educate his children but now his dream has been shattered. Climate change induced erosion changes everything; home, livelihood, society and fall them in vulnerable condition.

Neighbors do not know address of many displaced people. Uprooting is their main vulnerability. Displacement after extreme climatic event i.e. river erosion increases vulnerabilities in social disruption, unemployment, mental unrest, economic burden and uncertainty. Many displaced people migrate to big city along with limited cash and kinds. Sometimes they have only wearing cloth and nothing else. Even, no transport fare. Hope of survival, by any mean, in big city is their capital. Most of them live in slum, low rented house, polyphone-made house beside railroad and street. Permanent migrants usually do not have tie with place of origin.

Migrants are changing profession. As for example, fisherman of the village works as a construction helper in city. They face difficulty in finding employment with a limited skill set. It is found that new migrants who were boatmen in village now pulling rickshaw in city without skill and knowledge on traffic management. It creates fatal accident and disrupts quality of city life. They are also involved in informal nature workings and deprived from entitlements of fundamental rights.

Seasonal migrants generally send remittance. Remittance of majority of migrants is mostly used for daily expenses. They also use money for education of children, health, dowry, loan repayment and investment. However, it is viewed as a pillar which tackles the earning vulnerability in times of serious economic hardship. 43% of seasonal migrants, fishermen, are able to save and invest money for repairing boats, buy nets and other means to catch fishes when they get back in village especially at *hilsha* season.

Majority of migrants are facing exploitation in city especially female and children who are employed at unhealthy environment. The female and adolescents are also physically and mentally tortured and sexually abused at work place and living surroundings. Most of them live at low rented house or slum; even on footpath where have serious problem regarding water supply, sewerage, sanitation, electrification and other basic utilities. However, earning and living condition of few

migrants, who are employed in white color job and self-employed, in city is at satisfactory level.

Migration also adds vulnerabilities for sending family, community and others. Some of married migrants start a new family at new destination and thereby use earnings for them rather than family at village. They gradually cut their ties with their family staying in village. The absence of migrants has negative impact on social work of village and security of sending family. Migration of parents, make possibility to drop outs of children from school. When male are irregular to send money to village then it is very difficult for women and children to manage money. They fall in food insecurity, malnutrition and harassment.

IV. Conclusion

Pushing and pulling features of migration regarding poor and rich people are different. Migration of poor people is mostly influenced by immediate shelter and source of income.

This paper concludes that trend of migration from coastal villages to big cities is sharply increasing. It is putting pressure on the city's limited land, an already fragile environment, and weak urban services. New challenge has been emerged in small town and urban growth centers. Climate induced extremes forced many people to migrate in big cities and it seems to be refugee within their own beloved country.

V. Recommendations

Socio-economic conditions of coastal communities are different from mainland of Bangladesh. Coastal zone is relatively income-poor in comparison with rest of the country. Some districts and sub-districts are located at poverty pocket that were identified by the Government of Bangladesh. Holistic initiatives should be taken rather than scattered courses of action. Public expenditure in infrastructure and human development, access to financial services and creation employment opportunities in coastal villages can only fence unsolicited out migration. Major recommendations are:

1) Keep special budget allocation and fund for coastal communities especially for food security, health and infrastructure.
2) Bangladesh Climate Change Strategy and Action Plan (2009-2018) should be implemented through proper consultation with coastal people and respective stakeholders.
3) Bangladesh Climate Multi Donor Trust Fund (MDTF) and Climate Change Resilient Fund should be properly utilized as per prioritized six pillars set at Strategy and Action Plan (2009-2018).
4) Small-scale industries should be established in towns located beside coastal areas for creating alternative employment of poor people. Fish

processing and preservation industries can be established.
5) Number of cyclone shelters should be increased in risk-prone areas. These shelters should be utilized for multipurpose.
6) As per action of Strategy and Action Plan (2009-2018), comprehensive assessment should be undertaken on climate change and its impacts on out-migration.
7) Awareness program should be undertaken about impact of climate change.
8) Research innovation like BR-47 (saline tolerant), BR-44 (water stagnant tolerant), and other climate resilient crops should be extended to grassroots people.
9) Vulnerable Group Feeding (VGF) and Vulnerable Group Development (VGD) cards should be properly allocated for real vulnerable people.
10) Alternative employments should be created during *jatka* (juvenile hilsha fish) catching banning period. The rehabilitation of fishermen should be ensured rather than providing little bit cash and kind support.
11) Housing structure in coastal areas should be changed considering risks of climate change.
12) There must have integrated and long-term (approximately 10 years) development plan for coastal areas of Bangladesh in the light of its prospects and problems. It should be mainstreamed with national planning documents.

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