Migration Pattern and Urban Informal Sector of Bangladesh: The Applicability of the Harris-Todaro Migration Model in the Presence of COVID-19 Outbreak

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ABSTRACT

Urbanization in Bangladesh is an emergent phenomenon of recent times. Widespread urbanization facilitates the economy through offering urban centric better employment opportunities to generate greater pull factor which attracts more rural to urban migration. The growing population creates more pressure in urban economy which might led the urban formal sector to perform less effectively. Income differentials between rural and urban area form a greater expected urban income which motivate migrants to change their workplace and move to urban areas. Urban formal sectors have been mislaying its ability to generate diversified income source for those excessive urban job seekers. As a result, higher unemployment rate in urban sector creates more pressure on the economy. People migrating from rural to urban may wish to stay for a considerable period of time with a hope of finding a new settlement and prefer to survive with lack of both social and financial insecurities leading to the establishment of urban slums. Informal sector has led the way to feed those who are unable to get a desired job through offering short time self-employment opportunity. Rural to urban migration sometimes act in opposite direction owing to economic downturns; when urban sector fails to absorb the jobless labors often encourage reverse migration. Current ongoing COVID-19 pandemic in Bangladesh has led informal sector in a fickle due to continuous lock down situation which compels urban to rural migration for most of the population engaged in informal economic activities in many urban areas of Bangladesh.

KEYWORDS: Urbanization, Migration, Megacity, Informal sector, COVID-19, Reverse-migration

1. INTRODUCTION

Bangladesh has been experiencing the global phenomenon of 'Urbanization' and is recognized as one of the world's largest growing developing countries with its rapid population growth throughout the last century. The UN projection for urban population of Bangladesh was expected to be 86.5 million within 2030. Bangladesh has been experiencing a widespread urbanization among all the developing economies since the time of its independence (uz Zaman et. at., 2010). This rapid urbanization has widened a diverse employment opportunity which attracts more people to migrate from rural to urban region with an expectation of a better living style (Sinthia, 2013). The urban area of Bangladesh has been absorbing 2.6 percent persons per thousand of its population where Dhaka remains the hub for the migrants (BBS, 2019). Excessive pressure on urban formal sectors creates a panic in the economy despite the concerned authorities' negligence of the issue. According to International Organization of Migration (IOM), more than 3.4 million people live in more than 5000 slums in 2005 which was projected to be more than 60 percent of total population in urban (Sinthia, 2013). Income disparity has proven to be the key determinant for rural to urban migration which can be reduced through providing adequate employment facilities in the rural region (Jahan, 2012). There has been a huge domination of migrant workers of 39.3 percent

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compared to 34.5 percent of migrant workers active in rural zone (LFS, 2016-17). Urban job market fails to create enough employment opportunities for those migrant workers for either skill mismatched, or education mismatched problems. Most of the time these migrant workers cannot adjust to modern urban production techniques ending up being fired from the job or not having a job at all (BBS, 2018).Informal sector shelters those migrants who fails to secure formal job in urban sector. But informal sector sometimes cannot ensure temporary or permanent income generation due to economic shocks. The massive spread of corona virus might raise a short-term rub in informal sector as income deterioration of many people might push them to fall into extreme poverty (SANEM, 2020).

2. LITERATURE REVIEW

Major cities have been the concentration for most of the migrant population around the world making the world's most megacities to grow faster among which more than 80 percent of the world's megacities will be in developing countries (Dhaliwal, 2000). According to UN report (2000), developing countries will have to face severe difficulties in the coming days as 90 percent of the urban growth will be concentrated on Asia, Africa, and Latin America because of the rising economy. An increasing amount of shift from the

agrarian production technique to more advanced industrial production techniques and other occupations indicate the form of urbanization as stimulated by the occupational factors as well as many push factors (Mandal, 2000). Dhaliwal (2000) points these substantial differences between developing countries and Euro-American industrial urbanization as a key determinant for large scale urbanization having lots of challenges and opportunities. Urbanization in developing countries have both positive and negative dimensions including advanced communication system, modern production techniques, agglomeration economies in the production and consumption within the industries generate the fuel to economic development (Kleniewskiet.al., 2010). Cities in developing countries have become very vulnerable place to settle down due to massive rise in environmental problems as well as numerous social issues. Urbanization in developing region fails to eradicate poverty and instead introduce new challenges for the economy (Nazem, 2001).Rural-urban migration forms an essential pattern as it creates more pressure on cities way beyond its capacity of producing more income generating opportunities thus promotes more urban poverty (Gugler, 2004).

According to the 2011 Revision of World Urbanization Prospects, more than half of the population will live in urban areas by 2020 while almost 50 percent of population of Africa will live in urban areas by 2035. Davis (2004) identifies that, in urban areas of the South, more than 95 percent of population will live in whose population size will be double over the next generation as predicted about nearly 4 billion. Megacities with more than 10 million inhabitants along with hyper cities with 20 million inhabitants will face a gigantic crisis with the development of urban slums that has already jumped over one billion where one in three city residents live in an unhealthy situation with the unavailability of basic human needs (Hasan, 2011).

During 1950s and 1960s, it was widely believed that proper mix of economic policies could transform the economy from traditional economies to modern economies. Modern economies would offer more dynamism through absorbing traditional jobs eventually would disappear (Castells et. al., 1989). In early 1970s, economic growth in developing countries started to show much concern about their massive unemployment. International Labor Organization (ILO) deployed multi-disciplinary "employment mission" in various developing countries which started from Kenya in 1972. The traditional sector of Kenya had expanded to add efficient and profitable enterprise into the traditional sector as identified by the Kenya employment mission (International Labor Organization, 1971). The term 'informal sector' had been used instead of using 'traditional sector' to expand the range of small scale and unrecognized economic activities (Hart, 1973). In the age of surplus humanity, hundreds million of new inhabitants will be involved in informal economic activities due to lack of employment opportunities in urban zone (Davis, 2006). According to UN World urbanization prospect (2007), Bangladesh did not have huge urban settlement in the modern sense of the term "Urbanization" rather was largely rural centric. Only more than 5 percent of the population preferred to live in the urban areas. But Bangladesh has been experiencing a high rate of urbanization which is three time more than their growth rate since the independence of 1971.

Hossain (2001) viewed migration as a reallocation of residence for a certain time which may take both shorter time as well as longer time frame for various reasons. Any types of movement from one place to another place for a better living standard or for a better employment opportunity will be incorporated into migration phenomenon. Migration may take place within the geographical border or outside the border. Migration takes place within the geographical border is largely concentrated in rural to urban migration which can be both permanent and temporary in nature. Migration can be voluntary or forced migration based on the demographic, economic, socio-cultural activities. Migrants usually take account of expected urban income over average rural income rather than actual earnings and consider migration as a rational process despite of higher urban unemployment rate (Todaro, 2012).

People often prefer to be pulled to those area with relative advantages and pushed from relative disadvantageous areas (Braun, 2004). Push factors can be traced as a demerit factors at the core of the migration decision where pull factors are the motivating factors whenever anyone decides to migrate from the rural to urban (Dalta, 2002). Pull factors basically are active at the urban areas with lots of urban amenities including better employment opportunities and push factors are active at the rural areas with lesser economic and social facilities giving rise to the urban bias (Han, 1999). Severe rural to urban migration to Dhaka city has been introducing new challenges to the existing urban infrastructure and its ability to create new employment opportunities to migrants which impose greater pressure to urban environmental management. Despite of higher unemployment rate in Dhaka city, there remains an immense pressure from local migrants outside Dhaka city for seeking a better job followed by better living facilities. Numerous urban amenities provides strong pull factors for those migrates willing to make a move from rural to urban, but poor pull factors from the rural counterpart failed to generate strong incentive for the migrants to go back to the rural areas (Ishtiague and Mahmud, 2011).

Due to higher unemployment rate, many migrants fail to generate enough income which force them to live in a temporary habitat in vulnerable conditions. Landlords remain in Dhaka city are speculative giving rise to the slums in urban areas. Government fails to introduce any financial scheme for those slum dwellers making their conditions worse than before (Sinthia, 2013). Extreme poverty can be seen among poor urban migrants living as they do not have enough options to buy quality foods and nutrition because of insufficient income for their livelihood (Hossain, 2013). Most of the slums have been creating massive pressure to the natural growth of the Dhaka city because of unplanned rural to urban migration (Jahan, 2012). It is evident that Dhaka city will suffer an inadequate social, economic, and infrastructural facilities. Because of improper development policies for Dhaka city, authorities have failed to control this large number of migrations which create budget deficits (Abdullah *et.al.*, 2014).

According to World Bank (2019), Unemployment rate of Bangladesh has been steady around 4.19 percent in 2019. Youth unemployment has been accounted for 1.86 percent of the total labor force ages 15-24. Urban unemployment rate has been increased from 7.6 percent to 10.1 percent according to labor force survey report (2015-16 & 2016-17) due to inconsistence behavior of urban employers. Urban amenities have made rural to urban migration a continuous process for most of the people for a better living style and for those who wants to change their profession. According to Labor force survey report 2016-17, most workers are engaged in informal sector both in rural and urban areas. In urban area 65 percent of workers are engaged in informal economic activities ages between 15-29 years. Informal engagements are higher in urban area (31percent) than rural area (29percent) for people ages between 30-64 years. Urban labor market promotes lots of informal economic activities which makes it lucrative for those who are willing to migrate from rural area to urban area.

The spread of COVID-19 virus throughout the world has been a great shock for 2019-2020. At first Pneumonia appeared in south China seafood market in Wuhan, Hubei Province, China in December 2019 (Huang et.al., 2020). Unfortunately, this virus spread throughout China and spread internationally. To prevent this virus from massive spread, government closed all the channels of Wuhan temporarily (Yue et.at., 2020). After a massive destruction in Europe, first three patients of Novel corona virus including two members in one family was infected on 8th March 2020 confirmed by the director of IEDCR Dr. Meerjady Sabrina Flora. Maintaining social distance is what is needed as guided by the medical expert as the vaccine of corona virus is yet to be invented. The massive spread of COVID-19 has led the economy to a mass damage for most of the developing economies. According to SANEM (2020) report, many people might fall into extreme poverty due to the loss of income if this situation prolongs.

Several studies have been conducted showing the rural urban migration in Dhaka city. However, taking note of the previous literature, this study has attempt to find out the relevance of Harris-Todaro migration model in terms of rural to urban migration of Dhaka city and effect of COVID-19 on the informal part of the economy which might encourage reverse migration.

3. OBJECTIVES

- A. To examine the patterns and the trends of inter-regional migration in Bangladesh.
- B. To dissect the Dhaka based migration pattern.
- C. To explain the factors responsible for expansion of urban informal sector.
- D. To find out and interpret the reverse migration issue due to COVID-19 pandemic, using Harris-Todaro migration model.

4. METHODOLOGY

This paper is based on secondary data extracted from different published sources like the publications of Bangladesh Bureau of Statistics, World Bank, UNDP, Bangladesh Labor Force Survey, and relevant research articles for several years. Overall, data ranging from the year 1990 to the projected data up to 2050 have been analyzed to evaluate the urbanization process of Bangladesh and the internal pattern of rural to urban migration in order to outline the emergence of enormous urban informal based economy. Data on reverse migration in Bangladesh due to COVID-19 pandemic and associated effects has been taken from the reports presented by Bangladesh Institute of Development Studies(BIDS) and South Asian Network on Economic Modeling (SANEM) along with some renowned national newspapers. The collected data have been processed manually and presented to make the paper more analytical and coherent with the objectives.

5. THE ESSENCE OF HARRIS-TODARO MIGRATION MODEL

In most of the developing countries, rural sector is largely concentrated on agricultural activities while urban sector concentrates on manufacturing activities. Industrialization opens the door to reallocate resources from rural to urban through migration. Unemployment problem was at high in Kenya specially in Nairobi and other major cities in 1960. An agreement was signed that time named "Tripartite agreement" in which both public and private sectors agreed to expand their employment level while keeping the wage rate at the current level and Labor union in Kenya agreed to those terms and conditions. Tripartite agreement did not achieve much success rather urban unemployment seemed to rise faster. With a view to solving these issues, John Harris and Michael Todaro formulated a model to explain the riddle. (Fields, 2007).

According to Todaro migration model, Migrants usually take account of expected urban income over average rural income rather than actual earnings and consider migration as a rational process despite of higher urban unemployment rate. Harris-Todaro migration model (An equilibrium version of Todaro migration model) postulates that, In the presence of urban informal sector expected rural and urban income predicted to be equal.

Gary S. Fields (2007) set forth the essence of Harris-Todaro migration with the following characterisitics:

First: There were a significant difference in real wage between urban formal job sectors than in rural traditional job sectors.

Second: Employees needed to be present in the formal job loation in urban areas to be appointed for the job.

Third: The more job seekers looked for a formal job in urban areas, the greater the possibilty of not being employed in any urban formal job because employers might hire only few of them due to the limited employment opportunities in urban formal job sector.

Fourth: The equilibirum in such a situation would equate the urban expected wage associated with the probability of seaching for a urban formal job and expected average rural job.

Fifth: The initial wage differentials between urban and rural expected wage rate would be dissipated as more workers migrate from lower income zone to higher income zone.

Developing countries with chronic unemployment problems might not be able to secure jobs for all the migrants. So migratns can not expect to have a high paying job rather got themselves engaged in casual and part-time activities or many unskilled migrants may remain jobless for longer period where migrants with human capital like education

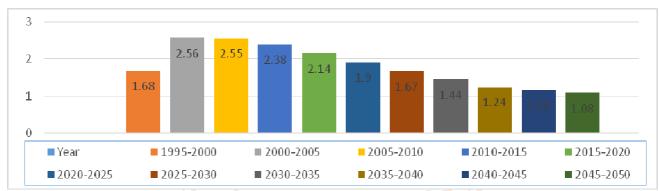
and skill will find their preferred job in urban formal sector. Most of the migrants are aged between 15 to 24 which emphasize the fact that migrants look forward to a longer term parmanent income opportunities. At the initial phase, expected urban income might be lower than average rural income. But migrants consider the discounted value at the present time of a sum of money to be received in the future would make them a ratioanl decision maker to stay for longer period of time in the urban competitive labor market seeking for a stable urban job (Micheal P. Todarro, 2012).

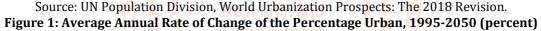
6. HARRIS-TODARO MIGRATION MODEL AND THE MIGRATION PATTERN OF BANGLADESH

6.1. Urban Growth versus Urbanization

Bangladesh being largely a rural country where 76.7 percent of the population lived in rural areas in 2011 (Population Census, 2011). Urbanization is the process by which large number of people permanently concentrated in relatively small area forming city. Throughout the twentieth century different administrative tiers of Bangladesh experienced

uneven trend of urbanization with remarkable variations for diverse reasons. Urban growth refers to the rate at which population of an urban area increase, whereas urbanization is the movement from rural to urban areas. That is why urban growth may occasionally take place without urbanization. According to BBS Population Monograph Report of 2015, between 1981 and 1991 the urban population of Bangladesh increased from 13.23 million to 22.46 million, indicating an annual average urban growth of 5.29percent while the proportion of urban population increased from 15.18percent to 21.12percent of the total population. Hence urban growth took place with positive urbanization. This was because the rate of expansion of rural population was lower than that of urban population. In 2011 proportion of urban population was 23.3 percent with urban growth rate of 1.37 which was half of the preceding census. The data of UN Population Division, World Urbanization Prospects: The 2018 Revision suggests similar outcome that urbanization is increasing but at a decreasing rate (figure 1).





From 1981 to 2011 population census, for the level of urbanization, rank of Dhaka division is 1, rank of Chittagong and Khulna divisions are 2 and 3, respectively. The primary reasons behind the fast-growing trend of urbanization of Dhaka are largely due to the establishment of various government and non-government offices, industrial and commercial organizations, educational institutions etc. Moreover, the easy employment opportunity in the vast informal sector has much contribution towards this rapid urbanizing trend. Chittagong and Khulna, the other two highly urbanized regions have seaports, divisional headquarters, industrial and commercial belts, and educational institutions that attract people from different parts of the country for better employment, commerce, and educational purposes.

6.2. Inter-regional Migration Pattern in Bangladesh

The internal migration outline, in this paper has been classified into in and out-migration for dissecting the inter-regional migration patterns. In-migration is a process that involves movement from one region or community to settle in another especially as part of a large scale and continuing movement of population. Whereas Out-migration is a process that involves movement from one region or community to settle in another especially as part of a large scale and continuing movement of population. So, every move is an out-migration with respect to the area of origin and in-migration with respect to the area of destination. In Bangladesh, the overall in-migration rate in 2019 was 72.4 per thousand population. This when compared with an out-migration rate of 72.7 per thousand population, resulted in a loss of 0.03 person per thousand population. But in 2018 it was a gain of 0.4 persons per thousand population. Migratory movement of the females is more pronounced than their male counterparts for both in and out-migration respectively (SVRS, BBS 2019).

According to BBS, urban people are more than 4 times as likely as the rural people to move in and the flow of in and outmigration in rural area resulted in a loss of 2.6 persons per thousand population. The urban area on the other hand is gaining population with a net gain of 2.6 persons per thousand population. The migratory movement is the highest in Dhaka with an inmigration rate of 119.4 and an out-migration rate of 113.9 resulting in a net gain of 5.5 person per thousand population. Other than Chattogram and Sylhet division, all other divisions are gaining population in terms of net migration, but Dhaka stands out amongst them. In case of gross migration also, urban area experienced the higher rate which is 131.6 than that of the rural rate of 75.6. And among the eight divisions, Dhaka ranks the highest in gross migration rate of 233.3 followed by Barisal which is 184.8 (SVRS 2019).

Table 1: Net Migration rates per 1000 population by sex and selected background characteristics										
	Male				Female		Both Sexes			
Background	In-	Out	Net-	In-	Out-	Net	In-	Out-	Net	
Dackgi oullu	Migration	Migration	Migration							
Residence:										
Rural	27.4	29.4	-2	45.7	48.8	-3.1	36.5	39.1	-2.6	
Urban	110	108.1	1.9	124.2	120.8	3.4	117.1	114.5	2.6	
Divisions :										
Barishal	85.8	83.9	1.9	100.6	99.7	0.9	93.1	91.7	1.4	
Chattogram	59	60.7	-1.7	76.6	79.3	-2.7	67.9	70.1	-2.2	
Dhaka	112.4	106.2	6.2	126.3	121.6	4.7	119.4	113.9	5.5	
Khulna	56.1	54.4	1.7	75.6	74	1.6	65.8	64.2	1.6	
Mymensingh	17.4	38.7	-21.3	27.3	59	-31.7	22.3	48.7	-26.4	
Rajshahi	41.1	41.1	0	60.8	59.2	1.6	50.9	50	0.9	
Rangpur	46.6	43.9	2.7	65.1	59.2	5.9	55.7	51.4	4.3	
Sylhet	54.7	60.6	-5.9	68.7	70.4	-1.7	61.8	65.6	-3.8	
Total	64.2	64.4	-0.2	80.7	80.9	-0.2	72.4	72.7	-0.3	

Table 1. Not Migration rates per 1000 population by say and selected background characteristic

Source: Report on Bangladesh Vital Statistics 2019, Bangladesh Bureau of Statistics.

Many people move (both in and out) for sheer reasons of living with their family members. This accounts for about 56.4 percent of all causes in the case of in-migration and 52 percent in the case of out-migration (BBS, SVRS 2019). Farming in the case of male and matrimonial in case of females also stand out as two major causes of migratory movements.

Table 2: Causes of in and out ingration by sex, SVRS 2019								
	In Migration				Out Migration			
Causes of migration	Male	Female	Both Sexes	Male	Female	Both Sexes		
Matrimonial 🖌	0.7	16.3	8.5	0.8	15.9	8.35		
Education 🖉	3.5	2.9	3.2	3.3	2.6	2.95		
In search of job	4.5	2.1	3.3	4.4	2.3	3.35		
To perform job duty	3.9	1.3 ati	2.6	2.9	1.2	2.05		
Due to transfer	5.8	2.1	3.95	6	3.2	4.6		
River eroded	1.4	0.8		1.8	1.3	1.55		
Farming 💋 🎽	15.8	4.9°Se	arc10.350	15	6.3	10.65		
To join the family	48	6 <mark>3.1</mark> .ve	55.55	46.6	56.3	51.45		
Business	4.9	1	2.95	3.7	1.2	2.45		
Due to retirement	0.4	0.1	245 0.25	0.5	0.3	0.4		
Abroad 🛛 🏹	0.2	0.1	0.15	0.2	0.2	0.2		
Others	10.8	5.2	8	14.8	9.3	12.05		
Total	100	100	100	100	100	100		

Table 2. Causes of in and out migration by sex SVRS 2019

Source: Report on Bangladesh Vital Statistics 2019, Bangladesh Bureau of Statistics.

Both in-migration and out-migration rates have exhibited an abrupt increase in recent times when compared to last 5 years. While the overall in-migration rate was 54.2 percent in 2015, it has increased to 73.8 percent in 2017. The current rate of inmigration rate in 2019 is 72.4 percent. The same feature is observed in case of out-migration rate: from 54.4 percent in 2015 to 74.3 percent in 2017 which thereafter slightly decreased to 72.7 percent in 2019. And the overall urban in-migration rate has been found to experience exceptionally surging rates in recent years. To be specific, from 2015, rather than rural to urban inmigration, urban to urban in-migration has been more prevalent. This indicates the gradual movement of the urban poor from the center of the urban city towards peripheral urban regions.

Table 3: Internal migration rates (per 1000 population)								
Indicators	2019	2018	2017	2016	2015			
In-migration rate	72.4	72.8	73.8	76.7	54.2			
Rural in-migration	36.5	38.6	37.8	39.5	30.7			
Rural to Rural	32.2	33.7	32.8	34.5	25.6			
Urban to Rural	4.3	4.9	5	5	5.1			
Urban in-migration	117.1	115.2	119.3	123	90			
Rural to Urban	29.7	30.6	30.3	30.3	29.5			
Urban to urban	87.4	84.6	90.2	92.7	60.5			

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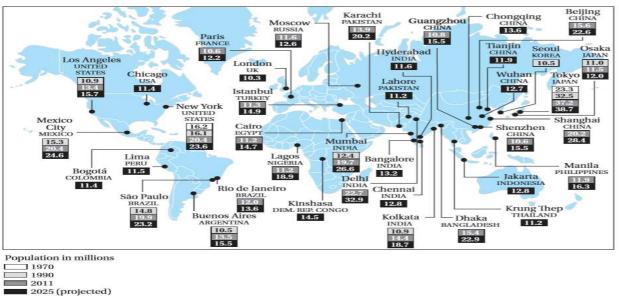
Source: Key findings of the SVRS 2019, Bangladesh Bureau of Statistics.

6.3. Emergence of Dhaka as a Megacity

An urban area has a high population density compared to the density of the surrounding area. This accommodates urban areas of vastly different sizes, from a small town to a large metropolitan area. A city area is based on population density because a

prominent feature of an urban economy is frequent contact between different economic activities within city areas. The emergence of city area is due to the fact that, human technology has created a system of production and exchange mechanism which requires a significant amount of agricultural surplus, urban production and transportation for exchange of goods and services (O'Sullivan, 2007). Urbanization increases due to the excess urban population growth rate over rural population growth rate. According to United Nation Population division (2011), developing countries are expected to become major urban based before 2020 while least developed countries may not be able to react to that until 2050. Urban population will grow from 1.9 billion to 3.3 billion as projected by United Nation. Many developing countries have experienced industrialization which is the precondition for urbanization in recent years. According to UN, many developing countries will dominate the world's largest cities with projected population over 10 million.

Figure 2 provides a map locating all the megacities in the world having a population of at least 10 million people. In 1970, there were only 2 megacities, but by 1990, there were 10, and by 2011, there were 23 such megacities. Among all these, 18 were in the developing world. According to UN projection, 30 of the 37 megacities will be in developing countries by 2025 which constitute 80 percent of the world's total urban population. Dhaka is also projected to be one of the megacities with the largest urban agglomeration in the world expected to have 22 million urban population by 2025.



Source: United Nations Population Division, World Urbanization Prospects: The 2011 Revision (New York: United Nations, 2011), (Michael P. Todaro, 2012)

Figure 2: Megacities of the World Having a Population of at Least 10 Million

According to classified land type of Bangladesh in Dhaka division, Dhaka has the second most cultivable land of 83 percentwith a combination of high, medium high, medium low, low and very low lands along with only 17 percent of miscellaneous lands of settlement, ponds, water bodies, river, channels and brick fields compared to other districts which makes Dhaka a center of attraction for migration (BBS, 2019). Dhaka facilitates with most of the economic opportunities along with various small, medium, and large-scale business, banking service and international commerce (Islam, 1999). Most of the migrants have come from the Northern and Southern part of the country like Comilla, Sherpur and Barisal (Ishtiaque and Mahmud, 2011). Several push and pull factors work behind this largely concentrated migration in Dhaka city like landlessness, loss of income sources, unemployment and poverty, job earning opportunities in Dhaka city and better lifestyle (Islam, 1999; Ullah, 2003; Haider, 2010).

6.4. Population Distribution of Dhaka: Surge of Its Floating Residents

The total population in Bangladesh according to the census 2011 is 144.04 million among which male is 72.11 million and female is 71.93 million. 76.7 percent of total population live in rural and 23.3 percent of them live in urban. Data indicates that Dhaka is the most populated district as enumerated in 2011 and in 1991 and 2001 as well, having a population of almost 12 million itself.

Table 4: Population distribution of Dhaka with ranks, 1991, 2001 and 2011

Popula	ntion in 1	million	Ranks			
1991	2001	2011	1991	2001	2011	
5.84	8.62	12.04	1	1	1	

Source: Bangladesh population census and housing census 1991, 2001 and 2011.

Floating population is a terminology used to describe a group of people who reside in a given population for a certain amount of time and for various reasons but are not generally considered part of the official census count. The size of the floating population of Bangladesh is 1, 47,674 which is 0.1 percent of the total population. Urban floating population size is 100472 (68 percent) and rural floating is 47202 (32 percent). Maximum floating people is in Dhaka division which is 73454 followed by Chittagong, 3188 (Bangladesh Population and Housing Census, 2011). Again, distribution of floating population by district

indicates that the maximum floating population is in Cox's Bazar which is obvious due to the presence of Rohingya migrants and next is in Dhaka.

Population

		roparation			
ensity	Floating	Percent (district)	Percent (national)	Density	Floatin
8229	47249	0.39	32	1	1
	C D	1 1 1 1 1	11 .	2011	

Ranks

Source: Bangladesh population census and housing census, 2011

6.5. Labor Market Scenario of Bangladesh

Bangladesh has been considered as one of the prominent exporters of cheapest labor around the world. Despite of labor export abroad, country fails to employ all its labor force due to the shortage of employment opportunity. With its gigantic population size, number of labor force enrollment has been increasing day by day with limited employment opportunities. Number of economically active population size is accounted to be 6.35 crore with 4.35 crore male and 2.00 crore female labor, according to the latest survey conducted by Labor force survey in 2016-17. Agriculture sector promotes 40 percent of employment while 39 percent and 21 percent employment has been generated by service and industry sector respectively (LFS, 2016-17)

Agriculture sector has been a dominant source of generating employment for the country since its inception. According to Labor force survey 2016-17, agriculture, forestry and fisheries contribute 40.62 percent of total employment. Although it seems to follow a gradual degradation of creating employment opportunity as industry and service sector has started to provide new jobs for urban centric job seekers. According to the LFS- 2016-17, the largest share of the employed population 44.3 percent worked as own-account workers, followed by 39.1 percent as employees and contributing family workers (11.5 per cent).

Table 6: Share of employed labor force above 15 age by see	ctor
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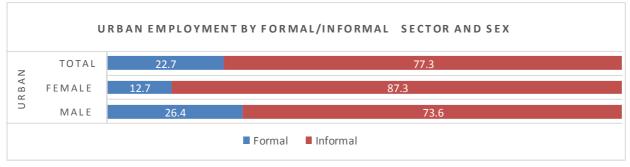
Table 0: Shale of employed labor force above 15 age by sector									
Sector	LFS	LFS	LFS	LFS	LFS	LFS	LFS	LFS	
Sector	1995-96	1999-00	2002-03	2005-06	2010-11	2013-14	2015-16	2016-17	
Agriculture, Forestry, and Fisheries	48.85	50.77	51.69	48.1	47.33	45.1	42.7	40.62	
Mining & quarrying	8-18	0.51	0.23	0.21	0.18	0.4	0.2	0.2	
Manufacturing	10.06	9.49	9.71	10.97	12.34	16.4	14.4	14.43	
Power, gas & water 🧳	0.29	0.26	0.23	0.21	0.18	0.2	0.3	0.2	
Construction	2.87	2.82	3.39	3.16	4.79	3.7	5.6	5.58	
Trade, hotel & restaurant 🥢	17.24	15.64	15.34	16.45	15.47	14.5	13.4	14.34	
Transport, maintenance &	6.32	6.41	ar6.77and	8.44	7.37	6.4	9.4	10.5	
Finance, business & services 🛛 🏹	0.57	1.03 ve	0.68en	1.48	1.84	1.3	1.6	1.97	
Commodities & personal services 🍸	13.8	13.07	5.64	5.49	6.26	6.2	6.2	6.08	
Public administration and defense 🕔	رد مرد •	ISSN:	6.32	5.49	4.24	5.8	6.2	6.08	
Total	100	100	100	100	_100	100	100	100	

Source: Labor Force Survey, BBS, Bangladesh Economic review (2019)

According to World Bank (2019), Unemployment rate of Bangladesh has been steady around 4.19 percent in 2019. Youth unemployment has been accounted for 1.86 percent of the total labor force ages 15-24. Urban unemployment rate has been increased from 7.6 percent to 10.1 percent according to labor force survey report (2015-16 & 2016-17) due to inconsistence behavior of urban employers. Urban amenities have made rural to urban migration a continuous process for most of the people for a better living style and for those who wants to change their profession.

6.6. Development of Dhaka Based Informal Sector

As discussed previously, a portion of the urban floating population is being included in the urban labor force which is mostly employed in the urban informal sector. Overall informal employment is dominating in the country and according to the Labor Force Survey Report (2016-17), at the urban level, 77.3 percent of the employed population are engaged in informal sector only. Though both male and female have a significant contribution in the sector, females are ahead from their male counterpart in terms of employment but not in payments.



Source: Bangladesh Labor Force Survey Report, 2018.

Figure 3: Distribution of urban employment between sectors and sex in Bangladesh

Dhaka has experienced the highest growth in terms of urban informal employment over the years. The city makes up less than 0.5percent of the landmass of the country but provides resources for nearly 14percent of the entire national population as it has become the breeding ground of informal sector activities. Streets are always buzzing with the discordance of rickshaw pullers, head-loaders, cart pullers, construction workers or occupied by barbers, cobblers, garbage collectors, waste recyclers, and vendors of vegetables, fruit, meat, fish etc. So, there exists a vast web of informal employment which are very much heterogeneous in nature. The activities concentrated in urban areas serve as a "pull" factor, as the prospect of informal sector work encourages migration to the city as demonstrated by their concentrations of national wealth and assets.

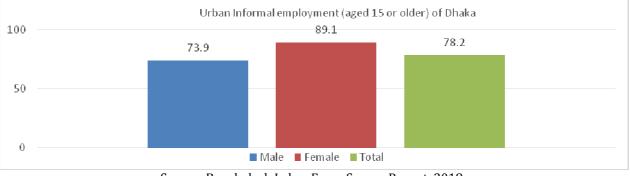
Informal sector includes activities and workers that are less visible and even at times, invisible. Graphical illustration of the informal employment in Figure 4shows the most visible segment at the top which is the employers or can be stated otherwise as the micro entrepreneurs and the industrial outworkers at the bottom as the least visible segment; the shape doesn't represents relative size of segments (Chen, M. A 2005). Globally there are substantial gaps in wages within the informal economy. Employers have the highest earnings; home workers have the lowest; and own account workers and wage workers earns in between, depending on the economic sector and country. The net result is a significant gender gap in earnings within the informal economy, with women earning less on average than men (Chan *et al.* 2004). According to Chen, around the world, men are over-represented in the top segment and women tend to over-represent in the bottom segment. While the shares of men and women in the intermediate segments vary across sectors and countries. But women tend to be over-represented as unpaid family workers.



Source: Chen, M. A 2005 Figure 4: Segmentation of the informal economy (Informal Economy Ladder)

Like the informal economy ladder of Chen, M.A in Bangladesh, men are visible more in rural areas as they are more likely to be heads of family businesses, while women are more likely to be unpaid contributing family members in invisible work force; so their wages also differs. Having said that, nowadays, women tend to be employed in different types of activities, associated with different levels of earning than men as they tend to earn less even within specific segments of the informal economy. In case of urban analysis, Figure 5 illustrates that female leads their male counterparts regarding employment in informal sector of Dhaka in terms of total employment. However, while considering total urban employment, 78.2percent is employed in the informal sector!

Migration is one of the main reasons for the growth of informal sector in Dhaka. The dynamicity attracts some 300,000 – 400,000 new migrants each year, a rate that would result in a population of almost 23 million by 2025 (LFS, 2016-17). Every year thousands of climate refugees also migrate to Dhaka due to the multiplying impacts of climate change like increasing floods, cyclones, and drought. According to BBS (SVRS, 2019) 2 out of every 1000 people relocate to cities in search of job after losing their lands and houses to river erosion. Most of these migrants come in search of the many opportunities the city can offer for finding new work to survive and end up working in the informal sector. In turn, the new migrants contribute significantly to Dhaka's economic growth as they provide much needed labor.



Source: Bangladesh Labor Force Survey Report, 2018. Figure 5: Urban Informal Employment of Dhaka

However, while there are few examples of workers who opt to participate in the informal economy by choice, majority of informal workers in Bangladesh seem to be in the informal economy involuntarily. Workers under informal employment arrangements or those working in informal employment enterprises have low productivity and thus have lower income and are more vulnerable to economic and social shocks (ADB, 2010).

In the case of Bangladesh, there has been an urban-rural wage convergence despite having wage differences across segments of informal sectors jobs. Expected wage in the urban areas does not stand up to expectation. Furthermore, the industrial (urban)-agricultural (rural) wage differentials have been distorted to such extent that the manufacturing sector has become incapable in case of pulling the surplus labor. Thus, the migration of the workforce in our country is characterized by the 'push-factor' more than the 'pull-factor' as identified by Harris-Todaro growth model. This huge bulk of people, who are 'pushed' towards the urban from rural regions, are agricultural labor who are less equipped with technical skill or education. Which is why, the supply of labor exceeds the demand in low-skilled jobs, where the wage is less as well. For the lack of technical competence, larger amount of work force keeps staggering in low paying, relatively in unproductive informal sector jobs.

7. REVERSE MIGRATION DUE TO COVID-19 PANDEMIC

In the first six months of 2020 Bangladesh experienced a change in the pattern and style of migration because of COVID-19 pandemic and its impact on the economy. Usually people migrate for better employment opportunities and to come out of poverty but what happens when they face the similar situation in the places they have migrated to? South Asian Network of Economic Modeling (SANEM) 20.4 percent of Bangladesh's population or about 34 million people might fall into poverty with a negative income shock of even 25percent as a repercussion of the COVID-19 outbreak and the economic slowdown. They added, as the average income of the urban and the rural poor and many in the informal sector has dropped by up to 80percent, more people are likely to fall into the "new poor" category if the negative economic shock inducing a rapid reduction in financial stability grows to be more than 25percent. The number of the new poor has increased by at least 9percent points to 29.4 percent from 20 percent, signifying that about 1.64 crore people have already become new poor by the end of June because of the ongoing COVID-19 outbreak and its consequent economic slowdown; and that more people would become new poor if the economic slowdown continues (S. Binayak, A. Zulfiqar & M. Muntasir, 2020).

Bangladesh has experienced both internal and external reverse migration as an effect of the pandemic outbreak. The consequent economic slowdown has forced thousands to return to their villages leaving the urban abode specially the huge community who was "pushed" towards cities. Though there is no inclusive estimate of the number of people taking recourse to reverse migration, a survey conducted by BIDS estimated that about 13percent of the people has become unemployed in the country and its negative effects on employment, income and expenditures of low- and fixedincome groups are increasing. Besides the newly unemployed, a larger group of people has experienced a substantial significant reduction in income as well. Main reason behind huge discharge of reverse migration is the complete shutdown of informal sector upon which the migrated group is dependent. Complete three months of strict country-wide lockdown halted the informal sector rescinding millions of professions. Failures of governments to incentivize agriculture and farming has weakened the villages, forcing people to move to urban areas for better employment opportunities but the reverse migration is expected to cause a crisis in rural areas as the people who have moved back to rural areas are likely to choose to remain there, because of their recent harsh experience in urban areas. This reverse migration is not only an issue of economic constraint rather it is likely to create many new social distresses in the rural areas. Appropriate long-term rehabilitation and relief intervention is desired to sustain the rural economy; so that it can accommodate a portion of those who have been forced to leave city centers by expanding rural employment opportunities.

8. **RECOMMENDATIONS**

Rapid urbanization has been a dilemma for many developing countries including Bangladesh. Unplanned population growth and development of city structure cause immense problems when migration is largely concentrated to city areas. Dhaka city is one emerging as one of the largest cities in the world within 2025 as projected by United Nation Population Division (World urbanization prospect, 2011). Despite of the existing urban challenges, this paper recommends some strategies that need to be traced out to dissolve current situation. The recommendations are following:

A. Decentralization of both economic and administrative activities should be ensured with transparency. Government should emphasis both on rural and urban economy.

- Rural infrastructure will have to be developed to B. facilitate more industrial services in rural economy and more factories should be established in rural areas to generate rural employment and to ensure smooth ruralurban transportation.
- Concerned authorities should provide efficient training C. facilities to enhance productivity of the rural workers to match the skill required to advanced production techniques.
- D. Wage earning differentials must have to be minimized to create enough pull factor in the rural economy through an equitable distribution of rural complementarities and introducing informal economic activities in the rural counterpart.
- The term 'Urbanbias' led development policy should be E. discouraged to bring the rural development in the picture and let the shanty areas to flourish.
- In case of government stimulus packages and social F. protection programs for the pandemic hit population, effective identification of the vulnerable people and determination of the nature and duration of support is primarily required. Ensuring the genuinely affected industries and introducing a monitoring and evaluation mechanism to ensure efficiency, transparency and accountability in the distribution mechanism must be followed by it.
- Since it would be difficult for the government alone to G. tackle the existing impact of Coronavirus, NGOs and privileged section of the society needs to come forward for help and overcome the situation.

9. CONCLUSION

Current trends of urban growth in Bangladesh is complemented by continuous large-scale migration from arch and sciences, Vol 30 No 2, pp. 307-323. rural areas and is one of the primary reasons why Dhaka, the [13] Hart, K. (1973). Informal Income Opportunities and capital city, has evolved into a megacity. This phenomenon had led in the development of huge volatile informal sector in subsequent urban areas accommodating the surplus labors from the agricultural sector. But for the economically marginalized workforce in the cities, informal jobs do not provide necessary financial security which is well evident from the impacts of pandemic upon this sector. It is important to consider longer-term repercussions when designing any policy to build an economy that instigates excessive human mobility from urban to rural.Not doing so could result in more economic stress, greater levels of inequality, more vulnerability to forced reverse migrant populations and overall subsiding the course of development and growth.

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