GROWTH AND DEVELOPMENT OF
DHAKA NORTH: 1971-2011*

Sharif uddin Ahmeda
Farzana Ahmed Mohuya b

Introduction

In 2011 the Government of Bangladesh amended the Local Government City (City Corporation) Act 2009, and divided the Dhaka City Corporation into two namely, Dhaka South City Corporation (DSCC) and Dhaka North City Corporation (DNCC). This divided the old capital city of Dhaka administratively into two broad areas and gave birth to the capital city of Dhaka North. This article will deal with the Dhaka North City Corporation as an administrative and urban area and call it in short Dhaka North. Although Dhaka North is very much a part and parcel of the Megacity Dhaka, it has however, some characteristics of its own, and now it has its own administration. Hence, it deserves a separate study to understand its urbanisation process and its social, economical, cultural and educational growth and developments. This may also be called Recent Dhaka. Indeed the phrase New Dhaka has been in circulation for quite some time since the development of the New Capital of Dhaka in the Ramna area in 1905. This New Dhaka though received a setback with the annulment of Partition of Bengal in 1911, began to grow steadily and serenely till 1947, specially after the establishment the University of Dhaka in 1921. Further expansion of Dhaka North took place during the Pakistan period and gradually extended up to the areas in a very mild form which now constitutes the DNCC. The extraordinary development of the DNCC took place since the birth of Bangladesh in 1971.

* The paper was originally presented at the seminar on “Bangladesh at 40: Achievements and Challenges”, organized by the Asiatic Society of Bangladesh in Dhaka during 14 - 15 March 2013

a Supernumerary Professor, Department of History, University of Dhaka
b Lecturer, Department of Geography and Environment, University of Dhaka
This article focuses on the growth and development pattern of Dhaka North from 1971 to 2011. The major aspects of the subject matter include urbanisation, physical growth (land use/cover changes), economy, society, culture, educational development, commercial shops and bazaars, transport, environment, health sectors, etc. In order to analyze the growth and development pattern of Recent Dhaka, in this research mainly secondary data (articles, maps, etc.) have been used like different pervious and present studies, scholarly articles, books, newspapers and internet articles, DNCC website, and from other research organisations. On the other hand, for preparing the map of Dhaka North City Corporation (Fig. 1), data have been collected from the DNCC office through the Bangladesh Gazette (5 December 2011) on DNCC area. Hence, GIS technology (ArcGIS, Version- 10 software) is used for producing the map. As this article is the first attempt to assess the development of Dhaka North after the recent abolitions of DCC, hence it is mainly based on secondary data rather than the primary.

**Area**

Dhaka North is situated within Longitude 90°20' to 98°28' and Latitude within 23°44' to 23°54'. Its total area covers 82.638 sq. kms which consists of five zones including 36 Wards.² (See Fig. 1). It has all the positive and negative characteristics of a Megacity like large population, economic boom, employment opportunities, various service opportunities, slums, homelessness, traffic congestion, urban sprawl, gentrification, air pollution etc. The major zones and areas of DNCC are listed in Table 1.

**Table 1: Major Zones and Areas of Dhaka North City Corporation**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Area Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone-1 (Uttara)</td>
<td>Uttara Model Town, Kuril, Khilkhet, Nikunjo</td>
</tr>
<tr>
<td>Zone-2 (Mirpur-Pallabi)</td>
<td>Mirpur section-12, Mirpur Ceramic, Mirpur section-10, Mirpur section-14, Byshteki, Mirpur section-11, Bawneabad Area, Mirpur section-6 &amp; 7, Pollabi, Mirpur section-2, Rupnagar, Govt. housing Estate, Mirpur section-1, Box Nagar, Zoo and Botanical Garden, Vasantek, Maticata, Manikdey, Barentek.</td>
</tr>
<tr>
<td>Zone-3 (Gulshan)</td>
<td>Baridhra, Shahjadpur, Gulshan, Banani, Mahakhali, Niketan, Badda, East Rampura, Ulon, West Haji Para, Khilgaon B Zone, Purbo Haji Para, Chowdhury Para, Tajgaon I/A, Kunipara,</td>
</tr>
</tbody>
</table>
History and Urbanisation

It is said that during the Mughal times (1608-1765), Capital Dhaka stretched in south-north direction from the River Buriganga to the Tongi Bridge or Tongi River. The present day Dhaka North city thus comes within the Mughal capital city of Dhaka. But how much of this area was actually inhabited and urbanised cannot be definitely said for lack of source materials. It is however asserted that all parts of this vast northern area were not urbanised or largely populated. However, we have definite information about settlements and use of certain areas of this area. Kawranbazar which is now an important commercial cum office area of Dhaka North was also an important trading area during the Mughal time. It was an important node in the internal trade of Bengal Subah or Bengal Province and number of caravans used to come here from distant places for business and trade. Indeed the name of Kawranbazar has originated from Kawran which means caravan. A bazaar was permanently established here, and the building of the famous mosque of Khwaja Amber indicates the settlement of permanent population on the bank of the Eskatan Khal or Canal, formerly a branch of Balu River. The place continued to be inhabited by modest population, and grew into some sort of urban area.
Fig. 1 Map of the Distribution of the New Ward of Dhaka North City Corporation.

* The map is prepared by the authors from the base map of M. A. Hossain, Centre for Urban Studies (CUS), 2011.
Further north to Kawranbazar is Tejgaon, which was used by the European traders as centres of their factories and vegetable gardens during the Mughal period to be precise from the middle of the 17th century. These European traders were mainly the Portuguese, the Dutch, the English and the French. Although the Factory Houses were later moved to the main centre of the city in the south, the area continued to be used as vegetable gardens, and there was also a sizable settlement of local population in the area. With the end of the Mughal rule this area lost much of its population and importance owing to the decline of city subsequently caused by the harmful policies adopted by the British.

With the departure of the British in 1947 this area for that matter the whole of present day Dhaka North began to be settled by the new population who migrated to Dhaka for various reasons. Many of the vacant areas or cultivated lands were bought and settled by the migrants. The government also acquired land and developed areas for settlement. The task of creating urban settlement in the whole area of Dhaka City fell upon the newly established Dhaka Improvement Trust– DIT. The DIT came into being in August 1956 under the Town Improvement Act of 1953. The function of the Trust was to carry out the development of the city in general; and this primarily meant improvement of old areas including slum areas, widening of the roads and creation of new areas for residential, commercial, industrial and other purposes. The Trust was also responsible for planning the development of the area within its jurisdiction which extended from south of Narayanganj to the north of Tongi with the Sitalakhya and the Balu Rivers in the East and the Dhaleswari and the Tongi Rivers in the South and West covering an area of 150 square miles. It exercised control over construction of buildings, lay outs of roads and usage of lands in various zones according to a Master Plan. This led to a more or less planned extension of the city. In the period between 1950s and the mid 1980s Mohammadpur, Banani, Gulshan, Baridhara and Uttara slowly developed. The built-up development was limited to the highlands available and the low lying areas and water-bodies were very profitably used, which no doubt added to the beauty of the areas as upper class residential enclaves. Then came the ‘growth rush’. Between 1990s and 2000s the new Dhaka North expanded to its present boundaries and is still expanding. The important areas which grew and expanded during these periods are Mohammadpur, Mirpur, Tejgaon, Banani, Gulshan, Baridhara and Uttara.

Historically, the growth and development of Dhaka can be categorized into six periods, such as- i) the Pre-Mughal Period (1205-1610), ii) the Mughal Period (1620-1757), iii) the East India Company Period (1758-1857), iv) the British
Colonial Period (1858-1947), v) the Pakistan Period (1947-1971) and vi) the Bangladesh Period (since 1971). However, since the Pre-Mughal Period, Dhaka City started to expand from its southern part which is the present “Old Town” of the city. Over time the city gradually moved towards West and North during the Mughal and British Period respectively. If we look back from historical perspective for the growth of the City, the growth of the Dhaka City could be well termed as slow and rapid during the 1950s.³

Fig. 2 Historical Growth of Dhaka towards the Northern Part. (Source: Islam, 2005.)
On the other hand, during the 1960s the growth picked up and since 1971 onwards the growth had been phenomenal. Fig. 2 depicts the growth of Dhaka City towards the northern part from “Old Dhaka (Dhaka South)” to “Recent Dhaka (Dhaka North)” over historical time period.

During the Pakistan period the growth of the city mainly focused towards the North and from 1980s onwards the growth of Dhaka City continued rapidly towards the boundary of Tongi, Savar and Gazipur in the North in an unplanned way. So, during the last forty years the city has undergone a rapid radical change not only in its physical form but also in terms of internal physical transformations where plots and open spaces, rural agricultural spaces, low lands, water bodies, parks have been transformed into building areas, places for commercial structures, built-up lands, etc. A clear picture of these types of transformation can be vividly seen in the Tejgaon, Uttara Model Town, Kurmitola and Bashundhara Residential Area. However, from the 1980s to the present, the expanding population of Dhaka City began to occupy all the vacant spaces of the city including low lands, water bodies, even forest lands. No serious efforts have been undertaken to create a planned city and Dhaka has now been growing by its own demand.5

The physical expansion of Dhaka City over the last few decades was mainly due to rapid population growth; the highest rate of population growth and physical expansion took place during 1981–1991 when population was doubled.6 However, since 2000s, the territorial configuration of Dhaka City had been classified into four different connotations. First, in 2005, Dhaka City Corporation had an area of 290 sq. kms. (120 sq. miles). The second concept of Dhaka City is the Dhaka Metropolitan Area (or more precisely the Dhaka Metropolitan Police or DMP Area) which is commonly referred to as DMA. Up to 2005, DMA or DMP was about 360 sq. km. (or 139 sq. miles) and this area was somewhat larger than DCC. The third connotation of Dhaka is the Dhaka Statistical Metropolitan Area or DSMA. In 1981, DSMA covered an area of 797 sq. kms. (307 sq. miles). The area of the DSMA region, however, was increased to 1353 sq. kms. (522 sq. miles) during the year 1991. The fourth concept of Dhaka is known as Capital Development Authority or Rajdhani Unnayan Kartripakhya (RAJUK) area, which is mainly a planning region and also larger than DSMA. During 1959, RAJUK had a planning area of about 829 sq. kms. (320 sq. miles). However, up to 2005, the planning area of RAJUK spread to nearly 1528 sq. kms. (590 sq. miles). This planning area is known as the Dhaka Metropolitan Development Planning Area or DMDP area.7 The extension of Dhaka City according to its above mentioned four connotations is shown in Fig. 3.
On the other hand, mixed use, combining shops with residences, increased considerably and the area of land used exclusively for shopping facilities were also increased. Besides, use of land for factories increased due to the growth of the garment industries. Moreover, use of land for offices increased due to the increase of government, NGO and private activities in the city over time. Furthermore, the percentage of agricultural land within the city limits decreased rapidly. However, it is also applicable till today in terms of Dhaka North. The land use/land cover pattern of Dhaka City up to 2011 is shown in Fig. 4 respectively.
Fig. 4 Changing Land use Pattern of Dhaka City. (Source: http://web.worldbank.org/)

Over the last forty years various researchers worked on the physical growth of Dhaka City. In this connection, it is evident that the city of Dhaka has physically extended with extensive internal classification as well as linking corridors. Similarly, due to newer link roads from South to North the integration core has a northward pull. However, the physical extension of integration core corresponds to the development of polycentric functional centres.

Fig. 5 Growth of Dhaka City through Land Cover Changes. (Source: Ahmed, 2013.)
Land Cover Changes

Dewan and Yamaguchi studied the land use/cover changes of Dhaka City through topographic maps and multi-temporal remotely sensed data. They found that from 1960 to 2005 built-up areas of Dhaka City increased approximately 15,924 hectares, while agricultural land decreased 7,614 hectares, vegetation decreased 2,336 hectares, wetland/lowland decreased 6,385 hectares, and water bodies decreased about 864 hectares. Besides, the amount of urban land increased from 11% (in 1960) to 344% in 2005. Simultaneously, the growth of landfill/bare soils category was about 256% during the same period. Ahmed also studied the land cover changes of Dhaka City through a period of three decades by applying RS (Remote Sensing) technology. He found that over the years (1989 to 2009) built-up area has increased in huge percentage (from 8.4% to 46%). On the other hand, it was also noteworthy that fallow land has decreased at a good rate (from 38% to 17%). However, the other land cover types (water bodies, vegetation and low land) have decreased in a very small amount (See Fig. 5) It is clear from the Fig. 6 that over the last three decades, built-up area has been increasing rapidly and Dhaka City has extended towards the North along with the built-up area where urbanisation also flourished at the same pace.

Gains and Losses of Land Cover Types

Ahmed also mentioned that between 1989 and 2009, in terms of built-up area, the core southern part of Dhaka City has remained the same. On the other hand, the northern part of Dhaka City has gained water body followed by a massive decrease in the south-east and south-west parts. However, no particular pattern of gains or losses is found for vegetation. For the cases of low land the changes are evident in eastern and western parts and the losses are clear in north-western and mid parts of the city (See Fig. 6).

The study of Nilufar and Ahmed revealed that over the last forty years the growth of urbanisation of Dhaka City was not achieved in a systematic way due to the absence of proper town or city planning.

Ashraf mentioned about the “Liquid Landscape” for the whole Dhaka City where he emphasized on the “edge concept” rather than the “centre concept” for the future development of the city in which hydrological and aquatic landscape frames the city. However, in recent times the encroachment upon rivers and other factors have virtually diminished the utilities of the three rivers of the city, namely Balu, Shitalakhya and Turag; so that Dhaka’s water provision and water communication have been threatened. Even then the expansion of Dhaka North will definitely take place towards the north in future as it has been seen during the last forty years.
Fig. 6 Gains and Losses of Land Cover Types. (Source: Ahmed, 2013.)
Economy
The economic development of Dhaka North since 1971 has been most impressive. It has a rich and growing upper middle class population driving the market for modern consumer and luxury goods. It has also seen the growth of varieties of industries and many economic institutions. Trade and commerce of the area are growing by leaps and bounds.

Though there is no separate statistics of economic and monetary developments at present, we may safely say that Dhaka North shares a large portion of all Dhaka’s economic growth. As of 2009, Dhaka’s Gross Municipal Product (GMP) is registered at 85 billion dollars. With an annual growth rate of 6.2 percent, the GMP is projected to rise to 215 billion dollars by 2025. The annual per capita income of Dhaka is estimated at USD 1350. Separately the per capita income in Dhaka North would be higher.

The main commercial areas of Dhaka North include Mahakhali, Gulshan, Kawranbazar, Farmgate, and Uttara. Besides, Bashundhara-Baridhara area is a fast developing economic area that includes high-tech industries, corporations and a large shopping precinct.

Growth has been especially strong in finance, banking, manufacturing, telecommunications and service sectors, while tourism, hotels and restaurants continue as important elements in the economy of Dhaka North. Most of the public and private banks of the country have their branches in Dhaka North; some of them have most modern facilities. These banks provide capitals to industrialists, businessmen and property developers. Foreign banks such as City Bank NA, HSBC and Standard Chartered also have branches here while HSBC and Standard Chartered have ATM booths all over the area. The mobile phone companies have their offices in the area providing services and employing large numbers of technical persons. There are also large numbers of buying houses of garments, which are playing a major role in the export trade of the country.

Construction Industries
During the last twenty years, urban developments sparked off a widespread construction boom in the Dhaka North area. Very recently new high-rise buildings and skyscrapers have changed the Dhaka North landscape. These developments have created a booming construction industry. Different construction firms of the conglomerate business groups of Bangladesh have erected various high-rise apartment buildings either by purchasing lands from the owners or demolishing the existing one or two-storied buildings and constructing over them multi-storied apartments some of them up to ten to
The agglomeration of these newly emerged concrete structures has invaded the tranquility and greenery of Dhaka North like the ‘Dragon’s flame’. However, shortage of electricity and gas has made these newly constructed multi-storied apartment buildings difficult of living. The situation is worsening day by day as the supply of essentials could not be provided. The unorganized planning of urban settlement has also become a threat to its dwellers if a sudden disaster like earthquake hits the city.

The Dhaka North city houses large construction companies like the Concord Group, Rangs Group, Beximco Group, Summit Group, Navana Group, Rahim Afroz etc. Most of these groups have their corporate offices located in Tejgaon, Mahakahi, Banani and Gulshan.

**Development of Commercial Shops and Bazaars**

The main commercial areas of the DNCC include Gulshan and Mahakahi, while Tejgaon is the major industrial area. With the rapid infrastructural development during the decades of 1990s, Mohammadpur, Kawranbazar, Gulshan, and Uttara areas have acquired a new outlook of multi-storied shopping plazas and commercial chain shops with modern escalators, elevators, central air conditioning and underground shopping facilities and car parking. Alternatively, Baridhara is developing as a new economic area that will include high-tech industries, corporations and a large shopping precinct in about five years. There are many shopping malls in DNCC area. Among them the most notable ones are Bashundhara City at Panthapath near Kawranbazar, Pink City Shopping Complex at Gulshan, Maskat Plaza at Uttara, etc. Besides, in the last 10-15 years the establishment of super shops like Meena Bazaar, Almas, Agora, etc. competes with the traditional bazaar system and serves a great majority of the people not only of Dhaka North but also of Dhaka South as well.

Bashundhara City is twenty-one storied tall shopping complex. The mall has space for 2,500 retail stores and cafeterias and also possesses a large underground gymnasium, a multiplex styled movie theater and top floor food court along with an indoor theme park. The fully air-conditioned shopping mall with rooftop gardens is considered as a symbol of the emerging modern city of Dhaka. It is also one of the biggest shopping malls in South Asia.

However, the most renowned brand shopping mall of Bangladesh, namely “Aarong” has its several branches in different places such as, Asadgate, Gulshan, MaghBazar and Uttra of the DNCC area. In recent years the trend of emerging shopping mall in Dhaka City is increasing rapidly in context of both the Dhaka North and Dhaka South City Corporation areas.
Food Industries

Dhaka is traditionally famous for its food. The old Dhaka or the Mughal Dhaka became famous for its Mughlai or Persianised dishes, namely Biriani, Kabab, Kofta etc. The indigenous food also made great strides with fish preparations creating an important place of its own.

This famous tradition of Dhaka’s food is also repeated in the Recent Dhaka (New Dhaka). Moreover, new additions have made it more cosmopolitan. This Recent Dhaka was more exposed to wider world since the partition of India in 1947. During the Pakistan days it came under serious western influence especially American influence. The so-called ‘Fast-food’ and soft drink especially ‘Coca Cola’ became the symbols of Recent Dhaka. The trend set up in the Pakistani days continued, and received tremendous fillip after the Liberation of Bangladesh in 1971 as the country became more exposed to western influence and free market economy.

Informal food of the inhabitants also became varied as migrants from different districts settled down in the Recent Dhaka with their regional characteristics. Fish still dominates the general menu. However, formal food is served with Mughlai dishes with some Pakistani additions.

However, major changes have been noticed recently in the food habit of the people especially of the youngsters with the arrival of western as well as far eastern foods. These new kinds of food are served in the large numbers of newly established restaurants. Most important among them are however, American style fast food followed by Italian Pizza and Chinese dishes. Soft drinks, both foreign and locally produced, have become extremely popular. The following are some of the most popular food shops in the DNCC area: KFC, Pizza Hut, Khazana, Marine Restaurant, Park Town, Yan-ji Chinese Restaurant, Cine Bistro, Aromaz at Hotel Pan Pacific Sonargaon, Dominous Pizza and Salt Grill Restaurant in Bashundhara City.

Dhaka North has established new food industries for different types of food like organic food, fast food etc. The food industries of DNCC supply foods to consumer shops, retail shops, chain food shops etc. They are mostly located in the Tejgaon, Mirpur and Uttara areas. These food industries are generally operated through owner-basis. The people who work in these food industries are migrants from different districts of Bangladesh.
Society
The society which is developing in Dhaka North is a mixed society with groups of people with no particular roots or tradition. On the one hand, we see in Gulshan a concentration of very rich people with a westernized way of life, and on the other hand, in the Mirpur-Mohammadpur areas the people are more or less middle income and lower income groups with the Bangladeshi culture dominating the scene. This is also largely the case in Uttara though the number of well off people is larger there. The people who now live in Dhaka North have come from all parts of Bangladesh.

The vast majority of the people are Muslims of Sunni sects who are generally very pious and moderate in their outlook. Orthodox, conservative attitude does not prevail and people are more liberal in their behavior and beliefs. They however, perform their religious duties faithfully.

The families are predominantly nucleus though quite often elderly parents live with their children. But joint-family system practically does not exist. Child marriage is virtually absent. Household maids are however distinct features in the families.

There are also a large group of foreign people living in Dhaka North as merchants and industrialists. There are also substantial numbers of foreign technical and professional people living in the area. Then there are the diplomatic enclaves. All the foreign missions are situated in Gulshan, Banani and Baridhara areas, and the diplomats and international professional people also live in these areas. The diplomats have their own ways of life which have given the area a cosmopolitan look. Some of these diplomats have schools of their own where their children and others study. Some of them also have their own clubs and other recreational facilities.

Culture and Heritage
The old part of Dhaka City has a strong cultural background in terms of food, religion, cultural programmes, different type of festivals, like the festival of kite flying during spring, traditional Iftaree Bazaar during Ramadan, Kasseda Song during the Sehree times, rituals of wedding ceremonies, Puja festivals in the temples, Hal Khata systems during the Pohela Boishakh (first day of the Bengali month ‘Boishakh’) and so on. Following these the new part particularly the northern part of the city also celebrate the Boishakhi festivals, Puja festivals in different places of Gulshan, Banani, and Uttara. However, the residents of Gulshan, Banani, and Baridhara particularly celebrate the New Year Eve festival gorgeously in different clubs, restaurants, cafés of these areas. Moreover, since 2000s these parts of Dhaka North regularly arranged different arts, photography
and fashion exhibitions, and workshops through different art galleries, centres established in different places of Gulshan, Banani, Mahakhali and Uttara areas. Some notable galleries of these areas are Bengal Art Lounge, Saju’s Art Gallery, Gallery Kaya, Kosmos, etc. These places have now created a new cultural hub for artists, art enthusiasts, photographers, etc. Moreover, some of the private universities of Dhaka North established their own photographic and art societies and they also have opened up new arenas regarding the field of art, crafts and heritage to the younger generation of the Dhaka North. So, the traditional culture and heritage of Old Dhaka are also slowly entering in Dhaka North with new dimension and becoming a mixture of Western and Bengali culture.

**Educational Development**

The education system of Bangladesh is mainly divided into three traditional stages, primary, secondary and tertiary or higher education. However, besides there are technical or vocational education and non-stream education system practiced all over the country. The Government of Bangladesh is proud that its education programs have dramatically improved since the independence in 1971 and in the 1990s, particularly during the later half of the decade of 1990s. A large part of this renewed commitment was a direct result of the *1990 World Conference on Education for All* (WCEFA), which encouraged all participating nations to expand their vision to meet goals in the education sector, especially the goal of making primary education universal. Following this conference, donors in Bangladesh invested much more heavily in the education sector and NGOs increased their involvement in assisting the Bangladesh government in meeting its primary education goals.

In Dhaka North, education is carried through the Bangla and English Medium Schools, and also there is a Madrasah education system as well. During the decades of 1990s the educational development took a new shape with the establishment of different private universities in this major part of Dhaka City. There are also some public universities as well.

**Bangla and English Medium School and College**

Many eminent public and private institutions of Dhaka City are located in its northern part including the zones of Uttara, Mirpur-Pallabi, Gulshan, Mirpur-Kazipara, Gabtoli, Kawranbazar. The area is also the place of many notable primary and secondary Bangla Medium Schools like RAJUK Uttara Model School and College in Uttara, Dhaka Residential Model School and College in Mohammadpur, Saint Joseph Higher Secondary School, Asadgate (Mohammadpur), Monipur High School in Mirpur, B.F. Shaheen School and
College in Mohakhali, Khilgaon Government High School in Khilgaon, Holy Cross College in Farmgate, Tejgaon Government High School in Tejgaon, Shaheed Bir Uttam Lt. Anwar Girls’ College in Cantonment, etc. Among these schools, RAJUK Uttara Model School and College has been the topmost school in Dhaka City in the last few years. On the other hand, renowned English medium schools like Scholastica (three branches in Mirpur, Gulshan and Uttara), St Francis Xavier's Green Herald International School in Mohammadpur, Academia in Lalmatia (Mohammadpur), Green Herald School in Mohammadpur, Sir John Wilson School in Gulshan, Canadian Trillinium School in Gulshan, American International School of Dhaka in Baridhara, Bangladesh International School (BIS) in Mahakhali are also situated in the DNCC area.

Madrasah Education

In the subcontinent the Sultanat and Mughal governments liberally supported Madrasahs by way of making 'lakhraj' or rent free land grants. Such grants were known as 'maadat-e-maash'. The early Muqtub or Furqania madrasahs in India were established in Delhi, Lucknow, Madras (Chennai) and Dhaka, and a few largely Muslim populated areas. In imparting education, Madrasahs of Bengal followed the Darse Nizami System and it continued till early 1970s. The curricula included the Unani method of medicine, Cottage industry and Technical training. At present, there are three systems of Madrasah Education in Bangladesh. These are: i) The Old Darse Nizami System; ii) The Revised and Modified Nizami System and iii) The Alia Nisab (Higher Syllabus) System. Among these three categories the first two are popularly called ‘Quawmi’ or non-government madrasahs. To co-ordinate these madrasahs a government body called Non-government Education Board was established in 1978. However, up to 1998, 2,043 Madrasahs were registered with the Quaumi Madrasah Education Board under Rifaqul Madaris throughout the country. Over 10 thousand Quaumi Madrasahs have been established in Bangladesh up to 2008. This board controlled seven standards of education system. At present madrasah education is an integral part of national education system. Now Bangla, English and Science have been introduced in most government aided madrasahs. Students having recognized diplomas from madrasahs are also entitled to obtain transfer for themselves from the madrasahs to colleges and universities. Some of the notable madrasahs in the Dhaka North are- Jamiah Rahmania Arabia in Mohammadpur, Islamic Research Center in Bashundhara, Jamia Madania Baridhara in Gulshan, Al-Madrasatul Arabia Baitussalam in Uttara, etc.
Public Universities

The arrival of Lord Curzon as a Viceroy in the Indian subcontinent opened up the vision of the existing education system and university education went ahead to a new arena of education. Curzon instituted the Indian Universities Commission in 1902 with a view to improving the state of higher education in the country. The University of Dhaka (Dacca) was established in 1921 under the Dacca University Act 1920 of the Indian Legislative Council, and it was a part of expansion programme (It was also the first public university of Bangladesh). It marked the democratization of the administrative bodies of older universities by a substantial increase in the number of elected members. However, in the recent years some important public universities have been established in the northern part of Dhaka City, like- Shere-e-Bangla Agricultural University in Sher-e-Bangla Nagar, Agargaon, Bangladesh University of Professionals (BUP) in Mirpur, and Bangladesh Textile University in Tejgaon. At present BUP is involved to run all educational institutions of the army, navy and air force and facilitate professional degrees for armed forces personnel and civilians through its affiliated institutions currently nine.21

Private Universities

In Bangladesh the Private Universities Act was passed in 1992. As soon as this Act was passed in the Parliament, many educationists, intellectuals and guardians welcomed it as an expansion of education at the private level, which could create opportunities for many students at the tertiary level and at the same time it could function to complement the long established public system of education in the country. However, the Private Universities Act of 1992 opened up a new vista in the history of the country’s university education. A section of the citizenry who could afford to send their children abroad for higher education got an option to consider their cases whether they should send their children abroad any more for higher education or admit them in the private universities within the country.

The first private university that started functioning in Bangladesh is the North South University (NSU). It was established by the North South University Foundation in 1992. Some of the best private universities in Bangladesh like the North South University (NSU), East West University, Independent University of Bangladesh (IUB), BRAC University, and American International University of Bangladesh (AIUB), etc. are situated in the northern part of the Dhaka City. So Dhaka North City now exhibits a new educational characteristic since 1971.
The growth of private universities in Bangladesh has taken a phenomenal shape in the recent years. The private universities have undoubtedly opened up new avenues of higher education in the country but higher education must be ensured in terms of quality education (although the quality of some private universities is reasonably high). University Grants Commission (UGC) considers that it has a greater role to play in this connection. To control the commercial motive and at the same time, to ensure quality education are indeed a difficult job. It is unlikely that all private universities of Bangladesh will be of the same nature and academic standard. There must be some kind of variation in the areas of course offering, financial positions and quality of education. What is needed most is the cumulative impact of these universities in the growth of higher education in the country. However, in spite of these plausible shortcomings, private universities also have a positive side; after nearly a decade of their operation, the private universities can claim to have made an impact on the main stream universities. One solid example is the switch over to four-year degree course that the public universities have already adopted, following the example of private universities.

**Engineering and Technological Education in the Private Universities of Dhaka North**

As mentioned earlier, during the decade of 1990, various private universities have been established in the northern part of Dhaka. Most of these universities provide general education but some of them only provide engineering and technological education. Among these most notable universities in the Dhaka North area are- Ahasanullah University of Science and Technology (situated in Tejgaon), Atish Dipankar University of Science and Technology (main campus situated in Banani and the other campuses are situated in Uttara, Panthapath, Mirpur, etc.), Bangladesh University of Business and Technology (situated in Mirpur), etc.

**Medical Facilities/Health Facilities: Government Hospitals/Private Hospitals**

Dhaka has been famous for providing medical facilities for a long time. Though in the old days, for lack of proper medicine many people lost their lives from deadly diseases. In Mughal period, Ayurvedic and Hekimi treatment provided succor to many. The first important western medical institution, the Mitford Hospital was established in 1858. This institution brought about a revolutionary change in the state of the health of the citizens of Dhaka. The Dhaka Medical College and Hospital was established in 1946 and Sir Salimullah Medical College in 1963. Though during the Pakistan period western medical system developed substantially, the growth of western medical facilities in Dhaka after
the birth of Bangladesh has been phenomenon. A number of hospitals, medical institutions, clinics, diagnostic centres etc. have been established both on public and private initiatives some of them are of world class standard. The name of BIRDEM, Lab Aid, Square, United are just a few examples. However, the numbers of these medical institutions are found inadequate when considered the huge population of the city as well as those who come from outside the city to seek medical help. Nevertheless it may be said that the health care situation in Dhaka North is more than satisfactory.

There are many medical research centres in the Dhaka North among which the most famous is the ICDDR,B situated in Mahakhali. The ICDDR,B or the International Centre for Diarrhoeal Disease Research, Bangladesh is an international health research centre. It is dedicated to saving lives through research and treatment. It addresses some of the most critical health concerns facing the world today, ranging from improving neonatal survival to HIV/AIDS. The Centre is credited, among other accomplishments, with the discovery of Oral Rehydration Therapy (ORT) for the treatment of diarrhoea and cholera. In collaboration with academics and research institutions all over the world, it conducts research, training and extension activities as well as programme-based activities to develop and share knowledge for global life saving solutions.

Institute of Disease and Chest Hospital (IDCH) is another notable government hospital in Mahakhali area. This institute is mainly a postgraduate teaching and training centre for treatment, prevention, and rehabilitation of wide range of medical and surgical chest diseases. Moreover, Mahakhali is also a place of another important hospital in the Dhaka North namely, National Institute for Cancer Research & Hospital (NICR&H). It was established in 1982 and it is also a teaching institute and training centre for postgraduate studies and research on cancer.

In Dhaka North, Apollo Hospital also provides the latest medical care facilities as well as the Emergency Air Ambulance service to outside which is the first of its kind in Bangladesh. On the other hand, being located in the heart of Dhaka, Square Hospital Limited also serves a greater part of both Dhaka North and Dhaka South. It is an affiliated partner of Methodist Healthcare, Memphis Tennessee, USA.

**Transport and Traffic**

It is a common phenomenon that most part of Dhaka City is badly affected by tremendous traffic jam over the last forty years and the traffic systems have still not improved properly. Probably Dhaka is a notable example among the world
cities in this regard. Faulty traffic signaling systems, inadequate manpower, narrow road spaces and overtaking tendency of drivers create prolonged traffic congestions. Besides, too many rickshaws, narrow and winding roads of the city, considerable speed difference between rickshaws and other non-motorised vehicles (for example, push carts and cycle vans) and motorised vehicles, holding of public meetings at street corners (due to lack of any public venue for such meetings), lack of knowledge and an inadequate and corrupt traffic administration were some of the factors contributing to the horrendous traffic jams. Albeit the roads and lanes in the northern part of Dhaka are comparatively wide than the southern part but due to the increase of private cars, buses, overtaking tendency, increased number of private schools, colleges and universities and also corporate offices in this part of the city, create tremendous transport pressure here which also results into traffic jam. Besides, most of the important roads of the northern part of the city termed as VIP Road, where frequent VVIP movement and political processions are observed regularly, which cause further traffic congestions. Moreover, most of the important roads of this part of the city also used for hawking and storage of construction materials e.g. in Farmgate, Mahakhali, Tejgaon, etc. These have naturally severely aggravated the traffic situation in Dhaka North.

Moreover, due to traffic jam a substantial portion of working hours are wasted on roads which indirectly put adverse impact on economy. On the other hand, regarding the environmental problems, it causes serious air pollution and noise pollution and thus worsens the overall environmental condition. Different researches have been done on reducing the traffic jam scenario of Dhaka City emphasizing on construction of roads through east-west connection of Dhaka City, construction of circular embankment-cum-road along the periphery of Dhaka City, grade separated road network system, Bus Rapid Transit (BRT) system, Metro-Rail system, etc. Among these recommendations some initiatives have already been taken and some are in the process. Most recent example of this type of improvements in the transport sector is the Kuril Flyover (3.1 km), which was opened for the public on 4 August 2013. It is constructed under the Strategic Transport Plan (STP) of the government to build up a modern Dhaka. The flyover comprises four sections providing uninterrupted road connections between Hazrat Shahjalal International Airport, Nikunja, Banani, Rampura and Purbachal areas. However, number of transport vehicles especially the CNG auto-rickshaw is not adequate enough considering the demand of people and the
high price charge asking by the drivers of CNG also make the system complex to the city dwellers. Most of the drivers do not follow the meter systems for running the auto-rickshaws. So, there is a need to carry out a monitoring system to run this mode of transport system systematically. By reducing traffic jam, both the DNCC and DSSC of Dhaka City can play a very important role by ensuring healthy environment and sustainable ecosystem.

**Environment**

The most significant development in the recent global history relates to the changes in its environment, both through natural causes and by human actions. It goes without saying that plants, gardens, wildlife and balanced environmental conditions are integral parts of a healthy urban centre. In 2010, the Asiatic Society of Bangladesh published a research book on the Environmental Changes of Capital Dhaka over the last four hundred years. Experts, researchers, scholars from various disciplines jointly worked there. The research findings of the book titled *Environment of Capital Dhaka* particularly in the field of the environmental and ecological issues of Dhaka City since 1971 highlighted many important issues in connection with the environment of Dhaka City. In this context, it is observed that initiatives have been taken to set up Social Forestry Programme as well as Strip Garden Formation along the roadsides of Dhaka City.\(^{24}\) Besides, establishment of Chandrima Uddyan in 1980s was also a remarkable garden in the DNCC area dominated by tree species.\(^{25}\) However, during 1977, about 18 open spaces (about 396 acres of land) were identified in Dhaka.\(^{26}\) In 1990, 115 parks and playgrounds (617.01 acres of land) were identified in the city.\(^{27}\) Of these, 591.01 acres were located in the Recent Dhaka, i.e. in Dhaka North. In the 1990s, the stock of open space was reduced to 92 including 71 parks and 21 playgrounds of 229.461 acres and 39.66 acres of land respectively. In 2004, the area of open spaces was around 221.92 acres according to the draft Detailed Area Plan of Dhaka City.\(^{28}\)

In terms of health issue, the air quality of Dhaka City shows an ups and downs trend. The citizens of metropolitan Dhaka were being slow-poisoned by air pollution in the 1990s. Hence, the commercial areas of Dhaka North, such as Farmgate, Mahakhali, Gulshan Post Box, Asadgate (Mohammadpur) areas, the situation was worsening. The air pollution survey of 1990 found that the major industrial areas like Tejgaon in Dhaka were not the main source of air pollution. The main sources of air pollution in the city were the vehicles and brick fields
Khals (ditches) and detention storages have been the most important elements of the storm water drainage system in Dhaka. Experts and writers mention that there were about forty Khals in Dhaka. However, in 1987, JICA identified three major Khal systems in Greater Dhaka City—first, Degun-Ibrahimpur-Kallyanpur Khal system draining into the Buriganga and Turag Rivers, second, the Gulshan-Banani-Begunbari-Dhanmondi Khal system draining into the Balu River, and third the Dholai-Gerani-Segunbagicha Khal system draining into the Buriganga and Balu Rivers. Among these Khal systems, the Begunbari Khal flowed as an open channel between Airport Road and DIT Road through Hateer Jheel, which is the largest stormwater detention area in the Dhaka City. However, in more recent years, domestic waste water discharge into the storm sewers of the city has led to deterioration in the quality of storm sewers which in turn pollute the receiving water bodies. Present physical extension and the dense catchments area of two important Lakes (Banani Lake and Gulshan-Baridhara Lake) of Dhaka North are shown in Fig. 7.

Success Story: Hatirjheel-Begunbari Project

Around four years ago, RAJUK in association with Dhaka Water and Sewerage Authority (DWASA) and the Local Government Engineering Department (LGED), took up the project to recover the 304 acres of land and the city's largest water retention basin – Hatirjheel and Begunbari Canals. The design of the construction work has been laid out by Bangladesh University of Engineering and Technology (BUET) while the “16 Engineering Construction Battalion (ECB)” of the Bangladesh Army monitored the project. The total costing of the project was over Tk. 1971 crore and the project was inaugurated and opened for the public on 2 January 2013. The total project sites stretch between Airport Road and Rampura along Tejgaon, Gulshan, Modhubagh, Maghbazar, Badda and Ulan. The project area included 46 acres of Rajuk's land, 34 acres of other government agencies, 81 acres of Court of Wards and 141 acres of private land. It is assumed that the project will help ease the traffic situation in Maghbazar, Modhubagh, Ulan, Mohanagar, Daserpara, Rampura, Merul Badda, Gulshan, Tejgaon and Begunbari.
However, the most notable public facilities of this project includes a 9 kms east-west connecting express road, 8 kms service roads, 477 metre bridges, 9 kms footpath, 10 kms lakeside walkway, 260 metres viaduct, forty metres overpass, an integrated drainage management connecting Begunbari canal with the Gulshan-Banani Lakes, a sewer network, an aesthetic public space, and waterfronts. The scheme is also designed to help ground water percolation. Besides, the three bridges (each of them is more than 15 feet high) have been
built across the Hateerjheel Lake along with three viaducts along the peripheral road and four overpasses on the road. However, the scheme's service roads now help the commuters of Rampura, Badda, Ulan, Modhubagh, Maghbazar, Gulshan, and Tejgaon area an easy movement in these areas.

Slums/Squatters

Expansion of urban areas also creates unplanned informal settlements as the sole option for newcomers. Informal settlements, squatters, and slums are also notable characteristics of Dhaka City since the independence as the Capital city. Most of the slums in Dhaka City are agglomerated with rural-urban migrants from different regions of Bangladesh. In general there are about 9048 slums in the six divisional cities of where about 15.45 million people live. However, for the case of Dhaka City, there are approximately 4966 slums and about 3.4 million people live in those slums which are equivalent to nearly 40% of the total population of Dhaka City. Besides, the population density of the slums of Dhaka City is 2,20,246 persons per sq. km. On the other hand, the non-slums population is 19,677 persons per sq. km. However, over the last forty years these settlements have grown in numbers and in spatial forms with the increase of the urban poor and their exclusion from formal housing sectors. The northern part of Dhaka also possesses some slums and squatters along with the posh residential area of Gulshan and Banani. “The Korail Slum of Gulshan” area is a remarkable example of this.

Dhaka's sprawling slums are testament to its struggle to accommodate millions of new residents. Land in the city is scarce and people have filled in water bodies and low lands to make space for new housing. Mass evictions are on the rise as landowners clear out slums to make way for more profitable building projects. Along with conditions of urban poverty, informal economy, and challenged urban management systems, these settlements and their residents have become increasingly susceptible to vulnerabilities like fire and natural disasters.

Challenges: Infrastructure Black hole- Korail Slum

The Korail Slum in Dhaka spreads out over 170 acres of government land owned by the state-owned Bangladesh Telecommunications Company Limited, the Public Works Department and the Ministry of Information and Communication. It is the largest slum in Dhaka North and shares its borders with two wealthy neighborhoods, Banani and Gulshan. Korail came into existence about twenty five years back and today has a population of 78,000. In the one-room, 100-200
sq. ft. dwellings, families with an average of five members, have created a life for themselves. However, when it comes to basic amenities, the 16,000 families of Korail are struggling. Not only these, they are also grappling with severe sanitation and water problems. They do not have any access to government-run health or educational institutions either. In April 2012, the Dhaka district administration began to demolish almost 2,000 homes in Korail without advance notice, leaving 4,500 people homeless. Despite the threat of eviction, Korail residents have not left the slum. Existence of Slums (up to 2005) in Dhaka Metropolitan (DMP) area is shown in fig. 8.

According to a community leader, Abdul Mannan,

The problem is that we are considered illegal residents and, therefore, we are not entitled to any government facilities like health, education, water, sanitation, and so on.” Simultaneously, a resident of the slum Jahan Ara said: “Just because we are poor it does not mean that we do not deserve a life of dignity. We also need potable water and proper toilets. Even my children deserve a decent education and something as basic as a playground. According to a study by the Centre for Urban Studies (CUS), the Public Works Department’s plans to develop apartments for forty thousands officials and media personnel on 43 acres of the land Korail sits on. There does not seem to be any assistance or rehabilitation plans for current Korail slum-dwellers.

**Technology: Booming in the ICT Sector**

Technological solutions not only make urban service delivery economically viable, but also ensure environmental sustainability and social inclusiveness. After the emergence of Bangladesh, in the recent years a dramatic technological boom has taken place in the ICT sector of Dhaka City. Various electronics markets have flourished in Dhaka City over the last forty years. The largest computer market of Bangladesh “BCS Computer City” has been built at Agargaon, which belongs to the northern part of the City. However, in the last 10-12 years, different mobile operating companies, such as City Cell, Grameen Phone, Bangla-link, Robi (previously Aktel), Airtel (Previously Warid) have set up their offices in different areas of Dhaka City particularly most of them have their head offices in Gulshan, Banani, and Uttara which belong to Dhaka North area.
Fig. 8 Slums Map of Dhaka City up to 2005. (Source: CUS, 2005.39)
On the other hand, the holding of ICT fair at different times of the year makes people aware about the latest model of electronic products in terms of laptop, tablet, mobile phone, LCD TV, etc. The young generation of the city uses the technology profusely for communication purposes. Besides, nowadays, job searching processes also depend on technology where different job searching websites, (e.g. http://www.bdjobs.com, http://www.protho-alojobs.com) etc. plays key role in this context. Moreover, the new trends of outsourcing also have created job facilities among the students and jobless people. However, in recent times, people even participate in different workshops or training regarding outsourcing. One of the renowned global freelance market company named oDesk (A USA) based Company; website: https://www.oDesk.com) arranged such type of event at Gulshan, Dhaka in May 2012. Another most important dimension in terms of communication technology is the use of different social networking sites like facebook, google+, twitter, blogs, etc. These are the common platform of modern communication system where people particularly the young generation share their views, ideas, and works with people around the world whom they are connected with through these social networking systems; and the people of Megacity Dhaka as well as Dhaka North are not lagging behind from these facilities.

The technological advancement has also made things possible like mobile banking, money exchange procedure through B-kash, Moneygram and other networking systems. The establishment of different electronics media, TV channels, and Radio stations are also the effects of this growing technological demand.

**Conclusion**

The growth and development of Dhaka North during the last forty years have been most impressive and in some cases extraordinary. The urban area has expanded, many houses and residential areas have been built and economic and industrial activities are booming. However, it is too early to talk about the future of Dhaka North. Nevertheless, it can be definitely said that the urban area of Dhaka North would certainly be extended at the cost of open spaces and water bodies. The expansion will also be mostly unplanned. Albeit on many occasions the authorities talk of planned growth of Dhaka City but in reality these are not being followed. Dhaka North will definitely be a place of well off people as most of the inhabitants are landlords, high government officials, business people and other professional people. Given the nature of population its commerce would be booming and the people will be served by expensive goods and materials. There will also be top class commercial centres and expensive hotels and restaurants.
However, because of large numbers of population and unplanned growth, the traffic problem would be a serious matter and overcrowding of roads would be a common feature. However, recently measures have been taken to ease the traffic jams by building diverse roads and flyovers. If these are more successfully carried out, road transport would be much easier.

Dhaka North would be inhabited highly by educated and professional people. Hence, it could be a truly urban area. Barring the disaster Dhaka North would be a prosperous city. Its educational development with the presence of many excellent private and public universities, colleges and schools, it would be a great hub of educational activities. Culturally it would be more of a cosmopolitan nature than purely Bangladeshi culture. Its future would be secured if political situation of the country remains stable and people are given opportunities to participate in nation-building.

References

3. Ibid.
7. Nazrul Islam, Dhaka Now, 2005, pp. 8, 10
8. Ibid. p. 11...
9. Ibid. pp. 7-9
10. This map is produced by World Bank and European Space Agency’s joint ventured project titled “Historical Assessment of Spatial Growth of Built-ups in Metropolitan Areas of Delhi and Mumbai in India and Dhaka in Bangladesh. Available at: http://web.worldbank.org/WEBSITE/EXTERNAL/TOPICS/EXTSDNET/EXTEOFD/, accessed in: December 2013.
15 Ibid.
19 Farzana Ahmed Mohuya, “Climate Change and City: An Utopian Debate or White Truth!”, in: *Souvenir of the World Habitat Day 2011 (বিশ্ব সাগর সন্নতি দিবস ২০১১) - Cities and Climate Change (সাগর ও বিশ্ব পরিবেষ্টন*) (eds. A. K. M. Abul Kalam and Nurul Islam Nazem), Ministry of Housing and Public Works (পৃথিবী ও গভর্নমেন্ট), Government of Bangladesh (সরকারি ভূমি ও প্রশাসনসমূহ), and UN-HABITAT, Dhaka, 2011, pp. 75-78
22 Azaher Ali Molla, “Forty Years of Health and Medical Care in Dhaka City”, in: *Forty Years of Capital Dhaka*, p. 347


37 Ibid.

38 Ibid. http://urbanpoverty.intellecap.com

39 Ibid., CUS, 2005.