

POPULATION OF DHAKA CITY : PAST, PRESENT AND FUTURE*

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PAST HISTORY AND POPULATION OF DHAKA CITY

The city of Dhaka had many ups and downs politically, economically and functionally. It is popularly known that the city was first founded by Islam Khan. But the historical evidence shows that there was a notable city in the vicinity even in pre-Moghul times. Probably, this pre-Moghul town spread from the mouth of the Dulai Khal upto the present Mitford Hospital. Dhaka first became important during Moghul period when Islam Khan was appointed the viceroy of Bengal in 1608, with his capital at Rajmahal. He decided to move his headquarters further east and chose a new site on the bank of the river Burhiganga, now the city of Dhaka.

Islam Khan reconstructed the old Afghan fort on the site of present Central Jail. He did not build a palace. He preferred to live on barge. The industrial and commercial prosperity of the city started during the third Viceroy, Ibrahim Khan. Many permanent buildings including the palace of the viceroy were built on the bank of the river.

The most important phase of prosperity in Dhaka started in the latter half of the seventeenth century when Mir Jumla was appointed as viceroy in 1660. Mir Jumal did not add much to the city, but he paved the way for the great developments which took place under the long and peaceful rule of Shaista Khan from 1663 to 1679. This was Dhaka's golden age. Industry and trade flourished. People flocked to the city from the surrounding areas and the population of the city reached its maximum level. The population of the city is said to have reached 900,000 and the built-up area extended for twelve miles along the river bank and eight miles inland.

But the growth of the city stopped almost as rapidly as it had begun. During the end of the 17th century, Dewan Murshid Kuli Khan shifted the whole machinery of the Dewani from Dhaka and Dhaka was left strangely quiet and deserted, and the city experienced disorder. From about 1700 onwards the city began to contract.

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The advent of British rule in 1757 was marked by ill omen. The East India Company took over the administration of Dhaka in 1764. In 1769, the province experienced severe famine. In 1784, there were extensive floodings leaving parts of the province deserted. Only three years later in 1787-88 these conditions were repeated on an even more serious scale. Starvation followed and riots broke out. Trade and manufacturing declined. The effect of these on Dhaka was a wholesale decrease in population by death and by desertion to the rural areas. In 1800, the population of Dhaka fell down to 200,000. In 1838, it had fallen to 68,038, while by 1876 it was only 51,638.

The Second half of the nineteenth century saw some improvement in Dhaka. In 1858, telegraphic communication with Calcutta was installed. The same year the Mitford Hospital was founded. In 1864, Dhaka Municipal Council was formed and from then on the town began to expand again. By 1882, the population had risen to 79,076 and by 1901, it was 90,542.

In 1906, the British Government decided to form a separate province comprising East Bengal and Assam, and once again Dhaka was to be elevated to the status of provincial capital. But this new phase as a capital was short-lived. In 1911, the partition of Bengal was annulled and to compensate for the change in policy, the Government established the Dhaka university which started to function from 1920.

After the Partition of India in 1947, Dhaka became the provincial capital of East Pakistan. Until in 1947, it was only a very small town. After the partition of India, there were influx of population to Dhaka City from India and also from rural areas. To accommodate this influx of population, Azimpur and Motijheel colonies were built, Dhanmondi, Mohammadpur, Mirpur and later Gulshan and Banani residential areas were developed. Dhaka Improvement Trust (now RAJUK) was set up in 1956 to ensure planned development of the City. New roads were laid out in Ramna and Tejgaon area, and Dhaka started to expand in the north direction. The population of Dhaka rose to 3,35,928 in 1951 and to 5,56,712 in 1961 (Table-1).

Table - 1
Past Population of Dhaka City

Year	Population	Growth Rate(in %)
1663-1679	900,000	
1800	200,000	
1838	68,038	
1867	51,638	
1882	79,076	
1891	83,633	
1901	1,28,857	
1911	1,53,609	1.77%
1921	1,68,510	0.93%
1931	1,96,111	1.53%
1941	2,95,735	4.19%
1951	3,35,928	1.28%
1961	5,56,712	5.18%
1974	17,72,438	9.32%
1981	34,40,147	9.94%

The City is experiencing a phenomenal growth of population since 1971 when after liberation it became the capital of independent Bangladesh. The population of Dhaka became 17,72,438 in 1974 and 34,40,147 in 1981 (Tables 2 and 3 respectively). Between 1974 and 1981, there were additions to the census area, and the population 3.44 million in 1981 was recorded for the new limits of the City which approximates an area of 171 sq. miles (BBS, 1986, p. 137). The increase of population in Dhaka city between 1961 and 1974 was 9.32 percent per annum and during 1974-81 period the increase of population was 9.94 percent per annum (Table - 1). The very high rate of growth during 1961-74 may be attributed to the sudden influx of population to the capital due to the liberation of the country and the emergence of independent Bangladesh. And also the very high rate of growth during 1974-1981 period may be attributed to the inclusion of population due to the additions of new areas to the old limits (1974 limit).

Table - 2
Population of Dhaka City in 1974

Thana/Union	Population, 1974
1. Dhaka Paurashava	13,10,975
2. Tejgaon Thana (Part)	
Dhaka Cantonment	52,530
Uttar Khan Union	15,225
Dakshin Khan Union	16,951
Gulshan Paurashava	39,753
Satarkul Union	38,582
Beraid Union	18,359
Demra Union	18,505
Matuail Union	35,693
Shyampur Union	20,725
3. Mirpur Thana (Part) :	
Mirpur Union	91,585
4. Mohammadpur Thana (Part) :	
Sultanganj Union	9,660
5. Keraniganj Thana (Part)	
Kalindi Union	15,491
Zinjira Union	35,506
Subhodya Union	52,957
Total for Dhaka City :	17,82,438

- Note :
1. Dhaka Paurashava in 1974 consisted of Lalbagh Thana, Kotwali Thana, Part of Mohammadpur Thana and part of Tejgaon Thana.
 2. In 1974 Tejgaon Thana included Gulshan Thana and Demra Thana which were seperated in 1981 census.

Table - 3
Population of Dhaka City in 1981

Thana/Union	Population
1. Sutrapur Thana	3,08,816
2. Lalbagh Thana	3,06,775
3. Dhanmondi Thana	94,047
4. Mohammadpur Thana	2,32,817
5. Kotwali Thana	1,81,068
6. Ramna Thana	1,11,260
7. Motijheel Thana	3,50,000
8. Tejgaon Thana	1,87,282
9. Gulshan Thana	2,15,444
10. Cantonment Thana	1,07,432
11. Mirpur Thana	3,32,231
12. Tongi Thana (Part)	94,580
13. Savar Thana (Part)	17,064
14. Keraniganj Thana (Part)	1,65,800
15. Demra Thana	3,20,452
16. Siddhirganj Thana	93,998
17. Bandar Thana (Part)	72,213
18. Fatulla Thana (Part)	52,689
19. Narayanganj Thana	1,96,233
Total (Dhaka SMA)	34,40,147

FUTURE POPULATION OF DHAKA CITY (YEAR 2001)

There are several projections for the future population of Dhaka City. One of them prepared for the World Bank assumed the annual growth rate of 6.8 percent in the high variant, 5.0 percent in the medium variant and 3.6 percent in the low variant, and it has projected that the population of Dhaka City in 2000 AD would range from nearly 13 million according to high growth rate, to 9.3 million according to medium growth rate and to slightly over 7 million according to low growth rate (UN, 1987). In another projections made by the Shankland Cox, the Study Group for Dhaka Metropolitan Integrated Development Strategy Plan, put the figures at 9.5 million to 6.9 million by 2000 AD, assuming high and low variants respectively. In the high variant the rate of population growth was assumed to be 5.8 to 4.9 percent which in the low variant were taken to be 4.9 to 3.8 percent (Shankland Cox, 1981).

In population projection the population figures of different years in the past, present and future must relate to the same geographical limit. The details of World Bank's projection were not available to us. So, we could not ascertain whether they have made area adjustments for the census limits of 1961, 1974 and 1981 in order to determine the past population growth trends. But, it seems to us that the growth rates that they have

assumed is over optimistic. Probably they have not made area adjustments for the deduction of past growth trends. In Shankland Cox's population projection they have made area adjustments for the past census limits. But their study area was much larger than the Dhaka City limit and for the purpose of projection they have divided the whole study area into four component areas e.g. (a) city area, (b) peri-urban area, (c) rural area and (d) the four towns (Munshiganj, Narsingdi, Kanchan & Ghorasal/Kaliganj). For the four component areas they have deduced four growth rates. The growth rate that they have deduced for Dhaka city is more realistic than that of World Bank's projection, but their (growth rate) deduction is based on 1961-71 census when there was sudden influx of population to the city due to the liberation of Bangladesh. So their growth rates also seem to us slightly higher.

In our projection we have deduced the growth rates based on 1974-81 census when the population growth rates are more stabilised than that of 1961-74, and also we have made area adjustment for the census limits of 1974 and 1981 for the year 2001. For the adjusted census limits we have found that the population of Dhaka city stood at 24,89,165 in 1974 and at 36,42,218 in 1981, and the annual rate of growth during 1974-1981 was 5.59 percent (Table 4). In our projection we have also considered the age specific fertility and mortality rate and also the net migration effect and its natural increase. Our analysis shows that the projected population of Dhaka City for the year 2001 AD would be around 8.9 million according to high growth rate and 7.9 million according to low growth rate.

THE BASIC STEPS AND ASSUMPTIONS OF THE PROJECTION

The change of population of any geographical area is dependent on four components, e.g. fertility, mortality, in-migration and out migration. With regard to these four components in respect of population projection of Dhaka city, past experience, present levels and possible future trends were explored in our study. We also considered the likely impact of the family planning programme. The basic steps and assumptions of our projections are discussed below:

Area Adjustment

In our projection we have assumed that whole of Tongi and Fatulla Thana, further areas of Savar Thana and a part of Joydebpur Thana will be included within the city limit by 2001 AD. With this assumption we made adjustment to the areas and population of 1974 and 1981 census, which is shown in Table - 4.

Base Population

We have considered the 1981 census population of Dhaka City to be the base population for projection. We have discussed earlier that with increase of population in future there will be likely expansion of 1981 SMA limit by 2001 AD. In the projection we have assumed that the limit of Dhaka City will increase by 2001 AD and the base population is taken to be 36,42,218 with the growth rate during 1974-81 as 5.95 percent per annum (Table - 4).

Natural increase of population

The natural increase of population is the result of two components i.e. the fertility and mortality rates of the population. In the projection of population for the year 2001 AD,

we have assumed the fertility rate to be decreasingly lower and to fall faster in urban areas (than rural areas), since the Family Planning Programs are rapidly building up an impressive effort in Dhaka city, both because of the concentration of better educated women who can best appreciate the need for family limitation and also the easy accessibility of various family planning agencies in urban areas. Moreover, we have found from the analysis of age-sex composition of population that in Dhaka city there is 136 males for every 100 females, as against 108 males for every 100 females in Bangladesh. Migrants from rural to urban areas tend to be young men in search of employment. So, the proportion of men to women is still higher in the young age group (reproductive age group). So, because of the less occurrence of females than males in Dhaka City, the fertility rate (or crude birth rate) will be much lower in urban areas than that of rural areas. For the future we assume that the trend already observed, proportionately less women than men, will continue.

Table - 4
1974 and 1981 Population adjusted for the Area of 2001 AD

	1974	1981
1. Sutrapur Thana		3,08,816
2. Lalbagh Thana		3,06,775
3. Dhanmondi Thana		94,047
4. Mohammadpur Thana	13,10,976	2,32,817
5. Kotwali Thana		1,81,068
6. Ramna Thana		1,11,206
7. Motijheel Thana		3,50,000
8. Tejgaon Thana	92,655	1,87,282
9. Gulshan Thana	1,28,870	2,15,444
10. Cantonment Thana	52,420	1,07,432
11. Mirpur Thana	1,62,954	3,32,231
12. Tongi Thana	67,419	1,19,760
13. Savar Thana (Part)	46,413	59,300
14. Keraniganj Thana (Part)	1,18,415	1,65,800
15. Demra Thana	1,10,511	3,20,452
16. Siddhirganj Thana	65,311	93,998
17. Bandar Thana (Part)	34,051	72,213
18. Fatulla Thana	91,045	1,32,809
19. Narayanganj Thana	1,76,459	1,96,233
20. Joydebpur Thana (Part)	31,556	54,335
	24,89,165	36,42,218

Population growth rate = 5.59%

Note :

1. Savar Thana includes Savar Union and Amin Bazar Union.
2. Keraniganj Thana includes Zinjira, Kalindi and Subhodya Unions.
3. Bandar Thana includes a part of it.
4. Joydebpur Thana includes Joydebpur Union.

Future trend of mortality is somewhat problematic. Though the major killer diseases have been controlled, but there is very real concern about the nutritional levels in the face of increasing population pressure in the country which tend to increase mortality rate. However, we have assumed the mortality rate of Dhaka City to be comparable with that of the country and will remain almost constant for future.

Based on these assessment we have deduced the growth rates of the natural increase of the future population. For Dhaka City we have explored the effect of one mortality assumptions and two alternative fertility assumptions and carried over to the high and medium variant of population projection (Table - 6).

Effect of Migration

For migrational change we looked at the available information of the pattern of past migration for Dhaka City. The effect of migration is the result of net migration (difference between in migration and out migration) and its natural increase. The natural increase of migrational population will be affected by the two sets of fertility assumptions that we have already made. Hence, two alternative migration projections have been made. The higher projection assumes that the relationships established for 1974-81 would be maintained (with adjustment for higher fertility assumption) and the lower projection assumes that all the factors which could operate to reduce migration to Dhaka would act together and cause future migration to be much less than between 1974-81 (Table - 6)

PROJECTED POPULATION

Considering all these factors we have made two sets of projections and population growth rates for future years as shown below :

Table - 5

Projection of population and growth rates (with base population 36,42,218).

Year	High Projection		Medium Projection	
	Population	Growth Rate	Population	Growth Rate
1981	36,42,218	5.59%	36,42,218	5.59%
1986	47,15,283	5.30%	46,70,674	5.10%
1991	59,89,426	4.90%	58,20,509	4.50%
1996	74,28,270	4.40%	69,46,399	3.60%
2001	89,51,059	3.80%	78,97,626	2.60%

Note : With the assumption that the city limit of 2001 AD will increase from 1981 limit as shown in Table - 4.

CONCLUSION

Our projection shows that the population of Dhaka City according to high growth rate would be around 6.0 million by 1991 and 8.95 million by 2001; and according to medium growth rate it would be around 5.8 million by 1991 and 7.9 million by 2001. So, our projection gives a figure of 7.9 million to 8.95 million as the population of Dhaka City by the year 2001. However, we would emphasize the limitations of population projections. A projection is simply a mathematical procedure showing the logical consequences of a set of assumptions. The assumptions we make appear, on present evidence, to be reasonable. But circumstances may change in unforeseen ways which may invalidate our present assumptions and if the evidence suggests that events are outside the range of assumptions that we have considered, new projections should be prepared.

Table - 6
Population Growth Rates (1981-2001)

Year	Natural Growth Rate		Net Migration Rate and its natural increase		Rate of Total increase	
	High	Medium	High	Medium	High	Medium
1981	2.60	2.60	2.99	2.99	5.59	5.59
1986	2.40	2.30	2.90	2.80	5.30	5.10
1991	2.20	2.00	2.70	2.50	4.90	4.50
1996	2.00	1.60	2.40	2.00	4.40	3.60
2001	1.80	1.20	2.00	1.40	3.80	2.60

Projection of natural increase (1981-2001)

Year	High	Medium
1981	36,42,218	36,42,218
1986	41,00,773	40,80,789
1991	45,72,147	45,05,521
1996	50,48,020	48,77,683
2001	55,18,994	51,77,453

Projection of Net Migration (1981-2001)

Year	High	Medium
1981		
1986	6,14,510	5,89,885
1991	14,17,279	13,14,988
1996	23,80,250	20,68,716
2001	34,32,065	27,20,173

Projection of of Total increase (1981-2001)

Year	High	Medium
1981	36,42,218	36,42,218
1986	47,15,283	46,70,674
1991	59,89,426	58,20,509
1996	74,28,270	69,46,399
2001	89,51,059	78,97,626

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