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# URBAN DEVELOPMENT IN DHAKA CITY AND ITS EFFECT ON HOUSING

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## INTRODUCTION

In Bangladesh, land is a very limited resource both in urban and rural areas and this phenomenon has reached an extreme situation where life and living has become difficult for the lower income group. As a result slum and squatters are increasing not only in the major cities but also in the secondary towns. Per capita availability of land is low, at present this figure is less than 0.30 acre for the country as a whole (Islam, 1989). The urban areas cover about 3 percent of total land for its 15 percent people. This situation has been gradually deteriorating due to the rapid increase of urban population in relation to the amount of land for housing.

One of the major reasons behind this is the lack of proper policy and planning. It is therefore urgent to think about proper use of land and to ensure its balanced distribution. Metropolitan housing policy should be formulated in connection with over all metropolitan transport and land policy. Special schemes for housing the urban poor and destitutes should be taken up by constructing low cost housing with provision for upgrading on self-help basis. It is viewed that tenement blocks and walk up row housing should be constructed both in the public and private sectors specially for the lower income group.

The purpose of this study is to look into the growth of population and housing in the past and projected demand for the future. In the light of the experiences of other selected countries of the world the problem and prospects of housing in Dhaka city are also discussed. Efforts have also been made to review the present and future trend of housing development is also discussed with special reference to high land value in Dhaka city. A set of policies is recommended to improve the housing situation of Dhaka city in future.

## POPULATION AND URBAN GROWTH OF DHAKA CITY

Dhaka, being a city of history and heritage is nearly 400 years old. During the last four decades Metropolitan Dhaka has recorded a phenomenal growth in terms of population and area. At present Dhaka is one of the fastest growing metropolice in the world with a

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population of 3.46 million in 1981 over an area of 171 sq. miles (443 sq. km.) (B.B.S. 1981).

In the preceding decade the annual exponential growth rate was 10% per annum. If the Dhaka population of 3.4 million in 1981 is extrapolated for 1990, the present population of Dhaka could be around 6 million. And this population will be around 10 million by the year 2000 A.D. The population of Dhaka city during the period of 1901-1981 as well as projected population upto 2001 are shown in the Table-1. .PA

Table-1: PAST AND FUTURE POPULATION OF DHAKA CITY (1901-2001)

| Year | Population | Growth Rate in Percentage |
|---|---|---|
| 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 |
| (Adjusted for | | |
| 1981 area) | (23,46,489) | - |
| 1981 | 34,40,147 | 9.94 |
| | | (5.62) |
| 1986 | 44,64,489 | 5.35 |
| 1991 | 56,70,575 | 4.90 |
| 1996 | 70,32,821 | 4.40 |
| 2001* | 84,74,543 | 3.80 |

Source: Compiled from Table-1, Table-4&6 (Islam & Nabi, 1988) pp. 7, 10, 14).
* Assuming that the limit of area of Dhaka city in 2001
A.D. will remain the same as 1981 SMA limit.

The actual population of 2001 will be higher because Dhaka will grow beyond the assumed 1981 Statistical Metropolitan Area (SMA) boundary by the year 2001. This additional population in the coming decade will add new dimensions to the urban fabric of metropolitan Dhaka. And it is not very hard to speculate that the acute housing problem will be mainfold by that time unless proper steps are taken now.

The main reasons for this huge estimated increase of Dhaka population in the coming decade is due to unbalanced urbanization and presence of primacy in the city size distribution pattern. Comparing with other developed and developing countries, it is evident that, in developing countries the extent of urbanization is much lower but the average growth rate is very high. In 1985 Bangladesh has 18% urban population against 92% in U.K. but the rate of urbanization in Bangladesh is 7.9% against 0.3% in U.K.

Table-2 shows the growth of urban population compared to selected countries of the world.

Table-2: DEMOGRAPHIC DATA FOR SELECTED COUNTRIES

| Region/ Country | Population (thousand) 1984 | Annual Growth (% per year) | | Population Density (No. per Km2) 1984 | Urban Population | | | Percentage of Urban Population in Largest city | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1950-55 | 1980-85 | | As % of total popln. 1985 | Average Annual growth 1965-80 | 1980-85 | 1960 | 1980 |
| Bangladesh | 98,464 | 1.6 | 2.7 | 735 | 18 | 8.0 | 7.9 | 20 | 30 |
| India | 7,46,742 | 1.9 | 2.0 | 251 | 25 | 3.6 | 3.9 | 7 | 6 |
| Nepal | 16,107 | 1.2 | 2.3 | 118 | 7 | 5.1 | 5.6 | 41 | 27 |
| Sri Lanka | 16,076 | 2.6 | 2.0 | 248 | 21 | 2.3 | 8.4 | 28 | 16 |
| Pakistan | 98,971 | 2.1 | 3.1 | 127 | 29 | 4.3 | 4.8 | 20 | 21 |
| Japan | 1,19,492 | 1.4 | 0.6 | 322 | 76 | 2.1 | 1.8 | 18 | 22 |
| U.K. | 55,592 | 0.2 | 0.0 | 230 | 92 | 0.5 | 0.3 | 24 | 20 |

Source: 1. UNEP 1987, Environmental Data Report: 1987 (Basil Blackwell)
2. World Bank, 1988, World Development Report: 1988 (Oxford University Press)

## IMPACT OF URBANIZATION AND ITS EFFECTS ON DIFFERENT SERVICES

The impact of urbanization is felt more intensively in major cities of the country. Specially service facilities of these cities could not be expanded to tackle the rapid population growth. As a result it was not possible to meet the minimum service facilities for the citizen. Dhaka city therefore rightly experiencing continuous deterioration of service facilities specially for slum dwellers. They can not afford the formal employment and basic civic facilities of the city.

As such given the rapid population growth and many other constraints this has resulted in a huge backlog of housing. According to World Bank Report, in 1980 there were 1.9 million housing units for 11.8 million urban population (World Bank, 1981). By the turn of the century the total requirement of urban housing units is likely to be in the order of 7.1 million. The additional requirement has been estimated to be 5.287

million of which 1.176 million units have been estimated for Dhaka Metropolitan Area (UNCRD, 1980).

Urban population is increasing at such an alarming rate that the increase in the housing stock can not keep pace with it. This results in acute shortage of accommodation, overcrowding and growth of squatter and slums. Moreover the land ownership pattern (specially residential land) is very skewed. About 80% of the residential land is occupied by the 30% of the population (specially upper and upper middle class) where as the poorer 70% have access to only 20% of land.

Due to huge increase in the cities population, the pressure on buildable residential land had been very high. Since the sixties until today RAJUK (Capital Development Authority) has provided only seven thousand plots at subsidized rate mainly for the middle and upper income groups. As a result, associated with other factors the land value of Dhaka city mainly in the central area has increased at a rate much greater than the rate of any other commodities. This situation is deteriorating day by day.

In Dhaka the price of land increased by 60% to 90% faster than consumer price index during the 1974-87 period and it is still rising in similar rate.

Other urban infrastructures like, Roads, Electricity, Water Supply, Gas, Telephone, etc. are also in short supply. In the case of water supply, the existing supply system is not well enough and not sound to cope up with the expanding requirements. At the rate of 40 gpd* , about 128 mgd** of water is needed for the city population, where as the Dhaka Water Supply and Sewerage Authority (WASA) is capable of supplying only 82 mgd for 3.4 million population. It can meet only 64% of the total requirements. (Murshed A., 1984).

The transportation system of Dhaka is not developing proportionately to the physical growth of the city and still it is primitive. Say for example, an outdated mode of transport like rickshaw accounts for about 60% of total vehicles while 35% of the passengers are totally dependent on rickshaw. It is estimated that in 1988 there were nearly 30,000 Motor cars, 6,440 Bus, 6,840 Trucks, 5,510 Auto-rickshaws, 30,000 Motor-cycles and 1,50,000 rickshaws including 80,000 licensed rickshaws in Dhaka city.

It is viewed that unless there is considerable improvement in the public transport system of Dhaka, the pressure on central city land associated with high land value will be continued in future.

## HOUSING IN DHAKA CITY: PUBLIC AND PRIVATE SECTOR PERFORMANCE

### Public Sector Housing:

Both in the past and in current years government or public housing programmes have met with little success because they have attempted to met housing needs rather than the

* gpd = gallon per day.

** mgd = million gallon per day.

Table-3 shows the average percentage of powered and non-powered vehicles in the city and Table-4 shows the mode of transport used by passengers.

Table-3: PERCENTAGE OF POWERED AND NON-POWERED VEHICLES (1988)

| | | Percent |
|---|---|---|
| A. | Powered: (Motorized CPU 110,000) | |
| | Motor car | 18.74 |
| | Auto-rickshaw | 7.00 |
| | Motor-cycle | 5.92 |
| | Bus | 2.13 |
| | Truck | 1.26 |
| | | 35.05 |
| B. | Non-Powered: (Rickshaw CPU 190,000) | |
| | Rickshaw | 59.38 |
| | Bi-cycle | 3.81 |
| | | 63.19 |
| C. | Miscellaneous | 1.76 |
| | | 100.00 |

Source: Ahmed and Hoque, 1988.

Table-4: MODE OF TRANSPORT USED BY PASSENGERS

| Sl.No. | Mode of Transport | Passenger (%) |
|---|---|---|
| 1. | Rickshaw | 35 |
| 2. | Bus | 34 |
| 3. | Pedestrian | 21 |
| 4. | Personal car | 4 |
| 5. | Auto-rickshaw | 3 |
| 6. | Office transport | 3 |
| Total | | 100 |

Source: Ahmed A. Khan, NILG, 1990

effective demands. The most striking feature in public housing programmes in the past is that the major share of the investment goes to the benefit of the upper middle and upper class people. Among the total government employees it is found that only 4% belongs to the high income group are benefited with 50% housing facilities constructed by public agencies. Whereas rest of 50% are allotted by low and middle income group which comprises about 96% of the total government employees. The lower and middle income categories of employees are the deserving sections to get housing facilities because they do not have enough resources to build their own.

Public Works Department (PWD), Housing and Settlement Directorate (HSD) are the construction agencies for government accommodation. Public Housing has been constructed throughout Bangladesh depending on housing requirement and as permitted by funds. In 1952 the HSD was established to construct houses especially for refugees. By 1964 the number of government housing units were 3,400 compared to a total staff strength of 35,000. But the year 1977 the number of government employees were 50,000 but the accommodation units had not increased since 1962. By 1981 government housing units were 10,000 and the number of government employees were 97,000. The ratio between government officer and housing was 1:97. A recent study (Shafi & Murshed, 1986) estimates that there are 1,07,574 housing units in the city of which 44% are single room accommodation or dormitory type and the remaining 56% are flat type units. According to World Bank, only 7% of the total housing stock was built by the public sector and the rest by the private sector[1]. Table-5 shows the total public sector housing units in Dhaka Metropolitan Area.

Table-5: TOTAL HOUSING UNITS IN DHAKA METROPOLITAN AREA

| Sl. No. | Type of Organization | Single Room | No. of Unit Flat/House | Total |
|---|---|---|---|---|
| 1. | Administration | 22,933 | 46,146 | 67,399 |
| 2. | Education & Health | 21,632 | 2,015 | 23,647 |
| 3. | Bank & Institute | 898 | 1,143 | 2,041 |
| 4. | Industry | 1,419 | 11,083 | 12,502 |
| 5. | Forest Department | 119 | 186 | 305 |
| | Total | 97,001 | 60,573 | 107,574 |

Source: Shafi & Murshed, 1986.

The type of housing provided by the government is guided by the pay scale adopted from time to time. The house rent paid by the government servants is generally 7.5% of

1 The World Bank: Urban Sector Memorandum, 1981.

their basic pay and the house rent allowance as house rent but which is not enough for recurring the cost of these houses.

The production of housing in relation to the urban population has been far from being adequate and not meeting the demands. At least 65% of the urban population are very poorly housed with inadequate services. In the absence of proper housing a segment of the urban poor remain squatters. At present there are 15,000 clusters of squatter settlement occupied by 2 million people in Dhaka city (CUS, 1988).

However, government has taken a positive step to solve the slum and squatters problems in the city. For this purpose 30 member committee was formed and recommend a 10 years programme (1990- 2000). In this programme an average 14,000 families will be rehabilitated per year on government own land in and around the city. As a result recently Dhaka City Corporation (former DMC) developed an area (Government own land) with services named as "City Pollee" to rehabilitate the city slum dwellers. About 250 slum and squatter families have been rehabilitate there.

## Private Sector Housing:

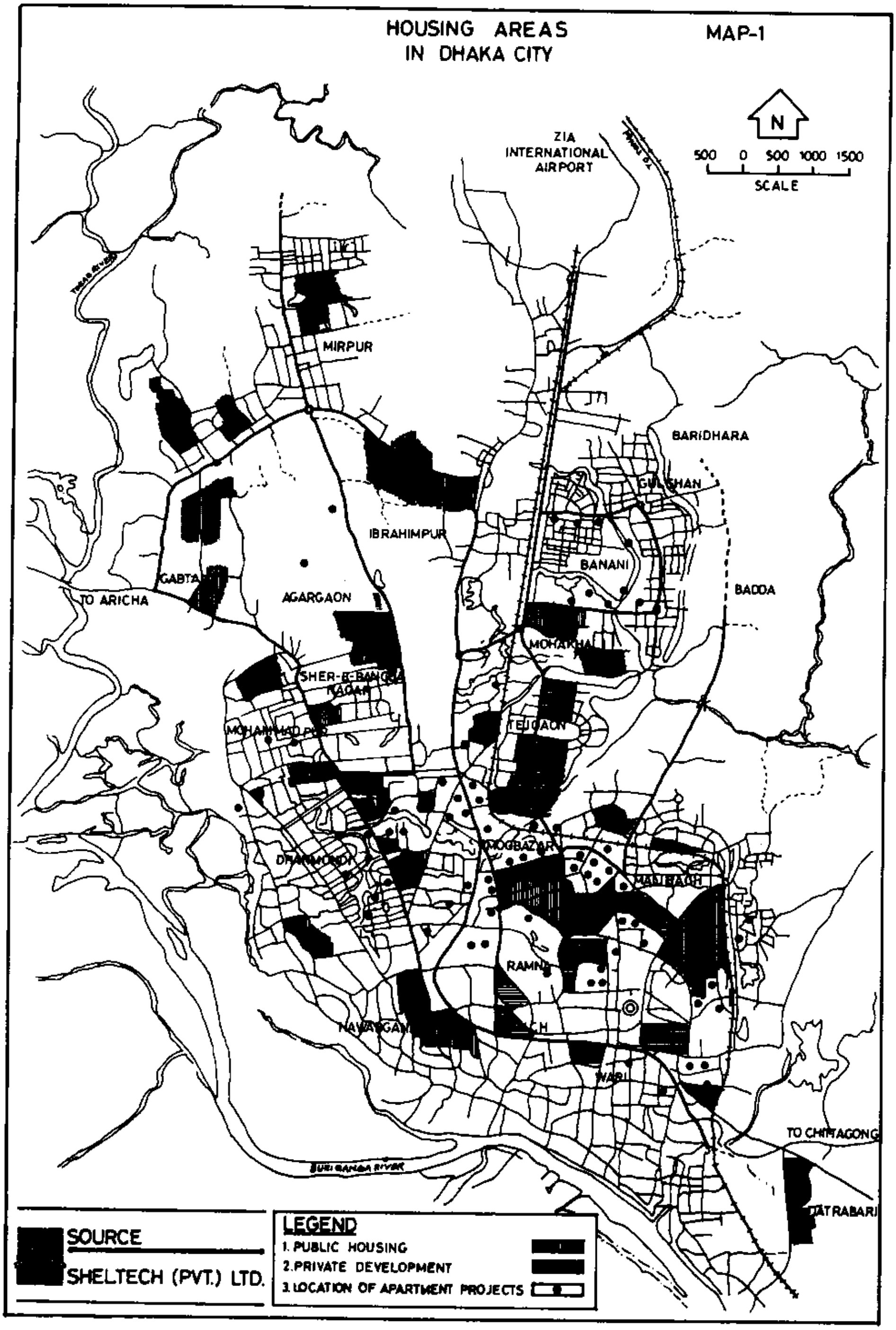
In the recent years there has been a new trend of housing development mainly in the private sector. As a result Dhaka has experienced a new type of residential development which can be broadly termed as apartment development. In most of the cases an individual or a company constructs one or more buildings comprising of several apartments, which is later sold to individual purchasers. This have prompted many individual entrepreneur to develop apartment buildings resulting in an increased number of real estate companies in the city.

Twenty years back Dhaka City dwellers were reluctant to live in a flat while ten years back some one would have thought twice before buying an apartment/flat. But in the last couple of years the Dhaka dwellers have shown increasing interest in owning apartments. The main reason is economic due to increased land cost as well as construction cost. There are also other reasons such as, lack of time for individuals for sending in house construction increased awareness of apartment living, western influence etc. Apartment owning is becoming increasingly popular. Moreover the absentee buyers i.e. the wage-earners in middle east and other countries are also a major contributing factor towards the increasing demand in apartments. As a result, many apartments builders have come up in the market in the recent years.

Only ten years back there were a few companies engaged in developing apartments. In 1988 there were less than 20 such developers in Dhaka city (Khan, CUS, 1988). At present there are about sixty such companies and most of the developers presently engaged in Dhaka city. These companies together have either developed or are developing around 5 thousand new building units for the market which is a considerable contribution for increasing the housing stock in the city. List of developers and total numbers of apartments and plots are shown in the Table-6.
The location of public and private housing areas in Dhaka city is shown in Map-1.

Table-6: PROJECT OF DIFFERENT REAL ESTATE COMPANIES, 1989

| Sl. No. | Name of Companies | Total No. of Apartment & Plots |
|---|---|---|
| 1. | Eastern Housing Ltd. | 827 |
| 2. | Free School Street Property Ltd. | 297 |
| 3. | Property Development Ltd. | 408 |
| 4. | Building Technology & Ideas Ltd. | 49 |
| 5. | Walsow Limited | 151 |
| 6. | City Development Corporation | 14 |
| 7. | Sheltech (Pvt) Ltd. | 123 |
| 8. | Iqbal Brothers Ltd. | 192 |
| 9. | Happy Homes Ltd. | 39 |
| 10. | Venus Real Estate Ltd. | 16 |
| 11. | Dhaka Property Development (Pvt) Ltd. | 22 |
| 12. | New Age Apartment Ltd. | 37 |
| 13. | Delta Property Development (Pvt) Ltd | 26 |
| 14. | Afsar Properties Ltd. | 54 |
| 15. | Concord Condominium Ltd. | — |
| 16. | Khan Real Estate Ltd | 48 |
| 17. | Aziz Co-operative Housing Society Ltd | 282 |
| 18. | Hope Real Estate Ltd | 36 |
| 19. | Homes Builders Co. Ltd | 78 |
| 20. | Estate Exchange Bureau | 596 |
| 21. | Moghbazar Apartment Ltd | 287 |
| 22. | Metropolitan Co-operative Housing Society Ltd | 336 |
| 23. | Ideal Homes (Pvt) Co.Ltd. | 36 |
| 24. | Syed Properties Ltd. | 18 |
| 25. | Alinawab Enterprise Ltd. | 10 |
| 26. | Bengal Estate Ltd | 80 |
| 27. | City Link Apartments Ltd | 48 |
| 28. | East West Property Development (Pvt) Ltd | 5,000 |
| 29. | Neerala Centre | 56 |
| 30. | Silver Estate Ltd | — |
| 31. | Cosmos Properties Ltd | 20 |
| 32. | Shymolli Housing Ltd | — |
| 33. | Ashraf Real Estate (Pvt) Ltd | 48 |
| 34. | Ali & Nur Real Estate Ltd | 65 |
| 35. | Bengal Multistoried Construction Apartment Ltd | 10 |
| 36. | Mona Property Complex | 58 |
| 37. | Mohammadi Housing Ltd | — |


HOUSING AREAS
IN DHAKA CITY
MAP-1
N
500 0 500 1000 1500
SCALE
ZIA
INTERNATIONAL
AIRPORT
MIRPUR
BARIDHARA
IBRAHIMPUR
BANANI
BADDA
TO ARICHA
AGARGAON
TEJGAON
MOGBAZAR
RAMNA
TO CHITTAGONG
SOURCE
SHELTECH (PVT.) LTD.
LEGEND
1. PUBLIC HOUSING
2. PRIVATE DEVELOPMENT
3. LOCATION OF APARTMENT PROJECTS

| | | |
|---|---|---|
| 38. | Topoban Housing Ltd | — |
| 39. | Ahmed Property Development Complex Ltd | 10 |
| 40. | Valley Apartments Ltd. | 20 |
| 41. | K.M. Property Development Ltd. | 33 |
| 42. | Capital Properties Ltd | 148 |

Note: The table is compiled from information available through advertisement of different companies, the national dailies and weeklies.

It can be seen form the Map-1 that the location of the majority of the projects for different developer are highly concentrated in the central city areas specially Eskaton, Shantinagar, Siddheswari, Malibagh, etc. Moreover, these location are considered as the prime locations for apartment builders because a high percentage of the prospective apartment buyers shows interest for apartments in central area. The main reasons for this preference is due to the proximity to Motijheel and other work places associated with increase taxes to different type of civic facilities.

## CONCLUSIONS AND SUGGESTIONS

The present urban housing situation is the direct consequence of social, economic and political factors. In the public sector, the participation of the government in solving the housing has so far remained rather insignificant. So most of the houses are built in the country by the private sector. To some extent the government provides financial assistance and land with service net works for private development.

However, there is no magical solution to the present or future housing problem of Dhaka city. A number of sets of policies need to be implemented both in the national as well as in the local level. Nevertheless in the light of the prevailing high growth rate as well as high land value in Dhaka city, it can be easily argued that apartment development should be encouraged in the future years. Both walk-up as well as high rise development should be encouraged. Hence the future residents of Dhaka should adapt themselves for apartment living by being more accommodating and tolerant. It may be worth while at this instance to quote Professor Lynn Beedle regarding high rise apartments, "surely each one of us would prefer to live in a home of our own with a nice garden, but as land in the city becomes scarce and expensive, the high rise alternative has to be considered".

Developing housing sector comprises not only building of houses but also the development of socio-economic infrastructure. A comprehensive and pragmatic housing policy should be adopted by the government, which will expedite housing development and interlink all the concerned agencies, such as Rajdhani Unnayan Kartipakha (RAJUK), Dhaka City Corporation (DCC), Water Supply and Sewerage Authority (WASA), Power Development Board (PDB), Titas Gas Transmission, House Building Finance Corporation (HBFC), etc. This will minimise the procedures and formalities associated with house construction. The economy of landuse should be given top priority in any future housing policy. It is suggested that metropolitan housing policy should be formulated in conjunction with overall metropolitan transport and land policy.

Special schemes for housing the urban poor and destitutes should be taken by concerned agency by constructing low-cost core housing with provision for upgrading on self-help basis. In the future master plans of Dhaka city, areas should be demarcated according to height and structures. Expensive central city area should be reserved for high rise development. Site and service scheme for middle and lower income group with varying degree of subsidization for different socio-economic groups should be promoted both in the public and private sector. A private housing bank could be set up for financing housing development as in absence of such a bank, land developers and promoters are very much handicapped. Such a specialised bank to tide over the housing crisis deserve serious consideration. Besides these long term and short term credit on soft terms for house building should be arranged to increase the housing stock in the city.

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