

# Housing at Uttara Model Town in Dhaka City

An analysis and exploring ways to tackle the housing problem of middle class

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## Introduction

Dhaka like most cities of the developing world is a poorly managed city, which leads to the deterioration of urban living conditions. Urban poverty results because in many countries, national and local governments cannot plan for the population increases, and fail to provide the required infrastructure, services and jobs.

Government efforts through all these years to provide housing to government servants, to the general public and to the urban poor have not so far been able to make any significant dent in the urban housing scene.

The paper intends to scrutinize the effort of government at the end of the 1960s with emphasis on a specific project to solve the housing problem as well as give direction for the growth of Dhaka city.

The government is the single largest provider of built up housing in Bangladesh mainly in the form of accommodation for its employees. Although the number of units provided is far less than the number of employees, government housing continues to be a strong influence on urban housing in general. Other than the built form projects were taken in form of giving access to land and providing infrastructure facilities. The trends established by government housing are followed by other semi-government agencies and to a large extent by private developers. The formal planned developments also influence the unplanned settlements.

Government housing can therefore be said to be representational of urban housing in general. So in bringing out the problem related to strategies of the project the intention is that the efforts in future can be made more meaningful and effective. The objective of this paper is also to discuss the housing problem faced by the different income level especially by the lower income group of urban middle class in Dhaka through the analysis of Uttara Model Town housing. The paper would also investigate the dominants form of walk-up houses. In doing so the present housing trend would be investigated with respect to a specific building project.

## Problem Definition

The satellite town was created to solve the housing problem of middle class in the 70s modelled on housing solutions done on 60s in the central area and northern areas of Dhaka city. The project failed to

serve the middle class as a whole. Almost 75% of the plots were not inhabited by 80s. Presently more than 50% plots of the newly developed sectors on west of township are still lying vacant. The main cause is the affordability of the middleclass group.

The middle class in the last three decade have stretched to three income groups: the upper income group, the mid income group and the lower income group. The main difference between the low-income middle class and the low-income group is that of education as well as the income level.

We see in the late 80s and 90s with the rise of land price a number of plots owned by people were being sold. The buyers were from the higher middle class group who do not own a land in Dhaka or the



businessmen of different income. Some owners are still holding to get advantage of higher land value. Thus in the end the land owners here are predominantly from the high income group.

*Figure: 1 View from the roof top of the project towards northeast, the Sonargaon Road, Uttara Model Town.*

## Motivation for the Choice of Study

The problem was identified by the author in 1998 while being involved in the implementation period of the individual house in the Uttara Model Town area. It was observed that the plots adjacent to the site were all vacant. During the construction period of two years of the project, some of the plots have been sold and the construction was beginning on those sold plots. There was also a big concentration of spontaneous settlements nearby in commercial plot of public ownership, which was lying vacant. So there was also the problem of low-income group housing. The picture clearly explains the situation described. This prompted to undertake this research into the problem of affordability of different income group of middle class.

Presently government is planning for similar communities south-eastern part of Dhaka city with higher densities. There is a possibility that this new subsidised solutions will used for speculation by the plot owners, which was the same with the Uttara Model Town.

The planning trend set by this public project has been followed by the private sector. Many of the private sector neighbourhood plans with the same amenities or less have the same subdivision of plots for different income groups but with higher density. There is need for re-evaluating the planning of the plots.

There is a need to integrate novel solutions for the different income group within the middle class. Also integration of different social groups should be looked into.

The basic concept of house in our country is to own a structure in a plot. This notion of housing needs to be modified to take advantage of different form of housing. There is need to introduce innovative solutions. Introducing row houses, multi storied houses; clusters etc. may be needed to add to the variety of housing.

## Method of Study

This research is essentially an analysis of a specific urban house form and its context that is the Uttara Model Town. A brief sketch of socio-economic development of urban middle class society would also be made.

The information relating the model town would be acquired from secondary sources, both published and unpublished, while the study of the form and context of the contemporary house form would be based on mainly practical experience.

## Background



Figure: 2 Political map of Bangladesh

### Country Level

Bangladesh is a small developing country with a large population of 130million, making it one of the densely populated country in the world<sup>1</sup>.

Bangladesh, being located in a tropical region has an average temperature of 24 °C to 38 °C. Rain with high wind is common and also the presence of high humidity. The country is divided into six divisions and each one contains several

districts and at present there 64 districts and 127 municipalities. The capital city Dhaka and the port city Chittagong are the major target for rapid urbanization.

### Urbanization in Bangladesh

Urban population growth rates in Bangladesh are the highest among the South- and South-East Asian countries. For example, average annual urban population growth rates in India and Thailand in the late 1960s were 4.0%, and 4.8% respectively against 6% in Bangladesh at the same period. Urban areas started to grow steadily particularly in the post British period when the British left the Indian sub-continent. However the rate became more significant after the country achieved independence in 1971. The main reason for this population increase besides the natural growth can be enumerated as following:

1. Change in the status of towns in different levels accompanied with offices, industries, and academic institutions attracting people of various professions.
2. Attraction of socio-cultural, educational and health and others facilities in the city. The concentration of different institution also led to high growth of the educated middle class.

<sup>1</sup> Population density 850per sq.km,2000 (Est.)

3. Large scale migration following natural disasters (flood, tornado) in different years or man-made calamities like war, famine etc.

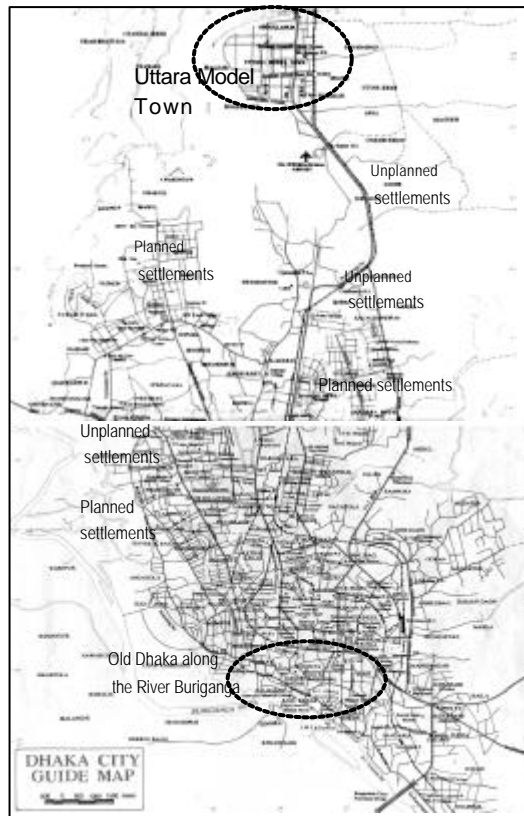


Figure 3: Map of Dhaka showing the Uttara Model Town and other settlements.

4. Deteriorating economic condition in the rural areas, increasing poverty and landlessness pushing the rural poor towards the cities. This resulted in growth of people working in the informal sector within low income range. Household income or consumption by percentage share: *lowest 10%: 3.9%* and *highest 10%: 28.6%* (1995-96 est.)

### Regional Level

City: Dhaka

Dhaka being the capital and largest metropolitan city of Bangladesh with its employment opportunities and other commercial activities has attracted the largest

number of migrants from all parts of the country.

As a result the population has increased tremendously during this period (1971-80) compared to the expansion in the city area. In 1991 it was estimated that 40% percent of the total urban population live in Dhaka city. Dhaka has grown from a town of just 0.5 million people in 1957 into a metropolis of more than 7.0 million in 1991 over an areas (Dhaka metropolitan development plan-DMDP) of 1528sq.km (590 square miles)<sup>2</sup>.

Dhaka's role includes full range of national government and administrative functions together with high proportions of all national industrial, commercial, cultural and recreational activities. All governmental decisions and the greater part of political activity originate from Dhaka.

### Migration to Dhaka

Migration figures give a picture on the affinity of the migrants towards the bigger cities. Number of total rural to urban migration was over 2,400,000 in 1961-74. This was 6 times higher than that in between 1951-61 and constituted nearly 60% of the total urban population increase. Three big cities combined absorbed nearly 2/3rds of the whole urban-bound migrants; Dhaka alone accommodated 38.83% of the total migrants

<sup>2</sup> Bangladesh Bureau of Statistics. 1991.

Table 1: Population growth of urban areas and new shelter requirements (1980-2000).

Urban centres	1980 Population (Millions)	1980 Households (000's)	2000 Population (Millions)	2000 Households (000's)	1980-2000 New housing units req (000)
Dhaka	3.5	515	9.3	1691	1176
Chittagong	1.43	220	4.0	727	507
Khulna	0.70	108	2.4	418	310



Figure 4: View showing the dense settlements of Dhaka

Housing situation in Dhaka faces the formidable problem of providing minimum shelter of acceptable standard to everybody. The scene is depicted by the volume of slums and squatters, number of families per household, trend in household formation, etc.

### The Urban Middle Class

In Indian subcontinent the middle class emerged more as a consequence of changes in the system of law and public administration than as a result of economic and technological development. The members of the middle class belong to the learned professions. The real growth of middle class was more of a 20th C. phenomenon with the growth of government jobs in civil, military, police, railway and river services along with the growth of institutions for professional education of doctors, engineers and advocates. This growth of the professions and the number of Indians (before subdivision) in government service coincides with a steady increase in urbanization after 1900 and the faster growth of individual cities.

Urbanization introduced major changes in the system of education and occupation. Traditionally, specific trade or occupation of each member of indigenous society was birth ascribed. Achieved characteristics are mainly economic and refer to formal education and training. Whereas in traditional system children followed their parents into their roles, education was at individual level without formal schooling.

Western ideas increasingly infiltrated into the middle-class thinking through their education, in service training and the media- books, journals and press. This influenced gradual change in the concept of family, life-style and living. Metropolitan society and the job structure together created preference for nuclear family to replace the traditional joint family. Westernization encouraged both spatial and temporal compartmentalization of activities in cities as well as in domestic level. The home and work place was no longer synonymous. The cities eventually compartmentalized into residential, commercial, recreational and industrial zones. Single used areas replaced traditional mixed land use. In the domestic level the trend was to

isolate spaces according to different activities like sleeping, eating, cooking, etc.

Table2: Income Groups in Dhaka city, 1987.

Income group	Monthly income of HH in Taka <sup>3</sup>	Proportion of total HH in the city (%)
Lower Income groups	1000-3000	70
Middle Income Groups		28
Lower-middle	3000-5000	
Middle	5001-10,000	
Upper-Middle	10,001-20,000	
Upper income groups	20,001-	2

Following table reflects government's interpretation of middle-income group in terms of salary and the built housing provided for them up to 1992. The present pay scale have nearly doubled. The class I represents the middle class even though the private and semi private organizations have much higher salary level. Class II and class III represent the low-income groups.

Table 3: Residential Space Standards for Government Officers and Employees, 1992. Salary is in Taka and corresponding area is in sq ft.<sup>4</sup>

Category of Officer / Employee	Pay Scale -Taka	Allotable Floor Areas in sq.ft
Class I	8000 and above	1800 + 200 for garage
	7100-7999	1500
	5500-7099	1250
	2850-5499	1000
Class II & III	1225-2849	800
	1125-1725	600
Class IV	1050-1915	500.

The middle income-group combined represents approx.28 percent of the city population but cover nearly 65 percent of the residential land. Density in these areas may range from 50-400 persons/acre (124-988 per/ha). This wide range is reflection of the significant variation within the group. There is also a high disparity of income between different income levels of the Middle class.

Urban middle class became a dominant power towards the end of colonial period. It gave leadership to all socio-cultural and political activities. After the independence this dominance lead to the planning of housing that only catered only to their need.

## Development of Uttara Residential Model Town

The Town ship project was launched with the intention that it will solve the problems as mentioned in the objectives of the project to a substantial extent by encouraging the process of decentralization of some of the functions.

The residential units in the proposed satellite town suggested to be self contained with respect to the needs. Each owner had to construct the structure by arranging the finance and other necessary approvals on their own.

The project was called as Dhaka North Satellite Township but was changed to Uttara Residential Model Town by Dhaka Improvement Trust (DIT, presently RAJUK) in 1980.

<sup>3</sup> 1US \$= 58 Takas.

<sup>4</sup> 1sft=.092m<sup>2</sup>.

The high densities, haphazardness of land use and non-availability of land around Dhaka were that was faced DIT and related bodies

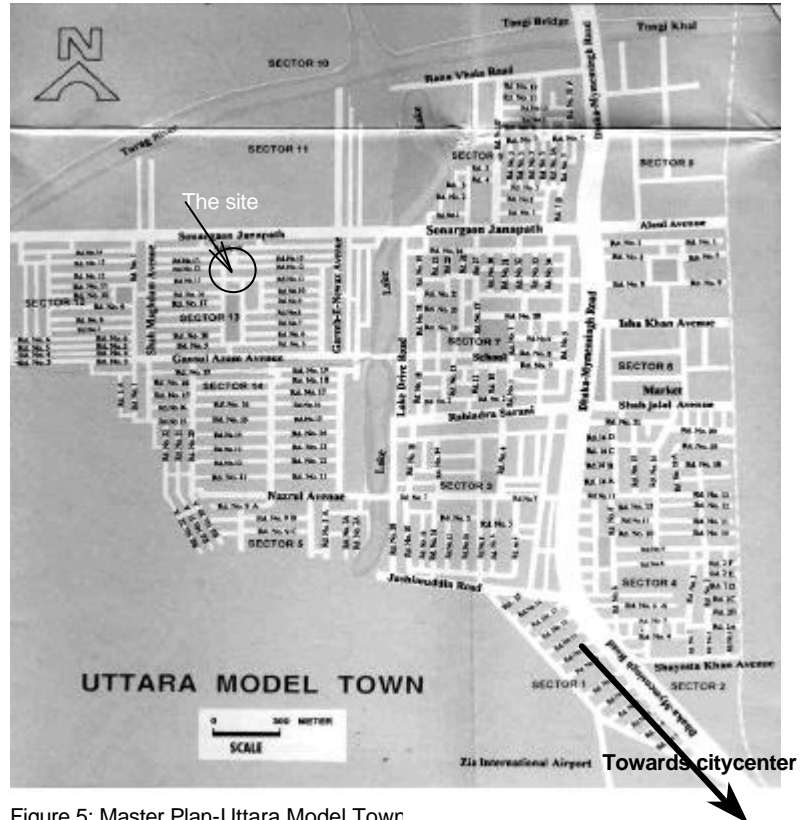


Figure 5: Master Plan-Uttara Model Town

during the early 60s. More over due to a rough estimate for dwelling unit shortage for Dhaka was made, which showed a backlog of about 34,000 dwelling units in 1965.

In the early 60s there was acute paucity of schools, hospitals, parks, playgrounds and related facilities in Dhaka. The problems of space and high land value were the prohibitive for the potential investors in such enterprises. Similarly the realisation of creating a self contained township was felt, to increase the length of the city, thereby alleviating the traffic problems of the central Dhaka and reducing strains on motorists, in addition to solve the haphazardness of land use.

## Strategies

In June 1965, a feasibility study was carried out by consultants for the 'Dhaka Improvement Trust', to set up a satellite town near Dhaka city. Finally the development North satellite town on a site of about 2,344 acres<sup>5</sup> were suggested within which the present Uttara model town of 950 acres is situated 4,302 serviced plots were made available within 9 sector over a period of 1966-67 to 1985-86. The project also paved the way future growth of Dhaka city.

The project scheme also hoped upon completion by 1971-72, an urgent need of the community will have been met by a scheme, which is self-financing and laid out on a planned basis. On completion the pressure on the population increase of the Dhaka city was expected be

<sup>5</sup> 1 Acre=0.40 hectare=100m<sup>2</sup>.

diverted to this new township and there will be employment facilities in and around the Township.

#### Site selection Criteria of Uttara Model Town:

The growth of the city is obstructed by the river Buriganga to the south and wide tracts of low-lying areas to the east and west, which is, flooded to 10inches<sup>6</sup> deep each monsoon. The selected area therefore provides the only and obvious outlet for uninterrupted development for residential purposes.

#### The provisions in the master plan of the project:

- i) It aims at serving a population of about 124,000 with an average net density of 95 persons per acre for low height residential sectors i.e. residence up to 2 storeys high; at a density of up to 135 persons per acre for the multi storied walk-up apartments sectors.
- ii) Areas for residential sectors were 1,041 acre for class I<sup>7</sup> employees and 54 acres for class III and IV communities of the total 2,344 acres. The rest were for civic administration, light industries and workshops, recreation and playfields, Schools, parks, squares, lakes, roads etc. The development cost was calculated to be 4rupee/sq.yrds in 1965.
- iii) The following were the proposed sizes and number of plots and its percentage:

Table 4

Sizes of plots in Kathas <sup>8</sup>	Nos. of plots	% Area under Category
3 kathas = 2160sft	2900	20
5 kathas = 3600sft	2500	30
7.5 kathas= 5400sft	1800	30
10 kathas = 7200sft	630	15
20 kathas = 14400sft	100	5

### Analysis

It can be seen that the proposals in the 1965 feasibility study were for a community of all income groups. This was never materialized fully by government. It deviated from initial concept to ‘...have in practice been completely abandoned in favour of providing subsidized housing opportunities exclusively for the upper income group’<sup>9</sup>.

One of the positive aspects is that it generated the growth of Dhaka towards the north. The problems that resulted may be broadly classified as of planning stage and implementation stage.

A portion of the township of about 950 acres were detailed out covering only that portion which was enmarked as housing for high income group in the original plan and in all 4,302 housing plots of different sizes were available. There was a shift from the initial planning of plots.

<sup>6</sup> 1 inch=2.54 centimeters

<sup>7</sup> Relate to the table on page1-6.

<sup>8</sup> 1 Katha= 1/20 bigha = 66.24m<sup>2</sup>

<sup>9</sup> Dhaka Metropolitan Area Integrated Urban development Project, final report by Shakland Cox and Partners.



Table 4: Actual distribution plots and the percentage of area.

Area of plots in sft.	Area in acres	Nos. of plots	% Of Area
2520sft	38.76	670	16
2521-2880sft	32.24	520	12
3600sft	176.80	2381	55
5400sft	90.62	761	17
Total	358.40	4302	100

From the initiation of the project the sector plans had to be reviewed which were made to accommodate more and more plots and thereby reducing area for community facilities. This led to the deteriorating of overall conditions of the sectors.

The objective of reducing high density in the central city by building independent residential community in Satellite Town was not a practical solution until and unless the same population is decentralised to the township. In practice, the allotment process was open to all, whether the applicant's are from Dhaka central business district or from any other area, who can afford to purchase the plot.

Table 4: DIT developed land price in Takas / Bigha (Residential)<sup>10</sup>

Areas	1965-75	1975-76	1977	1981	1987
Banani	27,000	225,000	4,00,000	4,00,000,	10,00,000
Gulshan	45,000	275,000	5,00,000	10,00,000	
Uttara	45,000		1,50,000	8,00,000	12,00,000

So, in reality, it happened that any one, who had the intention and ability to invest, has applied for a plot in the township and got allotted. So the allottees continued to live in government housing and held the plot for future investment.

Out of the applicants maximum number were of government service holders who had the intention of settling after retirements. As a result most of the plots allotted up to 1975 to such persons were vacant till 1980. According to survey in 1984 only 25% of the allotted plots had built-up structures. Of these structures 57% were of single storied buildings, which reflected the low density of population of the township. Again the land and the infrastructure were provided so slowly that the price rise and it becomes a commodity, which the rich buy and speculate in.

The roads, electrification works, water supply to all sectors was ensured only in the 1984-85, that is 14 years after the initial completion of work. The problem of providing communication was solved in the late 80s. The schools, colleges and commercial functions began to be built in the late 80s. But still the plots were empty in the new areas of sector 10,11 etc.

So we can easily discern that the housing was not meant for the whole of middle class society.

### The Individual House in the Uttara Model Town

The project is situated in the western part of the model town, which developed in the 80s. The client required a design approach, which would accommodate a multi-storeyed walk-up apartment housing with different space requirement for owners and tenants.

The owner family type played a crucial role in determining the different sizes of units atypical of identical demands of apartment on each floor.

<sup>10</sup> Source DIT (RAJUK) records.

The client is a retired government employee, a first generation Dhakite who showed inclination toward Joint Family concept as outlined in his requirement to share living units with his son and elder daughters-all well settled in their profession and with their own family. The financial aspect of the project was shared between the father, his elder daughter and her husband who are also government employees.

**Strategies : The Individual House**



Figure 6: Elevation of the individual project

From the first meeting with the architect it was clearly expressed that the units for the son and the daughter had to accommodate more spaces. The units for the son and daughter had to be on the 1st and second floor-closer to ground and have definite identification facing the front street.

Although the client opted for a more compact layout for tenant unit for renting out, for their own living units they decided to have more space.

The apartment was built partially on House Building Finance Corporation (HBFC) loan. As house rent is comparatively more for smaller unit sizes at Uttara,



Figure 7: Frontal View of the individual project

instead of renting out one large space on 3<sup>rd</sup> and 4<sup>th</sup> floor, the clients decided to go for 2 smaller units on each floor as the architect suggested.

Eventually a floor plan for 1<sup>st</sup> and 2<sup>nd</sup> floor was suggested with asymmetric layout distribution of 2 units. The front one facing the street is of larger size than the back unit –a smaller type, more of a compact layout for renting out.

The 3<sup>rd</sup> and 4<sup>th</sup> floor plan are identical with two same sized apartments on each floor.

**Analysis: The Individual House**



Figure 8: Ground floor plan of the individual project

The units were specifically designed for tenants-the second generation Dhakaites who have already adopted nuclear family type with limited income but with modern values imposed by city living so that a compact layout would be welcomed as a fresh alternative to a over sized loosely laid out apartment. Affordability of such new generation urban tenants of mid income status was taken into account while fixing on the sizes of the apartment.

The rental part is necessary to pay-off HBFC loan and to sustain a healthy income in future other than govt. salary. The cost of the building is approx.8.7million taka. Only 29% was paid from loan and rest was shared between the father, his daughter and son-in-law.

Uttara-designed as a satellite town with the population being more of a commuter type, the provision for parking for cars was also given due consideration in the design layout.

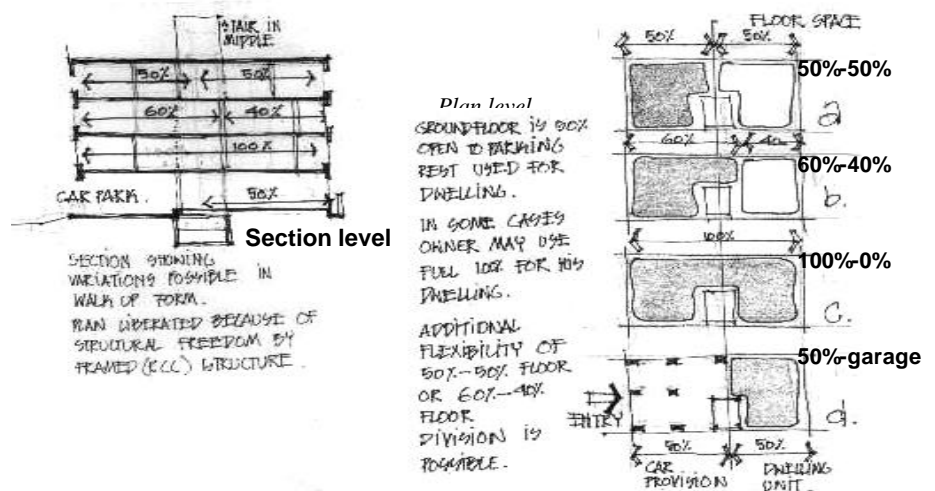


Figure 9: Layout & distribution pattern- mixed units in single structure.

50% of the ground floor serves a garage space. Survey shows apartment without parking space attracts poor rent and often lie vacant in spite of availability of other modern amenities.

**Actors**

A comprehensive overview of actors involved in the housing sector in Bangladesh is portrayed in this. This is to show that urban dwellers

have to face this varied set of actors. Some of the actors play direct role in Uttara model Township projects while others have more passive role. The actors are narrated in the sequence from National level, Finance and to local level actors.

#### **National Economic Council (NEC)**

It is for policy and programme and overall decisions.

#### **Planning Commission**

It is responsible for policy and programme review.

The Main Institutions and their Respective Responsibilities in the Public Housing and Funding.

#### **The Ministry of Housing and Public Works**

The following Departments/ Directorates under it are involved in the public housing provision.

- *The Department of Architecture* is the lone government architectural organization and responsible for designing all government buildings and public housing schemes across the country.
- *The Public Works Department (PWD)* is concerned with the construction and maintenance of govt. offices/ institutional building and public housing for the govt servants.  
Previously this body also carried out design and drawings. Presently with the formation of the Department of Architecture its role is limited to construction.
- *Housing and settlement Directorate (HSD)* is vested with the responsibility of building houses for general public especially for low and lower middle income housing in the country. HSD has been involved in the provision of serviced plots, core houses, semi-pucca houses, flats, and slum upgrading schemes.
- *The City Development Authority, RAJUK* is responsible for physical plan preparation, land acquisition, land development distribution of plots, regulation and control on private development and building permission as well as slum clearance and rehabilitation.
- *The Urban Development Directorate (UDD)* limits its role only to the urban and regional planning policy and plan preparation.

#### **The Ministry of Finance**

It is responsible for funding the public housing. Therefore it supplies finance for house building activities.

#### **House Building Finance Corporation (HBFC)**

It gives mortgage lending for housing construction to the people. It was the sole body providing finance to construct houses in the 70s. In the early 80s some private sector banks provided loans for high income generating schemes. The commercial banks of the country also make some housing finance but the government patronized Bangladesh House Building Finance Corporation still remains the single largest institution for housing finance.

Presently Delta brac housing and some NGOs are also providing housing loans for different income group.

There are different agencies that are responsible for regulation and control over the design and construction of housing its location, necessary infrastructure, services and social facilities essential for housing areas.

*Water Supply and Sewerage Authority* is responsible for water, sewerage and drainage.

*Titas Gas* is responsible for gas supply.

*Dhaka City Corporation (DCC)* is for maintenance of urban services, slum improvement implementation.

#### **Housing and Building Research Institute (HBRI)**

is responsible for research and development on building and materials. But their research related to low cost construction failed to influence the housing activities due to lack of publicity. There were hardly any demonstration projects, which showed the application of techniques developed by HBRI.

#### **Building Contractors**

From private sector working for developers to construct houses. They generally use mechanical means to construct.

The other actors from informal sector are the small constructors. They in turn sustain the laborer from the informal sector. Their construction process is labor intensive. In Dhaka as well as in Bangladesh 75% of the constructions done is labor intensive.

#### **The Professionals**

The technical persons involved in any building projects are mainly the architects and the civil engineers. In order to produce a full-fledged construction document the architects have to coordinate with the civil engineer, quantity surveyors, mechanical engineer, plumbing engineer and electrical engineer. In some cases the owners only require a detailed architectural and structural drawing. The architect's role may also extend to supervision during the implementation stage.

#### **Individual Plot Owners**

They are the beneficiaries who own the plots and subsequently the houses that are constructed on the plots. A plot owner has to employ an architect to prepare the drawings, which is to be approved by RAJUK. Then with the approved plan the owner can apply for housing finance. The infrastructure facilities are normally provided up to the developed plots from there the permission for connections for gas, water and sewage facilities are required.

### **Analysis**

The actors involved in housing sector all work independently without any coordination or information sharing between bodies. As a result it is the individual house owners who suffer mostly. Most of the bodies have been created in the pre-independence period.

Again there is a overlapping of activities of many agencies like HSD, UDD or the RAJUK. They all look after housing sector but from different perspectives. Some of the site and service schemes for low income in Muhammedpur, Mirpur area of Dhaka city have been implemented HSD. But due to lack of evaluation of its effectiveness these projects have not been replicated. Again the low-income

schemes had no relationship to the activities of HBRI, which has a cell that researches low cost houses.

The government in policy level had no clear strategy for finance for housing of different income group. But recently there were steps at policy level geared toward the housing sector.

In view of the increasing housing scarcity, the HBFC expanded its housing loan programme all over the country (at the district head quarters) from 1 July 1999 after 12 years of suspension. All its loan programmes were for higher middle income groups. Presently there is a shift towards providing loans to all income groups.

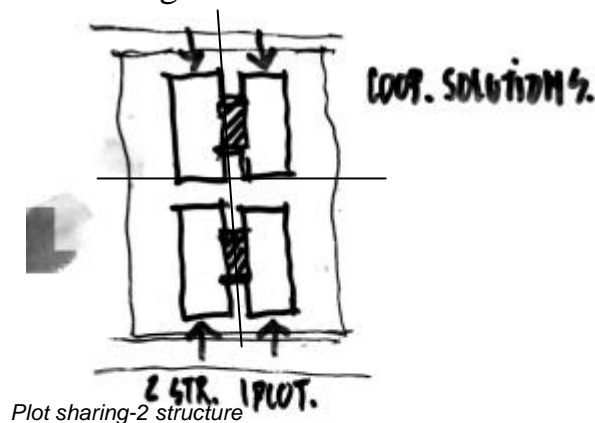
- New apartment loans in the metropolitan cities of Dhaka and Chittagong and for semi-pucca (semi-permanent) houses in the district towns have been introduced.
- A loan scheme for small size flats (550sft<sup>11</sup> to 1,000sft) for the middle and lower-middle class people has been introduced.

Rajuk organization plays key role in formulating housing schemes such as the Uttara model town, and the planned development of Baridhara, Banani, Dhanmondi etc. It is sole body that also looks after the set-back rules and its effectiveness that cover all the areas of Dhaka city.

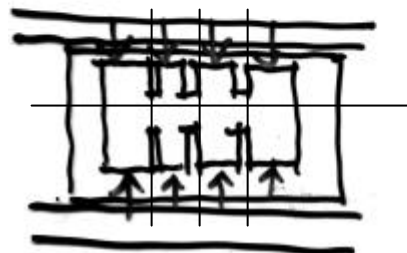
At the national level housing policy of 1993(modified1999) shows the endeavour by the governments to make housing accessible to all citizens of Bangladesh through various measures, incentives, motivation, planning and management. But still there is need to open up to accept novel ideas, advices and suggestions from different groups and communities.

## Design

### Plot sharing



Plot sharing-2 structure



Plot sharing-8 structure

<sup>11</sup> 1sft= .092m<sup>2</sup>.

The following analysis related to design is elaborated regarding the master plan. It also relates to housing level and the layout of streets.

**New approaches in layout of plots**

The new layouts as illustrated leave more land for other purposes. Also the buildings are four to five storied walk-ups. Which means we can have five owners in one structure. So the cost of building and the land gets divided between themselves. Sharing infrastructure, sharing services, etc. also adds to the savings.

Table 4: Size of the plots and savings in land.

Nos. of plots	Previous layout Plot Area in Kathas	Proposed layout Plot Area in Kathas	% of Land savings	Remarks
1	5	-	-	-
2	10	9.3	7%	all groups have 7.5% saving in shared structure. 50% saving in stair core.
4	20	17	15%	
8	40	33.4	16.5%	

Description

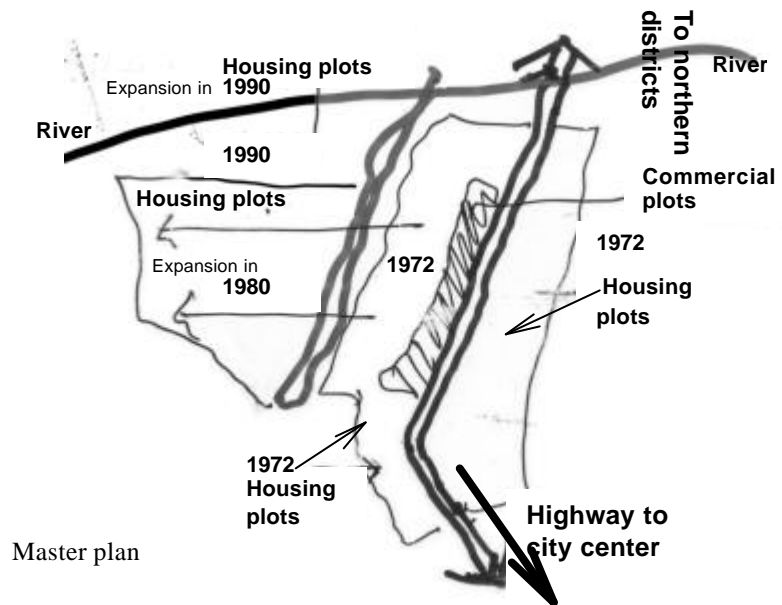
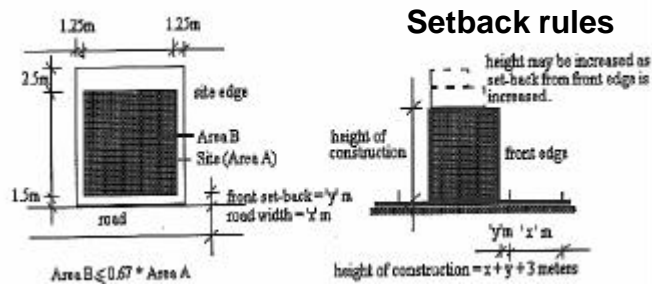


Figure 11: Master Plan-Uttara Model Town showing different areas.

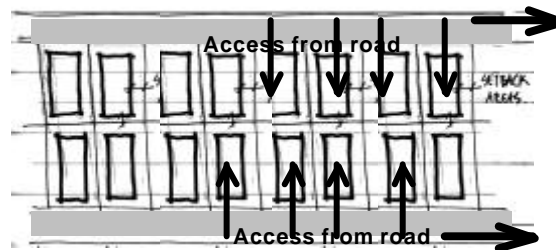
Master plan of the Satellite town completed in 1965 had some foresight with regard to growth of the Dhaka city (figure 11). The area is now a integral part of Dhaka city, no longer considered as satellite town. The Dhaka –Mymensingh road passing through the town is the highway to northern part of the country. In doing so the area is divided into two segments. The people on East segment have cross the highway to avail the facilities on west.

The Commercial areas are located linearly on north and south near the highway. The expansion in the 90s have been done towards the west, which is the sectors 12, 11 and 10 are quite far from the commercial area.



The areas even though have community areas but there is lack of open spaces in the sectors in neighbourhood scale. There is also inadequacy of detailing on street level with regards to pedestrian walkways. The planning was only concerned with accommodating the plots or other functions and the vehicular accessibility. The drawback of the design was that it failed to perceive the social activities of people like walking to market, meeting peoples, children playing etc.

#### Layout of plots



The plot layout in the Model Town had been done in grid pattern. The basic concept was that there is a structure in each plot irrespective of size. According to the set back rules by RAJUK approx. 70% can be built-up. Due to high land price the structures always take full if not more advantage of the maximum build area. The form and open area relationship is same as the other areas of Dhaka city. Due to lack of any detail plan the almost all residential buildings of the city have the same form that derives from the shape of the plot and the set-back rules. The height of the building is generally four to six storied walk-up types.

As a result different form of housing like cooperative solutions, row housing etc. have not been explored. The design ideas try to address this issue of variations that will not only have different form of housing but also be affordable to all groups.

The concept of having a house on a plot also is being modified by having a unit shared with others in a building.

## Conclusion and Recommendations

The project design was inherently flawed, with an over-concentration on the physical development of the residential estate and no meaningful attempt to integrate social activities that corresponded to project objectives on the development and institutionalisation of housing policies and strategies.

The consequence is that the project had no impact on national or Dhaka housing development strategies or policies which currently concentrate on high-rise developments or on high income group housing that are not accessible to the lower income middleclass or the



poor, and punitive demolition and eviction actions against squatter dwellers.

This represents a missed opportunity, for the Uttara model provides the basis for a sustainable and effective strategy addressing the living environment and livelihood development needs of the urban population. There is no evidence in the present activity of housing to suggest that the experiences gained during the project have in any way informed the policy approach to middle to low-income urban housing. The process of project design, implementation and evaluation needs to be carefully examined, to ensure that:

- There is an appropriate relationship between goals, objectives, activities and outputs.
- The structure and duration of the project reflects the full development process with which it is concerned.
- There is a clear and appropriate designation of institutional responsibilities for all aspects of the project.
- Adequate internal and external monitoring and evaluation processes are integral to the project.

Effective external evaluation is an essential complement to a good internal monitoring and evaluation system and needs to be integrated at the design stage. The success or the failure of the Uttara model should be more widely publicised: not just within the institutions directly involved in its implementation, but also in the wider public domain so that other institutions with an interest in this area are made aware of the results.

Creation of self-sustaining finance systems to meet for affordable finance of the people when purchasing, building or improving their dwelling units should be important component of national and national policies for the achievement of the goal of shelter for all.

Housing that meets the affordability of all of middle class must be explored. Researches in Low cost housing are necessary with reduction in the cost of land and infrastructure.

Clearly, it is important to include a broad variety of housing opportunities to meet changing needs. Encouraging a diversity of housing by type, accessibility, tenure, and cost will ensure that Uttara continues to have a healthy mix of people. But what does variety mean? Where and how should new housing forms be integrated into neighbourhoods? These should be incorporated with design ideas.

Encourage a broad variety of housing types, universal designed dwelling units, tenures and price ranges suitable to meet the needs of everyone in the community, including families, singles, couples, people with disabilities and seniors.

*Cooperative solutions for multi-storey dwellings could also be explored.* In Dhaka city we have individual ownership of units in the high-rise dwellings constructed by private entrepreneurs.

As government strategies will have to integrate housing policies and physical planning programmes into economic and social development planning, political will must above all be exercised with imagination. If we are to come up with new formulas, with new advice, housing strategies have to be practical, affordable for different economic groups and replicable within the cultural and social context. As the philosopher Albert Einstein so rightly said, “In time of crisis, imagination is more important than knowledge”.

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