PLANNING OF URBAN COMMUNITY FACILITIES: A CASE STUDY OF ISLAMBAGH AREA, IN DHAKA CITY.

KHONDKER NEAZ RAHMAN

MASTER'S THESIS

SUBMITTED TO THE DEPARTMENT OF URBAN AND REGIONAL PLANNING, BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA. IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF URBAN AND REGIONAL PLANNING.

DEPARTMENT OF URBAN AND REGIONAL PLANNING.
BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA.

JUNE, 1991.

THESIS ACCEPTANCE FORM

PLANNING OF URBAN COMMUNITY FACILITIES:

A CASE STUDY OF ISLAMBAGH AREA IN DHAKA CITY

BY

KHONDKER NEAZ RAHMAN

APPROVED AS TO STYLE AND CONTENTS BY:

Mahbubun Nabi.
CHAIRMAN OF THE COMMITTEE

MEMBER

Roxana Hafiz
MEMBER

MEMBER

DEPARTMENT OF URBAN AND REGIONAL PLANNING. BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA, BANGLADESH.

JUNE, 1991

ACKNOWLEDGEMENT

I owe my debt and like to express deep feelings of gratitude to my teacher and thesis supervisor, Mr.A.S.M. Mahbub-un-Nabi, Associate Professor, Department of Urban and Regional Planning for his valuable guidance at different stages of my research work. I consider it as a previledge to work under him. It would have been quite impossible to carry on this research work and give it a final shape without his advice and sympathetic encouragement.

I also extend my gratitude to Professor Dr.Mir Shahidul Islam, Head of the Department Of Urban And Regional Planning, for his kind co-operation and encouragement at different stages of this thesis. I take great pleasure to acknowledge the fact that how immensely indebted I am to all of my teachers of the department who gave their guidance through my course, specially Asstt. Professor Mrs. Roxana Hafiz. I am also obliged to my Head of Department, Professor Golam Rahman, V.C. Khulna University for his thoughtful suggestions.

I also express my greatfullness to Bangladesh University Of Engineering And Technology for financing my research work.

I acknowledge with thanks the assistance received from Mr. Tariq Bin Yousuf, Assistant Engineer, Dhaka City Corporation, Mr. Zinnah, Ward Commissioner of Ward No.28, Dhaka City Corporation and Mr. Mohiuddin Ahmed, Architect, Sthapati Sangshad, for my research work.

JUNE, 1991 KHONDKER NEAZ RAHMAN

ABSTRACT

The Urban Centers, the cities and towns of Bangladesh are experiencing a phenomenal growth both in area and population. Different municipalities and development authorities are given the responsibilities of providing different community facilities to these urban dwellers. The fact is that the existing policies of providing essential urban community facilities could not cope with the rising demand of the urban mass. The existing process of setting objective and providing facilities are very arbitrary. The present practice almost ignores the fact that different community have different problems and accordingly priorities.

This research focuses on identifying the problems and requirements of the urban community by studying their socio-economic condition. Then experiences of different procedure of planning process were studied with the aim to utilize their experiences to understand the nature of the problem and prospects involved there and get suggestions for our problem. The study also focuses on the demerits of keeping the user, the urban residents, away from the planning process which determine their future environment.

Considering the above issue, the research work suggests a users participation oriented planning process, including the structure of the planning team and their working procedure. An inventory

of urban community facilities and their standards are also suggested. In the conclusion some recommendations are given to make users participation smooth and successful.

THESIS TITLE : PLANNING OF URBAN COMMUNITY FACILITIES:
A CASE STUDY OF ISLAMBAG AREA IN DHAKA CITY.

THESIS SUPERVISOR: MR. A.S.M. MAHBUB-UN-NABI,
ASSOCIATE PROFESSOR,
DEPARTMENT OF URBAN AND REGIONAL PLANNING,
BUET., DHAKA.

CONTENTS

CHAPTER 3

CHAPTER 4

CHAPTER 5

CHAPTER 6

CHAPTER 1

THE PROBLEM, OBJECTIVE AND METHODOLOGY

1.1. THE PROBLEM AND THE RATIONALE FOR THE STUDY

After the emergence of independent Bangladesh in 1971 the urban centers of the country have started to expand both in the area and population at an alarming rate. The urban population of Dhaka had increased from 4,11,279 in 1951 to 7,18,766 in 1961, 20,68,353 in 1974 and 34,40,147 in 1981[1]. This is a growth about 8.36 times in 30 years. During the early sixties the country had experienced a rapid growth of urbanization, in 1959-61 this was 3.72 percent per year and in 1961-74 it increased to 6.70 percent per year. This was not all, the country experienced even a faster and alarming rate of population growth in it's urban centers during 1974-81, which was 11.00 percent[2].

---

[1] Bangladesh Population Census (1981). BBS, Dhaka.

[2] Bangladesh Population Census (1981), BBS, Dhaka.

Dhaka City Corporation was given the responsibility of providing community facilities to these fast growing urban mass of the capital. But it became difficult for the Dhaka City Corporation to cope with the rising demand with its limited budget and its present planning process. This is evident from the fact that there are only 23 community centers, 40 parks and 18 health centers for 75 wards* of Dhaka city corporation. While the city and population continue to expand unabatedly equal steps for providing urban community facilities are not observed.

This expansion of urban population not only created new demand for facilities but also created an unbearable pressure on the existing urban community facilities. The major cities in the country, where pressure of its population is already heavy are unable to cope with its rising gap between its peoples demand and the resource available.

The present planning process of providing community facilities does not create ample opportunity for effective peoples participation in creating their future environment. But they could participate in a fruitful way both in planning and implementation stage. Proper and effective utilization of different types of community facilities depends upon the adequacy and appropriateness in their

---

* Dhaka Chart, Dhaka City Corporation, 1990. Dhaka.

provision, standards, planning process and management. If better community facilities is to be provided within the limited budget available, a planning process have to be formulated which will reflect the community's hopes and aspirations and the priority of their needs. At present it is observed that the facilities provided at different community centers are almost same, ignoring the fact that different community will have different priorities. Before providing facilities the target group have to be fixed first so that their demand can be calculated and priorities understood. The success of preparing a plan or design depends upon the ability to communicate users image about the resulting environment with those who will elaborate the plan. Therefore, good communication between the designer and user is an important factor in successful planning. If the user and the planner is the same person the difficulties inherent in communication would disappear.

When any environment is created for more than one person it is a process of building community. Community life arises out of recognition of people's dependence on one another. People's desire for the company of their fellows by calling on one another in different occasion bring them together as a human community. Human being is the focal point of any community. But we are trying to build community by playing with streets, buildings, houses and infra-structure, instead of people. Modern cities and neighborhood planning have alienated the

people from the process of building their own living environment. In contemporary cities, place and occasion are being removed. The environment that is out today almost excludes users role and it changes in response to the powerful hand of market. The transformation of everyday life has narrowed the scope of the users to be involved in building the environment of their dwellings, their cities. These alienated user accepts these limitations as inevitable. The value of users participation in decision making role should not only be measured in materialistic plane, it has a profound effect in evoking awareness in the individual as a independent force. Dignity of a person is shaped by the feeling of not being used as others tool. The result of alienation is that one's work is no longer performed for himself to satisfy his own or his family's need. What is produced is not for them, it is for others. Life begins only when the workdays ends. Peoples participation results in creation of a self reliant community, confident about their own ability and responsibility.

The inhabitants of any area are relatively well acquainted with its condition and therefore they are very capable of contributing in the development activities in their own interest and in the interest of the community. They should play a significant role in determining the needs and priorities of the community. The more people participate, the more understanding they gain about the planning process and this results in a more rationality in

their demand for services. There are examples of successful planning where people participated in the planning process.

Users participation in planning process will result in a more rational environment both in physical and social term. For a successful planning of community facilities an inventory of facilities are required with proper standards and guide line.

1.2. OBJECTIVE OF THE RESEARCH:

Objective of the present research is to develop a planning process for Dhaka City Corporation to prepare community facilities plan for its residents, and also to prepare an inventory of facilities required and their standard. Once developed, such a process will immensely contribute towards an effective planning of the community facilities by responding to the hopes and aspirations of the people. Specific objectives set in the study are the following:

(a) To prepare an inventory of different community facilities required for community planning.

(b) To determine the standards for different facilities that will be provided.

(c) To formulate a social process for planning and designing the community center which will ensure community participation, and to develop a model of the planning team.

1.3. METHODOLOGY:

In order to attain the above mentioned objectives, the methodology described below was followed:

LITERATURE SURVEY: Intensive literature survey was carried out for getting a thorough understanding about the problem and opening a wider angle of vision. Special attention was given to the social problem the urban individual is facing due to his alienation in the city or town. Search was also carried out intensively to gather a proper understanding about the standard of different community facilities.

COLLECTION OF INFORMATION FROM PRIMARY SOURCES:

(a) Study of the planning process and standard of an existing community center of Dhaka City Corporation.

(b) Survey was carried out about the community facilities and other non-residential activities in two wards of Dhaka City Corporation, to have an understanding about them.

(c) Interview with the key persons of Dhaka City Corporation involved in the development activities of the project area.

COLLECTION OF INFORMATION FROM SECONDARY SOURCES: Information and data was collected from secondary sources to understand the socio-economic condition of the people in the project area.

ANALYSIS OF INFORMATION: After collecting information from primary and secondary sources they were analyzed and presented in the form of tables, maps, charts and written texts.

1.4. SCOPE OF THE STUDY:

Since the objective of the research is to prepare a more effective way of planning urban community facilities, accordingly the scope of the research has been outlined in the following:

(a) To understand the needs and problems of the people living in the study area and determine the priority of their needs.

(b) To prepare an inventory of facilities required for an urban community. This is essential for the purpose of planning urban

community facilities.

(c) To determine standards and criteria of different community facilities.

(d) To develop a model of planning process to ensure the participation of the users, by developing a design team, for the community center, and its working procedure.

1.5. THE COMMUNITY:

To provide urban community facilities in the cities, specially in Dhaka a basic unit of urban community have to be determined to start with. The size of the unit should be such that it can support the basic facilities provided, retain its identity and convenient for the existing administration. The Town Planners have been pondering the question of size for a long time. Most of them have agreed that the size should be such that it can support a elementary school. This size is capable to support the most basic facilities also , such as local shopping, small parks, play ground, primary health center etc. Therefore, a group of these units have to be combined into a large unit to support facilities of higher degree. Thus the city or town should be visualized as an organism.

In Dhaka the Wards of Dhaka City Corporation is the basic unit of its administration. The population size of these Wards varies from 1,14,671 in Ward No.55 to 7,288 in Ward No.11[4]. It is evident from the population size and development character that these ward are too large and diverged in nature to be considered as basic urban unit. On the other hand it is also observed that these Wards are distinctively divided into a number of "Mahallahs". For example there are 9 ward and 41 mahallahs with 3,11,129 population under Lalbagh Thana, that is about 7,588 people per Mahallah in average[5]. These Mahallah's are almost identical to the "neighborhood" concept of planning theories.

Therefore, the Wards of Dhaka City Corporation and other municipalities should be divided into Mahallahs in a manner so that they can be considered as the basic urban unit. There size should be around 10,000 population and the farthest end should be within the walking distance from its center. Then number of Mahallahs will be grouped together to provide facilities of higher degree. In the research we will consider the Mahallahs as the basic urban unit and we will deal with different aspects of planning of community facilities to these units.

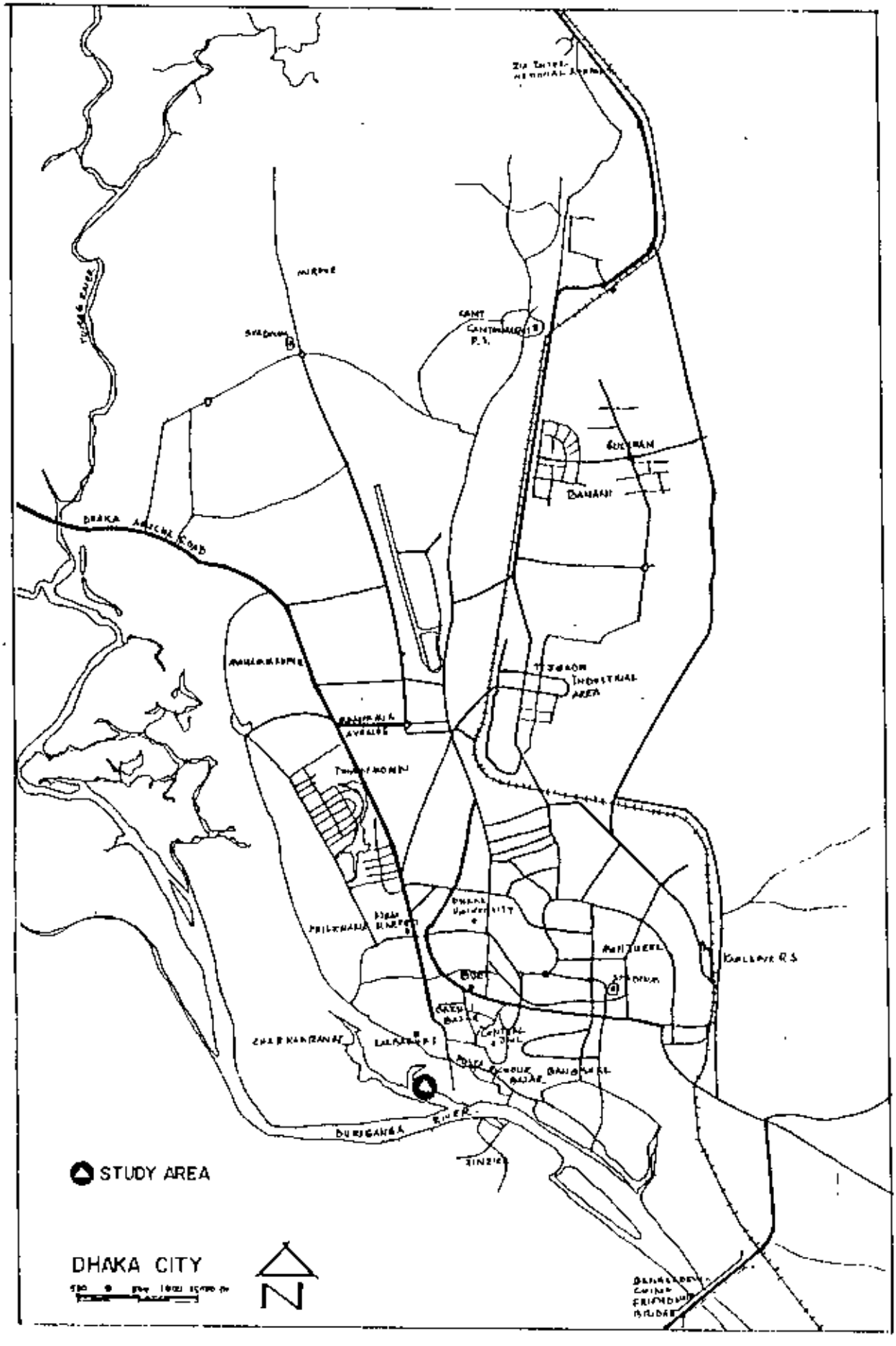
---

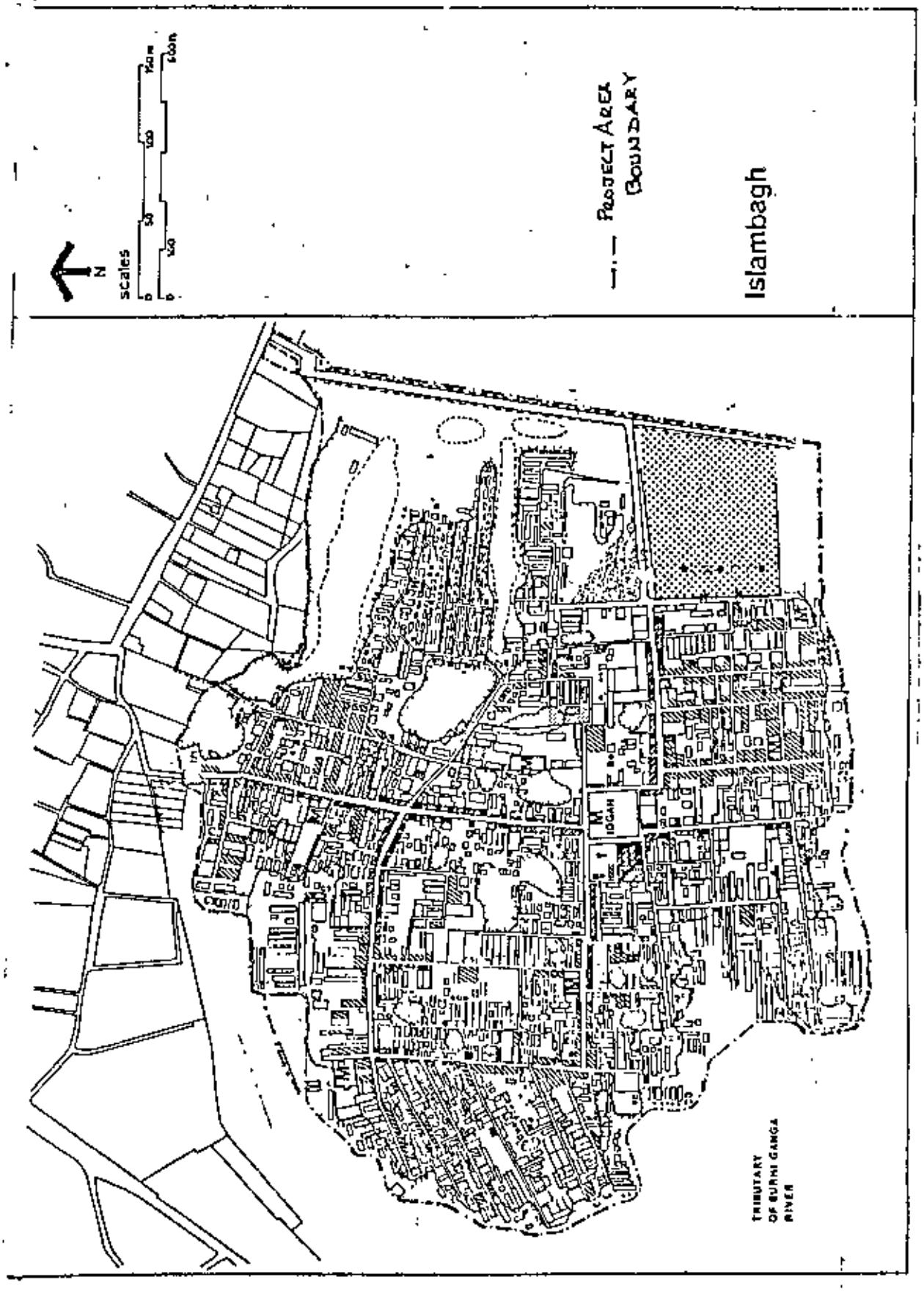
[4] Small Area Atlas of Bangladesh (September 1985),Dhaka District BBS,Dhaka. page 102.

[5] Ibid . page 20,116.

1.6. SELECTION OF THE STUDY AREA:

Islambagh community was selected for case study in this research work. The area is situated in the old part of Dhaka City. The northern and eastern boundary of the study area are defined by Posta and Islambagh section of Water Works Road, the south and west boundary is the Buriganga river. It is located within Ward No. 28 of Dhaka City Corporation. The entire area of Islambagh area are about 40 acres. The area is very densely built up. The economic and living condition of the population is very poor in comparison to the most of the area of Dhaka city. They enjoy very few community facilities of the modern city, and in a very inadequate scale. In most of the cases their socio-economic achievements are far below than those of the national average and the average of Dhaka metropolitan area.


MIRPUR
DHAKA AIRPORT ROAD
BANANI
TEJGAON INDUSTRIAL AREA
DHAKA UNIVERSITY
BUET
RAMNA RACE COURSE
DURIGANGA RIVER
STUDY AREA
DHAKA CITY
N



SOURCE:- Government of Bangladesh, UNDP and UNCHS (1985). "Final Feasibility Reoprt Integrated Urban Upgrading."Consulting Engineers, Aqua Consultant and Associates Ltd. Bongaerts,Kuyper and Haiswaard B.V., Dhaka. page I-12

CHAPTER 2

PHYSICAL AND SOCIO-ECONOMIC CONDITION OF THE STUDY AREA

2.1. PHYSICAL CONDITION OF THE STUDY AREA.

The physical condition of the study area have to be analyzed to some extent to understand the overall setting and to focus on features relevant and important for the research. These includes general description of the study area, land use, housing condition, utilities and service facilities etc..

2.1.1. GENERAL DESCRIPTION OF THE STUDY AREA.

Islambagh is a residence of 24,030 people. There are about 4,763 households in the study area. The permanent dwellings are on the land above flood level and by the side of the main roads. But most of the dwellings are in the low-lying flood prone areas in

most poor, dense and unsanitary condition[1].

2.1.2. LAND USE

The area is characterized by high population density, which is 470 persons per acre[2]. The whole study area can be divided according to their use in four major categories, such as the built up areas covering about 73.14% of the total land; roads/lanes/walkways occupying 18.16%; ditches covering 4.98% of the area and the remaining 3.72% of the land lying as vacant space[3]. The land is generally sloped towards the river to the west and the south. A large part of the area goes under water during the monsoon.

---

[1] Government of Bangladesh, UNDP and UNCHS (1985). "Interim Report.Housing Development Project". Consulting Engineers: Aqua Consultants and Associates Ltd. and Bongaerts, Kuyper and Huiswaard B.V. Dhaka. page 3.1/4.

[2] Ibid. page 3.1/4.

[3] Miah, Md. Abdul Quader (1988). Upgrading a slum settlement in Dhaka. Bangkok. page 60.

Source:

Interim Report. Housing Development Project. Op. Cit. Map 3.1.1

2.1.3. HOUSING CONDITION

The housing condition of Islambagh gives an impression of congested houses of brick structures, wooden and bamboo built houses and makeshift sheds. The houses are constructed in an unplanned manner. They are usually made with corrugated iron sheet, split bamboo and sometime with reinforced concrete and brick. Houses which are located by the side of the river and on ditches are built on stilts.

The overall housing condition is very poor. With few exception houses of this area lacks proper ventilation and sufficient light.

The following table gives an idea about the types of structures of Islambagh. Most of the houses are mixed use of residential, commercial and small scale industries.

TABLE NO. 1

Type of structures in Islambagh

Type		proportion %
Brick and concrete building structures	-	1.13
C.I. sheet structures	-	23.16
Thatched houses	-	75.71
Total	-	100.00

Source: Upgrading a slum settlement in dhaka. Op.Cit. page 60.

2.1.4. UTILITIES AND SERVICE FACILITIES

Supply of electricity to the study area is more or less adequate. Electricity supplies enter Islambagh area from the substations at Lalbagh. About 60.47% of the tenants and 85.92% of owner household had electric power connections. In 1985 there were 438 official connections in Islambagh. 62% of them were domestic connection, 22% were commercial and 16% for small-scale industries. But there were probably a large number of

Source:

Interim Report. Housing Development Project. Op. Cit. Map 3.9.1

unauthorized connections[a].

The main line of gas transmission enters Islambagh from the Water Works Road in the north. Households along all major roads and footpaths are under the gas distribution network. 40.70% of the tenants and 67.61% of the owner households had gas connection[b]. Electricity and gas distribution are shown in the map.

The supply of safe drinking water in Islambagh is unsatisfactory. Low-lying areas are the most deprived one. Areas adjacent to the Old Dhaka is mainly under the water service system. The following table shows the existing water supply situation.

---

[a] Upgrading a slum settlement in Dhaka. Op. Cit. page 63,64.

[b] Ibid. Op. Cit. page 225.

TABLE NO. 2

Existing water supply system.

Population served		
by the piped water	-	40%
No. of house connections	-	762 *
No. of standposts	-	14
No. of shallow tube wells	-	50

* About half are illegal.

Source: Interim Report.Housing Development Project.
Op.Cit.page 3.5/1.

2.2. SOCIO-ECONOMIC CONDITION OF THE STUDY AREA.

Information relevant and important for understanding the socio-economic character of Islambagh have been examined. Which includes there demographic condition, literacy, occupation and employment status, income and expenditure pattern, house ownership and tenancy aspects, existing community facilities etc.

2.2.1. DEMOGRAPHIC CONDITION

The population of Islambagh was 24,030 in 1981. There was 4,763 households in the community, which means an average household size was 7.2. The annual population growth was 2.5 - 3.5%*. The community was predominantly represented by male. the following table express the condition.

TABLE NO. 3

Heads of households by sexes

Sex	Tenants %	Owners%
Male -	88.37	74.65
Female -	11.63	25.35
Total -	100.00	100.00

Source: Upgrading a slum settlement in Dhaka. Op. Cit. page 218.

* Interim Report. Housing development project. Op. Cit. page 3.1/4

Male to female ratio in the community was 1:0.80. About 32% of the population were aged below ten years[7]. 33.75% heads of households of the tenants and 19.72% of heads of households of the owners are within the age group of 15 to 30 years[8].

2.2.2. LITERACY:

In Islambagh area there are only two educational institutions. One is Hajji Ibrahim Government Primary School, having 682 students. Another one is Islambagh Bara Masjid Maktab having 200 pupils[9].From the final Feasibility Report Annexure, Volume-1 of Housing Development Project prepared for Peoples Republic of Bangladesh, UNDP and UNCHS, in 1985 it has been found that the schooling facilities in Islambagh area are inadequate. Children who are not enrolled in school have different category such as some are in the waiting list, some did not tried because of the small chance of

---

[7] Interim Report. Housing Development Project. Op. Cit. page 3.1/6.

[8] Upgrading a slum settlement in Dhaka. Op. Cit. page 218.

[9] Government of Bangladesh, UNDP and UNCHS (1985). "Final Feasibility Report. Integrated Urban Upgrading" . consulting Engineers: Aqua Consultant and Associates Ltd. and Bongaerts, Kuyper and Huiswaard B.V., Dhaka.page II-30.

being enrolled and other are not enrolled because their parents will not allow them to travel far to school. Therefore, by increasing facilities within the project area might increase enrolment rate sufficiently. Table-4 shows that to increase the level of enrolment at the DCC level (32.70%) Islambagh would need two large primary schools,and to increase the enrolment to the national average of 50% (with population of 1985) the area would need three schools[19].

TABLE NO. 4

School enrolment levels and numbers of schools.

	Rate%	Roll	Schools
1985	32.70	1,670	2
	50.00	2,550	3
1990	70.00	4,147	4
1995	50.00	3,433	4
	100.00	6,867	7

Source: Final Feasibility Report. Integrated Urban Upgrading.Op.cit.page II-35.

[19] Final Feasibility Report.Integrated urban upgrading. page II-34.

Government of Bangladesh aims at increasing primary school attendance to at least 70% of the total Children of primary school age by 1990. From another study carried out by Md. Abdul Quadir Mia, K. E. Weber and Nazrul Islam shows that educational status of the household heads varies considerably according to age levels.

TABLE NO.5

Education level of heads of household by age groups.

Age\Education level	Illiterate	Upto primary	Upto SSC	Above SSC	Total
15-30	12.74	8.28	4.46	1.91	27.39
31-45	26.11	10.83	8.92	4.46	50.32
46-60	8.92	4.46	1.27	1.27	15.92
> 60	3.82	2.55			6.37
Total	51.59	26.12	14.65	7.64	100.00

Education: Education of head of household.

Age Level: Age level of head of household.

Primary : Five years of formal education.

Figures in the Table are percentages of f=157.

Source: Upgrading A Slum Settlement in Dhaka.Op.Cit. page 258.

2.2.3. OCCUPATION AND EMPLOYMENT STATUS:

Of the community, 14% of the population are in business and 12% are unemployed dependent. This indicates that if some organization comes forward with packages of small scale industries and trading the employment status can be improved.

TABLE NO. 6

Occupation profile of the community

Occupation	Percentage
Age below 10 years	32.60%
Unemployed dependent	12.00%
Students	2.40%
Household work	18.50%
Business	14.20%
Manufacture/Industry	1.20%
Others	19.10%

Source: Final Feasibility Report. Integrated Urban Upgrading. Op.Cit.page I-21.

Another study shows that while minority of tenant respondents were unemployed, but it was considerably higher among the owner respondents. The higher rate of unemployment among the owners may be related to their dependence on rental income. For both tenant and owner the proportion of employment in formal sector is low.

TABLE NO. 7

Employment status of heads of household.

Employment status		Tenant%	Owners%
Employment in Govt./ Semi Govt./ Autonomous Organization	-	11.63	5.63
Employed in private practice	-	10.46	5.63
Business	-	32.56	49.30
Self Employed	-	32.56	8.45
Others	-	1.16	2.82
Unemployed	-	11.63	26.76
N.A.	-	00.00	1.41
Total	-	100.00	100.00

Source: Upgrading a Slum Settlement in Dhaka. Op. Cit. page 219.

2.2.4. SOCIAL WELFARE AND PRIMARY HEALTH CARE:

At present there is no social welfare oriented program in the study area. There are some occasional visit by health workers. For making this upgrading project an effective one and to keep different services within the affordability of the residents a combined Health, Education and Social Welfare Program should be undertaken.

2.2.5. EXISTING COMMUNITY FACILITIES:

There is one primary school and a maktab in Islambagh. No health center is situated within the community. The condition of community facilities are expressed in the following Table.

TABLE NO. 8

Existing Community Facilities in Islambagh.

Facilities	Number
Primary School/Maktab	2
Mosque	5
Club	1

Source: Final Feasibility Report. Integrated Urban Upgrading.
Op.Cit. page I-22.

Source;

Interim report. Housing Development Project.Op. Cit. Map 3.1.1

Source:

Interim Report. Housing Development Project. Op. Cit. Map 3.1.6

One large religious school (Lalbagh Alia Madrasha) and a Family Planning Center is within one kilometer from the community. Another study shows the availability of facilities nearby the community. The following table expresses the responses of the households regarding the availability of different community facilities in the vicinity.

2.2.6. INCOME AND EXPENDITURE PATTERN

About 72% of the tenant households have income range between Tk 501-2000. Whereas only 55% of the owner households are within this range. The following tables show that the owners were better off than most of the tenants.

TABLE NO. 9

Availability of Facilities in the Vicinity of the Community.

Facilities	Availability	Tenants f	Tenants %	Owners f	Owners %
Primary School	Available	86	100.00	71	100.00
	Not available	0	0.00	0	0.00
	N.A.	0	0.00	0	0.00
Religious School	Available	78	90.70	71	100.00
	Not available	0	0.00	0	0.00
	N.A.	8	9.30	0	0.00
Health Center	Available	24	27.91	36	50.70
	Not available	32	37.21	27	38.03
	N.A.	30	34.88	8	11.27
Family Planning Center	Available	0	0.00	8	11.27
	Not available	60	69.77	56	78.87
	N.A.	26	30.23	7	9.86

Total numberr of respondents, n=86

Source: Upgrading a Slum Settlement in Dhaka.

Op.Cit.page 229.

TABLE NO. 10

Monthly household income.(in Taka)

Income range	Tenants %	Owners %
Upto 500	4.65	1.41
501 - 1000	38.37	14.09
1001- 1500	29.07	22.53
1501- 2000	16.28	16.91
Above 2000	11.63	45.06
Total -	100.00	100.00

Source: Upgrading a slum settlement in Dhaka. Op. Cit. page 220

TABLE NO. 11

Monthly household expenditure (in Taka)

Expenditure range	Tenants %	Owners %
Upto - 500	5.81	1.41
501 - 1000	36.05	14.09
1001 - 1500	32.56	23.94
1501 - 2000	13.95	15.49
Above- 2000	11.63	45.07
Total -	100.00	100.00

Source: Upgrading a slum settlement in Dhaka. Op. Cit. page 220.

2.3. OPPORTUNITIES AND CONSTRAINTS OF PROVIDING URBAN COMMUNITY FACILITIES IN THE STUDY AREA

INTRODUCTION:

Whenever there is a need for planning urban community facilities

of a community every time it is to deal with an unique situation. Each community has its own needs and also its own constraints and opportunities. Therefore, providing some facilities for a community is to deal with some factors, which will influence the decision about location and grouping of facilities, mode of planning and designing, standards, implementation procedures etc. Some of these factors prevailing in the community are in favor of the program and some factors are considered as constraint.

A. CONSTRAINTS:

The west side of Islambagh are flooded during four months of the rainy season. At this period access is mainly by boat. This is why the rent is low and the land is relatively cheap in the west side of Islambag, which goes under water in the rainy season, in spite of its proximity to the job opportunity of the Old Dhaka.

In Islambagh there are a number of stagnant pool and ditches. These ditches are fertile base for mosquito breeding. The project area is burdened with over crowding. Population density is over 1,484 person per hectare[11] and they have very poor facilities. The degree of improvement must be such that it will not increase the price of land and rent in such a way which will displace the existing population.

---

[11] Final Feasibility Report. Integrated Urban Upgrading. Op. Cit. page I-19.

The main financial constraints of the project area is the limited ability of the residence to pay for improvement work. A large population of this area are extremely poor and therefore can pay only very little for any kind of services extended to them. This results a serious limitation on cost recovery.

High proportion of private ownership of land in Islambagh imposes constraints on development program. Lands which are owned by religious authorities and private graveyard has religious and emotional significance within the community and this is why they can't be acquired for other community facilities. At present there exists a very limited and weak development control system in Islambagh. To develop an orderly environmental situation it will be necessary to control, guide and promote development.

B. OPPORTUNITIES:

Availability of garbage and cheap material open the opportunity to reclaim or fill the existing low lying land and ditches. Re-use of garbage in combination of river sand can play a vital role for this job.

The access road to the project area are poor but there exist a relatively well organized road layout with services. Although

these roads and lanes are narrow and low quality but existing roads make it relatively simple to introduce improvement and link-ups for developing an improved circulation pattern.

There are unused committed land. These mainly belongs to government and religious authorities. There are some vacant land by the side of the main access to the project area which can be considered as a suitable site for providing community facilities. This land belongs to the Dhaka City Corporation.

From the final feasibility report of Integrated Urban Upgrading, 1985 it is found that though the people of the community are of diverse origin but they tend to be fairly cohesive. This makes it easy for the community to cooperate very closely when and if they feel the need. From the report it is also evident that community members are also willing to provide unpaid services mainly in form of labor and time.

CHAPTER 3

PRIORITIES FOR THE PROVISION OF COMMUNITY FACILITIES FOR ISLAMBAGH AREA

It has already been discussed in Chapter-2 that the majority of the population at Islambagh are poor and hence cannot afford all kind of community facilities in the area. It is also very difficult for Dhaka city corporation to cope with the rising demand with its limited budget. Hence, it is necessary to determine some priorities for the provision of community facilities at Islambagh. In order to determine the priorities and standards of urban community facilities for Islambagh area, the work has been done in three phases. In the first phase, a review was made about the community facilities included in different projects of the world and what have been suggested by different architects and planners. Then, in the second phase, an inventory was prepared about the type of facilities which are existing in two wards of Dhaka City Corporation. In the third phase, a careful examination has been made about the programs undertaken by the Government of Bangladesh to provide community facilities to the urban dwellers. And finally, the priorities and the standards of essential facilities required for a community in our

country was prepared.

3.1. EXAMPLES OF COMMUNITY FACILITIES PROVIDED AND RECOMMENDED FOR DIFFERENT PROJECTS:

In the book "The Wider Use of the School Plant" published in 1910, and in the Regional Plan of New York and its Environs, Clarence Perry introduced and explained his concept of "neighborhood unit". The estimated population of this neighborhood was about 5000 persons. The neighborhood will occupy approximately 160 acres of land with 10 families per acre and the shape should be such that no child requires to walk more than half a mile to school. There should be ample provision of park and play lots. There should be a central point of the neighborhood which will contain the elementary school and other services. Each neighborhood unit would be served by a community center, a church, a library and shopping facilities. Approximately four neighborhood will be served by District Shops, located on their periphery[1].

---

[1].Ratcliffe, John (1974). An Introduction to Town and Country Planning. page 40,41.

and

DeChiara,Joseph and Koppelman,Lee (1975).Urban Planning and Design Criteria.Second Edition. page 500.

Lewis Mumford in his book "The Culture of the Cities", described the size and pattern of neighborhood, convenient walking distance for children between the furthest house and the school, playground and the park are the determining factor of the neighborhood size. Isolating the houses and school from the noise and danger of the traffic is to determine the pattern of the neighborhood unit[2]. It is expressed by different authorities and experts that a population of 10,000 is large enough to support the basic facilities required for peoples every day activities and yet small enough to provide acquaintance and easy accessibility between different parts of community.

In Britain a neighborhood unit of 10,000 population is considered big enough to support its own infant health center, nursery school, shops, picture theater, minor local industries, public buildings, branch library, churches and community center. To support those facilities which requires larger population to justify, five or six neighborhoods are grouped into "district". A typical "district" in Manchester comprising five neighborhood and whose population is 50,000 has the following facilities:

Facilities for each neighborhood unit (for 10,000 population):

Community Center

Branch Libraries

---

2. Brown,A.J.and Sherrard,H.M.Town and Country Planning. p/228.

Public Bath

Health Sub-Center

Neighborhood Shopping

Churches

Public Houses

Dwellings

Nursery Schools

Infant Schools

Junior Schools

Children Play Park

Organized Games

Ornamental Parks

Allotment

Minor Park Ways

Facilities within each district center(for 50,000 population):

District Hall

Main Library

Main Health Center

Cinemas

District Shopping, Commercial and Civic Area

Public Houses

Police Station, Fire Station

Petrol Station and Car Parks.

The main health center will serve a health sub-center for the neighborhood, in which it will be located. The district center itself will serve as a neighborhood center. General "district" requirement also includes light industrial area, additional organized games, modern schools, grammar schools, technical school, major parks etc[3]. For every neighborhood shopping facilities are an essential component and it should get due consideration for its number and setting. Locating the shops along the thoroughfare should be avoided, because it will create traffic congestion and increase accident. Rather they should be grouped around a center. Modern British neighborhood planning projects provides one shop per 100 to 125 persons.

Doxiadis Associates suggested different community building and spaces for communities for Lebanon of different sizes. Community comprising 10 to 15 families will require a small square which will have a fountain and few benches, this is the smallest group he had identified. On the other hand community with population of 900 to 1500 families, which is described as Community Class IV will have following building and spaces, this is the first complete community[4]:

---

[3] Brown,A.J. and Sherrard H.M. Town and Country Planning. Op.Cit. page 230

[4] Government of Lebanon (1958). "Housing in Lebanon. Problems - Polices - Programs",Consulting Engineer: Doxiadis Associates. page F-50.

Secondary school

Market

Public Baths

Administrative Center

Cultural Center

Public Health Center

Churches, Mosques etc.

Sports Ground

3.2. INVENTORY OF EXISTING FACILITIES IN MUNICIPAL WARDS:

Intensive surveys have been carried out in Ward No.65(Old number 46) and Ward No.27 of Dhaka City Corporation to have some understanding about the community facilities they are enjoying.

In both of the wards it has been observed that there are many non-residential activities which are not required by the residents of the community and some of them are even deteriorating the environment. On the other hand there are many small business enterprises which provides job opportunity to the residents.

In Ward No.65, there are many government offices and semi-government offices like T&T Head Office, Government Guest House, Passport Office which are not for the resident of the ward, rather for the whole country. There are many clinics in which

patients come from the whole city even from outside the city. Following is the list of different activities in the ward. This ward is situated in new Dhaka its population is 25,944[8].

T&T Head Office	1
T&T Local Complain Office	1
PWD Local Maintenance Office	1
Local WASA Supply Office	1
Passport Office	2
Police Special Branch Office	2
Film and Publication Department of Government of Bangladesh Head Office	1
Local Power Distribution Center	1
Red Crescent Hospital	1
Government Guest House	1
Petrol Pump	1
Post Office	1
Community Center	2
Restaurants and Hotels	7
Metropolitan Police H.Q.	1
Metropolitan Police Officers Mess	1
Foreign Mission of USSR and China	2
Ware House of USA	1
Family Planning Clinic	2

[8] B.B.S. Small Area Atlas. Op. Cit. page 102.

Ration Shop	2
Girl Guide Auditorium	1
Mahila Shamity Auditorium	1
T&T Wireless	1
Book Stall	11
Shopping Center	14
Laundry	5
Barber's Shop	3
Tailor	4
Clinic and Doctors Chamber with drug stores	21
Studio	1
Pathology Laboratory	6
Bank	9
Beauty Parlor	2
Vocational Training School	2
High School	6
College	4
Primary School	3
Mosques	3
Temple	1
Play Fields	3
Private Offices	27
Engineering Workshop	4
Automobile Workshop	6

From the above list we can observe that there are many function located in the Ward which are not meant to serve the residents but for their present location the community is suffering from unnecessary traffic hazard and their residential character is also being effected.

Ward No.27 is located in old Dhaka. It has a population of 24,742*. It has been observed that the whole area is comprised of a mixed use of residence, shops and light industries. Ground floor of almost every building, specially the road side spaces are either shops or place for light manufacturing and other business enterprises. Following are the list of different activities other than residences, shops and light industries:

Bank	10
Barbershop	5
Hotel and Restaurant	20
Mosque	10
Police Station	2
Madrasa	2
Doctors Chamber with Drugs store	17
Library	2
Primary School	2
Community Center	1
Hospital	1
Community Organization	1

* B.B.S. Small Area Atlas. Op. Cit. page 102.

3.3. FACILITIES OFFERED BY DIFFERENT GOVERNMENT AGENCIES IN BANGLADESH:

With the aim of community development currently Government of Bangladesh is operating several programs these includes woman affairs activities, youth development programs, child welfare program and many others. To fulfil these objectives government have to set different strategies . These programs are sometimes carried out directly by different government agencies and sometime by encouraging and extending help to non-government organizations. The Government of Bangladesh have outlined its objectives and accordingly strategies for community development. Following are
the strategies according to different program[7]:

Strategies for Social Welfare Program:

i. Social services for children.
ii. Social welfare for physically and mentally handicapped persons.
iii. Welfare services for delinquents.
iv. Eradication of beggars through community organization.

---

[7] Final Feasibility Report. Integrated Urban Upgrading. Op.Cit. page II-14.

v. Social welfare by voluntary agencies.

vi. Care for aged.

vii. Social welfare in-service training

The basic strategies for woman affairs and activities:

i. Skill development training production centers for women.

ii. Provision of services for women.

iii. Children's program.

iv. Industries for women.

v. Attitudinal change program

vi. Scholarship and stipend program

vii. Establishment of a National Women's Council.

Strategies for Youth Development Program are:

i. Involvement of Youth in massive infrastructure building.

ii. Involvement in population planning.

iii. Involvement in training projects.

iv. Participation at local level through different youth organizations in road building, canal digging, land development, literacy drive and family planning education and motivation programs.

EDUCATIONAL PROGRAM:

Survey carried out by UNCHS/UDD had made it evident that literacy level and standards of education in the Study Area (Islambagh)are well below than other existing areas of Bangladesh[8]. Ministry of Education, Government of Bangladesh have under taken education program from two levels, one starts from primary education which enrolls children and other one is adult literacy program.

HEALTH PROGRAM:

According to a survey it was found that the project area, Islambagh, requires one Health Center to maintain their facility standard to that of Bangladesh. Existing medical facilities provided by DCC in Old Dhaka[9] are:

i. Outdoor dispensary facilities.

ii. Maternity center

iii. Family planning advice from maternity center.

iv. Pre-natal and Post-natal health care at the maternity center

v. Child-welfare program

vi. Homeo - outdoor facilities

---

[8] Final Feasibility Report. Integrated Urban Upgrading. Op. Cit. page II-29.

[9] Ibid. Op. Cit. page II-48.

vii. EPI center - Immunization program

The main health problem of the project area are due to the lack of Primary Health care program, specially maternal and child health care program[10].

There are no existing social welfare program or primary health service facilities in the project area. Only some family planning field workers visit the project area occasionally.

Dhaka City Corporation is providing community facilities of different kind to the city dwellers. Among these following are the major facilities.

---

[10] Final Feasibility Report. Integrated Urban Upgrading. Op. Cit. page II-50.

TABLE NO. 12

Community facilities provided by Dhaka City Corporation.

Facilities	Number
Park	40
Community center	23
Gymnasium	12
Market	67
Health center	18
Maternity center	1
EPI center	6

Source: Dhaka City Corporation, 1990.

3.4. COMMUNITY FACILITIES REQUIRED FOR MUNICIPAL WARDS:

To develop a plan for community facilities it is important that different types of facilities require different size of population and support for making them feasible. However the inventory of the community facilities at the two municipal wards of Dhaka city gives us a picture of the type of the community facilities and spaces required by the communities at the

municipal ward levels, and these are summarized below.

1. Open Space:

Every community (municipal wards) will require different types of open spaces to match the demand of different age groups and activities of its residents. The major categories are:

Play lots	-	for children of pre-school age group.
Play grounds	-	for school age groups and adults.
Neighborhood park	-	for passive recreation of all age groups.

2. Educational facilities

The communities at the municipal ward level should include the following educational facilities.

Primary School

Secondary School

Libraries

3. Facilities for social welfare activities

These activities require some vocational training institute or some community building within the ward.

4. Medical facilities

These includes:

Primary Health Care Center

Clinics

Hospitals

5. Religious and other institutions:

Mosque

Temples

Community center etc.

6. Administrative center:

Municipal ward commissioner's office

Bank

Police outpost etc.

7. Markets and shops / shopping center.

3.5. PRIORITY FIXATION FOR ISLAMBAGH:

While selecting facilities and determining their extent for Islambagh we have to consider the population size and the socio-economic condition of the people. Any program we select for Islambagh must match its population size, which is 24,030 in 1985[11], and its socio -economic requirements.

---

[11] Final Feasibility Report. Integrated Urban Upgrading.

Op. Cit. page I-19.

Only those programs should get priorities at the initial stage of community development, which will have fast and widespread effect on social transformation of the community and on the other hand will be less expensive, so it can be affordable for the community members.

From the data placed in the second chapter we have observed that Islambagh is lagging behind the average development of Dhaka Metropolitan area and in some cases from the national average, such as in education, primary health condition, income and other community facilities. Accordingly the following items should get priority:

- Market
- Open space
- Facilities required for social welfare program
- Facilities required for educational program
- Facilities required for primary health care program

3.6. GROUPING OF DIFFERENT COMMUNITY FACILITIES:

Grouping of different community facilities have great merits. Through grouping it can be possible to provide wider variety of

facilities on less acreage and at a lower cost than required for separate installation. But all types of facilities can't be placed at one single site because they might need or create environment which are contradictory to each other.

Therefore, the facilities required for Islambagh can be divided into two or three groups. The market should be placed in a separate location. Social welfare facilities, educational facilities and primary health care facilities can be located in one site. For this purpose a multi-purpose community center can be built, so that resources invested will be utilized to the maximum extent. The open space which will include play lots, play fields, play grounds and neighborhood park can be combined with the community center. But in Islambagh such a large plot is not available, therefore, the community center will be separated from the play field and play ground, but the play lot can be integrated.

3.6.1. Market:

Due to the lack of a proper market place in Islambagh at present the vender and shop owners occupies the roads to satisfy the demand of the residents. A central market place is required to substitute the existing practice. It should be preferably located at a edge of the community.

3.6.2. Open space:

It includes playlot, playground and neighborhood park.Play lot for the pre-school children which is preferred to be located with the community center, where schools and other social welfare programs are also located. On the other hand the play ground and the neighborhood park can be grouped in one location.

3.6.3. SOCIAL WELFARE PROGRAM:

Improvement of the socio-economic condition of the people of Islambagh should be the basic objective of the social welfare program. The objectives of the social welfare program should be:

- To raise the community's awareness about the existing problems
- To suggest ways and means to solve those problems through organizations, community groups and activities.
- To undertake skill training program to increase income generating activities and make the community more independent and self-reliant.

A. Women activity program:

Women activity program should involve women training, child minding and educational aspects of family planning.
Initially the participants of these program will be provided

only with those training which they can use immediately for productive purpose.

The training program should be such that those women who have taken training could produce goods which have immediate market e.g. food, garments etc. After these goods are sold a part of its profit should be returned as training fees.

B. Skill training for women:

This program is undertaken to help the women to participate in production and ultimately income generating activities. Initially these programs could be started as an extension program of Mothers Club. But when sufficient number of women will attend the training sessions it could run independently. Later, these women should be encouraged to form co-operative business organization to operate their own enterprise and become independent and self-reliant contributors to their family income.

This program could include projects like the followings:

- sewing, dress making etc.
- embroidery
- weaving
- mat making/basket making
- knitting

- children's toys
- baking cakes and food preparation etc.

C. Youth development activities and training:

The target group of this program will be the unemployed youth and illiterate youth in the community. Firstly, those who are not educated or poorly educated would be enrolled in the educational literacy program. Those who are literate but unemployed would be involved in the youth training program to develop useful skills.

To provide information on practical issues such as house-building, health care and personal hygiene, financial matters and scientific matters. Educational evening classes would be held at the community center, these are also a part of educational program. These all training and educational program should be in simple and practical terms to suit the educational capacity of the participants.

3.6.4. EDUCATIONAL PROGRAM:

Educational program must be designed in such a way so that it can cover both the children with school enrolment age and those adults who did not get their schooling in their childhood. Therefore, the educational program should have two aspects one is primary educational program and adult literacy program.

A. Primary education program:

It has been observed that primary education level at Islambagh area is far below than that of the national level. In 1985 primary school enrolment rate in Islambagh was 24.40%. This rate is approximately 8.50% and 25% lower than those of Dhaka City Corporation and the national average respectively[12].

Therefore, if it is to increase the enrolment rate equal to the national level, project area will require 3 primary school and to achieve the Dhaka City Corporation level in 1995, 2 primary school will be required. One primary school will be established at Islambagh. If this school can be integrated with the community center its capacity can be raised without increasing its capital investment. The school will run in two shift.

B. Adult literacy program:

Adult Literacy Program for the whole country was undertaken by the Government of Bangladesh in 1980 with the objective to provide education for four crores of out-of-school youths and adults. The conception was based on using voluntary and religious organization, secondary school students and teachers. The aim of

---

[12] Final Feasibility Report. Integrated Urban Upgrading. Op.Cit. page II-34.

the project was to teach illiterates simple reading, writing and arithmetic.

This program will be a self-help program. Therefore needs very wide publicity and motivational drive. Large benefit with little cost can be achieved if handled correctly. All persons who are illiterate and within the age group of 11-35 will be identified and registered with the help of social workers, mosques and other community workers. Religious and youth group of the community will play the leadership role in forming the teaching group. During registration of the illiterate adults they will be thoroughly briefed about the benefits of literacy and opportunities it offer and informed that teaching is free of charge and available in formal and informal manner outside working hours[13].

3.6.5. PRIMARY HEALTH CARE PROGRAM:

Community health situation in Islambagh is not at all satisfactory. The health situation of the project area conforms more or less to the general condition of Bangladesh which is as following[14]:

---

[13] Final Feasibility Report. Integrated Urban Upgrading. Op. Cit. page II-34.

[14] Ibid. Op.Cit. page II-50

- Infant mortality rate : 120 - 140 per 1000
- Child mortality rate : 0 - 4 years = 220 per 1000
- Maternal mortality rate:5.7 to 7.1%

These high mortality rate made it evident that only through taking preventive measures the health situation of the project area can improve drastically. The principles laid down during the conference on Primary Health Care in 1978 in Atma Ata seem to be very appropriate for Islambagh. The basic principles are[18]:

- Provision of education on prevailing health problems and method of preventing and controlling them.
- Adequate food supply and promotion of proper nutrition.
- Adequate supply of safe drinking water and basic sanitation.
- Maternal and child health facilities including family planning.
- Immunization against major infections and childhood diseases.
- Prevention and control of locally epidemic diseases such as malaria.
- Appropriate treatment of common diseases and injuries e.g. diarrhoea, scabies, accidents etc.
- Provision of essential drugs through the health care system, private channels and traditional medical dispensaries.

---

[18] Final Feasibility Report. Integrated Urban Upgrading. Op.Cit. page II-51

Among the above principles, supply of adequate food and promotion of proper nutrition will probably be over ambitious for the project at the initial stage.

To provide all the services every day it will need large accommodation, which may become expensive and even extravagant. Therefore, each elements of Primary Health Program will run on different days, some of them will run every day such as Primary Referral Unit.

The major activities of Primary Health Care Program should be selected in such a way so that maximum change in health situation will occur in shortest span of time and at an affordable cost. According to these principle following activities are selected for Primary Health Care Program:

i . Primary referral unit - (PRU)

ii . Preventive care - Immunization of:
- Polio myelitis(Polio)
- Tuberculosis(TB)
- Diphtheria
- Whooping cough
- Tetanus
- Measles

iii. Prevention of blindness in children

iv . Health education

v . Family Planning

vi . De-worming

vii. Anti and Post natal care

With the increase of per capita income of the residents of Islambagh their affordability will also increase, in that situation more elaborate Primary Health care program will be undertaken such as nutritional program, aid for the disabled etc.

At the initial stage of development of the communities socio-economic condition, the development programs should be concentrated on those programs and projects only which will help the transformation of the society at the fastest rate, based on their own strength - i.e. those are affordable by themselves. Educational program, social welfare program and primary health care program are the basic requirements.

CHAPTER 4

REVIEW OF PLANNING PROCESS AND USERS PARTICIPATION IN THE PROVISION OF COMMUNITY FACILITIES.

4.1. REVIEW OF PLANNING PROCESS IN DIFFERENT COUNTRIES:

In this chapter the experiences of few projects from different countries are reviewed in order to gather an understanding about the role of users participation, in planning process in different scale, from the planning of a major transportation system and redevelopment of 120 acres of urban land in Boston and housing development in Cuba to a small housing project for low income people of Bangkok and upgrading of slum in Karachi. From the following discussion the possibility of users participation in planning process can be observed.

4.1.1. FRANCE:

Ministry of education of France appointed architect, Yona Friedman, to design a large secondary school, Lycee David, in

Angers, about 300 Km south-west of Paris.

The conception of the program and the design of the building was entirely done by the future users of the building, faculty, students and parents. The job was carried out step by step, as follows:

First, Yona Friedman was appointed by the Ministry of Education as the architect of the project.
Secondly,Friedman prepared a detail instruction manual for the users.
Thirdly, the pupils, parents and teachers used the lessons in the manual, individually and in groups, to prepare the program and to design the school.
Fourthly, the architect adopted their plan to the industrialized building system selected by the government agency.

4.1.2. SWEDEN:

In 1973-75 a small residential community; Klostermuren, was built near Goteberg, Sweden's second largest city. The community is about 5000 m², 12 families took part in this project, they varied in size from two person per household to five person per household. The houses are different in size and

design. The size varied from 112 m^2 to 151 m^2 of living space.

The Klostermuren was an experiment, carried out by university and government, which involves site selection and means for involving families into the development process, design methodology and enabling the participant to calculate the cost. Klostermuren's goal was not only housing, rather creation of a community. As the architect Johannes Olivegren says,

"As soon as we build for more than one person, we build a community. What methods and tools do we have for building such a structure? Nearly none. We've attempted to build a social structure with houses, streets, and infra-structure, rather than with people ..... "

The process of building community by keeping the people aside didn't produced good social community. So the architect tried to create a social process which will bring the people together in a new relationship and living pattern.

4.1.3. CUBA:

After the revolution in Cuba, the new government faced the challenge of providing housing to its people, they had to fill

up the deficits accumulated in the past. In 1966 initiative were taken to develop method of construction which will involve local communities through popular participation. As a result in 1970 the concept of microbrigade was materialized. Each microbrigade consists of 33 workers. This group can complete 30 apartments in nine months time. The composition of the labors were heterogeneous and only few of them had a background of construction. Though the building types were standard for the entire country, the presence of architects in all the microbrigade construction sites has permitted the introduction of variation on the original model, some of these were introduced by the architect and some by the workers.

The concept of microbrigade is that each production center will keep up its full production with a reduced number of worker. Then these extra workers are engaged in the formation of microbrigades. These microbrigades are given the task of housing construction.

In Cuba the objective of housing projects was not only dealing with the technological problem, but here it has to play a central role in the transformation of the entire society. Architecture have to create space which must be culturally and functionally significant for the new, integrated human being.

Here one is dealing with a social and human problem. The problem

which affects millions of inhabitants of the Third-World, whose sub-human condition is a result of prolonged cruel exploitation. The creation of culturally significant human settlement first requires a social revolution. This is why participation of the masses in the development of their own environment is so important.

4.1.4. U.S.A:

In Boston, U.S.A. a project was taken to build a link in interstate highway system, Southwest Corridor Project (SWCP), which would have required to remove a number of Boston's neighborhood. After years of protest followed by participation of 15 years the implementation started. But instead of highway the plan consists of mass transit, job development, community revitalization and an extension of Boston's famous "emerald necklace" parks.

The right to participate in Southwest Corridor project was not freely given rather it had to be won.

In 1966, the Massachusetts Department of Public Works started to relocate the families and demolition of houses and businesses that stood in the path of the proposed highway. Following this the citizens started to become organized and demonstrations were

carried out. In 1970 governor of the city declared moratorium on the design and construction of the project. In 1973 the governor appointed a Southwest corridor coordinator and established a Southwest corridor project office, with this begins the public meetings for discussion of the reuse of the corridor. A memorandum of agreement was signed for formalizing community participation, an integral part of Southwest Corridor Development, between the public officials and by numerous representatives of community organizations. After the agreement environmental impact analysis were carried out. Public meetings held and the community members and public agencies helped Massachusetts Bays Transportation Authority (MBTA) to select consultant for design.In 1980 SWCP station and landscape final design was completed and in 1982 construction work started.

Community participation process was organized in different levels. Three Neighborhood Committee was formed section-wide. Their topics of discussion was mainly construction scheduling, system-wide budget, park design, standards of station etc. Then comes Station Area Task Force (SATF). SATF were formed for each of nine station of the new Orange Line. Every residents, business people and agency personnel were allowed to become a member of SATF. Those who live or work in quarter mile from new Orange Line were eligible to be a member of SATF. SATF gave advice to the MBTA about station character, landscape design and community development opportunities. Other than these SATF and

Neighborhood Committees, some sub-committees were formed to deal with specific or local issues.

Because the scale of the project was very large, so a wide range of techniques had to be developed for making the community participation a success. The community participation technique includes News Letter publication, SATFs notebook, Handouts, Wall graphics, Slides and Models. The community influenced the design from the large scale to the details

The main positive side of the community participation is that they learned about how a community can exert influence on public policy and that they have a right in planning decision.

82.80.28

4.1.5. THAILAND:

Some members from academic organizations, non-government voluntary organizations and government agencies of Bangkok were united to explore ways and means to assist low-income people in securing housing facility through a process of community building.

This group realized that a structure is necessary to channelize peoples effort to produce some result through mass participation. Therefore in 1978 Building Together Company was formed for a

non-profit basis operation.

Building Together Project have three fundamental objectives: Shelter, Community and Self reliance. Self-reliance can be achieved by increased understanding and awareness about the common problems, and developing confidence by solving those through individual and common accomplishments. A healthy community is built by the process of working together and making decisions together.

The project is divided into three phases:

1. Site development by outside contractor.
2. Mutual aid construction of basic houses.
3. Self-help completion of houses and construction of community project.

In large communities it is not possible or it becomes difficult for everybody to build together. Therefore, people are divided into small working groups and each group builds their own cluster of houses. People participate more spontaneously ih smaller group.

4.1.6. PAKISTAN:

The people of Orangi, near Karachi, have demonstrated a success

of the peoples participation in planning, execution and direction. It was the large slum of Pakistan. Upgrading of sanitation and sewerage was successfully completed by the dwellers. The construction of water, sanitary and other facilities were carried out with the labor, money and materials mobilized by the dwellers. Only the technical assistance was provided by the government.

4.1.7. BANGLADESH:

In July 1980, Sthapati Sangsad Ltd., a consulting firm was appointed by Dhaka Municipal Corporation to prepare a plan, for the community center at Ward No. 3. After carrying out an investigation about the design process it was found that the process was as described in the following:

In 1980 a tender was called by Dhaka Municipal Corporation inviting consulting firms to submit design proposal for the community center at Ward No. 3 of Dhaka Municipality. Then from the participating firms Dhaka Municipal Corporation selected Sthapati Sangsad Ltd. as their consultant for the proposed project. Later Dhaka Municipal Corporation and Sthapati Sangsad Ltd. signed an agreement deed.

From the document and interview taken with consultant and Municipal Corporation it was found that the requirement of the project was set mainly by the consultant with some minor change about the details by the Dhaka Municipal Corporation. No evidence were found about involving the residents of the area or carrying out survey to determine the requirements of the residents of Ward No. 3.

After approval of the preliminary design and estimate by Dhaka Municipal Corporation the consulting firm prepared detailed plan, design and estimate of the projects.

4.2. MAIN ISSUES OF PLAN MAKING PROCESS:

At present the demand for building and the actual amount of construction are many times higher than ever before. But what is observed is the continuously increasing gap between the desire and achievement, the housing deficiency, spreading deterioration of cities, the environmental degradation. The problem lies not in the material needs only, it has its social and psychological aspects - the communities are breaking down, people suffering from alienation.

In such a situation where established trends of architecture and

planning is just reflecting and contributing the existing situation, all over the world there is a new idea gaining ground - peoples participation in building their own environment.

The process which involve the user in designing and developing their environment will have to deal with the following four intervening issues. These are:

i. Formation/Building of design team to ensure user's role in design and planning.
ii. Working procedure of the design team.
iii. Recovery of cost to sustain the replicability of the project.

According to the socio-economic condition of different community and the prevailing physical facilities, the above mentioned issues will have different dimension and configuration. Some projects which involved the user's in different phase of its development are discussed in the following in context of above issues.

4.2.1. DESIGN TEAM:

The structure of the design team depends on the socio-economic condition of the community, prevailing political and

administrative condition of the country and character and extent of the project. Therefore experience will vary accordingly. In Anger's, France, the secondary school at Lycee David was designed by the user's. Here the architect was turned into a simple technician assisting the future user's work. The planning team was built with the teachers, students and parents. As the work of user's designer proceeds they formed four "mini-lycees", small groups. Each group according to its own conception of pedagogy designed their own mini-lycee. A special group was given the responsibility of coordination of plans made by different smaller groups. No user can represent a group. Each individual can only represent himself or herself.

"Building Together", was a mutual aid project for housing for 140 families in Bangkok. For the inherent convenience of working in small group these 140 household were divided by lottery in cluster groups of 16 to 20 families. After going through intensive education course each group identified a group leader. Skilled participants, carpenter and masons were equally distributed among the clusters. This was essential because each cluster were again divided into smaller groups, each specialized in one or two task and was assigned for the same. Joint Community Committee was created, comprising two elected members of each cluster and member of project staff.

At Klostermuren, in Sweden a residential community was designed

by its future residents. Architect Johannes Olivegren initiated this project as an experiment of his design research project. His intention was not merely providing housing, rather a creation of a working community. 12 families were selected for this project. The houses were organized in four groups, each group consists of three houses. Individual family designed their houses and discussed with their next door neighbor to conform with each other. Each group had a group leader.

The Southwest Corridor Project of Boston, U.S.A. is the result of 15 years of active peoples participation. It involve the public in design, engineering and construction of a major transportation system and urban redevelopment of about 120 acres of land.

For the convenience of planning and design the corridor's length was divided into three sub areas or sections. One Section Planner was employed by each design firms and served as a primary liaison between the project and the community. To make community participation effective and efficient for such a large community a structure of several levels had to developed. For each of three section, three separate Neighborhood Committee was established . Under these Neighborhood Committee there were a number of Station Area Task Force (SATF). Each SATF was assigned to advice the Massachusetts Bay Transportation Authority (MBTA) about their corresponding stations design,

landscape, community development opportunity etc. Membership of SATF was open to all residents, business people and people who live and work in a quarter mile from new Orange Line and the area served by the new Station. Other task forces were formed as Sub-Committee of the Neighborhood Committees or SATF to deal with specific issues. Each station had one station Architect.

4.2.2. WORKING PROCEDURE:

The main problems which the user's design team commonly faces during their design process is the procedure of working together of different technical and non-technical individuals. The problem has two aspects :

(a) Language

(b) Participation techniques.

(a) LANGUAGE: If the environment conceived by a plan approaches close to the imagination of what the future user have in his mind, it will make a satisfactory architecture. Therefore, to materialize the image of the future user in real term will only become possible when the user will be able to communicate his or her image to those who will elaborate the final plan. Good communication between user and designer is the key to successful architecture. Here lies the importance of a language which both

the groups will understand, the user- designers and the technical persons.

The out come of every plan will have some user. These future users have some definite requirements which the outcome of the plan have to fulfill. The nature of the object or output the users wants is well known to them. If these users were given the responsibility of materializing the object they would have make the compromise between their image and the obvious difficulties to achieve them in the most favorable term. But when the responsibility of materializing the object is given to some other person the future user faces the problem of communication. This almost unsolvable problem of communication is inherent in this sort of design process. If any of the partners involved in this communication masters the language used, whether the language is verbal or non-verbal or both, the stronger partner will manipulate the weaker one. Where there are many partner involved the designer who is usually strong in language, will take on the role of arbitrator. He then justifies what he had in his mind. This manipulation can be avoided if all partners involved in design process masters the language to be used almost equally. To achieve this goal we have to develop a language which can be learned and used by all the partners easily and we have to exclude all sorts of "expert in design" who can manipulate the future users in designing the basic concept of the object. Therefore the future user should conceive and sketch the object

to be designed for their need,instead of approving and disapproving the design made and defended by a professional designer.

For design purpose in Klostermuren the architect prepared modular styrofoam blocks to aid the future residents in designing their house. Each module of styrofoam block was leveled with its approximate cost so that the families can design their houses with rough estimation.

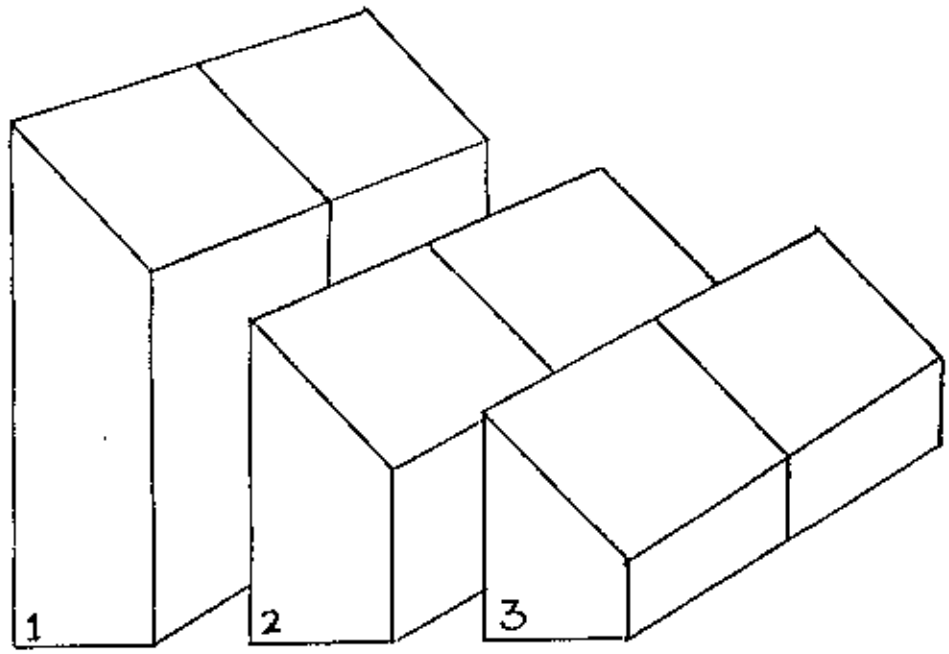


Fig.No.1: Modular Styrofoam blocks prepared by the architect, Johannes Olivegren.

Source : Olivegren,Johannes (1984). "How A Little Community is Born",in Hatch, C.Richard(ed.).
The Scope of Social Architecture.Vol.1. page 139.

This system also worked for solving the interior layout. With the help of styrofoam the families can check different alternatives by grouping and regrouping the pieces.

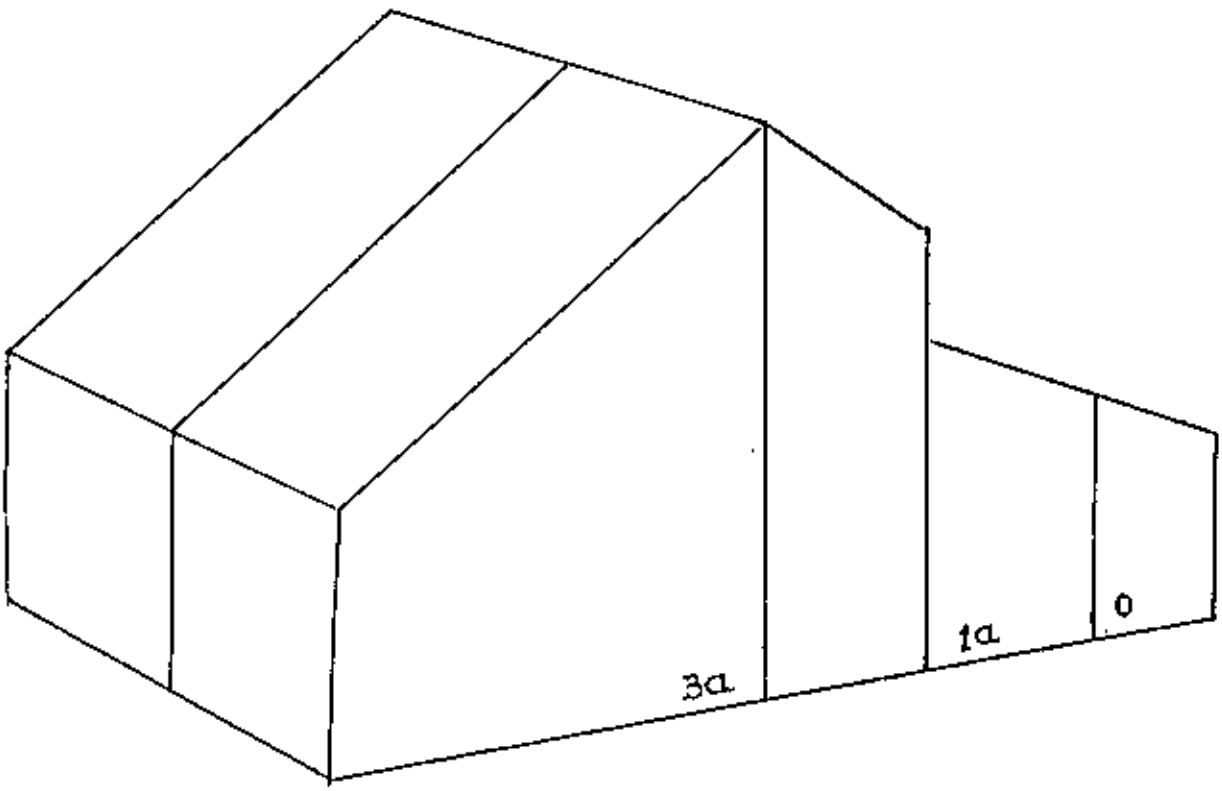


Fig. 2: Block Combine to Create different houses.
Source: The Scope Of Social Architecture. Op. Cit. page 139.

In Angers, architect Yona Friedman developed a language to establish communication between the User-designer and the architect for designing the secondary school at Lycee David. User design process requires an intrapersonal language for its one part and intrapersonal language for its another part. Any

architectural operation requires some fundamental steps and to create any language we have to recognize them. First specific area has to be designated for specific activity. Secondly, provision of access, direct or indirect, to the area designated, connecting it with all other parts of complex. And finally, assignment of appropriate functional descriptions to each designated area. According to these ideas Friedman established a simple notation corresponding to each operation.

* A Designated Area within the space will be represented by (.) a point.
* Any sort of access connecting two designated area will be represented by (--) a line.
* The particular functional properties of each designated area within the space will be noted in special labels.

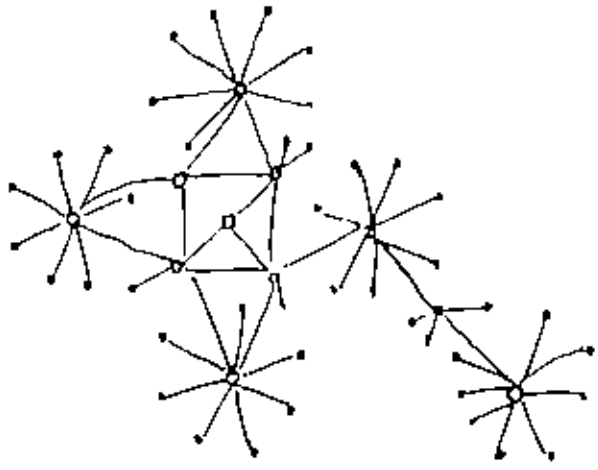


Fig. 3: Sample of a graph developed by user designers.
Source : Hatch, C. Richard(ed.). "The Scope Of Social Architecture".Op.Cit.page 150.

First the user designer's develop a graph to illustrate their conception of the schools organization. From their graph they created bubble diagram.

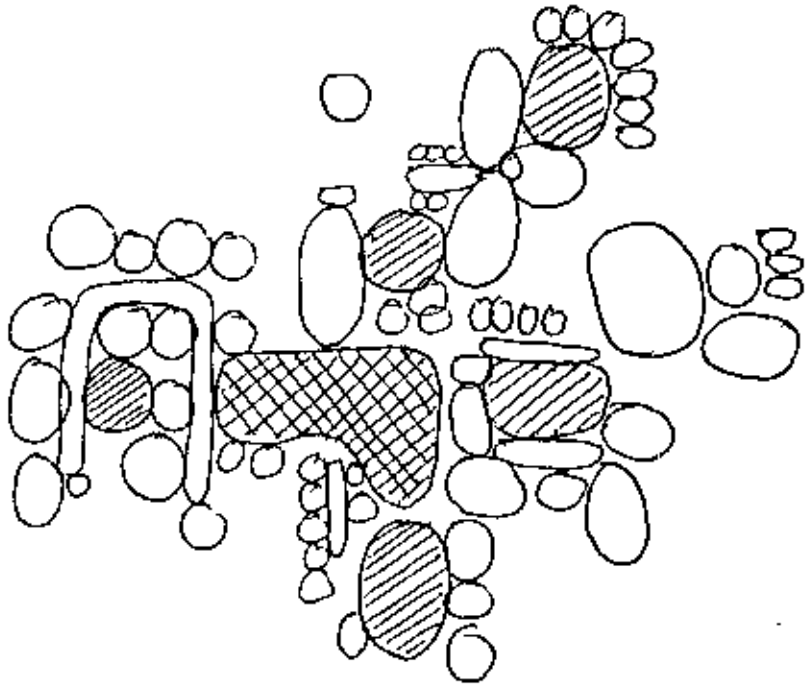


Fig.4: User-designer transformed their graph into bubble-diagram.
Source: The Scope Of Social Architecture.Op. Cit. page 158.

All these concept of user planning, graph making and the converting them into bubble-diagram were illustrated in a manual prepared by Architect Friedman.

From the bubble diagram and the graph the architect sketches his floor plans.

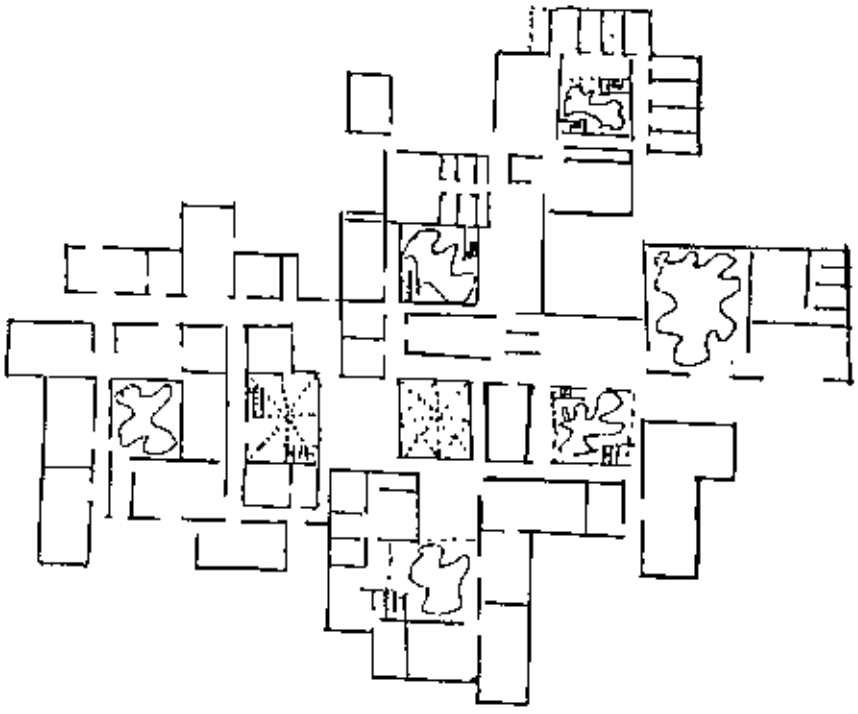


Fig. 5: The architect prepared his floor plan by using the graph and diagram as his guide.

Source: The Scope Of Social Architecture. Op. Cit. page 159.

(b) PARTICIPATION TECHNIQUES: The way user's will participate in the development of their environment depends on the type and extent of the project and the socio-economic condition of the user's, this is why participation technique will vary from project to project.

In Klostermuren, architect Johannes Olivegren had to develop new techniques and concept to help the user design team to work smoothly and efficiently toward the creation of a working community.

Firstly, the architect developed a pamphlet for all the participants, which describes seven simple techniques about the way of behavior participants have to follow during their work. These seven techniques are, introduction of each participant, round the group lecture, discussion when necessary, taking the opposing point of view, encouragement and taking someone aside to express his or her feeling.

Secondly, Professional Assistance, architects played an essential role as advisor or group leader.

Thirdly, the working schedule was divided step by step to ensure the users to complete their design work in time. The future users were taken for field-trip to existing housing areas so that the participant can gain an understanding about good and bad design.

Price-List are introduced to help the user-design to get an idea about the cost of their houses and the facilities they want.

To determine the forms of the houses in general, the House Design Procedure as a system was developed. For this process Styrofoam block of different shapes were used. It is not intended to represent prefabricated building unit. Yarn, paper cut-outs of utilities, stair case and furniture and styrofoam pin board are used in the Procedure for Interior Planning.

After the inspection of the site each family designed three different proposals for the overall organization of site. From all these site plans one was selected through careful review. Then each family chooses a site and made models of their houses. After making adjustment with their next door neighbors, total site, sunshine, vegetation the architect prepares the working drawing. The professional model builders completes the model and the contractor calculates the price. The contractors calculation are checked by the architect. Then after negotiation each family signs its contract deed with the contractor.

In Lycee David, the students, parents and teachers all together designed their school. All the teachers, pupils and parents were divided in four " mini-lycee". These groups designed their part of the school with the help of the lessons in the manual, developed by the architect. There were another group created to

coordinate the plan prepared by each small group. Then the architect translated their plan to the industrial building system, which was selected by the government of France. After this a series of meetings were held between the future users and the architect for working out the detail plans.

The cluster groups of Building Together Project of Bangkok select their group leader. The group goes to the building materials factory to produce the components for all the houses of the cluster. All the small groups in the cluster are given one or two types of work according to their training or specialization. Then each group executes its part of the job for all the houses. In this way individual families do not need to master all the skill necessary for house construction. After the completion of houses the group decides the allocation of houses to individual family. These cluster group builds together the basic houses only and gradual development of these houses are left for the individual family.

These cluster group are considered as the fundamental units of the organization of Building Together Project. Knowing each member by name is the determining factor of the size of these cluster. Tasks are assigned to individual family by cluster organization, they organize their own work and put social pressure on members to carry out their tasks properly. Clusters also have power to dismiss member who cannot participate

adequately in the building process. The Joint Community Committee takes major decision making responsibility. Committee reviews the project accounts and progress. The Committee members meet the staff on weekly basis to discuss emerging problems and to formulate solution.

SWCP of Boston involved a wide spread participation of the users, so they developed a structure of several tiers. Each level of the structure worked with other level of the structure.

The Neighborhood Committee meet periodically to review the design issues and to get informed about the project activities. Topics like construction scheduling or system-wide budgeting are discussed at Corridor Committee meeting. In the early stage of community participation corridor walks were organized to explore the ways of new transit line and its development issues. In the later stage SATF were created. SATF deals with the detail design aspect of individual station and advice accordingly to the MBTA. Special sub-committee were responsible to solve special issues of the total design. Such as the use of new deck over the tracks between two station etc.

The consultant and MBTA prepares alternative suggestion and these were placed in the meetings of the users. They always tried to take consensus, in some cases votes were taken.
To get information to and from the public this large project had

to take different steps. They published News Letters, whose circulation reached over 10,000 readers. They maintained SATF Notebook to bridge the gap about the knowledge of design process and techniques between the professionals and the community. These Notebook were mainly used as reference book. Handout were distributed covering specific points of immediate importance, such as meeting announcements. Wall graphics, slides and Model were used to add depth and clarity to oral presentation. Education program were taken for the young people 16-21 year old, so that they gain a deeper understanding about the project and can participate effectively.

4.2.3. COST RECOVERY:

Any government, specially in the third World Countries, have a great constraint of resource. There exist a large gap between the magnitude of demand and availability of resource. Therefore, the ability of the government to give subsidy is limited. So the question of cost recovery is gaining importance day by day.

Cost recovery is becoming a crucial issue in designing of project. It is because, replicability of any development project is very much related to the ability of cost recovery. Many projects which are aimed to provide urban facilities to the people have successfully recovered or recovering their cost. The Orangi Project in Pakistan and Nadi Program in Malaysia are

example of successful cost recovery. Slum improvement program in Madras has partially recovered its cost[1]. Recovery of cost from the users and beneficiaries is indeed a difficult task and sometime it is also not possible to recover cost fully from them. So, different measures are taken. One way of reducing the cost of project is to introduce self-help, mutual help and community participation[2]. Cross-subsidy is also an efficient measure to recover the cost. Raising income generating activities which raises the affordability can help cost recovery program. Orangi project of Pakistan is an example of successful community participation. In Colombo Slum Upgrading project one stand pipe for water supply was provided for 20 household. This standard was even lowered in Bombay where 30 to 40 households were provided with one communal tap[3]. There are the example of keeping standard low to make it affordable and make cost recovery a success. In Building Together project, Bangkok 15 middle-income shop-houses were built for open market sale. The surplus from the each of shop-houses are expected to cover the cost of infrastructure[4].

---

[1] Upgrading A Slum Settlement in Dhaka. Op.Cit. page 46

[2] Ibid.page 39.

[3] Ibid. page 50.

[4] Angel, Shlomo and Vovramtnchaiphan, P.C.(1980)."Erecting New Neighborhood on the Principle of Mutual Aid" in Swan, Peter. J.(ed.)."The Practice of Peoples Participation: Seven Asian Experiences in Housing the poor".HSD Seminar Proceeding. p177.

CHAPTER 5

PLANNING OF COMMUNITY FACILITIES FOR ISLAMBAGH:

5.1. INTRODUCTION:

Throughout the world, users participation in planning process is gaining support every day. But it is a new concept in our country. Therefore, fresh approach have to be taken in different development agencies. Appropriate organizational structure and financial policies have to be developed. For these Government will require new rules and regulation. The new organizational structure should support users role in planning, and financial policies should help to benefit maximum people with minimum subsidy.

To implement an users planning process through effective management a general model would include the following components, with considering the above mentioned pre-requisites.

A. Determination of planning standards and design criteria.

B. Users participation in planning community facilities for Islambagh.

C. Financial policy.

5.2. DETERMINATION OF PLANNING STANDARDS AND DESIGN CRITERIA FOR COMMUNITY FACILITIES AT ISLAMBAGH:

The socio-economic and physical condition of a community are the major factors in determining the standards and design criteria for its community facilities. Income-profile of the residents of Islambagh shows that majority of the population comes from low income group. The standards should be economical, realistic and financially feasible. We must try to make the project pay for itself with minimum subsidy. Standard have both qualitative and quantitative aspects.

5.2.1. PLANNING STANDARDS:

The standards for the community facilities for Islambagh are discussed below:

A. MARKET: A space should be provided in the central part of the community for construction of the market. The market should include shops, restaurant and some open spaces for vendors. The shops will be of two kinds, some of them will be open plan and others will be closed. The market should be placed in such a location that the distance of the farthest house from the market

is not more than half mile. It is desirable that for about each 200 population or 40 household one shop is provided, this is found rational for many neighborhood planning schemes[1] .Therefore about 120 shops will be required for the Islambagh community.

B. OPEN SPACES: The open spaces for Islambagh should include play lot, play ground and a neighborhood park. The play lots are for the children of pre-school age. Their radius of service is from 1/8 mile to 1/4 mile. One of the play lot should be combined with the community center. Their size should be around 2500 square feet each. The play ground and the neighborhood park should be preferably grouped together, so that the open spaces in the park can be used for informal games. The minimum size of the play ground is recommended to be about 3 acres and its radius of service is from 1/4 mile to 1/2 mile. Neighborhood park is required for passive recreation of all ages.Its radius of service is about 1 mile and its size should be about 5 acres.[2] Due to lack of open space the size of the neighborhood park and the playground have to be reduced, and these facilities should be considered as a part of school. Riverside embankment have to be designed as a neighborhood park. The play grounds size should be minimized to the size of a football field.

---

[1] Brown, A. J. and Sherrard, H. M. (1951).
Town and Country Planning. Op. Cit. page 250.

[2] Ibid. Op. Cit. page 151.

C. PRIMARY SCHOOL: Location of the primary school should be such that the farthest house from the school is not more than 1/2 mile. For each 800 pupils one primary school is required. Maximum 1200 pupil can be served by one school. The minimum size of a primary school should be about 3 to 5 acres, which includes the school building and playground. At Islambagh due to the lack of land, play field have to be separated from the school building site. The school building and the play ground have to be located separately, though it is not desirable. The school building and the play lot will be located within the community center and the playground at another location, serving both the school and the community demand.

D. PRIMARY HEALTH CARE CENTER: The Primary Health Care Center should be within the walking distance from each house. It should provide services in its simplest form. Therefore,it will require a waiting room, consulting room, few emergency admission facilities etc.

E. SOCIAL WELFARE CENTER: The center should be within walking distance of the residence. The center will need classrooms for conducting training programs for women and youths, hallroom for group discussion and other social activities, and auditorium for recreational performance, reading room, toilets etc.

Standard for planning of urban community facilities are illustrated in the following diagram.

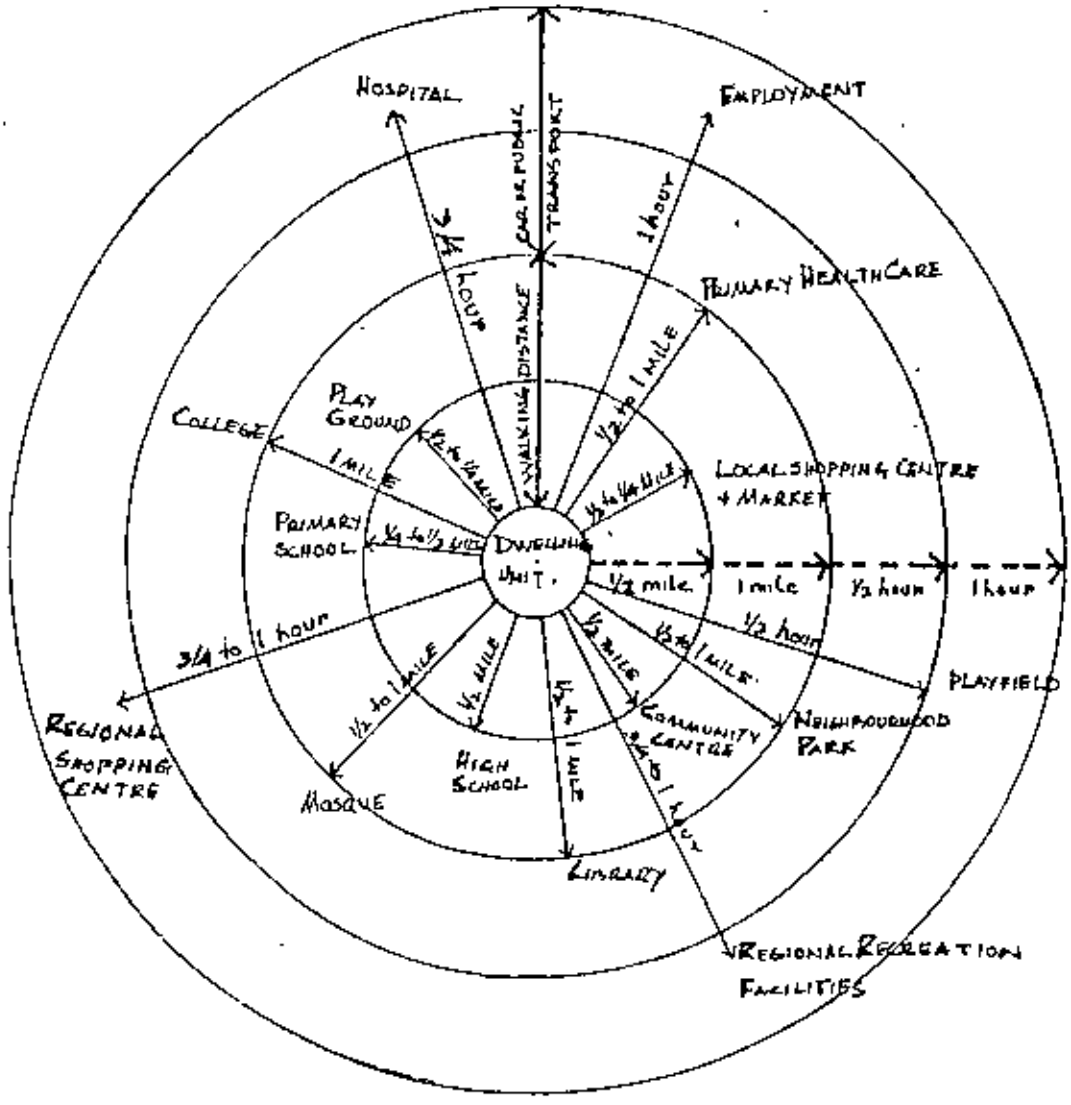


Fig. 6: Maximum distance for community facilities.

Walking distance is measured in miles. Car or public transportation is measured in time.

5.2.2. SITE SELECTION:

The whole area of Islambagh is densely built. There is almost no vacant land inside the community except the Idgah and some stagnant water ditches and a park on the east side of the project area.

There is no large vacant land to accommodate all the community facilities at one location. Neither it would be very rational to provide different types of activities together by one location. Therefore, we have to group different facilities according to their nature of activities and nature of spaces they require and administrative functionality. Considering these, educational program, social welfare program and primary health care program would form a group whereas markets, play field etc. will be located on other areas.

The Idgah have to remain for the existing purpose. While the ditches can be filled and reclaimed by using mix of garbage and river sand. But this will need time for the land to be consolidated enough for building construction, therefore initially they can be used as play ground and market. The existing park area, which is in fact just a left over open space, can be considered as an appropriate site for the community center.

5.2.3. SPACE ALLOCATION:

The community center will provide space for three types of programs, that is social welfare program, educational program and primary health care programs. Each of these programs will need such space that they can be used for running other programs, some may be used with modification and some spaces will be such that they can't be used for other programs. Now let us analyze some spaces.

For Primary Education and Adult Literacy Program we will need number of classrooms, staff room, library, administrative area, toilet and children play area etc.

Social welfare program will need class room for conducting training programs for woman and youth. They will require spaces for group discussion and activities, these spaces have to be larger than the class rooms.

For Primary Health Care program we will require a room for the doctor, a room for registration and records, a room as dispensary. Separate spaces will be required for immunization and deworming.

For emergency anti and post natal care some isolated area must be kept. To conduct health educational activities such as class

and seminar, where many participants will meet together, large spaces will be required.

From the above discussion we can observe that each of the program will require some spaces which are identical, such as the class rooms can be used for conducting the class of educational program and primary health care program, for training program, for training purpose of social welfare program. A community hall or a courtyard can be used for group discussion and activities of social welfare program, seminars and group discussion of primary health care program and play area for the children of the school. The class rooms can also be used as working place for the women and youth of the social welfare program.

In the present system of the Government of Bangladesh there is a problem that more than one agencies are running similar program, trying to achieve the same goal. This results in use of more resources than what is really needed to achieve them. Such as family planning program are dealt both by Ministry of Education, as a part of educational curriculum and by Dhaka City Corporation as a part of Primary Health Care program.

Therefore an integrated effort to achieve the goal of providing community facilities is required. A joint approach should be taken by different ministries and Dhaka City Corporation. An

integrated design of the school building and the Community Center should be developed with the aim of creating spaces for multiple use.

5.2.4. TECHNOLOGY:

The construction technology should be such that it helps the overall integrated upgrading program of the community which is based on community participation. Therefore, the technology must maximize the value added by the people themselves, so that high quality and low cost can be achieved.

While determining the construction technology we must not consider the economic aspect only but also its social achievement. Technology which supports the mutual aid construction must get priority because it will help to build a self reliant, working community based on trust and unity, generated in the process of working together and making decision together.

The building materials should be of semipermanent type like wood, pre-cast columns, C.I. sheet etc. So that it is easily conceivable and easy to construct by the community member, specially by the members of the Design Team.

In the design there should be provision for extension and alteration. The space should be designed in such a way so that they can be changed into different forms and sizes to match various requirements.

The partition walls must be easily removable, so that small spaces can be turned into larger one and again large rooms into small one, as and when required.

The total arrangement of the building and its structure should allow future extension and alteration according to the growing need of the community, which is hoped to be transformed into a better socio-economic condition.

While determining the standards and other criteria for designing the community center we must give emphasis on its future maintenance. The building should be constructed in such a way so that its maintenance cost is minimized at the same time the community members must be able to carry out most of the maintenance work. To fulfill these objective it is important to select those technology where the community participation is maximum.

5.3. USERS PARTICIPATION IN PLANNING COMMUNITY FACILITIES FOR ISLAMBAGH:

While we select the standards and technologies we must remember that the question is not only technical or mere economical, it is also equally social aspect which must play its role.

Therefore, users planning is advocated because it is expected that this planning process can reduce the errors that is introduced in the design because of the gap between the users image and those who materialize the plan, and the next thing is that the users planning can remove the alienation of the urban dweller of the present cities.

The basic concept of user planning is concerned with the formation of design team involving the local people (users) and the development of working procedure for the design team with the technical personnel of the local authority.

5.3.1. DESIGN TEAM AND USERS PLANNING:

A design team have to be formed with the users and other technical and administrative personnel. The main objective of formation of this design team is to materialize the conception

of users planning a success. The basic concept of user planning does not implies a procedure where future users can participate in architects work, rather it makes the architect into a simple technician assisting in the future users work.

This Design Team will work under the direct supervision of Dhaka City Corporation. The Design Team will be comprised of several "Design Groups" each dealing with separate issues (e.g. market, school, open space, health center, social welfare center etc.) and a "coordination group" and a "Technical Committee".

DESIGN GROUPS:

Various "Design Groups" will be formed to prepare plan for different facilities and programs, such as --

a. Design group for Market Facilities
b. Design Group for Educational Facilities
c. Design Group for Open Space
d. Design Group for Health Facilities
e. Design Group for Social Welfare Facilities

Function of Design Groups: Each Design Group will be responsible to prepare plan for individual facilities according to the

activities undertaken as a part of the community development program. Plan should be prepared in a way to match with that of other design groups, so that the space created can be used for multiple purpose. They will work in close collaboration with the Co-ordination Group and the technical committee.

Organization of Design Groups: Each Design Group will be formed from the representatives of the following categories:

- Representative from the residents will be taken as member of the group. Both owners and the tenants will be the members. They will help to identify the problem.
- Representative from the professional groups of the locality will be selected as members of each design group. They may be businessman, traders and buyers for the Design Group of market facilities; teachers, senior students and guardians for educational facilities; doctors, nurses, and paramedics for health facilities; different professional persons for social welfare facilities and open spaces.
- Representative of different community organization and philanthropic organization working in the community will be selected as member of the group.
- Skilled person in construction industry from the community will be selected as members of each design group, such as mason, carpenter, electrician etc.
- Members of the group will select their group leader from

themselves.

CO-ORDINATION GROUP:

The function and organization of Coordination Group will be as follows:

Function of coordination group: The main task of this group will be to coordinate the plans made by each design group. They will also maintain communication between the Dhaka City Corporation and the Design team. They will coordinate the plan with the policy set forth by the City Corporation.

Organization of Coordination Group:

- Representative from the city corporation of the city will act as convener of the group:
- ward commissioner of the area will be member of this group.
- group leader of each design group will be a member of this group.
- head of the technical committee will be a member of this group. He will maintain communication between the Technical Committee and Co-ordination Group.

TECHNICAL COMMITTEE:

The function and organization of the Technical Committee is discussed below:

Function of the technical committee: Assisting the future users design process, in technical aspect, is the main task of the Technical Committee.

They will prepare the construction plan or working drawing from the plan developed by the Design groups.

They will be responsible for preparing the estimate for alternative design developed by the Design Team.

The most critical job of this Technical Committee is to demonstrate and explain the Design group and the coordination group the working procedure of the Design Team.

Organization of Technical Committee:

- Group leaders of all the Design Group will be the member of the Technical Committee.
- Representative of Dhaka City Corporation who is the convener

of the coordination group will also be a member of this committee.

- Technical representatives from the city corporation and appointed consultants such as planners, architects, engineers, economists, estimators etc. will be the members of the Technical Committee.
- A planner who is also the member of this committee will be the head of this committee.

DG - Design Group

CG - Co-ordinating Group

TC - Technical Committee

DCC- Dhaka City Corporation

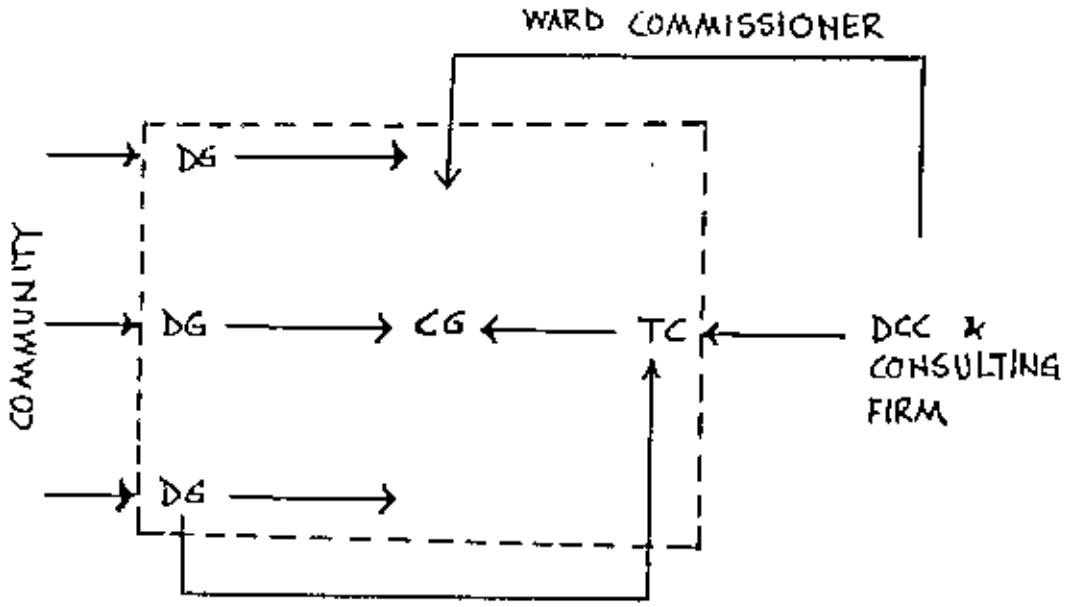


Fig. 7: Structure of the Design Team.

5.3.2. WORKING PROCEDURE:

The Design Team for Islambagh community center must have a language to be used by the members of the team to make the

design process work. And another aspect of the working procedure is establishment of techniques of participation of the representative of the community and other groups involved. That is why we have to develop a participation technique.

A. DESIGN LANGUAGE:

The educational level of the residents of Islambagh is very poor. Most of the population are from labor class, accordingly their economical condition and educational attaintment is very low. Therefore we have to develop a language for them which they can easily understand and use.

Requirements of the language: The language which the members of the Design Team will use for their design process must fulfill some requirements to make provision for all the partners to play their due role. The requirements are:

- The language must be able to define the location of different spaces with respect to other spaces in the design and connection between different spaces. This part is important during the negotiation of possible trade offs.

- The language must also be able to describe the properties of

spaces. Such as its size, shape, quality of light etc. This is required for developing the desired image and evaluating the trade-off.

- The elements of the language should comply with the users educational ability.

- The language should be such that the future users can prepare the basic design by themselves without being manipulated by experts and at the same time the experts should get their due scope to assist the designers to prepare the final working drawing or plan.

Notations and their corresponding operation: Any design process can be divided into some sequences and they are or can be represented by notation and models according to the language used for the process.

For developing the language,that will be used by the user designer, the whole design process is arranged in following order and corresponding notations and models are developed.

- For specific activities specific areas are designated. Each of these designated area is a part of the total space and they will be represented by a point(.).

- Every designated area needs an access and they should be connected with other areas within the space. Any means of access connecting two designated areas will be represented by a line (-).

- Each area designated must have appropriate functional description. Properties of each area according to the function will be noted in labels.
  With the help of the above mentioned notation planner graph will be prepared according to the requirement. Then the user designers will transform their planner graph into bubble diagram.

- At this stage the designer will sketch a plan in scale and make styrofoam block representing unit areas or rooms in three dimension. This will help the user designers to play with the alternative arrangements of spaces in same level or in different level.

B. PARTICIPATION TECHNIQUES:

In the design process participation will take place at different levels, the process should involve the whole community.Techniques for working together successfully have to be developed for

partners at different levels. They are:

- between the members of a same Design Group.
- between the Design Group of the Design Team.
- between the Design Team and rest of the community.

Between the members: To make the working process smooth between the members of a design group, some concepts and techniques are outlined below:

- Introducing each member:Every member will introduce himself or herself and inform other members about his or her interest, what kind of support he or she can offer and what kind of help is expected.

- Discussion: Each member will be given some amount of time to talk in the beginning. And then everybody will be given equal number of time to talk.

- Always try to avoid majority decision. It may be often unfair to the minority. Try to seek consensus.

- When two party are locked in their attitudes they will take opposite point of view and talk. This will help to become less one-sided. Harsh comment and criticism should be avoided.

- People working together contribute different shares to the

common effort. Some may be weak, some too busy or less interested to contribute fair share. On the other hand some are more diligent than other. These can hamper a balanced development of the design. Therefore, sanction will be used to check the slacking members. Any member of the Design Team can be voted out, if required.

Between the groups: Each of the three Design Group will first prepare their plan. During this process they will be in a continuous touch with other groups so that the plan matches each other. The Co-ordination.Group will supervise these Design Group, so that each group extend their cooperation to the other groups. The Design Groups will submit their plan at different phases of development and carry out discussion meetings.

The Technical Committee will only assist the Design Groups and the Coordination Groups by extending technical solutions. Such as cost of construction, preparing working drawing showing alternative technical and aesthetical solutions etc.

Between design team and rest of the community: The Design Team will inform the community about the design they are developing and will ask for their opinions. To do so they will take following steps.

- They will conduct general meeting to brief the community about their aims and objectives. To inform the community about the date and venue of the meeting, they will give notice and use posters.

- The Design Team will carry out some orientational program for the interested members of the community about the design process. This will be in brief and its only aim will be to help the community member to understand the design and its trade-offs.

- At different phases of the design the plans will be exhibited for the general people of the community and will be asked for their opinion.

Each Design Group will solve their own problem in coordination with the other groups. The coordination group will be responsible for maintaining the relationship between different part of total plan. They will also guide the Design Group according to the policy set by the Dhaka City Corporation. The Technical Committee will help the Design Group and the Coordination Group by assisting them in solving technical aspects only. They should not get involved in the basic design preparation stage.

5.4. FINANCIAL POLICY:

Out of 73 wards of Dhaka City Corporation there are only 23 community centers, 40 parks and only 18 health center provided by the D.C.C[1]. This may be an indication about the deficiency of resource to fulfil the demand of urban community facilities. Therefore, every project should be designed to pay maximum by itself. Cost recovery should get maximum emphasis in any project design, because replicability of a project depends on its recovery of cost. Resources have to be recycled as much as possible.

While sketching the financial policy two aspects should be considered, one is economic aspect and the other is it social aspect.

Steps must taken to increase the multiplier effect of investment as much as possible. To do this mechanism have to be deviced. There are many ways of doing this such as cross subsidy, by levying directly from the users, taking some profit making steps etc. The effect of investment will increase each time we recover cost from a project and use it to implement another project.

---

[1] Dhaka City Corporation, 1990

The social side of the financial policy is to let the community be self-reliant and get out from the vicious cycle of dependency. Self-reliance does not implies that the community, specially those low income and over worked people, should leave alone to do all by themselves, rather assisting them in the way they are willing and also in those areas where they have no other ways to help themselves at present. Therefore loan may be extended to them for capital expenditure but it must be returned so that they can feel their ability and skill and develop self-confidence. Financial schemes should not in any way help the process of dependency.

There are two types of cost to be recovered for which we have to prepare our financial policy. Firstly the capital investment for setting up of different community facilities and secondly the running cost, that is the cost to maintain those facilities and activities in future.

The cost of providing community facilities and sustaining them in the future, have to be bared by different sources such as:

- From development budget of the government.
- From taking some profit oriented step within the project.
- From charging levy on the users.

The aim of the whole project must be self-reliance to create a working community, who is aware of its own problems and

confident about their ability to think and act skillfully. Outside assistance should be extended according to people's willingness to help themselves and not bestowed as a form of patronage for the creation of dependence.

For the sake of creating self-reliance, the beneficiaries, the community must come forward with their all resources to solve their problem and create facilities they require. To extend community facilities to maximum number of people, real financial

subsidies for families must be minimized and assistance should be limited to sectors that the people cannot provide by themselves.

Since the community facilities in the project area is very low, Dhaka City Corporation should come forward with financial assistance. But the project should be designed to pay for by itself and by the residents of the community. This may be achieved by the following strategies :

- To recover the cost of capital expenditure, few shops will be constructed and sold. The number of shops should be kept as low as possible.
- Retain one or two shops and run them as cooperative by the community to meet the running cost of the community center and assisting its program.

- A part of the running cost of different programs will be met by levying directly from the users.
- The courtyard or the community hall of the community center will be given for hire on the off days for different social programs to recover some cost.

CHAPTER 6

RECOMMENDATION AND CONCLUSION:

Users participation can fail to achieve its success due to many constraints in its way. Complicacy of government bureaucracy, rigidity in the planning and implementation procedure of concerned agencies, lack of motivation in the target group are some example of weakness which might hamper to achieve the desired result. Therefore in the conclusion some policies are recommended:

GOVERNMENT ROLE : Instead of involving directly, a more recommended role of government agencies is, as a supporter and coordinator of these types of users participation program organized by gross-root non-government organizations and autonomous local government. Inappropriate and over ambitious standard and regulations should be removed by the government.

ACTIVATING PARTICIPANTS : Project should be designed in a manner so that target group is activated. The participation process

should try to involve as many community member as possible on as many levels as possible. Traditional ways of working and use of local materials can help to activate the people to participate and build the self-esteem of the community. On the other hand use of complex technology should be avoided because they can obstruct the process of participation. Lengthy programs with remote and only intangible goals can frustrate the participation process of the community.

ROLE OF INTERMEDIARY ORGANIZATION : Intermediary organizations have to be formed to pave the way for working together of peoples from different discipline. The people and the agencies working in this organization must have a moral obligation toward the common people. They should maintain dialogue with different agencies and institutions. They must avoid unnecessary conflicts.

FLEXIBILITY OF PARTICIPATION MODEL : Flexibility is one of the most important issue in users participation process. Rigid replicability of methodology can constrain creativity and introduces biases. The model of participation must be adjusted for each individual project. Same is with the standard, all the standard have to be tailored within a range to fit the socio-economic condition of the community.

This study does not claim to be a complete one and exhaustive in nature. Due to limitation of time and fund many aspects could not be dealt in more detail, such as the inventory of the community facilities were prepare on the basis of most essential services, this list can be a longer one. However future researcher may engage himself or herself to work in these fields and contribute more knowledge about planning of urban community facilities.

BIBLIOGRAPHY

Ali, Sabeha. (1980).
Urban Recreational Needs In Planning For Residential Neighborhoods : An approach Towards a planned Development, (A case Study On Some Selected Neighborhoods Of Dhaka City) Unpublished MURP Thesis, Department Of Urban And Regional Planning. Bangladesh University Of Engineering And Technology,Dhaka.

Angel,Shlomo and Zilla C. Phoativongsacharn(1981).
"Building Together". Working Paper No.5. Human Settlements Division, Asian Institute of Technology, Bangkok.

Bangladesh Bureau of Statistics, Government of Bangladesh(1985).
Small Area Atlas of Bangladesh, Dhaka District, Dhaka.

Breese,Gerald and Whiteman, Dorothy E.(eds)(1953).
An Approach to Urban Planning.
Princton New Jersery: Princton University Press.

Brown,A.J. and Sherrard, H.M.(1951).
Town and Country Planning.
Sydney Melbourne University Press.

Candill, William N.(1954).
Toward Better School Design.
New York: F.W. Dodge Corporation.

DeChiara,Joseph and Koppelman,Lee(1975).
Urban Planning and Design Criteria, Second edition,
New York: Van Nostrand Reinhold Company.

Doxiadis,C.A.(1974).
"The Human Settlements That We Need", papeers presented at Dorah Tata Memorial Lecture, at Bombay and Delhi.

Engelhard,N.,L.,Englhard N.L.Jr. and Leggett.Stanton(1953).
Planning Elementary School Buildings.
New York: F.W.Dodge Corporation.

Gallion,Arthur B. and Eisner,Simon(1963).
The Urban Pattern,City Planning and Design.
New York: Van Nostrand Reinhold Company.

Government of Bangladesh,UNDP and UNCHS(1985)
"Final Feasibility Report. Integrated Urban Upgrading".
Consulting Engineers: Aqua Consultant and Associates Ltd.

and Bongaerts, Kuyper and Huiswaard B.V. Dhaka.

Government of Lebanon(1958).
"Housing in Lebanon. Problems-Policies-Programs", Vol.4,5.
Consulting Engineer: Doxiadis Associates.Beirut.

Hafiz, Roxana. (1987).
Sites And Services Schemes : A Strategy For Housing Low Income Group In The Dhaka Metropolis.
Unpublished MURP Thesis, Department Of Urban And Regional Planning. Bangladesh University Of Engineering And Technology, Dhaka.

Haq, Md. Ziaul. (1986).
Formulation Of Planning Guidelines For Location Of Vegetable Markets In The City Of Dhaka.
Unpublished MURP Thesis, Department Of Urban And Regional Planning. Bangladesh University Of Engineering And Technology, Dhaka.

Hatch,C.Richard. (1984).
The Scope of Social Architecture, Vol.1
New York: Van Nostrand Reinhold.

Hossain, Md. Abdul. (1984).
Development Of Social Service Facilities In Tongi Municipality : A Planning Approach.
Unpublished MURP Thesis, Department Of Urban And Regional Planning. Bangladesh University Of Engineering And Technology, Dhaka.

Howard,Ebenezer. (1965).
Garden Cities of Tomorrow.
Massachusetts: The M.I.T.Press.

Islam, Mir Shadiul. (1972).
Planning Of Shopping Centres For Greater Dhaka.
Unpublished MURP Thesis, Department Of Urban And Regional Planning. Bangladesh University Of Engineering And Technology, Dhaka.

Keeble,Lewis. (1969).
Principles and Practice of Town and Country Planning.
London: The Estate Gazette Limited.

Keyes,Willliaam J.(1983).
"Freedom To Build-Phillippines: Experience with the Freedom to Build Project at Dasmarians,1976-1982".
HSD Research Report No.3, Division of Human Settlement Development, Asian Institute of Technology,Bangkok.

Khan, Leena Ferdous. (1982).
Character Use And Availability Of Health Facilities In Dhaka City.
Unpublished MURP Thesis, Department Of Urban And Regional Planning. Bangladesh University Of Engineering And Technology, Dhaka.

Khandakar, Mostaque Ahmed. (1988).
Planning Of Service Facilities In Paurashavas Of Bangladesh: A Case Study Of Narayanganj.
Unpublished MURP Thesis, Department Of Urban And Regional Planning. Bangladesh University Of Engineering And Technology, Dhaka.

Mahbub-un-Nabi,A.S.M.(1972).
The Physical Identity,Growth,Transformation and Revitalization of Residential Neighborhood.
Unpublished MURP Thesis, Department of Urban and Regional Planning,Bangladesh University of Engineering and Technology,Dhaka.

Miah,Md.Abdul Quader,Weber,Karl E. and Islam,Nazrul(1988).
"Upgrading A Slum Settlement in Dhaka".
HSD Monograph,17. Division of Human Settlements Development, Asian Institute of Technology,Bangkok.

Mumford,Lewis(1961).
The City in History: Its Origin, Its Transformation and Its Prospects.
London: Seeker and Warburg.

Ratcliffe,John(1974).
An Introduction to Town and Country Planning.
London: Hutchinson and Co(Publisher) Ltd.

Robert,Margaret(1974).
An Introduction to Town Planning Techniques.
London: Hutchinson and Co(Publishers) Ltd.

Sattar,Quazi Galive A.(1986).
An Approach to Upgrading of Low-Income Urban Settlements; A Case Study of Shaheedunagar Area in Dhaka City.
Unpublished MURP Thesis, Department of Urban and Regional Planning, Bangladesh University of Engineering and Technology, Dhaka.

Spreiregen,Paul D.(1965).
Urban Design: The Architecture of Towns and Cities.
New York: McGraw-Hill Book Company.

Swan,Peter J.(d)(1980).
"The Practice of Peoples Participation:

Seven Asian Experiences in Housing the Poor".
HSD Seminar Proceeding, Human Settlements Division,
Asian Institute of Technology, Bangkok.

Tips, Walter E.J.,Aryal,Sushil B.,Kambhu, Panita,
Narkwiboonwong,W.,Saetang,C.

Sugimin,Pranoto(1986). "Faild Your Implementation?
Yes, But in Style". HSD Working Paper No.20.
Division of Human Settlements Development,
Asian Institute of Technology,Bangkok.

Todaro,Michael P.(1985).
Economic Development in The Third World.
New Delhi: Orient Longman Limited.

Virochsiri,Xantharid(1977).
Design Guide for Secondary Schools in Asia.
Bangkok: UNESCO Regional Office for Education
in Asia.