

URBAN DEVELOPMENT DIRECTORATE
MINISTRY OF WORKS
GOVERNMENT OF
THE PEOPLE'S REPUBLIC OF BANGLADESH

LAND USE PLAN
BANIACHONG UPAZILA SHAHAR
HOBIGONJ ZILA

MARCH, 1988

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প্রতি,

পরিচালক,

নগর উন্নয়ন অধিদপ্তর,

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জনপদ প্রকৌশলী নিঃ কৃষক প্রদত্ত বাসিয়াচং উপজেলায় ভূমি ব্যবহার পরিকল্পনাটি অত্র শফিসে সিদ্ধি করা করিয়া দেখা হইয়াছে এবং আনোচনা করা হইয়াছে। উক্ত ভূমি ব্যবহার পরিকল্পনাটি সম্মোদনক বনিয়া বিবেচিত হইয়াছে।



✓ চেয়ারম্যান,
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HOBIGONJ ZILA**

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JANOPAD PROKOUSHALI LTD.
81, LAKE CIRCUS, KALABAGAN,
DHAKA-1205.

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Chapter I

INTRODUCTION

This Report (Report -iv), Landuse Plan is submitted in accordance with the Agreement signed between the Urban Development Directorate (UDD) and Janopad Prokoushali Limited in July 1986. The Report is prepared as per the guidelines provided in the Terms of Reference (TOR). It contains the following chapters :

- i. Introduction
- ii. The Upazila in Its Zila Context
- iii. The Upazila Headquarters
- iv. Forecasts
- v. Landuse Plan
- vi. Programming and Implementation

1.1 Background of the Project

The Government, considering the present socio-economic conditions of the country, recently took the decision of implementing administrative re-organization. Through this decision, the Upazila has been recognized as the most significant tier of the administration. So it is expected that each Upazila centre will be the focal point of the Upazila level administrative activities relating to law and order and socio-economic development. The Upazila Parishad will plan and develop all social, economic and infrastructural upliftment of the Upazila region. This also reflects the national policy of bringing development administration and service facilities to the door step of the rural masses and to ensure better delivery of governmental services to the people.

The decentralization of administration has made an impact on the increase of population and urban activities at the Upazila Shahar. Therefore, the Upazila Headquarters will require to provide the locations for all necessary urban services and facilities.

In the light of the above circumstances, it is felt that the Upazila Shahar should grow up expeditiously and the preparation of Landuse Plan for the Upazila Headquarters is of utmost importance for better utilization of scarce land, people and natural resources.

1.1.1 Project Objectives

The Terms of Reference (TOR) of the Urban Development Directorate (UDD) mentions the following objectives of the Landuse Plan of the Upazila Shahar :

- o Improvement of quality of life in the rural areas.
- o Provision of locational and spatial guidelines of landuses at micro-regional level.
- o Control of public and private development through physical planning approach.
- o Provision of technical back up for planned growth of human settlements.
- o Enhancement of physical planning capability in the private sector.
- o Detailed landuse plan of the Upazila Shahar to help formulation of spatial setting of urban activities with certain design standards.

1.1.2 Scope of Services

The Study will cover the following major aspects related to the preparation of landuse plan of the Upazila Shahar :

- o Determination of the Study Area for survey and data collection.
- o Detailed existing landuse survey.
- o Collection of socio-economic and demographic information.

- o Analysis and compilation of the data and information to forecast future population and land requirements for various services and facilities.
- o Preparation of detailed Plan for Upazila Shahar.
- o Provision of development plan for economic activities and investment facilities.
- o Development of framework and strategy for management and control and institutional arrangement for effective implementation of the plan.

1.2 Methodology Adopted in the Study

The Report presents information collected from surveys, forecasts and the Landuse Plan. The detail methodologies for these are discussed below.

1.2.1 Collection of Information from Secondary Sources

Relevant maps e.g. Upazila maps, mouza maps, contour maps and useful literature such as Census Reports, District Gazetteer etc. were collected for a thorough study of the project.

1.2.2 Field Survey

Field survey included a wide range of data collection. The survey was carried out by the groups of trained investigators and surveyors. One team performed the socio-economic survey and the other the landuse survey of the Upazila Shahar. The questionnaires and checklists used in the survey are given in the Appendices.

Socio-economic Survey

Socio-economic survey was carried out through household questionnaire survey. Catchment Area Survey, hierarchy of settlements survey and interviews with some selected persons from Government officials and private individuals at Upazila level.

Household Questionnaire Survey

A 5% sample of the total households in each mouza included in the Study Area was considered for household questionnaire survey (Appendix I). The Study Area was determined earlier by a reconnaissance survey. The household samples were proportionately distributed on income and occupation groups in all the mouzas of the Study Area.

Catchment Area Survey : To determine the Zone of influence or the Catchment Area of the Upazila Shahar, interviews with local knowledgeable persons and the users of services like market, health, education, transport, administration etc. were undertaken. On the basis of these interviews and field observations on existing transportation network and distribution of sub-centres/growth points, the Catchment Area or the Zone of Influence of the Shahar is determined.

Hierarchy of Settlements Survey : To identify a hierarchy of settlements in the Upazila, mouza wise population and services and facilities were listed using a structured format. Population by mouzas in 1981 census together with the concentration of services and facilities were also considered to determine the hierarchy.

Interviews : Interviews with relevant persons were useful to gather various information related to the preparation of landuse plan and for a cross-check of the collected data through other surveys. This also helped to conceptualize the various issues in respect of landuse plan of the Upazila Shahar.

Landuse Survey of the Upazila Shahar :

Landuse survey was conducted in the Study Area of the shahar identified during the reconnaissance survey. The mouza map of scale 1" = 330' was used in the survey to plot the existing landuses. Boundary and layout of different categories of landuse were recorded on the map.

Survey of the Town Service Centre

The Town Service Centre (Core Area) of the Upazila Shahar was surveyed using the contour map of Bangladesh Water Development Board. This map was upgraded noting all changes from the previous ones and naming all existing man-made structures and physical features.

1.2.3 Data Processing and Analysis

The data and information collected through field surveys have been processed manually and in most cases presented in tabular forms. The required maps for the project have been developed using the relevant information.

1.2.4 Forecasting and preparation of Landuse Plan

For forecasting the population upto the year 2000 A.D., high, medium and low projections are followed considering the trend of growth rate in different inter-census periods. Estimates on labour force and migrants are done considering the available information of the Bangladesh Bureau of Statistics and possible spatial distribution of these labour force and migrants within the Zila, Upazila and Upazila Shahar. Medium projection of population is considered to estimate the design population of the Upazila Shahar in the Plan period.

The Landuse Plan is prepared on the basis of the guidelines and standards of planning provisions provided in the Terms of Reference (TOR). A moderate approach is mostly adopted in the provision of services and facilities. Alongwith this, the existing landuses and natural physical condition of the Upazila Shahar are considered. The details are discussed in the subsequent stages of the study.

Chapter II

THE UPAZILA IN ITS ZILA CONTEXT

For the Landuse Plan of the Upazila Shahar, its background, location and physical characteristics are important. Its position in respect of population, settlements, socio-economic and physical infrastructural performance compared with the broader region, are discussed below.

2.1 Location and Physical Characteristics of the Upazila

The location background and physical setting of the Upazila are essential elements to be considered in the preparation of landuse plan. In the following paragraphs, these aspects are discussed.

2.1.1 Location, Area and Background

Baniachong Upazila is located within the haor areas of Hobiganj Zila. An important person Mr. Abid Reja lived here in the 18th century. According to the local people, the Upazila has been named after Bania who about two centuries ago used to hunt birds in the marshy land at Baniachong and later settled there. It is also said that after this, the family of Gour Gabinda came at Baniachong and many of his family members settled there. The famous Sagardighi is located in the village Baniachong very close to the existing Upazila Shahar.

Through years of time, the population density of Baniachong has been increased to a very large figure. The village which also contains the Baniachong Upazila Headquarters is about 4.5 miles in length in North-South direction and 3.5 miles in width in east-west direction. The village Baniachong has at present four Union Parishads and more than eighty thousand population. According to the information from Upazila Statistical office, Baniachong is the largest village in Asia.

During rainy season, the Baniachong Upazila Shahar becomes surrounded by water and can only be communicated by boats and motor launch. It is about 11 miles on the North of Hobiganj District Headquarters which is about 2 hours journey by boat. During the dry season, bus service is available between Hobiganj and Baniachong by a Katcha road which is now being improved for use in all seasons.

The Upazila Shahar is located around the intersection of latitude $24^{\circ}-31'$ N and longitude $91^{\circ}-22'30''$ E. Map 1 shows the location of Upazila Baniachong in the context of the Zila and the country.

2.1.2 Physical Characteristics

Upazila Baniachong has a peculiar physiographic situation. The total, the Upazila has 10% high land, 20% medium land and 70% low land. It comprises 75% doash soil, 10% bele soil and 15% etel soil.¹⁾

The whole Upazila lies on the central Haor Basin which stretches over 70 miles from Mahadeo and Mogra rivers to the Plain of central Sylhet. Baniachong has a succession of Beels and Haors of various sizes, interspersed with river cut-offs, scurs, swales and natural levees known as Kandha. The Upazila Shahar Baniachong is located on a pice of high land not subject to Monsoon flood. However, its adjoining areas and ditches within it go under water during the rainy season. Fishing is an important economic activity in the Haors of the Upazila.

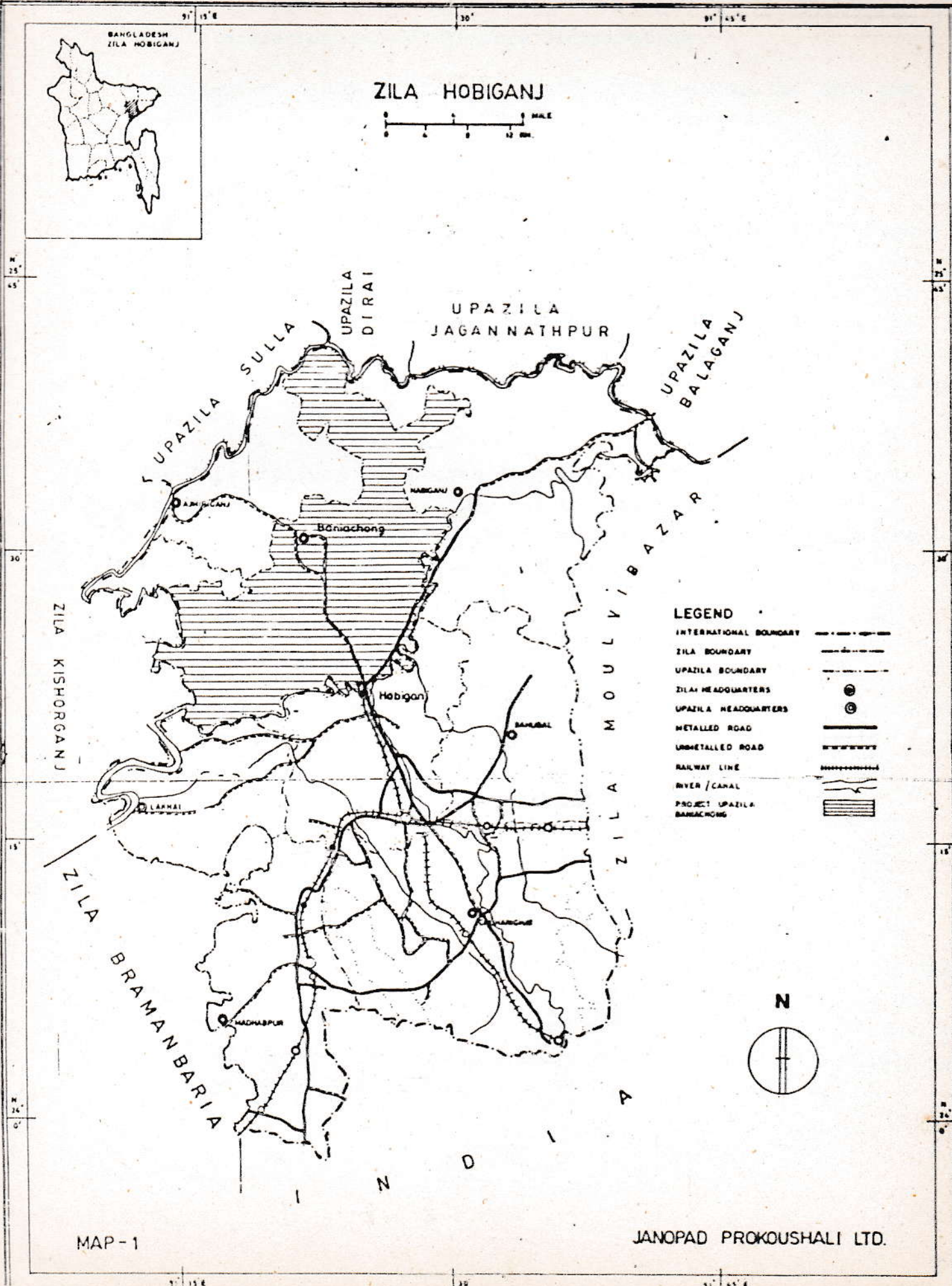
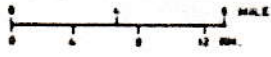
Climate :

The climatic characteristics of the Upazila is similar to that of the broader region Sylhet in which it is located. The average annual rainfall in this Upazila is above 100 inches (District Gazetter, Sylhet). During the Monsoon, high humidity prevails in the atmosphere. Due to the presence of water bodies especially the Haors, the difference between day and night temperature is minimum.

1) Bangladesh Statistical Bureau (BBS), Sylhet District Statistics, 1983.

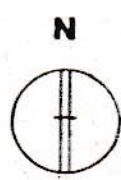


ZILA HOBIGANJ



LEGEND

- INTERNATIONAL BOUNDARY
- ZILA BOUNDARY
- UPAZILA BOUNDARY
- ZILA HEADQUARTERS
- UPAZILA HEADQUARTERS
- METALLED ROAD
- UNMETALLED ROAD
- RAILWAY LINE
- RIVER / CANAL
- PROJECT UPAZILA BANACHONG



MAP-1

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2.2 Population and Settlements Distribution

The population and settlements distribution within the Zila and Upazila are discussed in the following paragraphs.

2.2.1 Within the Zila

The Upazila wise population distribution within the Zila Hobiganj is shown in Table 1. It shows that the population density per square mile varies for different Upazilas. The inter-census percentage growth of population also varies for different Upazilas. It is also evident that the Upazila Baniachong has comparatively lower density and growth of population than that in some adjoining Upazilas of the Zila.

The Zila Hobiganj has uneven distribution of settlements due to its diversified physiography. Settlements are densely grown in plain lands not subject to floods and sparse in hilly parts and flood affected areas. Table 2 shows Upazila wise distribution of area, Union and mouza within the Zila. There are 15 Unions, 260 mouzas and 440 villages in Baniachong Upazila.

2.2.2 Within the Upazila

Upazila Baniachong is a low-lying area rich in Haors and beels. In most cases, the settlements are developed on artificially built up land above the flood level. As a result, settlements have grown with high density of population. The Union-wise distribution of population in the Upazila is shown in Table 3

2.2.3 Migration Pattern

Generally it is believed that there is outmigration in Sylhet Zila. This is due to the employment of its population outside the Zila and abroad. However, the migration patterns within the Greater Sylhet Zila and Baniachong Upazila are not discussed here elaborately due to lack of available data.

Table 1 : Area, population changes and density of population in the Upazila compared to other adjoining Upazilas and the Zila Habiganj.

Upazila	Area		Population						percentage variation 1961-81	
	Sq. mile	Sq. Km.	1961			1974				1981
			Population	Density per sq. mile	Density per sq. mile	Population	Density per sq. mile	Population		Density per sq. mile
Ajmiriganj	83	212	51143	616	62258	750	74094	892	19.01	44.88
Behubal	89	228	83021	933	99794	1121	116604	1310	16.85	40.45
Baniachong	192	491	138351	720	173884	906	204007	1062	17.32	47.46
Chunarughat	192	491	128373	669	171297	892	202267	1053	18.08	57.56
Habiganj	95	243	118772	1250	151494	1594	178713	1881	17.97	50.47
Lakhai	76	194	66083	669	79624	1047	90309	1188	13.42	36.66
Madhabpur	108	276	123232	1141	161674	1497	194710	1802	20.43	58.00
Nabiganj	161	412	143717	893	182460	1133	216662	1345	18.75	50.76
Zila Habiganj	996	2549	852692	856	1082485	1086	1277366	1282	18.00	49.80

Source : Bangladesh Bureau of Statistics, Sylhet District Statistics, 1983.

Table 2 : Upazila-wise area, Union, Mouza and Villages in the Zila.

Upazila/Zila	Area		Union/Ward (No.)	Mouza/Mahalla (No.)	Village (No.)
	Sq.mile	Sq.Km			
Ajmiriganj	83	215	5	76	128
Bahubal	89	231	7	146	331
Baniachong	192	497	15	260	440
Chunarughat	192	497	10	167	385
Hobiganj	95	246	10	175	325
Lakhai	76	197	6	73	63
Madhabpur	108	280	11	187	288
Nabiganj	161	417	13	219	347
Hobiganj Zila	996	2580	77	1303	2307

Source : Sylhet District Statistics, 1983.

Table 3 : Union-wise distribution of population in the Upazila Baniachong.

Name of Union	Population			No. of Households
	Total	Male	Female	
Baniachong N.E.	13897	6992	6905	2254
Baniachong N.W.	12394	6256	6138	2144
Baniachong S.E.	13456	6811	6645	2268
Baniachong S.W.	13754	6983	6771	2260
Baraiuri	11463	5688	5775	1943
Daulatpur	16453	8507	7946	2272
Kagarasha	15215	7938	7277	2366
Khogaure	15310	7702	7608	2700
Makampur	14610	7265	7345	2614
Mandari	10340	5160	5180	1839
Muradpur	10325	5294	5031	1956
Pailar Kendi	13554	7012	6542	1950
Pukra	15111	7795	7316	2578
Sujatpur	14359	7319	7040	2419
Umed Nagar	13766	6953	6813	2217
Baniachong Upazila	204007	103675	100332	33780

Source : Bangladesh Bureau of Statistics, Population Census, 1981, Union Statistics, November, 1983.

2.3 Economic Performance and Transport Linkages

Information collected from primary and secondary sources on economic performance and transport linkages of the Upazila compared with the Zila and other Upazilas are presented in the following paragraphs.

2.3.1 General Economic Performance

The economic performance of the Upazila Baniachong in terms of gross district products and performance in agricultural and non-agricultural sectors are presented below .

Performance in the Agricultural Sector :

Table 4 presents information on land utilization Baniachong Upazila. The Cropping intensity of the Upazila is less than the average cropping intensity of the Zila Hobiganj. Some adjoining Upazilas have higher cropping intensity than that of Baniachong. This may be due to the fact that almost whole of the Upazila Baniachong is subject to flood and water stagancy for a considerable period in the rainy season. Of the total irrigated land in the Zila, Upazila Baniachong has about 18 percent

Performance in the Industrial Sector :

Table 6 shows information on industrial performance of the Upazila Baniachong. The industries of the Upazila include rice husking mills, sweet factory, oil mill and different cottage industries.

Table 4 Land utilization in the Upazila compared to adjoining Upazilas and the Zila Habiganj.

Upazila/Zila	Total Area (Acres)	Current fallow land (Acre)	Single cropped area (Acre)	Double cropped Area (Acre)	Triple cropped Area (Acre)	Net cropped Area (Acre)	Total cropped Area (Acre)	Intensity of cropping
Ajmiringanj	53000 (8.35)	3000 (8.82)	18000 (7.79)	13000 (10.16)	2000 (6.45)	33000 (8.46)	51000 (8.79)	155
Behubal	57000 (8.98)	6000 (17.65)	14000 (6.06)	12000 (9.38)	1000 (3.22)	27000 (6.92)	41000 (7.07)	152
Baniachong	123000 (19.37)	8000 (23.53)	52000 (22.51)	17000 (13.28)	5000 (16.13)	73000 (18.72)	100000 (17.24)	137
Chunarughat	122000 (19.21)	-	38000 (16.45)	27000 (21.09)	8000 (25.80)	73000 (18.72)	116000 (20.00)	159
Habiganj	61000 (9.61)	8000 (23.53)	16000 (6.93)	14000 (10.94)	10000 (32.26)	40000 (10.26)	73000 (12.59)	183
Lakhai	48000 (7.56)	5000 (14.71)	29000 (12.55)	7000 (5.47)	2000 (6.45)	38000 (9.74)	49000 (8.45)	129
Madhabpur	69000 (10.87)	2000 (5.88)	21000 (9.09)	24000 (18.75)	2000 (6.45)	46000 (11.79)	74000 (12.76)	161
Nabiganj	102000 (10.06)	2000 (5.88)	43000 (18.61)	16000 (12.50)	1000 (3.22)	60000 (15.38)	78000 (13.45)	130
Zila Habiganj	635000 (100)	34000 (100)	231000 (100)	128000 (100)	31000 (100)	390000 (100)	580000 (100)	149

Note : Figures in parentheses indicate percentage.

Source : Bangladesh Bureau of Statistics, Sylhet District Statistics, 1983.

Table 5 Crop production of the Upazila, its adjoining Upazilas and the Zila Habiganj, 1981-82.

Production	Zila	Upazila Ajmiriganj	Upazila Bahubal	Upazila Baniachong	Upazila Chuneru-ghat	Upazila Habiganj	Upazila Lakhai	Upazila Madhabpur	Upazila Nabiganj
1. Rice (1981-82) (Maunds)	8631000 (100)	621000 (7.19)	819000 (9.49)	1217000 (14.10)	1523000 (17.65)	1273000 (14.75)	608000 (7.04)	1364000 (15.80)	1206000 (13.97)
2. Wheat (1981-82) (Maunds)	135000 (100)	3000 (2.22)	3000 (2.22)	2000 (1.48)	6000 (4.44)	17000 (12.59)	1000 (0.74)	101000 (74.81)	2000 (1.48)
3. Jute (1981-82) (Number of Bales)	13668 (100)	609 (4.46)	476 (3.48)	609 (4.46)	-	1155 (8.45)	-	6959 (50.91)	3860 (28.24)
4. Potato (Maunds)	44467 (100)	1800 (4.05)	4249 (9.56)	4999 (11.24)	15997 (35.97)	7124 (16.02)	2500 (5.62)	4049 (9.11)	3799 (8.54)
5. Pulses (Maunds)	2756 (100)	68 (2.47)	76 (2.76)	88 (3.19)	250 (9.07)	373 (13.53)	1274 (46.23)	390 (14.15)	237 (8.60)

Note : Figures in parentheses indicate percentage. - indicates not available.

Sources : Bangladesh Bureau of Statistics, Sylhet District Statistics, 1983.

Table 6 Industries in the Upazila compared to the adjoining Upazilas and the Zila Habiganj, 1982.

Types of industries	Zila Habiganj	Upazila Ajmiriganj	Upazila Bahubal	Upazila Baniachong	Upazila Chuneru-ghat	Upazila Habiganj	Upazila Lakhai	Upazila Madhabpur	Upazila Nabiganj
Cottage industries (1982)									
a. No. of units	21154 (100)	367 (2.00)	390 (2.00)	742 (4.00)	402 (2.00)	872 (4.00)	275 (1.00)	758 (4.00)	687 (3.00)
b. No. of persons engaged	14412 (100)	840 (6.00)	1222 (8.00)	1683 (12.00)	1451 (10.00)	3054 (21.00)	661 (5.00)	3448 (24.00)	2053 (14.00)
c. Sales value of the product	826.89 (100)	47.67 (6.00)	114.60 (17.00)	102.52 (12.00)	96.35 (12.00)	217.16 (26.00)	35.29 (4.00)	214.81 (26.00)	213.30 (26.00)
Small scale industries (1982)									
a. Rice Mills	309 (100)	25 (8.00)	16 (5.00)	61 (20.00)	24 (8.00)	53 (17.00)	26 (8.00)	43 (14.00)	61 (20.00)
b. Oil Mills	84 (100)	1 (1.00)	-	1 (1.00)	8 (10.00)	2 (2.00)	28 (33.00)	44 (52.00)	-
c. Saw Mills	7 (100)	-	-	-	-	5 (71.00)	-	2 (29.00)	-
d. Ice-cream factories	5 (100)	2 (4.00)	-	-	-	3 (60.00)	-	-	-
e. Sweetmeat factory	140 (100)	-	1 (1.00)	17 (12.00)	36 (26.00)	25 (18.00)	9 (6.00)	41 (29.00)	9 (6.00)
Hand Loom industry									
a. No. of units	272 (100)	88 (32.00)	-	-	120 (44.00)	6 (2.00)	2 (2.00)	18 (7.00)	38 (14.00)
b. No. of looms	8.29 (100)	1.25 (14.00)	-	-	1.53 (18.00)	1.00 (12.00)	1.00 (12.00)	1.83 (22.00)	1.68 (20.00)
c. Operational looms	4.02 (100)	0.44 (11.00)	-	-	0.35 (9.00)	0.50 (12.00)	0.50 (12.00)	1.05 (26.00)	1.18 (29.00)

Note : Figures in the parentheses indicate percentage.

Source : Bangladesh Bureau of Statistics, Sylhet District Statistics, 1983.

2.3.2 Employment Situation

Since information on Upazila level employment and underemployment are not available, some related indicators of Bangladesh Bureau of Statistics are used in this Report. Table, 7 shows information on economically active population in the Greater Zila Sylhet over different census years.

Table 7 shows that there has not been any substantial change over the census periods in the percentage distribution of economically active population in the Zila Sylhet compared to Bangladesh.

2.3.3 Income and Expenditure

The available information on income and expenditure pattern within the Zila and Upazila are not adequate. Therefore, the information available with the Bangladesh Bureau of Statistics on daily wage rates are used to have an overview of the income-expenditure pattern.

Table 8 presents information on the daily wage rates of agricultural and construction labour in the greater Sylhet Zila. The Table presents that the Upazila may also have similar pattern of daily wage rates of agricultural and construction labour.

2.3.4 Transport Facilities

Beniachong Upazila has 16 Km (1 mile) of semi-pucca and 104 Km (65 mile) katcha roads. As per Bangladesh Bureau of Statistics (1983) information, this Upazila occupies 1.5% and 9.0% of semi-pucca and katcha road respectively of the total road having within Hobiganj Zila.

Table 7 Economically active population (employed) by sex in the Greater Sylhet District
(In thousand)
over different Census Years.

	Economically active population								
	1961			1974			1981		
	Male	Female	Both sex	Male	Female	Both sex	Male	Female	Both sex
Greater Sylhet District	1028 (6.95)	274 (10.38)	1302 (7.46)	1381 (7.03)	75 (8.63)	1456 (7.09)	1494 (6.66)	109 (9.17)	1603 (6.79)
Bangladesh	14802 (100)	2640 (100)	17443 (100)	19650 (100)	869 (100)	20519 (100)	22430 (100)	1189 (100)	23619 (100)

Note : Figures in parentheses indicate percentage.

Source : Bangladesh Bureau of Statistics, Statistical Years Book, 1982.

Table 8 Average daily wage rates of construction and agricultural labour by type of labour in the Greater Sylhet Zila in different Years.

Year	Types of construction labour (Taka per day)			Agricultural labour (Taka per day)
	Mason	Helper (Jogaly)	Carpenter	
1975-76	20.25	9.48	18.09	11.55
1976-77	24.17	10.67	22.50	10.29
1977-78	25.00	12.34	22.34	11.17
1978-79	26.03	13.66	21.00	12.42
1979-80	32.48	14.78	23.84	15.00
1980-81	42.86	24.32	25.29	15.00
1981-82	42.86	24.32	34.36	15.42

Source : Bangladesh Bureau of Statistics, Sylhet District Statistics, 1983.

Table 9 : Number of buses, trucks, auto rickshaws, rickshaws and boats in the Upazila compared to its adjoining Upazilas and the Zila Habiganj, 1982.

Upazila/Zila	Bus	Trucks	Auto rickshaws	Rickshaws	Boats
Ajmiriganj	-	-	-	-	6000 (50.00)
Bahubal	12 (13.00)	10 (10.00)	15 (11.00)	60 (2.00)	50 (0.10)
Banischong	5 (5.00)	-	-	50 (2.00)	5000 (41.00)
Chunarughat	15 (16.00)	30 (29.00)	10 (7.00)	429 (18.00)	-
Habiganj	40 (43.00)	55 (52.00)	70 (52.00)	1500 (61.00)	250 (2.00)
Lakhsai	-	-	-	-	400 (3.00)
Madhabpur	12 (13.00)	5 (5.00)	20 (15.00)	300 (12.00)	115 (1.00)
Nabiganj	10 (11.00)	5 (5.00)	20 (15.00)	104 (4.00)	300 (2.00)
Zila Habiganj	94 (100)	105 (100)	135 (100)	2443 (100)	12115 (100)

Note : Figures in parentheses indicate percentage.

2.4 Social Infrastructure

There is a health complex having 31 beds in Baniachong Upazila. The distribution of health facilities in Baniachong Upazila with respect to other adjoining Upazilas within Hobiganj Zila is similar.

2.5 Current Development Projects

The Upazila Parishad undertakes annual development programme in each year. It is noted from Table 2-19 that these development projects are distributed in all Unions of the Upazila. The projects include several aspects under the general guidelines of the Government. It may be assumed that if the process of this annual development programme by the Upazila Parishad continues, there will be substantial development of services and facilities within the Upazila as well as in the Upazila Shahar.

Table 10 No. of Primary School Secondary School, College Madrasa and Gonosikha Kendra in the Upazila compared to its adjoining Upazilas and Zila Habiganj.

Upazila/Zila	Primary School		Secondary School		College		Gonosikha Kendra		Madrasa	
	No. of School	No. of Students	No. of School	No. of Students	No. of College Students	No. of Students	No. of Kendra	No. of Students	No. of Madrasa	No. of Students
Ajmiriganj	42 (5.59)	6047 (5.98)	6 (7.89)	1108 (6.55)	-	-	5 (6.49)	110 (6.76)	6 (8.33)	350 (3.86)
Bahubal	80 (10.64)	10110 (10.01)	5 (6.58)	1200 (7.09)	-	-	7 (9.09)	150 (9.21)	12 (16.67)	1928 (21.25)
Baniachong	104 (13.83)	16479 (16.31)	12 (15.79)	2241 (13.24)	1 (20.00)	150 (16.70)	15 (19.48)	325 (19.96)	5 (6.94)	735 (8.10)
Chunarughat	109 (14.49)	13157 (13.02)	11 (14.47)	2545 (15.04)	1 (20.00)	98 (10.91)	15 (19.48)	145 (8.91)	15 (20.83)	1430 (15.76)
Habiganj	114 (15.16)	14524 (14.37)	13 (17.11)	3240 (19.15)	2 (40.00)	450 (50.11)	4 (5.19)	200 (12.29)	4 (5.56)	550 (6.06)
Lakshai	48 (6.38)	7715 (7.64)	3 (3.95)	587 (3.47)	-	-	6 (7.79)	133 (8.17)	5 (6.94)	300 (3.31)
Madhabpur	95 (12.63)	13491 (13.35)	16 (21.05)	3281 (19.39)	1 (20.00)	200 (22.27)	12 (15.58)	255 (15.66)	2 (2.77)	369 (10.81)
Nabiganj	160 (21.28)	19523 (19.32)	10 (13.16)	2721 (16.08)	-	-	13 (16.88)	310 (19.04)	23 (31.94)	3412 (37.60)
Zila Habiganj	752 (100)	101046 (100)	76 (100)	16923 (100)	5 (100)	898 (100)	77 (100)	1628 (100)	72 (100)	9074 (100)

Note : Figures in parentheses indicate percentage.

Source : Bangladesh Bureau of Statistics, Sylhet District Statistics, 1983.

Table 11 : Number of Government office, Post office, Telegraph office, Bank branch and Dak-Banglaw of the Upazila, compared to its adjoining Upazilas and Zila Habiganj.

Upazila/Zila	No. of Govt. office	No. of Post office	No. of Telegraph office	No. of Bank Branch	No. of Dak-Banglaw
Ajmiringanj	27 (15.00)	4 (4.00)	1 (14.00)	5 (8.00)	1 (10.00)
Behubal	26 (14.00)	11 (11.00)	-	6 (9.00)	2 (20.00)
Baniachong	24 (13.00)	9 (9.00)	1 (14.00)	5 (8.00)	1 (10.00)
Chunarughat	22 (12.00)	10 (10.00)	2 (29.00)	4 (6.00)	1 (10.00)
Habiganj	38 (21.00)	19 (20.00)	1 (14.00)	19 (30.00)	2 (20.00)
Lakhei	-	-	-	-	-
Madhebpur	23 (12.00)	21 (22.00)	1 (14.00)	9 (14.00)	2 (20.00)
Nabiganj	25 (14.00)	22 (23.00)	1 (14.00)	16 (25.00)	1 (10.00)
Zila Habiganj	(100)	(100)	(100)	(100)	(100)

Note : Figures in parentheses indicate percentage.

Source : Bangladesh Bureau of Statistics, Sylhet District Statistics, 1983.

Table 12 : Annual Development programme, 1986-87, Upazila Baniachong.

Name of major schemes	Allocated amount in Taka
1. Upazila Training and Development Centre.	14,75,273/-
2. Furniture for primary school at Upazila Headquarters.	2,50,000/-
3. Construction of Sports and Cultural Centre at No. 5 Union Parishad.	74,051/-
4. Construction of Sports and Cultural Centre at No. 8 Union Parishad.	74,051/-
5. Construction of Sports and Cultural Centre at No. 9 Union Parishad.	74,051/-
6. Construction of Sports and Cultural Centre at No. 12 Union Parishad.	74,051/-
7. Construction of road at Sujatpur Market.	98,933/-
8. Construction of 15'-0" culvert on Baniachong Lingjhuri road.	1,18,916/-
9. Construction of 15'-0" culvert on Daria Khal at Aolakandi.	1,18,916/-
10. Construction of 10'-0" culvert on Bokarpur-Kadupur road.	1,27,826/-
11. Construction of two culverts in No. 1 Union Parishad.	64,883/-
12. Construction of two culverts in No. 4 Union.	64,883/-
13. Construction of two culverts in No. 13 Union.	92,320/-
14. Construction of three 36'-0" bridges on Gardnar5,00,890/- Khal, Nischintapur Khal and Satamuki Khal.	
15. Construction of two culverts in No. 11 Union Parishad.	1,10,670/-
16. Construction of culverts in no. 15 Union Parishad.	1,10,670/-
17. Construction of sanitary latrines at Baniachong No. 1 & 2 Union Parishad Office and No. 12 Sujatpur Union Parishad Office.	75,000/-
18. Construction of residence for Upazila Chairman.	7,62,558/-

Source : Upazila Parishad Office, Baniachong, November, 1986

2.6 Hierarchy of Settlements

In Table 13 and 14 the hierarchy of settlements in the Upazila are presented. Table 13 shows that over different census years, the number of settlements have been increasing. This may be due to the division of large mouzas into smaller ones. Also, it is notable that in some settlements, the population has largely increased over the census years.

Table 14 shows the hierarchy of settlements by services concentration. It shows that some settlements have higher concentration of services and some other have a very minimum level of services while a large number of settlements have at all no services and facilities. The settlements having no services depend on others.

It is further notable that the total score obtained by the settlements (mouzas) within the Study Area is much higher than other settlements. Therefore, it is assumed that the services of the Upazila Shahar reach the distant population within the Upazila. The hierarchy of settlements in the Upazila is shown in Map-2.

Table 13 : Distribution of Settlements by No. of Score obtained in the Upazila.

Score Range	Name of Mouzas	Total No. of Mouzas	Category
Unto 35	Sharifkhani Chowdhurypara Deshmukhya Hakimpur Kumri D. Shekandapur Muradpur	7	C
36 to 60	Sagardighi Umarpur Shahepur Pukra Shujatpur Firajpur	6	B
61 and above	Topkhana Puranbag	2	A

Table 44 : Scores obtained by important settlements in the Upazila

Name of Mouza	Score	Services with score																				Total Scores																		
		Population 1981	Administrative Complex	Other Government Office	Godown	Health Complex	Family Planning Clinic	Dispensary	Other Health Services	Weekly/Other Weekly Bazar	Shops	Post Office	Telephone line	Telephone Exchange	Electricity	Electrical Sub-station	Police Station	College	High School	Primary School	High Madrasahs		Junior Madrasahs/High School	Maktab	Public Library	Tahsil Office	Mettalled Road	Non-mettalled Road (All Weather)	Bus stoppage	Railway Station	Launch/Boat Chat	Mosque/Temple	Play Ground	Community Centre	Cinema Hall	Bank	Hotel	Restaurant	Dak Bungalow	
Sherifkhani	2	1	10	7	6	8	4	4	4	6	5	8	5	7	9	9	9	6	4	4	6	4	1	5	6	4	2	6	8	6	1	5	9	7	5	3	5	4	27	
Chowdhurypara	1	0							6	5			5						4	4						2												4	4	28
Deshmukhya	0	0			10	8							5						4	4						2	2	6	2	1	5	7	5	7	4	5	3	5	4	28
Parabag Topkhana	1	1	7	6			4	4	6	5	6	5	5						4	4					2	2	2	2	1	5	7	5	7	4	5	4	5	4	86	
Sagardighi	2	2									6	6	5		9											2	2	1	5	7								7	37	
Umarpur	1	1				4	4	6	6	6	6								6	4								1	1	4	4	4	4	4	4	4	4	4	45	
Shahapur	1	1				4	4	6	6	6	6								6	4								1	1	4	4	4	4	4	4	4	4	4	36	
Hakimpur	1	1				4	4	6	6	6	6								6	4								1	1	4	4	4	4	4	4	4	4	4	35	
Kumri	6	6				4	4	6	6	6	6								4	4								1	1	4	4	4	4	4	4	4	4	4	31	
D. Shekandapur	2	2				4	4	6	6	6	6								4	4								1	1	4	4	4	4	4	4	4	4	4	21	
Pukra	2	2				4	4	6	6	6	6								4	4								1	1	4	4	4	4	4	4	4	4	4	39	
Shujatpur	1	1				4	4	6	6	6	6								6	4								1	1	4	4	4	4	4	4	4	4	4	39	
Firejpur	4	4				4	4	6	6	6	6								4	4								1	1	4	4	4	4	4	4	4	4	4	39	
Muradpur	2	2				4	4	6	6	6	6								6	4								1	1	4	4	4	4	4	4	4	4	4	4	29

Source : Field Survey, January 1987.

Chapter III

THE UPAZILA HEADQUARTERS

In the detail survey of the Upazila Shahar, information on the existing demographic, socio-economic and landuse pattern were collected. The Sphere of Influence (Catchment Area) of the Upazila Shahar and the tentative area of the Upazila Shahar were also identified.

3.1 Definition of Sphere of Influence/Attractiveness

The Catchment Area or the Sphere of Influence of the Upazila Shahar is considered to be an area encompassing the Upazila Headquarters from where maximum population usually avail the services of the Shahar. In determining this area interviews of users of different services were conducted. On the basis of this interview, information obtained from the Upazila level office sources and the existing transportation network, the Catchment Area is demarcated as identified in Map-2. The Population and area of the Catchment Area are presented in Table 15

3.2 Definition of Shahar Area

The future Shahar Area includes the existing built-up parts and the adjacent areas likely to grow as urban centre in the near future. The Shahar area is tentatively decided to be the Study Area which has been identified for existing landuse and socio-economic surveys. The boundary of the future township is finally identified after estimating the design population and land requirements for the future township area.

Table 15 : Area and Population in the Catchment Area

Name of Mouza	Total Area		Involved Area (Catchment Area)		Total population			Involved population within Catchment Area		
	acres	hectares	acres	hectares	1961	1974	1981	1961	1974	1981
Sherifkhani (part)	185	74.90	91.45	37.02	1150	1493	1866	575	766	933
Uttar Jatrapasha(part)	555	224.70	371.14	150.25	3074	4504	5630	1537	2252	2815
Deshmukhya (part)	212	85.83	1.56	0.63	157	162	203	07	07	13
Chaturangaray (part)	150	60.73	55.00	22.27	318	427	534	159	213	267
Topkhana (part)	190	76.92	9.18	3.72	321	433	541	11	33	66
Kutubkhani (part)	194	78.54	124.74	50.50	600	805	1006	300	402	503
Paragaon (part)	452	183.00	352.11	142.55	668	879	1099	668	879	1099
Nabindapur (part)	230	93.12	161.31	65.31	182	234	293	182	234	293
Amirkhani (part)	167	67.61	159.15	64.43	816	1047	1309	734	942	1178
Majlishpur	1266	512.55	801.00	324.29	727	1239	2690	509	827	1690
Baniachong north-east (part)	948	383.81	450.00	182.19	9312	11929	13897	4656	5965	6948
Baniachong north-west (part)	500	202.43	300.00	121.46	8745	11043	12394	4373	5522	6197
Baniachong south-east (part)	1052	425.91	750.00	303.64	8418	11873	13456	4209	5937	6782
Baniachong south-west (part)	2200	890.69	1450.00	587.04	9526	12858	13754	4763	6429	6877
Total	8301	3360.74	3910.15	2055.30	44014	58926	68672	22683	30408	35637

Source : Bangladesh Bureau of Statistics, 1961, 1974 and 1981 and field survey, January 1987.

To demarcate the Study Area, following major aspects were considered :

- i. Existing Pourashava area and proposed new areas.
- ii. Existing pattern of development of urban services in the built up parts of the Upazila Shahar.
- iii. Pattern of existing transportation network of the Upazila Shahar and its adjacent parts.
- iv. Tendency of landuse changes from agricultural to non-agricultural uses.
- v. Vacant spaces and availability of buildable land within the Shahar Area.
- vi. Potentials for future development of urban services.

The area and population within the Study Area are shown in Table 16 .

3.3 Existing Landuse, Facilities and Utilization Characteristics

In the following paragraphs, the existing landuse pattern, facilities in the Shahar and their utilization characteristics are discussed.

3.3.1 Existing Landuses

Baniachong Upazila Shahar was not communicable by any improved road till last year. A semi-pucca road between Hbiganj Zila Shahar and Baniachong Headquarters is near in completion.

Due to the problem of transportation and communication and lowlying land in the existing Upazila Shahar, its Urban growth has been at a minimum level. The existing development is found in three major places within the Study Area. These three places also have three bazars.

The major existing landuses are presented in Table 17 and their details are shown in Tables 18 to 26 . The existing landuses are also shown in Map-3.

Table 16 : Area and population within the Study Area

Name of mouza	Total Area		Involved Area (Study Area)		Total population			Involved population (Study Area)		
	Acre	Hectare	Acre	Hectare	1961	1974	1981	1961	1974	1981
Sharifkhani (part)	185	74.90	93.55	37.87	1150	1493	1866	575	727	933
Chowdhurypara (full)	182.68	73.96	182.68	73.96	377	599	749	337	599	749
Uttarjatra (part)	555	224.70	183.14	74.15	3074	4504	5630	1537	2252	2815
Deshmukhya (part)	212	85.83	210.44	85.20	157	162	203	150	155	190
Purnabag (full)	250.61	101.46	250.61	101.46	159	208	260	159	208	260
Chaturangray (part)	150	60.73	95.00	38.46	318	427	534	159	214	267
Topkhana (part)	190	76.92	180.82	73.24	324	433	541	310	400	475
Safardirhi (full)	165.65	69.09	170.65	69.09	1550	1797	2246	1550	1797	2246
Kutubkhani (part)	194	78.54	69.26	28.04	600	805	1006	300	403	503
Parapson (part)	452	183.00	99.89	40.44	668	879	1099	0	0	0
Nabindapur (part)	230	93.12	68.69	27.81	182	234	293	0	0	0
Amirkhani (part)	167	67.61	7.85	3.18	816	1047	1309	82	105	131
Total	2933.94	1189.86	1612.58	652.87	9372	12588	15736	5159	6860	8569

Source : Bangladesh Bureau of Statistics, Population Census, 1961, 1974 and 1981 ; and field survey, January 1987.

Table 17 : Existing Landuses in the Upesile Shehar Baniachong

Sl. No.	Type of use	Name of Mouze (acres)										Total Area		Percentage of the Grand Total		
		Sherif Khani	Chowdhury Fara	Uttar Zatra-pasha	Beshmukhya	Puranta	Chaturan Faroy	Topkhana	Shager-dikhi	Kutub-Khani	Paragon	Nabinda-pur	Amir-Khani		Acre	Hectare
1.	Residential	21.13	33.15	46.18	53.40	62.81	24.29	64.51	23.53	15.48	-	-	0.71	345.19	139.75	21.41
2.	Administration & Govt.	0.65	1.25	-	-	9.48	6.54	0.15	-	-	-	-	-	18.07	7.32	1.12
3.	Health Complex	0.31	7.45	-	-	0.10	-	-	-	-	-	-	-	7.86	3.18	0.49
4.	Education	-	0.25	-	0.34	2.41	-	0.13	5.61	0.18	-	-	-	8.92	3.61	0.55
5.	Commerce	0.47	-	-	-	0.55	-	2.00	0.80	-	-	-	-	3.82	1.55	0.24
6.	Industry	0.08	-	-	-	-	-	0.12	-	-	-	-	-	0.20	0.08	0.01
7.	Socio-culture	1.70	-	-	2.31	3.20	0.80	1.00	1.07	1.53	-	-	-	11.61	4.70	0.72
8.	Urban Services	-	0.48	-	-	-	-	0.38	-	-	-	-	-	0.86	0.35	0.05
9.	Water body	14.53	28.74	24.28	17.43	20.15	10.39	9.91	91.99	8.63	-	-	-	226.05	91.52	14.02
10.	Roads	4.59	7.46	8.35	7.75	9.84	3.88	9.54	6.56	4.77	2.86	-	-	65.60	26.57	4.07
11.	Agriculture	50.09	103.90	104.33	129.21	142.07	49.10	93.08	41.09	38.67	97.03	68.69	7.14	924.40	374.25	57.32
Grand Total		93.55	182.68	183.14	210.44	250.61	95.00	180.82	170.65	69.26	99.89	68.69	7.85	1612.58	652.87	100.00

Source : Landuse Survey, November, 1986.

3.3.2 Facilities and Utilization Characteristics

The existing facilities in the Upazila Shahar are not adequate. The Shahar lacks in commercial facilities, roads and other urban services like water supply, swerage etc. However, its administrative, health and education facilities are quite appreciable.

The existing urban facilities are shown in Tables 18 to 26 and their utilization characteristics are discussed below :

Table 18 shows that there are a good number administrative offices which comprise an area of 18.07 acres. The maximum area (13.54 acres) is comprised by Upazila administrative complex.

Table 19 shows that post office and telegraph and telephone exchange are the only urban services which comprise only a negligible amount of land. Table 20 indicates that Upazila health complex comprises the maximum area (7.45 acres) of health services.

From Table 21, it is noted that graveyard (8.78 acres) comprises most of the area under socio-cultural uses.

Table 22 shows that Boys High School in the Upazila Shahar located in sagardighi mouza comprises the maximum area of the educational landuses. There are one girls high school, one college and one mad-rasha in the Upazila Shahar.

Of the total (3.82 acres) commercial landuses in Table 23, .51 acres are under shops developed in different parts of the Shahar especially in three bazar centres in Topkhana, Sharifkhani and Chowdhury para mouzas. Rice mill, Saw mill and one press comprise the industrial development of the Upazila Shahar Baniachong. The total land under industry is very minimum (Table 24).

Table 18 : Administrative Govt. & Autonomous body.

Sl. No.	Landuse	Area		percentage of the total
		Acre	Hectare	
1.	Upazila Complex	13.54	5.48	74.93
2.	Police Station	0.46	0.19	2.54
3.	WAPDA	0.15	0.06	0.83
4.	Tohsil Office	0.65	0.26	3.60
5.	Sub-Resistry Office	1.43	0.85	7.91
6.	Dak Banglow	0.47	0.19	2.60
7.	Godown	1.25	0.51	6.92
8.	Animal Husbandry	0.06	0.02	0.33
9.	Union Parishad	0.06	0.02	0.33
Total		18.07	7.31	100.00

Source : Landuse survey, November, 1986.

Table 19 : Urban Services

Sl. No.	Landuse	Area		percentage of the total
		Acre	Hectare	
1.	Post Office	0.71	0.29	82.56
2.	Telegraph & Telephone	0.15	0.06	17.44
Total		0.86	0.35	100.00

Source : Landuse survey, November, 1986.

Table 20 : Health Facilities

Sl. No.	Landuse	Area		percentage of the total
		Acre	Hectare	
1.	Health Complex	7.45	3.02	94.78
2.	Charitable Dispensary	0.31	0.13	3.95
3.	Veterinary	0.10	0.04	1.27
Total		7.86	3.18	100.00

Source : Landuse survey, November, 1986.

Table 21 : Socio-cultural Centres

Sl. No.	Landuse	Area		percentage of the total
		Acre	Hectare	
1.	Mosque	1.73	0.70	14.90
2.	Graveyard	8.78	3.55	75.63
3.	Eidgah	1.05	0.43	9.04
4.	Club	0.05	0.02	0.43
Total		11.61	4.70	100.00

Source : Landuse survey, November, 1986

Table 22 : Educational Landuse

Sl. No.	Types Institute	Area		percentage of the total
		Acre	Hectare	
1.	Primary School	1.40	0.57	15.70
2.	Boys High School	4.91	1.99	55.04
3.	Girls High School	0.55	0.22	6.16
4.	College	0.70	0.28	7.85
5.	Madrasha	1.36	0.55	15.25
Total		8.92	3.61	100.00

Source : Landuse survey, November, 1986.

Table 25 shows that the amount of waterbodies is quite large (226.05 acres). Of this, ponds, tanks and ditches comprise the maximum area. Due to its peculiar topographical condition, the Upazila Shahar Baniachong has a large number of ponds, tanks and ditches. As a result, for any development work, land filling fully or partially upto a certain level is required in most cases.

Table 26 presents information on roads in the Upazila Shahar. It shows that there is no pucca road in the Upazila Shahar. The only 4.24 kilometre length semi-pucca roads comprise only 6.37 acres of land. The katcha roads comprise 59.23 acres of land. It is observed in the survey that road width in most cases is minimum which will require sufficient widening for accommodating future increased number of traffic.

3.3.3 Land Value

In Table 27, the information on land value in the Upazila Shahar are presented. It shows that the value of buildable high land is higher. Again, the highest land value is found to be in the central part of the Shahar for commercial lands. The value of agricultural land and ditches is comparatively lower. Figure-1 shows an approximate land value in the Upazila Shahar.

3.3.4 Town Service Centre

The Town Service Centre includes the existing built up part of the Shahar, the Upazila Administrative complex and other important services and facilities. This part of the Shahar will also be important in the future Landuse Plan. The details of the services and facilities in the Town Service Centre are shown in Map-4.

UPAZILA SHAHAR BANIACHONG

0 0.56 mile
0 0.91 Km.



LEGEND

High land value	
Moderate land value	
Low land value	
Road	
Shahar boundary	
Settlement & services	
Pond/Dighi	

Fig. 1 Land Value

Table 23 : Commercial Landuse

Sl. No.	Landuse	Area		percentage of the total
		Acre	Hectare	
1.	Shop	2.51	1.02	65.71
2.	Bazar	0.85	0.34	22.25
3.	Market	0.33	0.13	8.64
4.	Bank	0.13	0.05	3.40
Total		3.82	1.54	100.00

Source : Landuse survey, November, 1986.

Table 24 : Industrial Landuse

Sl. No.	Landuse	Area		percentage of the total
		Acre	Hectare	
1.	Rice mill	0.12	0.04	60.00
2.	Saw mill	0.04	0.02	20.00
3.	Press	0.04	0.02	20.00
Total		0.20	0.08	100.00

Source : Landuse survey, November, 1986.

Table 25 : Water Bodies

Sl. No.	Types of water bodies	Area		percentage of the total
		Acre	Hectare	
1.	Pond	123.55	50.02	54.66
2.	Ditch	99.67	40.35	44.09
3.	Chhara	2.83	1.15	1.25
Total		226.05	91.52	100.00

Source : Landuse Survey, November, 1986.

Table 26 : Landuse by Roads

Sl. No.	Nature of roads	Roads	Area		percentage of the total
		Length in Km	Acre	Hectare	
1.	Semi-pucca	4.24	6.37	2.58	9.21
2.	Katcha	39.34	59.23	23.98	90.29
Total		43.58	65.60	26.56	100.00

Source : Landuse Survey, November, 1986.

Table 27 : Land value within the Study Area

Land type	Value in Taka per acre
Agriculture	35,000
Low land	20,000
Residential	60,000
Commercial	1,50,000
High land in the Administrative landuse area	1,00,000

Source : Field survey, January, 1987.

3.4 Physical Opportunities and Constraints

During the survey, the physical opportunities and constraints of the Upazila Shahar were identified. These are discussed in the following paragraphs. Also figure-2 and figure-3 present information on land level and agricultural potentiality on the Upazila Shahar.

3.4.1 Physical Opportunities

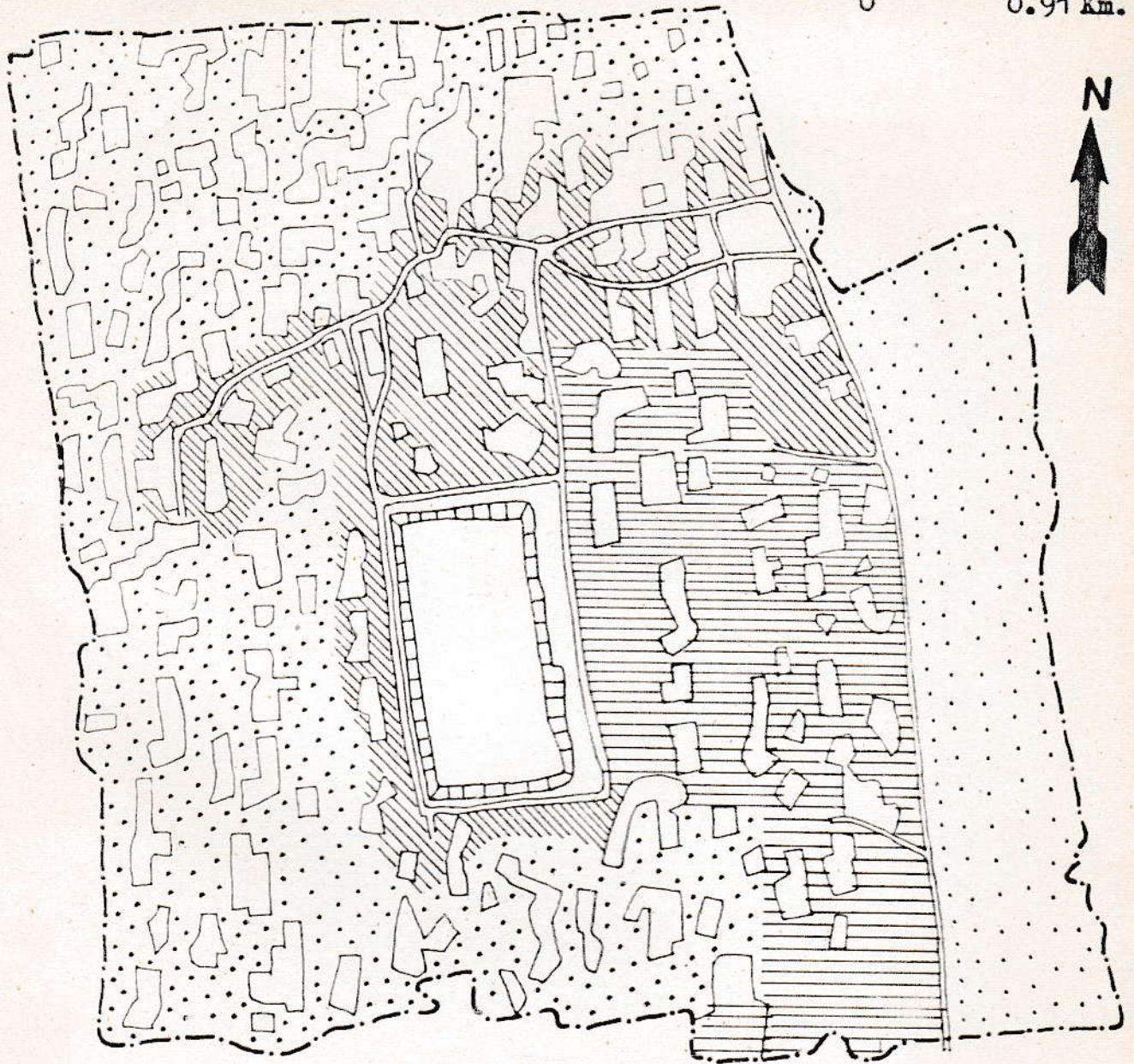
- Increase in the road traffic associated with local trades and passenger movement after the road between Hobiganj and Baniachong is improved in last year.
- Existence of a large tract of reserve land of Sagardighi within Upazila Headquarters area.
- Very high demand for a good township and trade centre by the population of the Upazila Shahar and its Catchment Area.
- Increased exploitation of fisheries by improved transportation.

3.4.2 Physical Constraints

- Very high density of population surrounding the existing Upazila Shahar area making scarcity of land for further expansion of services and facilities.
- Low-lying area in and around the Upazila Shahar restricting the development of urban services and facilities.
- High cost involvement for earth-filling.

UPAZILA SHAHAR BANIACHONG

0.56 mile
0.91 Km.



LEGEND








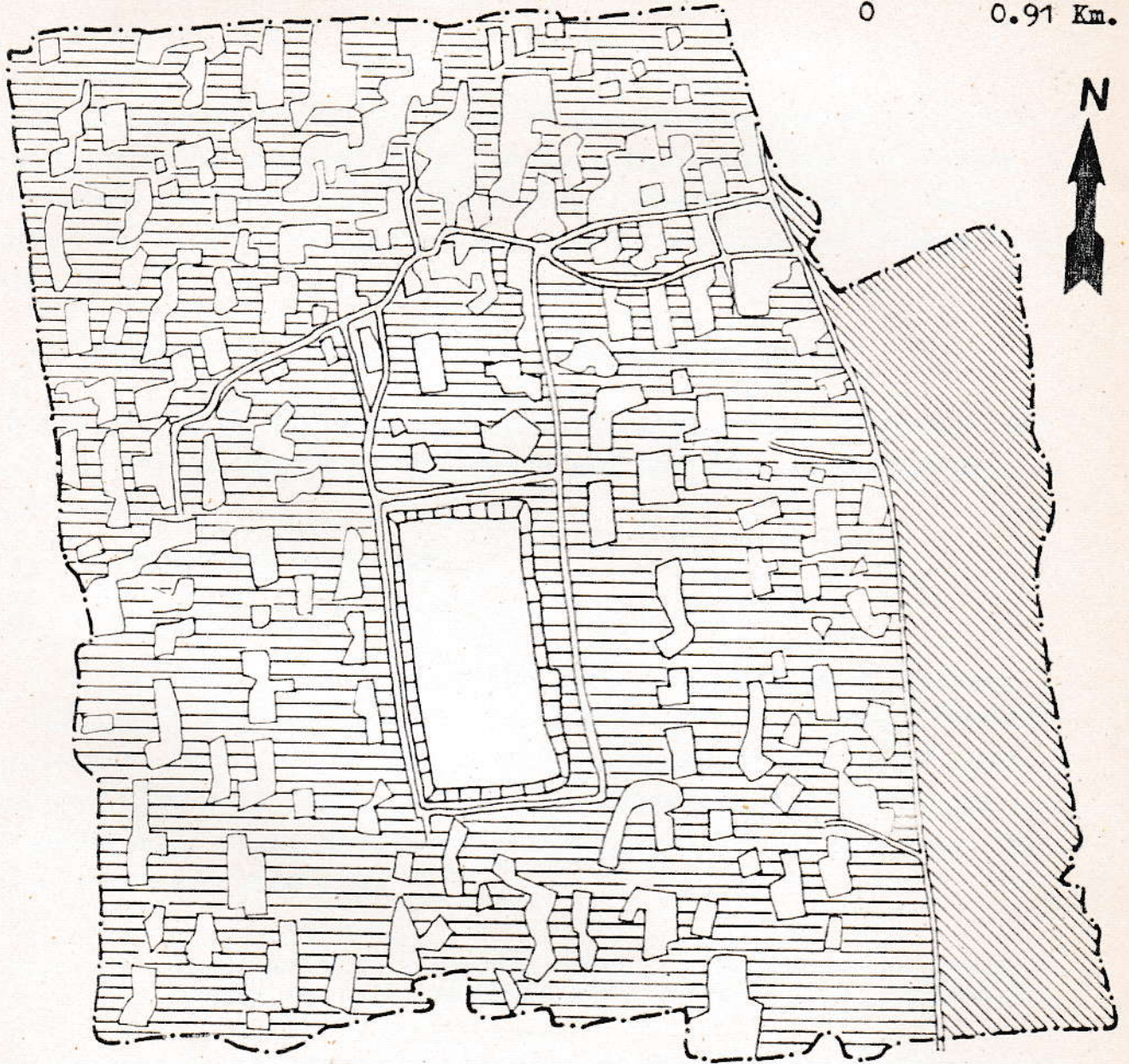
High land	
Medium high land	
Low land	
Road	
Shahar boundary	
Settlement & services	
Pond/Dighi	

Fig. 2 Land Level

UPAZILA SHAHAR BANIACHONG

0 ——— 0.56 mile
0 ——— 0.91 Km.



LEGEND







- Double crooped area 
- Single crooped area 
- Road 
- Shahar boundary 
- Settlement & services 
- Pond/Dighi 

Fig. 3 Agricultural Potentiality

Chapter IV

FORECASTS

This Chapter presents forecasts on population, household structure and density of population in the Upazila Shahar and its Sphere of Influence over different Plan periods. The estimates of labour force and migrant population are also considered for Design Population.

4.1 Population, Household Structure and Density

In the following paragraphs, population, household structure and density in the Sphere of Influence and the Upazila Shahar are presented.

4.1.1 Sphere of Influence

A. Population

The Catchment Area or the Sphere of Influence includes mouzas in full or part and an area of 3910.15 acres (2055.30 hectares). Total population of the Catchment Area in 1981 was persons. Table 28 shows area of the Sphere of Influence and population on high, medium and low projections for the year 1985, 1990, 1995 and 2000 A.D.

Table 28 Population size in the Sphere of Influence of Upazila Shahar on high, medium and low projection, 1985-2000.

	projection					
	High		Medium		Low	
	Pop. 1974	Pop.1981	Pop.1961	Pop.1981	Pop. 1961	Pop.1974
	30408	35637	22683	35637	22683	30408
	Growth rate = 2.29%		Growth rate = 2.28%		Growth rate = 2.28%	
1985	39015		38999		38999	
1990	43692		43652		43652	
1995	48929		48861		48861	
2000	54794		54691		54691	

Source : Population of 1961, 1974 and 1981 is quoted from Population Census.

Note : Population in 1981 is considered as base population.

B. Population Density :

The density of population in the Sphere of Influence is considered to be the number of population per acre over different plan periods. The density of population is shown in Table 4-2.

Table 29 Density of Population on medium range projection in the Sphere of Influence of Upazila Shahar, 1985-2000.

Aspects	Year			
	1985	1990	1995	2000
1. Area (acre)				
2. Population	12,768	16,381	21,017	26,964
3. Density/acre				

Note : Area is determined by field survey.

C. Household Structure :

The household size of the Upazila is 5. as per the Census Report 1981. It is assumed that within the Catchment Area of the Shahar the household size will be similar.

4.1.2 Upazila Shahar

A. Population

The effective Study Area identified during the survey is defined to be the Upazila Shahar. The final area and boundary of the Upazila Shahar are presented in chapter V of the Report. In Table 30 , population of the Upazila Shahar on high, medium and low projections over different plan periods are presented.

Table 30 : High, medium and low projection of resident population of the Upazila Shahar (Study Area), 1985-2000.

	projection					
	High		Medium		Low	
	Pop.1974	Pop.1981	Pop.1961	Pop.1981	Pop.1961	Pop.1974
	6860	8569	5159	8569	5159	6860
	Growth rate=3.23%		Growth rate=2.57%		Growth rate=2.22%	
1985	9731		9484		9356	
1990	11407		10767		10442	
1995	13372		12223		11653	
2000	15676		13877		13006	

Source : Population of 1961, 1974 and 1981 is quoted from Population Census.

Note : Population of 1981 is considered as base population.

B. Household Structure

The household size in the Study Area was found to be 5. in the survey in 1986.

C. Population Density :

The population density in the Study Area is moderate. But it may increase gradually with the growth of Shahar.

Estimates on Migration

Migration has been considered here in terms of the growth of population in the Zila and a redistribution pattern of the incremental population and labour force within the Greater Zila Sylhet and its Upazilas and outmigration to other Zilas. The net migration estimated by the Bangladesh Bureau of Statistics is quoted in Chapter II of the Report.

4.2 Labour Force and Employment

Labour Force :

There is hardly any dependable data to estimate the labour force and employment in urban and rural areas of Bangladesh. But it may be predicted from the information used in Chapter II of the Report.

Also, it is also difficult to determine employment structure at Upazila level because a correct picture is not available in the published data of the Bangladesh Bureau of Statistics.

4.3 Provision Standards and Land Requirements

Design Population

Table 28 and 30 present information on forecasted population for residential and services requirements of the Upazila Shahar. The population which will be residing at the Upazila Shahar is considered for residential land requirements and primary education facilities. For other uses, mostly the population of the Sphere of Influence of the Shahar is considered.

Land Requirements

The guidelines provided in the Terms of Reference (TOR) of the Urban Development Directorate in respect of Landuse Plan of the Upazila Shahar are mostly followed to assume the provision standards for different landuses.

Land requirements for different uses of the Upazila Shahar are determined specifically on the basis of the following :

- a. Forecasted population size of the Upazila Shahar over different plan periods.
- b. Provision of existing services and their future land requirements.
- c. Physical environmental condition, e.g., land level, waterbodies, etc.
- d. Circulation system of the Upazila Shahar and its transportation linkage.
- e. The planning standards provided in the TOR.

The estimated land requirements and proposed uses for the Upazila Shahar is presented in Table 31 .

Table 31 Summary of Existing and proposed landuses (2000 A.D.)

Function	Existing (acres)	percentage	Proposed (acres)	percentage
1. Housing	345.19	21.00	320	44.00
II. Infrastructure				
1. Education	8.92	0.02	17.70	2.00
2. Health	7.86	0.02	12.50	1.00
3. Administration/ Judiciary	18.07	1.00	21.00	2.10
4. Recreation	0.00	0.00	16.70	2.00
5. Socio-culture	11.61	0.03	12.60	1.10
6. Urban Services	0.86	0.01	8.60	0.80
7. Commerce and Industry	4.02	0.01	15.00	2.00
8. Roads	65.60	4.00	81.50	11.00
9. Urban deferred	0.00	0.00	78.20	10.00
10. Agriculture and Reserves(Ponds drainage etc.)	1150.45	71.00	139.60	19.00
	<u>1612.58</u>	<u>100.00</u>	<u>723.40</u>	<u>100.00</u>

Table 32 : Details of Estimated land requirements, upto 2000 A.D.
(existing uses incorporated).

Identified projects	Provision standard as per TOR	Existing land (acre)	Land requirements upto 2000 A.D. as per TOR	Proposed land		% of the total
				acres	hect.	
I. <u>Housing</u>	60 persons per acre	<u>345.19</u>	231.28	<u>320</u>	<u>129.55</u>	65.
II. <u>Infrastructure</u>						
1. <u>Education</u>		<u>8.92</u>		<u>17.70</u>	<u>7.17</u>	
- Primary/Nursery (Shahar pop.)	2 acre/ 5000 pop.		5.56	5.40	2.59	.0
- Secondary school	5 acres/ 20000 pop.		3.46	5.30	2.15	.0
- College	5 acres/ 20000 pop.		3.46	5.40	4.45	1.0
- Social welfare school (Vocational)				2.00	1.21	.0
2. <u>Health</u>		<u>7.86</u>		<u>12.50</u>	<u>5.06</u>	
- Dispensary/ Maternity/ Child Care	1 acre/ 5000 pop.		2.77	.50	0.20	.0
- Health Complex	5 acres/ 20000 pop.		3.46	12.00	4.86	1.0
3. <u>Administration/ Judiciary</u>	12 acres/ Upazila Shahar	<u>18.07</u>	12.00	21.00	7.28	1.0
4. <u>Recreation</u>				<u>16.70</u>	<u>6.76</u>	
- Parks/Open space	1 acre/ 10000 pop.		1.39	7.50	4.05	1.0
- Cinema Hall	0.5 acre/ 20000 pop.		.35	1.00	0.36	.0
- Play Field	3 acres/ 20000 pop.		2.08	8.20	4.53	1.0

Identified projects	Provision standard as per TOR	Existing land(acre)	Land requirements upto 2000 A.D.as per TOR	Proposed land acres	Proposed land hect.	% of the total
<u>5. Socio-culture</u>				12.60	5.10	
Mosque/Temple	0.5 acres/ 20000 pop.	<u>11.61</u>	.35	4.50	1.82	.04
Eidgah						
Cemetary/ Graveyard	5 acres/ 20000 pop.		3.46	4.00	0.40	.01
Town Hall						
Community Centre				2.20	0.49	.01
Public Library				1.90	0.36	.01
<u>6. Urban Services</u>		<u>0.86</u>		<u>8.60</u>	<u>3.48</u>	
Post Office	0.5 acres/ 20000 pop.		.35	.30	0.09	
Telephone exchange	0.5 acres/ 20000 pop.		.35	1.00	0.40	
Bus/Ghat/Rail station	1 acres/ 20000 pop.		.69	3.40	0.57	.01
Other Services	1 acre/ 20000 pop.		.69	.70	0.28	.01
Fire Services				1.90	0.36	.01
Water supply						
Electric Sub-station				1.10	0.45	
Petrol pump				.20	0.08	.01
<u>7. Commerce and Industry</u>		<u>4.02</u>	20.80	<u>15.00</u>	<u>6.07</u>	
Commerce		3.82		6.50	2.63	.65
Industry		0.20		8.50	3.44	.93
<u>8. Roads</u>	5-10% of the total	<u>55.60</u>	96.72	81.50	32.99	
<u>9. Urban deferred</u>	10% of the total		161.20	<u>78.20</u>	31.66	7.66
<u>10. Agriculture and Reserves(Ponds, drainage etc.)</u>	5% of the total	<u>1150.45</u>	80.60	139.60	56.52	13.67
Total		1612.58	631.02	723.40	292.87	100.0

Chapter V

LANDUSE PLAN

This chapter presents a discussion on the approach, concept and planning principles for the Landuse Plan of the Upazila Shahar. A description of the Landuse Plan is also included.

5.1 Approach, Concept, Planning Principles

Planning Concept and Principles

The main objective of the Landuse Plan is to accelerate and control the development through an appropriate locational and functional arrangement of urban services and facilities in the Upazila Shahar. The Planning Concept in this respect is also related to the Government's policy of administrative decentralization. In the decentralization policy, there is a commitment to carry out economic development and employment generating activities by Government Agencies. In the light of the above, two basic principles of planning are followed :

- i. First, functions to be located at the Upazila Shahar will be consistent with social, economic and physical infrastructural requirements of the Shahar's projected population upto the year 2000 A.D. The functions relating to socio-economic activities and employment generating activities are to be shared by the Upazila Shahar and other growth centres.
- ii. Second, the land requirements for housing are catered to the needs of the population of the Upazila Shahar. The population of the Sphere of Influence is included along with the population of the shahar to determine the total land requirements for urban services and facilities.

On these basic principles and general guidelines for development, individual schemes for implementation may be taken up for detail works according to a phase-wise development programme. The proposals in the Plan are evolved on the basis of existing conditions and expected trend in the growth of further population and services in the Upazila Shahar.

Planning Approach

Based on planning concepts and principles as well as practical limitations in the organization of Landuses, proposals for different landuses and guideline for implementation of those are prepared.

A General approach to the preparation of landuse plan is to consider the natural physical forces at work, such as, the natural drainage pattern, flood affected areas, existing pattern of development etc. For allocating land, a conventional method is adopted for distributing different uses, e.g. administrative, commercial industrial, residential and other urban services and facilities. As far as practicable, existing landuses and current scheme of any project are incorporated in the Plan. However, the landuses are proposed in such a way so that urban facilities are well distributed. Usually, a community of 5000 population is considered for the distribution of essential services. The road network in the proposed Landuse Plan is arranged in a way to obtain an efficient system of intercommunication between all parts of the shahar and its surroundings.

Blocks of landuses are created within a network of road system. The major and secondary road network are proposed in a way to control development and to have easy entry to the central part of the shahar from any directions and also for exit from the central part to any directions.

Finally, in the preparation of landuse plan, attempts are made so that adequate services and facilities may be achieved. Also, care is taken not to misuse the scarce land and public money.

5.2 Plan Description

The Landuse Plan of Upazila Shahar includes a total area of 723.40 acres (292.87 hectares). The estimated total population of Upazila Shahar in the year 2000 A.D. is 13877. The plan is prepared to provide residential facilities for the Shahar's population and necessary services and facilities for the Shahar's population and also the Catchment Area population.

The structure of the Shahar is more or less of a rectangular shape. The shape of the Shahar is mainly formed by the existing road network. The Landuses are conveniently located within the major and secondary roads and in areas included along these roads. A short description of major uses are presented in the following paragraphs.

Road Network :

In the road system of the Shahar, 100' width for highway, 80' width for inter Upazila road, 60' width for major roads and 40' width for secondary roads are considered. It is assumed that 24' road will be used in the detailed plan of each Landuse Zone. In the present plan, existing roads are considered to minimize the cost of road construction.

Commerce :

Commercial uses are distributed in different parts of the Shahar. Market and major shopping areas are provided in the central parts along major roads. Small shopping centres are distributed in different parts especially within residential uses.

Industry :

It is considered that in future there will be some industrial development in the Upazila Shahar. The areas for industrial uses are provided along the major transport route in the peripheral parts so that residential areas are not disturbed.

Administrative Uses :

Existing administrative landuses are least disturbed in the plan and additional land is provided along it as per requirement. The major administrative area is located in the central part. However, changes or extension of areas for this use will be possible since urban deferred areas are provided in different parts of the Shahar.

Education :

The location of each primary school is selected for approximately a population of 5000. The secondary schools and colleges are provided for both Shahar Population and Catchment Population. Girls' High School is also provided in the Plan.

Health :

The Health Services in the Plan mainly include a Hospital and a Maternity or Child Care Centre. The existing location of the Hospital is not disturbed but an additional area is included as per planning requirement. The Maternity Centre is located in central part to minimize travel distance for the dwellers.

Urban Services :

The major Urban Services proposed in the plan are Post Office, Telephone Exchange, Water supply, Power supply and Fire Service. These are located in a suitable central area of the Shahar. The existing location of Railway Station and Police Station are not disturbed. A Bus Terminal is provided along the major road to maintain services in all directions.

Socio-cultural Uses :

The important Socio-cultural uses proposed in the plan are community centre, Town Hall, Public Library and Central Eidgah. The location for these facilities are selected in a suitable central part of the Shahar. Mosques and Temples are mainly distributed in their existing locations. A Graveyard is also provided in the outskirts of the Shahar.

Recreation :

The recreational uses in the Landuse Plan included Park, Shishu Park, Stadium, Play Fields and Cinema Hall. The Stadium is located in a suitable central area accessible from all directions.

Residential Uses :

The existing residential uses are least disturbed in the Landuse Plan. The additional areas are included as per requirement of the Plan.

Urban Deferred and Reserves :

The Urban Deferred land is distributed in the Landuse Plan keeping scope for future extension of Urban Services and facilities and Governmental uses in different parts of the Shahar. The existing low land and waterbodies are mainly kept as Reserves.

Chapter VI

PROGRAMMING AND IMPLEMENTATION

This Chapter presents a discussion on programming and implementation of the Landuse Plan of the Upazila Shahar. The major aspects are phasing and priority action of projects, provision of urban deferred lands for future governmental uses and development control, monitoring and review of the Upazila Shahar's Landuse Plan.

6.1 Priority Actions, Cost Implication

The Landuse Plan of the Upazila Shahar enunciates a Landuse Zoning of different urban uses. The Landuse Zones are to be elaborated in future with detailed plans before laying out internal road and services network.

Some important services like, Administration, Health, Education, Market, Shopping Centres, Community Centre, Stadium, Central Park, Telephone and Postal service etc. are to be provided in this priority action and revenue income and residential facilities.

The standards and provisions of the Landuse Plan of the Upazila Shahar are in accordance with the standards of the Government, adopted in the provision of facilities.

It is considered that the provision of facilities, land fill, etc. will result, cost of any project, the cost of land fill

6.2 Phasing, Urban Deferred

The present Plan is prepared keeping in view the requirements for the development of services and facilities consistent with the incremental changes of population. Usually, a 5000 population qualify to be a primary urban neighbourhood. In most cases, each neighbourhood and major Landuse Zones are bounded by service roads. As the plan period is divided into 5-yearly phases, concerned authorities are advised to follow the 5-year development targets to implement the Landuse Plan.

The amount of land against each major landuse category and over different plan periods is determined on the basis of population size and project priorities. The phase-wise development proposal should, therefore, differ in some priority areas such as, expansion of the principal road network for which land should be acquired on priority basis.

The present Landuse Plan is prepared on the basis of medium population projection. As a result, in future, additional land may be required to accommodate changes in population size and urban services and facilities vis-a-vis for any decision regarding new projects in the Upazila Shahar. Considering the above situation, the urban deferred land is distributed over different areas within the Shahar so that a balance may be maintained in the Landuse Plan. The total urban deferred area is 78.20 acres (31.66 hectares) which is 7.66 percent of the total land under the Upazila Shahar.

6.3 Development Control

All types of development work including changes of any landuse should be subject to planning control. It is necessary to specify the uses which will be normally permitted in various Zones. Uses which create siting problems, such as filling stations, cinemas, hotels, stadium, etc. will necessitate special consideration. Regulations regarding building heights, density, plot coverage, preservation of natural vegetation, preservation of historic sites incorporated in the planning process. Also for revenue earning and control of landuses, different urban taxes should be imposed.

At present, there are no planning rules or regulations to control growth in the Upazila Shahar. The provisions of the Municipal ordinance is applicable only for the declared Municipalities. Hence, an appropriate planning regulation for all Upazila Shahars and potential urban centres should be framed urgently. For the time being Pourashava Ordinance or the Building Construction Act of RAJUK (Rajdhani Unnayan Kartripakha) can be adopted for the Upazila Shahars unless other suitable measures are taken by the Government. In any case, the Upazila Parishad should be the custodian of the Landuse Plan.

6.4 Monitoring and Reviewing

Monitoring : The Upazila Parishad will act as the key Agency in the Government for monitoring the development work and exercising the development control within the Upazila Shahar as stipulated in the Landuse Plan. Five Year Plans and Annual Development Plans should be prepared by the Upazila Parishad and approved by the Government on project basis. The Upazila Nirbahi Officer on behalf of the Upazila Parishad may seek advice from Urban Development Directorate in case of any difficulty in the implementation of the plan.

Since all Development Agencies at Upazila level are integrated for the purpose of carrying out development works, the Upazila Parishad will also monitor the progress of these works.

Review of the Plan : The Landuse Plan of the Upazila Shahar is a broad guideline for development work. The proposals of the Plan are evolved on the basis of existing conditions and the trend of future growth. Therefore, for any significant change in the proposal of landuses, reviewing from time to time may be required. Hence, the Landuse Plan should be reviewed periodically. The Urban Development Directorate may undertake a Five-Yearly Programme to review this Landuse Plan.
