

অসম



ৰাজপত্ৰ

মহামেৰ জয়ন্তে

# THE ASSAM GAZETTE

অসাধাৰণ

## EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত

PUBLISHED BY THE AUTHORITY

নং 387 দিশপুৰ, শুক্ৰবাৰ, 14 ডিচেম্বৰ, 2007, 23 আঘোণ, 1929 (শক)  
No. 387 Dispur, Friday, 14th December, 2007, 23rd Agraphayan, 1929 (S.E.)

GOVERNMENT OF ASSAM  
ORDERS BY THE GOVERNOR

URBAN DEVELOPMENT DEPARTMENT :: DISPUR

### NOTIFICATION

The 27th November, 2007

**No. UDD(T) 264/2006/2.-** In exercise of the powers conferred by Sub section (2) of Section 10 of Assam Town and Country Planning Act, 1959 (as amended) and the Assam Town and Country Planning (amended) Act, 1994 (Assam Act, XXIII of 1994) read with the Assam town and Country Planning (Publication of Master Plan and Zoning Regulation) Rules, 1964, the Governor of Assam is pleased to publish the following Notification regarding the publication of the **Final Master Plan and Zoning Regulation for Goalpara.**

#### NOTICE FOR THE PUBLICATION OF THE FINAL MASTER PLAN FOR GOALPARA :

1. It is notified that the Final Master Plan for Goalpara is prepared by the Director, Town & Country Planning Government of Assam under Section 10(2) of the Town & Country Planning Act, 1959 read with 3(2) of the Assam Town & Country Planning (amendment) Act, 1962 for the area described in the schedule below is hereby published.

2. The Final Master Plan and Zoning Regulation for Goalpara together with all relevant papers and maps may be inspected free of cost during the office hours at the office of the Director Town & Country Planning, Govt. of Assam, Dispur, Guwahati-6, Deputy Director, Town & Country Planning, District Office, Goalpara, the Chairman, Municipal Board, Goalpara, the Chairman, Development Authority, Goalpara. Copies of Final Master Plan also available at the office of the Director, Town & Country Planning, Government of Assam, Dispur, Guwahati-6 and the Deputy Director, Town & Country Planning, District Office, Goalpara for sale on payment.

**SCHEDULE****A. SITUATION AND AREA**

DISTRICT	GOALPARA
SUB-DIVISION	GOALPARA
THANA	GOAPLARA
STATE	ASSAM
APPROXIMATE MASTER PLAN AREA	71.49 SQ KM
APPROXIMATE MUNICIPAL AREA	12.79 SQ KM

**B. REVENUE AREA INCLUDED IN THE MASTER PLAN OF GOALPARA**

1. Goalpara Municipal Board
2. Other Revenue area

REVENUE CIRCLE	VILLAGES
BALIJANA	Hurkakuchi, Panchratna, Kharboja, Makri, Dakurbhita, Gobindapur, Hasila Bil, Dakurbhita N.C, Kalyanpur N.C, Bhalukdubi, Kalyanpur, Soulmari, Kuruabhasa, Goraimari, Bhaishkhuli, Dasarapara- Matia No. 1 & 2, Jungle Block No. 1 Gandra N.C. and Gandra
MATIA	Rakyasini Jungle Block Pt. I and Pt. II, Rakyasini Jungle Block

**C. DESCRIPTION OF BOUNDARIES**

NORTH	: Brahmaputra River
SOUTH	: Village Jungle Block, Urpada Bil & Moijonga Tea Estate
EAST	: Baladmari Char, Dek-dhowa Char, Hela-pakhri, Rakyashini Pahar, Matia- Garopara Pt I
WEST	: Kumri Bil, Village Dariduri, Taraibari, Bengkanda, Matia, Kochpara

**CHAPTER-1****INTRODUCTION****1:1 DEVELOPMENT OF GOALPARA**

Goalpara is one of the oldest towns in Assam located at the southern bank of the mighty Brahmaputra river. It is the head quarter of Goalpara District and surrounded by Bongaigaon District on the north, Barpeta District on the north-east, Meghalaya on south, Dhubri District on the west and Kamrup District on the East. Goalpara belongs to the Class III category of towns as per classification of 2001 census. Goalpara became a municipal town in the year 1875 with the formation of the first Municipal Board to look after the various civic needs of the growing community.

**FINAL MASTER PLAN  
AND  
ZONING REGULATIONS FOR GOALPARA-2021**

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# CHAPTER-1

## **INTRODUCTION**

### 1.1 DEVELOPMENT OF GOALPARA

Goalpara is one of the oldest towns in Assam located at the southern bank of the mighty Brahmaputra river. It is the head quarter of Goalpara District and surrounded by Bongaigaon District on the north, Barpeta District on the north-east, Meghalaya on south, Dhubri District on the west and Kamrup District on the East. Goalpara belongs to the Class III category of towns as per classification of 2001 census. Goalpara became a municipal town in the year 1875 with the formation of the first Municipal Board to look after the various civic needs of the growing community.

Goalpara is primarily an administrative town. Almost all the administrative head quarters of various Assam Government Departments are located here. Goalpara is also playing a vital role as commercial and educational centre in the region. Prior to the construction of Nar-Narayan Setu, the rail cum road bridge over the river Brahmaputra, connecting Goalpara Town with Jogighopa, the town had communication links with North Bank and other parts of the country by means of ferry services. But now with the completion of the bridge the town is linked with all the parts of the country by means of road through National Highway (NH) 31-B as well as by railway. Goalpara Town was connected with the network of Indian Railway with the establishment of the rail head in the town in 1998.

The P.R. Govt. Boys H.S. & M.P. School is one of the oldest educational institute of Assam and was established in the year 1868. Goalpara College was established in the year 1955 and the Junior Technical School (J.T.S.) was established in the year 1978. The Electricity Board of Goalpara Town came into being in the year 1955.

Goalpara town is connected to NH 37 by two ways. Through the Agia Road at Soulmari and through Matia road which connects NH 37 at Dudhnoi. These two are the main roads that connects Goalpara with other parts of the country as well with Guwahati, the capital city of Assam. Sri Surya Pahar located at a distance of 7 Km. from Goalpara town is a tourist spot and is of archeological importance. Sainik School at Mornoi was established in the year 1968, which lies at a distance of 18 km east of Goalpara Master Plan area.

### 1.2 LOCATIONAL ASPECT

Goalpara the Head Quarter town of Goalpara district is located at 29°9" North Latitude and 90°39" East Longitude at a distance of 156 Km towards west from Dispur, the State capital of Assam.

### 1.3. PLANNING AREA

Urbanisation is a dynamic process. As the population grows the town expands naturally and this process takes into its ambit the surrounding villages. The Master Plan envisages a scientific coordinated approach which guides the future development of the adjoining potential villages along with the development of the existing areas. The objective is to achieve a balanced growth of the town and to avoid haphazard development.

The demarcation of the planning area of Goalpara has been made after careful study of the present trend of growth of the town, the physical feature of the surrounding areas, communication network and the potential for future development of the region. The total area covered by Goalpara Master Plan is 71.49 sq km. i.e. 7149 ha which includes the Municipal area and 24 surrounding villages accommodating a total population of 81,092 as per survey conducted by Town and Country Planning, Goalpara.

## CHAPTER -2

### ***HISTORY, PHYSIOGRAPHY & CLIMATE***

#### 2.1 HISTORY

Literally 'Goalpara' means the land of milk men. However the background of Goalpara as administrative unit can be traced back from the time of its annexation by the British. History suggests that the whole of the area now forming the district of Goalpara was never a single administrative unit, rather it was divided into small entities with their own rulers or connected with different states in different times. Its history has to be considered in connection with those of various states of which from time to time, it formed a part. The great epic of Mahabharata mentions Goalpara as a part of the ancient Kingdom of Kamrup. The concrete history of Goalpara is available only from the fifteenth century A.D. when it fell within the dominion of Khan Princes whose capital Kamatapur was overrun by the Muslims in 1498 A.D. A few years later it passed into the hands of Koch kings who had their capital at Kochbihar. In 1661 A.D. it was captured by the Mughols and in 1765 A.D. Goalpara came under British rule.

#### 2.2 PHYSICAL CHARACTERISTICS

##### 2.2.1 Topography

The large portion of the town is in plain area. The town has the mighty river Brahmaputra flowing at the north. The land near the river is flood prone. Away from the river, the level of land slowly rises and the swamp gives way to vast cultivable area surrounded by dense grass and bamboos. The soil is generally alluvial and sandy.

##### 2.2.2 Temperature

The temperature of Goalpara town lies between 36°C to 20°C. May and June being the hottest period while December-January is the coldest period of the year. The maximum temperature of the town was recorded at 41.4° C on May 2nd, 1960 and the minimum temperature was recorded at 6.1° C on January 19th, 1960.

##### 2.2.3 Humidity

The climate of Goalpara town is highly humid throughout the year. From January to April the relative humidity is comparatively less, specially in the afternoon when it is between 50% to 65%. The maximum relative humidity of the town is 87% and minimum is 50 % as per records of last 20 years.



#### 2.2.4 Rainfall

The average annual rainfall of the town is 2801.3 mm. 23% of the total annual rainfall occurs during the period of March to May. The south-west monsoon arrives in the town towards the end of May and continues till early October. The rainfall in the four months, June to September accounts for 69% of the annual rainfall.

#### 2.2.5 Winds

In Goalpara town, winds are generally light. North Westerly and Easterly winds are the most common all the year round. Monsoon brings in the afternoon Southerly or South-Westerly wind also.

#### 2.2.6 Climate

The climate of this region falls within the humid-meso Gangetic type characterised by rainfall in summer months and cloud and foggy weather in winter months. Average rainfall in the District is 77.52mm. In late winter, a local low is developed over the valley and if this depression coincides with the western depression, thunder shower may result. Fog is very common feature of winter.

Table No.-1

#### MEAN TEMPERATURE, HUMIDITY AND RAINFALL

Month	Temperature		Mean	Humidity %	Rainfall mm
	Maximum	Minimum			
January	22.50	11.50	17.00	84	0
February	27.10	13.60	20.35	77	5
March	31.70	18.50	25.10	71	52
April	26.80	20.00	23.40	89	432
May	29.00	22.40	25.70	87	368
June	29.20	24.30	26.75	92	484
July	31.40	25.00	28.20	91	608
August	31.70	25.70	28.70	91	664
September	32.00	25.30	28.65	88	209
October	28.60	21.50	25.05	88	91
November	26.10	20.10	23.10	94	36
December	23.12	13.32	18.22	89	5

## CHAPTER 3

### **DEMOGRAPHIC FEATURES**

#### 3.1 POPULATION

A study and understanding of growth, distribution, composition and other characteristics of the population of an urban area is absolutely necessary to assess the various civic needs like housing facilities, urban infrastructure and other civic amenities. Population study therefore forms the basis for long range planning programme. While preparing the Master Plan for greater Goalpara, this important aspect has been thoroughly studied and the plan has been prepared accordingly to cater to the various needs of its present and future population.

As per the 1971 census, the population of the old and undivided Goalpara District was 22,25,103, while the state population was 1,49,57,542. As per 1991 census, the district was predominantly rural with only 7.74 % of its total population living in urban areas and the rank amongst the districts of Assam was 11<sup>th</sup>. However as per 2001 census though the level of urbanization in the district increased slightly to 8.18%, its state wise rank among the districts has fallen from 11<sup>th</sup> to 15<sup>th</sup>. This implies that the rate of urbanization in this district is rather slow and other districts have surpassed. In 2001 the while the national urbanization was 27.8% and the same at state level was 12.72% , the district with a level of urbanisation at 8.18% still shows the clear pre dominance of the rural sector.

##### 3.1.1 Growth of Population

The population of Goalpara town as per 2001 census is 48,911 as compared to a population of 12,545 of Lakhimpur, which is the only urban center of the Goalpara district besides Goalpara Town. The present population of Goalpara accounts for 73.11% of urban population of the district, confirming its primacy as an important urban center of the district. During the period from 1901 to 1971, Goalpara town was undergoing a steady growth of population.

It experienced comparatively higher growth rate during 1971 to 1991. As per 1971 census the population of Goalpara town was 16,703 which rose to 43,077 in 1991 experiencing a bidecadal growth rate of 157.90 % as compared to 69.14% bidecadal growth rate of Lakhimpur town and 92.96% of urban Assam. This higher rate of population growth can be attributed to migration of people from neighbouring country Bangladesh and surrounding rural areas.

##### 3.1.2 Population Density

The population density of Goalpara district as per 1991 census is 366 person per sq km which has increased to 457 persons per sq km as per 2001 census. The population density of Goalpara town as per 1991

census is found to be 3304.69 persons per sq km which has increased to 3824.16 persons per sq km as per the census of 2001

Table No. - 2

POPULATION GROWTH OF GOALPARA MASTER PLAN AREA  
FROM 1951 to 1999

YEAR	URBAN POPULATION	RURAL POPULATION	MASTER PLAN AREA POPULATION	% OF GROWTH
1951	10,192	3,262	13,454	
1961	13,692	5,379	19,671	46.21
1971	16,703	16,021	32,724	66.36
1991	43,077	29,807	72,884	122.72
1999	42267	33,825	81,092	11.26
2001	48911	NA	-	-

Source: 1951, 1961, 1971, 1991 & 2001 (Urban) population from Census of India, Assam. 1999 population by Town & Country Planning, Assam, Goalpara

### 3.1.3 Sex Ratio

The sex ratio i.e. number of females per 1000 male in the state shows an improvement from 923 in 1991 to 932 in 2001. The highest sex ratio has been recorded in the district of Goalpara in 1991 which is 955. The sex ratio for Goalpara town was 928 for the year 1991 which has slightly improved to 938 as per the census of 2001.

### 3.2. POPULATION PROJECTION

This Master Plan for Goalpara takes into consideration a time frame extending up to 2021. Growth of population in an urban center is a complex phenomenon which is influenced by several factors. Therefore estimating the future population for such long period needs a careful study. In the process of Master Plan preparation population analysis and projection plays a very important role as it gives an indication of the overall dimension of the physical environment and supplies a basic yard stick for the estimation of space requirement for various categories of land uses.

The projection of population for Goalpara Master Plan area has been made on the basis of the past growth rate. Various factors which may affect the growth of future population are also carefully considered. It is expected that shifting of occupation from primary to secondary and tertiary will contribute a lot to the growth of future population. While arriving at this projected figure, the following factors were taken into consideration :

- a) Natural growth of population of the town.
- b) Trend of migration of population from rural to urban area in this region as well as in the State of Assam.

c) Impact of the newly constructed Naranarayan Setu on the river Brahmaputra connecting Goalpara with Jogighopa.

d) Impact of various development projects in the town including infrastructure development.

The population projection of Goalpara Master Plan area is given in the Table No. 3

Table No. - 3

PROJECTED POPULATION FOR GOALPARA MASTER PLAN AREA  
FROM 1951 TO 2021

YEAR	POPULATION	ESTIMATED POPULATION	INCREASE	% INCREASE
1951	13,454			
1961	19,671		6,217	46.21
1971	32,724		13,053	66.36
1991	72,884		40,160	122.72
1999	81,092		8,208	11.26
2001	85,354		4,262	5.26
2011		1,02,598	17,244	20.20
2021		1,17,527	14,929	14.55

## CHAPTER 4

### ***ECONOMIC DEVELOPMENT AND OCCUPATION PATTERN***

#### 4.1. ECONOMIC DEVELOPMENT

The economy of Goalpara town is developed primarily on tertiary sector which constitutes of trade, commerce, industry and Government jobs. Activities related to trade, commerce and industry alone comprise 8.9% of the total employment of the town. Out of the total employment of the town, 79.9% are Government servant, 16.8% are in other tertiary activities and 3.3% are in industrial sector. The trend of industrialisation in and around the town is very slow resulting in a slower economic growth. The secondary sector employment which is an indicator of higher economic growth is rather low in case of Goalpara which is only 18.54%. It is important to note that the economy of a town like Goalpara can not merely thrive on Government Sector employment. Therefore, it is imperative that adequate urban infrastructure along with power supply and good road communication be provided to attract small and medium scale industries to boost the economy of entire region.

#### 4.2 OCCUPATIONAL PATTERN

In Goalpara town only 18% of the population is employed as compared to 30.92% employment in the State urban sector. This can be attributed to the lower rate of literacy of the district (36.20%) as compared to the State (42.45%) and also lack of adequate industrial infrastructure. Out of 11,687 number of employed persons in the town, 13.01% employed in the primary sector, 18.54% in the secondary sector and tertiary sector accounts for the rest 68.18% of the employment of Goalpara town.

Table No- 4.

#### OCCUPATIONAL PATTERN OF GOALPARA TOWN

	Primary Sector	Secondary Sector	Tertiary Sector
Male	1412	2046	7002
Female	109	121	997
Total	1521	2167	7999
%	13.01%	18.57%	68.45%

## CHAPTER 5

### **HOUSING**

#### 5.1. HOUSING ENVIRONMENT

Shelter is one of the basic human needs and its condition deeply affect the character of human life. The social and cultural life in an urban center is greatly influenced by the living condition and total environment of its residential area which is generally the largest land use element in an urban settlement. It includes the prevailing conditions under which the residents live in a town. As housing constitutes the largest land use element it contributes to the overall urban form and makes significant impact on its functioning. Housing environment which includes living condition within and outside dwelling unit is of utmost importance. While site condition, water-supply, drainage, road network, provision of amenities such as education, health, recreation are significant aspects of external housing environment; the dwelling unit space per person, nature of utilities within the house, tenure status, occupancy, age and structural conditions are vital aspects of internal housing condition. The housing survey conducted by Town & Country Planning, Goalpara in 1998 reflects the total housing scenario in the Master Plan Area.

#### 5.2 RESIDENTIAL DENSITY

Residential density measures distribution of housing over the space and helps in assessing overcrowding as well as inefficient use of urban land. It is also used as a basis for assessment of land required for living including the provision for other amenities and services.

In 1998 there were approximately 3504 housing units in the planning area and 7794 in the Municipal area. Extreme overcrowding is found in the slum areas of the town which is in some cases about 7 persons per dwelling unit. At present the gross residential density within the Master Plan area is 11.90 units per hector. The low residential density in the planning area is primarily due to the inclusion of large rural areas within the Master Plan.

#### 5.3 STRUCTURAL CONDITIONS

The survey carried out by Town & Country Planning, Goalpara in the year 1998 reveals that overall housing condition in the Goalpara Master Plan area is far from satisfactory. Out of the total 11298 houses of the Master Plan Area 41.05 % are kucha houses, 57.06 % are semi-pucca houses and the percentage of pucca (R.C.C. ) houses is only 1.89 % and is mainly concentrated in the centre of the Goalpara Municipal Area. The Table No. - 5 shows the detail conditions of the existing housing stock of Goalpara Master Plan area.

Table No.- 5

STRUCTURAL CONDITIONS OF HOUSES IN  
GOALPARA MASTER PLAN AREA: 1998

Sl	Type of house	URBAN (Goalpara Municipal Area)		RURAL		MASTER PLAN AREA TOTAL		WALLS, ROOF & MATERIALS USED
		No. of house	% to total	No. of house	% to total	No. of house	% to total	
1	Kutcha	2184	28.02	2454	70.03	4638	41.05	Thatch grass roof with reed grass, bamboo wall with or without mud plaster
2	Semi-pucca	5448	69.90	999	28.51	6447	57.06	GI, AC sheet or tile roof with bamboo reed or brick with cement plastered wall
3	Pucca (RCC)	162	2.08	51	1.46	213	1.89	RCC column and RCC roof, brick with cement plastered wall
	Total	7794	100	3504	100	11298	100	

## CHAPTER 6

### **EXISTING PHYSICAL CONDITION**

Urban sprawl is often conditioned and shaped by the natural landscape like hills, water bodies, forest and man made impediments like railway line, major roads, canals etc. The growth of Goalpara town is restricted towards north and east by the river Brahmaputra and its tributary Jinari. Therefore any extension of the existing urban area will be possible towards south and south-west only. Natural growth of the town has been observed towards the southern part upto Soulmari. However the pace of development is slow due to lack of any economic base and also due to the existence of Protected Reserved Forest (PRF).

#### 6.1. EXISTING LAND USE ANALYSIS

Functional relationship among various uses of land gives a clear picture of the functional efficiency of an urban area. The inter-relationship between various categories of land use is important to formulate future policies and to evolve a systematic land use pattern.

In order to understand and analyse the various functional co-relationship, a detailed land use survey of the planning area was carried out which helped in identifying the co-relationship among the various activities and also the existing inconsistencies. The detailed land use analysis of the inhabited area also reflected the share of urban land for various activities highlighting the inadequacies of land for various uses as per the norms.

##### 6.1.2 Existing land use pattern

The study of the existing land use pattern of the Master Plan area was carried out in order to formulate future policies so that a balanced approach can be made in allocating the future land uses. The existing land use in the Goalpara Master Plan area has been grouped into the following 12 ( twelve ) categories which is shown in the Table no.- 6

#### 6.2. LAND RESOURCES

Goalpara Master Plan covers an area of about 71.49 sq km out of which only 30.38 % is usable. The rest 69.62% constitutes of already inhabited area, the hills, water-bodies, P.R.F., agricultural land and pockets of low lying areas. Table No. - 7 shows the existing land resources of the Master Plan area which clearly states that the land for future development is 2171.71 Ha constituting 30.38% of the total Master Plan Area.

#### 6.3. PUBLIC UTILITIES AND SERVICES

##### 6.3.1. Water Supply



As per 2001 census out of the total household of 10093 in Goalpara town, piped water is accessible to only 842 households covering a population of 8.34% only. Existing water supply in Goalpara town is maintained by the Goalpara Municipal Board by lifting water from deep tube wells and through over head reservoirs. At present there are two over head tanks with capacity of 30,000 gallons constructed one at ward no. 10 and at ward no. 3 respectively. Rest of the Goalpara town depends either on ring well, ponds or tube-wells.

Table No. - 6  
EXISTING LAND USE, GOALPARA MASTER PLAN AREA

Sl	Land Use	Area (Sq Km)	% of total Developed Area	% of total Area
1.	Residential	12.9898	62.72	18.17
2.	Commercial	1.5101	7.29	2.11
3.	Industrial	0.2870	1.39	0.40
4.	Public & Semi-Public	1.8812	9.08	2.63
5.	Transport	0.3697	1.79	0.52
6.	Recreation	0.3322	1.60	0.47
7.	Railway	2.5981	12.54	3.63
8.	Parks & Play Ground	0.7437	3.59	1.04
9.	Forest	26.0736	-	36.47
10.	Agriculture	13.9951	-	19.58
11.	Hill	7.7972	-	10.91
12.	Water Bodies	2.9126	-	4.07

Source : Survey conducted by T&CP, Goalpara : 1998.

Table No. - 7  
LAND RESOURCES : GOALPARA MASTER PLAN AREA

Sl	Land Resource	Area (In Hectares)	% of Total Area
1	Inhabited Area	1298.98	18.17
2	Unusable Land		
	i) Water Bodies	291.26	4.08
	ii) Hills	779.72	10.91
	iii) P.R.F	2607.36	36.48
3	Usable Land	2171.71	30.38
	Total	7149.03	100.00

Source: Survey conducted by T&CP, Goalpara

### 6.3.2. Power

Goalpara Electrical Division situated at Bhalukdubi, Goalpara is playing the vital role in supplying electricity to the whole district. All works related to construction and commissioning of new lines and sub-stations are done through this division which covers both the urban and rural areas. The power supply to the Bhalukdubi sub-station is

from Dhaligaon via Ashok Paper Mill. Total power received by Goalpara town is 4.5 M.W. which is equal to its daily consumption. Out of this total, domestic uses alone accounts for 2.8 M.W per day.

In order to maintain smooth functioning as far as power supply is concerned, Goalpara Electrical Division has 4 ( Four ) sub-divisions in the district out of which Goalpara Electrical Sub-division covers the whole Goalpara Master Plan area. It is envisaged that with the commissioning of the new Agia TNT, the power supply scenario of the district as well as of the Master Plan area will definitely improve.

#### 6.3.3. Parks and Play Ground

At present there are 7 play grounds in the Goalpara town area. Besides these, the adjoining villages which are included in the Master Plan have another 7 play grounds. Thus the total play grounds in the Goalpara Master Plan Area is 14. The construction of a stadium is under progress and it is expected that this will function as the centre for sports and allied activities not only to the town but also cater to the demand of the whole region.

There is hardly any organised park in the town area. A small park named Gandhi Maidan is located in ward no. 1 which is the only place for recreation. An area in front of Goalpara College has been recently developed as a park for recreation.

#### 6.3.4. Health

There is one Civil Hospital with a provision of 200 beds within Goalpara Master Plan area. The old Hospital at ward no. 5 has been developed to a 20 bedded maternity hospital. There are quite a few health sub-centers in the Master Plan area and they are shown in Table No. 8. Besides these hospitals and sub-centers, there are quite a few number of private nursing homes coming up in the town catering to the urgent need of the citizen. A new dispensary is also coming up at Bhalukdubi. The 200 bedded civil hospital of Goalpara has quite a good number of specialised doctors from various disciplines along with the necessary facilities. However the facilities provided in other sub-centers is not up to the mark. The number of doctors and nurses in these sub-centers is not adequate for providing proper medical facilities.

#### 6.3.5. Education

The distribution of educational centers is not uniform in the Goalpara Master Plan area. Most of the educational institutions are within the municipal limit. As per a survey, there are 86 school level educational institutions within the Master Plan area with student population of 15,039. In addition to that there is a Junior Technical School (JTS) which is already converted to Textile Technology Institute with a certificate course. The Master Plan area accommodates 54 L.P. schools, 16 M.E. schools, 12 High and Higher Secondary schools, 2

Junior Basic schools and 2 nos. of M. V. schools. Details of the Educational Institutions are shown in Table No. -9. Besides these Goalpara also has 2 general colleges up to graduate level out of which one is a Girls' College, one Law College and one B.T. College.

Table No.- 8  
MEDICAL FACILITY : GOALPARA MASTER PLAN AREA

Sl	Name of Hospital	No. of Hospital	Total no. of Doctors	No. of Beds	Average patient treated indoor per day	Average patient treated out door per day	
1.	Goalpara bedded Civil Hospital	200	1	19	200	130	510
2.	Kuruabhasa sub-center	1	Nil	Nil			20
3.	Makri sub-center	1	-Do-	-Do-			19
4.	Pancharatna sub-center	1	-Do-	-Do-			18
5.	Rakhyasini sub-center	1	-Do-	-Do-			21
6.	Karbala sub-center	1	-Do-	-Do-			20
7.	Bapuji Nagar sub-center	1	-Do-	-Do-			20
8.	Pitbari sub-center	1	-Do-	-Do-			19

Source: Joint Director of Health Service, Goalpara, 2001

Table No. - 9

EDUCATIONAL INSTITUTIONS IN GOALPARA MASTER AREA  
YEAR 2002

Sl	Category of School	Total no. of Institutions	Total Enrolment	No. of Teachers	Student Teacher Ratio
1.	L.P. School	54	8064	195	41:1
2.	Junior Basic School	2	707	15	47:1
3.	M.E, M.V. School	18	2453	120	20:1
4.	High & Higher Secondary School	12	3815	170	22:1
	Total	86	15039	500	

Source: Deputy Inspector of Schools & Inspector of Schools, Goalpara

### 6.3.6 Sewerage and Drainage System

Though Goalpara is the second oldest Municipal town in Assam, like most of the towns, it does not have any sewerage and drainage

system. With increase in population and change in land use, the drainage and sewerage problems have already started showing up. Households are dependant on septic tanks. They become inefficient within a short period due to inadequate water-supply. Further leakages are a common factor which pollutes the ground water.

Water logging is very common in the town particularly during the monsoon which is due to the non-existent of any planned drainage system. The area in front of the Goalpara College is being served by a pucca road side drain which is not adequate to drain out the storm water from the whole area. Most of the residential localities have kutcha drain which does not serve the purpose.

The chronic water-logging in different areas during monsoon creates innumerable sufferings to the residents, damaging the roads and private properties throwing traffic out of gear.

In August, 2006 Goalpara Municipal Board has submitted a Drainage Master Plan for the town to Urban Development Department, Government of Assam to be funded under Non Lapsable Central Pool of Resources (NLCPR). It is expected that once the project is sanctioned and implemented, it will solve the drainage problems of the town.

#### 6.3.7. Trade and Commerce

##### 6.3.7.1 Commercial Activities

Goalpara being the head quarter of the District, occupies a significant position on commercial map of the region. Due to the introduction of railway services, the commercial activities of the town has gained momentum.

There are two main shopping centers in the Master Plan area, viz., Boro-bazar Market which is the old market and the New Market near Assam State Transport Corporation (A.S.T.C.) bus stand of the town. Besides these two major commercial hubs, there are number of shopping sub-centers which have come up sporadically throughout the Master Plan area. Total number of retail shops is around 1086 distributed all throughout the Master Plan area .

##### 6.3.7.2 Workshop and Repairing shops

Increased use of Motor Vehicles, Scooters and Motor Cycles, Cycles, Rickshaws, Steel Goods etc. has given rise to number of workshops and repairing centers in the town and adjoining areas. There are altogether 96 workshops and repairing shops in Goalpara town which are mainly motor-garages, cycle-rickshaw and scooter repairing, radio and watch repairing, fabrication centers etc. They are scattered in the town all along the major roads and have come up haphazardly without much consideration for safety, noise pollution etc.

### 6.3.7.3 Transport Agencies

Most of the transport agencies are located near Boro-Bazar. There are 3 transport agencies in the town which are playing vital roles in transportation of goods to and from Goalpara. Being located in the heart of the town and in absence of proper loading and unloading yards, they are facing extreme difficulties. The activities needs to be located suitably within the town to address the present problem.

### 6.3.8 Industries

Industrial development is the yard stick for economic growth of an urban area. Goalpara district is comparatively poor in industrial development and this can be attributed to certain basic factors like inadequate transport facilities, technical skill, banking facilities and non-availability of raw materials and market.

Cottage and small scale industries in whatever scale they are at present, play an important role in the economy of the district.

#### 6.3.8.1 Growth of Industries

In 1998 there were 38 small scale and cottage industries in Goalpara but large manufacturing industries were nonexistent within the Goalpara Master Plan area.

These small scale industries are spread all over the town and some of them are also in the midst of residential and commercial areas which are basically flour and oil mills, sawmills and soap factories.

Table No. - 10

#### INDUSTRIES BY TYPE IN GOALPARA MASTER PLAN AREA

Sl	Type	No. of Unit	Percentage
1.	Food Products	3	7.90
2.	Hosiery & Garments	7	18.42
3.	Wood Products	7	18.42
4.	Steel Fabrication	8	21.05
5.	Paper Product & Printing	1	2.63
6.	Repairing & Services	9	23.69
7.	Brick Industries	1	2.63
8.	Manufacturing Industries	2	5.26
	Total	38	100.00

SOURCE : District Industries & Commerce Centre

#### 6.3.8.2 Industrial Infrastructure

In spite of the presence of District Industries Centre (DIC) and industrial policies, nothing tangible has been seen in the field of industrial infrastructure. The scenario in respect of roads, cold-storage

facilities, electricity and other industrial incentives including the credit policies of the banking institutions are also not very encouraging.

One of the important factors contributing to poor industrial development of the district is the absence of any district level industrial policy based on the local resources and technical know how. However, the District Industries centre is putting up all its efforts to create an environment by encouraging local entrepreneurs for setting up of at least small scale industries. An industrial estate has been set up at Mornoi 17 Km. away from the Master Plan area which will definitely have an impact in the Goalpara Master Plan area.

#### 6.3.9 Offices

Goalpara being the head quarter of the district, almost all the district level offices are situated in Goalpara town. Therefore there is a great demand for office as well as residential accommodation in the town. Few departments have acquired land in the Bhalukdubi area in the southern part of the town and have constructed office campus but this development is sporadic and there no planned effort is seen in this regard.

#### 6.3.10 Garbage Disposal

Like most of the towns in Assam garbage disposal in Goalpara also does not have any scientific approach. Garbage from the town is collected by Municipal Board in tractor trailers and are dumped in to a low lying area at Salbari 4 km away from the town. 30 bigha of land has been earmarked already for this purpose and garbage is carried by tractors to the site. Availability of vehicles for garbage disposal is not sufficient as reported by the municipal authority. As the land for garbage disposal has already been earmarked, there is enough scope for the municipal body to adopt scientific methods for solid waste management provided techno-financial support is extended.

#### 6.3.11 Post and Telegraph

Goalpara Master Plan area has one head post office, four sub-post offices, one telegraph office and one telephone exchange. The main post office is located at Boro-bazar ward no. 3 at the northern side of the Master Plan area and the telephone exchange is located at Nayapara in ward no. 5. The telegraph office is situated at Bhalukdubi towards the southern side of the town.

#### 6.3.12 Fire Service

There is one fire station situated at Bapujinagar in ward no. 16 within Goalpara Master Plan area with 4 fire brigades under its control which at present serves the town and the surroundings. This fire station will not be adequate to serve the emergency calls of the entire Master Plan area and the hinterland. The station is at a rented accommodation

and the area is also not sufficient. This necessitates a new location for the fire service station in the proposed master plan of Goalpara.

#### 6.4.13 Other Services

##### a) Police Station

There are two Police Stations in the proposed Master Plan area. One of the Police Stations is located at Kachari Road in ward no. 1 and another at Pancharatna. Police reserve is situated at Beltola in ward no. 16. The A.P.T.F. district head quarter is situated at Dakurbhita which lies within the Master Plan area.

##### b) Cremation and Burial Ground

The main cremation ground in the entire Master plan area is situated within the Goalpara Municipal area and the other at Bhalukdubi. Besides the cremation grounds there are 8 burial grounds within the Master plan area out of which 4 are located within the municipal limit.

## CHAPTER 7

### **TRAFFIC AND TRANSPORTATION**

Functional efficiency of any urban settlement depends on the circulation pattern and therefore it is important to evolve an efficient circulation system. It is imperative that a study of the traffic flow of the entire master plan area in terms of road inventory, traffic inventory, passengers and goods movement at regional and local level is carried out. This study will provide necessary input to evolve a suitable circulation pattern and also provide with short term as well as long term measures for an efficient system.

#### 7.1 REGIONAL TRANSPORTATION SYSTEM

##### 7.1.1 Road Ways

Goalpara is situated in the southern bank of the river Brahmaputra and is the head quarter town of Goalpara District. Besides being a district head quarter, Goalpara is also functioning as collection and distribution centre of essential goods and commodities and as such most of the whole sale business houses, transport companies, commercial and financial institutions of this district have come up in Goalpara town. Apart from this, Goalpara occupies a very important place in the regional map of traffic and transportation. Major development in the transportation sector was ushered in in this area after completion of the Nar-Narayan Setu – a road cum railway bridge over the river Brahmaputra which connected Goalpara with the North Bank by road as well as by railways.

The basic road pattern of this town is governed by two major arteries, viz., Agia road and Matia road both of which connects the town with the National Highway 37. Typical ribbon development is seen along these two roads which connect Goalpara with the important towns of Assam and other part of the country. They are the carriers of the major incoming and outgoing traffic of Goalpara town. Another important road is Pancharatna road which is developed as a link road from the Nara-Narayan Setu to the town. Commercial activities of the town are concentrated along these main roads.

Bus connectivity with the neighbouring states of Meghalaya and West Bengal and few important towns like Guwahati, Dhubri and Bongaigaon is reasonably good. There are regular private bus services from Guwahati and North Bengal to Goalpara town. A number of other private vehicles ply regularly to and fro from Dhubri, Bongaigaon, Abhyapuri, Lakhipur, Mankachar, Dhumergat, Baguan, Dolguma, Nalban, Barpeta, Tura etc. to Goalpara town. Apart from this private bus services, Assam State Transport Corporation (ASTC) also operates regular bus services from Goalpara to Guwahati, Dhupdhara, Bongaigaon and Dhubri.



The Agia road is the major transport corridor to which all other roads including Matia road are connected. This road, as it carries all the traffic through the heart of the town and which is the link between the town and the National Highway, almost all vehicular movement takes place along this road creating traffic problems and congestion.

### 7.1.2 Water Ways

Before the construction of Nara-Narayan Setu, ferry services by Inland Water Transport of Assam played an important role in linking the town with the North Bank. But now with completion of Nara-Narayan Setu, Goalpara is connected to other parts specially North Bank both by roadways and railways.

Waterways still plays an important role in the trade and commercial activity of the town. Country boats owned by private individuals are operating regularly for movement of goods and passenger specially catering to the demand of its hinter land which includes Nagarbera in the district of Kamrup, Mornoi, Dolgoma, Jaleswar and Lakhipur area. Fresh vegetables, diary and poultry products along with other agricultural produce and passengers are regularly transported via water ways which apart from contributing to the economy of the town keeps it vibrant and alive.

### 7.1.3 Rail Way

Goalpara is well connected by board-gauge railway to New Bongaigaon on the north bank through Nar-Narayan Setu and also with Guwahati. Two passenger trains ply between Bongaigaon and Guwahati via Goalpara regularly in the morning and evening providing communication with the capital city. Apart from these trains, few express trains also travel via Goalpara connecting the town with New Jalpaiguri in West Bengal and New Delhi. Goods traffic also uses this rail route.

## 7.2 CIRCULATION PATTERN

The purpose of a road is mainly to provide access to the abutting property and to provide free, quick and safe movement of the trips. Except in some parts of the town, the road system of Goalpara Master Plan area is very irregular. The concept of road hierarchy is almost non existent. The lack of hierarchy, narrow widths, improper geometrics and poor maintenance of the roads made the level of service very poor making the urban life intolerable. The category of road can be confined to only Public Works Department (P.W.D.) roads, Municipal and village roads. The total length of all categories of roads within Goalpara Master Plan area is 149.43 km out of which 31.16% is black topped 4.22% is WBM, 12.86 % is gravel and 51.76% is earthen and brick paved. Since the railway line passes through the Master Plan area, quite a number of level crossings are there and to avoid this bottle necks, a secondary road is proposed parallel to the railway line with two railway footpath cum over bridge.

Table No. - 11  
TOTAL LENGTH AND P.C. OF ROADS IN  
GOALPARA MASTER PLAN AREA

Sl	Type of Road	Length in Km	Percentage
1	Black Top	46.56	31.16
2	W.B.M.	6.30	4.22
3	Gravel	19.22	12.86
4	Earth	76.20	50.99
5	Brick Paved	1.15	0.77
6	Total	149.43	100.00

Source :Survey conducted by T&CP, Goalpara

### 7.3 TRAFFIC VOLUME

To study the traffic volume on some selected points on the major roads of the town, a survey was conducted by the District Office, Town & Country Planning, Goalpara. The volume study was done for the two major peak times of the day, viz., morning from 9:45 am to 10:45 am and evening from 3:30 pm to 4:30 pm. The traffic survey reveals few important aspects regarding traffic characteristics of the town which can provide inputs for planning. The Table No. 12(A) and 12(B) show the predominance of the slow moving vehicles in all the roads within the Goalpara Master Plan Area. The volume of fast moving traffic is 36.56 % of the total traffic showing the pre dominance of the slow moving ones.

### 7.4. GROWTH OF VEHICULAR TRAFFIC

Increase in distance from one activity to another due to horizontal expansion of an urban area with increased value of time and comfort to the commuters give rise to increasing dependence on vehicular traffic. Varied trip lengths of the commuters which is a result of mixed land use gives rise to mixed traffic condition which is typical to the towns of Assam. Capacity of a road reduces proportionately in a mixed traffic condition and Goalpara town is also no exception. In the central area of the town and also in the old market area, traffic consists of motor vehicles, rickshaws, bicycle, hand-carts, animals and pedestrians. As the slow moving vehicles constitute a larger percentage of the overall traffic, the speed is controlled by this slow traffic resulting in more consumption of time, congestion, extra fuel consumption, pollution and irritation to the driver and commuter as well. It is imperative that the slow moving traffic requires segregation.

### 7.5. PARKING FACILITIES

In order to study the traffic scenario, it is essential to examine the suitability of location of the existing transport terminals in the town for various traffic modes. At present there are two public bus stands, one at Hasila bil in ward no. 13 and the other at Chawk bazar area in ward no. 3. Though the existing public bus stand and the Assam State

Transport Corporation Bus Station at Goalpara catering to the present demand, for future they require improvements.

**Table No. 12(A)**  
**TRAFFIC VOLUME SURVEY 2002 AT GOALPARA TOWN**  
(Morning peak hour 9:45 am to 10:45 am)

Sl	Name of Road	Car/ Jeep	Bus	Truck	Scooter MCycle	Rickshaw	Cycle	Thela	Total
1.	Agia Rd. (ASTC point)	57	36	1	190	440	480	38	1242
2.	Pancharatna Rd. (Idgah point)	8	1	6	43	88	118	15	279
3.	Pancharatna Rd. (ASTC point)	11	21	nil	30	62	37	10	171
4.	Goaltuli Rd. (ASTC point)	111	nil	nil	55	82	126	6	380
5.	Chawk Bazar Rd. (Azad Rd. point)	9	1	nil	16	127	55	7	215
6.	Agia Rd. (BOC point)	56	63	9	161	218	286	14	807

**Table No. 12(B)**  
**TRAFFIC VOLUME SURVEY 2002 AT GOALPARA TOWN**  
(Evening peak hour 3:30 pm to 4:30 pm)

Sl	Name of Road	Car/ Jeep	Bus	Truck	Scooter MCycle	Rickshaw	Cycle	Thela	Total
7.	Agia Rd. (ASTC point)	39	19	7	145	225	275	11	721
8.	Pancharatna Rd. (Idgah point)	7	1	5	62	80	81	12	248
9.	Pancharatna Rd. (ASTC point)	5	32	5	8	44	13	4	111
10.	Goaltuli Rd. (ASTC point)	12	nil	nil	59	65	80	12	228
11.	Chawk Bazar Rd. (Azad Rd. point)	14	nil	nil	10	76	7	nil	107
12.	Agia Rd. (BOC point)	105	74	13	378	42	34	2	648

SOURCE: Survey Conducted by T&CP, Goalpara

There is no organized truck terminus in Goalpara. The transport agencies are scattered along the main road and loading and unloading activities are carried out on the street. As the idle trucks are parked on the street during and after loading and unloading, it reduces the capacity.

#### 7.6. MODES OF TRANSPORTATION

The movement of people and goods takes place through various transport modes plying in the town. In absence of city bus services,

people move on foot, bicycles, rickshaws, auto-rickshaws, scooters and cars. Movement of goods take place by hand-carts and trucks, predominant modes being the cycles, rickshaws and hand cart (thella).

Table No. -13

GROWTH OF VEHICLES

Sl	Category of Vehicles	No. of vehicles registered			
		1999	2000	2001	2002
1.	Motor Cycle/ Scooter	226	287	525	810
2.	Auto- Rickshaw	71	81	42	91
3.	Car	51	63	74	81
4.	Taxi	3	5	6	Nil
5.	Jeep	1	1	1	1
6.	Truck	65	88	95	129
7.	Bus	27	25	9	4
8.	Others		Nil	2	
9.	Ambulance	2			2
10.	Tractor			4	2
11.	Trailer	1			1
	Total	447	550	756	1021
	Rate of Growth	-	103%	206%	265%

Source: District Transport Office, Goalpara, 2002

### 7.7. CRITICAL APPRAISAL

With the growth of population there will be proportionate increase in the number of different types of vehicles in the town and this is also evident at present. As the new developments are to be on the outlying areas, the people from these areas will have to depend on public transport mode for communication. Further the car-ownership ratio will also increase in future. It is therefore expected that the Goalpara Master Plan area will have to cater for about five times the present vehicular population in coming twenty years. The demand for present slow moving vehicles will definitely continue which necessitates segregation of the traffic. The existing road pattern which is mainly found to be catering for slow traffic, have to be planned and improved to meet future requirement of fast moving traffic. The network needs to be planned in such a way to make the movement suitable for public transport.

## CHAPTER 8

### ***CITY FUNCTIONS AND FUTURE CITY NEEDS***

The following major functions have been considered while preparing the Master Plan for Goalpara and effort has been made to evolve scientific and rational policies which will meet functional needs of Goalpara Master Plan area and also satisfy the aesthetic and emotional aspirations of its citizens. Hence based on the critical appraisal of the problems and inadequacies of greater Goalpara, the future needs during a plan period is assessed for an estimated population of 1,17,527.

#### 8.1 MAJOR URBAN FUNCTIONS

Based on the studies conducted and the analysis made, the greater Goalpara can be inferred to have the following major functions to decide its future growth.

- I. To function as a District Head Quarter town.
- II. To function as Trade and Commerce centre in the District .
- III. To continue as an Educational centre.
- IV. To function and grow as Growth Centre for small scale industries.

#### 8.2 PLAN PERIOD

The growth of an urban centre is a continuous process. However any development plan requires a time frame for its implementation. Accordingly, the plan period adopted for this Master Plan of Goalpara is upto 2021. Though projections and other future requirements are made upto 2021 urban dynamism will carry over beyond this plan period and this exercise will in fact expected to lay the foundation for well planned Goalpara Town contributing to the economy of the State.

#### 8.3 FUTURE POPULATION AND ITS CHARACTERISTICS

An assessment of future population and its future characteristics is a basic requirement for the preparation of a development plan for a town or a city. It is however difficult to work out exact estimates of future population because the factors on which the growth depends cannot be foreseen with accuracy.

A study on population projection of greater Goalpara up to the plan period is made accordingly. Population projection is already stated in Chapter 7.

## CHAPTER 9

### **PROPOSED LAND USE PLAN**

#### 9.1 AIMS AND OBJECTIVES

The major aims and objectives which are attempted to be achieved for Greater Goalpara through this Master Plan are as follows :

- I. To improve the existing condition of Goalpara Master Plan area and to develop the urban infrastructure for a population of 1,17,527 by 2021.
- II. To integrate the development of various areas of Goalpara Town with the adjoining areas.
- III. To distribute functionally the work centers and living areas, minimise travel distances and increase efficient functioning of activities.
- IV. To design a safe, easy and speedy circulation system and to ensure a functionally efficient transportation network for movement of goods and passengers.
- V. To accelerate the economic growth by increasing economic activities like industries, services and trade and commerce etc.
- VI. To create a harmonious and coherent inter relationship between various uses and activities.
- VII. To put forward a planned approach for overall future development of the town and gradual removal of existing non conforming land uses.

#### 9.2 BASIC CONSIDERATIONS

From the study of the existing land-use pattern of the town, traffic and transportation scenario, physiography, housing and other services and work centers of the Master Plan area, it is found that the town is associated with significant problems arising out of unplanned approach. These studies have also highlighted the opportunities available for proper development of Goalpara in future. The following basic points are considered as guiding factors while preparing the Master Plan for Goalpara town.

- a) Development as an administrative centre like district head quarter to accommodate various public and semi public offices of state at regional and local level.

- b) Development of new shopping areas as well as improvement of the existing ones both for retail and whole sale purposes.
- c) Encouragement for establishment of small and medium type of industry.
- d) Provision of circulation pattern to provide direct link between different areas.
- e) Efficient use of Government land and properties by putting them to most affective use.
- f) Rational distribution of residential densities so as to minimise disparities.
- g) Provision of utility and services in an integrated manner.
- h) Ensure proper urban environment by improvement and up gradation of slum areas through environmental improvement schemes.

### 9.3 PLAN CONCEPT

Growth of Goalpara Town is restricted by the river Brahmaputra on the northern side and as such the trend of development of the town is towards the east, west and southern side. Typical ribbon development is observed towards the southern side along the Agia road which connects the Master Plan area with National Highway 37. This road passing through the planning area influences to a great extent the physical growth of the town. Major activities are all situated along this road. As at present there is hardly any planned open spaces in the town in the form of parks and play grounds and therefore, it has been proposed to provide with organized open spaces in the town particularly in the living areas of Goalpara. A large part of the proposed planning area is covered by hills and reserved forest and as such these are considered as green belts in the town to restrict haphazard growth and also to act as lung to the town. Besides providing shopping areas in the town, a central shopping area is proposed towards the southern side to cater to the needs of the whole Master Plan area. It has been conceptually envisaged that the functions and activities in the entire Master Plan area will be knitted together and it will function as one entity. The entire area is planned to achieve-

- I. Better and efficient workplace - living area relationship.
- II. Safe and free movement of passengers and goods.
- III. Better living environment.
- IV. Efficient urban infrastructure and civic amenities.

#### 9.4. LAND USE PATTERN

The proposed land use pattern of Goalpara Master Plan area has been evolved taking into consideration the minimum dislocation of existing land use establishing work-place and living area relationship.

##### 9.4.1. Residential Uses

The residential area within Goalpara Master Plan are to be developed as self contained unit with the provision for all community facilities, services and work places within reasonable distances duly served with efficient circulation system undisturbed by through traffic. The living areas are proposed to be kept free from air pollution and other nuisance. Some of the present residential areas within the municipal limit which suffer from over crowding and lack of amenities are to be given due treatment to make these areas livable.

In order to meet the deficiencies and to accommodate the estimated future population of 1,17,527 by the year 2021 an area of 1487.00 hectares has been earmarked which will form 55.32% of the total developed area within the proposed Master Plan.

##### 9.4.2 Commercial Uses

Most of the commercial activities are at present concentrated in the Boro-bazar and New Market area near A.S.T.C. office. Both the whole-sale and retail activities are carried out in this area leading to extreme congestion and chaos. These activities require decentralization and therefore various commercial hubs need to be developed throughout the Master Plan area in addition to the commercial development that has already taken place along the major roads. The present shopping area are devoid of proper parking facility and sufficient spaces for loading and unloading of goods. This needs to be addressed properly.

The plan proposes a hierarchical setup for the commercial requirements of the Master Plan area. The whole of Boro-bazar area will continue as main shopping center of the old Goalpara town. The Chowk Bazaar is to be developed as Super Market under Integrated Development of Small and Medium Town (IDSMT) Scheme. The New Market near the ASTC Station will be developed and this will also continue as one of the main commercial area in Goalpara Town. Besides these existing ones, three new commercial centers at different locations, viz., at Karbala, Beltola and Bhalukdubi have been proposed in this Master Plan. This will distribute the commercial activities through out the Master Plan and will reduce the pressure on the existing commercial centre. The ribbon development of commercial activities will however continue along the main corridor, viz., Agia Road passing through the Master Plan area. Out of the total area of 211.01 hectares, 7.85 % of the total developed area has been proposed for commercial activities.



### 9.4.3 Industrial Uses

Industries are major contributors to urban economy and therefore can be considered as an important land use component. Industrialisation accelerates the process of urbanization. But at present there are no such remarkable industrial activities within the Goalpara Master plan area which can contribute to the economy of the town. The poor industrialisation of the district can be contributed to poor communication linkages in the past before the construction of the Nar-Narayan Setu, the rail cum road bridge, over the river Brahmaputra. Presently it is anticipated that industrial activities will come up within the Master Plan area and gain momentum with the provision of proper infrastructure and pro-industrialization Government policy. The Industrial areas proposed are well connected by roads and railways and will be served by other infrastructure like power and drainage etc. An area of about 58.70 hectares i.e. 2.18 % of the total developed area has been earmarked for industrial uses.

### 9.4.4 Public and Semi public Uses

This category of land use consists of multiple uses like Government and Semi-Government offices of various levels, education and health facilities, socio-cultural and religious institutions etc.

#### a) Offices

Most of the major office complexes are proposed at the Bhalukdubi area towards southern corridor in order to achieve better work-place and residence relationship. A considerable area of land has been earmarked for this purpose so as to enable various State Government offices presently located in different places in rented houses to shift to this area to form an administrative complex for better co-ordination and accessibility by the citizen. An area of 135 ha is proposed for office complex.

#### b) Education

As regards educational facilities no new major institutions are proposed. However existing institutions can be expanded. The J.T.S. can be made into a full fledged poly-Technic. An area of 115 ha is earmarked for schools and colleges.

#### c) Health

As regards health facilities, no new hospital has been proposed in the Master Plan area. The existing hospital is proposed to be upgraded to a district level referral center which can be fully equipped with all necessary expertise, machineries and instruments. Besides this, the old hospital situated at Nayapara is proposed to be developed into a 20 bedded maternity hospital for emergency purpose. All other health centers, dispensaries, maternity homes within the Master Plan area are also proposed to be developed by the year 2021.

#### d) Cultural Institution

To cater to the need of growing demand in social and cultural activities, cultural institutions of different orders are proposed at all levels. Civic Centers are proposed through out the Master Plan area. These Centers will contain town hall and some other cultural activities like auditorium, art gallery, clubs and library.

#### e) Recreational

Although there is ample scope for the development of parks, playgrounds etc. surrounding the municipal area, the town proper is devoid of any such amenities. A town needs ornamental parks and open spaces for giving it an image and also a decent appearance. Larger organized parks are the passive areas for elders, playgrounds for children and play fields for youths.

There is only one park located near the bank of the river Brahmaputra in ward no. 1 on the northern side of the planning area within Goalpara municipal limit. Another park is under construction near Goalpara college. In comparison to the future population of the Master Plan these are not adequate and in absence of any reserved land within the municipality, parks are proposed at various locations like Karbala, Beltola and Bhalukdubi. There are a number of ancient tanks and water bodies within the town area of Goalpara and few of them also have historical importance. These areas are proposed to be developed during the plan period as spot for water sports, boating etc. to form a part of the overall recreational facility of the town. The Rashmela ground where every year the 'Rash Utsav' is celebrated can also be developed as a planned recreational centre. It is envisaged that the existing D.N. Singha stadium will be completed within the plan period .

### 9.5 PUBLIC UTILITIES AND SERVICES

#### 9.5.1 Water Supply

The main source of water supply at Goalpara is by means of individual ring and tube wells. Goalpara Municipal Board has an old piped water supply scheme from deep tube well catering to the demand of only a small portion of the town population. Presently the Assam Urban Water Supply and Sewerage Board (AUWSSB) has undertaken the water supply scheme and once commissioned this will fulfill a long felt need of the citizen of Goalpara town. The source of this water supply scheme is the river Brahmaputra and the water reservoir and water treatment plant is being located on the top of Hulukanda Hill. It is envisaged that the treatment plant will be able to cater to the demand of the future population .

### 9.5.2 Drainage and Sewerage

The sewage disposal of the town is carried out through individual septic tanks in the absence of any underground sewerage system. A sewerage system has been proposed for the town as a measure of long term planning .

The drainage system of Goalpara is not at all satisfactory and this has been discussed in the previous chapters. It is proposed to improve the natural drainage channels of the Master Plan area which can relieve the town from the water logging problems in monsoon. The storm water from the municipal area is to be discharged to Hasila bil for final disposal in to the river Brahmaputra. At strategic points sluice gates are to be provided to prevent the back flow of water into the town from the river.

Table no.- 14

#### PROPOSED LAND USE , GOALPARA MASTER PLAN 2021

SI	LAND USE	HECTARE	% TO TOTAL DEVELOPED AREA	% TO TOTAL AREA
1	Residential	1487.00	55.32	20.80
2	Commercial	211.01	7.85	2.95
3	Industrial	58.70	2.18	0.82
4	Public and Semipublic	376.24	13.99	5.26
5	Transport	85.16	3.17	1.19
6	Recreation	76.32	2.84	1.07
7	Railway	259.81	9.67	3.64
8	Parks & Play ground	133.86	4.98	1.87
	<b>Total Developed Area</b>	<b>2688.10</b>	<b>100.00</b>	
9	Forest	2507.36	-	35.47
10	Greenbelt	300.00	-	4.20
11	Agriculture	754.24	-	13.35
12	Hill	779.72	-	10.91
13	Water Bodies	119.61	-	1.67
	<b>Total</b>	<b>7149.03</b>	<b>-</b>	<b>100.00</b>

## CHAPTER 10

### **PROPOSED CIRCULATION PLAN**

The circulation plan is the nervous system of an urban center. Therefore planning for the transportation system is vital to the Master Plan. Following are the basic goals that are expected to achieve through the proposed road concept of Goalpara Master Plan area-

1. Quicker movement of goods and passengers within the planning area.
2. Direct linkage between the different traffic generating points for easy accessibility.

#### 10.1. REGIONAL LINKAGES

##### 10.1.1 Road Linkage

The greater Goalpara has been linked with other parts of the state as well as the country by NH 37 which passes through the Master Plan area. Agia road is the main linkage of Goalpara which needs widening to serve as one of the major arteries in the Master Plan area. The other two link roads connecting Goalpara with other parts are one via Panchartna and the other via Makri should also be widened and developed.

##### 10.1.2 Rail Linkage

Goalpara town is already in the map of Indian Railways after it was linked with other parts of the state by a broad gauge rail track along the southern bank of the river Brahmaputra with Guwahati and through the Nar-Narayan Setu with Bongaigaon on the north bank. Any future proposal regarding rail linkages is beyond the scope of this Master Plan however the rail terminal at Goalpara can also be developed to transport goods.

#### 10.2. CIRCULATION PLAN CONCEPT

The proposed road network together with the new linkages is designed to have a proper circulation throughout the Master Plan area. Road hierarchy is proposed to provide free movement within the Master Plan and to relieve the existing congestion. The road system proposed for Goalpara Master Plan area is categorised as follows

1. Primary distributor                      It will cater to inter and intra town movements. Over all width is 20 to 24.5 M (65 to 80 ft).

- |                          |  |
|--------------------------|--|
| 2. Secondary distributor | It will cater to major movement between the sectors. Over-all width is 15 to 18 M (50 to 60 ft).   |
| 3. Local distributor     | Local roads are primarily meant to serve the traffic needs of residential sectors and will be connected to sector roads. Over-all width is 9 to 13.5M (30 to 45 ft). |
| 4. Access road           | These are meant for circulation within the residential sectors and provides access to the building sites. Over-all width is 6 to 9 M (20 to 30 ft).                  |

In order to improve the present circulation system and to remove the traffic congestion within the town, some measures are suggested which can be adopted in short terms :

- a. Improvement of the road junctions near ASTC, Nayapara, Borobazar, Idgah , BOC and Beltola points.
- b. Improvement and widening of Agia road.
- c. Clearing and removal of unauthorised shops and vendors selling vegetables etc. along the streets in the municipal markets and in front of Goalpara College.
- d. Enforcement of timing for entry of heavy vehicles into the town for loading and unloading.
- e. Improvement of the road linking the Railway station to the town.
- f. Improvement of the Link road to Goalpara via Pancharatna.

### 10.3 LEVEL CROSSING

The railway line passes through the Master Plan area and at several points it crosses the roads and as such for smooth movement of traffic, suitable arrangement for level-crossing is to be made.

### 10.4 TERMINAL FACILITIES

#### a) Truck Terminal

A truck terminal is proposed at the southern part of the Master Plan at Kalyanpur village along the National Highway where a Bus Terminal has already been developed by District Rural Development Agency of Goalpara (DRDA) and is presently lying non functional. This can be equipped with godowns and cold storage facilities depending on the demand and can be transformed in to a full fledged truck terminal which already has adequate parking facilities

b) Bus-terminal

A bus terminal is already under execution besides the Hasila Bil, Panharatna Road which is under Integrated Development of Small and Medium Town (IDSMT) Scheme. Once completed this will be adequate enough to take care of the future demand for the plan period.

#### 10.5 PARKING FACILITIES

With the growth of passenger vehicles over the years in Goalpara the scarcity of parking spaces has started manifesting particularly in the town center. This problem needs to be addressed properly by providing on street parking at strategic points and also by implementing the building bylaws and related regulations which prescribes minimum parking spaces for public and semi public buildings.

#### 10.6 TRAFFIC REGULATION

Traffic regulations are important tools to ensure smooth flow of traffic where roads are not sufficiently wide to carry the traffic volume. One way traffic system, segregation of traffic and implementation of regulatory measures are few examples. It is suggested that few roads in the town centers can be made one way depending on the peak hour of the traffic. The regulatory measures may include the control of improper driving, the prohibition of double parking, better control of pedestrian movement, restrictions on parking on-street and control of loading and unloading of bus and trucks. Though circulation system of the urban centers is concerned for vehicular traffic, the pedestrian traffic is often not taken into consideration resulting in great inconvenience and also accidents. It is proposed that proper measures like the provision of foot paths, pedestrian crossings and proper signage etc. shall be adopted.

## CHAPTER 11

### **PLAN IMPLEMENTATION AND ENFORCEMENT**

#### 11.1 PLAN IMPLEMENTATION

The effort that has been put in for preparation of the Master Plan and the Zoning Regulations for Goalpara and its mere adoption by Government will not improve the quality of urban life unless sustained efforts are made to enforce the Zoning Regulations and implement the Master Plan. Further the major role is always played by the citizens of a town or city individually or collectively by undertaking construction of building or re-building of an urban center by putting land into various uses. Active participation and co-operation from citizens in improving the quality of urban life and building a town is therefore indispensable.

#### 11.2 MAJOR SCHEMES PROPOSED

##### 11.2.1 Residential Uses

Construction of Residential Complexes for different Government employees at Bhalukdubi.

##### 11.2.2 Commercial Uses

- i. Construction of Super Market complex near Boro-Bazar area (Chowk-bazar).
- ii. Improvement of the fish market at New-market in front of ASTC.
- iii. Development of market complex at Karbala in ward no. 13, Beltola in ward no. 18, and Bapujinagar in ward no. 16.

##### 11.2.3 Industrial Uses

Small-scale and cottage industries are proposed in the planning area.

##### 11.2.4. Public and Semi Public

- |                      |   |
|----------------------|---|
| a)Education          | JTS. to be made into full fledged poly-technic.   |
| b)Health             | i)Improvement of the old hospital at Nayapara .<br>ii)Improvement of all the health centers within the planning area.<br>iii)Expansion of the 200 bedded civil-hospital |
| c)Government Offices | Development of office complex at Bhalukdubi.  |

- d) Cultural Institutions      Development of cultural institutions like Sangeet Kala Vidyalaya, Jana-Sanskritic Mancha and Gitayan.

#### 11.2.5 Public Utility and Facility

- a) Water Supply                      Construction of water treatment plant at Bhalukdubi and Karbala.
- b) Drainage & Sewerage      Preparation of Master plan for Drainage and Sewerage and phase-wise implementation.
- c) Waste Disposal                      Proposed solid-waste disposal treatment plant by scientific method at Rakhyasini Jungle block.
- d) Parks and Open Spaces                      (i) Construction of Indoor-Stadium at Beltola.  
(ii) Construction of Tourist complex by the side of river Brahmaputra at Pancharatna and Eastern side of Hulukanda Hill.  
(iii) Construction of Children park at Bhalukdubi.

#### 11.2.6 Road

- a. Improvement of road junctions near A.S.T.C., Nayapara, Boro-Bazar, Idgah, Beltola and B.O.C. points.
- b. Improvement of Agia road from Soulmari to Kacharighat.
- c. Improvement of the road from New-Circuit house to Pancharatna by connecting the missing links to release pressure from Agia road.
- d. Improvement of link road from Nara-Narayan Setu to Goalpara town via Pancharatna.
- e. Improvement of road connecting railway station and Agia road.
- f. A secondary distributor is proposed along the southern side of railway line for smooth movement of traffic as well as to reduce railway grade-crossings.
- g. Two foot over bridges are proposed over the railway line, one at Makri and the other near Goalpara railway station.
- h. Improvement and widening of following roads :
- i. Azad road from Boro-bazar to Karbala.
  - ii. Swaraj-road connecting Agia road.



- iii. Bir-Chilarai path to Pancharatna road via no. 2 Colony.
  - iv. Bihu Field road connecting Agia road and Matia road.
  - v. Road connecting Agia road and Matia road via Bapuji nagar.
  - vi. Makri to Karbala via Dakurvita connecting NH-37 and Pancharatna road.
  - vii. Pitbari road connecting Matia road.
  - viii. Goaltuli-Bamunpara road connecting Bor-Pukhuri.
- i. BUS-TERMINUS                      Commissioning and expansion of the bus terminus complex at Hasila bil.
  - j. TRUCK-TERMINUS                  Development of truck terminus at Kalyanpur by the side of NH 37.

#### 11.2.7. Protection of Water Bodies

- a) Hasila Bil is proposed to be protected and developed as flood water basin
- b) All water bodies in the Master Plan area are proposed to be protected and developed in their natural form.
- c) The Kumri Bil and the Urpada Bil adjacent to the Master Plan boundary can be developed as fishery and tourist resort.

#### 11.3. PUBLIC PARTICIPATION

The prime pre requisite for implementation of any development plan is the public participation. Though the preparation process of the Master Plan has the provision to involve the public this needs to be done more elaborately. Sufficient publicity of the Master Plan needs to be done so that the citizen are aware of this and as and when required the copies of the same should be made available. Finally the effort that has been put in for preparation of this Master Plan shall be fruitful if this can in true sense full fill the aspirations of the people of Goalpara and become an integral part of their social and cultural life.

## CHAPTER 12

### **ZONING REGULATION**

#### 12.1 ZONING PLAN

The method of accomplishing a suitable arrangement of different land use components in an urban center is known as Zoning. Although this is an integral part of a Master Plan, this is not a rigid arrangement. The essence of a good zoning lies in utilizing the available land rightly and judiciously.

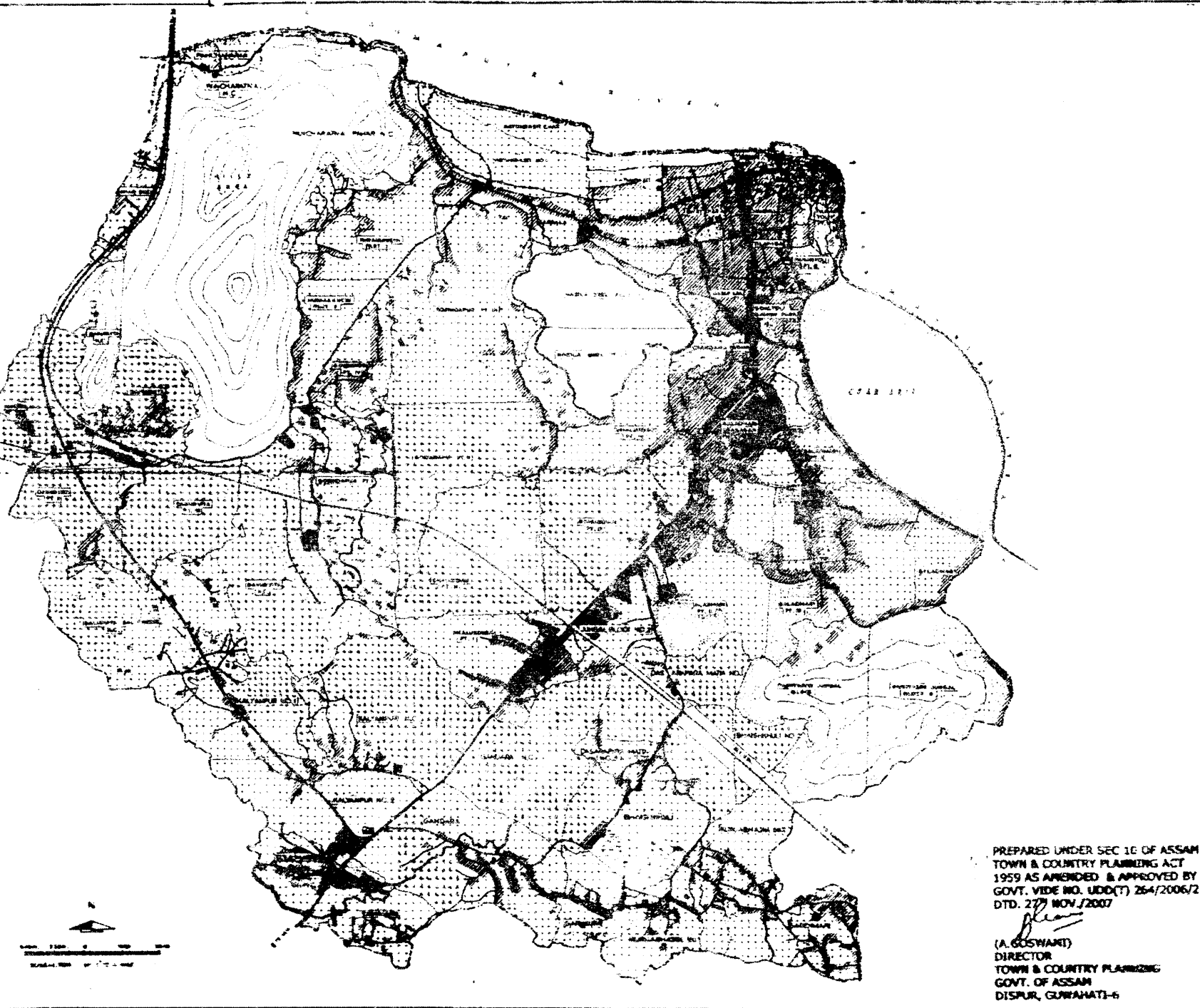
In order to achieve the desired goal and objective of the Master Plan, a Zoning Plan is prepared earmarking broad land use areas with definable boundaries as shown in the map. This Zoning Plan should be read in conjunction with the proposed land use plan and the prescribed Zoning Regulations

#### 12.2 ZONING REGULATION

Zoning Regulation play a very important role in controlling and promoting urban development on rational lines. They are also useful in limiting urban growth and in broader sense can also be used for laying down broad directions of growth in a regional perspective. Zoning Regulation form an integral part of any Master Plan and these have been elsewhere used extensively to control the development of urban areas.

Zoning Regulations have been widely accepted as legal instruments to control and promote the development and in fact it is the zoning regulation that an ordinary developer comes into contact while undertaking the development within the frame work of any Master Plan. Thus these regulations can do a great service in correctly portraying the intention of the Master Plan and promoting its objectives.

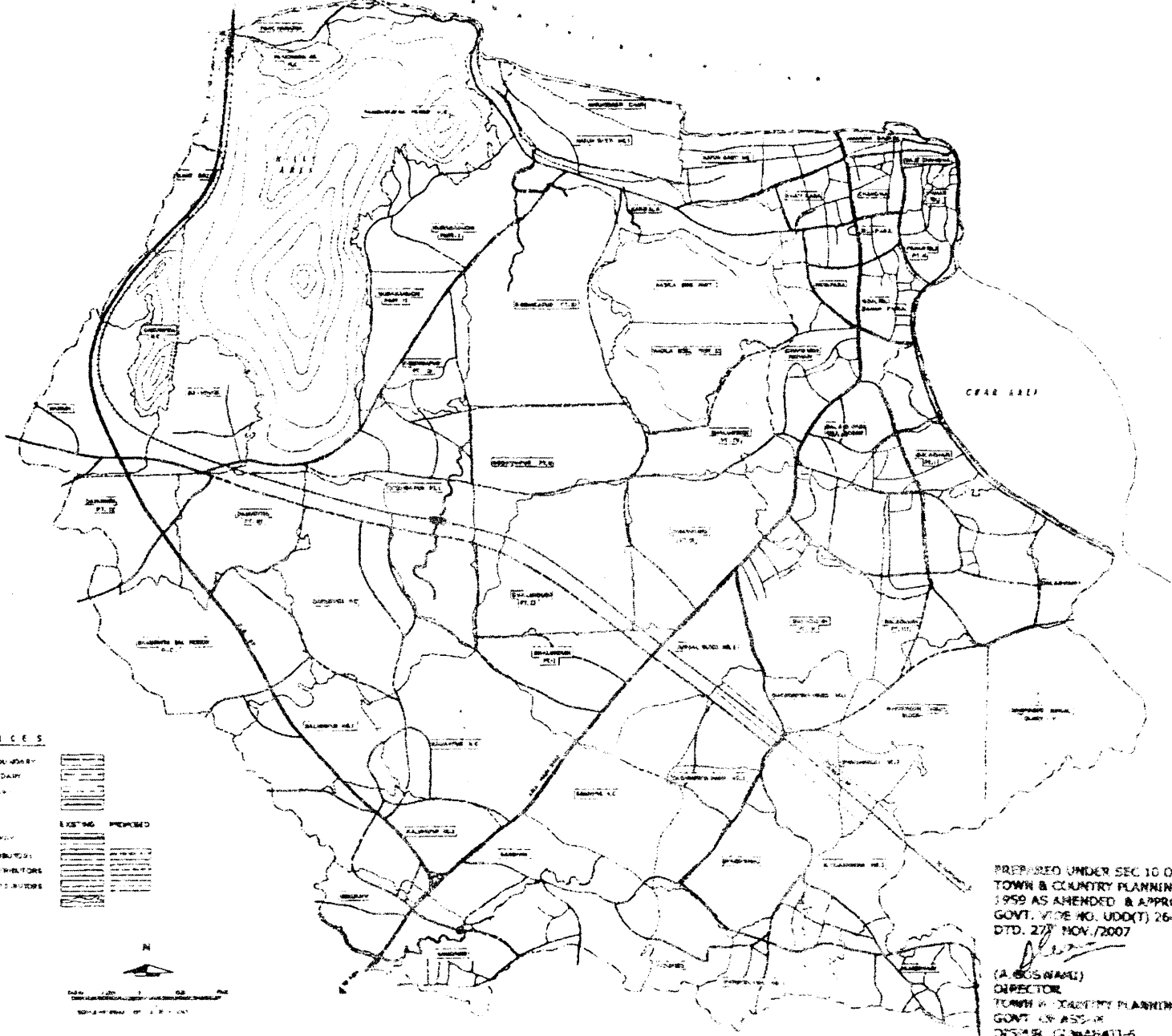
Zoning Regulations would help in controlling the density of development and land use and also ensure to protection of open areas, standards in light and ventilation and in guiding the future expansion in each zone in an appropriate manner.



PREPARED UNDER SEC 16 OF ASSAM  
TOWN & COUNTRY PLANNING ACT  
1959 AS AMENDED & APPROVED BY  
GOVT. VIDE NO. UDD(T) 264/2006/2  
DTD. 27 NOV/2007

*(Signature)*  
(A. GOSWAMI)  
DIRECTOR  
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GOVT. OF ASSAM  
DISPUR, GUWAHATI-6

EXISTING LANDUSE PLAN 1998  
**MASTER PLAN FOR GOALPARA**



**REFERENCES**

- MASTER PLAN BOUNDARY
- MUNICIPAL BOUNDARY
- VILLAGE BOUNDARY
- RAILWAY LINE
- ROADS
  - NATIONAL HIGHWAY
  - PRIMARY DISTRIBUTORS
  - SECONDARY DISTRIBUTORS
  - LOCAL DISTRIBUTORS
- WATER BODIES

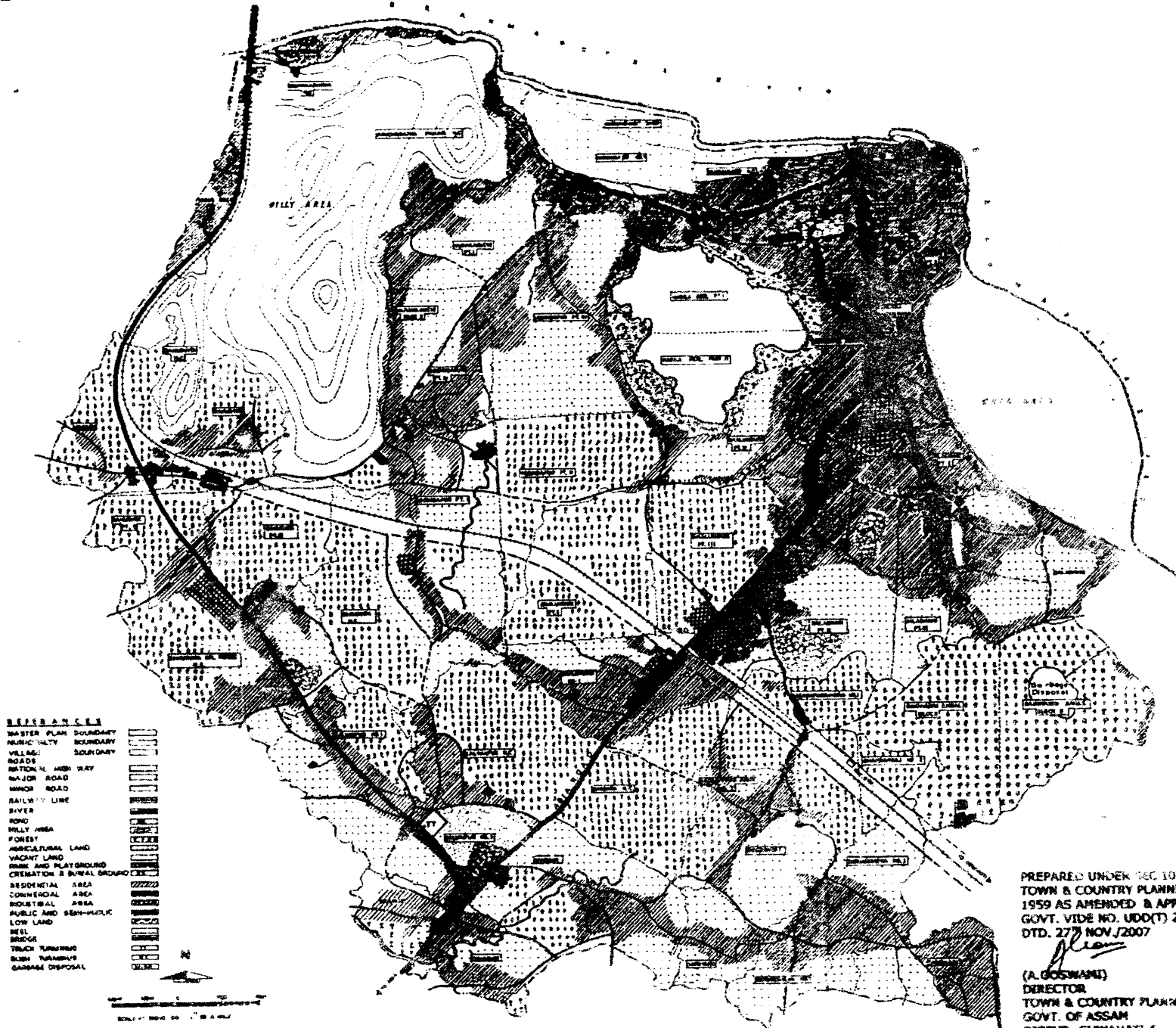
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TOWN & COUNTRY PLANNING ACT  
1959 AS AMENDED & APPROVED BY  
GOVT. VIDE NO. UDD(T) 264/2006/2  
DTD. 27<sup>th</sup> NOV./2007

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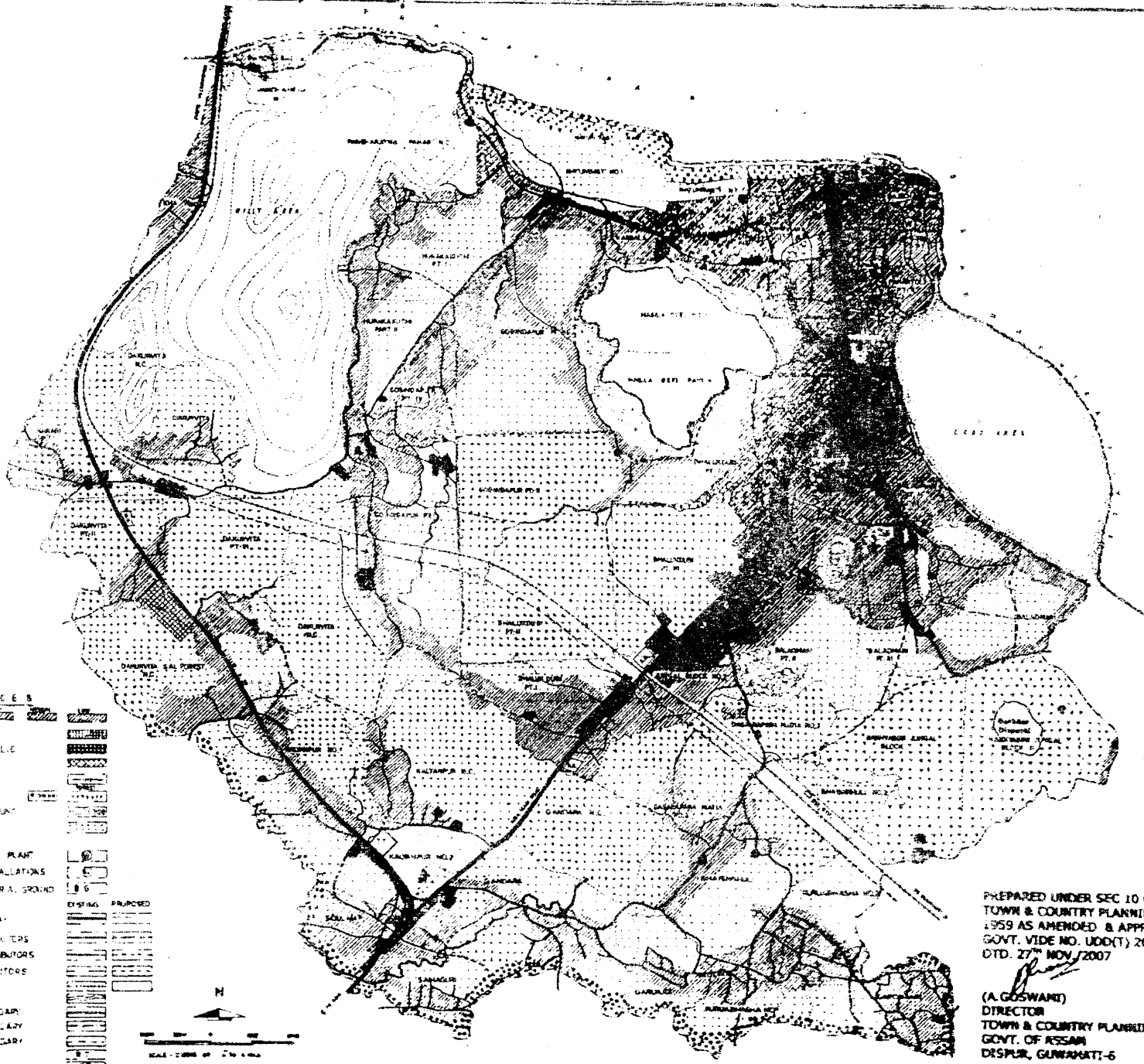
PROPOSED CIRCULATION 2021  
**MASTER PLAN FOR GOALPARA**



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PROPOSED LANDUSE PLAN 2021  
**MASTER PLAN FOR GOALPARA**



**REFERENCES**

- RESIDENTIAL
- COMMERCIAL
- PUBLIC & SEMI-PUBLIC
- INDUSTRIAL
- RAILWAYS
- GREEN BELT
- PARKS & RECREATION
- AGRICULTURE AREA
- PUBLIC UTILITIES
- WATER TREATMENT PLANT
- ELECTRICITY INSTALLATIONS
- CREMATION & BURIAL GROUND
- ROADS
- NATIONAL HIGHWAY
- PRIMARY DISTRIBUTORS
- SECONDARY DISTRIBUTORS
- LOCAL DISTRIBUTORS
- RAILWAY LINE
- WATER BODIES
- MASTER PLAN BOUNDARY
- MUNICIPAL BOUNDARY
- VILLAGE BOUNDARY
- BUS TERMINUS
- TRUCK TERMINUS



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**PROPOSED ZONING 2021**

MASTERS PLAN FOR THE CITY OF GUWAHATI