



অসম ৰাজপত্ৰ

THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত

PUBLISHED BY THE AUTHORITY

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No. 283 Dispur, Tuesday, 16th December, 2014, 25th Agrahayan, 1936 (S.E.)

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

URBAN DEVELOPMENT (T) DEPARTMENT

NOTIFICATION

The 24th May, 2010

No. UDD(T) 90/2010/6.- In exercise of the power conferred by Section 9 of the Assam Town & Country Planning Act, 1959 (as amended) and the Sub Section (1) of Section 2 of the Assam Town & Country Planning, 1994 (Assam Act. No. XXIII of 1994) read with sub-rule (1) and (2) of Rule 3 of the Assam Town & Country Planning (Publication of Master Plan (amendment) Rules, 1995, the Governor of Assam is pleased to publish the following Notification regarding the publication of the Draft Master Plan and Zoning Regulation for Gossaigaon.

NOTICE FOR THE PUBLICATION OF THE DRAFT MASTER PLAN AND ZONING REGULATION FOR GOSSAIGAON.

1. It is notified that the Draft Master Plan and Zoning Regulations for Gossaigaon is prepared under Section 9 of the Assam Town & Country Planning Act, 1959 (as amended) for the areas described in the schedule below is hereby published.
2. Any person or persons affected by the Draft Master Plan may submit their objections or opinions in writing to the Director, Town & Country Planning, Dispur, Guwahati-6 within two months from the date of publication of this Notification.
3. The Draft Master Plan and Zoning Regulation for together with all relevant papers and maps may be inspected free of cost during the office hours at the offices of the Director, Town & Country Planning, Deputy Director, Town & Country Planning, District Office Kokrajhar, Office of the Chairman, Town Committee, Gossaigaon. Copies of Draft Master Plan also available at office of the Director, Town & Country Planning, and the Deputy Director, Town & Country Planning, District office Kokrajhar for sale on payment.

SCHEDULE :-A. SITUATION AND AREA

1) DISTRICT	:	KOKRAJHAR
2) SUB-DIVISION	:	GOSSAIGAON
3) TOWN	:	GOSSAIGAON TOWN
4) MOUJA	:	GOSSAIGAON
5) THANA	:	GOSSAIGAON
6) STATE	:	ASSAM

Approximate Master Plan Area : 51.61 Sq.Km.

Approximate area of Town Committee : 4.41 Sq.KM.

REVENUE AREAS INCLUDED IN THE DRAFT MASTER PLAN FOR
GOSSAIGAON TOWN

	VILLAGES	MOUZAS	DAG NO.
1.	Padmapukhuri	Gossaigaon	All dag
2.	Guwabari No.1	Gossaigaon	All dag
3.	Guwabari No.2	Gossaigaon	All dag
4.	Guwabari No.3	Gossaigaon	All dag
5.	Basbari	Gossaigaon	All dag
6.	Gossaigaon No.2	Gossaigaon	All dag
7.	Dalgaon No.1	Gossaigaon	All dag
8.	Dalgaon No.2	Gossaigaon	All dag
9.	Anthabari No.1	Gossaigaon	All dag
10.	Anthabari No.2	Gossaigaon	All dag
11.	Kadamguri No.1	Gossaigaon	All dag
12.	Kadamguri No.2	Gossaigaon	All dag
13.	Hudumkhata No.1	Gossaigaon	All dag
14.	Dhauliguri	Gossaigaon	All dag
15.	Block Kuti	Gossaigaon	All dag
16.	Habrubil	Gossaigaon	All dag
17.	Nepalpara	Gossaigaon	All dag
18.	Madatipar	Gossaigaon	All dag
19.	Bhaulaguri	Gossaigaon	All dag
20.	Pakriguri	Gossaigaon	All dag
21.	Oxiguri	Gossaigaon	All dag
22.	Serfanguri No.1	Gossaigaon	All dag
23.	Serfanguri No.2	Gossaigaon	All dag
24.	Ballamguri	Gossaigaon	All dag
25.	Haruwaphuta	Gossaigaon	All dag
26.	Kamarpara	Gossaigaon	All dag
27.	Padmabil	Gossaigaon	All dag
28.	Babubil	Gossaigaon	All dag
29.	Alok Jhar	Gossaigaon	All dag
30.	Hakma Gaon	Gossaigaon	All dag
31.	Mahanpur	Gossaigaon	All dag
32.	Ward No.I	Gossaigaon Town	All dag
33.	Ward No.II	Gossaigaon Town	All dag
34.	Ward No. III	Gossaigaon Town	All dag
35.	Ward No. IV	Gossaigaon Town	All dag

SARASWATI PRASAD,

Principal Secretary to the Govt. of Assam,
Urban Development Department.

CHAPTER-1: INTRODUCTION

1.1 Development of Gossaigaon Town:

Gossaigaon Town is a Sub-divisional Head Quarter of Gossaigaon Sub-division and is situated in the Western most corner of Assam. This Town attained the status of town in 1972. It is located at the crossing point of Dhubri - Kuchugaon road towards east, N.H.31(C) toward North, Padma Bill towards west and N.F.Railway towards South. It lies between the $89^{\circ}46'N$ and $90^{\circ}N$ Longitude and $26^{\circ}18'E$ and $26^{\circ}15'E$ latitudes.

The town is well connected with Railway communication. The B.G. Line passes through the Town connecting other parts of the North East and rest of the country. The Sri-Rampur, the last railway station of Assam is only at a distance of 11Km (toward west) and one of the important railway Junction of lower Assam i.e. New Bongaigaon is only at a distance of 80Km. from the town (on the east).

The town is also well connected with N.H.31(c) which is passes through this town north eastern fringe of the town and other PWD roads such as Dhubri Kachugaon road passes through the heart of the town dividing the virtual into two parts, North Eastern part and east southern parts. The state capital Guwahati lies at a distance of 290Km. toward east. The Bongaigaon is 80Km. from Town and the Bengal Boarder is only at a distance of 11Km. from the Town.

Gradually, the area expanded as commercially important and now it is a core commercial center for the area as well as its surroundings.

CHAPTER-2: HISTORY AND EXISTING PHYSICAL CHARACTERISTICS

2.1 History

The Name Gossaigaon Town derived from the word Gosai-Gami or Gossai-gaon which means inhabitant of Hermit "Shadhu".

The elderly people says that there was a Hermit who lived under the Banyan tree, the same tree is still standing at the midst of Gossaigaon Market . It is believed that many Devote from far places used to come and took shelter along with Hermit. The local community especially Bodo Community called them as Gosai or Gossai. In association with their sheltered the word Gossaigaon derived from Gossai Gami or Gossai gaon.

2.2 Physical Features

Gossaigaon Town is situated in a fairly flat land form of Alluvial Soil . The river Madati, a tributary of river Sankoash flowing through the middle of the Town can be developed as a major out let of the rain water. It is also surrounded by Guma Forest Range towards the southern part of the town. Other parts are flat plain which strategic location for future development such as residential colony, Commercial zone, others institution for public and semi-public etc.

2.3 Geology

Geologically the Town consists of a vast alluvial tract. Upper tertiary sediments are exposed only along the foothills. Recent river deposits consist of clay, fine sand and silts are found along the course of the as well as river channels.

2.4 Climate

The climate of Gossaigaon is almost similar to that of whole Brahmaputra Valley with hot humid summer and cool dry winter. The monsoon starts from the early part of May and continues upto the month of August. The winter season starts from the month of November and continues upto February. The weather from the month of February to first half of the April is very pleasant. The mean maximum and minimum temperature varies from 15.52cm to 33.93cm and the annual average rainfall is 30.66cm. Rainfall generally begins from April and continues till the end of September.

2.5. Plan Objective

The aims and objectives of Master Plan are to guide development of the planning area on desirable line so to achieve an over all social and economic betterment of the people by creating conditions conducive to healthy social living.

- a) Development of a balance and integrated urban structure in the planning area.
- b) Development of inter-city transpiration and communication net work to discharge regional functions with efficiency.
- c) Hierarchical city structure in terms of self contained planning units and ensure disposition of services and amenities.
- d) Efficient and judicious utilization of land.
- e) Gradual removal of existing disorder.

Year	Gowainaga Town		Master Plan area (Excluding Town)		Grand Gowainaga Town	
	Total Population	Percentage Variation	Total Population	Percentage Variation	Total Population	Percentage Variation
2007	11,000	100%	10,000	100%	21,000	100%
2011	11,500	104.5%	10,500	105%	22,000	104.8%
2015	12,000	109.1%	11,000	110%	23,000	109.5%
2020	12,500	113.6%	11,500	115%	24,000	114.3%
2025	13,000	118.2%	12,000	120%	25,000	119.0%
2030	13,500	122.7%	12,500	125%	26,000	123.8%
2035	14,000	127.3%	13,000	130%	27,000	128.6%
2040	14,500	131.8%	13,500	135%	28,000	133.3%
2045	15,000	136.4%	14,000	140%	29,000	138.1%
2050	15,500	141.0%	14,500	145%	30,000	142.9%

Table 2: Population Projection for Gowainaga Town and Master Plan Area (2007-2050)

Source: Central Intelligence Agency (CIA) World Factbook (2007) and Planning Commission, Government of Assam (2011) and Planning Commission, Government of Assam (2014)

CHAPTER-3: POPULATION

3.1 Population in the Study Area

In 1971, total population of Gossaigaon Town was 4651 population. As per census of India report during 1991, the population in Gossaigaon Town raised abruptly to 11319(77%) population, which was due to the creation of Civil Sub-Division at Gossaigaon Town in the year 1983. Since early day's immigration has been an important factor of population growth in Gossaigaon Town mainly from Bengal and its neighboring Districts. Wonderful prospects of trade and commerce as well as availability of fertile land have caused influx of people from various places, accelerating the occupational scope in the tertiary sector. The establishment of educational institutions, Government offices are also contributed an important role in population growth of the town. Obviously, growths of population have been concentrated in the urban pockets or in and around it. As per the census 2001 and the population surveyed by the T&CP-2007, it is observed to be abrupt declined in the population growth. It may be due to communal disturbance between Bodo and Adibashi Tribe, social insecurity etc.

Year	Gossaigaon Town		Master Plan area (Excluding Town)		Greater Gossaigaon Town	
	Total Population	Percent in Variation	Total Population	Percent in Variation	Total Population	Percent in Variation
1971	4651		12316		16967	
1981	6392*	37.00%	17818	44.67%	24210	42.69%
1991	11319	77.00%	23320	31.00%	34639	43.08%
2001	13508	19.34%	40639	74.23%	54147	56.30%
2007	15130	12.00%	41443	10.00%	56573	11.00%

Table 1: Population Growth of Gossaigaon Master Plan Area 1971-2007

Source: Census of India, Assam (1971-2001) and Town and Country Planning survey 2007 (Population for the year 1981 is as per projected population*).

The urban population is only 7% in the district of Kokrajhar and 4% at Gossaigaon Circle, which indicates the predominately rural character of the town. The urban literacy rate of Gossaigaon Circle is 74% (2001 Census) while female literacy is 75%.

The area is predominantly inhabited by Bodos, Santhalies, Bengali, Rajbanchies etc. The other communities and others general, there is a huge chunk of other Scheduled Tribe (ST) population comprising of Bodos, Santhalies, and Konch etc.

3.2 Population growth in the Master Plan Area

The Gossaigaon Planning area includes 31 villages and 4 wards and the total population accounts for 51184 as per Census 2001. The decennial variation of population is shown in Table No. 1.

3.3 Population - Density:

Apart from few pockets of congested localities in the town the Master Plan Area as a whole thinly populated.

Area	Area in hectares	Urban/ Rural
1. Total Master Plan Area.	5061.00(50.61Sq.KM)	10P.P.Hec.(1000P.P.Km.)
2. Urban area.	441.10(4.41Sq.Km)	31P.P.Hec(3063P.P Sq.Km.).

Table 2: Density of Population per Hectare-2001
Source- Census of India, Assam (2001)

3.4 Sex Ratio

The overall sex ratio i.e. number of female per thousand male in Gossaigaon Town areas during 1991-2001 gives an interesting clue to the composition of population as given in the Table No. 3 below.

Urban Area				Rural Area		
Year	Male	Female	Female per thousand male.	Male	Female	Female per thousand male
1991	6144	5175	921	11529	10956	975
2001	7179	6329	941	21041	19598	966

Table 3: Sex- Ratio Gossaigaon Master Plan Area
Source - Census of India, 2001.

It is found that in rural area the sex ratio is higher than urban area due to more employment opportunity for male category in urban area.

3.5 Age-Sex Composition

The male population of urban (36%) area in the age group of 18-50, is higher than that of rural (32%) area. The reason for high male population in the town is mainly due migration from rural to urban area in-search of jobs. The population above the age 50 is very low both in the urban and rural area.

3.6 Migration

The population of the Gossaigaon town has gone up owing partly to the large scale immigration. In the absence of any official agency or organization for registration of immigrant, only the birth place figure gives the clue whether a person is immigrant or not. This process however, it doesn't reflect the actual movement of people; because it takes no account of those who come and leave between the two censuses.

There is also vast scope for influx of population both in the Agricultural and non-Agricultural sector. Improvement of transport and communication will increase mobility and will likely to add to the urban influx in near future. The tendency of seasonal migration is generally common in this area, specially, in between September to November and move back to rural area for harvesting.

3.7 Occupational and Employment Structure

The occupational pattern of Gossaigaon Master Plan Area (separately for urban and rural area) for 2001 to 2007 is shown in table no. 4.

Year		Total Pop.	Total worker	Sector wise Employment		
				Primary	Secondary	Tertiary
2001	Urban	54147	4313	1074(25%)	1974(45%)	1265(29%)
	Rural		17660	11388(65%)	3083(18%)	3189(18%)
2007	Urban	56573	5116	1183(23%)	2283(45%)	1650((32%)
	Rural		19425	12129(62%)	4037(21%)	3259(17%)

Table 4: Occupational Distribution in Gossaigaon Master Plan Area

CHAPTER - 4: PHYSICAL GROWTH AND EXISTING LAND USE PATTERN

4.1 Physical Growth Trend

Planning area of Gossaigaon has been demarcated after studying the present trend of growth, the geographical factors of its location and the future growth potentiality of the area. The present trend of growth of the town shows rapid expansion towards North and North-Western directions. The growth towards South and East is slow due to existing Forest Reserve Land and low lying paddy fields etc. Towards North development possibility is bright due to existence high lands, Establishments (Civil Sub-Division Office, other offices), Educational Institutions etc.

4.2. Existing Land Use Analysis

A land use survey for the Gossaigaon Master Plan Area was conducted during 2007 to ascertain the existing land use pattern as well as to estimate the present and future needs of the planning area. The various uses have been classified into nine broad categories and approximate area under each category is shown in table no. 5

Land use	Area in acres	Area in hectares	P.C. of total area(%)	P.C. of developed area (%)
Residential	630.00	254.95	57.79	64.94
Commercial	150.00	60.70	13.76	15.46
Industrial	20.00	8.09	1.83	2.09
Public & Semi Public	50.00	20.24	4.58	5.15
Park and Play ground	10.00	4.04	0.91	1.03
Roads	50.00	20.24	4.58	5.15
Railways	60.00	24.28	5.50	6.18
Developed area	970.00	392.54	88.95	100.00
Agricultural land	70.00	28.33	6.47	
Vacant Land	30.00	12.14	2.75	
Water Bodies	20.00	8.09	1.83	
Total	1090.00	441.10	100.00	

Table 5: Existing Land Use (Gossaigaon Town) 2008

Land use	Area in acres	Area in hectares	P.C. of total area (%)	P.C. of developed area. (%)
Residential	2770.00	1120.98	22.14	60.08
Commercial	110.00	44.51	0.87	2.38
Industrial	10.00	4.04	0.07	0.21
Public & Semi Public	710.00	287.32	5.70	15.43
Park and Play ground	20.00	8.09	0.15	0.43
Roads	800.00	323.74	6.39	17.35
Railways	190.00	76.89	1.56	4.12
Developed area	4610.00	1865.57	36.88	100.00
Agricultural land	4620.00	1869.65	36.93	
Water Body	630.00	254.95	5.03	
Forest Land	1800.00	728.47	14.38	
Vacant Land	850.00	342.89	6.78	
Total	12510.00	5061.00	100.00	

Table 6: Existing Land Use (Master Plan Area) 2008
Source- Town & Country Planning, Survey 2007.

The total Master plan area is about 5061.53 hectares out of which the Gossaigaon town Committee area covers about 441.10 hectares and developed area within the town Committee is only 392.54 hectares approximately, there by constituting 36.88(%) P.C. of the total Town Committee area. Out of the total developed area of the Town Committee area, residential use occupies the maximum which comes to about 254.95 hectares. The next major uses under developed area are Commercial (60.70hec) Roads / Railways(44.51Hec.) and public and semi public which covering 20.24 hectares within the Gossaigaon Town Committee area.

Residential use:

Out of the total developed area of 1865.57 hectares within Master plan area about 1120.98 hectares are use for residential purposed which constitute 22.24(%) P.C. of the total developed area.

Commercial use:

The commercial area is located along the main streets of the town. There are altogether 300 nos. of retail shops and 30 nos. of wholesale shops within the Municipal area. The overall land under commercial use within the Master Plan area is 44.51 hectares which is 0.87% of total developed area.

Industrial use:

Industrial development within the Gossaigaon Master Plan area is very low. The Industrial use covers only 4.04 Hectares out of the whole Master Plan area, which constitute 0.07% of total developed area.

Public and semi Public use:

The public and semi-public use consisting of educational institutions, govt. offices, Hospitals, Mosques and Temples etc. occupies about 5.70% to the developed area of Gossaigaon Master Plan area. There are altogether 51 Nos. of Educational Institutes within the Gossaigaon Master Plan area. Besides, there are 15 nos. of Govt. Offices most of which are accommodated in rented buildings.

Recreational use:

Park and playgrounds occupy about 8.09 Hectares or 0.15% of the total developed area.

Agricultural use:

Agriculture is the major use within the Master Plan area which covers 1869.65 hectares thereby constituting 36.93% to the total Master Plan area. Even within urban area agricultural land use covers 6.47% of the total Master Plan area.

Water bodies: Water bodies occupy about 5.03% of Gossaigaon

Master Plan Area

Land Resources: As per the records of Revenue Circle Gossaigaon, almost 6% of the land belongs to Government land and abundant agricultural, vacant land which may be use for future developmental scheme. It has been observed from the table No. 6 that out of the total Gossaigaon Master Plan Area, 1869.65 Hectares of land are under cultivation followed by 1120.98 Hectares, 342.89 Hectares of land are under residential and vacant land respectively. Most of the existing lands are highland which is suitable for future development as residential as well as commercial zone.

CHAPTER - 5: HOUSING

5.1 Housing Environment

The housing problem is acute in Gossaigaon Master Plan Area specially, to those villages included in Master Plan Area; this may be due to Anthropological scenario. The people of this area rather gives special emphasis on traditional housing pattern than the modernize housing system. Most of the dwellers live in an unhygienic condition. The ethnic tribal people of this area are fond of rearing piggery, poultry etc. nearby their resident, which creates unhygienic living condition. Contaminated water leads to favorable place for breeding of mosquitoes. Hence, the awareness towards cleanliness, minimum architectural modification, installation of basic minimum infrastructures such as water supply, drainage, roads, communities facilities etc. are to be taken care of.

5.2 Residential Density

The residential area outskirts of Town committee is almost thinly populated. The gross residential population in the rural area of Gossaigaon Master Plan Area is the 10 persons per hectare while in the Town Committee area is 31 persons per hectare. In 2007 there were approximately 3058 housing units in the Gossaigaon Town Committee area 4150 housing in the rural area.

5.3 Structural Condition

About 22.20 percent of dwelling units in Town Committee area and 54.50 percent of dwelling units in Master Plan area are Kutcha in structure. Structural conditions are more or less uniform in entire Gossaigaon Town Committee area. Almost 96 percent of buildings are single storied within the Town Committee area and about 32.72 percent houses are of Assam Type and 26 percent are of RCC and Semi- RCC.

The quantitative aspects of present housing condition are not bright. About 944 numbers of existing housing units in Town Committee area are in dilapidated condition which means these houses should be re-build as early as possible.

Type	Under Urban Area		Under Master Pl- an area (Including Town area)		Materials used for roof and wall
	No. of Houses Urban	Percent	No. of Houses Rural	Percent(%)	
Kutchha	787	22.20	5316	54.50	Roof with thatched grass, & wall with bamboo, grass leaves, with or without mud plastering
Assam Type	1668	47.03	3192	32.72	Roof with CIC sheets, thatched grass and wall with brick and wooden.
Semi RCC	951	26.81	1093	11.21	RCC columns and RCC roof, brick wall with cement plaster at ground floor and CIC sheets with brick wall at first floor.
RCC	140	3.95	153	1.57	RCC column and RCC roof, Brick wall with cement plaster.

Table 7: Housing Condition

Source: Town & Country Planning, 2007.

CHAPTER - 6: COMMERCE AND INDUSTRIES.

6.1 Commerce

Gossaigaon is the main commercial center in the district. The trade and commercial activity of the town is in rapid stride for the last few years. At present, commercial activity are growing scattered all over Gossaigaon Master Plan area.

6.1.1 Commercial cum Shopping Areas: The major commercial activities are concentrating mainly along the D.K.Road, T.P.Road of Gossaigaon Town and in and around the Bus terminus and railway station road. At present there are about 450 Nos. of retail shop within the Gossaigaon Master Plan area. Since the commercial area of Gossaigaon town is not in a position to cover up the entire Gossaigaon Master Plan Area, hence, the small vendors such as vegetable, fish, meat, rice etc. are spreading over the adjoining area of Gossaigaon town.

6.1.2 Whole Sale Trade: There are 18 Nos. of wholesale market dealing with grocery, stationary, clothes and medicine etc. at Gossaigaon town which are located near by the retail shops.

6.1.3 Workshop and Repair Shop: There are altogether 28 numbers of workshop and repair shops at the Gossaigaon town and its adjoining area which are mainly motor garage, scooter repairing shops, radio and watch repairing houses etc. These are scattered in the town along the major roads and this has created a lots of traffic problem.

6.1.4 Transport Agencies: The transport agencies are mainly located at the heart of the Gossaigaon town there are 4 numbers of transport agencies, which are playing a vital role in transportation of goods to and from Gossaigaon town. These agencies are connected by roads with other towns. Being located in the heart of the town these agencies are facing problems at the time loading and unloading. These activities require being suitably located within the town to solve the problem being faced at present.

6.1.5 Centers of Retail Trade: There is no major retail trade center in this town and few have been developed haphazardly along the major roads creating lot of problems. For example, the existing daily bazaar practically occupies the main-roads causing traffic congestion and inconvenience for people. In order to facilitate the daily needs of household goods, it is necessary to develop retail centers at convenient places of planning area. Apart from the major trade center are growing scattered along the N.H.-31(c) and towards the Railway station .

6.2 Industries:

Industrial development is generally recognized as the most important part of economic growth of any area. But present Gossaigaon town is poor in industrial development due to certain bottlenecks like inadequacy of technical know-how, banking facilities and non-availability of raw material and market. However after the constitution of BTAD, and improvement of physical infrastructure facilities especially agriculture sector, entrepreneurs are willing to develop industry in this area .

The canned, bamboo handicraft and Wooden Furniture etc. plays a major role to the local artisans. The canned and wood (like Sal, Segun, Shisu) products are highly fascinating customers, as the good quality of raw materials are easily available near by the Bhutan boarder and the state of W.B. This industry can boost up the economic activity of this area provided enhancement of suitable infrastructure by the BTC.

6.2.1 Growth of Industries: Since the area having no natural resources for industrial development , except few small scale industries such as Cane, Bamboo and Wood product which are purely forest product hence as per records the Industrial development is quite slow.

6.2.2 Industrial Establishment by Type: Industrial survey conducted by the Town and Country Planning Organization in 2007, shows that there about 19 numbers of small scale industrial establishments in the Gossaigaon town.

Sl. No.	Type	No. of Units	Percentage %
1.	Handicraft	9	16
2.	Small Scale Industries	19	34
3.	Servicing	28	50
Total		56	100

Table 8: Industrial Establishments by type

Source: Town and Country Planning, 2007.

CHAPTER-7: TRAFFIC AND TRANSPORTATION

7.1 Transportation System (Regional): The Town is well connected by the NH-31(c) present low level of development in the Gossaigaon Master Plan area may be attributed to the inadequacy of transportation facilities. Although this region is connected with rest of the state by road and railways yet no single communication line is adequate to meet the all season requirement. In generally during monsoon frequent disruption of road-communication occurs in these areas.

Roadway: Gossaigaon is well connected by road to other urban centers of the region as well as to other parts of India.

Railway: The town has great advantage of rail communication by means of Broad Gauge (B.G.) line, which passes through the hearth of the town. This connects it with Guwahati and upper Assam on the east and other parts of the country on the west. This line has increased the commercial activities of the town and help to a large extend for the development of Gossaigaon Town.

7.2 Circulation Pattern:

Within the planning area all the movement of people and goods take place by road. There is no established pattern of road network in Gossaigaon town. In the central area of the town, motor vehicles, rickshaw, bicycles, handcarts, pedestrians and animals jumble through the same street. Although it is necessary to segregate slow moving traffic from that of fast moving, there is no such scope due to lack of suitable alternative road. A hierarchical road system by improving existing roads and by providing new roads is an urgent need of the town.

The total road length within the Gossaigaon Master Plan Area is about 75.00 km. of which about 33.847 km. (45%) of the roads are 'kutchha' as shown in the table no. 9 below. The existing width of the road is inadequate for the efficient movement of traffic.

Sl. No.	Type of Road	Length in K.M.	Percentage (%)
1	Pitch	20.175	27.00
2	Gravel	20.97	28.00

3	Kutchra	33.847	45.00
Total		75.00	100

Table 9: Length of Road in Gossaigaon Master Plan Area

Source: Town & Country Planning 2007

7.3 Traffic Terminal Centre

At present sub-urban buses are operating from Gossaigaon to important neighboring places of the districts as well as to West Bengal, Bhutan Boarder etc., but there is no suitable bus terminal centre, as a result of which buses are parked on the roads. This causes obstacles for smooth running of vehicles as well as passengers traffic in the town. Now, altogether 35 Nos. of public buses runs daily from Gossaigaon, as such few bus terminals are long felt demand of this town.

7.4 Modes of Transportation

Traffic carrying capacities of urban roads are intimately related to the modes of traffic in use along these roads. Mix of traffic modes reduces the traffic carrying capacities of the roads. At present there is no intra town, mass transportation system in the Gossagaon town, but several regional mass transportation agencies are functioning for movement of people from suburb to the town.

Table 10: Growth of Fast Moving Vehicles –Gossaigaon

Year	Bus	Car/ Jeep/Taxi	Motor Cycle/ Scooter	Van	Truck	Auto Rickshaw
1	2	3	4	5	6	7
2003	2	36	624	5	8	7
2004	11	67	672	5	35	1
2005	8	96	1356	12	27	4
2006	3	183	1326		39	21
2007	7	215	1068		39	57
2008	4	225	1235		41	23

Source: District Transport office Kokrajhar.

The number of fast moving vehicles given in the tables pertains to the whole Jurisdiction of Gossaigaon Sub-Division under D. T. O. Kokrajhar. The figures in the table reflect the trend of fast moving vehicles in Gossaigaon Town.

7. 5. Traffic Surveys and Problems

A conspicuous feature of the vehicular traffic in Gossaigaon is the high in proportion of slow moving vehicles, Cycles and other slow moving vehicles constitute about 65% of the total traffic in a morning peak hour (9-30 A.M to 10-30 A. M.) at which passes the town carries the maximum number of vehicles. The road wise traffic volume during morning peak hour is shown in the table No.11.

In bound and out bound traffic volume of Gossaigaon Town

Route	Total traffic volume			Peak hour traffic volume (From 9:00a.m. to 11:00a.m.)			
	Fast	Slow	Total	Fast	Slow	Total	% of Slow moving
Inbound ←							
1. Tamarhat-Gossaigaon road.	978	2745	3723	329	626	955	65.50
2. Sri Rampur-Gossagaon road.	666	809	1475	195	190	385	49.30
3. Bongaigaon-Gossaigaon road	626	900	1526	211	340	551	61.70
Outbound →							
1. Tamarhat-Gossaigaon road.	947	1938	2885	291	459	750	61.20
2. SriRampur-Gossagaon road.	697	717	1414	195	190	385	49.30
3. Bongaigaon-Gossaigaon road	576	777	1358	156	156	312	50.70

Table 11: In bound and out bound traffic volume of Gossaigaon Town
Sources:-Survey T&CP Kokrajhar (2008).

Other secondary roads are generally low volume of traffic flow which ranges between 50 to 480 bi-hourly.

The Traffic problem in Gossaigaon is not only due to high growth of fast moving vehicles but also because of unplanned road net work, absence of bus terminus in a suitable location, insufficient parking Space and lack of segregation of pedestrian and vehicles traffic, insufficient traffic control measures and defective road geometries, in addition to these and ignorance of traffic sense of the road uses further deteriorate the situation. Therefore, the problem must be tackled simultaneously from all sides.

Road Name	Inbound			Outbound		
	Slow moving	Fast moving	Total	Slow moving	Fast moving	Total
1. Jambhoni Gossaigaon road	225	150	375	120	150	270
2. Jambhoni Gossaigaon road	285	180	465	150	180	330
3. Jambhoni Gossaigaon road	321	340	661	170	150	320
4. Jambhoni Gossaigaon road	220	120	340	120	150	270
5. Jambhoni Gossaigaon road	285	190	475	150	180	330
6. Jambhoni Gossaigaon road	315	120	435	170	150	320

CHAPTER - 8: URBAN INFRASTRUCTURE

8.1. Water Supply

The provision for potable piped Water supply schemes in the Gossaigaon town is under construction by the Urban Sewerage Board and may likely to be completed by the end of 2009, while the Railway have their own water supply. At present, rest of the town population have to depend on private means of tube wells, deep tube well and the ring wells. High iron content in tube well and ring well water marks it unsuitable for consumption.

8. 2. Drainage and Sewerage

The problem of drainage in Gossaigaon is acute particularly in the developed areas. Within the Gossaigaon Town, there is no affective drainage system, Inadequacy of drainage system and conversion of low lying areas into built-up areas without making provisions for out let of rain water has resulted water logging of various areas. It has been observed that the bed level of the existing streams are raising due to spontaneous silting caused due to deforestation of adjoining foothills of Bhutan. Therefore a comprehensive drainage net work for the entire urban Area under UIDSSMT has been submitted to Govt. for approval.

There is no underground sewerage system at Gossaigaon Town. Generally in the town about 60 p. c. of the house hold have sanitary latrine 28 p. c. have either service or pit latrines. Although now houses have individual septic tank, but in due course of time it may, give rise to problem of soil and water contamination water discharged from these septic tanks generally percolates underground which -affects soil adversely and ultimately contaminates the ground water.

8.3. Electric Power

The overall power requirement for the entire town is 3M.Watt. and is being supplied by the ASEB. 2M.Watt is required during peak load period (5PM to 10PM) and 1M.Watt at off peak load.

8. 4. Health

The Gossaigaon Civil hospital located at Habrubil with a provision of 30 bedded. As per 2007 figures, the average daily out door and indoor patients attend this hospital are 125 and 35 respectively. There are 5 numbers of Doctors 5 umbers of paramedical staff, Nurses, pharmacist and grade IV personnel in the civil hospital is altogether 22 numbers with regard

to a minimum need based standard of medical facilities. This hospital is too small to cater the needs of the local people. The hospital is always overcrowded by both indoor and outdoor patients; there is one Primary Health Centre near Higher Secondary Field run by the Sub-Divisional Medical Health Officer with a limited paramedical staffs. Further there are two Polyclinics without adequate facilities.

8.5. Education

As per survey conducted by this department in 2008, there are 52 educational institutions in the Gossaigaon Master Plan area of which 29 are within the Town Committee Area. The total student populations in all these institutions were 8416.

There are 30 primary schools in Gossaigaon Planning area with a student population of 3490, the average enrolment being 116. out of the 30 Primary school 16 schools are located within the Town Committee area.

There are 19 high and higher secondary schools (including ME and MV) in the planning area, out of which 10 are located within the urban zones, the average rate of enrolment in each of the school comes to about 200. Most of the primary and high schools are accommodated in dilapidated houses without proper service facilities such as play-ground, toilets, water supply etc. However the Govt. has planning to provide good infrastructure facilities through the schemes like Buniad Achani and Sarbasikhsha Abhijan.

There are 3Nos. colleges for general education within the planning area. The colleges are facing difficulties due to inadequacy of building space for class room library and common room etc. Moreover lack of space the problem for providing hostel and play-grounds.

There is no institution for technical education at Gossaigaon town. Table-12 had shown the different educational institutions with enrolment in the Gossaigaon Planning area for the year 2007.

Type of institution	Gossaigaon town Committee area			Master Plan area(excluding Town Committee)			Total planning area		
	No. of institution	No. of students	Average enrolment per institutions	No. of institution	No. of students	Average enrolment per institutions	No. of institution	No. of students	Average enrolment per institutions
1. Primary School	16	1861	116	14	1628	116	30	3490	116
2. High & Higher Secondary School (including ME, MV.)	10	2006	200	9	1805	200	19	3812	200
3. College	3	820	273	0	0	0	3	820	273
Total	29	4687		23	3433		52	8122	

Table 12: Educational Institution – Gossaigaon Master Plan Area
Source – Town and Country Planning Survey – 2007

8.6. Other Utilities and Services

1. Post and Telegraph Offices:

There is one number of sub-post offices in Gossaigaon town. There is one Telephone exchange under BSNL is functioning in the town. Beside, Airtel, Aircel are occupying the major part in communication sector.

2. Police Station:

There is only one police station in the Gossaigaon Master Plan area

3. Fire Station:

Unfortunately there is one fire fighting service station at Gossaigaon town.

4. Cremation and Burial Ground:

The present location of cremation and burial ground is adjacent to urban area.

CHAPTER—9: URBAN FUNCTION AND FUTURE URBAN NEEDS

9.1. Major Urban Functions

Gossaigaon Planning area comprises Gossaigaon Town Committee and a galaxy of agricultural villages with an agricultural hinterland. Gossaigaon town is one of the biggest commercial town of the District. It collects the agricultural surplus commodities and supplies the essential items to its hinterland. There is maximum scope for development of commercial activities as the area is adjacent West Bengal Boarder as well as Sri Rampur Gate. It is assumed that the town will continue its commercial function in future too.

Further, it is the headquarter of Gossaigaon Civil Sub-Divisional and has departmental offices.

The scope for industrial development in the town appears to be scanty, due to lack of raw materials and infrastructural facilities. However there is some scope on Agro-based, Forest-based and other allied industries in and around the Gossaigaon Town.

9.2, Plan Period

The plan period for Gossaigaon Master Plan Area is 2010-11 to 2030-31 spreading for a span of 20 years. During this Plan period various proposals have been proposed in the Master plan area to be executed in phased manner. At the time of phasing priorities will have to be given to the immediate need problems and long term and short term measures are to be sorted out based on the problems faced by the planning area.

9.3. Future Population

Master Plan being a long term guideline for future scientific development including all kind of amenities for the people, it is important to know the future population resources. For this purpose, the population projections have been made.

The population projection of Gossaigaon Master Plan area is based on the past trend. The trend of past population growth shows a sharp rise of population especially between 1971 to 1991 in the Gossaigaon town. However, after 1991's the urban population growth rate stabilized. On the other hand, the rural population growth rate appeared to be a sharp rise by 2001. Finally, population projection till 2051 has arrived after the comparative study of Arithmetic Progression and Graphical Projection as shown in the table No. 13.

Area	2007	2011	2021	2031	2041	2051
1	2	3	4	5	6	7
Gossaigaon Town Committee Area	15130	16463	20674	27452	35963	47872
Rural area (Villages)	41443	44512	48241	55735	63935	71808
Total Master Plan area	56573	60975	68915	83187	99898	119680

Table 13: Projected Population

Source - Col- 2(T&CP Survey) and 3,4,5,6,7.-Town and Country Planning department projection.

9.4. Housing Requirement

The housing requirement is more in the urban areas than that in the rural areas. Almost all persons in rural areas have got their own house. As per survey of 2007, the total requirement of dwelling units in the planning area is 1501 considering 5 persons per dwelling unit. By 2031 A.D, additional 4,442 numbers of dwelling unit will be required in the planning area.

Apart from residential housing requirements there is a shortage of office building. About 40% of the Government offices are now in occupying private houses meant for residential purposes paying large amount of rent and most of them without having required floor space. To accommodate those offices an office complex is required for their proper functioning.

9.5 Residential Area Requirement

The residential area requirement mainly depends on agency of development. In case of Government or Semi-Government developing agency, some optimum standard can be imposed for the residential plots. And this Standard can be adopted 3600 Sq. fit. (1 K. 5 lessas) for each individual. Further, the area requirement depends upon the type of development. In case of group housing the area requirement can be minimized depending upon the layout plan for the purpose.

In the Rural areas of the Gossaigaon Master Plan Area, no standard could be enforced as the rural people have got their typical way of living, having granary and cowshed apart from residential houses within the same campus. This social habit can not be ignored and hence, no definite standard could be imposed on the rural component.

However, the area having maximum scope for residential land development as there is large Govt. land for acquisition of such R.L.D.S. project and those land areas are comparatively high land on which development cost will be less.

9.6 Trade and Commerce

At present, there is only 44.51 hectares of land under commercial use which is only 2.38% of the Gossaigaon planning area. There is a shortage of organized commercial space within the Gossaigaon planning area as a result of which large parts i.e.

Almost along all the roads and the heart of the town have been used for commercial purpose. To avoid the pressure on the city centre and to facilitate the rural component of the Gossaigaon planning area, the Commercial centers are required to be proposed in the outskirts of the Town Committee area for which suitable lands have to be earmarked.

A total of about 304.44 hectares (6%) of the total land area of commercial land is likely to be required up to the 2031.

9.7. Industry

The entire Gossaigaon Sub-division is industrially backward. There are very few industries existed in the Gossaigaon Planning area. No city can function well, unless it is supported by industries. As such, it is expected to develop some selected industries based on available raw materials. For this an area of about 139.53 hectares (2.70%) of land will be required which should be developed in different phases till 2031.

9.8. Public and Semi-Public

The Gossaigaon planning area needs one office complex for smooth and coordinated functioning of the offices and for planned development of the Gossaigaon Planning Area. For this a suitable area is required to be earmarked to accommodate the different Government and semi-Government offices.

Apart from this suitable land for Railway- Goods Station, Helipad, Medical, Educational Institution, Parks and Play grounds Garbage Disposal etc. are to be kept reserved for future development.

A total of about 177.59 hectares of land (3.50% of the G.M.P.A.) is likely to be required for public and semi-public use for the year 2031.

9.9. Traffic and Transportation

The existing transportation system is not at all adequate. Most of the roads are very narrow and there is no order of roads. For plan development of the GMPA a hierarchical road system is required to be developed. At present there is no organized Bus Terminal, Truck Terminal and Taxi stand. These facilities are to be provided at suitable places to avoid congestion at the heart of the town.

For mass transportation circular system of movement of Buses are required to be introduced along the ring- roads to serve the entire Gossaigaon Master Plan areas, taking special care to the pick hours.

CHAPTER – 10: PROPOSED LAND USE PLAN

10. 1. Aims and Objectives

The main aims and objectives of the comprehensive Master Plan for greater Gossaigaon town is as follows:

- i. Development of a balance and integrated urban structure in the planning area.
- ii. Development of inter-city transportation and communication net work to discharge regional functions with efficiency.
- iii. Hierarchical city structure in terms of self contained planning units and ensure disposition of services and amenities.
- iv. Efficient and judicious utilization of land.
- v. Gradual removal of existing disorder.

10. 2. Basic Considerations

After various round of surveys and analysis for Gossaigaon town and its adjoining areas the problems as well as prospects for the planning area came to light. The following consideration is taken into account in preparing the Master Plan for the Gossaigaon planning area.

- a) Development of a 'Civil Centre' and specific areas for social and cultural activities.
- b) Development of Administrative complex to accommodate various Public and semi-public offices presently scattered within the town.
- c) Development of shopping centre at suitable places to serve suitably the entire planning area.
- d) Provision for suitable circulation pattern with provision internal by-pass system. National Highway 31© which passes through the town toward north
- e) Provision for utilities and services in an integrated manner for the entire planning area.
- f) Development of land for industries and evocating them in suitable places.
- g) Encouragement for establishment of small industrial units.
- h) Development of residential land with infrastructures.
- i) Efficient use of Government land and priorities by putting them to most Proper Use.
- j) Rational distribution of residential densities so as to minimize disparities.
- k) Improvement and clearance of slum by executing environmental improvement schemes and National Slum Development Scheme.

- l) Development of parks at suitable places to enhance the beauty of the town.
- m) Development of a Stadium to be encouraged for development of Sports and Culture.

10.3 Plan Concept

The urban growth within the planning area is very limited. Large part of the Town Committee area is even under cultivation. The present growth of the town is mainly along the major roads leaving the rear sides for cultivation. From the present trend of development as well as topography of the area it is assumed that the future development of Gossaigaon town would take place only towards Northern side of the Town. A finger type of development would place along the major roads. An attempt has been made to integrate the activities of those areas by providing some unit level Centers at suitable places.

10.4 Land Use Pattern

The land use pattern for Gossaigaon has been worked out on the following considerations.

- (a) Mixed land use at the existing town centre.
- (b) Minimum dislocations of present Land pattern.
- (c) Inter-relationship of various land use classification.
- (d) Hierarchical relationship of activity areas.
- (e) Decentralization of work centers.

10.4.1 Residential Land Use

The Master Plan provides about 1255.82 hectares of land under residential use by the year 2031 which Constitutes 25.00% of the planning" areas keeping in view of the existing trend of development, availability of build able land, projected population etc. three residential areas have been divided in different density Zones.

The residential areas are proposed to organize in two neighborhood units with a population of 10 to 12 thousand leaving the predominantly rural areas to grow at the existing villages in their linear pattern. In each neighborhood facilities like primary School, Secondary School, Play Ground Shopping centers for day to day needs and other service facilities will be provided.

10.4.2 Commercial Use

At present commercial activities are confined along the major roads (it heart of the town). Apart from organizing the existing commercial areas within the Town some new

shopping centers will be developed as to serve the entire planning areas in a phased manner till 2031 All total 304.44hectares of land is being earmarked for commercial purposes. The following shopping centers are proposed for development.

1. At Hudumkhata No.1(Toward North East of the Planning area)
2. At Kadamkuri No.2.
3. At Habrubill Tin-Ali.
4. At Harua Futa (Extension).
5. At Anthaibari No.1.
6. At Basbari (toward south)

10. 4. 3 Public and Semi-Public Uses

The proposal of total land allocation for public and semi public use is about 177.59hectars which is about 3.50% of the total planning area' This includes land requires for educational institutions, hospitals, Government and semi-Government offices Socio-cultural and religious institutions, cremation and burial ground,

Education:

Considering the standard as for every 1,500 to 2,000 one primary school and for every 5,000 to 6,000 population one High and Higher Secondary the required number of primary and High or Higher Secondary School in the Gossaigaon Master Plan Area will be 55 Nos. and 17 Nos. respectively. There are already 30 Nos. of primary school and 19 Nos. of ME, MV, High or Higher Secondary schools within the Master Plan Area (2007). So 25 of primary school and 6 Nos. of High or Higher Secondary schools are to be established within the planning area by 2031. The Table No. 14 shows the total requirement, of educational Institutions for the Master Plan Area. At present there are 3(three Nos.) of Colleges and considering the future population further 3() more Colleges have been proposed and another 2(two) No.s of Technical institutions have been proposed.

Sl. No.	Category	Existing number	Proposed number	Total number
1	Primary School.	30	25	55
2	M.E. ,M.V. ,High and Higher Secondary school	19	6	25

3	College (general)	3	3	6
4	Technical Institute	Nil	2	2

Table 14: Proposed educational institutions: Silapathar Master Plan Area (2025)

Health:

The general health units available at Gossaigaon town is not sufficient to serve the population of the town but also the entire population of the Sub-division. The existing 30 bedded civil Hospital at Habrubil is not at all sufficient for present population. Conversion of existing civil Hospital to 200 bedded has been proposed in addition to another up gradation Primary Health Centre 100bedded Hospital near Higher Secondary Field to meet the actual requirement. It is proposed that the residential units with a population 3,000 to 5,000 should have one Dispensary and a Maternity Centre and where the neighborhood unit's with having population of 10,000 to 12,300 should have one Health Centre.

Government Offices:

At present the Government Offices are scattered all over the town and are mostly in rented house. So it is desirable to organize an office complex in a suitable area. As such a suitable area measuring 69 hectares including the existing public semi-public uses will be developed to accommodate the Government offices and residential quarters for the employees at Nepal Para.

Recreation and Open Space:

For healthy environment open space is a very important factor. The existing recreation and open space within the town as per standard is very inadequate.

The standard should be 0.405 hectares per thousand populations in the existing town and 1.6 hector per thousand populations for the rest of Master Plan area. For this purpose a total area of 133.00hectaresland is required in suitable locations which will be adjusted from the land allocated to green belt.

Cremation and Burial Ground:

Apart from existing cremation ground two new cremation grounds have been earmarked in the plan. These are:-

- (a) At Guabari No.2 (near River Jaima)
- (b) At Sefunguri No.1 (near River Haruaphuta).

The proposed cremation grounds and the existing cremation grounds are to be developed

suitably by providing all facilities and services.

10.4.4 Industrial Uses

The potentiality for development of industries in the Planning area is not bright mainly due to lack of local raw materials. Except few rice mills, saw mills, servicing, industries, *no* other industry exists in the area. The existing small and servicing industries will continue to grow with the increasing demand. Depending upon the local and regional economic factors, availability of raw materials and Government initiative to extend infrastructural help. There are ample scope for development small and medium industries based on Agriculture and forest resources, such as rice mills flour mills, oil mills, fruit preservation. The canned and bamboo handicraft plays a major role to the local artisans.

This industry can boost up the economic activity of this area provided enhancement of suitable infrastructure by the Government. In this regard, Hudumkhata No.1 and Dhauliguri have been proposed for development of Industrial Estate.

10.4.5 Public Utilities and Services

Sufficient potable water supply, well planned sewerage and drainage system and availability of power are basic need of urban life. At present there are no drainage and sewerage system and water supply in the planning area except inadequate supply of electricity. It is therefore, essential to provide this infrastructure in a coordinated way by the concern authorities.

Water Supply:

At present there is no adequate drinking water supply in the town. The existing of potable water for the Gossagaon Town is totally under construction. Therefore, it is essential to propose II-Phase Potable water supply scheme to fulfill the demand of the entire plan area. System is required to fulfill the needs of the common mass, having total capacity of 29,11,545 gallon of water per day.

Drainage and Sewerage:

To solve the drainage sewerage problem, comprehensive drainage and sewerage schemes should be taken up or drainage Master plan for long term basis. From the hygienic point of view, the drainage scheme should be on top priority.

In the meantime relief measures like opening up of blocked drains and their proper maintenance should be taken up to avoid further deterioration of drainage condition.

Garbage Disposal:

There is no organized garbage disposal site by the town Gossaigaon. The garbage are generally disposed along the road side or in the existing river/streams which effects the water and lets to water contamination. Therefore, a suitably location at Hudumkhata towards North East and Anthaibari No.1 towards south east having maximum scope for Solid waste management project in future.

Electricity:

The source of electric power to Gossaigaon is Meghalaya Hydro Electric Power Project from which power is supplied, under the supervision and execution of the Assam State Electricity Board. The allocation of electric power is being fixed by the ASEB Guwahati. The Gossaigaon town and its adjoining areas, about 53 p.c. of the total house holds have power connection while the rest depend on Kerosene oil lamps. Power generation and supply are quite inadequate in meeting up the consumer's demand at present. The total demand at present in Gossaigaon town itself is about 3M.Watt. whereas power generally receives only 1.5MW. However with the completion of town line with a substation Gossaigaon it is expected to meet-up the consumers demand fully.

10.5 Land Use Distribution

The distribution of the total urbanize-able land in to various broad categories of land use have been made keeping in view the minimum desirable standard of development and functional linkages between them. The table No. 15 shows the land proposed for various major used for 2031 of. Gossaigaon Master plan Area.

Land use	Area in hectors	P. C. to developed area	P.C. of total area	Land allocation per 1000 persons area in hectare
Residential	1255.82	49.50	25.00	15.13
Commercial	304.44	12.00	6.00	3.66
Industrial	139.53	5.50	2.70	1.68
Public & Semi Public	177.59	7.00	3.50	2.14
Recreational	152.22	6.00	3.00	1.83
Transportation	507.40	20.00	10.00	6.11
Developed area	2537.00	100.00	50.20	30.55

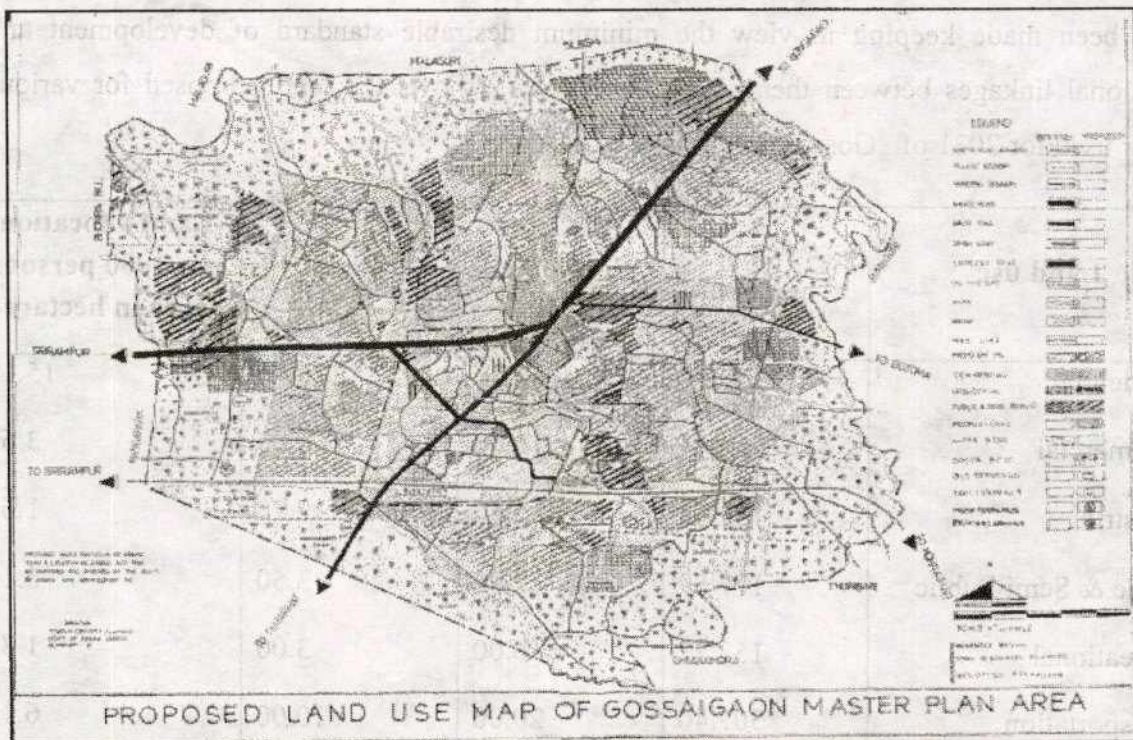
Water Body	630.00	12.40
Green Belt	1894.53	37.40
Total	5061.53	100.00

Table 15: Proposed Land Use (Master Plan area) till 2029-30
 Source- Town & Country Planning, Survey 2008.

10.6 Density Pattern

Considering the existing trend of development, availability of build able land and projected population three density zones have been proposed. out of the total land under residential use 25 pc. will be under high density 35 P.C. will be under medium density and 40 P.C. will be under low density residential zone. The gross residential density in each zone is given below:

1. Low density below 75 persons per hectare.
2. Medium density 100 persons per hectare.
3. High density above 150 persons per hectare.



Map 2: Proposed Land Use plan of Gossaigaon Master Plan Area

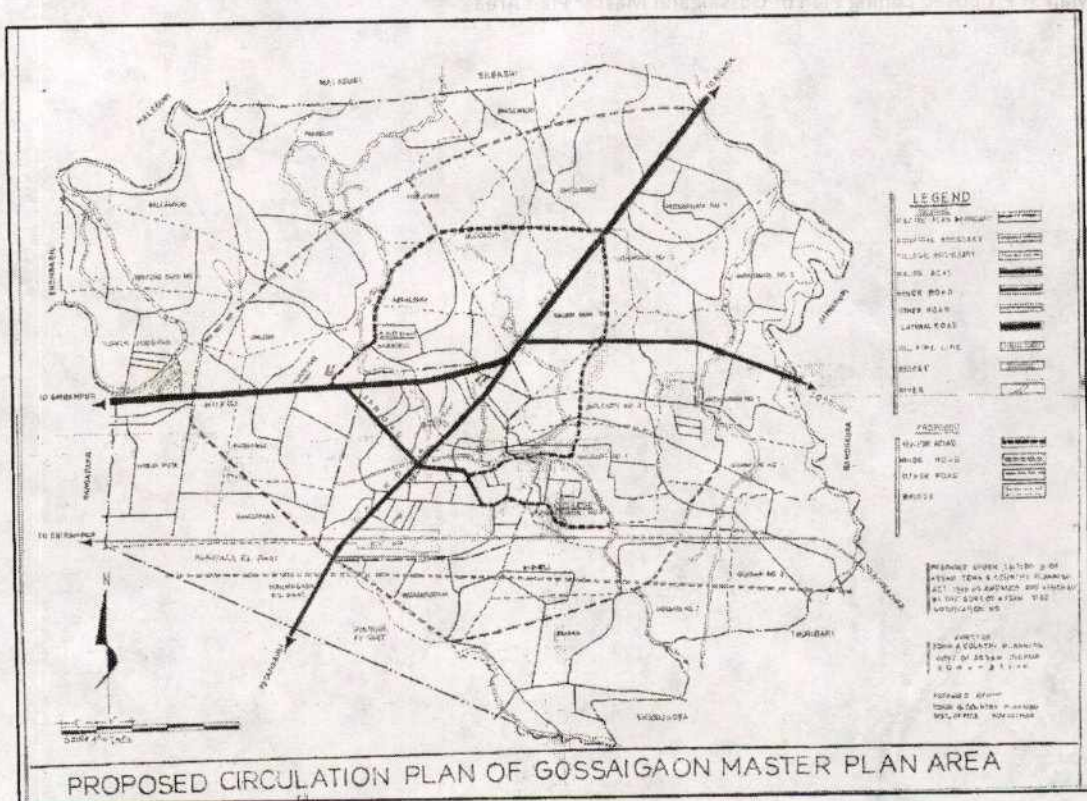
CHAPTER-11: PROPOSED CIRCULATION PLAN

Circulation system is the basic infrastructure for promoting and guiding the future development. Efficient road net work is very much essential for safe, easy and quick movement people and goods from one place to another. Further it is very essential for providing public utility such as drains, drinking water, electric, telephone line etc.

11.1 Circulation Plan Concept

Efficient functioning of the city can be achieved only by evolving functionally inter-related land use, pattern connected by a circulation net work having minimum travel distance. Apart from this basic consideration the following considerations are taken into account in preparing the Master Plan for Gossaigaon Town.

- a) Evolution of a hierarchical circulation pattern within the city with suitable linkages to the regional road network.
- b) Segregation of regional and city level traffic.



Map 4: Proposed Circulation Plan of Gossaigaon Master Plan Area

11.2 Regional Linkages

(a) Road Linkages:

The Town is well connected by the NH-31(c) present low level of development in the Gossaigaon Master Plan area may be attributed to the inadequacy of transportation facilities. Although this region is connected with rest of the state by road and railways yet no single communication line is adequate to meet the all season requirement. To segregate the through traffic from local traffic a by pass either Southern and the Northern part of areas has been proposed. The passenger vehicle will follow the Northern side of the bye pass and the heavy loaded trucks will follow along the NH-31© towards the Northern side of the planning area- touching the proposed industrial zone.

(b) Rail Linkage:

The Broad Gauge Railway line is running through the center of the town (from east-west) connects the Planning area with the rest of the country. This will be the fastest connectivity next to roadways.

(c) Air Linkage:

One Helipad is highly essential for the save guard during Natural Disaster or during any emergency.

11.3 City Circulation Pattern

With the growth of population and development of new areas there will be corresponding increase of vehicular traffic. Considering this to achieve higher efficiency in circulation system a hierarchy of road net work has been proposed under four categories according to their functional importance which are given below.

Sl. No.	Type of Road	Right of way
1	Primary Road	20m to 24.50m (65ft. to 80ft.)
2	Secondary Road	15m to 18m. (50ft. to 60ft.)
3	Tertiary Road	10m to 15m. (33ft. to 45ft.)
4	Access Road	6m. to 9m. (20ft. to 30ft.)

Table 16: Road Typology

11. 4 Grade Crossing

The main Railway line passes across the state High way at Kamarhat. This road is an important road linking the Gossaigaon Town to Dhubri Town Via Tamarhat----- . Considering the future increase of traffic volume on this road in large extent, the construct one over bridge at the Railway crossing at Gossaigaon railway crossing has been proposed.

11. 5 Terminal Facilities

(a) Bus Terminal:

There is no organized bus terminal within the Gossaigaon Master Plan Area except one for the Assam Sate Transport Corporaration and private bus stand situated near the daily market . Other light vehicles are generally parks along the main road which causes traffic congestion as well as creates problems to the pedestrians.

These road side bus terminuses should be removed from present sites. Altogether following four numbers of Bus Terminals and five numbers of taxi stand have been proposed.

Bus Terminals:-

- i. At Dhaulaguri.
- ii. At Hauraphuta towards western most part of the village.
- iii. Hagma Gaon(Near Gossaigaon Railway Station)
- iv. Gadam Guri No.1

Taxi Stand:-

- i. At Gossaigaon Tini-Ali ward No-1 (at the site of existing Bus stand).
- ii. At Dhauliguri.
- iii. At Madati Para towards northern most part.
- iv. At Hauraphuta.
- v. At Hagma Gaon(Near Gossaigaon Railway Station)

(b) Truck Terminal:

As there is no existing truck terminal, the Road side area now used for parking of heavy trucks. This reduces the capacity of the roads and creates congestion within the town. With the increasing activities within the Master plan area the need of organized truck terminal will more. For these three numbers of truck terminals have been proposed for development. These

are:

- i. At Dhaulaguri.
- ii. At Hauraphuta (near Railway Station).

11.6 Mass Transportation

The circulation pattern of the town has been designed keeping due attention to the requirement of mass transportation facilities, but the present population and spatial distance of work place from home and other places of activities could not able to sustain city bus system. However the present sub-urban buses should be synchronized and the routes have to be changed slightly to make Use of these services till the introduction of the city bus system for the town.

11.7 Parking

At present there is no suitable parking place for vehicles within the town. The road sides are used for parking of the vehicles. Sufficient off street parking place is very much essential at the busy centers of the town. Although the parking problem at present is not so acute, is expected that with the growth of vehicles in future there will be problem for parking space. Considering this, the following off street parking places have been proposed for development as parking space.

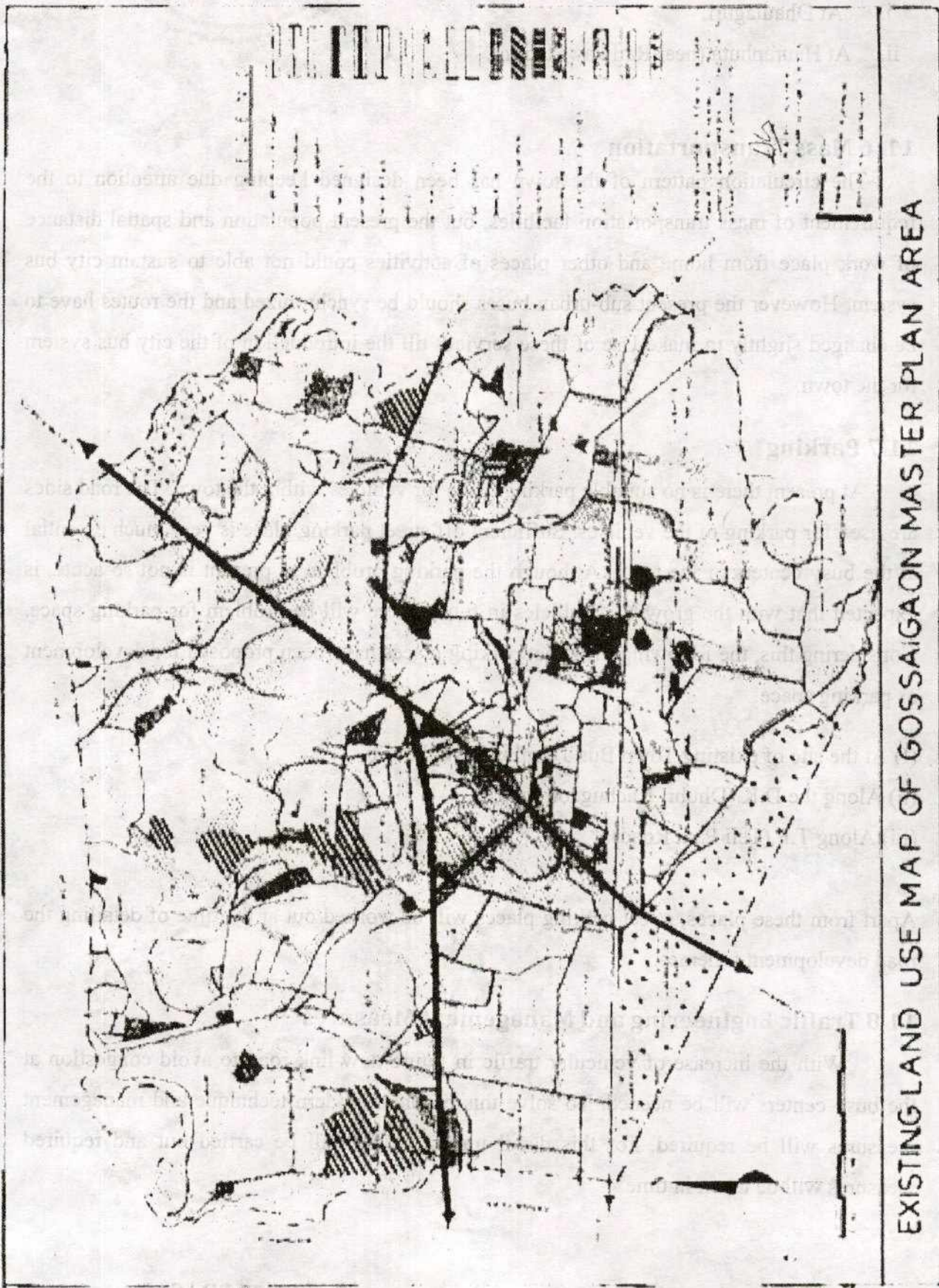
- (I) At the site of existing Town Bus Terminus, ward No.1.
- (ii) Along the D.K.(Dhubri Kachugaon road).
- (iii) Along T.P.(Teli Para Road).

Apart from these places, street parking places will be worked out at the time of detailing the road development schemes.

11.8 Traffic Engineering and Management Measures

With the increase of vehicular traffic in future new link road to avoid congestion at the busy centers will be needed. To solve this problem modern technique and management measures will be required. For this detail traffic survey will be carried out and required measures will be taken in time.

SARASWATI PRASAD,
Principal Secretary to the Govt. of Assam,
Urban Development Department.



EXISTING LAND USE MAP OF GOSSAIGAON MASTER PLAN AREA

