



অসম ৰাজপত্ৰ
THE ASSAM GAZETTE

অসাধাৰণ
EXTRAORDINARY
প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত
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No. 280 Dispur, Tuesday, 16th December, 2014, 25th Agrahayana, 1936 (S.E.)

GOVERNMENT OF ASSAM
ORDERS BY THE GOVERNOR
URBAN DEVELOPMENT (T) DEPARTMENT

NOTIFICATION

The 26th November, 2013

No. UDD(T) 88/2010/14.-In exercise of the powers conferred by the Sub-Section (1) & (2) of Section 10 of the Assam Town and Country Planning Act,1959 (Assam Act II of 1960) read with Rule 4 (2) of the Assam Town & Country Planning (Publication of Master Plan and zoning Regulations) Rules 1962 alongwith Rule 2 of the Assam Town & Country Planning (Publication of Master Plan and Zoning Regulations) Amendment Rules 1964, the Governor of Assam is pleased to publish the following notice regarding the publication of the Final Master Plan the Zoning Regulations of Margherita Master Plan Area for Naharkatia.

NOTICE FOR THE PUBLICATION OF THE FINAL MASTER PLAN FOR
NAHARKATIA.

1. It is notified that the Final Master Plan for Naharkatia prepared by the Director, Town and Country Planning, Government of Assam and adopted by State Government under Section 10(2) of the Assam Town & Country Planning Act,1959 read with sub-section 1 of section 3(2) of the Assam Town & Country Planning Act,1962 for the area described in the schedule below is hereby published.
2. The Final Master Plan for Naharkatia with all relevant papers and maps may be inspected free of cost during office hours at the office of the Director, Town & Country Planning, Dispur, Guwahati-6, Office of the Deputy Commissioner, Dibrugarh, the Deputy Director, Town & Country Planning, District Office-Dibrugarh and the office of the Chairman, Town Committee, Naharkatia. Copies of the Final Master Plan for Naharkatia are available at the office of the Director, Town & Country Planning, Govt. of Assam, Dispur, Guwahati-6 and Deputy Director, Town & Country Planning, Dibrugarh for sale on payment.

SCHEDULE :-

District	Dibrugarh
Revenue Circle	Naharkatia
Block	Joypore
Master Plan Area	24.41 Sq.Km.
Town Committee Area	7.24 Sq.Km.

REVENUE AREAS INCLUDED IN THE MASTER PLAN FOR NAHARKATIA :-MOUZA

JOYPORE

TOWN AND VILLAGES

1. Naharkatia Town
2. Alichiga Gaon (Part)
3. Balijan Majhi Gaon (Part)
4. Baghmora Gaon (Part)
5. Bahdhari Tipling Gaon
6. Cerepajan Pathar Gaon
7. Cerepajan Bongali Gaon
8. Dighola Sonowal Gaon
9. Dihing Kinar Bahdhari Gaon
10. Gethu Pathar Gaon (Part)
11. Hajua Pathar Gaon
12. Hatigarh Block
13. Jagun Gaon
14. Longjong Gaon
15. Lengrijan Tea Estate (Part)
16. Naharkatia T.E. GR.No.22/19 (part)
17. Naharkatia T.E. 126 F.S. Grant
18. Nagaon Dhadumia Gaon

DESCRIPTION OF BOUNDARIES

NORTH :	Buri Dihing River
SOUTH :	294 NLR Tea Estate, No.2 Balijan Majhi Gaon, Other part of Alichiga Gaon, Other part of Lengrijan T.E., Other part of Naharkatia T.E. 22/19
EAST :	Buri Dihing River, Fakial Gaon, Dihing Kinar Bongali Gaon.
WEST :	Rangoli Pathar Gaon, Kuwarijan Gaon, Chenglijan Gaon.

Sd/-

(V.B. Pyarelal, IAS)

Additional Chief Secretary to the Govt. of Assam
Urban Development Department.

INTRODUCTION

The concept of planning has evolved gradually through the changing demand of man and environment, but has assumed greater significance and wider connotation with the inception of the present century. The rapid pace of industrial expansion and urbanization has hastened the growth of urban centres. The forces operating behind urban growth-social, cultural and economic have drawn people towards towns or cities. The trend of urban expansion in recent years is becoming more and more difficult to direct or to control. To check the unplanned and haphazard growth of the towns, the principles of planning have been accepted as urgent and imperative.

A town is composed of land, buildings, people, utilities and services and transportation. It is a large configuration of more or less permanent settlers engaged in diverse economic activities. As a town grows, it attracts larger population ; it enlarges the scope of their activities, while the complexity of living distorts the well-organized concept of the urban space organization.

Master plan is a statutory instrument for controlling, directing and promoting the sound and rational development and /or redevelopment of an urban area with a view to achieving maximum economic, social and aesthetic benefits. The Master plan generally indicates the manner in which the use of land in the respective area is to be regulated and also indicates the manner in which the development of land therein is to be carried out. A master Plan is a scheme of arrangement of these, that is the Master Plan consists of co-ordinated plans of major streets, transportation facilities, parks, recreation facilities, schools, housing, public buildings, business and industrial areas-all arranged in such a way which would function most efficiently and economically and also enhance the aesthetic beauty of the town at the same time. It is also an important tool for guiding and regulating the growth of the town.

The evils of unplanned growth of our towns have caused enormous problems such as shortage of living accommodation, traffic congestion, lack of sanitation and other community facilities and amenities. The growth of population and the potentiality of Naharkatia to be a commercially and industrially vibrant town in future had led the state Government to realize the importance of proper planned growth of the town and the preparation of the Master Plan for this purpose.

In order to translate the suggested developments for Naharkatia into action, it would be necessary to follow this Master Plan, which is designed to regulate the future growth and to affect a uniform community. In preparing the Master Plan for Naharkatia, various surveys such as land-use, socio-economic survey etc. were carried out to understand the existing scenario of the town, in order to suggest the line of actions to be adopted.

It is highly desirable at this point that the citizens of Naharkatia should clearly understand and appreciate the need for the Master Plan. The most desired results could be achieved only if the Master Plan is supported by a positive civic interest and greater confidence which will create a conducive environment and our descendents will profit by our forethought or suffer from our negligence. What better work can we achieve than make their path easier, their homes more intimate, their public buildings more attractive and accommodating.

HISTORICAL GROWTH AND ECOLOGY

LOCATION :-

Naharkatia is a small town of Dibrugarh District. It is situated at a distance of 56km. South-east of Dibrugarh town and 504km from state capital, Guwahati. Its geographical location is 90'(E) longitude and 27' (N) latitude and plan area situated in the south of river Buridihing.

Naharkatia is mainly an agricultural town with some tea gardens and tea factories at the heart of the town and its surrounding areas. Discovery of oil in Naharkatia and its adjoining areas has raised the importance of this town and this importance has been further strengthened due to the fact that Naharkatia is the gateway to some of the Districts of Arunachal Pradesh.

HISTORY OF THE TOWN

Historical evidences say that this place got the name of Naharkatia, based on many maxims. Among the reliable sayings, the mostly accepted one runs like this - "During the reign of the Ahoms, the Choudang who cut Nahar Chanamua lived here, for which the place was called Naharkatia. Nahar was the adopted son of King (Sargadeu) Chukhampha or Khora Raia (Lame King), who ruled from 1552 to 1603 A.D. At the advice of queen Meslow, Nahar was elevated to the rank of prince. He became very audacious and cared for none. Day by day his behaviour became a headache for everyone. Finding no way-out, Borgohain laid a trap and got Nahar murdered through a Choudang who was named Naharkatia and the place where he lived was called "Naharkatia-Bari". Another popular maxim was that the area was covered with Nahar plant forests for which the place was known as Naharkatia..

During the British rule, tea gardens were set-up here in 1901. It is also learnt that Christian Missionaries started printing press at Joypore, a suburb area of Naharkatia. In 1904, Railways connected Naharkatia with the rest of India. The sub-deputy collector's offices established here on 1935. Naharkatia was declared as a town in the year 1960. The Naharkatia Town Committee was established in the year 1965 along with some state and central Government office in the town. Since then the town area has been growing up with other tertiary services coming up to serve the people of the town. The main commercial area, which has grown up, is a strip along the main road of the town. In order to check the haphazard growth of the town and also to provide the basic services to the surrounding rural areas, the Town & Country Planning, Dibrugarh office has prepared a "Master Plan" for Naharkatia town. At this juncture it is also essential to create a "Development Authority" to implement the guidelines, implications, plan proposal of the Master Plan.

PHYSICAL FEATURES :-

Naharkatia region falls in the North Eastern part of India in the Upper Assam Valley. The Master Plan area is situated on a flat land with slight slopes towards south and north-east from the heart of the town. The soil is mostly of alluvial origin consisting of sand, clay in varying proportions. The presence of good soil on the bank of the river Buridihing and with a heavy rainfall has been conducive to a rich growth of vegetation in this area.

TEMPERATURE, HUMIDITY AND RAIN FALL

The climate of Naharkatia is particularly cool and pleasant. It is moderately hot and humid only for three months from June to August. But in recent years due to global warming the hot weather begins from the month of April to the middle of October. The minimum and maximum relative humidity of Naharkatia varies between 60 to 90. The annual minimum and maximum temperature varies between 6-degree Celsius to 37-degree Celsius. The mean monthly temperature is lowest in December-January and highest in June - August. Since the climate is tropical, the rainfall is heavy as in the other parts of the state. The average rainfall of the region is 310.45 centimeters. The rain, associated with monsoon, sets in by the middle of May and reaches its peak in July and continues till the middle of September. The relative humidity during the rainy season is almost 85%. The prevailing wind direction is east and north-east. The velocity of wind is about 4-6 k.m. per hour. A medium range of fog is also experienced in the region during the winter season.

POPULATION

The purpose to provide facilities and services in community is to meet the physical, economic and social needs of the community. A study and understanding of the growth, distribution, composition and other characteristics of the population and the trend are, therefor the basic requirements for the wider range of planning programmes. The objective of the Master Plan for Naharkatia is to cater to the various needs emerging from these studies in order to meet the aspiration of its residents, for whom the plan is prepared.

GROWTH OF POPULATION OF NAHARKATIA TOWN :-

Naharkatia town is only about 49 years old . It had only 10774 persons in 1971 and the population has increased to 15052 in 1991. According to 2001 cesus the population of Naharkatia town was 15523. In between 1971-1991 and 1991-2001 the growth of population has been 39.71% and 3.13% as recorded by the census of India.

TABLE-1**Growth of population of Naharkatia Town**

YEAR	POPULATION	PERCENTAGE INCREASE
1971	10774	---
1981	---	---
1991	15052	39.71
2001	15523	3.13
2009	16643	7.21

Source :- Census of India .

The population of 2009 estimated by

Town & Country Planning Office, Dibrugarh

Naharkatia town comprises of four wards. The ward wise population for the 2001 has been tabulated below :

TABLE - 2**Ward wise population of Naharkatia town in 2001**

Ward No.	Total population	Male	Female	0-6 Age group	SC	ST
1	6531	3441	3090	726	37	956
2	1009	559	450	138	54	10
3	3909	2054	1855	426	252	138
4	4074	2208	1866	426	427	64
Total	15523	8262	7261	1716	770	1168

Source :- Census of India.

NAHARKATIA MASTER PLAN AREA :-

The total Naharkatia Master Plan Area (NMPA) is about 24.41 Sq. km. with a population of 28981 persons in 2001 as per Census of India. Out of which about 15523 live within the town area covering 7.24 sq. km.

For planning purpose, Naharkatia Master Plan Area has been divided into the following zones :-

A. The urban zone comprises the following areas :-

1. Four wards under Naharkatia Town Committee.
2. Urbanized area adjacent to the four wards.

B. The rural zone comprises the following villages :-

1. Alichiga Gaon (part)
2. Balijan Majhi Gaon (part)
3. Baghmora gaon (part)
4. Bahdhari Tipling Gaon
5. Cerapajan Bangali Gaon
6. Cerapajan Pathar Gaon
7. Dighola Sonowal Gaon
8. Dihing Kinar Badhari Gaon
9. Gethupathar Gaon (part)
10. Hajua Pathaar Gaon
11. Hatigarh Block
12. Jagun Gaon
13. Longjong Gaon
14. Lengrijan Tea Estate (part)
15. Naharkatia T.E. Grant No.22/19 NLR (part)
16. Naharkatia T.E. 126 F.S. Grant
17. Nagaon Dhadumia Gaon

The population of Naharkatia Master Plan Area in 2001 has been Shown in the following table :-

TABLE-3**Population of NMPA in 2001**

Sl. No.	Name	Total Population	Male	Famale	0-6 age group	S.C.	S.T.
1	Naharkatia Town Committee Area	15523	8262	7261	1761	770	1168
2	Alichiga Gaon (part)	502	270	232	33	4	14
3	Baalijan Majhi gaon (part)	260	132	128	31	0	131
4	Baghmora Gaon (part)	1200	643	557	177	0	72
5	Bahdhari Tipling gaon	1234	616	618	170	6	435
6	Cerapajan Bangali Gaon	151	72	79	16	0	0
7	Cerapajan Pathar Gaon	257	141	116	34	11	3
8	Dighola Sonowal Gaon	264	124	140	59	16	36
9	Dihing Kinar Badhari Gaon	1011	511	500	121	218	65
10	GethuPathar (part)	1051	540	475	124	41	45
11	Hajua Pathar Gaon	472	250	222	88	0	75
12	Hatigarh Block	580	314	266	82	0	2
13	Jagun Gaon	543	289	254	53	0	11
14	Longjong Gaon	9112	471	440	110	24	87
15	Lengrijan Tea Estate (Part)	2010	1001	1009	375	0	7
16	Naharkatia T.E. Grant No.22/19(Part)	1026	516	510	133	6	0
17	Naharkatia T. E. 126 F. S. Grant	1559	769	790	279	0	0
18	Nagaon Dhadumia Gaon	463	239	224	56	0	75
	Total	28981	15160	13821	3702	1096	2226

The decadal growth of population in the urban and rural areas of Naharkatia Master Plan from 1971 to 2009 is shown in the following table :-

TABLE-4
Growth of population in Naharkatia Master Plan Area

Zones	Year	Population	Increase of population	P. C. Increase
Urban	1971	10774	-----	-----
	1981	---	-----	-----
	1991	15052	4278	39.71%
	2001	15523	471	3.13%
	2009	16643	1120	7.21%
Rural	1971	8189	-----	-----
	1981	---	-----	-----
	1991	11477	3288	40.15%
	2001	13458	1981	17.26%
	2009	15544	2086	15.50%

The total population in Naharkatia Master Plan Area in the year 2009 are 32187 and P. C. increase from 2001 to 2009 is 9.96%.

Source :-Census of India, Assam.

The population of 2009 is estimated by Town & Country Planning Office, Dibrugarh.

DENSITY OF POPULATION :

While the net density of population in Naharkatia Master Plan area was 1211 persons per Sq. k.m., the same within the Town Committee Area was 2144 person per Sq. Km. in 2001. In 2009 density of population for the plan area increased to 1345 persons per Sq. Km. and the same within the Town Committee Areas increases to 2299 person per Sq. Km.

SEX-RATIO AND AGE-SEX COMPOSITION :-

In 1971, the overall sex ratio i.e., the number of female per thousand males in Naharkatia town was 706. According to 2001 census, there were 876 female per thousand male in Naharkatia Town. According to 2001 census, the total population of Naharkatia Master Plan Area was 28981 and out of which the number of male population was 15160 and female are 13821. The number of female per thousand male in the planning area is 912 according to 2001 census.

OCCUPATIONAL STRUCTURE :-

Occupational structure depicts the characteristics of a particular planning area. Planning areas involvement in industry, trade, commerce, white-collar jobs etc. is known as the occupation and employment character. In 1971, the total number of workers in Naharkatia Town Committee area was about 3336, which constitutes 30.96% of the total population of the Town Committee Area. In 1971, the percentage of workers engaged in primary, secondary and tertiary sectors of occupations was 14.32%, 19.51% and 66.17% respectively. In 2001, the total workers in Naharkatia Master Plan Area was 110446, of which the number of workers in Urban area was 5388 and 5058 in Rural areas. The percentage of workers engaged in primary, secondary and tertiary sectors of occupations was 3.15%, 6.71% and 90.14% in the Urban Area and 19.53%, 26.13% and 54.34% in the Rural Area. In the Planning area as a whole, the workers engaged in primary, secondary and tertiary sectors of occupations was 11.34%, 16.43% and 72.23%. The high percentage of workers engaged in the tertiary sectors of the economy clearly indicated the Naharkatia is a service oriented town rather than an industry oriented town.

The occupational distribution of population in Naharkatia Master Plan Area has been shown in the following table :-

TABLE- 5

Occupational distribution of population in Naharkatia Master Plan Area in 2001.

Sl. No.	Category	Urban Area		Rural Area		Naharkatia Master Plan Area	
		No. of workers	% of total workers	No. of workers	% of total workers	No. of workers	% of total workers
1	Primary Sector	170	3.15	988	19.53	1158	11.08
2	Secondary Sector	362	6.71	1322	26.13	1684	16.12
3	Tertiary Sector	4856	90.14	2748	54.34	7604	72.80
	TOTAL	5388	100.00%	5058	100.00%	10446	100.00%

The above table reveals that the people engaged in the secondary sector are higher in the Rural Area than in the Urban Area. This is due to the fact that in the suburbs of Naharkatia town, there are exists three-tea estates along with the factories. So, a good number of people work as labourers in these tea estates.

The number of people engaged in primary sector in the planning area is low in comparison to other two sectors. The highest number of people i.e. 7604 are engaged in the tertiary sectors in the planning area.

Naharkatia is a pioneer on oil extraction in Assam. The first oil pit of Assam was installed here and till date Naharkatia is playing a pivotal role in this field. Meanwhile the tea industry of Naharkatia has crossed the 100th year of its existence. Moreover, many people have been engaged in plywood factory set up at Joypore near Naharkatia decades ago.

On the other hand, the people of near by villages have been blessed with the alluvial & fertile soil by the river Buridihing, which begets rich crops and this is the main source of livelihood for them.

Secondly, due to expansion of micro and cottage industry, Naharkatia town has been developing day-by-day providing scope of living to many people. In view of the above, the question of livelihood can be discussed on the following heads mentioned below :-

- (a) Engaged in industry like Oil, Tea, Micro Cottage etc.
- (b) Engaged in cultivation.
- (c) Engaged in business.
- (d) Serving as a Govt. employee & private employee.

POPULATION PROJECTION :-

In making the future population projection for Naharkatia Master Plan Area for the period 1991-2031, all the relevant factors such as changes in fertility and mortality rate, age-sex composition of the population and expected emigrational flows have been considered.

For the projection, a general fertility rate of 0.19 for woman in a productive age group has been assumed. Mortality trends have been based on recent experience of India and the trends on increase on life expectancy on the United Nations model life table for underdeveloped countries.

The final population projections have thus been arrived at with the entire base population of 1971 accounted for as the natural population, by adding to the natural population, the increase due to the natural growth plus the increase due to emigrational flow of trade & commerce purpose including the natural increase of migrants. The table 6 shows the population projections up to 2031 for the urban and rural zones of Naharkatia Master Plan Area.

TABLE - 6

Population Projection of Naharkatia Master Plan Area 1991-2031

Year	Urban Zone	% of increase	Rural Zone	% of increase	Total for Naharkatia Master Plan Area.	% of increase
1991	15052	---	11477	---	26529	---
2001	15523	3.13%	13458	17.26%	28981	9.24%
2011	16923	9.01%	16066	19.38%	32989	13.83%
2021	19822	17.13%	19480	21.25%	39302	19.13%
2031	22996	16.01%	23359	19.91%	46355	17.94%

Source :- 1991 and 2001 figures Census of India, Assam 2011, 2021, and 2031 figures estimated by Town & Country Planning, Dibrugarh.

ECONOMIC DEVELOPMENT

The Master Plan for Naharkatia stresses on the urgent need of the creation of a conducive environment in which optimum use of local and regional resources can be utilized to build up a sound economic base.

Except tea and oil, Naharkatia had no industrial tradition in the past. So in order to provide adequate employment opportunities in the future, the establishment of new industries should be encouraged and the rate of industrial growth needs to be stepped up considerably, so that it can keep pace with the population growth of this area.

EXISTING INDUSTRIES :-

Unlike other neighbouring towns, like Namrup, Duliajan etc. Naharkatia has very little importance in major industrial activities. Within the planning area there are 3(three) tea factories employing about 1072 workers. Other important industries in Naharkatia are Rice, cottage and other light-manufacturing units. According to 2001 census, the total number of persons employed in industry was 1684 which was about 16.12% of the total workers of the Naharkatia Master Plan Area.

OIL INDUSTRY :-

Most of the major oil wells of Oil India Limited are situated in the vicinity of Naharkatia, such as South Bank, Chachoni, Joypore, Nigam and Tingkhong.

TEA INDUSTRY :-

Centering Naharkatia, a large number of the gardens have developed. There are also innumerable small tea-growers in the region.

PLYWOOD INDUSTRY :-

Due to the imposition of law by Govt. on the cutting of tree (timber cutting), this industry at present has been closed.

COTTAGE INDUSTRY :-

Naharkatia has a good number of cane and bamboo industries and a sizable portion of the population is engaged in these industries.

Some of the important factors which have hampered the growth of industrial establishments at Naharkatia, may be mentioned as follows :-

1. Non-availability of power.
2. Acute shortage of skilled labour.
3. Shortage of basic raw materials
4. Non-existence of notified industrial area either in the town or in the adjoining areas.

The development potentials of some of the industries that can be established in Naharkatia Master Plan Area have been discussed below :-

Light engineering industries :-

Naharkatia region is a scope for establishing industry associated with tea garden implements. Other possibilities are non-ferrous utensil units, casting and foundry and general engineering industries.

Wood and wood products :-

Although Naharkatia region is rich in forest resources, these have not been exploited fully. But there is a good scope of various wood-based industries, which can be taken up on a small and medium scale like safety matches, tea chests and pre-fabricated housing units etc.

The industrial development targets proposed above can be achieved only through the joint efforts of the private sector & various Governmental agencies by providing developed industrial land with necessary infrastructure like roads, power, water and drainage and incentive measures like rebate on power expenses, financial assistances in the form of loan at reasonable interest etc.

TRADE AND COMMERCE

Naharkatia town is the nerve centre of business of that area. Within the radius of 20km. distance, people used to come here to sell their produce and to buy necessary goods for their domestic consumption. In addition to that customers from Deomali, Khonsa etc. of Arunachal Pradesh come to Naharkatia for their marketing. The weekly market of Naharkatia is the biggest of all the markets of that area. In this market traders deal in each and every kind of day-to-day necessities. The traders are fully equipped with stocks of commodities to meet the demands of the buyers.

Trade & commerce along with service occupy the first position in the field of employment in Naharkatia Master Plan Area having about 7604 workers, which is 72.8% of total workers as per 2001 census. It is assumed that during the plan period, the workers in tertiary sector will increase and out of the total workers trade & commerce will employ a considerable portion of the total working force.

FUTURE EMPLOYMENT PROJECTION :-

The future employment opportunities in Naharkatia Master Plan Area will greatly depend on the growth of economic activities in the region, particularly in the fields of trade, transportation and industry in 2001. Naharkatia was primarily a service-oriented town and it is assumed that this trend will continue throughout the plan period.

PHYSICAL GROWTH, EXISTING CONDITIONS AND CONSTRAINTS

Physical growth trend :-

Urban growth and development is often conditioned by the natural landscape like hills, water bodies, forests and manmade impediments like railway line, major roads, canals etc. It is also conditioned by the resources and technology employed in overcoming the growth impediments and constrains.

The growth of Naharkatia town has been restricted within the 4(four) wards. Presently growth has been taking place along the main road towards Dibrugarh up to Nagaon Tinali and on the other side along the roads towards Namrup up to Naharkatia College.

LAND RESOURCES :-

Existing Naharkatia Master Plan covers an area of 24.41 sq. km. (2441.36 hectare). Except Buridihing river on the North & East no other physical features is a constrain for development. The soil is very fertile and good vegetation is observed in the region.

EXISTING LAND USE :-

The quality of urban life and its functional efficiencies are governed by its land-use pattern. In order to understand and analyze systematically the functional relationship between various uses particularly the places of working, living and recreation, a detailed land use survey was conducted during 2006-07 and 2007-08 and was analyzed up to 2009 to estimate the present and future need of the town. The present Naharkatia town committee covers an area of 7.24 sq. km. while the existing Master Plan covers an area of 2441.36 hectare or 24.41 sq. km. out of which total developed area is 478.78 Hectare or 4.78 sq. km. of the total plan area. Table 7 classifies the various uses of land and the areas occupied by each use in Naharkatia Master Plan Area.

TABLE-7**EXISTING LAND USE-NAHARKATIA MASTER PLAN AREA. (in 2008)**

Use	Naharkatia Master Plan Area in hectare	Percentage of the Naharkatia Master Plan Area	Percentage of the total developed Area
1	2	3	4
Residential	294.00	12.04	61.41
Commercial	21.45	0.88	4.48
Industrial	20.45	0.84	4.27
Public & Semi Public	25.15	1.03	5.25
Recreation	12.73	0.52	2.66
Circulation	45.00	1.84	9.40
Railways	60.00	2.46	12.53
Green belt-A	156.00	6.39	
Green belt-B (tea estate)	637.99	26.13	
Agriculture	867.00	35.51	
Vacant land & other spaces	169.38	6.94	
Water bodies	39.70	1.63	
Govt. land	92.51	3.79	
Total 2441.36 hectare	2441.36 hectare or 24.41 Sq.Km.	100.00	100.00
Total Developed Area	478.78 hectare or 4.78 Sq.Km.	20.01%	-----

(Source :- Town & Country Planning, Dibrugarh Land Use Survey 2005-06 & 2007-08.

Out of the total developed area of 478.78 Hectares, about 294.00 Hectare of land are used for residential purpose, which constitutes 61.41% of the total developed land. New residential areas have developed in the last few years at Gethu Pathar, Tipling Badhari, Jagun Gaon & Long Jong Gaon.

Commercial and business uses occupy nearly 21.45 hectare or 4.48 % of the total developed area. The central business area in Naharkatia is located in a compact manner along either side of Dibrugarh-Namrup road starting from the Naharkatia Thana to Daily Bazar Tinali. Another commercial area exists along the Naharkatia-Moran road starting from Moran Tinali to the starting point off Langrijan Tea Estate. The roads being narrow, the parking spaces and open areas are inadequate to accommodate the increased business activities and vehicular traffic.

The industrial activities are practically nil in the Naharkatia town. Only 20.45 hectare of land is utilized for industrial purpose in the plan area, which constitutes 4.27% of total developed area.

The land covered under Public & Semi-public uses including educational institutions is about 25.15 hectare, which is 5.25% of the total developed area. At present the town has very few administrative offices. In case the Government declares Naharkatia as a Sub-division of Dibrugarh District in near future, more Government and public institutions are expected to spring up in this town more space for Administrative purpose shall be required. In the planning are schools and college occupy a considerable portion of land.

In Naharkatia town only 12.73 hectare of land or 2.66% of the total developed area is used for recreational purposes which is inadequate for healthy urban living environment.

Transportation and Circulation network of a town plays an important role and affects immensely the economic and socio-cultural life of the town. A well laid road network can provide answer to many problems of urban life. In Naharkatia Master Plan Area, the land used for circulation purposes is 45.00 hectare, which constitutes 9.40% of the total developed area.

In Naharkatia Master Plan Area. Railways occupy 60.00 hectare of land or 12.53% of the total developed area.

In the Master Plan Area, Green belt-"A" covers an area of 156.00 hectare, i.e. 6.39% of the Total Master Plan Area and Green belt-"B" (Tea Garden) covers an area of 637.99 hectare, i.e. 26.13% of the total Master Plan Area. The land used for Agriculture is 867.00 hectare or 35.51% of the total Plan Area. Vacant land and other open spaces constitute an area of about 169.38 hectare or 6.94% of the total plan area. Water bodies constitute an area of 39.70 hectare or 1.63% of the total plan area. Govt. land occupies an area of 92.51 hectare or 3.79% of the total Master Plan Area .

HOUSING

Housing areas, which cover a large portion of an urban settlement at any point of time, influence the quality of urban life, which in turn, affects the efficiency of the settlement. In general housing condition in Naharkatia town is mainly characterized by inadequate amenities essential for standard living.

HOUSING STOCK :-

There are about 2980 houses within the town committee limit and 2625 houses in rural areas in 2001 at Naharkatia Master Plan Area. This shows that at an average of 5 persons per house, housing accommodation is available for 28025 persons and for the remaining 956 persons 191 nos. of additional housing accommodation is required in the year 2001 itself.

Out of the 5605 houses in Naharkatia Master Plan Area approximately 4764 or 85% of the total houses are used for residential, public and semi-public purpose, while the remaining 841 or 15% of the houses are utilized for commercial and industrial purposes. It has been found that the average number of persons per residential or partly residential house in Naharkatia is 6.08.

Though the houses in Naharkatia have been primarily designed for single-family occupancy, the above figure supports the commonly observed situation of families doubling up in single-family dwelling units. Despite this overcrowded, Naharkatia is still a low-density town and overcrowded of buildings on the land of People on the land does not exist except in some isolated peckets of the town. Still the rate of construction of new houses has not kept pace with the rate of increase of population

HOUSING PATTERN :-

Residential buildings of Naharkatia are of mixed types. Generally in the old residential areas Assam type houses and in the newly developed areas R.C.C. houses are seen.

The following Table shows the housing pattern in Urban and Rural areas of Naharkatia Master Plan --

TABLE - 8

SI No.	Housing Pattern	Urban Area	Rural Area	Naharkatia Master Plan Area
1	Kutchha	1273	1674	2947
2	Semi-Pucca	330	282	612
3	Assam Type	827	476	1303
4	R. C. C.	550	193	743
	Total	2980	2625	5605

Source : Field survey conducted by
Town & Country Planning, Dibrugarh in the year 2009

Slum Area :-

The slum in urban area is a common phenomenon in India. The slum problem in city/town has multi-facets impact on socio economic development of the society. In pursuit of jobs and any other source of economic activities, people from various groups, classes, sectors, have been migrating to towns/cities as a result of which over population of the town/cities have impeded the development of the town/city and it leads to create urban slum.

With the growth of population the slum areas started increasing in the vicinity of Naharkatia town. Normally people from other place of the country migrate to these areas in search of their livelihood. These include daily wage earners, low-income group, employees, beggars etc. These people manage to occupy vacant Government land, riverside areas and deserted plots of land in and around railway stations. On the bank of the Buridihing river of Naharkatia town such dwellings have sprung up gradually. These temporary shelters have converted into permanent congested and unhygienic buildings in due course.

At present there are 4(four) slum pockets at Naharkatia town. The name of the different slum pockets along with their population and number of households are tabulated below :

TABLE - 9

Slum pockets with population & house hold in Naharkatia Town in 2001

SI No.	Name of slum pockets	Total no.of population	Male population	Female population	No. of household
1.	Alupatty	714	368	346	102
2.	Bikash Nagar	840	436	404	120
3.	Boiragipara	770	401	369	110
4.	Daily Bazaar	826	423	403	118
	Total	3150	1628	1522	450

Source : Field survey conducted by Town & Country Planning, Dibrugarh in 2007.

At present there is 3150 no.of population living in the slum pockets out of a total Town Committee area population of 16643 in 2009. i. e. 18.92% of town committee area population has been living in the slum pockets. During the rainy season most of the slum areas of Naharkatia town become water logged due to which the existing kutchha roads as well as graveled roads got badly damaged. The other problems faced the slum areas are sanitary, water supply, streettight, refuse disposal etc. So, for the addressing the above problems various schemes had been implemented under National Slum Development Programme (NSDP) and for the future various scheme is being prepared under Integrted Housing and Slum Development (IHSDP).

TRAFFIC AND TRANSPORTATION

Existing road condition : -

In the Urban areas roads are very narrow and shoulder width are unscientific to accommodate the existing traffic volume for easy movement and there is also little scope for the expansion of the existing roads within the town. Almost all the road junctions require immediate improvement and modifications. There is one Railway level crossing within the town, which remains always busy, and this level crossing requires immediate improvement. There is 25Km of surfaced road and 17Km of unsurfaced road under the Naharkatia town Committee. The roads within the residential areas are too narrow. Widening of these roads is urgently necessary. There is hardly any parking area within the town.

Transportation System : -

Naharkatia is well connected with the rest of the country by roads and railways. The roads constructed by the PWD have connected Naharkatia with other places as shown below : -

- (a) Naharkatia to Dibrugarh via Tengakhat.
- (b) Naharkatia to Tinsukia via Duliajan.
- (c) Naharkatia to Sonari via Namrup.
- (d) Naharkatia to Moran via Tingkhong.
- (e) Naharkatia to Chachoni.
- (f) Naharkatia to Khonsa, Deomali of Arunachal Pradesh via Joypore.

Naharkatia is also connected with the main train network from Dibrugarh to Guwahati. The railway station of Naharkatia facilitates the passengers to travel out side Assam. Besides train, playing of taxis and trucks are playing a major role in transporting passengers and goods to and from Naharkatia.

Naharkatia town has gained importance in the field of industry and business owing to the existence of industrial towns like Namrup and Duliajan situated nearby and, as a result, number of vehicles in the road of Naharkatia town has increased day by day. Among the buses, a large number of ASTC buses pass through the town. The buses plying through Naharkatia town are : -

- (a) From Khonsa, Deomali (Arunchal Pradesh) to Dibrugarh, Tinsukia via Naharkatia.
- (b) From Sonari, Namrup to Dibrugh, Tinsukia via Naharkatia.
- (c) From Namrup to Moran, Sibsagar via Naharkatia.
- (d) From Rajgarh, Tingkhong to Tinsukia via Naharkatia.
- (e) From Chachoni to Dibrugarh via Naharkatia.

Over and above, a good number of vehicles belonging to oil and tea industry ply daily. The number of private vehicles plying in the roads of Naharkatia town is also rapidly increasing day by day.

Traffic Volume : -

The maximum inter town traffic volume is on the road starting from Nagaon Tinali and moving towards Namrup. This is the most vital link both to the town and the rest of the district. The second inter town traffic volume is from Moran Tinali point and moving towards Moran via Tingkhong.

From the traffic survey it is ascertained that mixed type of traffic on all roads has accelerated traffic congestion in Naharkatia. The road coming from Dibrugarh passing though Naharkatia towards Namrup carries maximum number of vehicles per hour during the peak hours. The Moran Tinali point carries maximum number of vehicles amounting to 1050/per hour during the peak period.

Bus Station, Taxi-Auto stand & Truck Stand :-

At present, A.S.T.C. Bus station is located at Naharkatia-Namrup road near Agriculture Office. This station serves intra urban traffic, i.e. regional traffic. However, there is no terminal for the private buses, which operate to all the surrounding places. Presently the private buses temporarily stand in the roadside near Circle Office. So, this plan suggests stopping such unauthorized stand for the smooth vehicular traffic in the town.

At present one Taxi and Auto stand is located at Moran Tinali road. This stand is causing congestion and obstruction of the smooth flow of traffic. Another Taxi and Auto stand is located at the eastern boundary of Lengrijan Tea Estate along Dibrugarh-Naharkatia road.

Presently there is no truck terminus at Naharkatia. The trucks load and unload their goods on the roadside itself.

At present, there is no organized parking space for the cars, two wheelers in the market area. The cars are generally parked on the main road of the town. Since this road is already over burden with traffic and further encroachment of the road by cars and two wheelers being obstructed the traffic and causes congestion.

Conclusion : -

In Naharkatia town the condition of the primary road is very bad. The roads are not capable of taking additional amount of traffic. Access roads are both narrow and bad. Most of the traffic flow generated from Hatigarh Block nears the Bridge of Buridihing River to the point of A.S.T.C. Bus station. But the area is deficient of parking spaces and there is no terminal facility for private buses.

COMMUNITY FACILITIES**Education :**

Most of the educational institutions are located within the town. Out of the total educational institutions, the percentages of primary and High Schools are higher in comparison to higher education. In the last few years, few private English medium institutions have been set up to provide educational facilities to primary section, High School and Higher Secondary level. At present in Naharkatia Master Plan area, there are sixteen Government L.P. Schools three M.E. Schools, one M.V. School, nine High Schools and one Higher Secondary School. There is only one college in Naharkatia situated at Baghmora village.

TABLE - 10**Structure of Educational Institution in Naharkatia Master Plan Area**

Sl. No.	Institution	No. of School	No. of Student	No. of Teacher	Teacher Student ratio
1	L.P. School	16	2222	75	30.1
2	M.V School	1	262	12	22.1
3	M.E School	3	393	23	17.1
4	High School	9	2160	68	32.1
5	Higher Secondary School	1	480	17	29.1
6	College	1	1140	---	---
	Total	31	6657	195	

Source : Field Survey conducted by the Town & Country Planning, Dibrugarh in 2009.

Literacy :

As per the 2001 census, 12002 persons are literate and 3521 persons are illiterate in Naharkatia urban area. The over all literacy rate of the town is 77.32%. Out of the 12002 literate persons, male literates are 6700 and the numbers of female literates are 5302 in Naharkatia Master Plan area as a whole, the numbers of literate persons are 20618 and the numbers of illiterate persons are 8363 as per 2001 Census of India. The numbers of male literate are 11755 and the number of female literate are 8863. The overall literacy of the Master Plan area is 71.14%.

The ward wise and village area literacy in Master Plan area for the year 2001 has been tabulated below :-

TABLE - 11**Literacy figure in Naharkatia Master Plan area :**

Sl. No.	Ward no. & name of village	No. of literate	No. of male	No. of female	No. of illiterate.
1	Ward no. 1	5056	2799	2257	1475
2	Ward no. 2	675	400	275	334
3	Ward no. 3	3033	1665	1368	876
4	Ward no. 4	3238	1836	1402	836
5	Alichiga gaon (part)	374	200	174	128
6	Balijan Mazi gaon (part)	210	110	100	50
7	Baghmora gaon (part)	1095	596	499	105
8	Bahdhari Tipling gaon	905	481	424	329

Sl. No.	Ward no. & name of village	No. of literate	No. of male	No. of female	No. of illiterate.
9	Cerapajan Bongali gaon	101	52	49	50
10	Cerapajan Pather gaon	156	98	58	101
11	Dighola Sonowal gaon	101	62	39	163
12	Dihing kinar Bahdhari gaon	692	386	306	319
13	Gethupather gaon (part)	902	500	402	113
14	Hatigarh Block	375	224	151	205
15	Hajua Pahter gaon	246	142	104	226
16	Jagun gaon	430	240	190	113
17	Longjong gaon	666	373	293	245
18	Lengrijan T.E. (part)	812	605	207	1198
19	Naharkatia T.E. Gr. no. 22/19 NLR (part)	578	364	214	448
20	Naharkatia T.E. 126 no. F.S.	609	428	181	950
21	Nagaon Dhadumia gaon	364	194	170	99
	Total	20618	11755	8863	8363

Source : 2001 Census of India, Assam.

Recreation :

Naharkatia Master Plan area has only 12.73 hectare of land for park and play ground facilities. Outdoor and Indoor stadium is located near Naharkatia Police Station. In addition to this, numerous vacant plot of land serves as play ground for neighbouring children. But now these areas being built up at a fast rate leading to acute shortage of open spaces in the planned area. A children park has been built up at Dighalpathar area in the recent past a voluntary organization set up a public library at Naharkatia. Within the Master Plan Area there is only 0.44 hectare of recreational space per 1000 population, which falls far below the minimum accepted standard of 1.62 hectare of per 1000 population for Developing country like India.

Health :

There is a Government Dispensary at Naharkatia and a thirty-bedded Hospital at Dighalpathar gaon, a suburb area of the town Considering the population growth in greater Naharkatia area, medical facilities available at present are not adequate. As a result, large number of patients rush to Dibrugarh or other places for better tretment. Private Nursing Homes are yet to come up in Naharkatia.

PUBLIC UTILITIES

Water Supply :

Although Naharkatia town is located on the bank of the Buri Dehing River, there is no piped water supply system in the town. The only source of water in Naharkatia is the Tube well and the ring wells. Ground water and surface water is readily available at Naharkatia town. Though the tube well and ring wells are efficiently functioning, it will no longer be considered free from pollution. Because with the increasing number of sanitary latrine with septic tank and soak pits, the tube well and ring wells are likely to be polluted soon. Therefore, it requires execution of comprehensive water supply schemes with treatment plant and also scheme of deep well system where the water supply scheme could not serve.

Drainage & Sewerage :

Though Naharkatia was declared as a town in the year 1960, yet the drainage system in the town is very pitiable. The existing drain is not capable of carrying the load during the heavy showers. Though the drain was constructed on the both sides of the road but the condition of the road in the rainy season lead

us to make a conclusion that the drain was not constructed in a planned way. Due to the lack of planning in the construction of drain, it fails to serve its purpose. As a result, roads are damaged within a short span of time. So, there is an urgent necessity of realignment and resectioning of the drains and a comprehensive drainage scheme is required for the whole Master Plan area.

Solid Waste Disposal :

There is no solid waste disposal management system at Naharkatia town. At present a small portion garbage of the town are dumped near Sukapha Bhawan on the bank of Buri Dehing River. Majority of daily waste of the town and village area are either dumped in their own compound or in the open space. This creates not only a problem of pollution, which stands as health hazard but also tells upon the decency and beautification of Naharkatia town. Garbage disposal system in the Naharkatia Master Plan area has been tabulated below :

TABLE - 12

Garbage disposal system in Naharkatia Master Plan Area

Area	Town Committee Collection	Own Compound	Open space
	No. of household	No. of household	No. of household
Urban Area	918	1183	879
Rural Area	---	828	1797

Source : Field survey conducted by
Town & Country Planning, Dibrugarh in 2009.

Power :

Power requirement of Naharkatia Master Plan area is met from A.S.E.B. grid. There is total 2689 electric connection in the town and 291-house holds are not electrically connected. In the rural area of the Master Plan total 2078 electric connections and 547 household are not electrically connected. Naharkatia is also facing the problem of acute scarcity of electric power like the other towns of the state. In peak hours, shut down for one or two hours is a way of life for its residents. Since the consumption is increasing at a fast rate, the department concerned fails to cater to the needs of the people-causing load shedding a bitter experience.

Indane used :

In Naharkatia Master Plan Area mixed type of indane is used in the households, Majority households used LPG as indane both in the Urban and rural areas in comparison to the other modes of indane. The type of indane used by the household has been tabulated below :

TABLE - 13

Types of Indane used by the household in Naharkatia Master Plan Area :

Area	No. of household			
	LPG	Pipe Gas	Wood	Others
Urban Area	1745	664	473	98
Rural Area	1233	352	898	142

Source : Field survey conducted by
Town & Country Planning, Dibrugarh in 2009.

Physical Plan Proposal

Draft Master for Naharkatia presented here. proposes that physical development of plan area be guided by the following basic concepts and proposals.

Town functions :

Preparation of development plan for a town and its surrounding villages is an effort to evolve scientific and national policies, which will meet functional needs of the town and yet satisfy the aesthetic and emotional aspirations of its citizens. Hence based on a critical appraisal of the problems and inadequacies of the town, the assessment of the future needs during a plan period is prepared for an estimated population.

A clear understanding of the major functions and their impacts on the future of a town and its suburbs is a desirable fact. Based on studies, Naharkatia town and its suburbs can be inferred to hold the following major functions to decide its future growth :

1. To function as a trade and commerce centre of the region.
2. To function as a light and medium industrial centre owing to the availability of raw materials.
3. To function as an Educational Centre to the surrounding areas.
4. To function as an Administrative Centre of a lower hierarchical order serving the local area.

Plan Period :

Growth of an urban settlement is a continuous process. However, for the purpose of a development plan, a time span for the plan is adopted to facilitate the estimation of various requirements of the town and its suburbs. The plan period for Naharkatia is therefore assumed up to 2031. It is true in any case that proposals incorporated in the plan cannot be entirely based on the requirements of the plan period alone. The town has to function efficiently even beyond the plan period.

The Plan Concept :

The concept of the plan has been developed in the context of the different objectives and in response to the immediate need and critical problems of the existing town and environs.

Naharkatia Urban Area :

The Urbanisable limit of Naharkatia is to be restricted within the area bounded by Jagun and Tipiling Bahdhari gaon in the North, Lengrijan T.E. Dighola Sonowal gaon and Naharkatia T.E. 126 F.C. in the south. Buridihing River in the east and Nagaon Dhadumia and Hajun pather gaon in the West. The existing tea gardens and agriculture land will separate Naharkatia Urban Area from neighbouring rural area.

Residential Area :

Major residential developments are to take place in Jagun and Tipiling Bahdhari gaon, i.e. in the eastern part of Master Plan, in the southern part, at Dighola sonowal and Longjong gaon. In the western side, at Nagaon Dhadumia, Hajua Pather and Gethupather. These areas are to be planned and developed on neighbourhood principles.

Commercial Area :

The existing principal shopping centre is to be allowed to continue and other secondary and neighbourhood shopping centre is distributed at selected places in Naharkatia Master Plan Area. Established commercial strips in some areas are to be allowed to grow in a restricted manner. New warehousing and wholesale centre to be located at Cerapajan Pather gaon where good transportation linkages are available.

Industrial Area :

This plan has discouraged the existing industrial activities within the congested urban area. This plan has earmarked an industrial block at Cerapajan Bongali gaon for light and medium industries and another at Hatigarh Block for hazardous industries.

Proposed Land Use :

Land use planning has a bearing on the expansion of the town and put pressure on rural areas. A change in urban economic function causes changes in population. The decision to locate industrial estates in urban areas stimulates general economic development and accounts for population growth resulting in opportunities for employment, increased income and business opportunities.

The proposed Naharkatia Master Plan covers an area of 2441.36 hectare or 24.41 Sq. km., out of which about 767.15 hectare or 31.43% of the total plan areas, is proposed to be developed for urban use by 2031 for a projected population of 46355.

The following table shows the proposed distribution of land uses in Naharkatia Master Plan Area up to 2031.

TABLE-14

Proposed Land Uses -- Naharkatia Master Plan Area up to 2031.

Use	Naharkatia Master Plan Area in hectare	Percentage of Naharkatia Master Plan Area	Percentage of the total developed area
Residential	488.19	19.99	63.64
Commercial	45.72	1.88	5.96
Industrial	35.99	1.47	4.69
Public & Semi Public	43.78	1.79	5.71
Recreational	42.21	1.74	5.50
Circulation	51.26	2.10	6.68
Railways	60.00	2.46	7.82
Green Belt-A	126.21	5.17	---
Green Belt-B(Tea Estate)	637.99	26.13	---
Agriculture	720.40	29.51	---
Openspaces	81.66	3.34	---
Water Bodies	39.70	1.63	---
Govt. Land	68.25	2.79	---
Total	2441.36 hectare or 24.41 Sq. km	100.00	100.00
Total Developed Area	767.15 Hectare or 7.67 Sq. km	31.43%	---

Source : Town & Country Planning, Assam, Dibrugarh, Land Use Survey 2008-09.

Residential :

An area of about 488.19 hectare or 19.99% km of the total Master plan area has been earmarked for residential use within Naharkatia Master Plan Area. It is presumed that a part of the total projected population will be residing in the mixed used areas. In the proposed land use plan the gross residential density will increase to 94 persons per hectare. The following gross residential densities have been recommended in the plan :

1. Low density --- Up to 75 persons per hectare
2. Medium density --- 75 to 125 persons per hectare
3. High density --- 125 to 225 persons per hectare.

Commercial :

About 45.72 hectare of land or 5.96% of the total developed area has been allocated for commercial use in the plan at various suitable areas. Out of which 1.25 hectare of land has been earmarked at Cerepajan gaon for warehousing and godowns. In order to decentralize the commercial activities from existing principal shopping centre, the plan proposes secondary or local commercial centers at Nagaon

Tinali, near A.S.T.C. Bus station. Neighbourhood shopping centers will be located with other community facilities in each neighbourhood. Besides these, local daily markets are recommended to be established in selected places according to the needs of the community.

Industrial :

The plan has allocated an area of about 35.99 hectare or 4.69% of the total developed area for light and medium industries. The plan earmarked a block at Cerepajan gaon for establishing medium industries. The plan has also earmarked an area of about 3.26 hectare at Hatigarh Block for obnoxious industries.

Public and Semi-Public :

The town has very few administrative related activities presently. The area is also deficient for schools and hospitals. This is very well reflected in the high utilization rate of 0.86 hectare per 1000 persons. To set up this area as an administrative and educational centre for the town as well as for the surrounding villages, the plan proposed to reduce the utilization rate to 1.51 hectare per 1000 persons. So, the plan proposes an area of about 43.78 hectare or 5.71% of the total developed area for public and semi-public uses. The plan has also earmarked an area of 18.00 hectare of Govt. land at hajun Pather for establishing future administrative offices.

Town Centre :

With rapid urbanization and growth of urban population the demand for housing and market complex has increased manifold. There is no organized Residential Land Development Scheme implemented at Naharkatia. So the plan proposes a Residential Land Development Scheme (RLDS) aims at providing a planned Residential neighbourhood house around 1000 persons or 200 households.

The main item of development in the area will be development of well-planned roads, drains, provision of external electrification water supply, and a site for community centre with a park and a neighbourhood shopping centre. The project is proposed to be implemented in an area of 9.00 hectare at Hajua Pathar.

It is proposed to develop 0.10 hectare of land for local shopping centre located at the centre and at the entrance of the area. It is proposed to develop an area of 0.28 hectare for development of a park and for neighbourhood community centre. It is proposed to develop 2.50 hectare of land for road network and roadside drain.

Housing Need :

To find out the housing need for future a detailed study of family size, level of obsolence, existing shortages etc. are necessary. However, on the basis of projected population and household size of 5.5 persons, the gross housing needs are depicted below :

TABLE - 15

Housing requirement in Naharkatia Master Plan Area up to 2031

Year	Projected population	Gross Housing Requirement
2011	32989	5998
2021	39302	7145
2031	46355	4828

Source : Estimated by Town & Country Planning, Assam Dibrugarh.

It is estimated that the total need for the additional population of about 17374 during 2001-2031 is 3158 houses. This requirement is in addition to the existing needs of 191 houses. So, the total requirement of the houses up to 2031 will be 3349 nos.

The plan therefore, has paid attention to the magnitude of housing problem and recommended that necessary housing schemes by various public, semi-public and private agencies with the help of the Govt. and private organizations should be under taken with the framework of the Master Plan. The private developers may come forward to solve this problem.

Proposed Land Use Plan :

Aims and objectives :

The main aims and objectives that are attempted to be achieved in preparation of Master Plan for Naharkatia are as follows.

1. Integration of various areas of Naharkatia with adjoining areas.
2. Development of inter-town transportation and communication network to discharge regional functions with efficiency.
3. Functional disposition by urban use so as to achieve :-
 - (a) Efficient and judicious utilization of land.
 - (b) Harmonious and coherent inter relationship.
 - (c) Functional distribution of work centre's and living areas, minimize travel distances and increase efficient functioning activities.
 - (d) Gradual removal of existing disorder.
 - (e) Functionally efficient transportation network and circulation system ensuring safe and at the same speedy movement of urban and regional traffic.

Basic consideration :

Studies in respect of land use pattern, traffic and transportation, housing and services, work centers etc. has brought out the main problems being experienced by the town and the opportunities available for development of Naharkatia in future. The following are the basic point that will form guiding factors for preparation of Master Plan for Naharkatia.

- (i) Development of new town level shopping centre to relieve congestion on the present town centre and provide for growth of commercial activities.
- (ii) Development of "Administrative Block" to accommodate various public and semi-public offices of local level.
- (iii) Efficient use of Govt. land and properties by putting them to proper use.
- (iv) Encouragement for establishment of small & medium industrial units.
- (v) Development of land for industries in such a way that future growth is possible without creating conflict in land-use pattern.
- (vi) Provisions of proper circulation pattern which enables the traffic to by pass the town.
- (vii) Rational distribution of residential densities so as to minimize disparities.
- (viii) Provision of utilities and services in an intergrated manner for the whole Master Plan Area.

Transportation Facilities :

For smooth traffic movement in Naharkatia the plan provides 51.26 hectare of land, which constitutes 6.68% of the total developed area. In this plan emphasis has been given on the following aspects for the transportation system in Naharkatia Master Plan Area.

- (i) Optimum use of the existing transportation system through improved traffic operation and controls.
- (ii) Improvement of the existing road network through widening, realignment and extension.
- (iii) Provision for adequate parking facilities for vehicles.
- (iv) Development of new roads and other transport facilities.
- (v) Construction of a flyover at the Market Area Railway level crossing and at proposed by-pass near Balijan Railway crossing to solve the problem of traffic congestion at the busy hours.

Road system :

The major action recommended in the plan regarding the road transportation is given below. The existing roads will be improved and widened as follows.

Category of roads	Name	Recommended width
Major	Dibrugarh-Naharkatia Road	60' to 70'
	Naharkatia- Namrup Road	- Do -
	Naharkatia-Chachoni Road	- Do -
	Naharkatia-Moran Road	- Do -
Arterialk	Dighola pather Road towards Namrup	40' to 50'
	Station Road	30' to 40'
	Daily Bazar Road	- Do -
Sub-Arterial	Tiplng Bahdhari Road	- Do -
	Amolapatty Road	- Do -
Other Road	-----	Minimum 20' and 12' for single plot.

Besides the above improvement the plan recommended to improve all important road junction and Railway level crossing of Naharkatia Master Plan Area.

In order to ensure a free and fair circulation system within Naharkatia, it is necessary to improve the condition of the existing roads. Following measures may be suggested for improving the circulation pattern of Naharkatia.

- (i) The primary road passing through the town should be widened as recommended above and renovated. Footpaths should be constructed on both sides to ensure free movement of pedestrians.
- (ii) Parking space for cars should be constructed near the Daily Bazar Area, at the site of abandoned Cinema Hall near Moran Tinali point and near the Town Committee Office.
- (iii) Dighola Pather Road towards Namrup should be widened as recommended above and improved for reducing the burden on the existing Naharkatia Namrup Road.
- (iv) Improvement of all major and arterial roads.
- (v) Sub-Arterial roads connecting the residential units from Arterial roads should be widened and improved.

Terminal Facilities :

Keeping in view the present bus traffic and the increase of bus traffic in future, the plan recommended the expansion and renovation of the existing A.S.T.C. Bus station. The plan proposed a public bus stand beside the A.S.T.C. Bus station.

In the plan two-truck terminus is proposed. One at Longjong gaon on the road side of Naharkatia Namrup road just opposite to the proposed Industrial Block and another at Hatigarh Block.

The plan suggests to shift the Taxi & Auto stand located at Moran Tinali point to Joypore Tinali point to reduce traffic congestion in the town and for the smooth flow of traffic. The plan recommends expansion and renovation of the other taxi and auto stand located at the eastern boundary of Lengrijan T.E. along Dibrugarh Naharkatia Road.

COMMUNITY FACILITIES

Education :

The Director of Education of the state Government is mainly responsible for preparation and execution of the educational programmes.

The plan recommends 8 to 10 Sq. feet of floor space per pupil for the Primary Schools and minimum 1.00 hectare of land for each High or Higher Secondary Schools including areas for playgrounds and other recreational purpose with a standard number of 300 students per school.

Table 16 shows the number of students and additional school required in Naharkatia Master Plan Area during 2011-2031.

TABLE - 16

Year	Primary School			ME and MV School			High and Higher Secondary School		
	Enrollment	No. of school @ 100 studens per school	No. of additional school required	Enrollment	No. of school @ 150 studens per school	No. of additional school required	Enrollment	No. of school @ 300 studens per school	No. of additional school required
1	2	3	4	5	6	7	8	9	10
2001	2222	16	---	655	4	---	2640	10	---
2011	2530	26	10	745	5	1	3005	1	1
2021	3014	31	5	888	6	1	3580	12	1
2031	4339	44	13	1047	7	1	4223	15	3

Source : Estimated by Town & Country Planning, Assam, Dibrugarh.

The shortage of schools in the plan area, to some exten has been fulfilled by the private institutions at present and it is also hoped that in the future, private institutions will play an important role to mitigate the shortage of both primary schools as well as High and Higher Secondary schools.

Parks and Recreation :

The plan recommends 1.45 hectare of land for every one thousand persons for parks and recreational purposes and accordingly about 42.21 hectare of land has been allotted for it. A strip of land covering an area of 38.89 hectare starting from Cerepajan Pathar towards north-west up to the point of PWD. Inspection Bungalow, which was originally the flowing bed of Buridihing river, now due to the change of the flowing track of Buridihing river this trip of land has been useable. The entire strip of land is proposed to be converted into an ornamental park with boating facility and playground since this strip has its own scenic beauty. So, the plan recommends converting a part of this strip of land for picnic spot providing two-flyover facility to the strip for easy movement of traffic, because this strip is low lying area in comparison to the main urban land of Naharkatia,. Since the Master Plan also caters to the social and cultural needs of the town, so the plan thus envisages a Town Hall for the town in the said strip of land. In addition to these, sufficient open areas will be provided in each neighbourhood at the time of preparation of detail plans . The plan also recommends modernizing the existing playground with sufficient infrastructure located at Sajua pathar area.

Health :

At present Naharkatia is very much deficient in medical facilities. So, the plan proposes 5 dispensaries at various areas within the Master Plan and 1 full-fledged 100 bedded Hospital. The Hospital should be serving the whole population of that area and so it should be located in the vicinity of the town centre.

Public Utilities

Water supply :

Preparation and execution of a comprehensive water supply scheme for the entire Naharkatia Master Plan Area will naturally require considerable time and money. So, it is recommended that deep tube-wells may be installed initially. The distribution system of the scheme should be such so as to be useful for the future filtered water supply scheme. The plan also recommends preparation of a comprehensive filtered water supply scheme to cater the needs of the estimated population of 46355 up to 2031 by a competent authority.

Sewerage :

A detailed sewerage scheme for Naharkatia Master Plan Area shall be taken up by the authority concerned when necessary funds will be available. Till the execution of the sewerage scheme, it is recommended to encourage the people by advancing loan by the competent authority concerned for construction of sanitary latrines to needy parties and enforcement should be done to stop the use of service latrine for the health and hygiene of the community.

Drainage :

Naharkatia Master Plan Area does not have any systematic drainage system. In the town area, though the drain is existing, but the said drain was not constructed in a planned way. So, the drain is not capable of discharging water from the urban area. So, the plan proposes a major drain along the primary road, which would be a collector from the surrounding areas. Once the main drains are constructed, the feeder drains and sub-drains of the town are proposed to be cleaned, re-sectioned, newly construct and missing links is connected. The detail of the drainage plan has been recommended to be prepared on priority basis by the concerned department.

Solid Waste Disposal : -

At present garbage of Naharkatia town are dumped near Sukapha Bhawan on the bank of Buridihing River. Since the town is expanding in recent times, so the situation only stands to worsen unless the concerned authorities give a serious thought to the problem. So, this plan has suggested to stop the present site of the solid waste disposal for the present as well as future environmental safety of the town. Accordingly, this plan earmarked a low-lying site at Hatigarh Block for solid waste disposal for Naharkatia town.

The town generates a good amount of biodegradable solid waste besides plastic waste and malted wastes. So, this plan has suggested a few steps for scientific solid waste management system in Master Plan Area. This includes segregation of bio-degradable and non-biodegradable solid waste at source, construction of compact pits at all residential houses in order to produce compost wherever feasible, introduction of specific litter bins for collection of segregated bio-biodegradable and non-biodegradable solid waste for soil conditioning and recycling purpose respectively and doing away with the system of dust bins along roads which is a major cause of pollution. For solid waste management, the plan earmarked an area at Hatigarh block for setting up of obnoxious industry.

Need for Disaster management :

Data on disaster occurrence, its effect upon people and its cost to countries, are primary inputs to analyze the temporal and geographical trends in disaster impact. Disaster losses provide the basis for identifying where and to what extent the potentially negative outcomes embedded in the concept of risk is realized. They help to understand where and to whom disaster risk becomes impact. They also provide the basis for risk assessment process a departing point for the application of disaster reduction measures. Development cannot be sustainable unless disaster mitigation is built into development process. Investments in mitigation are more cost effective than expenditure on relief and rehabilitation. Prevention and mitigation contribute to lasting improvement in safety and are essential to integrated disaster management. Disaster response alone is not sufficient as it yields only temporary results at very high cost. So emphasis must be on Disaster prevention, mitigation and preparedness which help in achieving objectivity of vulnerability reduction.

The importance of putting disaster management plans in place :

Disasters are events that have a huge impact on humans and/or the environment. Disasters require Government intervention. They are not always unpredictable. Floods take place in valleys and flood plains, droughts in areas with unstable and low rainfall, and oil spills happen in shipping lanes. This predictability provides opportunities to plan to prevent and to lessen the impact of disasters.

Disasters arise from both natural and human causes and the responses needed could stretch community and Government capacity to the limit. Disasters are inevitable although we do not always know when and where they will happen. But their worst effects can be partially or completely prevented by preparation, early warning, and swift, decisive responses.

Disaster management aims to reduce the occurrence of disasters and to reduce the impact of those that cannot be prevented. North East Region has been vulnerable to many disasters in the past both natural and manmade and most of the disasters have occurred within the last two decades and the frequency, intensity and magnitude of the disasters are ever increasing.

Plan Objectives

The objectives of the District Disaster Management Plan are :

- To plan and implement risk reduction activities in the district.
- To have effective disaster preparedness and effective emergency response for saving of lives.
- To provide relief and humanitarian assistance.
- To enable faster recovery through comprehensive reconstruction and rehabilitation.
- To conduct trainings and capacity building for effective prevention, mitigation and response for disasters.
- To undertake information, education and communication activities to create awareness among the communities and the general public.

Disaster Management Cycle

In multi-hazard response plan, the disaster management cycle has a significant role to play. The four stages of disaster cycle have their own importance in terms of their implementation during, after and before the occurrence of any disaster.

The Master Plan recommends for formation of a Disaster Management Cell at Naharkatia (NDMC) either in the office of the Chairman, Naharkatia Town Committee or Circle Office, Naharkatia revenue Circle with one nodal Officer to the rank of Junior engineer and 5(five) membrs. One member each from Naharkatia Town Committee Circle Office, PWD office, Public Health office and one member from the leading citizen of Naharkatia Master Plan Area. The plan also recommends that the NDMC cell to co-ordinate during emergency with the Distrit Disaster Management Cell (DDMC) located at the Head-Quarter of the District. The NDMC Cell will provide all the available resources and manpower for Disaster Management. This Cell will mobilize the service of technical personnel for the damage survey work to help the District Administration.

Rainwater Harvesting :

Naharkatia Zone have experienced heavy rainfall during summer season due to the South-Western monsoon. It creates artificial floods not only in the town area but also in its suburbs area. So, this plan suggest for rainwater harvesting system in the Naharkatia Master Plan Area. This system will reduce the volume of artificial floods in the Master Plan Area and also to help to maintain the ground water level. Rainwater harvesting technology should reach to all strata of the society. The local Govt. bodies should encourage rainwater harvesting on the building roof-tops by providing incentives Efforts from scientists should be made to see that technology is available to the all classes of the society at affordable cost.

Phasing and Priority Scheme

The plan proposals for Naharkatia Master Plan Area spread up to the year 2031. It is quite obvious that the natural development will continue and the private developers will play an important role in this respect. As such the private development will be allowed but in conformity with the Master Plan. It is strongly recommended to stop unplanned and sporadic developments and to encourage planned and compact development where the provision for necessary infrastructure and public amenities are economically possible. There are some immediate necessities, which are to be taken up as priority schemes for Naharkatia Master Plan Area.

1. Widening and improvements of roads, providing street light and notified parking area.
5. Improvement of existing A.S.T.C. Bus station.
6. Construction of public bus stand and truck stand.
7. Improvement of existing taxi and auto stand.
8. Preparation and execution of a comprehensive drainage scheme.
9. Construction of a town hall.
10. Execution of Residential Land Development Scheme with Market complex.
11. Beautification of town by setting up parks and other recreational facilities.
12. Development and Construction of playground.
13. Construction of new hospital and dispensaries and improvement of existing hospital and dispensaries.
14. Construction of Administrative Block.
15. Construction of flyover at Railway level-crossing in the market area and at proposed by-pass near Balijan Railway crossing.
16. Setting up traffic points as required.
17. System of regular collection and disposal of garbage in the master plan area by the concerned authority.
18. Water supply schemes.
19. Construction of light and medium industrial units.
20. Solid waste Management system at Hatigarh block.
21. Construction of Slaughter house.
22. Construction of cold storage, ware house and godown etc.

Necessary scheme for development of land and to provide necessary incentive to attract industrial enterprise in the areas earmarked for industries at Cerepajan gaon.

In the first phase, the small schemes like widening and improvement of roads, construction of new roads, schemes for slum area up-gradation and relocation, provision for required spaces for parks, playgrounds and parking places and improvement of commercial and market areas including improvement of existing market, daily bazaar etc. would be taken up. The Town Committee and concerned authority will play an important role in the execution of such schemes in town and whole Naharkatia Master Plan Area.

During the 2nd phase, the plan recommends for the establishment of Health centre, construction of fly-over, construction of administrative block, execution of comprehensive drainage schemes, execution of comprehensive water supply scheme and execution of Residential Land Development Scheme must be taken up.

During the 3rd phase, the plan recommends for the establishment of industrial unit, setting up obnoxious industry for solid waste management.

Plan Implementation and Enforcement

Zoning Plan :

Zoning means the method of accomplishing a suitable arrangement of different land use components of a area. Although it is an integral part of the overall plan yet it does not mean the only arrangement. Good Zoning ensures right use of available land. In order to achieve the goals and objectives of the plan, a zoning plan is prepared by earmarking different use areas with suitable boundaries.

Zoning Regulation :

Zoning Regulations play a very important role in controlling and promoting urban development and redevelopment in rational lines. They are also useful in limiting urban growth and in a broader sense can also be used for laying down broad directives in regional plan. Zoning regulations from an integral part of any.

Master Plan and these have been used extensively to control development of urban areas.

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

Zoning Regulations would help in controlling density of development and land use in each zone in an appropriate manner. Zoning Regulation for Naharkatia Master Plan Area will follow the uniform zoning regulations as approved and notified by the Govt. vide No. 226, Dispur, the 16th December 2000. published in Assam Gazette Extra ordinary on 16th December 2000.

Plan Implementation :

The Master plan and zoning regulations for Naharkatia and its mere adoption by the Govt. is not the end of the planning process. In order to make the town and its surrounding villages a better place to live and work, sustained efforts to enforce and implement the Master Plan proposal are necessary. For successful implementation of the plan, preparations of development scheme in a phased manner are absolutely necessary. Further in the process of development and redevelopment of an urban area, the people of the town play a major role by undertaking construction and reconstruction and development of land in private sector. People's participation is therefore, indispensable for the success of the plan.

Plan Administration :

The Master Plan and Zoning Regulation for Naharkatia contains broad policy programmes for development of Naharkatia Master Plan Area up to 2031. The administration of this plan will be carried out within the framework of Assam Town and Country Planning Act, 1959 (As amended).

Resource Generation :

Implementation of any plan can be successful only if there are resources at hand to carry out the work. The initial capital required for the plan implementation can be borne by the State Govt. The three large Tea Gardens situated within Master Plan Area and large industrial units situated with 15 km. at Duliajan and Namrup can also proportionately contribute to the Development fund for implementation of Master Plan for Naharkatia. The Chamber of Commerce can also contribute some funds.

Constitution of Development Authority :

Besides preparation of the Master Plan and Zoning Regulations for Naharkatia, the Directorate of Town & Country Planning will render technical guidance and assistance to the local bodies and other Development Department for bringing in the required conformity of the various development schemes with the proposed Master Plan. As empowered by section 8A of Assam Town and Country Planning Act, 1959 (as amended), Govt. may constitute Development Authority to implement Naharkatia Master Plan after its adoption.

Conclusion :

Planning is a continuous process and preparation of a plan implies its actual translation into reality. The Master Plan for Naharkatia prepared will require sustained efforts for its implementation. In building a town, a major role is played by the people living in the town. so successful implementation of this plan will require people's participation in all phases of planning activity and in all functions in order achieve the common goal to make Naharkatia a better place to live, work and entertainment.

NAHARKATIA MASTER PLAN (FINAL)
TRAFFIC & TRANSPORTATION - 2031

LEGEND	EXISTING	PROPOSED	EX-NOVO TO BE INTRODUCED
MASTER PLAN BOUNDARY			
DISTRICT BOUNDARY			
PIPER & LINCOLN			
MAJOR ROAD			
MAJOR ROAD TO BE IMPROVED			
ARTERIAL ROAD			
TRUCK ARTERIAL ROAD			
RAILWAY LINE			
PAVING FINISHED			
PAVING IN PROGRESS			
ROAD UNDER CONSTRUCTION			
GRAVE YARD & CEMETERY (CURRENT)			
SOLID WASTE DISPOSAL			
COMMERCIAL INDUSTRIAL			
RESIDENTIAL			
GOVT. LAND			
RYE PASS			
RAIL CROSSING			

SCALE 1:25,000

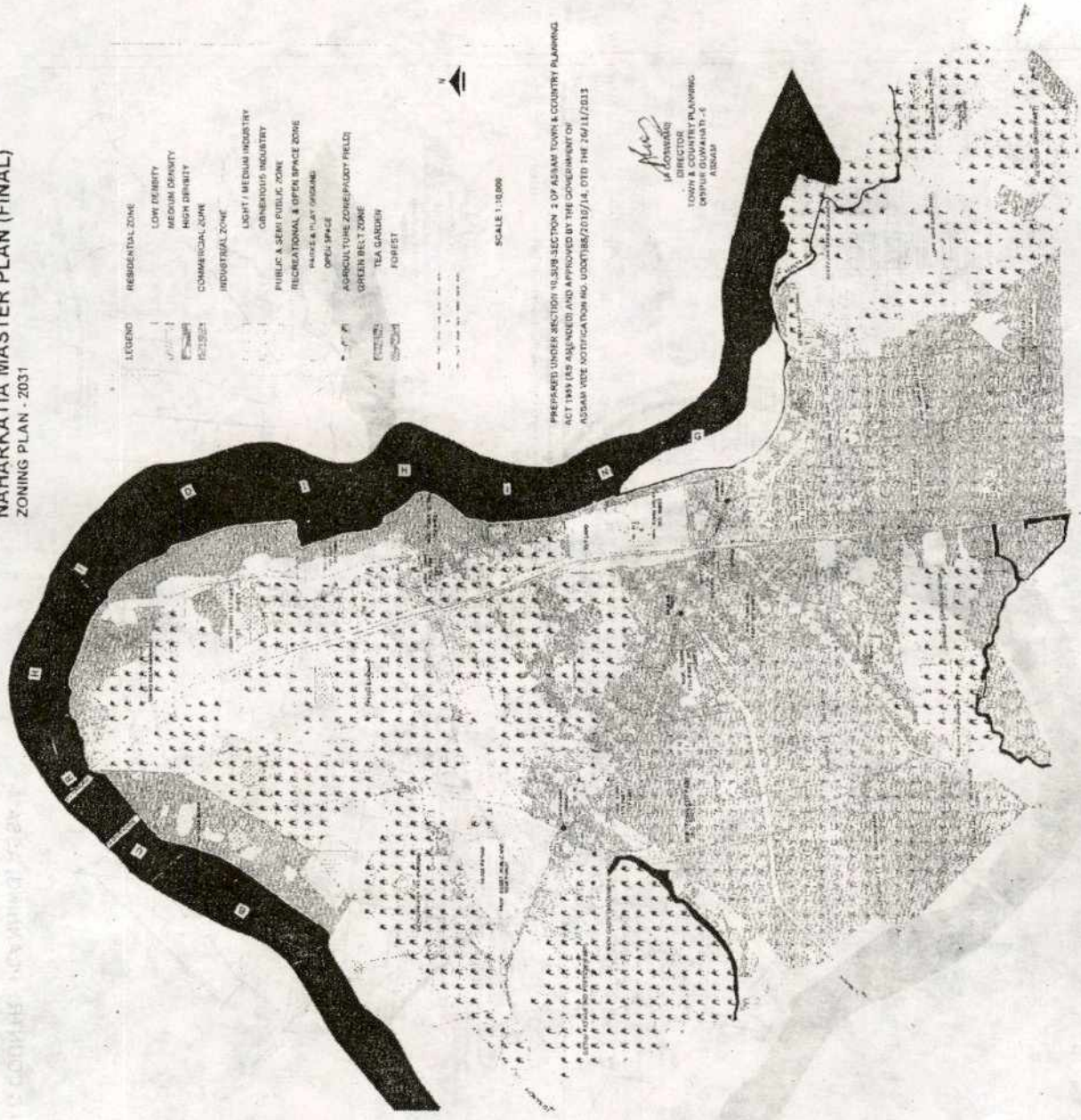
PREPARED UNDER SECTION 12, SUBSECTION 2 OF ASSAM TOWN & COUNTRY PLANNING ACT, 1959 (AS AMENDED) AND APPROVED BY THE COMMISSIONER OF ASSAM VIA NOTIFICATION NO. UD03/188/2010/14, DTD THE 26/11/2013

[Signature]
 DIRECTOR
 TOWN & COUNTRY PLANNING
 DISHUP GUWAHATI - 6
 ASSAM



TOWN & COUNTRY PLANNING, ASSAM

NAHARKATIA MASTER PLAN (FINAL)
ZONING PLAN - 2031



- LEGEND**
- RESIDENTIAL ZONE
 - LOW DENSITY
 - MEDIUM DENSITY
 - HIGH DENSITY
 - COMMERCIAL ZONE
 - INDUSTRIAL ZONE
 - LIGHT / MEDIUM INDUSTRY
 - GENEROUS INDUSTRY
 - PUBLIC & SEMI PUBLIC ZONE
 - RECREATIONAL & OPEN SPACE ZONE
 - MARKET & PLAY SQUARE
 - OPEN SPACE
 - AGRICULTURE ZONE/AGRO CITY FIELD
 - GREEN BELT ZONE
 - TEA GARDEN
 - FOREST



SCALE 1:10,000

PREPARED UNDER SECTION 16, SUB-SECTION 2 OF ASSAM TOWN & COUNTRY PLANNING ACT 1954 (AS AMENDED) AND APPROVED BY THE GOVERNMENT OF ASSAM BY THE NOTIFICATION NO. UODT/188/2013/14, DTD THE 26/11/2013

[Signature]
 DIRECTOR
 TOWN & COUNTRY PLANNING
 DISHUP GUVARHATI-2
 ASSAM

TOWN & COUNTRY PLANNING, ASSAM

NAHARKATIA MASTER PLAN (FINAL)
EXISTING LANDUSE PLAN, 2010



LEGEND

RESIDENTIAL
COMMERCIAL
INDUSTRIAL
ADMINISTRATIVE PUBLIC & SEMI-PUBLIC
GRAVE YARDS & CREMATORIUM GROUNDS
ROADS & PLAY GROUNDS
OPEN SPACE
WATER BODIES
SETBACKS
NATURAL HIGHWAYS
RAILWAY ROAD
TRIGGER ROAD
GREEN BELT (PARKS)
PUBLIC FIELD
GOVT. LAND
TEMPLES & SHRINES
EMBANKMENT
RAILWAY LINE BOUNDARY
RAILWAY OCCUPANCY
TOWN COMPOSITE BOUNDARY

SCALE 1:10,000

FORWARDED UNDER SECTION 16(1) OF ASSAM TOWN & COUNTRY PLANNING ACT 1959 HAS APPROVED AND APPROVED BY THE GOVERNMENT OF ASSAM (DECLARATION NO. 10007/MS/2014, DTD 14/11/2013)

[Signature]
 AS COMMISSIONER
 TOWN & COUNTRY PLANNING
 DISUR GURWANETI-8
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TOWN & COUNTRY PLANNING, ASSAM

NAHARKATIA MASTER PLAN (FINAL)
PROPOSED LAND USE PLAN - 2031



TOWN & COUNTRY PLANNING, ASSAM