



THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত

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No. 276 Dispur, Tuesday 16th December, 2014, 25th Agrahayan, 1936(S.E.)

GOVERNMENT OF ASSAM
URBAN DEVELOPMENT (T) DEPARTMENT
DISPUR :: : GUWAHATI-6

ORDERS BY THE GOVERNOR

NOTIFICATION

Dated Dispur, the 30th April, 2013

No. UDD(T) 98/2013/6 : In exercise of the powers conferred by section 9 of the Assam Town & Country Planning Act, 1959 (as amended) and the sub-section (1) of Section 10 of the Assam Town & Country Planning Act, 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 and Zoning Regulations (amendment) Rules, 1995 the Governor of Assam is pleased to publish the following notification regarding the publication of the Draft Master Plan and the Zoning Regulations of Udalguri Master Plan Area.

NOTICE FOR PUBLICATION OF THE DRAFT MASTER PLAN AND
ZONING REGULATION FOR UDALGURI :

1. It is notified that the Draft Master Plan for Udalguri prepared by the Director, Town & Country Planning, Government of Assam under section 9 of the Assam Town & Country Planning Act, 1959 for the area described in the Schedule below is hereby published.
2. Any person or persons affected by the Draft Master Plan may submit their objection or opinion in writing to the Director, Town & Country Planning, Government of Assam, Dispur, Guwahati - 6 within two months from the date of publication of this notification.
3. The Draft Master Plan and the Zoning Regulation together with all relevant papers and maps may be inspected free of cost during office hours at the office of the Director, Town & Country Planning, Government of Assam, Dispur, Guwahati-6, the Deputy Director, Town & Country Planning, District Office - Mangaldoi, the Circle Officer, Udalguri Revenue Circle, Udalguri and Office of the Chairman, Udalguri Town Committee. Copies of the Draft Master Plan are also available at the Office of the Director, Town & Country Planning, Dispur, Guwahati-6 and Deputy Director, Town & Country Planning, District Office - Mangaldoi for sale.

SCHEDULE**Situation and Area :**

District	:	Udalguri
Sub-Division	:	Udalguri
Approx. Master plan Area	:	3468.51 Hector (34.68 Sq. km.)

**MOUZA AND VILLAGES INCLUDED IN THE DRAFT
MASTER PLAN FOR UDALGURI**

<u>Mouza</u>	<u>Villages</u>
1. Amba Gaon	1. Sapkhaity Bher No. 1 2. Sapkhaity No. 2 3. Sapkhaity No. 3 4. Galandi Habi
2. Barchilajar	5. Bellow Chuburi 6. Kathalguri 7. Purani Garaibari
3. Udalguri	8. Gulmagaon 9. Nalbari No. 1 & 2 10. Niz Udalguri 11. Khangkhala bari 12. Thana Udalguri No. 1 13. Thana Udalguri No. 2 14. Manpur Gaon 15. Bekigaon 16. Rangamakha

DESCRIPTION OF UDALGURI DRAFT MASTER PLAN BOUNDARY :

1. North : Fuhura Bari Gaon No. 2, Chandana pur, Harpur Gaon
2. East : Jhara Bari Gaon, Tamul Bari, Chandana, T.E. No. 1
3. South : Bodlagaon, Barna Gaon, Santipur, Cring Gaon, Garmana.
4. West : Kahi Bari (Part), Dhula Chuburi, Gelagaon, Galandi River.

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

CHAPTER - I

INTRODUCTION

An unplanned growth of a town or city has caused enormous problems in our social, cultural and economic life. It is now quite urgent to apply new principles of urban planning in order to achieve good living and working environment, where needs of housing employment, transportation, recreation activities etc. of the whole community are best provided with optimum utilization of available resources.

In preparing the Draft Master Plan for Udalguri various surveys, such as land use, socio-economic, traffic surveys, were carried out to understand the existing condition of the town in order to suggest the type of action to be taken to guide future growth. The Master Plan Area of Udalguri has been demarcated after studying the present trend of growth of the town, the physical feature of the surrounding areas, future development of commercial network in the region etc.

1.1. LOCATION :

Udalguri, a trade and commerce-cum service town is located at 26° 47'N latitude and 92° 50' E longitude and is situated at a distance of 146 k.m. north-east of Dispur, Guwahati, the state capital of Assam Originally Udalguri was a sub-divisional head quarter of Darrang District and at present it is raised to the status of District head quarter when the original Darrang District was bi-furcated into two Districts namely Darrang and Udalguri. The town is located at an elevation of 590 feet. To the south of Udalguri is Darrang District, to the north is Arunachal Pradesh and Bhutan, to the east is Sonitpur District and to the west lies Baksa District.

The town committee was constituted in 1984 and there are presently six wards. The present area covered by Udalguri Town Committee is approximately 4.65 sq. kms. and accommodated about 10,057 persons in 1985. The town has comprised mainly of plain tribal groups of Assam.

The original undivided Darrang District was primarily an agricultural District. Udalguri has developed as an agro-based commercial town. Since it has become a District headquarter, it has become an important administrative centre also.

1.2. UDALGURI MASTER PLAN AREA :

Considering the trend of growth of Udalguri it has been felt necessary to include 16 villages around the town within the Master Plan area. The total area thus covered within the Master plan area is 34.68 Sq. Km. (3468.51 Hectare) including 4.83 sq.km. of Municipal area, accommodating a population of 14,893 persons as per 2001 census report. The percentage decadal growth for 1981-1991 was 85% and 1991-2001 was 42%. On basis of these figures the population of Udalguri town may be projected at 18,770 persons in the year 2011 and 23,650 persons in the year 2021.

1.2.1. URBAN AREA :

Udalguri District is one of the 27 Districts of Assam state in north-eastern India. Udalguri town is the headquarters of the District. The Population of Udalguri District is 83,2769 as per 2011 census. Udalguri is 21st most populous District out of total 27 Districts in Assam and it is 476th most populous District in India. The population density of Udalguri District is 497 Persons per sq. km. It is 9th most densely populated out of 27 Districts in Assam.

The Udalguri Town has been expanding rapidly since last 10 to 15 years. There are total 6 (six) nos. of wards exists in the Udalguri Town and the present area covered by Udalguri Town Committee is Approximately 4.83 square kilometer and accommodated about 10,057 persons in 1985 and 18,770 persons in 2011.

The total urban area within the planning area thus calculated comes to 4.83 sq.km.

1.2.2. RURAL AREA:

Total 16 Nos. of villages which are located in the periphery of the Udalguri town have been included in the master plan area. The economic, social and cultural activities of these villages are inter-related with the town and also has future urban growth potential.

The villages included are as follows :

Golmagaon, Rangamakha, Thana Udalguri No. 1, Thana Udalguri No. 2, Niz Udalguri, Khangkhala Bari, Monpur, Sab Khaity Bher No. 1, Sab Khaity Bher No. 2, Sab Khaity Bher No. 3, Galandi Habi, Purani Garaibari, Kathalguri, Bekigaon, Nalbari No. 1 & 2, Bellow Chuburi.

The total rural area within the planning area thus calculated comes to 29.84 sq.km.

1.3. PHYSICAL FEATURES :

The Udalguri town situated in the northern border of Assam, lies near foot-hills of Bhutanese Himalaya, serves as one of the gateway to Bhutan. Physiographically, Udalguri town occupied its position on flat alluvial plain land 15 kms. away from the foot-hills of Bhutanese Himalaya.

The River Golondi runs 2 kms east of the town. Various branches of stream flows from Bhutan hill and these changes their course often. The river Sapkhaity flows through the core of the Master plan area. Another river Kakarakhaity is the west boundary of Udalguri Master Plan area.

1.4. CLIMATE :

Udalguri has a sub tropical humid climatic condition. The region maintains temperate and moderate climate throughout the year. During summer the humidity level is high. During winters the temperature remains pleasant. Monsoons are characterized by heavy rainfall and thunderstorm. The area also faces flood due to heavy rainfall.

The District has the direct influence of the surrounding mountains and hills and similar climate condition with the rest of the Brahmaputra valley with hot humid in summer and cool, dry in winter. Mean annual temperatures of the Town is maximum 33° C and minimum 10° C. Extreme months are August (hottest) and December (coldest). There is sufficient rainfall in the summer months with an annual average of 1879 MM. The maximum Humidity is 93% and minimum is 63%. The total average rainfall is 225 centimeters. Monsoon period are from April to September.

1.5. HISTORY :

This District was formed on June 14, 2004 as one of the four Districts under the Bodoland Territorial Autonomous District. This District was carved out by bifurcating Darrang District. The territory of the present District was earlier Udalguri sub-division of the undivided Darrang District. Udalguri is a part of Mangaldai Lok Sabha Constituency.

There are Hindu, Christians and Muslim population living together in the District. The main composition of people there are Assamese (Borpetia), Boro Kachari, Saotal, Marwari, Bengali, Hindu, and Muslims, Nepali, Garo and other tribes. This was a very peaceful place till mid 80s but various communal clashes took place from time to time. Late Jojaram Sharma was one of the prominent India freedom fighters from Assam who lived here

The name of a place is generally associated either with some historical facts or with some legend. As per popular belief, Udalguri is named after Udal trees found in abundance in the town and its surrounding areas. Popular belief is that in the olden days, the Bodo people were dependent on these trees for using its barks to produce durable yarn to meet their clothing needs. Hence the name of Udalguri followed which is a place full of udal trees.

Udalguri is an old traditional bazaar. It was also famous for silk production and was an important land mark on the international silk route. Because of repeated kirmish of the Bodos with the Bhutanese, during British rule, it was left as an undecided territory that was under Bhutanese control for eight months of the year and British control for remaining four months of the year.

There is a holy place namely Bhairabkunda at a distance of 17 km. away from Udalguri near Bhutan hill. As a popular belief Arjuna, the hero of Kurukshetra war received the famous pashupat ashtray from Lord Shiva after bath in the Bhairab kunda. The name of Lord Shiva is Bhairaba. At present it would be a famous tourist centre for nearby region.

CHAPTER - II

POPULATION AND CITY FUNCTION :

Growth and decay of a human settlement is influenced by the character and magnitude of functions discharged by the settlement, and its economics and social relationship with the hinter land. In considering the human resources of the undivided Darrang District, it is seen that in 2011 the total population of the District was 8,32,769 persons (an increase of 9.8% over 2001). After the declaration of Udalguri town in the year 1984, as the administrative headquarter of the newly formed sub-division, the population of the town is below 10,057. After the declaration of Udalguri as an urban centre importance of the town has been increasing.

The analysis of demographic features and economic functions of the town and its neighbouring settlements carry immense importance in the study of growth pattern and forecasting future trend. Under the studies of population, growth trend, density pattern, sex-ratio occupational structures etc. are taken into account to assess and earmark land for different public uses such as amenities and facilities for the present and future population.

2.1. POPULATION CHANGES IN STUDY AREA :

2.1.1. POPULATION GROWTH :

As a District there was change of 9.76 percent in the population compared to population as per 2001. In the previous census of India 2001, Udalguri District recorded increase of 10.02 percent to its population compared to 1991.

As a small town, Udalguri located in a remote area of Assam, is getting momentum to grow rapidly over space by diversifying the development activities. A number of Government officials and institutions have already been established and it is expected to increase town's population in the near future.

So far the Municipal area is concerned, a significant variation in population is found since 1981 and the population was 5905 persons only. The following table shows the decadal variation of population from 1971 to 2001 of Municipal Area and Master Plan Area separately. More than half of the total population of the town belongs to tribal community comprises mainly of Bodo-Kacharies, Rabhas, Nepalis etc.

The growth of population of Udalguri Master Plan area has been categorized as Urban, Rural and total Master Plan Area population. The growth of population of Udalguri Master Plan Area has shown in the table No. 2.1 and Table No. 2.2. The population of the Master Plan Area has increased from 9,500 in 1971 to 31,407 in 2001.

TABLE - 1

GROWTH OF POPULATION IN UDALGURI MASTER PLAN AREA

Year	Decadal Variation	Urban Population	Rural Population	Total Master Plan Population
1971	NA	NA	NA	9,500
1981	26%	5905	6065	11,970
1991	85%	7272	14897	22,169
2001	42%	14,897	16,510	31,407

Source : Census of India Town Directory, 2001

*No Census could be conducted in Assam in the year 1981

2.1.2. POPULATION GROWTH WITHIN THE TOWN :

TABLE - 2
GROWTH OF POPULATION WITHIN THE TOWN
(1991 TO 2001 CENSUS)

Wards	Population (1991)	Population (2001)	No. of Household	No. of Literates	Literacy Rate in %	No. of Illiterates	Illiteracy Rate %
1	2	3	4	5	6	7	8
1	1641	2783	549	2186	88.0	597	24.0
2	1719	3701	724	2540	79.4	1161	36.3
3	1514	3260	609	2442	86.4	818	28.9
4	849	1828	342	1234	78.9	594	38.0
5	832	1792	319	1219	78.5	573	39.6
6	712	1533	309	1118	83.1	415	30.9
Total	7,272	14,897	2,852	10,739	4158	494.3	1977

Source : Census of India Town Directory, 1991 to 2001.

The growth rate of population within the town has been increasing during the year 1991 to 2001 at very fast rate. It is because the declaration of Udalguri as a town in the year 1984, as the administrative Headquarter of the District.

2.1.3. DENSITY PATTERN :

The initial provisional data released by census India 2011, shows that density of Udalguri District for 2011 is 497 people per sq. km. In 2001, Udalguri District density was at 451 people per sq. km. Udalguri District administers 1,676 square kilometers of areas.

From the following table it is shown that during the year 1991 to 2001, the density pattern of all the entire Master Plan area has continuously increasing. The density of population for Udalguri town is 30.84 PPH in 2001 and in the Master Plan areas is 9.05 PPH. The density of the town has increased almost double from 1991 to 2001 that is 15.05 to 30.84.

TABLE - 3
DENSITY OF POPULATION : UDALGURI MASTER PLAN AREA

Zone	Area in Hectares	Population	Approx Density (P.P.H)	Area in Hectares	Population	Approx Density (P.P.H)
1	2	3	4	5	6	7
		1991			2001	
Urban Area	483.02 ha	7,272	15.05	483.02 ha	14,897	30.84
Rural Area	2985.49 ha	14897	4.98	2985.49 ha	16,510	5.53
Total Master Plan Area	3468.51ha	22,169	6.39	3468.51 ha	31,407	9.05

Source : Census of India, 2001, Assam

2.1.4. SEX-RATIO :

The sex ratio of a population means numbers of females per 1000 males. With regards to Sex Ratio in Udalguri District, it stood at 966 per 1000 male compared to 2001 census figure of 952. The average national sex ratio in India is 940 as per latest reports of Census 2011 Directorate. In 2011 census, child sex ratio is 965 girls per 1000 boys compared to figure of 974 girls per 1000 boys of 2001 census data.

As per 2001 census the sex ratio of Udalguri town was 932 females per 1000 males and 919 females against 1000 males in 1991 census, it is seems that the sex-ratio (female per 1000 male) has been increasing from 1991 to 2001. On the other side the sex-ratio in rural parts of the Udalguri Master Plan Areas is comparatively higher then the town area which may be due to the out-flux of male worker for better employment opportunities.

TABLE - 4

GROWTH OF POPULATION AND SEX-RATIO OF UDALGURI TOWN (WARD-WISE)

Ward	Population		Increase (1991-2001)	Sex-Ratio	
	1991	2001		1991	2001
I	1641	3429	1788 (109%)	926	927
II	1719	4561	2842 (165.32)	958	958
III	1514	4017	2503 (165.32)	873	874
IV	849	2252	1403 (165.25)	886	886
V	832	2208	1376 (165.38)	1000	1000
VI	712	1889	1177 (165.30)	873	920
Total	7272	18356	7630 (104.92)	919	932

Source : Census of India Town Directory, 1991 and 2001.

The sex-ratio within the age group 0-6 is the the vital indicator of the future trends of the sex-composition in the population in the Udalguri Master Plan area. As per 2001 census, the child sex-ratio in the Udalguri Master Plan are a was 914 female per 1000 male child.

2.1.5. LITERACY :

Total literate as per 2011 census in Udalguri District were 481,867 of which male and female were 271,529 and 210,338 respectively. In 2001, Udalguri District had 4,674,149 in its District. And as per 2011 census the average literacy rate is of the Udalguri District was 66.6% compared to 56.40 of 2001 and the gender ratio is 966 and as per the year 2001 census report, male literacy rate of the Udalguri town is 90.90% and the female literacy rate of the town is 76.79%. These figures are almost as per with the corresponding District figures that stands at 91.14% and 80.54% for male and female respectively. The total literacy rate of the town is 84.11% compared to the state figure of 85.76%.

The literacy rate for Udalguri Master Plan are as per 2001 census comes to 62 percent and out of 62 percent 36 percent are illiterate. Again as per 2001 census data the literacy rate of rural and urban area remain at 38 percent and 62 percent respectively.

TABLE - 5

LITERACY RATE WITHIN
THE MASTER PLAN AREA AND URBAN AREA (2001 CENSUS)

Area	No. of Literates	Literacy Rate in %	No. of Illiterates	Illiteracy Rate %
Udalguri Master Plan Area	18054	62%	10147	36%
Urban Area	10,739	68%	4943	32%

Source : Census of India Town Directory, 2001.

The literacy within the town area of Udalguri as per 2001 is 68 percent are literate and 32 percent are illiterate. The rate of literacy within the town area compared to Udalguri Master Plan Area as per 2001 data recorded is comparatively high.

2.2. OCCUPATION STRUCTURE :

As per the 2001 census, the total workers of Udalguri Master Plan Area were 30.06% of the total population of the Udalguri Master Plan Area. According to 1991 census the percentage of working people engaged in Tertiary Sector and Primary Sector are almost same which is 48% in Tertiary Sector and 49% in Primary Sector. On the other hand as per 2001 census, the percentage of people engaged in Tertiary Sector is 70.25% which is the highest followed by secondary sector with 12.78%. The following table shows the occupational pattern of Udalguri Master Plan Area from 1971, 1991, 2001.

TABLE - 6
CHANGES OCCUPATIONAL STRUCTURE IN
UDALGURI MASTER PLAN AREA, 2001

Category	No. of Workers within Master Plan Area 1971 to 2001					
	1971	%	1991	%	2001	%
A. Primary Sector	2040	72%	4281	49%	2545	26.95
B. Secondary Sector	114	4%	262	3%	263	12.78%
C. Tertiary Sector	672	24%	4194	48%	6633	70.25%
Total (A+B+C)	2826	100%	8737	100%	9441	100%

Source : Census of India, 1971, 1991 & 2001.

It is seen from the above that the Tertiary sector is continuously increasing from 1971 to 2001 census it is because of declaration of Udalguri as administrative Headquarter in 1984 which help to increase the percentage of working people engaged in Tertiary Sector.

2.3. EMPLOYMENT STRUCTURE :

As per 2001 census, the total worker of the Udalguri Master Plan Area are 9,438 which account 46.84% population of total Master Plan area. The details of employment structure of the Udalguri Master Plan are shown in the following table No. 7.

TABLE - 7
EMPLOYMENT STRUCTURE IN
UDALGURI MASTER PLAN AREA, 1971 TO 2001)

Year	Total Workers	Proportion of Main Workers in %	Main Workers	Proportion of Marginal workers in %	Marginal Workers	Proportion of Non-Workers Workers in %	Non-Workers
1	2	3	4	5	6	7	8
1971	5675	81.46	4623	18.53	1052	52.66	10,775
1991	8737	86.02	7516	13.97	1221	51.92	18173
2001	9438	85.65	8084	16.74	1354	53.15	20147

Source : Census of India, 1971, 1991 & 2001.

The total main workers within the planning area as per 2001 census is 85.65%. The growth of working population mainly in main workers is almost nil from 1971 to 2001.

2.4. PLAN PERIOD :

Growth of an Urban Settlement is a timeless phenomenon, yet for the preparation of a Master Plan, it is necessary to assume a "Time Span" for the plan. The time space facilities estimation of various requirements of the city during the period. The plan period for Udalguri has been assumed up to 2031. The "Time Span" of 20 years, would be more realistic which will coincide with the census decades. A relationship with census decade will facilitate utilization of valuable census data available.

The proposals contained in the Master Plan can be entirely based on the requirements of the plan period which will also help to provide nearby surrounding hinterland areas regional needs. The plan is required to be reviewed every 5 to 7 years so as to modify the same to meet the new and unforeseen requirements and made adjustments in the programme of implementation accordingly.

It is encouraged that the implementation of the Master Plan will be as phase wise, which will base on five years periods so as to facilitate inter-relationship between financial requirements for plan implementation and financial allocations available under various sectoral heads.

2.5. PROJECTED POPULATION :

For the preparation of Master Plan for any town or region, population analysis plays a very important role because population size gives an indication of the overall dimension of the physical environment and supplies a basic yard stick for the estimation of space needs for various categories of land use. Besides the economic attraction which cannot be predicated sufficiently in advance, Regional and International factors which are also responsible for determining the future growth trends of population of Udalguri Master Plan has been calculated in table No.8.

TABLE - 8

**PROJECTED POPULATION OF
UDALGURI MASTER PLAN AREA, (2011-2031)**

Year	Urban		Rural		Master Plan Area	
	Population	Growth Rate	Population	Growth Rate	Population	Growth Rate
2011	18,770	26%	20,802	26%	39,572	26%
2021	23,650	26%	26,210	26%	49,860	26%
2031	29,799	26%	33,024	26%	62,823	26%

Source : Growth Rate calculated as per 26% decadal growth taken as Standard.

The estimates for future population are normally on the past trends and indication of new trends. This method is based on decadal growth rate of preceding decade. For these the Master Plan area is being divided in Urban and Rural.

The population projection for the Udalguri Master Plan has been calculated as considered 26 percent decadal growth rates as standard as because data for the decade 1971 - 1981 and 1981 - 1991 is not available. By 2021 and 2031 the populations of Udalguri Master Plan Area are expected to increase 49,860 and 62,823 respectively.

CHAPTER - III

PHYSICAL GROWTH AND EXISTING LAND USE PATTERNS :

The competition among various uses of land is intense in the urban areas. It is very essential to take note of the existing land use pattern in order to formulate policies so that every use of land finds its right place and they function together in harmonious way. The study of the land use pattern of any town imperative to understand the disposition of town activities its growth trends, physical impediments etc.

A land use survey was conducted by Town and Country Planning, Darrang, Mangaldoi for the planning area of Udalguri in the year 2011.

3.1 PHYSICAL GROWTH TRENDS :

The town Udalguri has generally grown as scattered on major centers of town along with the major routes. The trend of growth is along the different major subway passing through the town as well as nearby surrounding areas.

The present growth trend of population is towards the Ward No. I, II and III. The growth is medium in Ward No. IV, V and VI. These areas are newly growing areas where most of the new residents are belongs from middle income groups with satisfactory income.

3.2. LAND USE ANALYSIS :

The development activities of the town is mainly due to the two factors-(a) Location of Railway Station and (b). Its role as a regional road transport nodal centre. The main roads and the railway are also directly controlling the direction of the physical growth of activities of this small town.

Hypothetically, growth and development activities of this small town in different phases can be interpreted as - initially trade activities came up along the north of the railway track just near to the railway station and encircling this, there were residences, subsequently industrial cum trade and commercial activities have been extended towards north, public institution and residential activities towards east residential activities towards west, public institutions residential cum commercial activities towards south of the railway track. Clearly it is a good example of pulling up of urban activities by the respective transport network system in the town.

3.2.1. LAND USE CLASSIFICATION :

In order to understand problems of land use and to study quantum of land under various uses to land has been classified to following 8 No. of categories.

- | | |
|-----------------------|------------------------------|
| 1. Residential | 5. Recreation and Open space |
| 2. Commercial | 6. Circulation |
| 3. Public-semi public | 7. Water Bodies |
| 4. Industrial | 8. Agricultural. |

The above mentioned land use classification would broadly cover all the uses in the Master Plan area and would facilitate a comparative-study of existing land uses and proposed Land uses in the Master Plan Area.

The disposition of various land use within the Municipal Area as well as planning area are given in the following table separately. The present Municipality area of Udalguri town is about 483.03 hectares against the proposed planning area of 2985.48 hectares comprising of 16 adjoining villages.

The developed area of the town land use within municipal limit is 421.79 hectares giving a town density of 35.31 P.P.A as per 2001 census.

TABLE - 9

**EXISTING LAND USE PATTERN OF UDALGURI MASTER PLAN AREA
IN 2011 (AREA IN HECTARES)**

S I. Nos.	Land Use	Within the Municipal Area	% To the Total Area	Within the Master Plan Area	% Of the Total Master Plan Area	% Of the Total Developed Area Within the Master Plan Area
1	2	3	4	5	6	7
1	Residential	247.63	51.27	670.06	19.32	50.34
2	Commercial	3.97	0.82	6.96	0.20	0.52
3	Public & semi-public	26.67	5.52	105.15	7.90	7.90
4	Industrial	0.51	0.11	0.82	0.06	0.06
5	Recreational and open space	7.37	1.53	81.69	2.36	6.14
6	Roads and Railways	135.64	28.08	466.42	13.45	35.04
7	Developed Area	421.79	87.33	1331.10	—	100.00%
8	Water bodies	6.73	1.39	248.27	7.16	—
9	Agriculture	54.51	11.28	1808.07	52.13	—
10	Green Belt	—	—	81.07	2.34	—
	Total	483.03	100%	3468.51	100%	—

Source : Land use Survey conducted by T & CP, Mangaldoi 2011.

The Udalguri Master Plan area measures 3468.51 ha. out of which 421.79 ha. falls within the Developed area of the Master Plan. The rest of the Udalguri Master Plan area is covered by more or less agriculture with pockets of marshy land and barren land.

3.2.2. EXISTING LAND USE PATTERN :

Residential areas cover 670.06 ha. which is 50.34% of the total developed area and 19.32% of the total land use. The major residential area covered along Rowta Harisingha road, Ambikagiri path, heart of the city area, Purani Garaibari area, Galandihabi area, Udalguri Kharupetia Road.

The commercial area covers an area of 6.96 ha. which is 0.52% of the total developed area and 0.20% of the total land use. The intensity of the major commercial activities is concentrated in central business District and these commercial activities are spread in a linear fashion and stretched along Udalguri town to Golma chowk area. On the other hand a number of retail commercial activities are concentrated in area near to Galandihabi and Purani Garaibari.

The Public and semi-public uses cover an area of 105.15ha. which is 7.90% of the total developed area and 3.03% of the total land use and it is higher than the commercial, industrial, recreational and open spaces because Udalguri is a District headquarter.

There are several educational institutions both Govt. and Private mainly in the town of Udalguri and it's nearby surrounding. A 30 bedded hospital, banks and police station are situated in the heart of the city.

A few of recreational activities are available within the Udalguri Master Plan area. The Master Plan area has 81.69 ha. of land under open space, parks and play ground.

3.3. INTER RELATIONSHIP OF LAND USES :

TABLE - 10

PERCENTAGE OF RESIDENTIAL IN UDALGURI TOWN, 2011

S I . Nos.	Wards	Residential Areas (In Percentage to the Total Areas)
1	I	44.03
2	II	22.13
3	III	50.89
4	IV	17.70
5	V	59.75
6	VI	26.55
	Total	161.30

Source : Land use Survey conducted by T & CP, Mangaldoi 2011

The survey conducted by Town and Country Planning Organization in the year 2011 reveals that the Planning area has mixed land uses especially within the town area. This has created inefficient and non-conforming land use loss of inter-relationship between various land-uses.

The wards No. III and ward No. V are the area mostly dominated by residential use of land within the Udalguri town area and on the other hand the density of these areas are medium. Some part of these areas are newly growing areas with satisfactory income. Most of the offices of the towns are located in the ward No. III leading to a high land uses under commercial areas. The second most dominated land uses within town area are dominated by public and semi-public uses which cover 5.52% of land (26.67 ha.) to the total municipal area. Most of the wholesale and retail markets are located in ward No. III and V, dominated by commercial area creating environmental problems.

3.3.1. ISSUES AND POTENTIALS :

The main issue and potentials of the existing land use pattern of the Udalguri Master Plan area are as follows:

ISSUES :

1. Haphazard residential with mix land use growth in the town area,
2. Uneven distribution of land uses,
3. Inadequate recreational facilities,
4. Uneven commercial facilities.

POTENTIALS :

1. Connectivity of rail and roads to its surrounding,
2. Potentialities of Industrial growth,
3. Potentialities of commercial and Public-semi public growth.

CHAPTER-IV

RESIDENTIAL USE AND HOUSING

4.1 RESIDENTIAL USE :

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 fact the total urban form and character emerges from the quality of housing areas and the interrelation of housing areas with work centre and other non-residential areas.

Normally the word housing and problems related to it are taken to mean dwelling units in terms of quality and quantity alone. Housing and the quality of life is more dependent on other elements of housing such as disposition of various working areas, sewerage, drainage and provision of basic amenities such as shops, schools, parks, health facilities etc. In this context the problems of housing experienced in Udalguri has been studied in its totality.

The problem of housing in Udalguri is aggravated because of low density of residential units and unplanned development. The following table gives us a clear picture of the housing areas in the Udalguri town. It was identified that the highest concentration of residential areas are in ward V and III and in contrary the lowest is ward IV where most of the land is covered by offices and other public uses.

TABLE :-11

PERCENTAGE OF RESIDENTIAL AREAS IN UDALGURI TOWN

SL.NO.	WARDS	RESIDENTIAL AREAS (IN PERCENTAGE TO THE TOTAL AREAS)
1	I	44.03
2	II	22.13
3	III	50.89
4	IV	17.70
5	V	59.75
6	VI	26.55

Source : Survey by Town and Country Planning Department, 2011.

4.1.1. HOUSING ENVIRONMENT :

Housing is one of the basic necessities of life. It is a place where a person spends most of his span of life. The creation and maintenance of healthy environment in an around a residence is therefore very desirable. A good house with a good environment exerts great influence on a person mental and physical development. But such as a small town like Udalguri is growing moderately as compared to national standard has growing residential density without much vertical development and some parts of the town has grown lack of good hygienic condition is leading the town towards slums.

4.1.2. LIVING CONDITION :

Living condition and total environment of residential areas, the largest land use element in the urban settlements, influences its social and cultural life. It indicates the prevailing condition under which the inhabitants live in residential areas. In order to understand and identify the problems of these areas is essential to examine the living condition of these areas both qualitatively as well as quantitatively. Qualitative aspect of living environment covers study of housing areas in terms of structural conditions, standard of services, relationship of housing areas and work centers, provision of services like education, health and recreation provision of services like water supply, drainage and transportation linkages, while quantitative aspects covers tenure states, housing shortage, residential density, occupancy rate etc.

4.1.3. HOUSING AREAS :

Urban Housing is mainly restricted within the municipal boundaries. The residential area is shown outside the municipal boundaries. The existing residential spread or housing within the municipal areas as per 2001 census data is around 14.11 hectares per 1,000 populations. Normally the rate of housing spread (a town of similar size) should range 6-7 hectares per 1000 persons.

The rate of existing housing spread within the Master Plan Area is around 55.63 hectares per 1000 persons. From the above it is clear that there is very low utilization rate of residential areas as per standard. The Master Plan would sought to rectify that increasing the utilization rate and consequently increasing densities. The housing areas are restricted to the municipal area Here some houses are dilapidated and need repair and maintenance with good hygienic condition from environmental point of view.

4.2. RESIDENTIAL DENSITY :

The study of residential density enables us to understand various aspects, such as intensity of use of urban land, problems of overcrowding arising out of high occupancy rates, building bulk, provision of open space, amenities etc.

The Table-12 reveals that Ward II has the highest concentration of population. This is natural as this is the town centre. At the other extreme end is ward VI, where the residential density is only 57 persons per hectares.

TABLE : 12

DENSITY OF UDALGURI TOWN (2011)

Sl No.	WARDS	DENSITY (in Person/Hector)
1	I	63
2	II	167
3	III	64
4	IV	103
5	V	30
6	VI	57
Total	6 Nos.	Average 80.5

Source : Survey by Town and Country Planning Department, 2011

Note : Density = Population/Residential Area.

For a more better understanding the density pattern of Udalguri Town the wards are classified into three categories, i.e. High Density (100 above), Medium Density (63-100) and Low Density (below 100). The Table - 12 it is found that Ward II and IV are the highest density areas within the town because of available urban amenities near to residential areas and on the other side Ward V and Ward VI have the lowest density within the town because most of the areas are covered by rural agricultural land, paddy fields etc.

TABLE : 13
DENSITY PATTERN OF UDALGURI TOWN (2011)

Sl.No.	DENSITY RANGE (IN PERSON HECTOR)	WARDS	POPULATION	RESIDENTIAL (AREAS IN HECTORS)	POPULATION	% AREA
1.	100 above	II,IV	5529	39.83	37.12	18.02
2.	63 - 100	II, III	6043	94.92	40.56	42.94
3.	Below 60	V, VI	3325	86.30	22.32	39.04
Total Municipal Area=			14897	221.05	100	100

Source : Survey by Town and Country Planning Department, 2011

4.3. DEVELOPMENT TRENDS :

There are total 2,825 no. of household against 14,897 persons in the year 2001 census, and the average household size of the town is 5.27. Within the town are the ward no. II, V and VI has slow growth of occupancy rate as compared with the ward nos. of I, III and IV. On the other hand it is seen that the ward No. I and III have the highest occupancy rate where high income housing is developed.

TABLE : 14

THE OCCUPANCY RATE OF UDALGURI TOWN

Sl.No.	WARDS	OCCUPANCY RATE	IN PERSON/HOUSING UNIT
1	I	31.5	5.73
2	II	28.4	3.92
3	III	31.3	5.13
4	IV	29.9	2.99
5	V	27.6	8.12
6.	VI	27.8	8.99
Total Municipal Area=		29.4	5.81

Source : Survey by Town and Country Planning Department, 2011

4.4. STRUCTURAL CONDITION OF HOUSING :

The Udalguri town has mostly Assam Type (A.T.) of houses either Pucca or Thatched and RCC houses are few. The town has developed as an agro-based commercial town and therefore the living character of people is rural in nature.

TABLE : 15

TYPES AND STRUCTURAL CONDITION OF THE HOUSES (2008)

TYPES OF STRUCTURE			CONDITIONS		
R.C.C.	Assam Type	Thatch	Good	Fair	Bed
6.80%	42.95%	50.25%	45.15%	40.50%	14.35%

Source : Survey by Town and Country Planning Department , 2011

Total House - 5,422 Nos.

The survey conducted by Town and Country Planning Organization in the year 2011 reveals that total no. of houses in Udalguri Town area was 5,422 nos. and out of the total houses in the town area 42.95% are Assam type houses, 50.25% are Thatch houses and 6.80% are RCC type houses. 45.15% of the housing in of the Udalguri Town area reveal good condition and 40.50% are in fair condition and rest 14.35% are in very dilapidated condition.

An Assam type or semi-pucca house is defined as cement floor brick walls and CCI or AC sheet roofing. A pucca house is of cement floor brick wall and RCC slab roofing. The number of dwelling units available in comparison to the total population within the town reveals that there is congestion in the town areas.

4.5 HOUSING ESTIMATION:

The total housing requirement is expected to grow almost in same proportion as the population growth. The number of household for the projected plan period by 2031 within the Udalguri Master Plan area has been estimated with an average size of h/h 5.27, which is 11,920 against the projected population of 62,823.

TABLE NO. - 16

PROJECTED HOUSEHOLD FOR UDALGURI MASTER PLAN AREA (2011-2013)

YEAR	ESTIMATED HOUSEHOLD		
	UDALGURI MASTER PLAN AREA	TOWN AREA	VILLAGE AREA
2011	7914	3754	4160
2021	9972	4730	5242
2031	12564	5959	6604

Source: Town and Country Planning , Darrang Mangaldai, 2011

CHAPTER- V

COMMERCE, OFFICES AND INDUSTRIES :

The economy of the Udalguri town has dominated by agriculture, cottage and small scale industry and related activities and it is supplemented by the exploitation of locally available forest resources. There are total 25 nos. of tea gardens in this sub-division. The Udalguri sub-division has good prospect in farming, mixed farming, forest resources, agricultural and forest based industries. The single instance of creation of a sub-division is a conclusive evidence of the growing importance of Udalguri. It has brought the administrative services nearer to the people living in secluded and remote border area of the State of Assam.

Moreover, it is the linking town to Bhutan with Assam and also it is the centre of collection and distribution of innovation and development inputs and outputs to nearby rural and urban settlements.

5.1. COMMERCIAL CUM SHOPPING CENTRE :

The town Udalguri is basically an administrative centre and commercial center for its vast rural hinterland. There are a few numbers of shopping cum commercial centers in the town area which serve its nearby surrounding regions. Within the town there are only two nos of major commercial shopping Centre located at ward no. 3 and another at ward no.-5. The people flock from the surrounding region to work, buy and sale their products in this town and there is an absolute lack of industries. A very few industries such as rice mills, household industries etc. are developed.

Since the Master Plan envisages this town as an administrative and commercial center, it is imperative that the growth of commerce and offices are provided in a planned manner and for this purpose analysis of existing activities along with this problems and prospects are necessary, so that the Master Plan can take care of these.

5.1.1. WHOLESALE TRADE :

The wholesale trade is located in the town centre. This area deals mainly in cloth, electronics, stationary etc. Since the town linkages by roads and rail from its surrounding is not so sound it creates problems for the town to grow commercially as well as industrially.

TABLE NO. 17

TRADE AND COMMERCE WITHIN THE UDALGURI MASTER PLAN AREA - 2011-2031

WHOLESALE TRADE	NOS.	RETAIL TRADE
Agency business	6	There are many retailers in the town
Grocery whole sale	8	Udalguri dealing on various commodities.
Stationary	28	
Hardware	12	
Electronics	30	
Clocks & Watches	13	
Photo Studio	5	
Clothes	22	
Total	124	

Source : Survey by Town and Country Planning, 2011

a) THE WEEKLY MARKET :

These weekly markets cater mostly in foodgrains. Here traders from its near rural surrounding come to buy and sell foodgrains by local farmers. Thus the weekly grain market serves as a "mandi" for buying and selling foodgrain products.

Udalguri has one Cattle Market located at ward No. 3 which serve its surrounding region. Presently an open field at ward no. 5 adjacent to present daily market of Udalguri Town Committee is used as weekly grain market.

5.1.2. CENTERS OF RETAIL TRADE :

a) TOWN CENTRE :

The Udalguri town has one daily market place located in the heart of the town at ward no. 3 adjacent to Udalguri Town Committee. There are varieties of shops consisting mainly of cloths, stationary, studio, book shops, computer repairing etc.

b) COMMERCIAL INSTITUTIONS :

A few of commercial institution within the town has been shown in the following table no. 18. All these commercial places have grown with the growth of the town. However, the growth of the town as a district headquarter should give positive stimulus for its growth.

TABLE NO.- 18

COMMERCIAL INSTITUTION WITHIN UDALGURI TOWN

Sl.Nos.	AREA	DESCRIPTION
1	Town Centre	This is the commercial area of the major shops and daily vegetable markets etc. It is also wholesale market along with Polece Station, Hospitals, Culture Centre and all the major Offices.
2	D.C. Court	This area in compassing a large area consisting some Govt. Office.
3	Golma Chowk	This is also another commercial area with schools and colleges.
4	Purani Garoibari Chowk	This area is a little commercial area along with schools and colleges.

Source : Survey by Town and Country Planning Department, Mangaldai, 2011.

5.1.3 PROBLEMS OF TRADE AND COMMERCE :

Studies reveal that the present increasing population of the town required additional space for better development of commercial activities within the town as well as its surroundings. Inadequate development of commercial space will also hampers the city development works and it's reflects on unplanned growth of the town. The present daily market is not well designed. Some small private shopping complexes have also been up in the town, which required a better space and well designed structure in near future.

5.2.OFFICES :

The main function of this town is as a District Headquarter besides trade and commerce-cum-services. As a District head quarter the town function has been further enhanced. There are total 40nos. (Excluding the D.C. Court, S.P.'s office of different Government departments under the district administration. A large proportion of the workers of the area are engaged as Government sector employees.

5.2.1. OFFICES IN RENTED BUILDING :

There are shortages of office accommodation as per requirement. Only a few nos. of offices have their own building and other offices are in rented building. All of these require a substantial amount of land. In addition, the offices presently in their own sites needs to be upgraded consequent to the up gradation of the status of the town and thus take cognizance of this fact and provide space for the future offices.

5.3. INDUSTRIES :

Industries are momentum of economic growth. They provide the employment to the growing populations also bringing other forward and backward linkages. The town Udalguri is very backward industrially. There are limited small scale and household industries located in different places within the Master Plan Area are mainly producing farming, mixed farming, agricultural and forest based products.

The potential for industries is being scoped, within the plan period which require a specific package including finance, land, infrastructure facilities etc. for the development of this industry. In respect of industrial development of the area it is also necessary to take care in respect of road communication, electricity and other industrial incentives including the liberal credit policies of the banking institutions.

5.3.1. EXISTING INDUSTRIES :

There are total 242 nos. of different types of light industries within the planning area where 8.33 no. of employees have been engaged. The table No. 19(a) and table 19(b) gives the lists of industrial units within the Master Plan area. The surrounding area of Udalguri is fertile and contributes a major portion of agriculture production to the state. There is scope for establishment of agriculture based industries.

TABLE : 19(a)

INDUSTRIAL ESTABLISHMENT WITHIN UDALGURI MASTER PLAN AREA, 2011

UDALGURI TOWN AREA			UDALGURI RURAL AREA	
CATEGORY	NOS. OF UNIT	TOTAL NO.OF EMPLOYEE	NOS. OF UNIT	TOTAL NO. OF EMPLOYEE
Textile based unit	1	10	42	527
General Engineering based Unit	3	15	3	14
Food Base Unit	7	73	31	184
Forest Base Unit	-	--	7	90
Mise. Unit	30	90	119	357
Total	41	188	201	1172

Source : Survey by Town and Country Planning Department, Mangaldai, 2011.

TABLE : 19(b)

INDUSTRIAL ESTABLISHMENT WITHIN UDALGURI MASTER PLAN AREA, 2011-2031

TYPES OF INDUSTRIES	NOS.OF INDUSTRIAL UNITS	TOTAL AREA COVER IN SQ.MT.
Agro based Industries		
Rice / Ata Mills	32	3840
Biscuits/Breads	1	120
China-Muri Industries	2	120
Spices	1	112
Dalmut	1	115
Others	1	115
Mineral based Industries		
Bricks	2	250
Engineering based industries	5	1060
Automobile Servicing and Repairing	1	120
Others	142	3120

Source : Survey by Town and Country Planning Department, Mangaldai, 2011.

CHAPTER - VI

TRAFFIC AND TRANSPORTATION :

The transportation networks play a significant role on effective functional of any urban settlement which effect it's socio-cultural and economic life. A good road network can provide answers to many problems of urban life.

The efficiency of the road network needs to be examined both in terms of inter-city and intracity movement. The growing traffic movement of circulation pattern such as road capacities, inaccessibility, traffic inventory regional and local passengers and good movements demand suitable remedies both in terms of short term as well as long term measures.

6.1. TRANSPORTATION SYSTEM (REGIONAL) :

6.1.1. ROADWAYS :

The town Udalguri is connected by rail road only. The town is connected to other centers indirectly by the National Highway No. 52, via Rowta Chariyali, Kharupetia and Mangaldoi. The Rowta Tangla connecting road passing through the town. At present there are a few secondary roads passing through the Udalguri Master Plan area as well as through the town.

6.1.2. RAILWAYS :

The North Assam Metre Gauge Railway line which is converted to Broad Gauge running between Rangia and Mukakcheleng passing through the town is the only railway line connection for the entire Master Plan Region.

6.2. CIRCULATION PATTERN :

The road circulation of the Udalguri Master Plan Area is connected in three major directions towards East-West and South-East. The N.H. 52 passing through Rowte Chariyali in the eastward direction of the planning area which is almost 12 K.M. away from Udalguri town. The northern part of the planning area is not well connected with road facility compared to area of the planning area. Flooding and isolated location from urban centers is the reason for the area being underdeveloped.

The road system is very irregular in the Udalguri Master Plan Area. The concept of road hierarchy is not properly maintained in the entire region. Lack of road hierarchy, narrow road width, and lack of geometries, poor construction and maintenance of roads has made the level of service poor and intolerable to the urban area and its surrounding. The category of roads can be defined only as P.W.D., Municipality and village road.

6.2.1. PROBLEMS :

1. The N.H. 52 is away from Udalguri town which create the town remote.
2. The roads are narrow mainly in town area which required sufficient width.
3. Lack of spaces for parking will create the problems of congestion.
4. A proper hierarchy of roads are absent in the planning area.
5. The physical condition of the roads mainly in rural areas.
6. Poor road condition and lack of maintenance.
7. Lack of bus and truck terminal facilities.
8. Lack of inter-connection between Traffic signal and traffic node and junctions.

Within the town area 40% of roads are black top, 29% is gravel and another 31% is earthen type of roads.

TABLE - 20

TYPES OF ROAD IN UDALGURI TOWN, 2011

SL.No.	TYPE	DISTANCE (IN K.M.)	% OF THE TOTAL
1	2	3	4
1	Black topped	14.00	40%
2	Gravel	10.00	29%
3	Earthen	11.00	31%

Source : Survey conducted by Town and Country Planning Department, Mangaldai, 2011.

6.3. TRAFFIC VOLUME :

The study of traffic volume on four main selected junctions of major roads of the Master Plan Area including town was carried out by Town and Country Planning, Mangaldai in 2011. The traffic survey reveals interesting facts regarding traffic characteristics such as major road intersections, the peak hour timing, peak hour traffic, peak hour traffic consumption etc. The table No. 21 and 22. shows that Rickshaw, Cycle and Two-wheeler are the slow moving category vehicles whose no. is high in comparison compared to fast moving vehicles such as Bus, Truck and Car.

It is also found that the slow moving vehicles in all roads within the Master Plan Area is predominating there and the volume of fast moving traffic is very insignificant in all the planing area.

TABLE : 21

PEAK-HOUR TRAFFIC VOLUME (In PCU)

(Peak Hours 9.00 A.M. and 2.00 P.M. to 04.00 P.M.)

SL.No.	NAME OF THE POINT	FAST	SLOW	TOTAL	
1	2	3	4	5	
1	Kathalguri Chowk	Time : 9.00 A.M. to 11.00 A.M.			
		(i) Incoming	562(32.22)	1182(67.78)	1744(100.00)
		(ii) Outgoing	407(50.80)	404(40.82)	811(100.00)
		(iii) Total	969(37.93)	1586(62.07)	2555(100.00)
		Time : 2.00 A.M. to 04.00 A.M.			
		(i) Incoming	3.46(60.92)	222(39.08)	568(100.00)
		(ii) Outgoing	421(65.21)	328(43.79)	749(100.00)
2	Goraibari Chowk	Time : 9.00 A.M. to 11.00 A.M.			
		(i) Incoming	107(15.88)	567(84.12)	674(100.00)
		(ii) Outgoing	117(23.26)	386(76.74)	503(100.00)
		(iii) Total	224(19.03)	953(80.97)	1177(100.00)
		Time : 2.00 A.M. to 04.00 A.M.			
		(i) Incoming	70(26.72)	192(73.28)	262(100.00)
		(ii) Outgoing	117(11.48)	902(88.52)	1019(100.00)
(iii) Total	187(14.60)	1094(85.40)	1281(100.00)		

		Tractor	37	1.06
		Total	3512	100.00
3.	Kathalguri Chowk	Bus	27	0
		Truck	88	1.06
		Car	877	4.68
		Rickshaw	140	7.97
		Cycle	1964	70.79
		Two-Wheeler	727	12.98
		Thela	16	0.94
		Tractor	33	1.58
		Total	3872	100.00%

Source : Traffic survey conducted by Town and Country Planning Department, Mangaldai, 2011.

From the above table No. 21 it's observed that a large number of predominance of slow traffic such as Bicycles, Rickshaws and Thelas are high in all the traffic points. Therefore, steps need to be taken considering traffic regulation, specific traffic nodes should be designated in different roads for slow moving traffic at specific period of time.

6.4. TRAFFIC GENERATION NODES :

6.4.1. WORK CENTERS (UDALGURI)

TABLE : - 22

WORK CENTRES (UDALGURI)

SL.NO.	AREA	DESCRIPTION
1	2	3
1.	Town Centre	This is the commercial town consisting of the major shops and daily vegetable markets etc. It is also wholesale market along police station, Hospital, Cultural centre and all the major offices.
2.	D.C. Court	This area encompassing a large area consisting some Govt. Offices.
3.	Golma Chowk	This is also another commercial area with major shops.
4.	Purani Garaibari Chowk.	This area is a little commercial area along with schools and College.

Source : Socio-Economic survey by Town and Country Planning Department, Mangaldai, 2011.

6.4.2. RESIDENTIAL NODES :

In order to study the present "work-place" relationship, it is necessary to identify residential areas and relate them to work centers on the basis of field investigations and observations. The following table has identified important residential areas.

TABLE : - 23.

RESIDENTIAL AREAS (UDALGURI)

SL.NO.	AREA	DESCRIPTION
1	2	3
1.	Main Town Center	This is one of the oldest localities and most density populated one. Most of the residence of this word falls in middle income group.
2.	Ward No. I,II,III	This locality contains the largest amount of population.
3.	Ward No. IV,V,VI	These are newly growing areas. These areas are mainly new residents with satisfactory income.

Source : Socio - economic survey by Town and Country Planning Department, Mangaldai , 2011.

6.5. TRAFFIC TERMINALS:

Location of terminals centers both for inter-city and intra-city traffic play significant role in the efficiency of city traffic. This location is related to the traffic nodes is also very significant. At present there is no terminal facility for the entire region. Therefore it is necessary to examine suitable location to proposed traffic terminal centers.

6.5.1. TRAFFIC SURVEYS AND PROBLEMS :

A number of Traffic surveys were conducted by the department in the year 2008 to identify traffic problems and magnitude. These studies would give a better understanding of the traffic patterns and identifying the problem areas so as to arrive at a better and efficient traffic operation plan.

6.5.2 BUS STATION AND TRUCK TERMINAL :

There is a temporary Public-Bus Stand located in Udalguri Tangla Road (heart of the town) at ward No. 2 which cover an area of 3 Bighas of land and one A.S.T.C. Bus Stand which is located at Ward No. 2 which need to be shifted in suitable place immediately.

At present there is no any truck terminal facility at Udalguri town. There is no On-street, Off-street provision of parking within the town area. It is important to provide of proper truck terminal center for the entire region in near future.

CHAPTER-VII

URBAN INFRASTRUCTURE

URBAN SERVICES AND AMENITIES :

As an urban centre the town Udalguri lacks proper urban infrastructure facilities. As compared to the nearest Tangla Town of the sub-division, Udalguri is slowly growing in case of trade and commercial activities. The Town Committee Udalguri has its limited financial resources Hence, the basic services of the town like roads, drainage, water supply, public sanitation, street lighting, housing marketing shed etc. are poor. After the declaration of Udalguri Town as the sub-divisional Headquarter, special emphasis has rightly been given to provide better urban facilities under the Udalguri town Committee.

7.1 WATER SUPPLY :

At present the Udalguri town has lack of efficient drinking water supply for the town. Most of the households have their own shallow tube wells besides some community tube wells. Most of the people in the whole Master Plan area have their own well facility with deep tube wells. The quality of water of the town is very poor in quality. The iron content in water is very high which is unhygienic. The people of Udalguri Master Plan area filtered ground water for their drinking purpose.

At present, the town Udalguri is covered by Udalguri Town water Supply Scheme built and manages under Udalguri PHC Under the scheme the entire town is divided into two zones that are zone No. 1 (covered ward No.1, 2, & 3) and zone No.2 (covered ward No.4, 5 & 6) with total capacity of 27.00 lacs liters. Under this scheme only 10% of households are connected with pipe water supply. The entire zones under the existing water supply scheme have separate sources and distribution networks having total 4 Nos. of underground reservoir.

Another scheme namely Udalguri Mini Road Water Supply Scheme is covering ward No.2 and ward No. 6 of the town where household water connection is not yet given.

7.2 DRAINAGE AND SEWERAGE :

The existing drainage network of Udalguri town is mostly kutchra in nature and need improvement in near future because of the growing demands. The town does not have any sewerage system. Most of the housing units of the town have either sanitary latrines or pit latrines and these sanitary latrines are covered by pits Some household have their own septic tank with the tank effluent discharged directly into the roadside kutchra drain.

The Udalguri Town Committee (UTC) has taken up a storm water drainage project under UIDSSMT Scheme which covered only 10 kms. of drains.

7.3.WASTE DISPOSAL :

There is no any scientific solid waste disposal management system in Udalguri Town. The present system of waste disposal by the Udalguri Town Committee is inadequate and unhygienic. The Udalguri Town Committee is responsible for collection, transportation and segregation of solid waste generation of the town. At present the garbage of the town are dumped at various localities mainly in open spaces, road sides and low lying areas such as marshy land etc leading to unhygienic living condition. It is needed to identify suitable Govt. land for proposed solid waste disposal for the area.

7.4. HEALTH :

The existing medical facilities in the town are not adequate as per requirement of the region. At present the Udalguri Civil Hospital situated at ward No. 3 at the heart of the town is only the medical facility to serve for entire planning region. In this existing 30 bedded hospital has lack of medical infrastructure facility such as doctors, nurses, technicians etc. to fulfill the health requirement of the entire region and most of the time the hospital is overcrowded leading to unhealthy environment. As per requirement of the region the PHC, polyclinic, dispensary, maternity hospital and health units including private practices are not sufficient to meet up future population demand by 2031.

7.5. EDUCATION :

The town Udalguri has slowly attaining the status of educational center for the district with all general colleges, B. Ed. College etc. but its still insufficient to meet the need of educational facility at this level for the entire population of Master Plan Area by 2031. The details of educational institutions within the Udalguri Master Plan are stated below.

TABLE NO. 24**EDUCATIONAL INSTITUTIONS WITHIN UDALGURI MASTER PLAN AREA, 2011**

SL. NO.	TYPES OF INSTITUTIONS	NO OF INSTITUTIONS	NO. OF STUDENTS
1	L.P. Schools	25	1271
2	M.E. Schools	16	2669
3	H.E. Schools	9	5251
4	Higher Secondary Schools	2	1014
5	College for general Education	1	9227
6	B. Ed. College	1	320
	Total	53	19,752

Source : Survey conducted by Town and Country Planning Department Mangaldai, 2011.

From the above table it is observed that in the town Udalguri has only 1 B. Ed. college and 1 General College, of Higher Secondary School covering 1014 Nos. of student, 9 high schools covering 5215 No. of students, 16 ME Schools covering 2669 No. of students and only 25 LP Schools covering 1217 no. of students besides 3 Missionary Schools which is not sufficient according to planning norms.

The details of high schools and L.P. schools of the town are listed below to show the actual education scenario of the town.

TABLE NO. 25**DETAILS OF HIGH SCHOOLS WITHIN THE UDALGURI TOWN, 2011**

SL. NOS	NAME OF THE SCHOOLS	TOTAL NO. OF TEACHER	TOTAL NO. OF STUDENT	TYPE OF SECTOR (GOVT./PRIVATE/ SEMI GOVT.
1	Golmagoan High School	14 Nos.	306 Nos.	Govt.
2	Udalguri Girls School	25 Nos.	564 Nos.	Govt.
3	Udalguri Higher S. School	43 Nos.	1014 Nos.	Govt.

4	Sankardev Mission High School	11 Nos.	221 Nos.	Private
5	Sankardev Sisu Niketan	18 Nos.	240 Nos.	Private
6	Rabi Kashari Memorial Akademi	18 Nos.	540 Nos.	Private
7	Dimond English School	25 Nos.	1100 Nos.	Private
8	Ramsawrap Agarwala English School	24 Nos.	1080 Nos.	Private
9	Saevati Hard English School	28 Nos	1200 Nos	Private
	Total=9			

Source : Socio-economic survey conducted by T. & C. P., Mangaldai-2011.

TABLE NO. 26

DETAILS OF L. P. SCHOOLS WITHIN THE UDALGURI TOWN, 2011

SL. NOS.	NAME OF THE SCHOOLS	TOTAL NO.OF TEACHER	TOTAL NO. OF STUDENT
1	Rangamakha L.P. School	2 Nos	48 Nos.
2	Manpur L.P. School	7 Nos.	151 Nos.
3	Purani Goroimari L.P.L. School	7 Nos.	259 Nos.
4	Udalguri Town Bodo L.P. School	4 Nos.	35 Nos
5	Niz Udalguri L.P. School	6 Nos.	160 Nos.
6	Thana Udalguri L.P. School	2 Nos.	59 Nos.
7	purani Thana L.P. School	3 Nos.	140 Nos.
8	Bellow Chuburi L.P. School	2 Nos.	160 Nos
9	3 No. Sapkhaiti L.P. School	2 Nos.	88 Nos.
10	1 No. Sapkhaiti L.P. School	3 No.	29 No.
11	Harpur L.P. School	3 Nos.	142 Nos.
	Total = 11		

Source : Socio-economic survey conducted by T. & C. P., Mangaldai-2011.

7.6. OTHER SOCIO CULTURAL INSTITUTIONS :

7.6.1. PARKS AND OPEN SPACES :

The parks and open spaces are very essential factors for plan development of any town and city. There is a few park and play grounds available as open spaces in the whole Udalguri Master Plan area which require upgradation and extension of existing amenities where it possible. Within the town area there are only 5 Nos. of parks and playground available which mainly located at Jyoti Bishnu Children Parks (beside Uttar Udalguri L.P. School), Sadbharana Children park located at 3 No. Sapkhaitibher, U. N. Brahma parks located at Manpur area.

There are also two nos. of Stadium available within the Udalguri Master Plan Area which located one at Purani Garaibari adjacent to ward No. 6 and another is at Manpur.

7.6.2 POST AND TELEGRAPH OFFICES :

At present there are only 2 Sub-Post office located within Udalguri Town area. These 2 Sub-Post Office can serve for entire Master Plan.

7.6.3 FIRE SERVICES :

At present there is only one Fire Station within Udalguri Master Plan Areas which is inadequate to support emergency calls for the Master Plan Area and its hinterland.

7.6.4. POLIC STATIONS :

There is only one police station located at heart of the town in ward No. 3 which is not sufficient to serve for future population demand by 2031.

7.6.5. CREMATION GROUND AND GRAVE YARDS :

The existing Burial ground and Cremation Ground are not adequate to serve all the population of the Master Plan Area. There are only 2 No. of Cremation Ground located near Nalbari No. 1 and No. 2 and 4 Nos. of Grave Yard are available within Master Plan Area that are (a) Nalbari No. 1 and No. 2, (b) Galandihabi, (c) Bekigaon and (d) Kathalguri.

7.6.6. PETROL PUMP :

At present there is only one petrol pump located within the town area which can serve the entire Master Plan region demands which is very inadequate as per requirement.

7.6.7. TELEPHONE EXCHANGE :

There is one Telephone exchange located within Udalguri Town area and the total employee of the telephone exchange is only 10 which serve all the entire Master Plan Area population is inadequate as per population demand as a regional context.

7.6.8. STREET LIGHTING :

At present there is insufficient street lighting facility in the entire town. The Town Committee of Udalguri has covered the town with street lighting facility in only 10 k.m. in length which is not sufficient.

7.6.9. ELECTRICITY :

The Assam State Electricity Board has 1841 enlisted users including 1460 numbers of industrial connections.

7.6.10. FINANCIAL INSTITUTIONS :

Udalguri Town and the surrounding areas are well served by six nationalized banks.

CHAPTER-VIII

PROPOSED LAND USE PLAN :

8.1. AIMS AND OBJECTIVES :

The aim and objective which are attempted to be achieved in preparation of Udalguri Master Plan are as follows :-

- a. To improve the existing condition of Udalguri Master Plan area and to develop the urban structure with a population of 62,832 by 2031.
- b. To integrate the various components within the Master Plan Area.
- c. To improve the overall quality of life by providing an efficient economic growth in the area by increasing economic activities like Industries, services and trade and commerce etc.
- d. To improve connectivity in Udalguri Town with its adjoining rural areas and develop proper Intercity Transportation and communication network linkages with the hinterland areas.
- e. Decentralized Planning Approach is considered for all the Master Plan Area with balanced urban growth through maintaining eco-friendly concept.
- f. Efficient and judicious utilization of land within Master Plan Area.

8.2. BASIC CONSIDERATIONS :

Detailed studies have been considered in respect of land use pattern, traffic and transportation, physiographic, housing and services and work centers etc. which have brought out many significant problems being experienced by the town. These studies have also brought out opportunities available for proper development of Udalguri in future. A simultaneous studies of both problem as well as opportunities, has thrown up the following basic points which will form guiding factors for preparation of the Master Plan area for Udalguri.

1. Development of administrative centres like various Public and Semi-Public offices in State, Regional and Local level.
2. Encouragement for establishment of small and medium Industries.
3. Decentralized and balanced development of commercial activities through creation and improvement of shopping areas both retail and whole sale markets to relieve congestion in the present town center.
4. The provision of circulation pattern to provide direct links between the different urban and rural areas.
5. Rational distributions of residential density to minimize disparities of commercial, economic and socio-cultural activities.
6. Provision of utility and services for the whole Master Plan area to improve and upgradation of proper drainage network linkages, parking facilities, garbage disposal in an integrated manner.

8.3. PLAN CONCEPT :

The udalguri urban agglomeration is presently a town with number of new urban settlement with majority middle class people. Different types of settlements are forming with several castes and communities. A newly formed town likes Udalguri requestes critical appraisal of the problems and the assessment of the future need during Plan Period, it functions as administrative headquarter town for the whole district and considered as trade, commerce as well as socio-cultural center in the district.

8.4. LAND USE PATTERN :

The proposed land use plan has been prepared taking into consideration the minimum dislocation of existing land uses inter-relating the highest order of activities with planning areas and establishing home work place relationship between different sectors of Master Plan. To avoid single use of land of the area to permit the mixed land uses to reflect the area more variety and make the land used pattern more functional. The plan prepared will determine a physical base for massive new growth through a major programme of land acquisition and installation of infrastructure.

8.4.1. RESIDENTIAL AREA :

Residential areas are proposed to meet the deficiency of existing requirement as well as to accommodate additional population of about 62,832 by 2031. These areas will be developed as self contained unit with provision of all community facilities and services and it should be free from population and other nuisance. The predominantly mixed residential areas which suffer from overcrowding and lack of amenities should however be taken for reconsideration. In residential uses it's considered to plan interaction with other groups and with the work center in a harmonious way.

According to the studies conducted the residential areas are under utilized. Hence, in the proposed plan emphasis is laid on increasing the density so as to achieved optimum utilization of urban land use. An area of 1262.09 hectares has been earmarked for the the residential area which includes 670.06 hectares of existing residential area. Land under this use as proposed thus covers about 36.44% of the total Master Plan Area.

The residential areas are again divided in 3 zones on the basis of density. They are (1) High density Zone, (2) Medium density Zone and (3) Low density Zone. The density ranges within these Zones are (i) 80-80 persons per hectares, (ii) 40-60 persons per hectares and (iii) 20-40 per hectares respectively.

8.4.2. COMMERCIAL AREA :

At present the commercial activities mainly the major retail and daily markets etc. are concentrated in the center of Udalguri town and some parts of the commercial activities are scattered all over the Master Plan Area. There is no existing wholesale commercial market center within the master Plan Area which urgently require space for sufficient loading and unloading yard for better economic development of the area. The road side shopping centers within the town are however growing without parking spaces and insufficient loading and unloading yard. The roadside development of shopping centers will create more congested and haphazard areas in near future.

It is therefore, proposed to make the area more functional by providing spaces for parking facility and proposed to concentrate some commercial activities in one specific location and apply neighborhood commercial development with good accessibility and consider home market place linkages.

The existing Govt. Marketing Center near Udalguri Town Committee (UTC) office is proposed to be extended and established as Multistoried Commercial Shopping Complex with earmarked of 3.5 Bighas of land approximately. On the other side 3.06 bighas of land near old bus stand of Udalguri shall be earmarked for another Multistoried Shopping Complex.

A Wholesale Commercial Market Center is proposed at Niz Udalguri area by the side of the proposed Truck Terminal which can help to facilitated city commercial loading and unloading needs and it would also act. as the market centre for the people of the surrounding region. The total land area has to be earmarked for commercial use is 48.19 hectares which is 2.31% of the total developed area.

8.4.3. INDUSTRIAL AREA :

Industry is a very important component of land use which accelerates the growth of urbanization as well as to boost the urban economy. The industrial development of the Udalguri Master Plan Area has developed very poorly ; there are hardly any small and medium types of industry within the Master Plan Area. But it is observed that there scope for developed of small to medium types of industries in the plan area in near future. A very few Nos. of small scale industries has been developed routinely within Udalguri town area which is not sufficient for filling up future urban economic demand.

The Udalguri Master Plan area itself has a big hinterland where the sources of raw material are available and the region is surrounded by good connectivity of rail and roads will support to developed the region industrially in near future. Due to its availability of raw material, well linkages of transportation facility and availability of local labor, the Udalguri Master Plan area has to be developed industrially as agro-based industries and food processing industries etc.

The centres proposed for industrial development requires special treatment by way of location, position of services and accessibility. The industrial areas are well connected by proposed road system and has to be linked with proposed National Highway. It is proposed to take the area by other infrastructure like power, drainage, water supply etc. The air, water and noise pollution aspects are also fully considered while selecting location etc. An area of about 111.70 hectares or 5.35 % of the total developed area of Master Plan has been earmarked for industrial use. This area incorporates the existing area of 0.82 hectares.

8.4.4. PUBLIC AND SEMI-PUBLIC :

Public and semi-public uses include a wide range of activities such as educational institution, Govt. Offices, Health and Cultural center etc. The plan proposed and area of about 133.91 hectares or 6.42 of the total master Plan Area for public and semi-public uses.

Under this category of land use the earmarking intends to propose Government Offices, Educational and Health facilities in the form of Primary, Secondary Schools, Health centers, Cultural Centers, Community Halls, Cultural centers etc.

8.4.4.1. GOVT. OFFICES :

As a District Headquarter the Master Plan area has to be developed with the major infrastructure like Govt. machinery consisting of Public Building etc. is to be proposed with a view for future expansion of administrative functions.

In locating administrative complex, the available buildable land is considered as prime factor. At present, there are about 40 Nos of different offices under different administration level like State, Central and local. Most of the Govt. offices are scattered all over the urban area of Udalguri Master Plan area and some of them are in rural area occupying rented houses. It is also observed a few Nos. of private office buildings, NGO's, Banks post office etc are scattered all over the Udalguri Master Plan area with inadequate spaces with lack of infrastructure facilities. So it is proposed to have new office complex at 3 No. Sapkhaitibher and the existing D.C. Court and the proposed office complex would be the major administrative complex of the town as well as Master Plan region encompassing an area of 65.72 hectares of land.

8.4.4.2. EDUCATION :

The education spaces would be more diffused covering the entire Master Plan. The facilities of lower level schools like primary and pre-primary schools, Higher Secondary, Colleges etc. which are not sufficient to meet the need of the educational demand for the entire population of Udalguri Master Plan by 2031.

The following table No.27 given below gives the detail requirement of education institutions demand in Master Plan Area by 2031 as Udalguri will serve the regional demand District as a whole.

TABLE NO. 27

PROJECTED EDUCATIONAL FACILITY FOR THE MASTER PLAN AREA BY 2031

SL. NOS.	CATEGORY	EXISTING NUMBERS	NORMS ADOPTED	PROPOSE D NUMBERS	TOTA LNO.	AREA IN HECTARE
1	L.P. Schools	25 Nos.	1 Primary school is for 200 students	37 Nos.	62 Nos.	-
2	M.E. Schools	16 Nos.	1 for 3000 population	5 Nos.	21Nos.	-
3	H.E Schools/ Higher Secondary Schools	11 Nos.	1 for 7500 population	6 Nos.	8 Nos.	-
4.	College for general Education	1 Nos.	1 college for 15000 population	4 Nos.	5 Nos.	4.00 Ha

Source : Norms as per UDPFI Guidelines.

From the above table it has been proposed as per requirement for 37 more No of L.P. Schools, 5 more No of M.E. Schools and 13 more Nos. of collages including junior colleges are for fulfillment of the educational need of the region. It is also proposed to have the entire Primary and Pre-Primary Schools located nearer to the residential areas to maintain school home relationship in a perfect way.

It has been also observed from our surveys that the land allotted for all these schools and colleges is not sufficient and there is also lack of facilities and services. It has been proposed to have immediate augmentation of such facilities and services to cope up with the requirement of projected population by 2031.

It is also proposed to have technical college, teachers training centers, other computer centers, professional training centers, for special courses where necessary which should be located in the Govt. vacant land near 3 No. Shapkhaitibher which will also help the town grow socially in systematic way.

8.4.4.3. HEALTH :

The health facility is not sufficient for the entire Udalguri Master Plan Area. The growing population of Udalguri Master Plan region by 2031 will have an immediate requirement of 200 beds of Civil Hospital with other health infrastructures to better serve not only the master plan area but for entire District. A 200 beds hospital constructed near Bar Nagaon village at 3 No. Shapkhaitibher will help to fulfill to serve the future requirement of health demand for the entire surrounding.

TABLE NO. 28

PROJECTED MEDICAL FACILITY FOR THE MASTER PLAN AREA BY 2031

SL.NOS.	CATEGORY	EXISTING NUMBERS	PROPOSE D NUMBERS	TOTAL NO.
1	Civil Hospital	2 Nos.	Nil	2
2	Maternity Hospital	Nil	1	1
3	Dispensary	Nil	6	6
4.	Health Unit	Nil	2	2

Survey conducted by Town and Country Planning Department, Mangaldai, 2011

It has been also recommended to improve and maintain the environment quality of existing hospital and to established more Nos. of PHC, Polyclinic, dispensary, Maternity Hospital and other health units including private practices etc. to serve the medical requirement of the area in a better way .

8.4.4.4. CULTURAL INSTITUTIONS :

The social and cultural institutions are very qualitative factors as it enriches the social life of the town. To centre to the growing demand of social and cultural facilities, cultural institutions of different orders are proposed at all levels. The existing socio-cultural facilities of the region are very inadequate and hence the urgent need of upgrade and developed the existing facilities as a decent manner. In this regard it is proposed to have civic amenities at decentralized locations to cover all Master Plan area to make the area grow as systematic manner.

The civic amenities will contain town halls, auditorium, Art Gallery, clubs, library, community halls, Musium etc. The existing District Library located at ward No. I is to be upgraded and the Theatre Hall located at ward No.III needed, to be shifts at a suitable place near to Shapkhaitibher village No. 3 to reduce city congestion and the existing stadium need upgrade with adequate parking facility, lodge and the total capacity should be extended to cover the future demand. It is proposed to have some of the socio-culture amenities could be located near at the administrative area.

8.5. PUBLIC UTILITIES AND SERVICES :

8.5.1 WATER SUPPLY :

The provision of sufficient safe and potable water, proper drainage, power distribution etc. which are very essential for healthy urbanization is lacking in Udalguri Master Plan area. The piped water supply by Udalguri Town Committee (UTC) in the Municipal Area is not sufficient to meet the demand of people. Only 40 lpcd water supplied have cover only 10% of the Municipal area and a few number of Rural Water Supply Schemes have fulfilled the rural areas of Udalguri Master Plan Area which is also not sufficient to fulfill the future water supply demand of the region by 2031.

Considering the present situation of water supply requirement of the Udalguri Master Plan Area it is proposed to upgrade and extend the existing water supply schemes with set-up of water treatment plant against each water pumping stations. Overhead water reservoir should be permitted for covering water supply through all the plan area.

Considering on average consumption of 100 lpcd the Municipality requires to have the installed capacity of 2.90 MLD which is considered to merge with the existing capacity for the town area by 2031. On the other side 6.28 MLD water demand is required for entire Udalguri Master Plan Area covering town area by 2031. It is proposed to have decentralized networks of pumping stations which should cover around 5000 population per station as considering planning standard. For this 10 Nos. of additional pumping stations would be required by plan period.

8.5.2. DRAINAGE AND SEWERAGE :

There is no any proper drainage system in the town and the existing drainage system is mostly through open channels and surface drain. Most of the housing units of the town have either sanitary latrines or pit latrines and these sanitary latrines are covered by pits. Some portion of the household has their own septic tank effluent discharge directly into the roadside kutchha drain.

Almost 80% of the drainage of the town is kutchha in nature and which require proper improvement of the existing drains linkage networks for growing population demand. It is proposed to be prepare a detail scientific Drainage Master Plan for networking of city drainage system covering all the town areas with its adjoining areas and its will also cover all the entire Master Plan Area to solve this drainage network problem in near future.

8.5.3. WASTE DISPOSAL :

There is no any garbage dumping side of the Udalguri Town Committee (UTC) for disposal of solid waste of area. An absence of any proper scientific dumping ground of the town which increase the town unhygienic living condition leads to environment pollution. It is estimate that the generation of solid waste per day is a quarter kilogram in such a small town like Udalguri.

It is proposed to adopt a scientific solid waste management system to solve this problem as per population demand by 2031. A plot of land measuring 12 Bighas has been earmarked near Niz Udalguri area (by the side of the proposed national Highway) and another side near Udalguri kahibari Road for solid waste dumping of the Master plan Area.

8.5.4 ELECTRICITY (POWER) :

The expansion of urban growth has increased the demand of electricity. Power must be available for domestic, industrial and other activities. Presently the Assam State Electricity Board has supply the electric power to the town and its adjusting area is not sufficient as city requirement which create power shortage in all the Master Plan area. It is recommended that the distribution system provisions are like one electric sub-station of 11KV for a population of 15,00 as a general standard for all categories of towns and the estimated requirement of power supply consumption works out to be 2 kw per household at the town level is appreciated which includes domestic, commercial, industrial and other requirements.

A land has been earmarked for Industrial Zone at Khanghalabari near northern side of the proposed National Highway which will increase power demand for near future and for this to croup up shortage of power demand during plan period it is estimated of total requirement of power within the udalguri Master plan are will be about 25,129 K.W.V.H.

8.5.5 PARKS AND OPEN SPACE :

Parks and open space are a very essential component of land use which directly related to a healthy environment of any place. The existing public open spaces covering an area of 81.69 Hectares which is cover 6.14% of total developed area and 2.36% of the total Master Plan area. The land under this component is inadequate for existing population of the Master Plan Area. Considering the space planning standard, there is an immediate requirement of parks and play grounds (open spaces) which are proposed in each of the neighborhood units for recreational facilities.

On the basis of total projected population by 2013, the requirement of area for parks and open space has been worked out to be about 25.75 Hectares i.e. 1.23% of the total developed area and 0.74% of the total Master Plan area.

At present the weekly market of Udalguri Town Committee is proposed to be developed as recreation center where an approximately 15 Bighas of land has been earmarked.

8.5.6. WATER BODIES :

The Galandi and Kakrakhati River are the two major water bodies within the Udalguri Master Plan area and a few Nos. of small water streams are gradually connected to this two main stream Beki River is one of the main streams connected to river Galandi. This two major water bodies can be used for major recreation like boating, water sports etc. and also should be developed for necessary beautification.

8.5.7. GREEN BELT :

In the northeastern part of the Udalguri Master Plan area mainly Thana Udalguri No. 1 and Thana Udalguri No. 2 area have been earmarked as green Belt Zone. This is a low lying river basin area of River Galandi and many small tributaries are connected to this river. It is also a flood prone area of the region. Therefore, this basin should be preserved and future development of the area should be prohibited. This area has been demarcated as Green Belt Zone to reserve the water bodies and forest to maintain ecological balance.

8.5.8. POST AND TELEGRAPH OFFICES :

It is proposed that there would be established 14 more Nos. of Sub-Post Office located in different suitable location and 1(one) Main Post Office is required and it will connect to all these 14 No. of Sub-Post Offices as per regional demand.

8.5.9. POST AND TELEGRAPH OFFICES :

It is proposed to have one more Fire Station within the Udalguri Master Plan Areas for better fire service .

8.5.10 CREMATION GROUND AND BURIAL GROUND :

A No. of Cremation Grounds should be proposed at convenient location to cater to the needs of the entire region and the existing Cremation and Burial Grounds are proposed to be extended and upgradation as scientific manner.

8.5.11. PETROL PUMP :

It is proposed to establish 2 more Petrol Pumps within the Udalguri Master Plan area at suitable location to serve the city in a better way.

8.5.12. STREET LIGHTING :

It is proposed that 20 km. of lengths should be cover with street lighting facilities to cover the entire town area.

8.5.13. POLICE STATIONS :

It is need to be improve the existing infrastructure facilities of the police station from all sides. Further the town would also need one more No. of Police Out-Post in the area near to Battalion Camp. at Udalguri Kahibari Road.

8.5.14. TELEPHONE EXCHANGE :

It is proposed to have 3 No. of sub-telephone exchange for all the entire Master Plan Region by 2031.

8.6. LAND USE DISTRIBUTION :

After calculating the land under different urban components in the Udalguri Master Plan Area, the rate of urban spread is found to be 16.93 hectares per 1000 population. However, the proposed rate is adopted as 12 hectares per 1000 population just meet the future requirement of different activities for development of Master Plan Areas. The following table No. 29 shows the details of proposed land use for the Udalguri master plan area by 2031.

TABLE NO. 29
PROPOSED LAND USE AND ALLOCATION (2031)

Sl. NO.	LAND USE	AREA IN HECTARE	P.C. TO DEVELOPED AREA	P.C. TO TOTAL AREA	LAND IN HECTARE ALLOCATION PER 1000 POPULATION
1	Residential	1262.09	60.46	36.44	20.08
2	Commercial	48.19	2.31	1.39	0.77
3	Industrial	111.70	5.35	3.23	1.80
4	Public-Semi-Public	133.91	6.42	3.87	2.13
5	Parks and playgrounds, Open Spaces	25.75	1.23	0.74	0.40
6	Transport and Communication	505.71	24.23	14.60	8.04
	Developed Area	2087.34	100.00	-	-
7	Water bodies	87.45	-	2.52	1.40
8	Agriculture	1052.32	-	30.38	16.74
9	Green Belt	236.38	-	6.82	3.80
	Total Area	3463.49	100	100	55.16

Source :-Based on survey conducted by Town and Country Planning, Mangaldai, 2011.

CHAPTER-IX

PROPOSED CIRCULATION PLAN :

The proper growth and function of any town or city it's much depend on an efficient circulation plan of the area backed by efficient transportation system. transportation is the basic infrastructure for promoting and guiding future development of any town or city. A efficient functioning of the Udalguri Master Plan area can be achieve by developing functionally interrelated with land use pattern and it's connected by efficient circulation system with minimum travel distance.

The Circulation Pattern of the Udalguri Master Plan Area has been designed with the following basic consideration for efficient functioning of the area for the coming plan period.

9. Optimum utilization of the existing transportation system through widening extension and improvement of the existing road networks connected with better public utilities such drains, water mains, electric and telephone line etc.
10. Efficient linkage of all the entire Master Plan Region with its surroundings.
11. Development of new roads with necessary transportation facilities such as truck terminal, bus terminals etc.
12. Direct linkage between the different traffic generation points for easy accessibility.

9.1. REGIONAL LINKAGES :

A. ROAD LINKAGE : The Udalguri Master Plan Area has good linkage with its nearby surrounding region with road linkage. In the east of the Master Plan area the major namely Udalguri Barbengra Road (Way to Kalaigaon) is a major primary road of the area is connected to Udalguri Kahibari Road in the east side of the Master Plan area which is the way to go Rowta through Jhargaon.

- * The another alternative road namely Kaporpur Barnagaon Road which is a major secondary road of the region passing through Sapkhaitibher No. 1, 2 & 3 areas and connected to Udalguri Barbengra Road (Way to Kalaigaon) and in the north the road is connected with proposed National Highway which is one of the major road of the area is required immediate widening.
- * The road way to Khaurang which is the another main road passed by the hert of the town through connected with the Udalguri Railway line and in the south finally link with Barbengra Road (the way to Kalaigaon Road) which is one of the most important Primary road of the Master Plan area require widening and improvement to better serve the area in a regional context.
- * The another access road passing through the Nalbari No.1 and No.2 area of the Master Plan and in the south its connected to Udalguri Kahibari Road which is proposed to extend in the North side and connect it with the road way to Bhairabkundo.

B. RAIL LINKAGE : A Broad Gauge (B.G.) Railway Line passing through the heart of the Udalguri Town is connected to Rangia through Tangla in the East-West direction is the only one Railway line of the whole Master plan Region. It is recommended that the Railway linkage of the region should developed and better link with important nearest point/junction in near future.

C. NATIONAL HIGHWAY (N.H.) : A National Highway (N.H.) is proposed in the northern side of the Udalguri Master Plan Area which will connect to National Highway No. 52 through Rowta Chariyali in the north-eastern direction and connect to Harisingha in the north-western direction. This proposed National Highway (N.H.) will serve to better the accessibility to its near surrounding regions and also help to grow the region industrially in near future.

9.2. CIRCULATION PATTERN :

The proposed road system together with new linkage is designed to have a proper road circulation throughout the Master Plan Area. The road hierarchy is proposed to provide free vehicular movement within the Udalguri Master Plan Area and to relieve the existing congestion at a regional level.

The road system has the following categories of Roads :-

1. National Highway.....65 to 80 ft. (30 to 60 mts).
2. Primary Distributors.....50 to 60 ft. (18 to 30 mts.)
3. Secondary Distributors.....30 to 45 ft. (12 to 18 mts.)
4. Local Access Road (Local Distributors).....20 to 30 ft. (8 to 12 mts.)

A few numbers of local access roads has been proposed and link it with nearby access roads for easy and smooth pedestrian and vehicular movement covering all the entire Master Plan Area. In case of road circulation in the Master Plan Region it is considered to be improvement and maintenance of road hierarchy at national standard and in case of local street it is to encourage for access roads with residence, business or other abutting property having necessary parking facilities.

The improvement and widening of the following roads is essential to improve the efficiency of the whole road network :-

1. Kaporpur Barnagaon Road connecting to Proposed National Highway.
2. The road passing through Manpur in the North and connected Udalguri Barbenga Road in the South.
3. Udalguri Barbenga Road connected to propose National Highway in the north and in the south-east it's connected to Udalguri Kahibari Road.
4. The road passing through the Kahibari area in the south-east and directly connecting to Bhairabkunda in the north crossing through proposed National Highway.

The road need for necessary extension for efficient accessibility of the region is as follows :-

1. The major Primary roads connecting to Bhairabkunda in the north and connecting to proposed National Highway in the south direction.
2. Secondary and local access roads in the Kathalguri, Purani Garaibari, Galandi Habi, Bellow Chuburi etc. areas.

9.3. LEVEL CROSSING :

The Broad Gauge (B.G.) Railway Line of Udalguri has passed through the Master Plan area from heart of the town east to west direction where grade crossing is necessary for efficient movement of Circulation Pattern. In some important crossing points where suitable arrangement for level crossing is urgently required.

9.4. TERMINAL FACILITIES :

A BUS TERMINAL : The existing Public Bus-Stank at heart of the town Udalguri don't have adequate space for passing Buses and Passengers easy movement which will create city congestion in near future due to its located. There is no scope for expansion of the existing Public Bus Stand. It is proposed to utilize a portion of land (12 Bighas) near 3 no. Shapkaitibher, the site near to Govt. Vacant land (near Udalguri Barbengra road & adjacent to Civil Hospital).

One Mini Bus stand is proposed at Purani Garaibari site at ward no. 6 and another one at Monpur near pertol pump adjacent to ward no. 1.

B. TRUCK TERMINAL : In Udalguri Master Plan area there is no any Truck Terminal facilities exist which required urgently for better Circulation Pattern facilities and overall improvement of the region. One No of Truck Terminals have proposed in the National Highway, adjacent to proposed whole sale market. All the truck can be parked for loading and unloading in the nearest site located adjacent to the proposed wholesale commercial area and proposed industrial area.

The open yard should kept open for all the trucks to get loaded and unloaded. The loading and unloading site should provide the space for storage of goods coming into or out of the centers. The

site for Truck terminal is proposed at north side of the Nalbari No.1 and No. 2 and also near north side of the proposed National Highway which cover total area of 20 Bigha.

9.5. TRAFFIC PARKING :

The Udalguri Master Plan area is being an underdeveloped area where hardly any traffic parking facilities is available within the region. There is an urgent need for specific space for parking facilities for the overall development of the town as well as the whole area. Therefore it is proposed to provision of adequate space for parking facilities in the commercial, industrial and official areas should be provide immediately as phase wise at the time of reconstruction and renovation of these areas.

9.6. TRAFFIC REGULATION :

The traffic regulations are important factor where roads are not sufficiently wide to carry the maximum traffic volume. It that case one way road system, segregation of traffic and regulatory measures should be followed. A properly designed one way road system could be increase the roadway capacity significantly and reduce accident. It is suggested that one way road system can be efficiently applied in the proposed National highway with its adjoining regions.

The regulatory measures may includes the control of improper driving, the prohibition of double parking, better control of pedestrian movement, restriction on parking on street and control of the loading and unloading buses.

CHAPTER-X

10.1. PLAN IMPLEMENTATION :

The main objective of preparation of Master Plan is to provide a physical frame of land use and communication for a projected period of 20 years with major objective of regulation and enforcement. It is a fact that the plan has been prepared as per minimum standard for providing to the community the satisfactory level of civic amenities, services and facilities and therefore, implementation of the plan should be taken up in systematic manner to achieve the objective of the plan development.

The effort for preparation of Master Plan and its adoption by Govt. will not improve the quality of urban life unless sustained efforts, are made to implement the plan with the enforcement of Zoning Regulation. A Zoning plan has been prepared for earmarking the broad used area with definable boundaries. And this Zoning Plan should be read in conjunction with proposed land use and prescribed Zoning Regulation.

10.2. PLAN ADMINISTRATION :

The Master Plan and Zoning Regulation for Udalguri as presented here contains the broad policies and programmes for improvement and development of Udalguri Master Plan area upto 2013. The administration of this plan from its initiation to the realization will be carried out within the frame work of the Assam Town and Country Planning Act, 1959 as amended from time to time.

The Town and Country Planning Organization of the State Government besides preparation of the Master Plan and Zoning Regulation for Udalguri will provide necessary guidance by rendering technical advice and by arranging proper scrutiny of the development schemes so as to ensure that the proposed development of Udalguri conform to the proposals contained in the Master Plan and Zoning Regulation.

The section 8 of Assam Town and Country Planning Act, 1959 empowers the Government to constitute a Development Authority for the Udalguri Master Plan Area for enforcement, control and implementation of Development proposals as envisages in the Udalguri Master Plan. As per section 13 of the same act all development to be undertaken within the Udalguri Master Plan Area will be subjected to technical scrutiny and approval from the development authority so as to conform with the Master Plan.

10.3. PUBLIC PARTICIPATION :

Public consciousness and public participation are the important aspects of successful implementation of the proposals of Master Plan. Citizens play a major role in the physical development of any town by undertaking with construction works, reconstruction of any structure and development of land for various uses. Therefore, co-operation and active participation of public are encourage for successful implementation of any Master Plan. It is also encourage for provision of public private partnership options for developmental works for Udalguri Master Plan Area where its necessary.

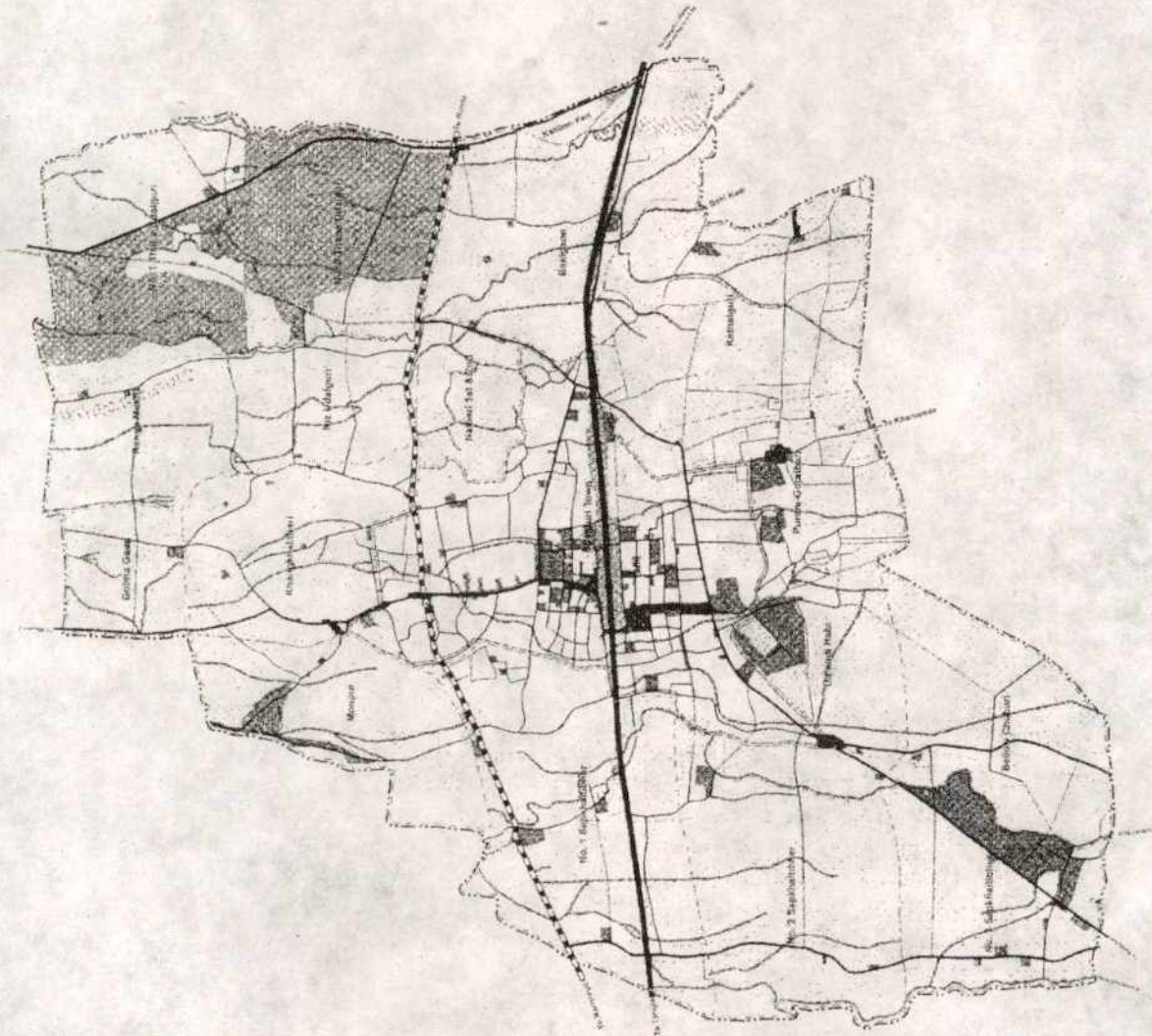
10.4. FISCAL PLAN :

There may be some changes of this Draft Master Plan for Udalguri and therefore, no fiscal plan has been worked out at this stage. The final Master Plan when completed would provide a basic for preparation of five yearly development programmes and yearly fiscal plans for implementation.

10.5. CONCLUSION :

Planning is a continuous process and the preparation of Master plan implies its actual translation into reality. Lack of planning in physical development leads to various problems which will help to city expansion in very unsystematic way created haphazard growth. The Master Plan for Udalguri is not merely a blue print but an expression of the sustained desire of its people to make Udalguri a worthwhile place to live, work and play. Citizen participation in all decision making process of planning activities and functions will implement the master plan success in a very systematic way.

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



LEGENDS

	RESIDENTIAL
	COMMERCIAL
	INDUSTRIAL
	PUBLIC & SEMI-PUBLIC
	AGRICULTURAL
	PARKS & PLAYGROUN
	GREEN BELT
	VACANT LAND
	WATERBODIES
	RAILWAY STATION
	RAILWAY LAND
	CREMATORIUM GROUND
	STREAM
	MASTER PLAN BOUNDARY
	MUNICIPAL BOUNDARY
	VILLAGE BOUNDARY
	PROPOSED NATIONAL HIGHWAY
	PRIMARY ROAD
	SECONDARY ROAD
	TERTIARY ROAD
	RAILWAY LINE

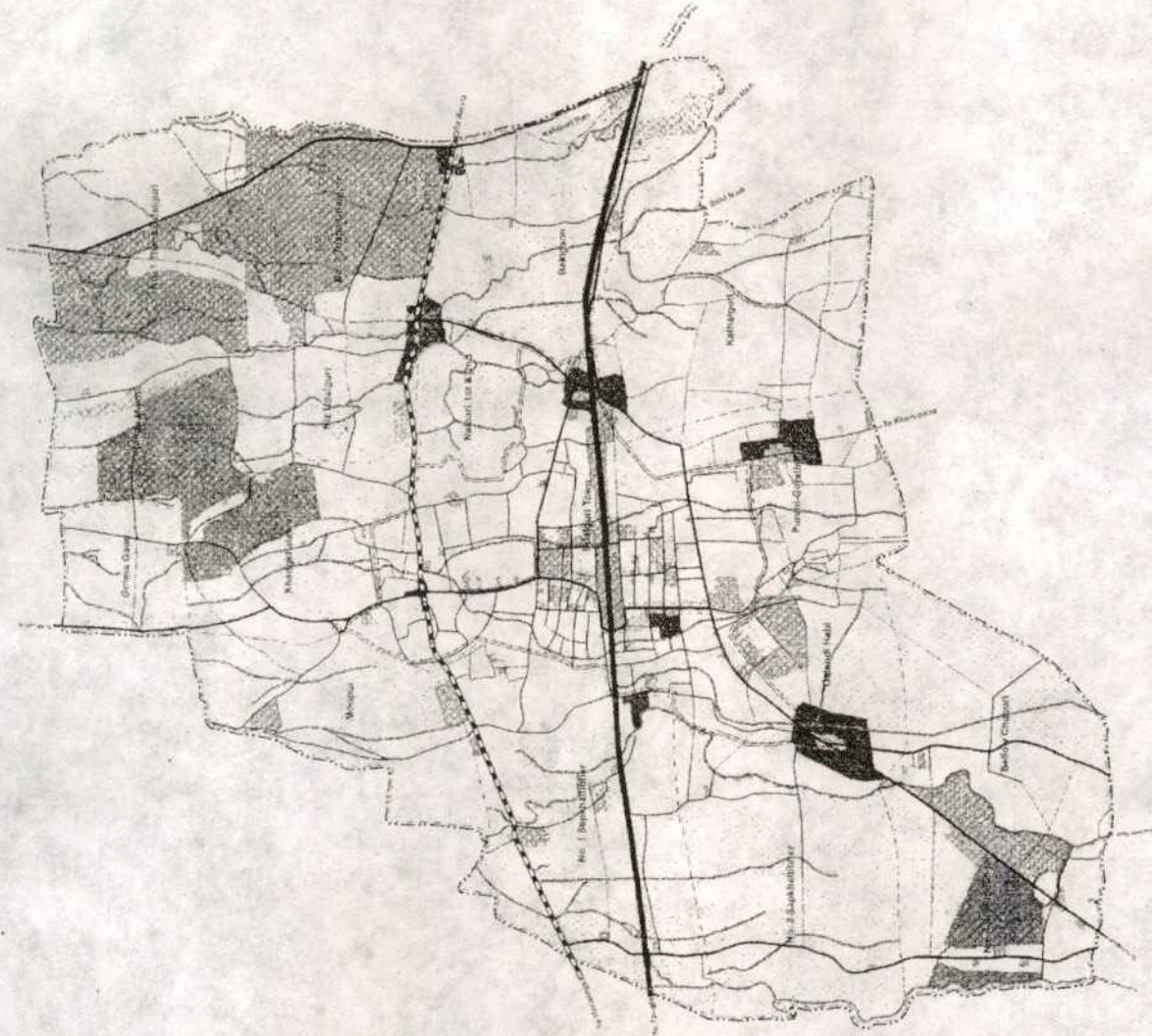
Prepared by:
Town and Country Planning
Govt. of Assam

**EXISTING LANDUSE PLAN, 2011
MASTER PLAN FOR UDALGURI**

PREPARED UNDER SECTION 16(2) OF ASSAM
TOWN & COUNTRY PLANNING ACT, 1959 AS
AMENDED AND APPROVED BY THE
GOVT. OF ASSAM, VIDE NOTIFICATION NO.
1013/2011-2012, DATED 05.11.2011.

(Signature)
A. GOSWAMI
DIRECTOR, TOWN & COUNTRY PLANNING
GOVT. OF ASSAM, DISPUR
GUMWAHATI - 781005





LEGENDS	
EXISTING	PROPOSED
RESIDENTIAL	RESIDENTIAL
COMMERCIAL	COMMERCIAL
INDUSTRIAL	INDUSTRIAL
PUBLIC & SEMI-PUBLIC	PUBLIC & SEMI-PUBLIC
AGRICULTURE	AGRICULTURE
PARKS & PLAYGROUND	PARKS & PLAYGROUND
GREEN BELT	GREEN BELT
WATERBODIES	WATERBODIES
RAILWAY STATION	RAILWAY STATION
RAILWAY LAND	RAILWAY LAND
BUS STRAND	BUS STRAND
BUS TERMINUS	BUS TERMINUS
TRUCK TERMINUS	TRUCK TERMINUS
CREMATORIUM/GHAT	CREMATORIUM/GHAT
CLUSTERING/CLUSTERS	CLUSTERING/CLUSTERS
STEREAM	STEREAM
MASTER PLAN BOUNDARY	MASTER PLAN BOUNDARY
MUNICIPAL BOUNDARY	MUNICIPAL BOUNDARY
VILLAGE BOUNDARY	VILLAGE BOUNDARY
NATIONAL HIGHWAY	NATIONAL HIGHWAY
POSBANDY ROAD	POSBANDY ROAD
SECONDARY ROAD	SECONDARY ROAD
TERTIARY ROAD	TERTIARY ROAD
STATEWAY LINE	STATEWAY LINE

Prepared by:
Town and Country Planning,
Govt of Assam

**PROPOSED LANDUSE PLAN, 2031
MASTER PLAN FOR UDALGURI**

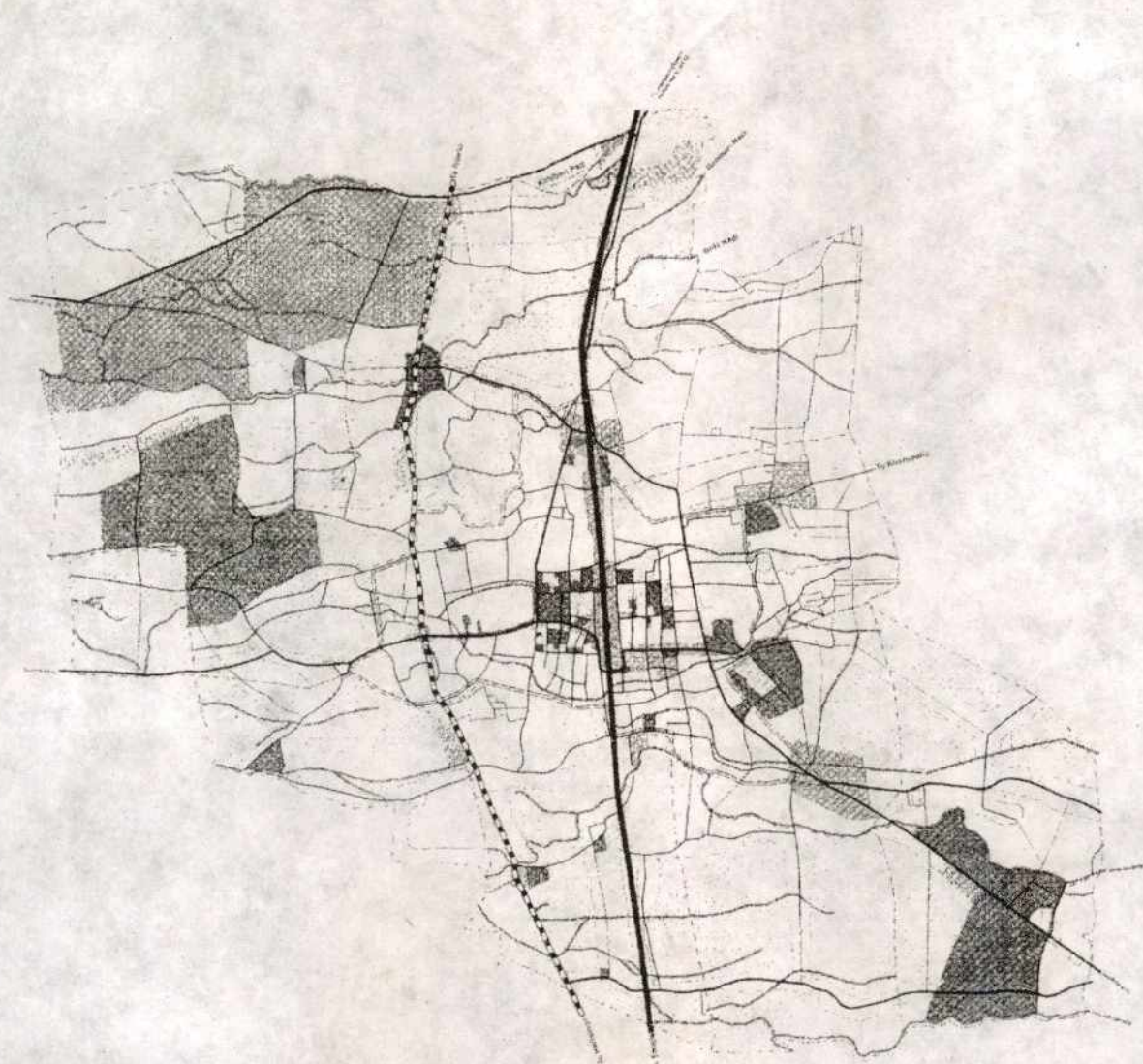
PREPARED UNDER SECTION 10 (2) OF ASSAM
TOWN & COUNTRY PLANNING ACT 1959 AS
AMENDED AND APPROVED BY THE
GOVT. OF ASSAM VIDE NOTIFICATION NO.
1000/1959, D.D. 16/12/2014

[Signature]
A. GOSWAMI
DIRECTOR, TOWN & COUNTRY PLANNING
GOVT. OF ASSAM, DISPUR
GUWAHATI - 781006



LEGEND

RESIDENTIAL ZONE	INDUSTRIAL	RAILWAY LINE	EXISTING
HIGH DENSITY ZONE	PUBLIC & SEMI PUBLIC	NATIONAL HIGHWAY	PROPOSED
MEDIUM DENSITY ZONE	AGRICULTURAL	PRIMARY ROAD	
LOW DENSITY ZONE	PARKS & PLAYGROUND	SECONDARY ROAD	
COMMERCIAL ZONE	GREEN BELT	TERTIARY ROAD	
WORLD CLASS ZONE	VACANT LAND		
RECREATION ZONE	WATERBODIES		
	RAILWAY STATION		
	RAILWAY LAND		
	BUS STAND		
	BUS TERMINUS		
	TRUCK TERMINALS		
	CREATION GROUND		
	DUMPING GROUND		
	STREETS		
	MASTER PLAN BOUNDARY		
	MUNICIPAL BOUNDARY		
	VILLAGE BOUNDARY		
	ROADS		
	NATIONAL HIGHWAY		
	PRIMARY ROAD		
	SECONDARY ROAD		
	TERTIARY ROAD		
	RAILWAY LINE		



Prepared by:
Town and Country Planning,
Govt. of Assam

**PROPOSED ZONING PLAN, 2031
MASTER PLAN FOR UDALGURI**

PREPARED UNDER SECTION 10 (2) OF ASSAM
TOWN & COUNTRY PLANNING ACT, 1969 AS
AMENDED AND APPROVED BY THE
GOVT. OF ASSAM WIDE NOTIFICATION NO.
107/2013 (PART 1) OF 2013, DATED 12.12.2013

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