



অসম ৰাজপত্ৰ

# THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত

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

## NOTIFICATION

The 12th July, 2013

No. UDD (T) 336/05/28.- In exercise of the powers conferred by section 14 of the Assam Town & Country Planning Act, 1959 (as amended) and the sub-section (1) of Section 10 of Assam Town & Country Planning Act, 1994 (Assam Act 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 Revised Master Plan of Sivasagar.

### **NOTIFICATION FOR PUBLICATION OF THE REVISED FINAL MASTER PLAN FOR SIVASAGAR**

1. It is notified that the Revised Final Master Plan for Sivasagar prepared by the Director, Town & Country Planning, Govt. of Assam under Section 14 of the Assam Town & Country Planning Act, 1959 (as amended) for the areas described in the Schedule below is hereby published.
2. The Final Master Plan with all relevant papers and maps may be inspected free of cost during office hours at the office of the Director, Town & Country Planning, Assam, Dispur, Guwahati-6, office of the Deputy Director, Town & Country Planning, Dist. Office- Sivasagar, Office of the Deputy Commissioner, Sivasagar, office of the Chairman, Municipal Board, Sivasagar and office of the Chairman, Development Authority, Sivasagar. Copies of the Master Plan are also available at the office of the Director, Town & Country Planning, Dispur, Guwahati-6 and Deputy Director, Town & Country Planning, Dist. Office- Sivasagar for sale on payment.

**SCHEDULE****A. Situation and Areas :**

District	:	Sivasagar
Sub-Division	:	Sivasagar
State	:	Assam
Area	:	61.58 Sq.Km. (6158.00 Hectre)

**CIRCLE, MOUZA AND VILLAGES INCLUDED IN THE MASTER PLAN AREA OF SIVASAGAR**

CIRCLE	MOUZA	VILLAGES
SIVASAGAR	NAGARMAHAL	SIVASAGAR TOWN
		ARJUNGURI KUMAR GAON
		KAMARPHADIA GAON
		BAILUNG PATHAR
		PACHI PATHAR
		DUI ALI MAJ GAON
		DEULIAKAHATAR PATHAR
	METEKA BONGAON	NAMTIAL PATHAR
		KHATOR PATAH
		KURULA KATIA GAON
		HALUA BHAKAT GAON
		METEKA PATHAR
		SALAGURIA GAON
		JULA GAON
		DECHIAL DHULIA GAON
SALAGURI	RUPAHI PATHAR	
	JOI SAGAR	
	DEMOW PATHAR	
HACHARA	BEZ GAON	
	HATIMURIA GAON	
BETBARI	NAWJAN GAON	
	NIMAIJAN GAON	
	KNOWER GAON NO.2	
	CHANGMAI GAON	

**B. DESCRIPTION OF BOUNDARIES.**

NORTH	:	KHATPAR GAON, BANMUKH CHUTIA GAON, GOHAINGAON, MERABIL GAON, LUTHURI CHETIA, KOWAMORA.
SOUTH	:	SALAGURI GAON, BARPATRA DOL, KALU GAON, DEULIA GAYEN GAON
EAST	:	KHELUA GAON, SINGHA DUAR GRANT, BURA GOHAIN GAON, MECHAGAR GOHAIN GAON, PART OF AMKATIA GOHAIN GAON,
WEST	:	CHAOLKORA GAON NO.-1, MOTHADANG GAON, RUPAHI BEEL AND RUDRASAGAR

**DR. U. N. BORA,**Secretary to the Govt. of Assam,  
Urban Development Department.

## 1.0 CHAPTER-I

### 1.1 INTRODUCTION

Lack of planning in physical development leads to various problems, which has already been experienced in almost all of our towns and cities. A healthy town or city with planned development always stimulates generation of many activities by becoming a seat of administration and containing many central functions of economic, social, intellectual and cultural importance. As such, it is now quite urgent to apply new principles of urban planning in order to achieve good living and working environment where the needs of housing, employment, transportation, recreational activities etc. of the whole community are suitably provided with the optimum utilization of the available resources.

For preparation of the Final Revised Master Plan for Greater Sivasagar it requires various surveys such as, Land-Use Survey, Socio-economic Survey etc. that were carried out to know the conditions already existed in the town in order to make plan proposals to guide the future development of the town.

The planning area of Sivasagar has been demarcated after studying the present trend of growth, the geographical factors of its location and the future growth potentiality of the area. The present trend of growth of the town is towards the east for creation of workshop and other offices of the Oil and Natural Gas Corporation Ltd. and to the south where the historical monuments and the educational institutions are located.

The Master Plan presented here is a broad guideline for orderly development of Sivasagar as a growing urban centre. The study made for this purpose is discussed in the subsequent chapters along with the

recommendations based on modern planning principles. The population of Greater Sivasagar has been estimated upto the year 2031 and the recommendations are made accordingly. These will be effectuated by way of taking up detailed schemes in phased manner. In order to control the land use and to achieve the desired growth of the town "Uniform Zoning Regulations" as notified by the Government is adopted.

Public participation in town and City Planning is a vital aspect. No plan can achieve its desired goal unless it is supported by citizens participation. As such, it is desirable that the people of Sivasagar will extend their hearty co-operation to the measures taken up for the successful implementation of the Master Plan.

## 1.2 Regional Aspects of Sivasagar

A town or a city exercises its influences far away from its own boundary. This zone of influence is called the Arm land or Hinterland of the town. On the other hand, the growth and nature of development of the town depend upon the existing potentialities of the hinterland.

Apart from its own boundary, Sivasagar town exercises its influences upto Dechangmukh on the North; Nazira and Amguri on the South; Moran and Sonari on the East and upto Jhanji on the West. Within this region, Sivasagar town plays a vital role by providing amenities and facilities and being a wholesale trade centre to the region. On the other hand, the region also serves the town by supplying essential commodities like food grains, milk, vegetables, fish meat etc. The both aspects are taken into consideration in preparing the long-range physical planning programmes.

### 1.21 Regional Settings:

In growth and development of various activities, the wider regional setting plays an important role; Sivasagar is situated in the flat basin of the Brahmaputra river, which flows at a distance of about 15 K.M. from the town. Other important rivers of the region are Dikhow, Dichang and Jhanji, which are tributaries of the mighty river Brahmaputra. Due to these rivers, most of the areas of the region frequently suffer from flood during rainy season. The magnitude of the devastation and havoc caused by floods has increased after the great earthquake of 1950. It is well known that the great earthquake of 1950 has changed the topography of the basins. After the earthquake the riverbeds aggravated and the carrying capacities of the rivers have been reduced. Like most of the other towns of the Brahmaputra valley, Sivasagar town has been protected from flood devastation by embankments along the rivers flowing in and around the town.

Towards north of the town, the area is low lying and is inundated by the floodwaters of river Darika for which the development of the town is restricted to this side. Other sides are suitable for future expansion of the town. At present the town is expanding towards south where vast open land is available and dominated by old monuments.

The town Sivasagar is situated in a picturesque setting dotted by numerous old monuments of Ahom Kingdom. To an inquisitive mind the Dowls, Sagars (Pukhuries), Garhs, Rong-Ghar and Kareng Ghar located in and around the town whispers to his historical queries and brings back passerby closer to the Ahom Swargadews.

## 1.22 Regional Linkage

Situated on the National Highway No.37 Sivasagar is connected to all the important urban places of southern bank of the Brahmaputra river. It is also well connected by roads to different parts of the Sivasagar District. Sivasagar is also connected by road to Nagaland.

Like most other towns in Assam, the main railway line has not touched Sivasagar town. Sivasagar town is connected with the main line at Simaluguri Junction at a distance of about 20 K.M. from Sivasagar town by a Branch Line of N.F. Railway.

Sivasagar does not have Air Transport facility, as there is no Air Field in Sivasagar. For Air Transport, Sivasagar has to depend on Rowriah Air Field located at Jorhat at a distance of about 58 K.M. from Sivasagar or Mohannbari located at Dibrugarh at a distance of about 97 K.M. from Sivasagar.<sup>3</sup> The Brahmaputra river is located at a distance of about 15 K.M. from Sivasagar and is connected by river Dikhow. As such the scope for development of Regional Water Transport is bright.

## 1.3 Natural Resources

Sivasagar District is very rich in mineral oil. Numbers of oil fields are explored around the Sivasagar town. To explore the oil of the region, Oil and Natural Gas Corporation Ltd. has established their workshop and related offices within the town.

The region enjoys monsoonal type of climate. The winter is moderately cold and pleasant. The summer is hot and humid with low to

heavy showers facilitating the growth of tea, rice, sugarcane, jute etc. abundantly.

#### 1.4 Urban Pattern:

The process of urbanization in the Sivasagar District has already gathered momentum. The urban population of the Master Plan area is 53,854 Nos., which is about 63.30% of the population of the Master plan area as per 2001 Census.

The urban population of the district is 97,179, which is about 9.24% of district population. Total District population is 10, 51,736 persons as per 2001 census. This percentage of urban population of the district is 8.8 per cent.

Like other towns of Assam, the towns of this district are mostly Administrative and Market towns in character. With infusion of administrative functions of higher order, tourist location in the town, as well as other economic activities it is expected that Sivasagar Town will further emerge as an important urban centre of the state.

Singha, having ascended the throne made up his mind to build up a new palace and a city. Accordingly, he built up the famous Rangpur Nagar with a seven storied palace known as Tolatal Ghar. Besides, he constructed Rang Ghar and other brick buildings too. He excavated Joysagar tank and shifted the Ahom Capital from Gargaon to the newly Built site (Rangpur) which is situated at a distance of about four kilometers from the existing Sibsagar town.

### 1.5 Physical Characteristics:

Surrounded by picturesque green paddy fields Sivasagar is situated on a alluvial flat land at a distance of about 15 K.M. from the mighty river Brahmaputra. The two rivers Dikhow and Darika are following their zigzag path on the middle and north of the town respectively. The river Darika was a very active river in the past. The Beels (water bodies) are the prominent features within the town. These Beels were formed as the river Dikhow changed its course in the long past. These are covered with swamps. Portions of these Beels are now being built up. The two big tanks, namely, Sivasagar and Joysagar are the prominent water bodies covering about 300 acres of land, which were excavated during the Ahom reign.

The altitude of Sivasagar is 86'67 M above mean Sea Level. It's latitude and longitude is 26.59' N and 94.38'E respectively.

### 1.6 Climatic Conditions:

Like other parts of the Brahmaputra Valley, Sivasagar enjoys monsoonal type of climate. It is characterized by hot humid summer and cold winter. The monsoonal rain starts from the month of May and it continues upto October. May and June are generally the hottest months. The winter is cold and it starts in the month of November and continues upto the middle of March. December and January are the coldest months of the year. The highest maximum temperature during summer is  $39.0^{\circ}$  C and minimum temperature during winter is  $12.8^{\circ}$  C.



The average annual rainfall is about 2045.3 mm (81.6 inches). About 80% of the rainfall is received during the summer months having maximum rainfall during July. Number of cloudy days during summer is very high. Sometimes gloomy days with high humidity continue for weeks together in the rainy season. A noticeable feature of this summer weather is that it takes hardly few hours to change a bright sunny day into a gloomy rainy one with thunderstorm. During autumn and winter the rainfall is very low. It goes without rain for months together with clear sky during winter. Early monsoonal rain during spring with short duration and long interval removes dust particles from the air adding a greenish look to the environment.

In general the climate of Sivasagar is pleasant except for few months during summer. The spring is the best season of the year where the fruits and flowering trees with their colourful look scattering all over the town enhance the natural beauty.

The velocity of wind is considerably high during rainy season with occasional thunderstorm. Calm weather prevails in there remaining part of the year except few days in March and April while the velocity of wind becomes prominent due to local wind which is locally known as Bordoichila . The prevailing wind direction of the town is from Northeast to Southwest.

TABLE NO-1  
POPULATION GROWTH OF SIVASAGAR TOWN  
1901-2001

Year	Male	Female	Total	Decade Variation	P.C. Variation
1901	2,420	2,282	4,702	—	—
1911	2,528	2,388	4,916	214	+0.91
1921	2,527	2,388	4,915	-1	-0.02

## 2.0 CHAPTER II

### 2.1 DEMOGRAPHIC FEATURES:

Sivasagar is a class II town in Assam. Having a population of 53,854 persons in the Municipal area and 85,060 persons in the master plan area as per 2001 census. By 2001 with a decadal variation of +44.28% from its previous decades of 1951-91, Sivasagar proves an alarming rise of population in comparison to many other towns in Assam. The factor behind this conspicuous growth rate are, (a) establishment of ONGC Complex of North-Eastern Region in Sivasagar, (b) Sivasagar being the District Headquarters (c) Tourist locations etc. and (d) Establishment of other institutions like educational institution, branches of various Banks and commercial organizations, Government and Semi-Government offices etc. have certainly assisted migration and re-distribution of population which in return has greatly contributed to the growth of Sivasagar as an important urban centre in Assam.

### 2.2 POPULATION GROWTH:

The population growth of Sivasagar Municipal Area from 1901 to 2001 and the percentage variation is shown in the Table No.-1

TABLE NO.-1  
POPULATION GROWTH OF SIVASAGAR TOWN  
1901-2001

Year	Male	Female	Total	Decade Variation	P.C. Variation
1901	3,420	2,292	5,712	--	--
1911	3,228	2,536	5,764	+52	+ 0.91
1921	2,997	2,338	5,335	-435	-7.55

1931	3,922	2,747	6,669	+1340	+25.15
1941	4,405	3,154	7,559	+800	13.35
1951	6,435	7,187	13,622	+3063	+40.52
1961	9,337	5,769	16,016	+44,84	42.21
1971	16,278	11,148	27,426	+12320	+81.56
1981 (Projected)	17325	14175	31500	+4074	+14.85
1991	20722	16604	37326	+5826	+18.50
2001	29663	24191	53854	+16528	+44.28

Source – Census of India, Assam

From the table it is observed that the population growth in Sivasagar town by 1921 was suddenly decreased to 7.55% below than its previous decade. It was due to the shifting of the District Headquarter from Sivasagar to Jorhat in 1913 A.D. But from 1931 there is an increasing growth rate, which reached to a percentage growth of 81.56% in 1971 with a total population of 27, 426 nos. The most rapid growth was occurred in Sivasagar town during 1961-71 due to an inflow of migrants from outside the town and from more distant parts of India. This in migration took place due to establishment of work centre of the O.N.G.C. for the North Eastern Region, various Central and State Government offices and educational institutions.

The attraction for migrants in search of employment in this town has not helped in population redistribution and migration to the surrounding areas of Sivasagar town. The growth rate of population within the Master Plan area outside the Municipality is normal and there is no phenomenal increase of population in any of the previous decades. The growth of population in Sivasagar Town and rest of the areas within the Master Plan is furnished in Table No.-2 from the period 1941 to 2001.

**TABLE NO.-2**  
**GROWTH OF POPULATION: SIVASAGAR MASTER PLAN AREA**  
**1941-2001**

Year	Urban Population	Percentage Variation	Rural population	Percentage variation	Total SMPA	Percentage Variation
1941	7,559	---	8,042	---	15,601	---
1951	13,622	+40.52	9,198	+ 14.37	22,820	+27.04
1961	15,106	+42.21	11,048	+20.11	26,154	+31.95
1971	27,426	+81.56	13,508	+22.26	40,934	+56.51
1981 (Projected)	31500	+14.85	19,500	+44.36	51,000	+24.59
1991	37326	+18.49	29,447	+51.01	66,773	+30.92
2001	53854	+44.28	31,206	+05.97	85,060	+27.37

Source-Census of India, Assam

### 2.3 SEX RATIO AND AGE SEX COMPOSITION.

The overall sex ratio i.e. number of female per thousand male in Sivasagar Town and its neighbouring areas during 1951-2001 gives an interesting composition of the population as given in the Table No-3 below.

**TABLE NO- 3**  
**SEX RATIO SIVASAGAR MASTER PLAN AREA**  
**1951-2001**

Year	Urban Area			Rural Area		
	Male	Female	Female per thousand Male	Male	Female	Female per thousand Male
1951	6,435	4,187	650	4,959	4,234	853
1961	9,337	5,769	618	6,128	4,920	802
1971	16,278	11,148	685	7,285	6,223	854
1981 (Projected)	17325	14175	818	10850	8650	797
1991	20722	16604	801	15588	13859	889
2001	29663	24191	816	16147	15059	932

Source - Census of India Assam.

It is seen that in rural area, sex ratio is higher than that of urban area. In 1961 the sex ratio in Sivasagar Master Plan area stood at 691, which increased, to 857 in 2001 as per census of India. The District figure for 2001 is 926 and for the state are 932. This figure is lower compared to the State average. Comparison of sex ratio figures reveals that the social life of the area is changing and phenomenon of migration seems to be a factor in the growth of population scenario. However its impact is still insignificant. Table no 4 shows the details of sex ratio of Sivasagar Master Plan area.

TABLE -4  
AGE SEX COMPOSITION -SIVASAGAR MASTER PLAN AREA

Year	Master Plan Area	District			State
		Male	Female	Female per thousand Male	Female per thousand Male
1961	691	293282	254434	867	869
1971	737	386711	307625	795	896
1991	839	476132	43185	907	923
2001	857	546565	506237	926	932

Source - Census of India , Assam.

## 2.4 LITERACY

The literacy in Sivasagar Master Plan area as per 2001 census is 78.92 as against the state average of 56.03%, which is significant. The literacy percentage has risen during the decade by approximately 4.6% revealing the fact that the education scenario of the area is improving. This is an indicator of development.

**TABLE NO-5**  
**SEX-WISE LITERACY**  
**1991&2001**

Year	Persons			Literates			% of literacy		
	Male	Femal e	Total	Male	Female	Total	Male	Female	total
1991	36310	30463	66773	28217	21392	49609	77.71	70.22	74.29
2001	45810	39250	85060	37466	29670	67136	81.78	64.76	78.92

## 2.5 POPULATION DENSITY

The total area of 4927 hectares of land within the Sivasagar Master Plan Area was occupied by 26152 persons in 1961 and 40,934 nos. in 1971 respectively. This in course of time increased to 85060 in 2001. Therefore, the overall density which was 5 persons per hectare during the year 1961 increased to 14 persons per hectare in the year 2001. This shows an average increase of population density at the rate of 3 persons per hectare per decade.

## 2.6 OCCUPATIONAL DISTRIBUTION

The working population in the Sivasagar Master Plan Area during the 1961 and 1971 in various sectors was found 11,275 nos and 12,286 nos. respectively. The following Table no-6 will show the distribution of working population in 1961 and 1971 respectively.

**TABLE NO-6 (A)**  
**DISTRIBUTION OF WORKING POPULATION OF SIVASAGAR**  
**MASTER PLAN AREA 1961-1971**

		Urban Area				Master Plan Area			
		Nos. of workers		P.C. to total workers		Nos. of workers		P.C. to total workers	
		1961	1971	1961	1971	1961	1971	1961	1971
A.	PRIMARY								
(i)	Agriculture	288	563	4.80	6.20	4200	2328	38.0	19.72
								0	
(ii)	Fishing, plantation etc.	107	77	1.80	0.86	195	144	1.70	0.95
B.	SECONDARY								
i)	House hold industries	---	264	---	2.81	535	340	4.86	2.87
ii)	Quarry, Manufacturing and other industry	1473	2727	25.0	30.4	1600	305	14.7	24.87
				0	8			6	
iii)	Construction	207	518	3.40	5.79	281	634	2.53	5.36
C.	TERTIARY								
i)	Trade and Commerce	998	1868	17.0	20.9	1102	2012	10.2	15.04
				0	5			3	
ii)	Transport, storage, and Communication	199	757	5.00	8.48	361	881	3.25	7.45
iii)	Other Services	2554	2174	43.0	24.3	3004	2924	24.6	23.74
				0	4			7	
	Total	5926	8945	100	100	11275	12286	100	100%
				%	%			%	

Source- Census of India, Assam

**TABLE NO-6(B)**  
**DISTRIBUTION OF WORKING POPULATION OF SIVASAGAR**  
**MASTER PLAN AREA 1991-2001**

		Urban Area				Master Plan Area			
		Nos. of workers		P.C. to total workers		Nos. of workers		P.C. to total workers	
		1991	2001	1991	2001	1991	2001	1991	2001
A.	PRIMARY								
	Male	6032	16346	87.93	86.93	9003	24549	79.40	84.91
	Female	828	2457	12.07	13.07	2335	4360	20.60	15.09
	Total	6860	18803	100	100	11338	28909	100	100
		57.71%	49.38%			55.26%	50.86%		
B.	SECONDARY								
	Male	1749	123	96.25	62.75	2173	241	93.02	58.78
	Female	68	73	3.75	37.25	163	169	6.98	41.22
	Total	1817	196	100	100	2336	410	100	100
		15.28%	0.51%			11.38%	0.72%		
C.	TERTIARY								
	Male	2937	16083	96.64	87.45	5275	21999	92.59	87.44
	Female	102	2306	3.36	12.55	422	3158	7.41	12.56
	Total	3039	18389	100	100	5697	25157	100	100
		25.56%	48.30%			27.77%	44.24%		
D.	MARGINAL WORKERS								
	Male	150	542	88.23	79.23	291	1438	25.41	60.44
	Female	20	142	11.77	20.77	854	941	74.59	39.56
	Total	170	684	100	100	1145	2379	100	100
		1.45%	1.81%			5.59%	4.18%		
	TOTAL WORKERS	11886	38072			20516	56855		

Source- Census of India, Assam



## 2.7 POPULATION PROJECTION

The population projection is being based on many factors besides the basic factors such as (i) Existing and past rate of growth; (ii) Rate of mortality and (iii) Rate of fertility as revealed by the past Census Reports. The two important factors i.e. (i) Natural growth and (ii) Migration play important role in determining the population of the urban areas of Assam, Birth death, fertility rates and family planning programme etc. govern natural growth while the growing economic activities determine the growth of population due to migration. But the trend of economic activities is not always predictable sufficiently in a town as it depends on National and Regional factor. If the population figures are considered as the net outcome of various factors is assumed to be reasonably constant than the trends exhibited by time Series observation on population may be accepted for working out future population estimate.. The actual population growth of Sivasagar Master Plan Area from 1941 to 2001 with percentage variations is shown in block-A and projections for the area for next three decades in Block B. are given in Table No -7.

As per projection, population of the Sivasagar Municipal Area will be 1,30,500 Nos. and the overall population of Sibsagar Master Plan Area will be 1,98,600 by the year 2031.

**TABLE -7**  
**ACTUAL GROWTH AND PROJECTED POPULATION OF SIVASAGAR**  
**MASTER PLAN AREA 1941-2031**

Year	Urban	Decadal P.C. variation	Rural	Decade P.C. Variation	total	Decadal P.C. variation
<b>BLOCK - A</b>						
1941	7559	---	8084	---	15643	---
1951	10622	+ 40.52	9198	+ 13.78	19820	+26.70
1961	15106	+ 42.21	11048	+20.11	26154	+31.95
1971	27426	+ 81.56	13508	+ 22.26	40934	+56.51
1981 (Projected)	31500	+14.86	19500	+13.62	51000	+24.56
1991	37326	+18.49	29447	+18.33	66773	+30.92
2001	53854	+44.28	31206	+20.01	85060	+27.38
<b>BLOCK B</b>						
2011	71000	+31.84	38000	+21.77	109000	+28.14
2021	95900	+35.07	48800	+28.4	144700	+32.75
2031	130500	+36.08	68100	+39.55	198600	+37.25

Source : BLOCK - A - Census of India

BLOCK - B - Projected by T. & C.P. Assam

Projected population for 2005: 94,200

## CHAPTER III

## EXISTING PHYSICAL CONDITION

## 3.1 EXISTING LAND USE.

A land-use survey for the Sivasagar Master Plan Area was conducted during 2003-2005 to ascertain the existing land-use pattern as well as to estimate the present and future need of the Planning Area. The various uses have been classified into eleven broad categories and area under each category is shown in the Table No.-8.

TABLE NO.- 8

## EXISTING LAND-USE – SIVASAGAR MASTER PLAN AREA

Sl.No	Categories	AREA Master-Plan) (in Hectre)	Percentage Of the Total Area	Percentage of the Developed Area
A.	DEVELOPED AREA			
1	Residential	1255.75	20.40	59.39
2	Commercial	92.50	1.50	4.37
3	Industrial	153.40	2.49	7.26
4	Public and Semi-Public	257.65	4.18	12.18
5	Public Utilities and Facilities	28.50	0.46	1.35
6	Transport Railway	241.25	3.91	11.41
7	Open Space	85.35	1.39	4.04
	TOTAL	2114.40	34.33 %	100 %
B.	UNDEVELOPED AREA			
8	Green Belt	195.50	3.20	
9	Agriculture	2012.30	53.46	
10	Vacant	225.60	3.66	
11	Water Boly	330.20	5.35	
	Total	4043.60	100 %	
	TOTAL MASTER PLAN AREA	6158 HECTARE		

Source: Town and Country Planning Survey.

The survey revealed that the growth under various uses is although scattered, has taken shape. The total Master Plan Area is about 6158 Hectares out of which the Sivasagar Municipal Area covers about 1094 Hectares. Residential use is the only major use covering an area of 1255.75 Hectares within the Master plan Area and the percentage of which is 59.39 of the Developed area. The next major uses under developed area are public and Semi Public and Transport and Railways which are covering 257.65 Hectares and 241.25 Hectares respectively.

The land use pattern within the Sivasagar Master Plan Area excluding the Municipal Area is quite different. Here, the predominant land use is agriculture About 53.46 percent of the total Master Plan Area is under agriculture. The residential use occupies 1255.75 Hectares constituting 20.40 of the total Master Plan Area. The significant feature of urbanisation within the Master Plan Area is that the urban expansion is mainly towards the south and east of the town.

#### Residential Use :

Out of the total developed area of 2114.40 Hectres within the Master Plan Area, about 1255.75 Hectres are used for residential purpose constituting 59.39 percent of the total developed area.

#### Commercial Use:

Organised commercial areas are few within the Sivasagar Master plan area. There are about 8 Nos. of main commercial streets along which most of the shops are situated. The Central Market Building is accomodating various commercial units in the heart of the Sivasagar Town. The market is not spacious to cater the future need and there is no

scope for future expansion and development. The overall land under commercial use within the Sivasagar Master Plan Area is 92.50 Hectares only which constitutes 1.90% of the total Master Plan area.

#### Industrial Use:

Industrial development within the Sivasagar Master Plan Area is very slow. The industrial use covers only 153.40 Hectres out of the whole Master Plan Area, which constitutes only 2.49 percent of the total area. Except ONGC the most of the industries available within the Master Plan Area are of Service Type industries. There are many tea industries within the Sivasagar Subdivision having a little impact on this town with regard to transportation and commerce. There is ample scope for the development of agro-based industries and processors of tea products and bi-products e.g tea blenders and packeters of black and green tea, consumer pack manufactures, tea waste based industries for manufacturing of Caffain, instant tea and other diversified products of tea leaf etc. For these necessary infrastructure can be provided.

#### Agriculture Use :

Agriculture is the major use within the Master Plan Area, which covers 2012.30 Hectares thereby constituting 53.46 percent of the total area. Pockets of agricultural land behind the developed areas of the town dominate the land use pattern.

#### Water Bodies:

Water Bodies in Sivasagar Master Plan Area covers 330.20 Hectares constituting 5.35 percent of the total land. The two historical tanks, namely Joysagar and Sivasagar, cover about 115 Hectres under water. The river

Dikhow and other abandoned past river course by river Dikhow presently water logged covers the rest of the areas within the Master Plan Area.

**Public and Semi-Public Use:**

Educational Institutions, Government Offices, Hospital, Historical Monuments, Mosques and Temples etc. occupies about 257.65 Hectres which constitutes 4.18 percent to the total land within the Sivasagar Master Plan Area. There are altogether 117 nos of Educational Institutions within the Sivasagar Master Plan Area and the areas occupied by these institutions are not spacious for future expansion they are:

1. Primary School	: 61
2. ME/MV School	: 19
3. High/Higher Secondary School	: 26
4. College	: 06
5. Jr. College	: 05

**A. HOUSING :**

Shortage of housing is acute both in quality and quantity within the Sivasagar Master Plan Area. (The qualitative problems are not because of the physical conditions of the structures are bad, but more so due to lack of proper environmental standard. Improving the environmental conditions can make substantial improvement.) Installation of basic minimum infrastructures such as water supply, drainage, roads, community facilities etc. can be of great help in this respect. The total housing stock at present is 13200 nos.out of which 12% are in dilapidated condition and needs replacement. The total housing need by 2031 will be 17500. Therefore an additional 5884 houses will be by the end of the planning period. Public housing achievement in Sivasagar is very negligible. Most of the Government offices are functioning in rented

buildings and most of the Government employees are also not being provided with housing accommodation.

#### B. TRAFFIC AND TRANSPORTATION

Suitable means of communications connecting Sivasagar with other parts of the country were developed since the time of Ahom Rule. The Ahom rules took sufficient care for the development of communications throughout their kingdom and took active interest in building roads. Thus the entire Sivasagar District was covered with a network of roads built by the Ahom rulers. About 90 per cent of the existing roads of Sivasagar Subdivision were constructed by the Ahom Kings, Queens, Ministers and other Courtiers and sometime by common people. Most of the small rivers during that period were abridged with stone, planks, bridges or culverts. These were known as Pakidalong, Silsako, Pat Sako or Dalong. Till now a large number of stone and brick bridges are seen within the Sivasagar Subdivision. The strong stone bridge over Namdang river in Sivasagar Subdivision known as Silsako constructed by Swargadeva Rudrasagha in 1701 A.D. on National Highway No.-37 is still serving. No major repairs have since been made to this stone bridge during the British rule or thereafter. Later on during the period of decline of the Ahom monarchy, the roads were not repaired due to internal revolts and civil war. During the Burmese invasions, which brought Ahom rule to an end early in 19th century, the roads fell into further dis-repair and many were altogether destroyed.

#### Road System:

Sivasagar Master Plan Area has a total road length of 97.60 K.M. out of which about 75% percent was constructed during the Ahom era. The Assam Trunk Road runs through the Sivasagar Master Plan Area connects the town with other important places of Southern part of the Brahmaputra Valley. The bridge over river Dikhow is the only connecting media of the southern and northern half of the Sivasagar Master Plan Area. The by-pass

of the National Highway No.37 helps in easing traffic congestion in the town.

The Sivasagar Nazira Road (Old Gargaon Ali) is an important road connecting Sivasagar with the N.F. Railway Junction at Simaluguri , tea-growing areas of Southern parts and oil fields of O.N.G.C Besides , there are some other important roads known as Dichangmukh Road, Dhai Ali, Borpatra Ali, Dubarani Ali, Gazpuria Ali ( Old Bor Ali ) connecting all the important places of the region.

The existing roads under different categories within the Sivasagar Master Plan Area are shown below:

1. Bituminous Road - 20.5K.M.
2. Gravelled Road - 35.50 K.M.
3. Kutcha Road - 41.60 K.M.

Sivasagar is fairly connected with the important towns of Assam by roads

#### Railways:

Sivasagar is connected by a branch line of Northeast Frontier Railway at Simaluguri Junction. Simaluguri is one of the major and important junction of N.F. Railway at a distance of about 12 K.M. from Sivasagar Town. The branch line from Simaluguri to Moran via Sivasagar is very old and was constructed mainly for transportation of tea and forest products from this region. As the Sivasagar town is away from the major line most of trains go direct without touching the town. As such Sivasagar is deprived of most of the facilities provided by the railways.



#### Inland Water Transport:

During the British period small steamers were plying on Dikhow river for the purpose of transportation of tea chests of surrounding tea gardens. The bridge on river Dikhow then was so constructed that the middle portion of the bridge could be raised to enable the steamers to have an easy pass under the bridge. There is passenger Ferry service on the Brahmaputra River plying from Dichang Ghat to the North Bank. Dichang Ghat is situated at a distance of about 8 K.M. from Sivasagar Town and is fairly connected by private buses plying every day. From the point of development of trade and commerce of this town Dichang Ghat plays an important role in connecting Sivasagar Town with a vast hinterland.

#### C. PUBLIC UTILITIES AND FACILITIES

Sivasagar Town is the nerve centre of cultural, educational and other economic activities for the people of the District. Moreover this is a place of tourist interest having the monuments of the Ahom dynasty. But this town has very disorganized settlements without sufficient public utilities and facilities. Correlation between demand and supply in respect of public utilities and facilities is almost nil. The Sivasagar Master Plan Area outside the Municipality has very less facilities.

#### Water Supply:

The present network of water supply is not adequate to cater the need of the people within the Sivasagar Master Plan Area. The existing water supply system within the Sivasagar Municipality has a total tank capacity of 1.46 million liters in its reservoirs with a daily average supply of 2.92 mld of treated water. Assuming a total consumption capacity of 125 lpcd, the total population of 84,200 Nos within the Sivasagar Master Plan areas requires about 10.53 mld to be supplied. Due to the shortage in

capacity, water is provided only for an hour in the morning and one hour in the evening, which is not at all sufficient. Water have not been provided for the Master Plan Area outside the Sivasagar Municipality and all the people of this area depend upon tanks, well and other sources of water for their daily requirement. This surface source of water at Sivasagar is sufficient to meet the water requirement for the Master Plan area. To meet the present and future need, an additional water supply of capacity of 7.61 should be installed as early as possible.

#### Drainage and Sewerage:

The problem of drainage in Sivasagar is acute and more particularly in the developed areas within the Sivasagar Municipality where there is no effective drainage system. The existing drains are not adequate to drain out the water and as a result water logging has become a regular feature during the rainy season. The beds of the drains have become shallow resulting in the crippling of their capacity to discharge rainwaters effectively. Even in the winter too, this disability causes water logging on the drains thereby giving changes for rise of mosquitoes and flies. A comprehensive Master Plan for drainage has already been prepared for Sivasagar Town and has been submitted to the Govt. for approval and funding.

#### Cremation and Burial Ground:

There are altogether 4 nos. of Cremation and Burial Grounds within the Sivasagar Master Plan Area. One is for the Christian community situated at Babupatty, at ward no: 3 and one for the Muslim community situated near Darbar field and the rest 2 Nos. are of Hindu community situated at Phukan Nagar and Thana mukh respectively. The existing cremation grounds of the Hindu

community cover an area of 26 acres. These cremation grounds are adjacent to the residential areas, which create unhygienic living to the inhabitants in the locality. There is no organized cremation ground within the Sivasagar Master Plan Area outside the Municipality except the burial ground of the Muslim community beside Darbar Field.

#### Health Service:

The Sivasagar Civil Hospital is the only medical service institution for general public with a capacity of 200 beds. With minimum need based standard of medical facilities. Apart, there are 5 other Nursing Homes within the Mater Plan area.

#### D. RECREATION:

Sivasagar has adequate public parks play grounds and other outdoor recreational space within the Master plan area as shown in the plan. However the existing spaces requires additional infrastructures to be built to conduct games of District and state level.

#### Parks and Play Ground:

There are 85.35 Hectres of organised open space, which constitutes 1.74 percent of the total Master Plan area. There are two numbers of play grounds namely, Boarding Field and Durbar Field within the town which are in every occasion used by the public apart from a outdoor Stadium at Tenganibeel. These playgrounds are in addition to the individual playgrounds owned by individual schools. During the summer season

these fields become unsuitable due to water logging and as are not properly developed and therefore require attention. The parks namely, the Lakshminath Bezbaruah Park and Anandaram Baruah Park situated within the town are two important parks apart from other parks shown in the plan.

#### D. RECREATION

Sivasagar has adequate public parks play grounds and other outdoor recreational space within the Master Plan area as shown in the plan. However, the existing spaces require additional structures to be built to conduct games of District and state level.

#### Parks and Play Ground

There are 88.85 Hectares of organised open space, which constitutes 1.74 percent of the total Master Plan area. There are two numbers of play grounds namely, Boating Field and Durbar Field within the town which are in every occasion used by the public apart from a outdoor stadium at Tengraibel. These playgrounds are in addition to the individual playgrounds owned by individual schools. During the summer season

## CHAPTER-IV:

### TOURISM DEVELOPMENT:

#### 4.1 Historical Growth:

Like some other towns in Assam, Sivasagar is a historically important town. It was the capital town at the period of Ahom kingdom.

Formerly, at the time of Ahom dynasty Sivasagar Town was known as Rangpur Nagar, which was then reigned by Swargadeva Rudra Singha (1695-1714-AD) the mighty ruler of Ahom dynasty. Swargadeva Rudra Singha, having ascended the throne made up his mind to build up a new palace and a city. Accordingly, he built up the famous Rangpur Nagar with a seven storied palace known as Tolatal Ghar. Besides, he constructed Rang Ghar and other brick buildings too. He excavated Joysagar tank and shifted the Ahom Capital from Gargaon to the newly Built site (Rangpur) which is situated at a distance of about four kilometers from the existing Sibsagar town.

The name of the present town Sivasagar came to be known from the time of king Siva Singha, the eldest son of king Rudra Singha. King Siva Singha entrusted his power to his wife Ambika who excavated the famous Sivasagar Tank and constructed Siva Dowl, Vishnu Dowl and Devi Dowl on the southern bank of the tank and in consistent with the name of this tank Sivasagar. Therefore, the entire place even the whole district came to be known as Sivasagar.

In 1828 A.D. the East India Company took over the charge of administration of the Lower Assam districts. As per the terms of 'Yandaboo Pact' Swargadeva Purandar Singha was entrusted with the administration of upper Assam. But in 1828 the whole area was assumed by the East

India Company and annexed it to the British territory. By a proclamation in 1839 A. D. the area was divided into Lakhimpur and Sivasagar Districts placing under the same administration with Lower Assam Districts. With the creation of new district, Sivasagar, the British constructed the administrative Headquarter of Sivasagar on the bank of Sivasagar Tank in 1839 A.D. Thereafter Sivasagar has continued to grow as a modern town.

The Sivasagar Municipality came into existence in 1916 to look after the various civic needs of the growing community. In recent years after independence, the enormous expansion of traffic and transportation, industry, communication, Government Offices, trade and commerce, employment and educational facilities etc. has assisted Sivasagar to be an important town in Assam.

#### 4.2 Proposals for Tourism development:

Sivasagar has immense potential for tourism development. For tourist attraction will boost the economy of the Town. It is pertinent to mentioned that to attract tourist it is necessary to provide adequate infrastructure to the town. The following is proposed.

1. No new construction on the bank of Sivasagar tank within a distance of 300 metres will be allowed.
2. All low-lying areas within the Master Plan area be preserved as green belt area.
3. Sivasagar Master plan area is bestowed with a large number of water bodies. These water bodies be developed by landscaping on the banks.

4. Beautification of all road junction within the Master Plan area.
5. Placement of guide maps and sign boards depicting the history of the town and information of heritage structures in important locations.
6. Registration of Travel agencies who conduct Tour operations in Assam, India and abroad. Registration of Tourist Guides.
7. Beautification of Heritage centers by landscaping and arboriculture.
8. Development and beautification of entry exit points to Sivasagar Master Plan area by construction of Dividers, Kerbs, Reflectory sign boards, foot paths and plantations etc.
9. It is proposed to organize a National Tourist Festival during winter months by developing a ethnic village in the Demow pathar area.
10. All existing parks are proposed to be renovated.
11. It is proposed to construct Tourist lodges, Cottages and tents in the Demow pathar area.
12. Introduction of boating in Dikhow river instead of Joysagar and other water bodies as it hinders visit of migratory birds during the winter season.

## CHAPTER-V

### 5.1 ECONOMIC DEVELOPMENT:

The fundamental goal of any planning is to raise the standard of living of each citizen and this can only be achieved through economic development. Economic analysis and judgement are integral part of any physical planning. It requires critical appraisal and proper evaluation.

Sivasagar District, being the resourceful region has assumed manifold development of its economy. The mineral resource has been harnessed and oil fields have been discovered in a belt spreading in and around Sivasagar. Besides, small-scale industries and subsidiary industries were installed in and around Sivasagar Town and as such it has to play a vital role in bringing about the industrial and commercial development.

The economic position of Sivasagar District is fairly high in comparison to that of the other districts of Assam. The economic development for Sivasagar depends upon the following broad assumptions:

- i) Sivasagar will continue to play an important role as a commercial centre and transportation centre in the Upper Assam region. Industry of the type will increase manifold with the expansion of the oil fields.
- ii) Sivasagar is at present the most important distribution centre of crude oil, which will in return stimulate growth and also expand the economic base of the area.
- iii) Sivasagar, as a historical place has many historical monuments, which will attract tourist. Sivasagar could be developed to a major tourist centre.



- (iv) For communication advantages because of its ideal location, Sivasagar will continue to play a role of the major urban centre in Upper Assam.

The major activities for economic development are practically based on industry, commerce, transportation etc.

#### Industrial Development:

Industrial development is generally recognized as important part for economic growth of any area. Sivasagar occupies a notable position in the tea market and in respect of oil exploration. There are many oil fields lying in and around Sivasagar, which are yet to be harnessed. The Sivasagar District has already been recognized as an oil producing area. But it is yet poor in industrial development due to certain bottlenecks like distance from the market places, lack of entrepreneurship and technical skill.

#### Commerce:

At present commercial activities are growing scattered all over Sivasagar Master Plan Area. The major commercial activities are developed in almost all eight commercial streets. There are 2 Nos. of Municipal Markets located in Central Market Building and Station Chariali respectively. Sivasagar itself is a major commercial centre in the region.

#### Transportation:

Transportation play an important role in economic development. The A.T. Road (National High Way), which passes through Sivasagar,

connects the important places of Assam like Guwahati, Jorhat, Dibrugarh, Nowgaon, Tinsukia etc. The branch N.F. Railway line connects Sivasagar with Simaluguri, a railway junction of the main N.F. Railway (Tinsukia to Barauni). There are also other roads connecting the nearest oil-fields and important towns like Moran, Sonari, Nazira, in Assam and Nagaland and Arunachal Pradesh via Sonari.

## CHAPTER –VI

### 6.1 PHYSICAL PLAN CONCEPT AND PROPOSALS

The Planning concept and proposals that has been worked out in the Final Master Plan for Sivasagar are based on various Physical, Land-use and Socio-economic surveys and analysis conducted by the Town Planning from time to time. Based on these studies recommendations are made to find out solutions for various inter –related problems of Sivasagar Town.

The basic objective of this comprehensive development plan is to develop a balanced and integrated urban structure in the area purposed for supporting a population of 1,98,600 by 2031 keeping in view of the existing traditions and all predictable factors.

### 6.2 PLANNING CONCEPT:

From the present trend of development as well as regional setting of Sivasagar, it is assumed that the future growth of Sivasagar would take place towards South–East, South-West and mainly to South of the river Dikhow. Further, it is assumed that the predominant function of the town will continue as commercial, administrative and Tourist town in future. It will also retain the status as an important social, cultural and educational centre in the Sivasagar District. As the Sivasagar Town has assumed the status of an administrative Headquarter of the Sivasagar District and is located at a communication node of the District, it will continue to grow as an important urban centre.

Small and medium scale industries will be encouraged allocating land in suitable sites for their development. The residential areas will be developed in the neighbourhood concept. Facilities like Primary Schools, Shopping Centres etc. will be provided as per requirement in each

neighbourhood. Integrated development of the Master Plan Area must be achieved through rational distribution of land for various uses like residential, commercial, industrial etc. along with a transportation network to provide easy flow of communication between them.

### 6.3 PROPOSED LAND USE:

Various recommendations and proposals for the future growth of Sivasagar Town have been formulated after examining the prospect of development in relatively inexpensive areas, scope for providing necessary infrastructure and keeping harmony between various areas. The recommendations and proposals so far as possible have been translated into Land Use plan to give them special dimension. The Land Use shown in the Map No. 2 broadly indicates the functional relationship between various urban activities as visualized up to 2031 and aims at to provide the most economic use of urban land.

Although, it may not be possible to alter the existing land-use in already developed areas due to the socio-economic reason, the desired land use pattern could be achieved in the areas to be developed during the plan period. To meet the changing need of the town, modifications may however be made from time to time in the recommendations and proposals as per procedure. The distribution of the total urbanisable land into various broad categories of land-use have been made keeping in view the minimum desirable standards of development and functional linkages between them. The Table No—9 shows the land proposed for various major uses for 2031 of Sivasagar Master Plan Area.

**TABLE NO.-9**  
**PROPOSED LAND-USE**

**SIVASAGAR MASTER PLAN AREA. 2031**

Sl. No	A. Category of use (Developed Area)	Area in Hectre	P.C. of Masterplan area	P.C. of Developed area
1	Residential	2001.20	32.49	64.97
2	Commercial	136.40	2.21	4.22
3	Industrial	157.54	2.53	4.87
4	Public and Semi-Public	351.20	5.70	10.85
5	Utilities and Facilities	47.75	0.77	1.47
6	Transport and Communication	308.50	6.60	9.54
7	Recreation & open space	131.70	2.12	4.08
	<b>Total Developed Area</b>	<b>3134.29</b>	<b>52.42</b>	<b>100</b>

**B. Category of use (undeveloped Area)**

8	Green belt	210.30	3.50	
9	Agriculture	2257.81	36.66	
10	Vacant Land	125.60	2.05	
11	Water bodies	330.00	57.79	
	<b>Total Undeveloped Area</b>	<b>2923.71</b>	<b>100.00</b>	
	<b>Total Master Plan Area</b>	<b>6158.00</b>	<b>---</b>	<b>100.00 (A+B)</b>
		<b>(A+B)</b>		

### A. Residential Land Use:

The Plan provides about 2001 Hectres of land under residential use by the year 2031, which constitutes 32.49 percent of the planning Area. Keeping in view of the existing trend of development, availability of usable land, projected population etc. the density of zones have been divided into three parts. Out of the total land under residential use 25 percent will be under high density, 35 percent will be under medium density and 40 per cent will be under low-density residential zone. The gross residential density in each zone is given below:

1. Low Density : below 40 persons per Hectare
2. Medium Density : 40-80 person per Hectare
3. High Density : above 80 person per Hectare

It is proposed to organize the residential areas in to neighbourhood units where primary facilities like Primary Schools, Play ground, a community centre and a shopping centre for day to day needs and other service facilities will be provided.

It is proposed in the Master Plan that all the residential areas will continue to develop around the major work centers. The maximum of future residential development will take place towards south and South-East To meet the deficiencies of the existing area as well as to accommodate the future population by 2031 AD.

### B. Commercial Land use:

The total land allotted for commercial purpose is 136.40 Hectres, which is 4.22 percent to the total developed area. The existing areas under commercial use will not be sufficient to provide commercial facilities for the entire Master Plan Area for the year 2031, Therefore, hierarchial set up of commercial activities is proposed. The existing main shopping centre is proposed to be developed as General Business and Commercial Area while, other Sub- Centres are proposed at Station Chari Ali, Joysagar Chari Ali, Rong Ghar Chari Ali, Jenganikatia and B.G. Road to cater the shopping needs to the people away from the central business area. These shopping centres will comprise of retail shops, service shops, and houses for tertiary activities etc. Neighbourhood shopping centres in residential localities are also proposed to serve the residential units.

It is proposed to use the existing Civil Hospital area at central part of the Town for commercial purpose by shifting the remaining administrative functions of Health department to the Joysagar Hospital area where suitable sufficient land is available for the purpose.

### C. Industrial Land Use:

The potential for development of industry in the Master Plan Area is considered to be bright. The existing service and small-scale industries will continue to grow with the increasing demand. Depending upon local and regional economic factors and availability of raw materials, skill labour etc. New industries are likely to come up within the Master Plan Area. There are ample scope for development of small and medium scale industries based on forest and agriculture such as rice and flour mills, oil

mill, jute mill, fruit preservation, agro based perfumed oil, wooden and cane furniture making, match factory, etc. There are also good prospect for setting up of service and light consumers goods producing industries such as readymade garments, soap making, candle making, brick making, power loom, plastic goods, agriculture implements bakery, dairy etc.

The Oil and Natural Gas Commission is the only big industrial establishment within the town. Since its activity is only pumping oil from this region to the outside refineries, its impact on industrial development within the town is very limited. However, with its increasing activity it will help in setting up of some supporting industries of service and light consumer goods. The Total land proposed for the purpose is 157.54 Hectares, which constitutes 4.87 percent of the total developed area.

#### D. Public & Semi Public Land Use:

The total land allotted for public and Semi-public use is 351.20 Hectares, which is 10.85 percent of the total developed area. This includes land required for educational institutions, hospitals, Government and Semi Government offices, historical monuments, etc.

#### E. Community Facility:

To make the Master Plan realistic and to meet the needs of the people provisions for community facilities have to be made at various levels within the Master Plan Area.

##### Education:

Considering the standard as for every 1,500 to 2,000 population one Primary School and for every 5,000 to 6,000 population one High or



Higher Secondary School, the requirement of Primary and High or Higher Secondary Schools in the Master Plan Area will be 100 Nos. and 33 Nos. respectively. There are 61 Nos. of Primary Schools, 19 Nos. ME & MV school and 26 Nos. of High and Higher Secondary Schools. So, 39 Nos of Primary Schools and 7 Nos. of High and Higher Secondary Schools are to be established by 2031.

It is proposed that some of the existing Primary Schools should be shifted to suitable locations so that no children are to walk more than  $\frac{1}{4}$  K.M. to reach their respective Schools from home.

#### Health:

The Sivasagar Civil Hospital is the only medical service institution for general public with a capacity of 200 beds. With minimum need based standard of medical facilities. Apart, there are 5 other Nursing Homes within the Mater Plan area. It is proposed that beds in hospital should be provided as per standard given below:

It is proposed that the residential units with a population of 3,000 to 5,000 should have one Dispensary and a Maternity Centre and where the neighbourhood units with a population of 10,000 to 12,000 should have Health Centre.

#### Government Offices:

At present the Government Offices are scattered all over the town and are mostly in rented houses. It is desirable to organize an office

complex in a suitable area. It is proposed that Government land available at Demow Pathar should be utilized for developing such office complex.

#### Historical Monuments:

Sivasagar has large number of historical monuments constructed during the Ahom Rule signifying the glorious past. The architectural aspects of some of the monuments are very rich. The places of these monuments can be developed for large tourist attraction and may be made very useful for the general people. For this, it is proposed to provide recreational facilities like parks, open restaurants etc. at the site.

#### Cremation and Burial Ground:

Apart from the three existing cremation grounds two new cremation grounds have been earmarked in the Plan. One of these is near Kurula Kalita Gaon and the other near Arjun Guri Kumar Gaon. Both the places are located on the bank of Dikhow River. These sites are to be properly developed with tree plantation all around the cremation grounds so that there may not be any adverse effect on the surrounding areas. The existing cremation ground to the south of Phukon Nagar area also requires to be developed with trees all around. In all the areas bathing Ghats should be properly developed.

#### F. PUBLIC UTILITIES AND SERVICES:

Sufficient potable water supply well planned sewerage and drainage system and availability of power are basic need of urban life. At present

there is no drainage and sewerage system in the town except inadequate supply of power and water. It is therefore, essential to provide these infrastructures in a coordinated way by the concerned authorities.

#### Water Supply:

The present network of water supply is not adequate to cater the need of the people within the Sivasagar Master Plan Area. The existing water supply system within the Sivasagar Municipality has a total tank capacity of 1.46 million liters in its reservoirs with a daily average supply of 2.92 mld of treated water. Assuming a total consumption capacity of 125 lpcd, the total population of 84,200 Nos within the Sivasagar Master Plan areas requires about 10.53 mld to be supplied. Due to the shortage in capacity, water is provided only for an hour in the morning and one hour in the evening, which is not at all sufficient. Water have not been provided for the Master Plan Area outside the Sivasagar Municipality and all the people of this area depend upon tanks, well and other sources of water for their daily requirement. This surface source of water at Sivasagar is sufficient to meet the water requirement for the Master Plan area. To meet the present and future need, an additional water supply has been taken up by Assam Urban Water Supply & Sewerage Board to cover the Master Plan Area.

#### Drainage and Sewerage:

To solve the drainage problem a comprehensive drainage plan has been prepared and has been submitted to the Govt. for approval and funding. From the hygienic point of view the drainage scheme should get

top priority. In the mean time relief measures like opening up of blocked drains and their proper maintenance should be taken.

#### Garbage Disposal:

The existing garbage disposal site near Darika river along the National Highway 37 is not desirable and hence the dumping of garbages should be discontinued in the present site. For this purpose, a new sites measuring 20 Bigha has been identified at Poloshoni adjacent to the Master Plan boundary. A detail survey has been conducted and necessary project report is under progress along with incinator.

#### G. TRAFFIC AND TRANSPORTATION:

Transportation is the basic infrastructure for promoting and guiding the future development. Efficient road network is very much essential for safe, easy and quick movement of people and goods from one place to the another. Further, it is very essential for providing public utility such as drains, water-mains, electric and telephone lines etc. With the growth of population and development of new areas there will be corresponding increase of vehicular traffic. Considering this, to achieve higher efficiency in circulation system a hierarchy of road net work has been proposed under four categories according to their functional importance which are given in the page that follows.

Sl.No.	Type of Road		Right of way
1	Primary Road	---	20m to 30m (65 ft. to 100 ft.)
2	Secondary Road	---	16m to 18m (50 ft to 60 ft)
3	Tertiary Road	---	11m to 15m (36ft to 50 ft.)
4	Access Road/ approach road	---	6.6m to 9m (22 ft. to 30 ft) except single of 12'

#### Existing Road:

Most of the existing roads in the Master Plan Area are not properly developed. Sufficient widening of some of the roads are very much essential to have the required width as per the classification of the roads proposed. Among the existing roads the following roads are established as Primary roads with necessary improvement.

1.	The National High way
2.	A.T. Road excluding a small portion to the North of Railway Station
3.	Bhuban Gogoi Road
4.	Bor Ali
5.	A portion of the Dechial Dhulia Gaon Road starting from Rong Ghar Chari Ali
6.	O.N.G.C. Colony Road and B.N. Phukon Road

The following existing roads are to be redeveloped as Secondary Roads:

1.	Piyali Phukon Road
2.	Dole Mukh-Hemchandra Road upto Dikhow bridge
3.	Krishnapran Changkakaty Road
4.	R.K. Baruah Road A.K. Ghose Road
5.	Dubarani Ali
6.	Dechial Dhulia Goan Road
7.	West Jamuna Road upto National Highway .
8.	Dechang Mukh Ali
9.	Kharikatia Ali
10.	Link Road through Chipahi Gaon between Dubarani Ali and Bor Ali
11.	R.S. Road
12.	Arunudai Road Bazar Road upto the Thana
13.	K.P. Chaliha , New colony Road

New Roads:

Apart from remodeling and improving some of the major existing roads, some new roads have to be developed to meet the growing traffic need. Among these the following roads are established as Primary roads.

1	Road linking National Highway No 37 and Dechial Dhulia Gaon Road.
2	Road linking Bor Ali and B.B. Phukon Road

The following roads are established as Secondary roads among the new roads:

1	Extension of A. Ghose Road crossing the proposed link road between National Highway and Dechial Dhulia Gaon Road upto the
2	Extension of R.S. Road to Hemchandra Baruah Road.
3	Construction of a loop road starting from the Dechial Gaon Road crossing Bor Ali and Kharikatia Ali upto Bogidowl Ghari Ali
4	Construction of a link road linking Bor Ali and proposed loop road.

#### New Bridges:

The river Dikhow is running through the middle of the Master Plan area. As such to connect both the banks it is proposed to construct two more R.C.C. bridges besides the existing one. The proposed bridge towards the east of the existing bridge will mainly serve the O.N.G.C. traffic to different oil fields and the other one will mainly serve the western part of the town.

#### Improvement of Road Junctions:

Most of the existing road junctions are not properly designed. As a result of this the road junctions are becoming obstacle for easy flow of traffic. So, it is proposal to improve these conflicting junctions in a scientific way. The following road junctions require improvement:

1.	Dowl Mukh Chari Ali Road Junction
2.	Station Chari Ali Road Junction
3.	A.T. Road, R.K. Barua Road Junction
4.	Central Market Chari Ali Road Junction
5.	Rong Ghar Chari Ali Road Junction

6.	A. T. Road, bor Ali Road Junction
7.	Jenganikatia Chari Ali Road Junction
8.	K.P. Chari Ali Road Junction
9.	Bogidowl Chari Ali Road Junction
10.	National High-way-Piali Phukon road Junction
11.	Joysagar Chari Ali Road Junction

#### Bus and Truck Terminals:

There are no organised bus terminals within the Sivasagar Master Plan Area. The existing Bus stand of Assam State Road Transport Corporation will continue to cater to the needs of the general commuters and this should act as an Night Bus stand from 8.00 pm as the traffic become thin thereafter. It is proposed that a Public Bus Terminus in the north or south of National High Way should be developed for long distance public Buses and the private concern to operate their bus services conveniently. This bus terminal will relieve the centre of the town from the plying of the buses considerably.

As there are no existing truck terminals, the roadsides are used for parking of heavy trucks. This reduces the capacity of the roads and creates congestion within the town. With the increasing activities within the Master Plan Area the need of organised truck terminals will be more. For this one site is proposed adjacent to the National Highway near Betbari Chariali close to the Industrial area, which will serve the loading and unloading purposes apart from parking heavy vehicles.



**Car Parking:**

At present there is no suitable car-parking place within the town. Roadsides are used for parking of the cars. For this four very convenient sites are proposed. Those are:

1.	The present site of Health Department will be vacant as soon as it is shifted to the existing campus at Joysagar. It is proposed to develop the site suitable for car parking area, Apart from parking of private cars, a taxi stand may well operated in this area.
2.	Provision for on-street parking could be made on the western side of the Dowl Mukh Road. A strip of Government land is available along this portion of the road, which will accommodate about 100 Nos. of cars after development.
3.	Area near the Joysagar Chari Ali on the Southern side of Bor Ali is proposed to develop as car parking space. This will well serve the Joysagar area.
4.	On the northern side of the National Highway near the National High Way Dichang Mukh road Junction, it is proposed to develop a parking space to serve the northwestern side of the town.

**Mass Transportation:**

There are two types of mass transportation, one at the city level and the other between the city and its region. At present the population and the size of the town cannot sustain the service of city mass transportation. However, with the increase of population and development activities as proposed in the Plan, there will be future demand for city level mass

transportation system. And it is assumed that such a system will be effective only by bus. In the mean time the regional mass transportation system should be well organised to serve the suburban areas.

#### H. RECREATION AND OPEN SPACE:

For healthy environment, open space is a very important factor. The existing recreation and open space within the town as per standard is although adequate and at present it will be inadequate by the planning period 2031. The standard should be 1 acre per thousand population in the existing town and 4 acres per thousand populations in the rest of the Master Plan Area. For this purpose a total area of 131.70 acres have been earmarked apart from green belts and water bodies. The existing open space around the Rong Ghar and the Kareng Ghar may be well developed which will be also points of tourist attraction. The two big tanks namely Sivasagar and Joysagar tank may be used for boating and swimming by providing required facilities.

#### I. GREEN BELTS:

The total area under this use is about 210.30 Hectares, which is 3.50% of the total Master Plan Area. Activities in the green belts should be restricted to as provided in the zoning regulations.

## CHAPTER-VII

### 7.1 MASTER PLAN IMPLEMENTATION

The Master Plan presented here contains plans and policies for the improvement and development of Sivasagar Master Plan up to 2031. For implementation of the Plan, preparation of development schemes in conformity with the Master Plan Area absolutely necessary. The details of the development proposals for different areas will be worked out at the time of preparation of development schemes. This includes the various improvement and development schemes for residential, commercial, public and Semi-public areas including street schemes etc. The successful implementation of the proposals of the Master Plan requires efficient administrative set up, active technical guidance, sufficient financial resources and strong legal backing. Apart from these, public participation is a vital aspect in implementation of the Master Plan.

All the above-mentioned aspect will be taken into account at the time of taking the Master Plan for implementation. The execution of the Master Plan will be carried out within the framework of the Assam Town and Country Planning Act, 1959 and as amended from time to time and Zoning Regulations and Building By-laws published by the Government.

A co-ordinated development of the Master Plan areas is very essential. Although the Master Plan will be implemented by an agency as desired by the Government many development works have been doing within the Master Plan area by different government and Semi-government Department as a part of their normal routine work. If these agencies carry out their works following the guidelines given in the Master Plan the problem of overlapping, financing unplanned development of schemes will

be greatly reduced. As such it is suggested that effective directions should be given by the Government to the agencies to follow the Master Plan in implementing their different schemes.

The most important tools in connection with private department are Zoning Regulations. To check the haphazard growth and to channalize the different activities within the Master Plan Area the Zoning Regulations are to be followed very carefully. If these rules are followed properly the town will take an organised shape as per plan in course of time. The different Zones of the Master Plan area are shown clearly in the plan and the Zoning Regulations are given at the end of this Report.

## 7.2 PRIORITY SCHEMES

To achieve the desired goal the development schemes will be implemented in a phased manner in order of priority which are given in the Appendix 'A' The proposed schemes will have to be reviewed from time to time as per changing needs. And it is suggested that the priorities should be fixed at the time of reviewing and implementation should be done accordingly.

### APPENDIX –A PRIORITY SCHEMES

#### PHASE –I

1	Water Supply	i)	Implementation of the water-supply scheme prepared for Sivasagar Master Plan area. Amt: Rs.20.58 crore.
2	Office Complex	i)	Construction of office buildings at Joysagar area.

3	Improvement and widening of Road	i)	Improvement and widening of the A.T. road – four lane.
		ii)	Improvement and widening of B.G. Road- two lane (Road leading to Simaluguri).
		iii)	Improvement and widening of K.P. Changkakoty Road G.G. Phukon Road, B.N. Phukon Road –two lane.
		iv)	Improvement and widening of Piyali Phukon Road – two lane.
4	Road Junction Improvement	i)	Improvement of Central Market Road junction.
		ii)	Improvement of K.P. Chariali Road junction.
		iii)	Improvement of Rong Ghar Charali Road junction.
		iv)	Improvement of National Highway-Piyali Phukon Road junction.
5	Construction of Road	i)	Development of a new road linking Borali and B.N. Phukon Road, Crossing the river Dekhow (80').
6	Bus Station	i)	Development of Bus Terminal near along N.H.Way.
7	Bridge	i)	Construction of double way R.C.C. Bridge over river Dikhow and the proposed Bor Ali-B. N. Phukon Road.

8	Market	i)	Construction of R.C.C. double story Market at the site of existing daily market near Station Chariali.
		ii)	Development of R.C.C. Market at suitable location.
9	Drainage and Sewerage	i)	Implementation of the Drainage Project prepared for the Sivasagar Master Plan area.
10	Parks	i)	Expansion & Development of park near the Rong Ghar.
		ii)	Expansion & Development of park near the Kareng Ghar.
11	Educational Institution	i)	Improvement of conditions of the existing schools by providing required facilities.
12	Residential Area Development	i)	Land development and sale scheme by providing required utilities and facilities on the Northern Side of NH-37 Bypass.
		ii)	Land acquisition for land development and sale scheme at Gohain Chuk.

**PRIORITY SCHEMES**

**PHASE-II**

1	CONSTRUCTION OF ROAD	i)	Construction of road linking National High way 37 and Dechial Dhulia Gaon Road (80').
		ii)	Development of a link road connecting R.K. Chaliha road and New Colony Road (30').

2	BRIDGE	i)	Construction of a R.C.C. double way bridge over river Dikhow on the link road between National Highway and Dichial Dhulia Gaon road.
3	IMPROVEMENT AND WEDENING OF ROAD	i)	Improvement and widening of west Jamuna Road upto National Highway.
		ii)	Improvement and widening of Dichang Mukh Ali.
		iii)	Improvement and widening of Dhuliapar Ali.
		iv)	Improvement and widening of Dechial Dhulia Gaon Road.
		v)	Improvement and widening of Bor Ali.
4	ROAD JUNCTION IMPROVEMENT	i)	A.T. Road Bor-Ali junction improvement.
		ii)	Joysagar Chariali junction improvement.
		iii)	Jenganikatia Chari ali junction improvement.
		iv)	Bogidowl Chariali junction improvement.
		v)	West Jamunamukh Road National Highway junction improvement.
5	RESIDENTIAL AREA DEVELOPMENT	i)	Land Development and sale scheme by providing required utilies and facilities in the Rupahi Pathar and Demow Pathar area.
6	MARKET	i)	Development of a market at Joysagar Tiniali.

		ii)	Development of a market at Jenganikatia Chariali.
7	PARKS	i)	Development of a park on the westernside of the Piyoli Phukon Road upto the National Highway.
8	BUS TRUCK TERMINALS.	i)	Development of existing Public- Bus Station near Dorika Bridge.
		ii)	Development of a Truck Terminus near Betbari Chariali adjacent to the NH-37.

#### PRIORITY SCHEME: PHASE-III

1.	CONSTRUCTION OF ROAD IMPROVEMENT & WIDENING OF ROAD.	i)	Extension of A.K.Ghose Road crossing the proposed link road between National Highway and Dechial Dhulia Gaon Road upto National Highway (60').
		ii)	Development of a link road linking Bor Ali and proposed loop road near Demow Jan.
		iii)	Improvement and widening of Melachakar Road.
		iv)	Improvement and widening of T.P. Chaliha Road.
2	RESIDENTIAL AREA DEVELOPMENT.	i)	Land development and sale scheme by providing required utilities and facilities in the Bailung Pathar Area.



## CHAPTER-VIII

### 8.1 ZONING REGULATIONS

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

Zoning Regulations have been widely accepted as legal instruments of control and promotion of development and in fact it is the Zoning Regulations that an ordinary development within the frame work of any Master Plan. Thus, these regulations can do a great service in correctly portraying the intention of the Master Plan and promoting its objectives.

Zoning Regulation would help in controlling density of development and land use, in ensuring protection of open areas, light and ventilation standards and in providing for future expansion in each zone in an appropriate manner.

### 8.2 ZONING PLAN:

Zoning means the method of accomplishing a suitable arrangement of different land use components of a town. Although it is an integral part of the overall plan, yet it does not mean the only arrangement. Good zoning ensures right use of available land.

In order to achieve the goals and objectives of the plan a zoning plan is prepared earmarking different use areas with suitable boundaries. This zoning plan should be read in conjunction with the land use plan and zoning regulations.

Zoning Regulation would help in controlling density of development and land use in each zone in appropriate manner. Zoning Regulation for Sivasagar Master Plan Area will follow the uniform zoning regulations as approved and notified by the vide Government Notification No. 226 Dispur, dated the 12<sup>th</sup> June 2000, published in Assam Gazette Extra Ordinary on 16<sup>th</sup> December 2000.

### 8.3 PLAN IMPLEMENTATION:

The Master Plan and Zoning Regulations for Sivasagar and its mere adoption will not improve the quality of urban life without enforcement of zoning regulations and implementation of Development schemes for the town. Further in the process of development and redevelopment of an urban centre the citizen of the town plays a major role by undertaking construction, reconstruction and development of land in private sectors. Citizens' participation is therefore indispensable for the success of the plan.

### 8.4 PLAN ADMINISTRATION:

The Master Plan and Zoning Regulation for Sivasagar contains broad policy programme for development of Sivasagar Master Plan area

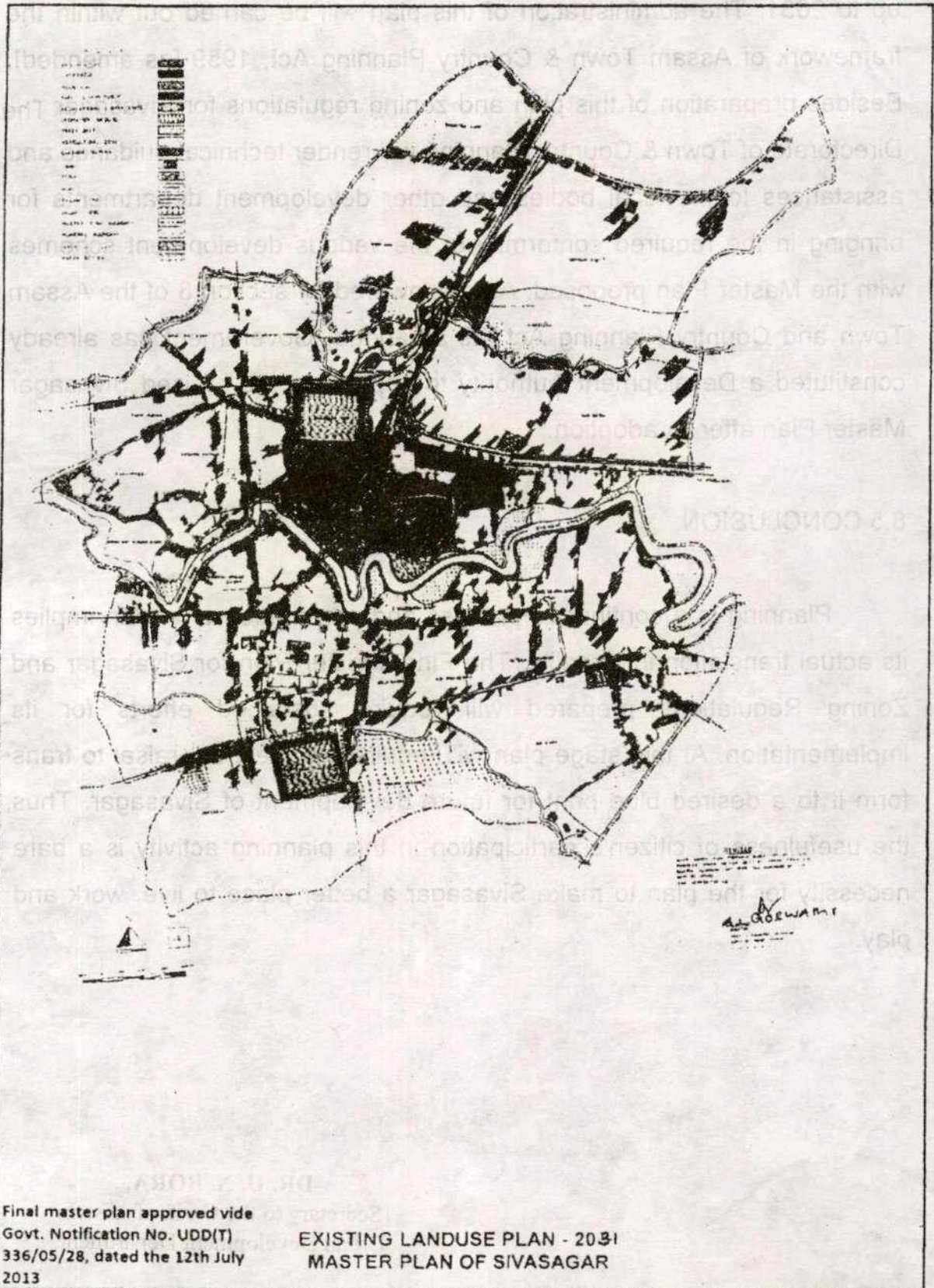
up to 2031. The administration of this plan will be carried out within the framework of Assam Town & Country Planning Act, 1959 [as amended]. Besides preparation of this plan and zoning regulations for Sivasagar, The Directorate of Town & Country Planning will render technical guidance and assistances to the local bodies and other development departments for bringing in the required conformity of the various development schemes with the Master Plan proposed. As empowered by section 8 of the Assam Town and Country Planning Act [as amended] Government has already constituted a Development Authority to implement the revised Sivasagar Master Plan after its adoption.

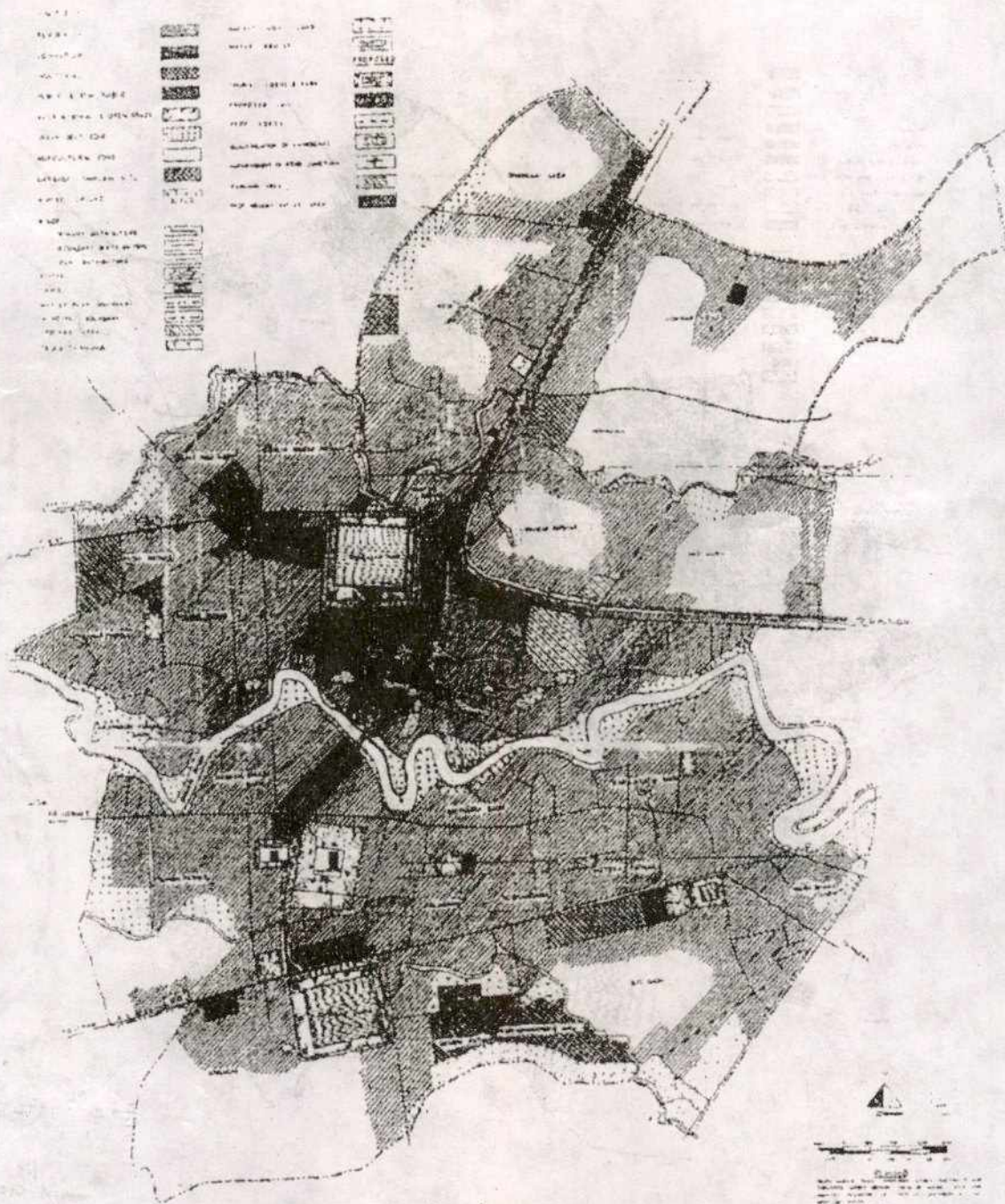
#### 8.5 CONCLUSION:

Planning is a continuous process and preparation of a plan implies its actual translation into reality. The Final Master Plan for Sivasagar and Zoning Regulations prepared will require sustained efforts for its implementation. At this stage plan will require a correct appraisal to transform it to a desired blue print for future development of Sivasagar. Thus, the usefulness of citizen's participation in this planning activity is a bare necessity for the plan to make Sivasagar a better place to live, work and play.

**DR. U. N. BORA,**

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





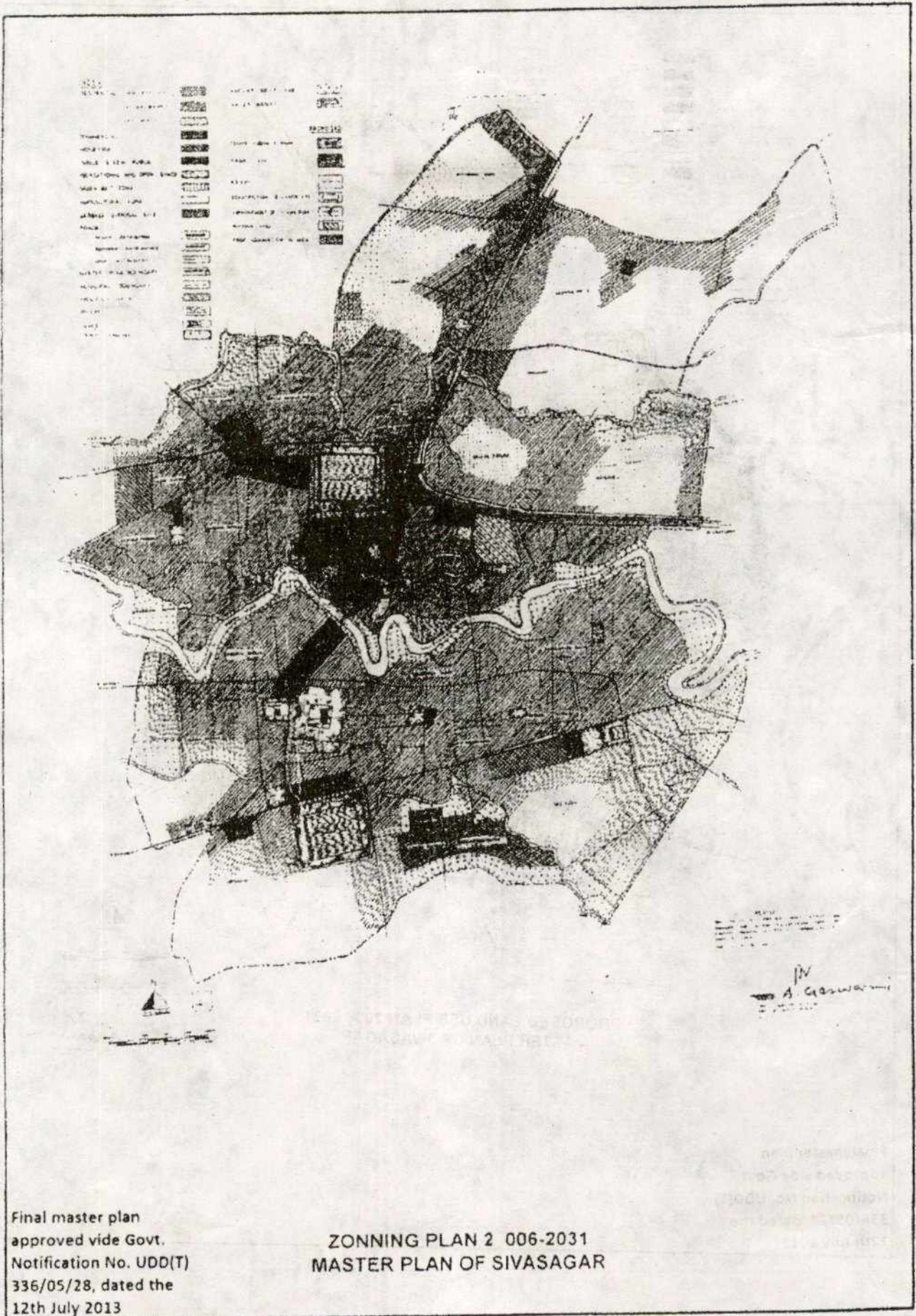
PROPOSED LAND USE PLAN 2006-2031  
MASTER PLAN OF SIVASAGAR.

By  
A. G. G. G. G.  
[Signature]

Final master plan  
approved vide Govt.  
Notification No. UDD(T)  
336/05/28, dated the  
12th July 2013

MASTER PLAN OF SIVASAGAR

Notification No. UDD(T)  
336/05/28 dated the  
12th July 2013



Final master plan  
approved vide Govt.  
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336/05/28, dated the  
12th July 2013

ZONING PLAN 2 006-2031  
MASTER PLAN OF SIVASAGAR

