



# THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত

PUBLISHED BY THE AUTHORITY

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No. 122 Dispur, Monday, 11th March, 2024, 21st Phalguna, 1945 (S. E.)

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

DEPARTMENT OF HOUSING AND URBAN AFFAIRS

## NOTIFICATION

The 4th January, 2024

**DoHUA EcF No. 393727/2023/46** -- In exercise of the powers conferred by the Sub- Section (2) and (3) of Section 10 of the Assam Town and Country Planning Act, 1959 (as amended) read with Rule 6 of the Assam Town & Country Planning (Publication of Master Plan and Zoning Regulation) Rules, 1962, the Governor of Assam is pleased to publish the following notice regarding the publication of the Final Master Plan for Sootea.

### Notice for publication of the Final Master Plan for Sootea

1. It is notified that the Final Master Plan for Sootea is prepared by the Directorate of Town & Country Planning, Government of Assam and adopted by the State Government under sub section (2) and (3) of Section 10 of the Assam Town & Country Planning Act, 1959 (as amended) read with Section 6 of the Assam Town and Country Planning (Amendment) Rule, 1962 for the area 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 the office hours at the office of Director, Town & Country Planning, Dispur, Guwahati-6, Deputy Director, Town & Country Planning, Dist Office – Tezpur, office of the Chairman, Sootea Municipal Board & Naduar Revenue Circle Office. Copies of the Final Master Plan is also available in the office of the Director, Town & Country Planning, Dispur, Guwahati-6 and Deputy Director, Town & Country Planning, Dist Office – Tezpur for sale on payment.

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

DISTRICT	:	SONITPUR
SUB-DIVISION	:	TEZPUR
POLICE STATION	:	SOOTEA
STATE	:	ASSAM
APPROXIMATE MASTER PLAN AREA	:	44.63 Sq. KM.
APPROXIMATE MUNICIPAL AREA	:	11.33 Sq. KM.

**B. REVENUE AREA INCLUDED IN THE SOOTEA MASTER PLAN**

1. Sootea Municipality
2. Other Revenue area

<u>Revenue Circle</u>	<u>Mouza</u>	<u>Villages</u>
<b>Naduar</b>	Nagsankar	Sootea Town (1. Sootea Revenue Town, 2. Niz Sootea) 3. Solal Sonari, 4. Pathakakuri (Pathor), 5. Metera, 6. Chaporial, 7. Major Ati.
<b>Naduar</b>	Sootea	Sootea Town (8. Bora Bhuyan, 9. SaraiJania, 10. Gereki Grant, 11. Khatowal, 12. Malar Gaon (Metera), 13. No. 2 Nalbari), 14. GhahiGaon, 15. Magurmara, 16. Bongali Gaon (Basti), 17. BagoriAti, 18. DakhinDol, 19. No. 1 Nalbari, 20. No. 3 Nalbari, 21. Palashani

**C. DESCRIPTION OF BOUNDARIES**

<b>NORTH:</b>	Chalahola Gaon
<b>SOUTH:</b>	Giladhari River.
<b>EAST:</b>	Giladhari River.
<b>WEST:</b>	Nagsankar.

**KAVITHA PADMANABHAN,**  
Commissioner & Secretary to the Government of Assam,  
Department of Housing and Urban Affairs,  
Dispur, Guwahati-6.

## CHAPTER – I

### INTRODUCTION TO THE MASTER PLAN AREA

#### 1.1 LOCATION, REGIONAL SETTING AND HISTORY OF THE TOWN

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 principals of urban planning in order to achieve good living and working environment, where needs of housing, employment, transportation, recreational activities etc. of the whole community are best provided with optimum utilization of available resources.

The latitude and longitude of Sootea are 26° 44' 0.6" N and 93° 2' 47.4" E and Elevation is 76.00 meters (249.34 feet) above Mean Sea Level.

In Preparing of the Final Master Plan for Sootea, various surveys have been carried out such as Land use survey, Socio-economic survey, Traffic survey etc. to understand the existing condition of the town as well as the selected villages which covered under Master Plan area in order to suggest the types of action to be taken to guide future development of the area. The Master Plan area of Sootea has been demarcated after studying the present trend of growth of the town, the physical feature of the surrounding areas, future development of commercial and industrial network in the region etc. The present trend of growth of the town is towards the east for the development of road and rail communications to Lakhimpur, development of trade and commerce etc. along the both sides of NH-15 and towards west due to the tourist attraction point of Nag Shankar Temple. The NH -15 is directly linked with Arunachal Pradesh via Gohpur/ Biswanath Chariali which is going to boom trade & commerce activities for Sootea in near future. On the other hand, the present trend of growth of the town is towards the eastern side due to well transport communication linked with district headquarter, Biswanath Chariali etc.

In English the name of the place is written to two different ways such as CHATIA, used in the local purpose and in the Rail-way Department and SOOTEA, used in the postal department.

Most probably in the time of the British Rule the British pronounced 'Chatia' as 'Sootea' and hence it was so.

Turning over the pages of history to know about the source of the word Chatia/Sootea it is known that within the period of 1804-1808 Dr. Bubman Hemilton, residing at Rangpur and Goalpara surveyed entire Assam and wrote a book named "An Accounts of Assam" where he stated Sootea as an ESTATE, a residential area. This is adopted from 14<sup>th</sup> page of the book "Ahom Tribal", written by L. Devi.

It is also known from the "Alleins Gazetteer of Lakhimpur", published in 1905 a number of *Chutia* families were deported to a place a little to the East Bharali river which bears the name Sootea or Chatia to the present day. Only because of the residential area of *Chutia's* Dr. Hemilton used the word Estate.

Under the British rule in 1834 the then agent to the Governor General Mr. KeryKarpet established three districts in Assam namely Guwahati, Nagaon and Darrang. Sootea was in the district of Darrang and it was counted as a developed place then. The district head quarter of Darrang was at Mongoldai and afterwards it was transferred to Tezpur. There was neither bridge nor boat in the Bharali River that flows between Tezpur and Sootea and hence for the convenience of Govt. jobs and Court Cases for the people, residing in the east Bharali, the Government established a police station at Sootea and declared as Sub-Division. From Tezpur to Behali there was only one police station at Sootea then.

In 1928 the British Government established a village authority at Sootea and the same had been executing its function up to 1942.

"Chatia Rayat Sabha" was organized and came into force in 27<sup>th</sup> December in 1923. The only aim and attitude of the said Sabha was to take part in the agitation of Independence of the Country and to constitute the nation as a whole. Chatia was the sole-centre in the agitation of Independence of the entire district. Late Lakhikanta Barkakati, a worthy son of Sootea, got the chance to attend the meeting of Indian National Congress, held in madras in 1887.

In 1932 as per planning of Jyotiprasad Agarwala, the then courageous youth of Malar Gaon Late Bhunidhar Bardoloi flags down the union jack from the Judicial Court of Tezpur and flags there the tri- coloured Indian flag on 18<sup>th</sup> March, happened for the first time in entire India.

On 20<sup>th</sup> August in the year of 1942 six male and three lady teachers resigned their post and accompanied by many student, youth and other Congress workers marched forward to the Sootea police station and unfurled the Indian National Flag there and held a public meeting too. The same was done on 20<sup>th</sup> September/1942 and showed the courage and velour of the people, residing at locality of Sootea for the independence of India.

The Master Plan presented here is a broad guideline for orderly development of Sootea as a growing urban center in near future. The study made for this purpose is elaborate in the subsequent chapters along with the recommendations based on modern planning techniques and principals etc. The population of the Master Plan Area has been estimated up to the year 2041 and all the recommendations are made accordingly. And in this connection, all these plan and projects will be effectuated by way of taking up detailed schemes in Phased manner. In order to control the land use of the area and to achieve the desired growth of the town “Assam Unified Building Construction (Regulation) Byelaws, 2022 and the Uniform Zoning Regulations, 2000” as notified by Government have been adopted.

For the implementation of Master Plan in broader sense, the participation of Public/Community is a vital aspect. No plan can success and reach its desired goals until and unless it is supported by citizen. As such, it is desirable that the people of Sootea will extend their hearty co-operation to the measure taken up for the successful implementation of the Master Plan.

## **1.2 CLIMATE, TOPOGRAPHY AND SOIL CONDITION**

Sootea occupies its position on the strip of flat land lying in the foothill of Arunachal and Bhutan.

The climatic condition of Sootea town is same as the average climate condition of the state. The monthly maximum and minimum temperatures of Sootea during the last few years are-

**Table No. 1: Climate Sootea: Weather by month in recent years**

Factors	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Day temp. (°C)	21	25	32	38	42	42	37	35	35	34	29	23
Night temp. (°C)	9	11	17	23	29	31	29	28	26	23	18	12
Precipitation (mm)	7	13	7	6	5	20	66	66	53	2	1	2
Days with rain	2	4	4	4	3	6	14	15	9	1	1	1
Dry days	29	24	27	26	28	24	17	16	21	30	29	30
Sun hours per day	7	10	10	11	12	12	11	11	9	8	7	7
Wind force (Bft)	2	2	2	2	2	2	2	2	2	2	2	2
UV-index	5	5	7	8	9	8	8	7	8	6	6	5

*Source: www.google.com*

From the above table it is summarized that Sootea has a very pleasant weather i.e. not too hot in summer and not too cold in winter like other areas of Assam and NE, Sootea has been enjoying a very heavy rainfall during monsoon seasons.

From the above table it can be derived that Sootea has been experiencing the major rainfall in a year in the months of June, July and August during the last five years.

Sootea and its immediate neighbouring areas enjoy a climate which is suitable for cultivation of paddy and tea. The soil within the Master Plan area is alluvial and comparatively less prone to annual floods which are a recurring feature in any parts of the state.

### **1.3 URBAN MORPHOLOGY AND PHYSICAL SETTING**

Urban Morphology refers to the study of internal structure, the arrangement of residential houses, layout plan of roads and streets, internal physical structure of the city consisting entertainment space, community land, marketing area etc.

Sir Edward A. Gait (1897) had made reference to the nine-line inscription of Harjjar Varma in his book "A History of Assam." The inscription is the first recorded history of Assam and dates back to 829 A.D. After the Pal dynasty" the royal dominance of the Koch Kings in the west and the Ahoms in the east started growing. During the 14th and 15th century a large part of the

western bank of Brahmaputra from Singri in the west and Sootea in the east was ruled by the Bora-Bhuyans. The great saint poet Sri Sri Shankardeva belonged to Bora-Bhuyan family, who settled at Rowta in Darrang District. The Ahom King Suhungmung alias Dihingia Raja occupied the territories of the Bora-Bhuyans on the north in 1505 A.D. The Koch King Biswa Sinha rose to power in 1515 A.D. King Naranarayana who ascended the throne in about 1540 A. D. divided his Kingdom into two parts. He had given the eastern part to the son of his brother Chilarai and the western part of the kingdom to his own son Lakshminarayana. But soon after their ascension as kings, fratricidal war broke out and Lakshminarayana sought refuge with the Mughals which eventually led to invasion of Kamrup by the Mughals. Balinarayana, one of the brothers of Parikshitnarayana fled away to Gorgaon to seek the help from the Ahom king Swargadew Pratapsingha. Pratapsingha christened Balinarayana as Dharmanarayana, made him the king of Darrang and declared war against the Mughals (1616-1637 A.D.). The Ahoms defeated the mighty Mughals in the Bharali war and re-occupied Darrang from the Mughals. King Dharmanarayana made supreme sacrifice in Singari war in 1638. His son Sundarnarayana ascended the throne and became the king of Darrang. (excluding Tezpur). On the other hand, the Ahoms ruled the eastern part of Darrang (present Sonitpur) through Kalia Bhomora Borphukan, stationed at Kaliabor. The Ahom Kings resettled many people in the southern part of Brahmaputra.

The heritage Sootea Police Station in Biswanath is a testament of Assam Police's glorious history & an icon of our Independence movement, where the national flag was unfurled in 1942.

The area west of Chatia in between the Ghiladhari River and the Bharali River gently slopes down towards the Brahmaputra. Rice is grown in great stretches having villages in the background. Feathery bamboo, slender palms and broad-leafed plantations add to the wealth of the greenery of the district.

According to the historical events, Biswa Sinha the first Koch King conquered Darrang including the present Sonitpur, which was part of the then Darrang district. Biswa Sinha rose to power in about 1515 A.D when the Bora-Bhuyans were ruling the small principalities in several parts of the then Darrang district. The Koch expedition is believed to have taken place in 1546 A.D. The reign of Naranarayan, the eldest son of Biswa Sinha represents the zenith of Koch power. He died in 1584 A.D. After his death, quarrel began between the Lakshminarayan, the son of

Naranarayan and Parikshit, the successor of Raghudev. Laxminarayan sought the help of Nawab of Dacca to subdue Parikshit, and the other side, Parikshit sought the help of Ahom king PratapSinha. In 1614 A.D., Mughals defeated Parikshit and he was taken to Delhi as a prisoner, and his kingdom was annexed to Mugalempire. In 1616, the Ahom king, PratapSinha inflicted a crushing defeat on the invading Muslims on the bank of Bharali. But in 1637 A.D., the Muslims who were advancing towards Kajali at the mouth of Kallong, again defeated Ahoms. In the counter offensive, the war ended with a treaty between Muslims and Ahoms. Under this treaty the Barnadi on the northern bank of the Brahmaputra and the Asurar Ali on the south bank were accepted as the boundary between them. Mir Jumla, the governor of Bengal made an attack on Assam on 4th January 1662, and captured Gauhati. But in 1667 A.D., the Ahoms again captured Guahatifrom the Muhammadans and extended their territory up to the Manasriver. On hearing this, Aurangzeb sent a huge arm force against Ahom, which reached Rangamati in February 1669 A.D. and advanced up to Tezpur. However, in 1671, Ahom gained a decisive victory over Mughals at Saraighat and Mughals retreated to Rangamati. The zenith of Ahom's power was reached during the reign of Rudra Sinha (1695- 1714 A.D.) During the period of Kamaleshwar Sinha, who succeeded to the Ahom throne in 1795, there was a series of insurrections in several parts of the Ahom territory. The Daflas and Moa-morias rose in rebellion. The darkness period of the history of Assam is from 1818-1824 A.D., when the Burmese invaded Assam and let loose a reign of terror. After conquering Assam, the Burmese intruded upon British territory, which led to British intervention. Soon after a war between British and Burmese, the treaty of Yandabo took place on February 24, 1826, which led to the eventual annexation of Assam to the East India Company. Sonitpur along with the rest of Assam took part in India's Independence movement. Not much jurisdictional changes took place since its formation. A small part of Sonitpur was annexed with the Bodoland Territorial Area District (BTAD) of Udalguri during the last decade.

Consideration its past, present and importance in the future, it seems Sootea town is likely to grow more in the coming years ahead. Already, there is less possibility of expansion inside the municipal area; hence expansion will be mainly in the sub-urban areas, located immediately under the direct influence of the town.



#### 1.4 NEED FOR THE MASTER PLAN

“Final Mater Plan for Sootea - 2041”, has been prepared to guide the physical development of the town and its sub urban areas, in future. Sootea with its neighbouring 21(1twenty-one) villages Sootea Town (1. Sootea Revenue Town, 2. Niz Sootea, 3. Bora-Bhuyan, 4. Sarai-Jania, 5. Gereki Grant, 6. Khatowal, 7. Malar Gaon (Metera), 8. No. 2 Nalbari) 9. Solal Sonari, 10. Pathakakuri (Pathor), 11. Metera, 12. Chaporial, 13. Major Ati, 14. Ghahi Gaon, 15. Magurmara, 16. Bongali Gaon (Basti), 17. Bagori Ati, 18. Dakhin Dol, 19. No. 1 Nalbari, 20. No. 3 Nalbari, 21. Palashani are included in the “Final Mater Plan for Sootea - 2041”

The Final Master Plan for Sootea, 2041 has been prepared considering different aspects (within the constrains), including transportation aspect, and others those likely to affect activities and land use in the planning areas in future. By and large, this plan is prepared as per provision of the URBAN AND REGIONAL DEVELOPMENT PLANS FORMULATION & IMPLEMENTATION (URDPFI) GUIDELINES 2015, prepared by the MINISTRY OF URBAN DEVELOPMENT, GOVT. OF INDIA under the guidance of the Town & Country Planning Organization and circular issued from time to time by the TCP Dept., Govt. of Assam, Uniform Zoning Regulations, The Assam Unified Building Construction (Regulation) Byelaws, 2022 are considered as it is already approved for all the towns of **Assam** including **Sootea** by **the Government of Assam**.

The main aim of the infrastructural development of Sootea town is to provide better facilities to the public. At the same time, it is expected that this will provide convenience of discipline, cleanliness & pollution control to all section of people.

## CHAPTER – II

### DEMOGRAPHY

The study growth of population and its composition together with its characteristic is vital in planning a town or a region in order to evolve out planning programme in respect of physical economic and social development in a rational manner.

#### 2.1 TOTAL POPULATION, MALE/ FEMALE POPULATION

Sootea has grown into a multifunctional town with trade and commerce, as its main activity. Sootea Master Plan Area had a population of 25,226 as per 2011 census and it had a gradual decadal increase. The table shows the population growth of Sootea planning area.

**Table No. 2: Population Growth of Sootea Planning Area, 1951 - 2011**

Year	Sootea Municipal Area	Growth Rate (%)	Planning area minus Municipal area	Growth Rate (%)	Sootea Master Plan Area	Growth Rate (%)
1951	6307	---	5215	---	11522	---
1961	9201	45.89	9194	76.30	18395	59.65
1971	9785	6.35	8495	(-) 7.60	18280	(-) 0.63
1991*	11807	20.66	8853	4.21	20665	13.05
2001	12598	6.70	10077	13.83	22675	9.73
2011	14000	11.13	11226	11.40	25226	11.25

\*20 years growth rate.

Sources: Census of India.

Town population has been calculated from the population of the villages, those included in Sootea town which was created Vide **Govt. Notification No. UDD(M)211/2014/71 dated 31-07-2017**.

The above Table reveals that the rate of growth of population in the town during 1951-61 was considerably high being 45.89% respectively. This is due to the migration from its hinterlands to the town obviously for employment opportunities. Due to establishment of many schools and growing up household industries attracts people to migrate to the town. The growth of population in the town during 2001-2011 was also 11.13% which indicates that population migration has been taking place to the town area. The rate of growth of population in the planning area excluding the municipal area was 76.30% during the decade 1951-61 and the growth rate of population in the planning area excluding the municipal area as well as for the entire master plan area were also found as negative one i.e. (-)7.60% and (-)0.63% respectively during 1961-71. As per 2011 Census, the Schedule Cast and Schedule Tribe Population in Sootea Municipality were 7.19% and 0.58% of total population respectively and that in entire planning were 11.50% and 0.41% respectively.

**Table No. 3: Male & Female Population in Sootea Master Plan Area 1951– 2011**

Year	Sootea Municipal Area		Sex Ratio	Planning area minus Municipal area		Sex Ratio	Sootea Master Plan Area		Sex Ratio
	Male	Female		Male	Female		Male	Female	
	1951	3453		2854	827		2733	2482	
1961	5446	3754	689	5063	4131	816	10509	7876	749
1971	5297	4488	847	4464	4031	903	9761	8519	873
1991	6177	5630	911	4563	4295	941	10740	9925	924
2001	6499	6099	938	5207	4870	935	11706	10969	937
2011	7042	6958	988	5782	5474	947	12794	12432	972

*Sources: Census of India*

According to 2011 Census, the sex ratio i.e. number of females per 1000 males of Sootea town was 988 while the district urban ratio was 955. During the same year ratio for the planning area stood at 972 against that of the district was 956.

The 0-6 age group population of in Sootea Municipality and Sootea Planning Area in 2011 were 1462 (10.44%) and 2682 (10.63%) respectively.

## 2.2 MIGRATION OF POPULATION

As a result of urbanization i.e. creation of Sootea town, rural urban migration of the individuals is taking place at a fast pace, holds the dominant role in terms of the number of migrants in case of intra-district migration. Rural to urban migration in intra-district migration showed an upward increase in respect of the number of migrants in Assam as per 1991, 2001, 2011 census. In 1991, rural-urban migration held 1.83 percent of the total migrants in Assam. However, it increased to 2.18 percent in 2001 and to 2.9 percent in 2011.

For Sootea too, migration from rural areas have been taking place during 1991-2001, 2001-2011 for different purposes like work and business especially for men and marriage especially for women, also education for both men and women.

## 2.3 HOUSEHOLD DENSITY AND SIZE

According to 2011 census, the gross density of Sootea town was 1236 persons per Sq. KM. (considering the Sootea Municipal area as per the prepared map is 11.33 Sq. Km.) while it was 565 persons per Sq. Km for the entire planning area. The town registered population density of 1112 persons per Sq. Km in 2001 while it was 508 persons per Sq. Km in Sootea Master Plan Area. The density of population gradually falls as we go away from the town, where population is sparsely distributed with pockets of settlements amidst agricultural land.

The household size in Sootea Municipal area during as per 2011 census was 4.58 and that in the entire planning area was 4.68 which were in 2001 census 5.09 and 5.17 respectively, which indicates the household sizes had been decreasing during the last decade both in Sootea Municipal Area as well as Sootea Master Plan area.

## 2.4 POPULATION PROJECTION UP TO 2041

Considering the past and present growth and development factors, population up to 2041 are projected for Master Plan area and it is given in the table below:

The average decadal growth rates of population in Sootea Municipal area and the Planning area excluding municipal area for the last 4 (four) decades i.e. 1961-1971, 1971-1991, 1991-2001,

2001-2011 have been calculated. The decadal growth rates of population for the next 3 (three) decades have been assumed the average decadal growth rate of past five decades for the different two areas. The decadal growth rate of population for the decade 2011-2021 is assumed to be higher than the calculated average for municipal area and for planning area excluding municipal area at the rate of just doubled as there will be scope of physical development as most of the areas within the master plan area including municipal area are yet to be developed.

**Table No. 4: Population Projection: Sootea Master Plan Area– 2041**

Year	Sootea Municipal Area	Growth Rate (%)	Planning area minus Municipal area	Growth Rate (%)	Sootea Master Plan Area	Growth Rate (%)
1951	6307	---	5215	---	11522	---
1961	9201	45.89	9194	76.30	18395	59.65
1971	9785	6.35	8495	(-) 7.60	18280	(-) 0.63
1991*	11807	20.66	8853	4.21	20665	13.05
2001	12598	6.70	10077	13.83	22675	9.73
2011	14000	11.13	11226	11.40	25226	11.25
2021**	18200	30.00	14594	30.00	32794	30.00
2031**	25480	40.00	21891	50.00	47371	44.45
2041**	35672	40.00	32836	50.00	68508	44.62

\* Twenty Year Growth Rate;

\*\* Projected

## CHAPTER – III

### ECONOMIC BASE AND EMPLOYMENT

A sound economic base with the optimum use of local and regional resource is a basic requirement for all round development. A small town like Sootea acts as a powerful link between rural settlement and more urbanized centers with regards to collection and distribution of economic inputs of the region and these influence the physical development of the region.

Economically, Sootea Town is surrounded by many tea gardens for which many small and medium scale industries based on tea garden machineries has been set up in the town. Another one popular industry is handloom products. Some other industries (Rice & Oil) are also setup based on everyday needs of the public. Thus, it occupies a fairly good position being rich in agriculture especially jute, rice, tea cultivation and forest resources.

Situated in the midst of tea, jute and rice growing areas, service of NH 15 & BG Railway line passing through the town, over the years the Sootea town has been emerged as important trade and commercial center in the north bank of Assam. Tertiary sector dominates the economy of the town.

As per 2011 census only 62.09% of the total working population were non worker in Sootea Municipal Area and that in the planning area, excluding municipal area, it was 54.00% which shows Sootea needs setting up of industrial and economic activities.

Planners are concerned with the likely demands of land development for various economic activities, the possible location of these activities within a city or city regions; the broad relationship between these activities and the scale and timing of migration into and out of the area; Formal sector trading is to be promoted in the planning areas by providing necessary financial assistance from bank and training; Industrial activities and trading and services will provide income and employment; For weaker section care to be taken to provide employment and basic services under poverty alleviation scheme; Labor localities that have come up in the sub urban villages, in the planning area deserve special attention; Horticulture, Fisheries Dairy

and Poultry activities to be promoted in the planning area to provide local needs and export to other urban centers where there is sufficient demand.

**Table 5: Percentage of households having each of the specified assets within SMPA in 2011**

Name of MPA	Radio/Transistor	Television	Computer/Laptop with Internet	Computer/Laptop without Internet	Landline Telephone	Mobile Telephone	Both land line and mobile telephone	Bicycle	Scooter/Motor cycle/Moped	Car/jeep/van	None of the specified asset
Sootea MPA	16.38	21.82	0.95	4.81	1.20	38.3	1.73	72.30	9.20	2.54	16.36

*Source: Census of India, 2011.*

From the above table it can be summarized only a few populations with SMPA have four wheelers (2.54%) and computer/ laptop with internet connection (0.95%).

### 3.1 FORMAL SECTOR

**AGRICULTURE:** As per 2011 census, only 23.30 percent of the total main workers were engaged in cultivation in Sootea Municipal Area; but in the planning area, excluding municipal area, it was 47.20%. Again only 2.95% of the total main workers were agricultural labourers in Sootea Municipal Area; but in the planning area, excluding municipal area, it was 7.36%. Similarly, 27.80% of the total marginal workers were engaged in cultivation in Sootea Municipal Area; but in the planning area, excluding municipal area, it was 17.03% and 23.12 of the total marginal workers were agricultural laborers in Sootea Municipal Area; but in the planning area, excluding municipal area, it was 40.03%.

The three major agricultural commodities produced in some of the villages within Sootea Master Plan area are –

**Table No. 6: Major Agricultural Commodities in some of the villages within SMPA**

Sl. No.	Name of Villages	Agricultural Commodities	
		First	Second
1	Ghahi Gaon	PADDY	
2	Pathaka Kuri (Pathor)	PADDY	SUGAR CANE
3	Solal Sonar	PADDY	
4	Bora-Bhuyan	PADDY	
5	Sarai-Jania	PADDY	VEGETABLES
6	Magurmara	PADDY	VEGETABLES
7	Bongali Gaon (Basti)	PADDY	
8	Khatowal	PADDY	
9	Malar Gaon (Metera)	PADDY	
10	Niz-Chatia	PADDY	
11	Metera	PADDY	
12	Chaporial	PADDY	
13	Dakhin Dol	PADDY	
14	No.1 Nalbari	PADDY	
15	No.3 Nalbari	PADDY	
16	Palasani	Paddy	

*Source: Census of India, 2011*

It is observed that villages Pathaka Kuri (Pathor), Sarai-Jania and Magurmara within the Master Plan area have been cultivating multiple crops more than one crop.

**TRADE AND COMMERCE:** As per 2011 Census most of the workers were engaged in other category in Sootea Municipal area as well as in Master Plan area, The Household industries found in the planning areas are, mainly weaving, embroidery, cutting & tailoring, pickle & juice making, etc. Manufacturing units found in the planning area are handloom product units, steel fabrication units. The construction units found in the planning areas are civil construction units only.

It has already been indicated that Sootea town is a trade and commerce-oriented town. The main trade and commercial activities of both retail and wholesale have spring up above the MG road. With the improvement of regional transportation system and increase in population, the field of



trade and commerce of Sootea town is expected to increase fast. There is only one big market which occupies its position in the entire Sootea area. As per 2011 Census, in House hold industry, 9.63% of main workers were engaged in Sootea Municipal area and that in planning area it was 7.31% but out of marginal worker these were 11.06% and 12.37% respectively.

Three most important commodities exports from the town are tea, jute, timber and most important commodities imported to the town are sugar, pulses and wheat. About 38.92% of the total work forces in the town areas were directly engaged in the trade and commerce which was revealed from primary survey conducted by T & C P office, Tezpur.

The following table shows the villages having weekly / bi-weekly / Daily markets in the planning Area of Sootea Master Plan.

**Table No. 7: Daily / Weekly / Market in the planning area**

Sl. No.	Town/ Village	Daily / Biweekly/ Weekly
1	Solal Sonar	Weekly
2	Baro-Bhuyan	Weekly
3	Sarai-Jania	Daily
4	Bongali Gaon (Basti)	Weekly
5	Chatia Rev. Town	Weekly & Daily
6	Malar Gaon (Metera)	Weekly
7	Niz-Chatia	Weekly
8	Major Ati	Weekly & Daily
9	Chaporial	Weekly
10	Bagori Ati	Weekly
11	Dakhin Dol	Weekly & Daily
12	No.3 Nalbari	Weekly
13	Palasani	Weekly & Daily

*Source: Census of India, 2011.*

The wholesale trading is mostly concentrated in and around the CBD of Sootea Town. Wholesale cloth Market, Hardware market, food and food staff markets are located on the both sides of MG Road that passes through the town. The wholesale vegetable markets are found in the daily market of Sootea town.

The both sides of MG Road that passes through the town are the main centers for retail trade and commercial activity for Sootea town and for the whole planning area. It also serves as wholesale market for the nearby rural centers. The other shopping areas presently functions within Sootea Master Plan Area are Sarai-Jania, Chatia Rev. town, Major-Ati etc.

**INDUSTRY:** Except the tea factories in each tea garden within the entire planning area, and a few saw mills, Rice Mills, Oil Mills, Chira Mill, engineering workshops and Bakery etc. 2 nos. food and beverage industries (Tea & Moong Dal Papad), 1 no. Energy & Power (Solar Module), 1 no. Safety matches, 1 no. Electronics & Electrical supplies industries are found in Sootea.

As per 2011 Census, only a few workers of Sootea M.B. areas were engaged in the industrial activity.

**SERVICES:** As per 2011 census, 64.12% of the total workers were engaged in others category in the whole planning area out of which a major portion of workers engaged in service sector.

As Sootea has to function as railway town & trade centre, there is no. of government offices established in the town. Besides the offices a quite no. of educational institutions is found in the planning area and because of all these workers engaged in service sector in the planning areas are quite high.

### **3.2 INFORMAL SECTOR**

Informal sector trade and commercial activities are generally seen in all the urban centers of the state. Sootea Town is also not exception in this respect. Roadside retail shops are found here and there in the municipal area as well as in the planning area especially in the villages near the town. Informal transport has been seen in the form of slow-moving vehicles only. A large number of battery rickshaws are running in the planning area without license/ any registration in SMB. Few household industries are running in the planning areas without registration. Weaving,

cutting and tailoring, embroidering, doll-making, scented stick (dhoop) making food related items etc. are some of these kinds of industries found in the planning area. This informal sector business has been increasing because of urban poverty. Urban poor mainly depends on this type of informal business to day-to-day earnings.

### 3.3 OCCUPATIONAL PATTERN

The following tables have been prepared from Census of India, 2011 which reflects clearly the occupational pattern within Sootea Municipal Area, Sootea Master Plan Area excluding Municipal Area and total Master Plan Area.

**Table No. 8: Occupational Pattern of Sootea Master Plan Area (2011)**

Sl. no.	Category	No. of workers		
		Outside Municipal Area	Sootea Municipal Area	Total SMPA
I	Main workers	3594	5074	8668
		25.43%	35.29%	27.17%
II	Marginal	2907	377	6679
		20.57%	2.62%	20.93%
III	Non workers	7632	8926	16558
		54.00%	62.09%	51.90%

Sl. no.	Category	No. of Industrial category of Main workers		
		Outside Municipal Area	Sootea Municipal Area	Total SMPA
I	Cultivators	1372	893	2205
		47.20%	23.30%	33.01%
II	Agricultural laborers	214	113	327
		7.36%	2.95%	4.90%
III	Household Industry workers	119	369	488
		4.09%	9.63%	7.31%

IV	Others	1202	2457	3659
		41.35%	64.12%	54.78%

Sl. no.	Category	No. of Industrial category of Marginal workers		
		Outside Municipal Area	Sootea Municipal Area	Total SMPA
I	Cultivators	117	362	479
		17.03%	27.80%	24.08%
II	Agricultural laborers	275	301	576
		40.03%	23.12%	28.96%
III	Household Industry workers	102	144	246
		14.85%	11.06%	12.37%
IV	Others	193	495	688
		28.09%	38.02%	34.59%

*Source: Census of India, 2011*

## CHAPTER – IV

### HOUSING AND SHELTER

#### 4.1 HOUSING SCENARIO

Access to housing facilities, is a basic human need, next only to food and clothing. Effectively, society as a whole and poor in particular, must have access to livelihoods, finance and technology as well as relevant capacities, knowledge and skills for habitat development in order to enjoy the “right to shelter” (Assam Urban Affordable Housing and Habitat Policy, November 2015).

**Table No. 9: Households by ownership in Sootea Master Plan Area (2011)**

Ownership status	No. of dwelling rooms	Sootea Master Plan Area (% of Total Dwelling Units)
Owned	No exclusive room	1.13
	One rooms	23.54
	Two rooms	40.12
	Three rooms	19.45
	3+rooms	15.76
Rented	No exclusive room	1.18
	One room	32.63
	Two rooms	36.01
	Three rooms	16.96
	3+ rooms	13.22
Others	No exclusive room	1.02
	One room	15.46
	Two room	32.7
	Three rooms	27.93
	3+ rooms	22.89

*Source: Census of India, 2011.*

For both owned and rented dwelling units two rooms houses were found more in JMPA in 2011 i.e. 40.12% and 36.01% respectively.

The following table shows the percentage of households by availability of kitchen facility in the Sootea MPA-

**Table No. 10: Availability of Kitchen facility in Households of SMPA, 2011**

Name of MPA	Cooking inside house		Cooking outside house		No cooking
	Has Kitchen	Does not have Kitchen	Has Kitchen	Does not have Kitchen	
Sootea MPA	76.54	6.05	15.02	2.10	0.27

*Source: Census of India, 2011.*

From the above it can be summarized that most of the households within SMPA have kitchen inside the house.

The following table shows the percentage of households by type of fuel used for cooking of Sootea MPA-

**Table No. 11: Percentage of Households by type of fuel used for cooking in SMPA, 2011**

Name of MPA	Firewood	Crop residue	Cow dung cake	Coal/lignite/charcoal	Kerosene	LPG/ PNG	Electricity	Bio-gas	Any other	No Cooking
Sootea MPA	81.13	1.81	0.43	0.05	0.12	15.74	0.03	0.21	0.07	0.26

*Source: Census of India, 2011.*

It is observed that most of the households within SMPA had used firewood (81.13%) for cooking and only a few i.e. 15.74% used LPG/PNG in 2011 but at present the situation is just reversed.

There is no codified policy for “Affordable Housing” but initiative has been taken by the government to produce the stock through various Housing Schemes which are implemented in the Sootea MPA like-PMAY (G) and other rural housing programmes.

#### 4.2 HOUSING SUPPLY MECHANISM

The steady influx of population has reflected a new dimension to the socio-economic aspect of housing problem. The slow building construction activities due to high cost of building materials have further aggravated the problem. About 3.38% of the total residential houses are rented in Sootea town and that is 6.81% in entire planning area, the average size of house-hold being 4.85 persons as per primary survey. According to 2011 Census, the average size of household in Sootea Municipality and in the entire planning area was 4.58 and 4.81 respectively. The Pradhan Mantri Awas Yojana (GRAMEEN) has already taken care of the up-gradation of temporary structures of the poor within Sootea master plan area.

#### 4.3 HOUSING CONDITIONS

About 24.67% of the existing houses are temporary in Sootea MB area and 32.00% in the planning area excluding municipal area. Again, the semi-permanent houses in Sootea MB area and in the planning, area excluding municipal area are about 47.33% and 40.00% of the total houses respectively.

**Table No. 12: Type of Dwelling Units, 2022 in S.M.P.A.**

Sl. No.	House Type	SMB		SMPA excluding SMB	
		No.	%	No.	%
1.	Permanent	42	28.00	56	28.00
2.	Semi Permanent	71	47.33	80	40.00
3.	Temporary	37	24.67	64	32.00
	Total	150	100.00	200	100.00

*Source: Primary Survey, T&CP, Tezpur, 2022.*

#### 4.4 SLUMS-SQUATTERS AND INFORMAL HOUSING SHARE

There are no any slum pockets in the Sootea Master Plan area.

#### 4.5 HOUSING STOCK, SHORTAGE AND NEED ASSESSMENT

As per projected population and existing deficit, housing requirement in the planning area estimated for the year 2041 is about 12687 (i.e. future need for 2041 =  $(68508-25226)/4.70 =$

9209) + (existing Deficit 28% x 5393 = 1528) = 10737. Housing for the needy ones is to be promoted with assistance from the Bank/ HUDCO/Budgetary assistance and local mobilization of resources in cash or in kind; Upper poverty alleviation scheme, training to be provided to weaker section, they may construct the building, once materials, (locally available) are provided under Govt. sponsored / partly shared scheme; Land Development-Building construction linked scheme is proposed to initiate under HUDCO/FIs for better off section.



## CHAPTER – V

### TRANSPORTATION

#### 5.1 OVERVIEW OF CRITICAL ROADS AND THEIR IMPROVEMENTS

The existence of adequate transportation facility is the prime factor for the socio- economic development of a region. The availability of good serviceable roads is as important as the availability of the other services like water, electricity, drainage etc. Any shortfall in the serviceability of roads immediately results in a great dissatisfaction amongst the citizens. It is, therefore, necessary that the roads in the City Area are designed, constructed and maintained properly. The roads in the city area are constructed by contracting system. Maintenance operation can be broadly divided into two types- preventive maintenance and corrective maintenance.

**Table No. 13: Slow Moving Vehicle within Sootea MB (Nos.)**

Year Type of vehicle	2022
1. Rickshaw	16
2. Thela	38
3. Cycle	2856
4. Battery Rickshaw	92

*Source: Sootea M.B, 2022*

Registration of the vehicles purchased within the Sootea Master Plan Area have been registered in Biswanath District Transport Office, thus it is impossible to find the yearly registration figure of 3/ 4 and above wheeler vehicles for Sootea Master Plan area, but registration of Slow-Moving Vehicles in Sootea MB (Nos.) has not yet been started.

It is seen that a large number of battery rickshaws (Tum-tum) are running in the planning area.

**Table No. 14: Condition of Municipal Road in Sootea Municipality, 2022**

Sl. No	Types of Roads	Road Length in km	% Share
1	WBM/ WMM Road	35.68	19.05
2	BT/ CC road	53.52	28.57
3	Unsurfaced Road	80.28	42.86
	Total	187.32	100.0

*Source: Sootea MB, 2022***Table No. 15: Road Connectivity to villages within Sootea Master Plan Area, 2011**

Name of Village	National Highway	State Highway	Major District Road	Other District Road	Black Topped (pucca) Road	Gravel (kuchha) Roads	Water Bounded Macadam	All Weather Road
Ghahi Gaon	No	No	Yes	Yes	No	Yes	Yes	Yes
Pathaka Kuri (Pathor)	No	No	No	Yes	No	Yes	Yes	Yes
Solal Sonar	No	No	No	Yes	No	Yes	No	Yes
Bora-Bhuyan	No	No	Yes	Yes	No	Yes	Yes	Yes
Sarai-Jania	No	No	Yes	Yes	No	Yes	Yes	Yes
Magurmara	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Bongali Gaon (Basti)	No	No	Yes	No	No	Yes	No	No
Gareki Grant	No	No	No	Yes	Yes	Yes	Yes	Yes
No. No-Nalbari	No	No	No	No	No	Yes	No	No
Khatowal	No	No	No	Yes	No	Yes	Yes	Yes
Chatia Rev. Town	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Malar Gaon (Metera)	No	No	No	Yes	Yes	Yes	Yes	Yes
Niz-Chatia	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Metera	No	Yes	Yes	Yes	No	Yes	No	Yes
Major Ati	No	No	No	No	No	Yes	No	No
Chaporial	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Bagori Ati	No	No	Yes	No	No	Yes	No	No
Dakhin Dol	No	No	No	Yes	No	Yes	No	Yes
No.1 Nalbari	No	No	No	Yes	No	Yes	No	Yes
No.3 Nalbari	No	No	No	Yes	No	Yes	No	Yes
Palasani	No	No	No	Yes	No	Yes	Yes	Yes

*Source: Census of India, 2011*

## 5.2 BUS TRANSPORT TERMINALS, BUS TERMINUS, BUS PARKING BAYS, MAJOR BUS STOPS

The ASTC Bus Stand located at the heart of Sootea town has been lying functionless for last 10 years or so. The ASTC station at Sootea is under Tezpur ASTC Station.

The ASTC and private buses are plying through Sootea Town, a total of approximately 192 nos. of buses, 65 nos. of small carriages (Magic, Maximo model) etc. have to park on road at the heart of the town for loading and unloading of passengers, which creates traffic congestion and threats to pedestrian movements.

Slow moving vehicles like Rickshaws and Tum Tums have been seen parking here and there creating obstruction to the free traffic flow in the core town area.

**Table No. 16: Analysis of Existing Conditions of the Bus Stands**

Terminal Center	Location	Observation
<b>A. Inter-City/hinterland</b>		
1. Passenger	i) ASTC Bus Station	- Located at heart of the town - Not functioning and abandon
	ii) Public Bus-Stands	- No Organized stand - Road side parking - Prone to accident. - Located at heart of the town.

### 5.3 NETWORK OF ROADS (NH, SH, DISTRICT ROADS ETC.)

National Highway-15 is passing through the centre line of the town, connects Tezpur towards west and Biswanath Chariali towards East. State Highway District Roads and a good nos. of PWD roads have connected Sootea with its hinterlands.

### 5.4 TRUCK TERMINUS, FREIGHT ZONES, LOGISTICS

There is no any Truck Terminus within Sootea Master Plan area. The observation of truck parking within Sootea Master Plan area is as follows-

**Table No. 17: Analysis of Existing Conditions of the Truck Parking**

Terminal Center	Location	Observation
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#### A. Inter-City/hinterland

1. Goods	Truck Stand	- No Organised stand - Roadside truck parking
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Timetable of 4 trains passing through Niz Chatia railway station (Niz - Chatia / station code: NCA) Sonitpur, Assam. Arrival & departure time of trains reaching Niz-Chatia station. Niz Chatia is not a major railway station, only few long-distance trains stop here. Nearby station is Biswanath Charali railway station (VNE), which is about 13 kms away.

The Four (4) express trains stop at Niz-Chatia station. Detailed timetable is given below.

No.	Train Name	Arr.	Dep.	Schedule	Origin	Destination
15813	Dekargaon Murkongselek Express	06:24	06:25	S M T W T F S	Dekargaon	Murkongselek
15895	Rangiya - Murkongselek Express	11:45	11:46	S M T W T F S	Rangiya Junction	Murkongselek

No.	Train Name	Arr.	Dep.	Schedule	Origin	Destination
15896	Murkongselek - Rangiya Express	14:00	14:01	S M T W T F S	Murkongselek	Rangiya Junction
15814	Murkongselek Dekargaon Express	22:16	22:17	S M T W T F S	Murkongselek	Dekargaon

For the entire planning area of Sootea, this railway station acts as freight zone and logistics as all the goods imported to Sootea & exported from Sootea are loaded and unloaded at the Railway Stations.

The unorganized freight zones and logistics present within the Sootea Town are to be shifted to the proposed Transport Terminal to be constructed in future.

### 5.5 FOOTPATHS

A few of the roads within CBD area of Sootea Town have only footpaths. Part of the footpaths is found during land use survey either occupied by the informal businessmen and/or the adjacent shopkeepers by placing the goods on footpaths.

Footpaths in the CBD areas are to be reconstructed with floor tiling and road side railing and Sootea Municipality to pass order not to occupy the footpaths by any shopkeepers/ informal businessmen and to keep free for pedestrian movement.

### 5.6 PARKING

There is no organized parking area within the Sootea Town and entire planning area. On-road parking has been found without any planning which leads to traffic congestion now and then.

An organized parking area to be constructed at the outskirts of the town, to get rid of the traffic congestion of the town.

### 5.7 AREAS WITH MAJOR TRAFFIC CONGESTION

The following tables shows the major traffic congestion in Sootea Town and the entire planning area -

**Table No. 18: Areas with Major Traffic Congestion in the Planning Area**

<u>Area</u>	<u>Location</u>	<u>Description</u>
A. Town Area	(i) Hazarimal Centre. (South Side of NH-15)	Gyan Bharti School attached to Main Road, 6 no. GP attached to NH-15, Sootialgaon. Radhogaon,
	(ii) Kacharigaon (South Side of NH-15)	Kacharigaon, Bogolibari, I T I, Charengia, MadhuriAhat Fire station, Solalgaon, Karatigaon, PahuSuwa
	(iii) Seuj Path (North Side of NH-15)	Model 30 Bedded Hospital, Cremation Ground
	(iv) Hospital Road (North Side of NH-15)	Sunday Weekly Market, Daily Market SMB, SBI, 3 no. GP, Nilima Hall opposite of Road, Charaijania Gaon/ E-Rickshaw Stand, Sootea PHC (Hospital), APDCL, Kabarstan, Nurpur, Saipur, Ghahi Gaon
	(v) L.B Road (South Side of NH-15)	Police Station Attached to main road, Tata Sumo/ Magic stand, Post Office/BSNL, Veterinary Hospital, Circle Office, Sub Register office, Development Block, Co-operative, New Stadium, Ghiladhari, Koroiani, Katarati, Tewaripal, Kaziranga 6th addition

(vi) Purana Centre Road (Near Police station) (North Side of NH-15)	Charaijania Gaon, Public Good Carrier Stand Tempo, Sootea PHC APDCL, Purana Centre Market, SBI ATM
(vii) Purana Centre (Near PWD IB ) (North Side of NH-15)	Purana Centre Market/E Rickshaw stand, Apex Bank, Udaipur, BH filling station, Potia Gaon, Uttar Chatia, Borpam, Hokaijan, Itakhola, Seijosa Arunachal Pradesh
(ix) Khatwal Road (South Side of NH-15)	Khatowal Gaon/ E Riksaw stand, 4 no. SooteaGP, 1,2,3 no. Nalbari, Borbheti, Balighat, Bokrapatta Filling Station at NH, Niz Chatia
(x) Station Road (North Baro-Bhuyan Gaon	Railway Station Ghahi Gaon

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The four-lane road from Kaliabhomora Bridge to Jamugurihat is presently under construction by the Simplex Company in Jamugurihat area. The road starting from Dolabari underneath the Jia Bharali River to Jamugurihat measures nearly 10 KMs, which connects to NH 15. The new bridge constructed over the river Jia Bharali had reduced the distance between Tezpur and Jamugurihat considerably, resulting to easier and smoother communication.

### 5.8 IMPROVEMENT OF ROTARY AND JUNCTIONS

No any traffic junctions are found within the entire planning area of Sootea either developed or maintained properly.

The traffic junctions at LB Road South side of NH-15, Purana Centre Road (Near Police station) (North Side of NH-15) and Purana Centre (Near PWD IB) (North Side of NH-15) within Sootea

Municipality are to be developed immediately.

### 5.9 STREET LIGHTING AND PROPOSED IMPROVEMENT PLAN

A few of the roads within CBD area of Sootea Town have only Street lights and those were found mostly off round the year creating havocs among public, indulging theft and difficulties in pedestrian movements.

Recently, a good no. of High Mast lights i.e. 10 nos. had installed in major points within Sootea Town which illuminates the town to some extent.

A project for scientific Street Lighting should be taken up for the entire planning area of Sootea.

### 5.10 SIGNAGE, AVAILABILITY AND REQUIREMENTS

A very few PWD roads within the Sootea Final Master Plan area have road signage. The signage for the other major Roads needs to be done immediately.

### 5.11 MAJOR ROAD PROPOSALS

Proposed growth and functioning of any area and its efficient management is very much dependent on the circulation pattern and it is vital part of the whole physical plan. The proposed circulation pattern envisages effective linkage within the region and direct linkages between different areas and functionally interrelated uses for easy accessibility. Following is the hierarchical classification of roads;

- a) NH- 15 & 415- width more than **80.0m**
- b) Prime Major roads that will cater major movements between areas- **Less than 80.0 m to 50.0 m**
- c) Major roads that will cater major movements between areas- **Less than 50.0 m to 30.0 m**
- d) Minor roads or secondary distributors will distribute traffic within each area-- **Less than 30.0 m to 12.0 m**



- e) Local access road will carry traffic to each locality and lead to individual- **Less than 12.0 m to 6.60 m**

All major roads within the planning area are to be widened; and improved; missing link, if any are proposed for development to bring the road network efficiency. An alternative road to reduce city's traffic congestion has been proposed too.

## CHAPTER – IV

### INFRASTRUCTURE PUBLIC UTILITIES & SERVICES

#### 6.1 PHYSICAL INFRASTRUCTURE

##### 6.1.1 WATER SUPPLY

As per census, 2011 households of Ghahi Gaon, Pathaka Kuri, Solal Sonar, Baro-Bhuyan, Sarai-Jania, Magurmara, Gareki Grant, No.2 Nalbari, Khatowal, Malar Gaon, Niz Chatia, Chaporial and Dakhin Dol found having treated tap water. Households of the villages within the Sootea Master Plan area mainly use Hand pumps/ tube wells and Bore holes. All the villages within Sootea Master Plan area is going to cover under Jal Jeevan Mission which will cater all houses with tap water connections.

**Table No. 19: Percentage of Households by main source of drinking water, SMPA, 2011**

Name of MPA	Tap water from treated source	Tap water from untreated source	Covered well	Uncovered well	Handpump	Tubewell/borehole	Spring	River/Canal	Tank/Pond/lake	Other Sources
Sootea MPA	7.41	1.94	1.32	58.7	22.9	1.54	0.54	4.31	0.17	1.55

*Source: Census of India 2011*

In 2011, only 7.41% of households of SMPA had tap water from treated source, hence a potable water supply scheme for SMPA is badly needed.

**Table No. 20: Status of Water Supply Schemes at Sootea MB, 2022**

Sl. No.	Name of Village	Existing Scheme	New Proposal	Nos. of FHTC proposed
1	Ghahi Gaon	Ghahi Gaon WSS (225 FHTC)	Nil	Nil
2	Sarai-Jonia	Charai Jonia (72 FHTC)	Nil	Nil
3	Bar- Bhuyan	Bar-Bbhuyan (103 FHTC)	Nil	Nil
4	Pathaka Kuri (Pathor)	Kumar Gaon (60 FHTC)	Nil	Nil
5	Gereki Grant	Joypur Gereki (81 FHTC)	Nil	Nil
6	Khatowal	Khatowal (126 FHTC)	Nil	Nil
7	No.1 Nalbari	New Scheme	No.1 Nalbari	249
8	No.3 Nalbari	New Scheme	No.3 Nalbari	120
9	Palasoni	New Scheme	Palasoni	186
10	Solal Sonar	New Scheme	Solal Sonar	261
11	No.2 Nalbari	New Scheme	To be proposed next year	
12	Ghahi Gaon	New Scheme	Ghahi Muslim	106
13	Ghahi Gaon	New Scheme	Choypur	175
14	Ghahi Gaon	New Scheme	Tantipara, Nowgong	97
15	Ghahigaon	New Scheme	Ghahi Nagaon, Asmiya	146
16	Gereki Grant	New Scheme	Gereki Grant	375
17	Khatowal	New Scheme	Khatowal East, N.H Side	52

Source: Primary Survey, T&CP, Tezpur, 2022

### 6.1.2 DRAINAGE SYSTEM

Sootea town has practically no close drainage system. Like many other towns in Assam, during rainy season low lying areas are water logged whenever there is a heavy shower. The most of

the drainage system of this town's are both open and closed drains. In residential areas the roadside drains are found often blocked which aggravates the situation worse. In order to keep the town free from water logging a drainage system should be planned and the stream flowing through the area should be utilized for this purpose.

Among the villages within the Sootea Master Plan Area Ghahi Gaon, Pathakakuri, Solalsonar, Bora-Bhuya, Magurmara, Sarai-Jania, No 1 Nalbari, No.3 Nalbari etc. have open kuttcha drains.

**Table No. 21: Percentage of households by type of Drainage connectivity for waste water outlet, 2011**

Name of MPA	Closed Drainage	Open Drainage	No Drainage
Sootea MPA	1.31	10.12	88.54

*Source: Census of India, 2011.*

### **6.1.3 SANITATION**

No community toilet with bathroom as well as community toilet (CT)/ Public Toilet (PT) without bathrooms were found in any village within Sootea Master Plan area and only Solal Sonar and Khatowal were under Total Sanitation Campaign (TCS) (Source: Census of India, 2011)

**Table 21: Percentage of households by type of latrine facility, Sootea MPA, 2011**

Name of MPA	Flush/Pour Latrine	Pit Latrine	Night soil disposed into open	Service latrine	No latrine within premises

	Piped Sewer System	Septic Tank	Other system	With slab/ Ventilated Improved pit	Without Slab/open Pit	drain	Night SoilRemovedBy human	Night soil Serviced By animals	PublicLatrine	Open
Sootea MPA	2.98	14.13	10.86	6.67	26.07	0.55	0.43	0.33	2.30	35.68

*Source: Census of India, 2011.*

#### **6.1.4 SEWERAGE NETWORK**

As in other towns of Assam, Sootea town and its neighbouring villages do not have sewerage network. People in the planning area depends on septic tank with soak pit and/ or pit latrine.

#### **6.1.5 SOLID WASTE MANAGEMENT**

There is no facility of door-to-door collection of solid waste in Sootea town. There have no community bio-gas or recycle of waste for production use. Except Gerekigrant, No. 2 Nalbari and Khatowal villages the rests have used garbage on roads/streets. (Source: Census of India, 2011)

#### **6.1.6 ELECTRIC SUB –STATION AND MAJOR TRANSFORMERS**

Assam Power Distribution Company Ltd. (APDCL) is the only source of power supply to the Planning Area.

**Table 21: Percentage of households by main source of lighting, Sootea MPA, 2011**

Name of MPA	Electricity	Kerosene	Solar	Other oil	Any other	No lighting
Sootea MPA	30.91	67.4	0.25	0.03	0.02	0.3

*Source: Census of India, 2011.*

In 2011, there were 30.91% households in SMPA only who had electricity as main source of lighting, but at present the percentage is more than 70%.

**Table 22: Power supply, Sootea MPA, 2011**

Village name	Power supply for domestic use (Summer)	Power supply for domestic use (Winter)	Power supply for commercial use (Summer)	Power supply for commercial use (winter)
Ghahi Gaon	12	8	0	0
Pathakakuri	20	15	0	0
Solalsonar	12	8	0	0
Baro-Bbhuyan	12	7	0	0
Sarai-Jania	13	8	0	0
Magurmara	12	8	0	0
Bangali Gaon (Basti)	12	8	16	18
Gerekigrant	12	8	0	0
No.2 Nalbari	12	8	0	0
Khatowal	12	8	99	99
Chatia Rev. Town	14	12	0	0
Malargaon	12	8	0	0
Niz-Chatia	15	10	0	0
Metera	99	99	0	0
Major Ati	99	99	0	0
Chaporial	12	8	0	0
Bagoriati	99	99	0	0



1.	Pre-Primary & Primary School	15	2	17	5	32	7
2.	M. E./ M.V. School	10	1	8	0	18	1
3.	High School	2	0	3	1	4	1
4.	Higher Secondary School	1	0	0	0	1	0
5.	Junior College	0	1	0	0	0	1
4.	College	1	0	0	0	1	0
Total		26	3	28	3	53	6

*Source: Education Department Offices, Tezpur & Primary Survey, 2022.*

Sootea College was established in the year 1971, with the unwavering endeavor of some leading citizens and the public of greater Sootea area. The college is situated at Malar Gaon and it is the heart of the Sootea around 1 km away from N.H-15. The college is affiliated to Gauhati University. The college is also a centre of distance education to the Krishna Kanta Handique State Open University (KKHSOU) and the institute of distance and open learning (IDOL) of the Gauhati University. The college has provided an atmosphere with diverse students.

### HEALTH

Within Sootea Municipality, there are all together 1(One) no. of State allopathic hospital with 30 (thirty) beds and 2 nos. doctor and 10 para-medical staff at Bar-Bhuyan, 1(one) no. of health care centre is at Sarai-Jania. There is also Primary sub-health centre at Chaporial and Pathakakuri (Pathor).

The establishment of Tezpur Medical College at Tumuki, which is at a distance of 59.6 KM from Sootea which has been presently fulfilling the needs of health issues of the citizens of Sootea Master Plan area. Moreover, a new proposal for construction of a Medical College at Biswanath Chariali, at distance of 15 KM from Sootea town has been taken up by Govt. of Assam which will look after future health related problems of the people of Sootea MPA.

### PARKS AND PLAY GROUND

The whole planning area is lacking in organized parks. Sports fields are also located in most of the master plan areas viz - Ghahi Gaon, Pathakakuri Pathar, Solalsonar, Baro-Bhuyan, Ghahi Gaon, Pathaka Kuri (Pathor), Solal Sonar, Bora-Bhuyan, Sarai-Jania, Magurmara, Gareki Grant,



Khatowal, Chatia Rev.Town, Malar Gaon (Metera), Niz-Chatia, Chaporial, No.1 Nalbari, No.3 Nalbari and Palasani

Sports Club/Recreation facilities are located at Pathaka Kuri (Pathor) and Chatia Rev. Town. (Source: Census of India, 2011)

#### **SOCIAL AND CULTURAL INSTITUTIONS**

Sootea town and the entire planning area do not have any Cinema Hall, but at Chatia Rev. town has 1 no. of Auditorium/ Community Hall. There is one Public Library located at Chatia Rev. Town.

#### **POLICE PROTECTION AND FIRE PROTECTION**

At Sootea Town, there is one Police Station viz. SOOTEA POLICE STATION. The whole planning area covers under the control of the Sootea Police Station.

The heritage Sootea Police Station in the heart of Sootea town is a testament of Assam Police's glorious history and an icon of Independence movement, where the national flag was unfurled for the first time in the country in 20th august 1942.

To protect it, Govt. of Assam had sanctioned Rs. 50.0 Lakhs last year to the Directorate of Archaeology.

There is a fire fighting unit office at Sootea Town under the Directorate of Fire Services, Assam, which serves the entire planning area.

#### **CREMATION GROUNDS AND GRAVE-YARDS**

There is no. of grave yards within Sootea MPA located at Sarai-Jania, Khatowal, Ghahi Gaon etc. Again, in the planning area there are cremation grounds located at Baro-Bhuyan, Malor Gaon, and Sarai-Jania. Moreover, the Hindu people in the planning areas generally use their own land for cremation purpose. All the Cremation Grounds and Grave Yards are to be developed as per modern requirements.

ON-GOING MAJOR INFRASTRUCTURE PROJECTS WITHIN SOOTEA MASTER  
PLAN AREA



Fig. 2 Photograph showing Ongoing construction of ITI at Sootea Town (Govt. of Assam funding)



Fig. 3 Photograph showing Mukti Jodha Bhumidhar Bordoloi Memorial Stadium at Malar Gaon, Sootea Town (Govt. of Assam funding. Project Cost: Rs. 10.00 (ten) Crores)



Fig. 4 Photograph showing Ongoing construction of 30-bedded Model Hospital, Sootea Town (NHM funding. Project Cost: Rs. 6.00 (six) Crores)



Fig. 5 Photograph showing Sootea Natya Mancha (Theatre) (Project Cost: Rs. 1.00 (one) Crores)

## CHAPTER – VII

### ENVIRONMENT AND CITY BEAUTIFICATION PLAN

With increasing awareness of the role that a healthy and clean environment plays in the wellbeing of the societies, governments are adopting environment friendly approaches in conduct of development activities. The Final Master Plan for Sootea, 2041 proposes many ideas to improve prevailing conditions those fail to adequately address the wide range of issues that have hobbled development in the Sootea town.

#### 7.1 ECO-FRIENDLY AREAS

The tea garden areas, agricultural areas, green belts and water bodies within the whole planning areas can be considered as eco-friendly areas for the Sootea Master Plan. These area measures as 20.59 Sq. Km which is about 45.40% out of total Sootea Final Master Plan area of 45.35 Sq. Km.

#### 7.2 PLAN/ MEASURES FOR PROTECTION AND CONSERVATION OF ENVIRONMENTALLY- FRIENDLY ZONES

45.40% i.e. 20.59 Sq. Km. out of total Sootea Final Master Plan area of 45.35 Sq. Km. has been left undeveloped out of which 0.08 Sq. Km (0.18%) will be Tea Garden, 18.27 Sq. Km (72.58%) will be Agricultural use, 0.14 Sq. Km. (0.31%) will be green belt and 2.10 Sq. Km. (4.63%) will be water body. These all will be taken care of environment of the whole Master Plan area of Sootea.

#### 7.3 CITY BEAUTIFICATION PLAN

The whole planning area is lacking in organized parks. A kind of sports club/recreation centres are located at Pathakuri (pathor) village and Chatia Rev. town. Sports fields are also located in most of the master plan areas viz.- Ghahigaon, Pathakakuri, Solalsonar, Baro-Bhuyan etc. A modern Park has been proposed by Sootea MB at Sootea Samshan, Ward No. 1 with development works consist of construction of boundary wall, construction of funeral shed,

construction of a traditional entry gate to "Madhuri Ahat Tal" first Mukuli Bihu Toli of Assam, construction of decorative umbrella, installation of garden's solar light, bench at waiting shed and outside Gate with RCC post, water Supply system, toilet block, construction of chowkider shed, internal driveway/ roads etc. for an estimated cost of Rs. 50.00 Lakhs under Grants In Aid to ULB's of Govt. of Assam



Fig. 6 Photograph showing the Location of proposed construction of Park at Sootea Samshan

The heritage Sootea Police Station in the heart of Sootea town is a testament of Assam Police's glorious history and an icon of Independence movement, where the national flag was unfurled for the first time in the country in 20th august 1942 and to protect it, Govt. of Assam had sanctioned Rs. 50.0 Lakhs in the year 2020 to the Directorate of Archaeology.

There is a big pond at the backside of Sootea Police Station which will be developed & preserved as water body development and also a park has been proposed where all modern children playing equipments will be placed. Some water sports facilities will be introduced in the tank within the said proposed Park.



Fig. 7 Photograph showing the Location of proposed construction of Park and Water Sports facilities at Sootea

The road connecting Ward No. 8 and Ward No. 5 via Nalbari village has been proposed to act as by-pass to avoid traffic congestion at core of the Sootea town and will be proposed to develop as a two-lane road with divider which will add beauty of the town as a whole.

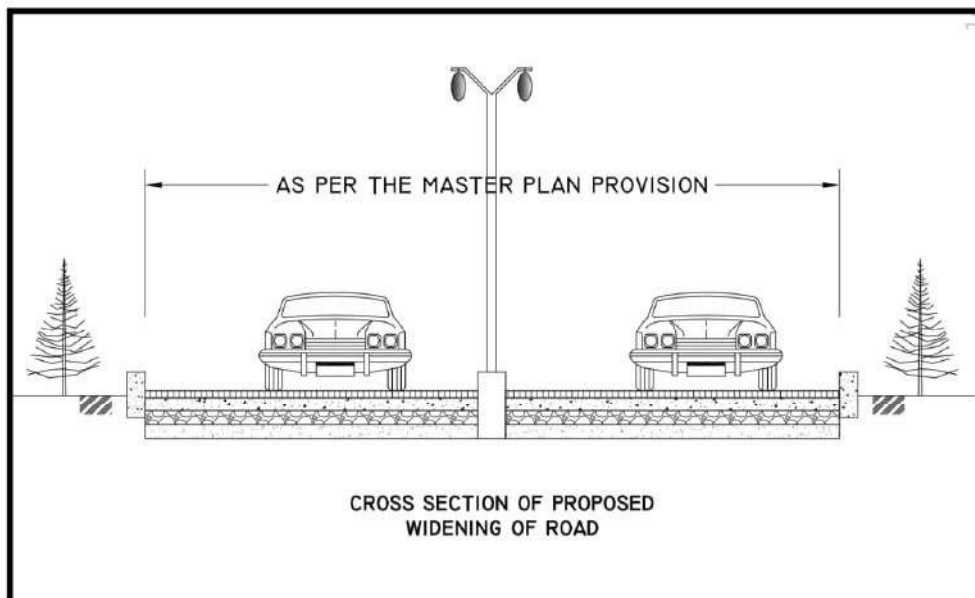


Fig. 8 Cross-sectional drawing of proposed road widening in Sootea Master Plan

### 7.4 BLUE-GREEN NETWORK

Blue - green network map for Sootea Final Master Plan 2041 has been prepared to show the linkages of green areas within the master plan with the water bodies which will help in the long run to solve environmental issues like drainage etc. for the whole Master Plan area.

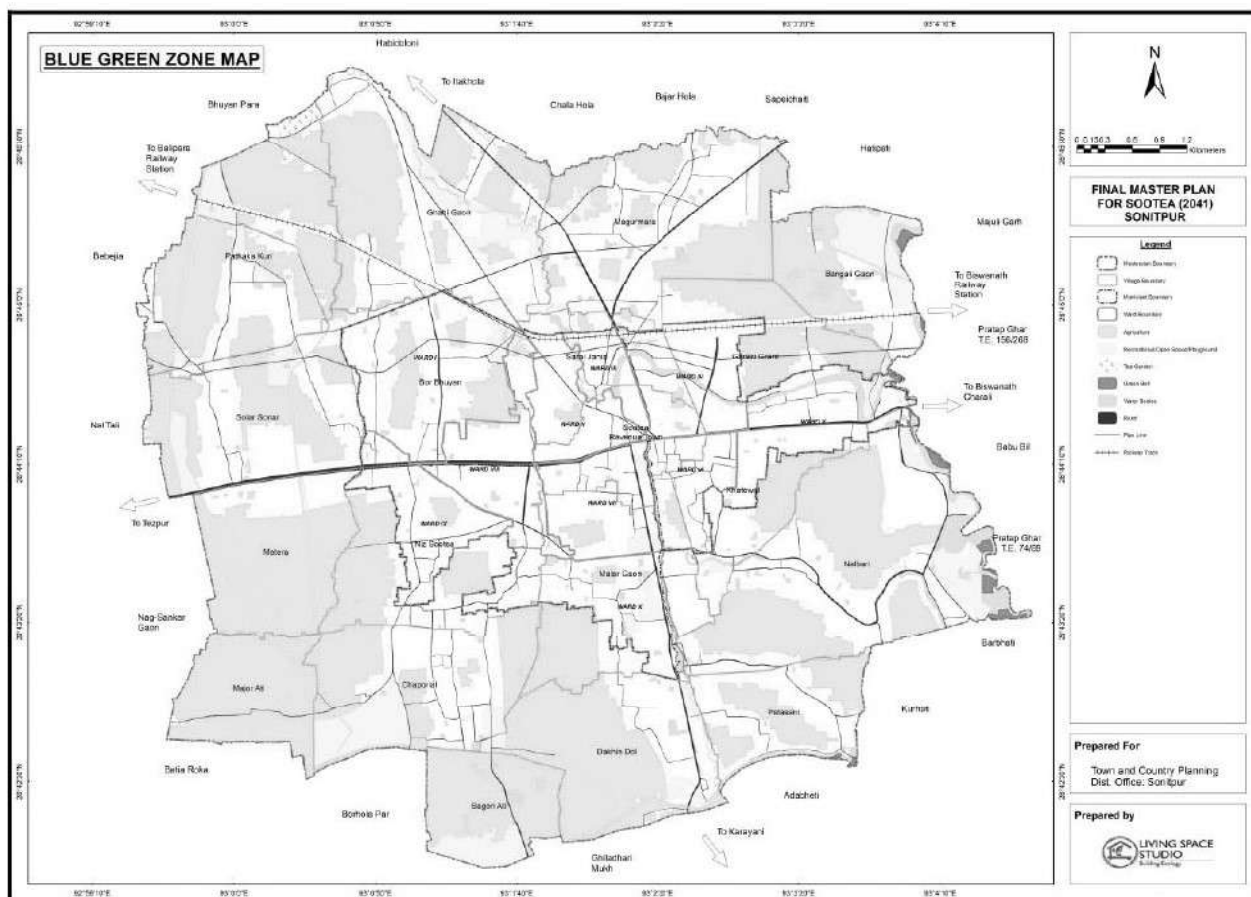


Fig. 9 Blue Green Zone Map

## CHAPTER – VIII

### LAND USE PLAN

As per 2011 Census of India, the total land area within the Sootea Final master Plan was 44.64 Sq. Km. which is slightly less than 45.35 Sq. Km. as derived from the map prepared from the cadastral maps those were collected from revenue department and the reason for these variations might be the boundary road/ water bodies in between two or more villages which might not calculated in any of the villages during census.

**Table 25: Town/ Village wise Geographical area within Sootea Final MP for as per 2011 Census**

Town / Village Name	Total Geographical Area (in Sq. Km.)
Ghahi Gaon	374.50
Pathaka Kuri (Pathor)	332.83
Solal Sonar	245.20
Baro-Bhuyan	271.20
Sarai-Jania	125.40
Magurmara	328.60
Bangali Gaon (Basti)	166.15
Gareki Grant	257.71
No.2 Nalbari	129.04
Khatowal	160.90
Chatia Rev. Town	123.06
Malar Gaon (Metera)	270.45
Niz-Chatia	295.86
Metera	203.00
Major Ati	131.65
Chaporial	243.74
Bagori Ati	112.85
Dakhin Dol	230.83
No.1 Nalbari	148.50
No.3 Nalbari	173.80
Palasani	138.50
Total	4463.77

*Source: Census of India, 2011*



One of the fundamentals of planning process is to know the existing uses of land within the planning areas. It has already been indicated that Sootea town is of recent origin where in ribbon type development along the major roads have come up in a haphazard manner. Gradually, with the growth of commercial activities, urban expansion has been taking place. Therefore, to provide a coherent land use pattern for future development it has been studied as follows.

### 8.1 DEVELOPABLE AND NON-DEVELOPMENT AREA OF THE MASTER PLAN

**Sootea Municipal area** and its neighbouring 21 (**Twenty-One**) **villages** are included in the **Final Master Plan Area for Sootea – 2041**. The ongoing construction of the 4-lane NH 15 passing through the centerline of the town has a direct impact on the fast development of the area. The 2<sup>nd</sup> bridge over river the Brahmaputra and the bridge over the river Jia-Bharali near Chakighat have opened a new development corridor for the North Bank of Assam. All these factors are considered while submitting plan proposal for Sootea town.

Only 10.27 Sq. Km which is about 22.65% of total Sootea Final Master Plan area is developed as per the primary land use survey conducted by the Town & Country Planning Office, Tezpur in 2022. And an area 35.08 Sq. Km. i.e. 77.35 % of total Master Plan area is found as non-developed. Moreover, the residential use continues the major land use within the town and its immediate outskirts, while the villages within the master plan areas are predominantly covered by tea gardens and paddy fields.

The table given below depicts the land use distribution in the Sootea Planning area and the percentage of area covered by each type of land use.

**Table No. 26: Existing Land Use, 2022: Sootea Master Plan Area**

Land Use	Area in Sq. Km	% to Developed Area	% to Master Plan Area
1. Residential	7.82	76.14	17.24
2. Commercial	0.14	1.36	0.31
3. Public & Semi public	0.4	3.89	0.88
4. Industrial	0.01	0.10	0.02

5. Transportation	1.53	14.90	3.37
6. Parks & Playground / Recreation	0.37	3.60	0.82
<b>Total Developed Land</b>	<b>10.27</b>	<b>100.00</b>	<b>22.65</b>

Source: Survey Conducted by Town & Country Planning, Tezpur, 2022

## 8.2 EXISTING AND PROPOSED LAND USE

Before going to propose the required land uses in the Sootea master plan area, the availability of Government land had been searched at local land revenue office which has been tabulated below.

**Table No. 27: Availability of Govt. land within Sootea Master Plan Area**

Mouza	Name of the Village	Area of land		
		Bigha	Katha	Lessa
Sootea	Palashani	369	0	12
	Ghahi Gaon	746	4	7
	Malar Gaon (Rajah Nagar Pt. I & Malar Gaon)	551	5	1
	Magurmara	415	1	2
	Baro-Bhuyan	208	1	12
	Charajionia (Rajoh Nagar & Gaon)	357	4	8
	BagoriAti	262	4	6
	Dhakhindol	303	1	6
	Khatowal	483	3	19
	No. 1 Nalbari	47	3	18
	No. 2 Nalbari	174	4	18
	No. 3 Nalbari	246	3	19
	Bengali Basti	402	2	15
	Gereki Grant	199	3	17
Nagsankar	Chaporial	577	2	13
	Major Ati	75	3	1
	Niz Sootea	179	3	15
	Hatbor	108	0	5
	Solal Sonar	271	3	12
	Metera	170	0	4
	Pathekakuri Pathar	307	3	14
Total :		6840	51	247
i. e.		<b>6852</b>	<b>3</b>	<b>7</b>

Source: Circle Office, Naduar, 2022

Out of the above available government land in Sootea Master Plan Area, most of which were allotted for different public & semi-public uses, encroached by habitants and only a few have been left for taking up any developmental projects in near future.

The scope of development of the Sootea Master Plan area is expected to be guided by the following factors:

- i) Development activities in the Sootea Town and trading and transport activities and other functions like administration, education and culture and industrial activities;
- ii) Proposal for establishment of Biswanath Medical College at Biswanath Chariali, at a distance of 10-12 KM from Sootea near to the master plan area;
- iii) Vast vacant land within the master plan area.

On the basis estimated population and functional requirement, future trend of growth, suitability of land for development and availability of government vacant land; a land use plan is prepared for the Master Plan Area to guide the future physical development.

The proposed land use plan is prepared based on the following consideration:

- i) Minimum dislocation of the present land use path
- ii) The trend of natural growth pattern of the village
- iii) Inter- relationship of various land use classification
- iv) Possible spillover of the various activities from Sootea Town

**Table No. 28: Proposed Land Use for Sootea Master Plan Area - 2041**

Land use Category	Area in Sq. Km.	% to developed area	% to total Master Plan Area
1. Residential	15.82	63.89	34.88
2. Commercial	1.29	5.21	2.84
3. Public & Semi public	1.07	4.32	2.36
4. Industrial	0.76	3.07	1.68

5. Composite Use	0.13	0.53	0.29
6. Transportation	2.55	10.30	5.62
7. Parks & Playground / Recreation	3.14	12.68	6.92
<b>Total Developed Land</b>	<b>24.76</b>	<b>100.00</b>	<b>54.60</b>
8. Agriculture	18.27		40.29
9. Tea Garden	0.08		0.18
10. Green Belt Proposed	0.14		0.31
11. Water Bodies	2.1		4.63
<b>Total Master Plan Area</b>	<b>45.352</b>		<b>100.00</b>

*Source: Proposed land use Map, 2041*

**8.2.1 RESIDENTIAL USE:** An area of 15.82 Sq. Km. of land is proposed for Residential use. However, in course of time Residential Land Development Schemes are to be taken up for planned development along with basic infrastructure; main residential areas are proposed in the normal expansion of existing villages along with emerging development corridor. An affordable housing Scheme has been proposed within the area proposed for composite use.

Sites for Town Planning Schemes (TPS) and Local Area Plan (LAP) have been proposed at suitable locations within the planning area.

**8.2.2 COMMERCIAL USE:** An area of 1.29 Sq. Km is proposed under commercial use. Sootea town market will dominate the trading activities and the daily market of Sootea will dominate the wholesale trading. However secondary centers are proposed at Near Railway Station (Ward V) and along National Highway 15 (near the main Town area)

CBD area and Vending zone has been identified within master plan area.

**8.2.3 PUBLIC & SEMI-PUBLIC USE:** An area of 1.07 Sq. Km. of land is proposed under public and semipublic use. An area has been earmarked for public and semipublic use in village Gareki Grant; Malar Gaon (Ward V & Ward X) for establishment of proposed educational institutions. A plot of land bearing Dag No. 905 at Ghahi Gaon under Sootea Mouza measuring 40 bigha 0 Katha 0 Lessa has been earmarked for dumping ground site along with STP site which is to be scientifically developed as per NGT guidelines.

**8.2.4 INDUSTRIAL USE:** An area of 0.76 Sq. Km. is proposed for industrial development. Industrial areas are proposed to be developed in Solar Sonar and Nalbari Village along NH-15 Side within Sootea Master Plan area.

**8.2.5 TRANSPORTATION:** An area of 2.55 Sq. Km. of land is proposed under transport and communication. All major roads within the planning area are to be widened; and improved; missing link, if any is proposed for development to bring the road network efficiency. The roads connecting NH-19 (near Gyan Bharati Public School) to LB Road (near Sootea Block Office) and From LB Road to NH-19 (near M/S Ghanakanti Indane Gramin Vitrak) are proposed for widening which will be used as a bypass road during any blockage/ Jam inside the Town. Bus Terminus has been proposed one at Solar Sonar village and a Truck Terminus will be constructed at village Gareki Grant.

**8.2.6 PARKS & PLAY GROUND/ RECREATIO:** An area of 3.14 Sq. Km. of land is proposed under this category. Recreational area is proposed at Gareki Grant (Ward V), Chaporial, Pathaka Kuri; Dakhin Dol village. One no. Modern Park with all facilities has been proposed each in Ward No. 1 and Ward no. 10 (Malar Gaon). A state level stadium will be developed with all facilities at Bor-Bhuyan (Ward I) village.

**8.2.7 AGRICULTURAL USE:** An area of 18.27 Sq. Km. of land is proposed for agriculture use. These areas may provide vegetables and perishable requirement to the planning area; economic program may be initiated in phases for urban cultivation in course.

**8.2.8 GREEN BELT:** An area of 0.14 Sq. Km. is proposed under Green Belt Zone. It will work as buffer zones between two developed uses either of same use or of different uses.

#### **ENFORCEMENT OF MASTER PLAN**

The proposed master plan once approved and adopted by the Govt. of Assam, will be enforced by a Development Authority to be created under Assam Town & Country Planning Act, 1959 (as amended) for the villages included in the Master Plan and Sootea Municipality for the municipal

area with the provisions of Uniform Zoning Regulations & The Assam Unified Building Construction (Regulation) Byelaws, 2022 already approved by the Govt. of Assam.

## CHAPTER – IX

### PROPOSED PROJECT'S BRIEF AND TENTATIVE FUNDING SOURCE

Without proposing projects, a master plan prepared for a town cannot be completed one. The major infrastructure projects for the entire Sootea Master Plan area will be Storm Water Drainage Network, Sewerage Treatment Plan, and Potable Water Supply to all the households of Sootea Master Plan etc.

The Contour line of the entire master plan area have been shown on the utility map, with the help of which and other many required rainfall data etc, the Drainage Master Plan for Sootea will be prepared by Drainage & Sewerage Division, Guwahati, Town & Country Planning Assam. The Sewerage Network Plan will be prepared by Drainage & Sewerage Division, Guwahati, Town & Country Planning Assam, STP site has been proposed within the area earmarked for solid waste management. All the households within entire Sootea Master Plan area will have piped water supply connection under Jal Jeevan Mission for Rural areas and AMRUT 2.0 for SMB area.

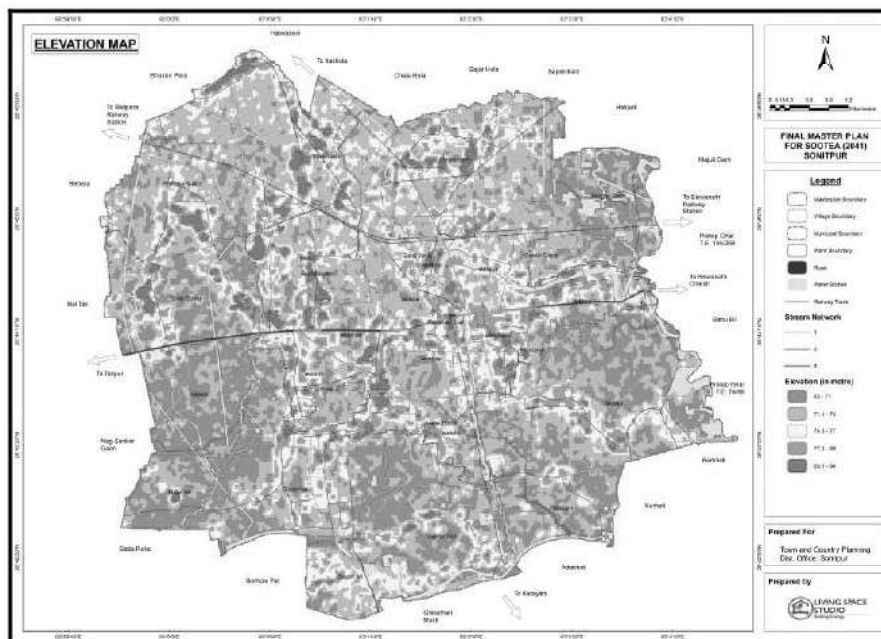


Fig. 10 Elevation Map of Sootea

Digital Elevation Model Map & Existing Drainage Network Map for the planning area have been prepared which will help in finalizing Drainage Plan etc. for Sootea Master Plan area later on.

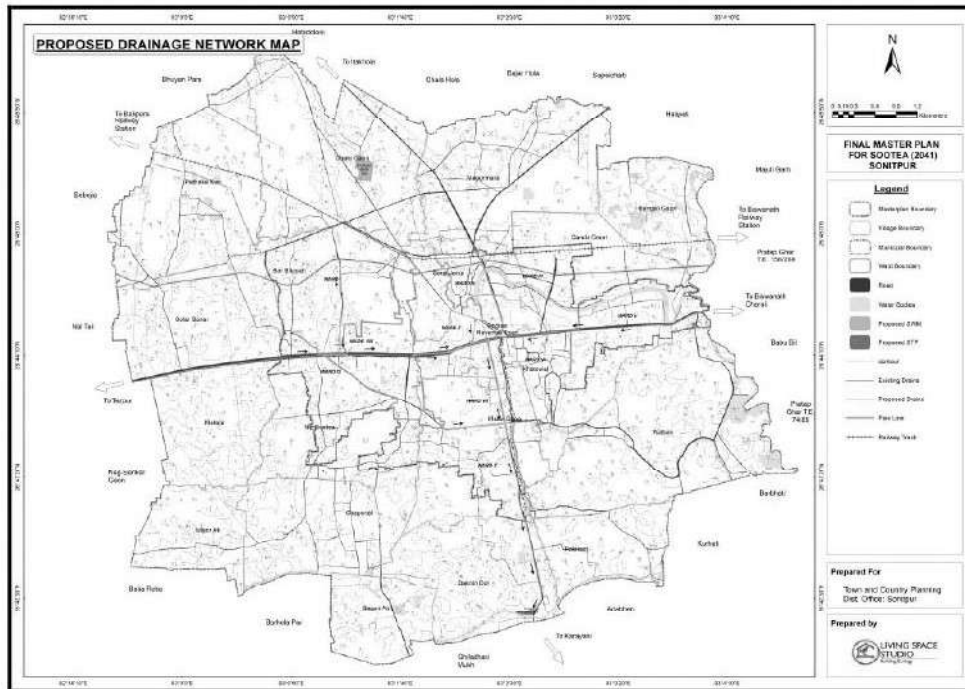


Fig.11 Proposed Drainage Network Map of Sootea

**9.1 BASED ON EXISTING CONDITION AND PROJECTED REQUIREMENTS OF THE PLANNING AREA**

Based on the existing infrastructure analysis, some of projects have been proposed, Like-

1.

Name of the scheme	Sl. no.	Type of road	Length of the Roads in m.
Construction of Road within Sootea Master Plan Area	1	Roads under Municipal area.	17200.00
	2	Roads under Master Plan area.	20670.00
		Total	37870.00



2.

Type of projects	Length of the existing drain in m.	Length of the drain to be constructed	Unit
Storm Water Drains for Sootea Master Plan Area			
Type 1	-	3500.00	M
Type 2	-	10500.00	M
Type 3	-	9000.00	M
Sewerage Treatment Plant for whole Master Plan Area		1	no.
<b>Total</b>		23000.00	M

3. Street Lighting for the entire Sootea Master Plan Area.
4. Solid Waste management Project.
5. Existing Stadium to facilitated with required equipment and infrastructures
6. Bus & Truck Terminus
7. Development of Weekly Market
8. Modern Park with children playing facility

## **9.2 FUND REQUIRED FOR EACH SECTOR/PROJECT IDENTIFIED UNDER THE SECTORS**

Fund required for the above-mentioned projects have been calculated as per the latest Delhi Schedule of Rates.

### 1. Roads

Improvement of Road within Sootea Master Plan Area	Sl. no.	Type of road	Length of the Roads in m.	Cost for construction in Rs.	Total estimated cost in Rs.
				For 1.00m Road with Paver Block	

	1	Roads under Municipal area.	17200.00	6083.71	104639812.00
	2	Roads under Master Plan area.	20670.00	6083.71	125750285.70
	<b>Total</b>		43480.00		230390097.70
<b>Say, Rs.</b>					<b>23.04 Cr.</b>

## 2. Storm Water Drains & STP

Type of projects	Length of the existing drain in m.	Length of the drain to be constructed	Unit	Cost for construction in Rs.	Total estimated cost in Rs.
				For 1.00 m drain with cover	
Storm Water Drains for Sootea Master Plan Area					
Type 1	-	3500.00	M	14585.23	51048305.00
Type 2	-	10500.00	M	16274.72	170884560.00
Type 3	-	9000.00	M	20425.95	183833550.00
Sewerage Treatment Plant for whole Master Plan Area		1	nos.	125000000	125000000.00
<b>Total drain length</b>		22500.00			530766415.00
<b>Say, Rs.</b>					<b>53.08 Cr.</b>

3. Street Lighting with LED Bulb for the entire Sootea Master Plan Area.....Rs. 5.00 Crores

4. Solid Waste management Project.....Rs. 10.00

Crores

5. Existing Stadium to be facilitated with required equipment and infrastructures

.....Rs. 30.00 Crores

6. Bus & Truck Terminus .....Rs. 40.00 Crores

7. Development of Weekly Market.....Rs. 20.00 Crores

8. Modern Park equipped with outdoor playing infrastructure facility.....Rs. 10 Crore

**9.3 IDENTIFICATION OF LAND SITE OF PROPOSALS**

The sites for the above-mentioned projects are shown in Proposed Land Use Plan of Sootea Final Master Plan, 2041

**9.4 INDICATIVE SOURCES OF FUND**

The source of the fund for the above- mentioned projects will be sought from different Urban Development Schemes/ Programmes of Govt. of India and Govt. of Assam.

## CHAPTER – X

### DISASTER PLAN

**Soo tea** falls under Seismic Zone V and witnessed two major earthquakes in the region. The Assam-Tibet Earthquake of 1950 measuring 8.5 in the Richter scale was the worst felt earthquake in the district and nearly 4000 people lost their life in the state. With increased density of urban population over the period combined with haphazard growth the risk from earthquake has increased manifold. Data on disaster occurrence, its effect upon people and its cost to countries, are primary inputs to analyze the temporal and geographical trends in disaster impact. Disaster losses, provide the basis for identifying where, and to what extent, the potentially negative outcomes embedded in the concept of risk is realized. They help to understand where, and to whom, disaster risk becomes impact. They also provide the basis for risk assessment processes, a departing point for the application of disaster reduction measures.

Development cannot be sustainable unless disaster mitigation is built into development process. Investments in mitigation are more cost effective than expenditure on relief and rehabilitation. Prevention and mitigation contribute to lasting improvement in safety and are essential to integrated disaster management. Disaster response alone is not sufficient as it yields only temporary results at very high cost. So emphasis must be on Disaster prevention, mitigation and preparedness, which help in achieving objectivity of vulnerability reduction.

As per Section 40 of Disaster Management Act 2005 that every department of the State Government shall prepare a Disaster Management Plan.

#### **IMPORTANCE OF PUTTING DISASTER MANAGEMENT PLANS IN PLACE:**

Disasters are events that have a huge impact on humans and/or the environment. Disasters require government intervention. They are not always unpredictable. Floods take place in valleys and flood plains, droughts in areas with unstable and low rainfall, and oil spills happen in

shipping lanes. This predictability provides opportunities to plan for, prevent and to lessen the impact of disasters.

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

Disaster management aims to reduce the occurrence of disasters and to reduce the impact of those that cannot be prevented. The government's White paper and Act on Disaster Management define the roles of Local Authorities as well as Provincial and National government in disaster management.

North East Region has been vulnerable to many disasters in the past both natural and manmade, we can notice that most of the disasters have occurred within the last two decades, and the frequency, intensity and magnitude of the disasters are ever increasing.

#### **PLAN OBJECTIVES**

The objectives of the District Disaster Management Plan are:

- Disaster management in the routine affairs of the department.
- To provide technical and humanitarian assistance during disaster.
- Prompt and effective discharge of departmental responsibilities during disaster situations
- Ensuring safety of departmental infrastructure, human resource and other assets
- Ensuring safety of the beneficiaries and others
- Speedy restoration after disaster impact
- To conduct trainings and capacity building for effective prevention, mitigation and response for disasters.
- To undertake information, education and communication activities to create awareness among the communities and the general public.

#### **DISASTER MANAGEMENT CYCLE:**

**DISASTER MANAGEMENT CYCLE:**

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

**Pre disaster activities**

1. Policy development and National, State, district, local level disaster organization formation
2. Vulnerability and capacity assessment.
3. Prevention and mitigation
4. Preparedness, planning and training

**Emergency activities**

1. Warning (beginning before the actual event)
2. Evacuation, search and rescue
3. Emergency assistance (relief) – food, water, shelter, medical aid

**Post disaster activities**

1. Repair and restoration of life lines (power, telecommunications, water transportation)
2. Reconstruction and rehabilitation.

**PROFILE OF THE DEPARTMENT: -**

This is a municipal office under the Director, Municipal Administration, Dispur, Guwahati-6 (Department of Housing & Urban Affairs). The office is situated at Sootea town, NH-15, Sootea.

**1) Departmental works:**

- Implementation of schemes related to Central and State Govt. fund for infrastructure development.
- Cleaning and scientific dumping and management of waste generated in the town

**2) Office Building:-**

Sootea Municipality is working at a rented 2<sup>nd</sup> floor of a G+2 building belongs to Sootea Gaon Panchayat.

**3) Status of employees:-**

Sl. No.	Staff strength & pattern	Total	Male	Female
1	Executive Officer	1	1	Nil
2.	Junior Engineer			
3.	Sub Junior Engineer			
4.	Head Assistant (in -charge)			
5.	UDA			
6.	LDA			
7.	Tax Daroga			
8.	Tax Collector			
10.	Asstt. Tax Collector			
11.	Supervisor			
12.	Driver including temporary & Tum tum			
13.	Grade IV			
14.	Labourer			
15.	Harijon			
16.	Water Supply Plumber/ Helper			
17.	Garbage collector			
<b>Total</b>				

There are --- employees in this office as of now, out of which only --- are female.

#### 10.1 FLOOD/URBAN FLOOD

Water and Climate Related	<ul style="list-style-type: none"> <li>• Floods and Drainage management</li> <li>• Cyclones</li> <li>• Tornadoes &amp; Hurricanes</li> <li>• Hailstorm</li> <li>• Cloud burst</li> <li>• Snow Avalanches</li> </ul>
---------------------------	---

	<ul style="list-style-type: none"> <li>• Heat &amp; cold Waves</li> <li>• Thunder &amp; Lightning</li> <li>• Sea Erosion</li> <li>• Droughts</li> </ul>
--	---

➤ **Flood : -**

The general reason of occurrence of flood in Biswanath District is due to overflow of River Brahmaputra and its tributaries, viz. Mornoi, Ghiladhari etc. **Sootea** Town faces urban flooding due to artificial reduction Cross section of Tributaries.

## 10.2 EARTHQUAKE

.Geological Related	<ul style="list-style-type: none"> <li>• Earthquakes</li> <li>• Landslides &amp; Mudflows</li> <li>• Dam Bursts &amp; Dam Failures</li> <li>• Mine Fires</li> </ul>
---------------------	---

➤ **Earthquake :-**

As per the latest seismic zoning map of India, the **Sootea** falls under High-Risk Zone- V, where a maximum intensity of IX can be expected.

## 10.3 OTHERS

Chemical Industrial and Nuclear Related	<ul style="list-style-type: none"> <li>• Chemical and Industrial Disasters</li> <li>• Nuclear Disasters</li> </ul>
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Accident Related	<ul style="list-style-type: none"> <li>• Road, Rail and other Transportation accidents including Waterways</li> <li>• Mine Flooding</li> <li>• Major Building Collapse</li> <li>• Serial Bomb Blasts</li> <li>• Festival Related Disasters</li> <li>• Urban Fires</li> <li>• Oil Spill</li> <li>• Village Fires</li> <li>• Boat Capsizing</li> <li>• Forest Fires</li> <li>• Electrical Disasters &amp; Fires</li> </ul>
------------------	--

➤ **Soil Erosion : -**

The soil erosion at the embankment of Brahmaputra is the major threat to many places in Biswanath District.

➤ **Fires : -**

The fire takes places in Biswanath District due to short circuit in commercial areas. Mainly fire takes place from March to April when the climate remains very dry and probability is more instance of fire breakout. The towns in the district are also prone to industrial disaster due to having some manufacturing industrial plants in many parts.

Fire hydrants have proposed to be installed within the campus of petrol depots located in the Master Plan area of Sootea.

➤ **Cyclone:-**

In Biswanath District cases related to low density cyclone occurred in some places.

**SEASONAL CALENDAR FOR DIFFERENT TYPES OF HAZARDS:**

Sl. No.	Type	Hazard												Remarks
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	<b>Flood</b>						←————→							
2	<b>Earthquake</b>	←————→												
3	<b>Fire</b>	←————→												
4	<b>Landslide</b>						←————→							
5	<b>Cyclone</b>				←————→									
6	<b>Erosion</b>				←————→									
7	<b>Epidemic</b>				←————→									
8	<b>Accident</b>	←————→												
9	<b>Riot</b>	←————→												

**Likely Geographical extent and magnitude / severity:**

- 1) Assam as a whole is within the Zone V of earthquake zone. Especially Sootea has witnessed a devastating earthquake in 1950. So, it can be said that geographically and geologically Sootea is situated in a very hazards prone zone in the context of earthquake.
- 3) Chances of Landslide are comparatively less in this district. But fire can break out in the congested residential and commercial areas, markets of the town anytime during lean season, so is the risk of epidemic in the slum/basti areas. The district has faced cyclones several times in the past. Road accident, rail accident, collapse of multi-storied buildings etc. may occur at any time; of course, communal/ other riot is not so common in this district.

**Preparedness & Response System**

<i>Department</i>	<i>Response System</i>			
	<i>Preparedness</i>	<i>Pre (after Warning)</i>	<i>During Disaster</i>	<i>Post Disaster</i>
Sootea MB	<ul style="list-style-type: none"> <li>▪ Capacity building ( training) and sensitization among departmental official &amp; staff</li> <li>▪ Assessment of existing departmental building &amp; other hazard's.</li> <li>▪ Identification of vulnerable building ( Safety Audit ) in towns and necessary direction to Urban local Body's for necessary action</li> <li>▪ Evacuation Plan in high rise and life line building</li> </ul>	<p>Pre preparedness in case of a disaster like flood. Earthquake etc., collection of some construction materials like bamboo, rope, wire, wood, sand, cement bags, First Aid kit etc., will be kept ready.</p> <p>Coordination with District Disaster Management Authority</p> <p>Dissemination of information for early warning to general public with the aegis of DDMA .</p>	<p>During disaster this department will provide technical manpower support to restore essential services and coordinate with DDMA</p>	<p>After the disaster this department will make assessment of destruction and report to District Admin.</p> <p>Identification of rehabilitation site</p> <p>Modification of Master Plan</p> <p>Preparation of any new Master Plan for affected areas.</p>

### **Prevention & Mitigation Plan –**

Proper implementation and enforcement of Assam Unified Building Construction (Regulation) Byelaws, 2022 & Sensitization among stakeholders engaged for construction work / owners to use disaster resistant technologies

#### **10.4 STANDARD OPERATIONAL PROCEDURES (SOP) ON DISASTER**

- ❖ Written guideline that precisely defines how operations are to be carried out.
- ❖ An organizational directive that establishes a standard course of action.
- ❖ Written guidelines that explain what is expected and required of the personnel.
- ❖ Standardization of activities :-
  - Identify planned and agreed upon roles & actions.
  - Promotes coordination and communication amongst personnel.
  - Simplify decision making during potentially stressful conditions)

#### **Emergency Support Function (ESF):**

1.	<b>NAME OF HEAD</b>	EXECUTIVE OFFICER, SOOTEA MB; MOBILE No:-	NODEL OFFICER (EXECUTION OF SOP)
2.		JUNIOR ENGINEER, SOOTEA MB; MOBILE No:-	EXECUTION OF SOP & SUPERVISION OF ESF 1 & 2

#### **Damage Assessment:**

The team consist of technical person as mentioned in ESF 1 will do the rapid damage assessment in post disaster as per Annexure – 2.

**ESF 1:- Damage Assessment & Monitoring Team (DAMT):**

Sl. No.	Particulars	Contact No.	Ward Nos.	Remarks
1	JE 1		Overall Incharge	The officials will assess the ground situation in their respective areas and report to control room
2	Sub JE 1		1,2,3,4	

Note :-Damage Assessment of Buildings through Rapid Visual Screening ( RVS ) as per Annexure – 3

**ESF 2:- Rapid Assessment Team (RAT):**

Sl. No.	Particulars	Contact No.	Area	Remarks
1	Head Assistant		Technical Supervisor will give necessary direction for field visit	The officials will assess the ground situation and assist / report to concern DAMT officials and report to control room
2	UDA			
3	LDA			
4	Tax Daroga			
5	Tax Collector			

**ESF 3:- Control Room Setup & Logistics :**

<b>Head Asstt (CONTROL ROOM IN-CHARGE )</b> Mobile No:-	1. UDA 1 2. LDA 1
<b>UD Asstt. ( DATA COMPILATION &amp; DAILY REPORT TO HEAD &amp; CONCERN OFFICES )</b> Mobile No:-	1. LDA 1
<b>Sub Junior Engineer 1</b> ( LOGESTIC & SAFETY / SECURITY OF OFFICIALS) Mobile No:-	1. Supervisor 1 2. Supervisor -2

**Equipments**

Sl.No	Particulars	Contact No	Equipments
1.	J. E. Engineer Sootea Municipal Board		Mini Loader
			Auto Tipper(big)
			Auto Tipper(small)
			Tractor with trailer

**Command and Control (SOP)**

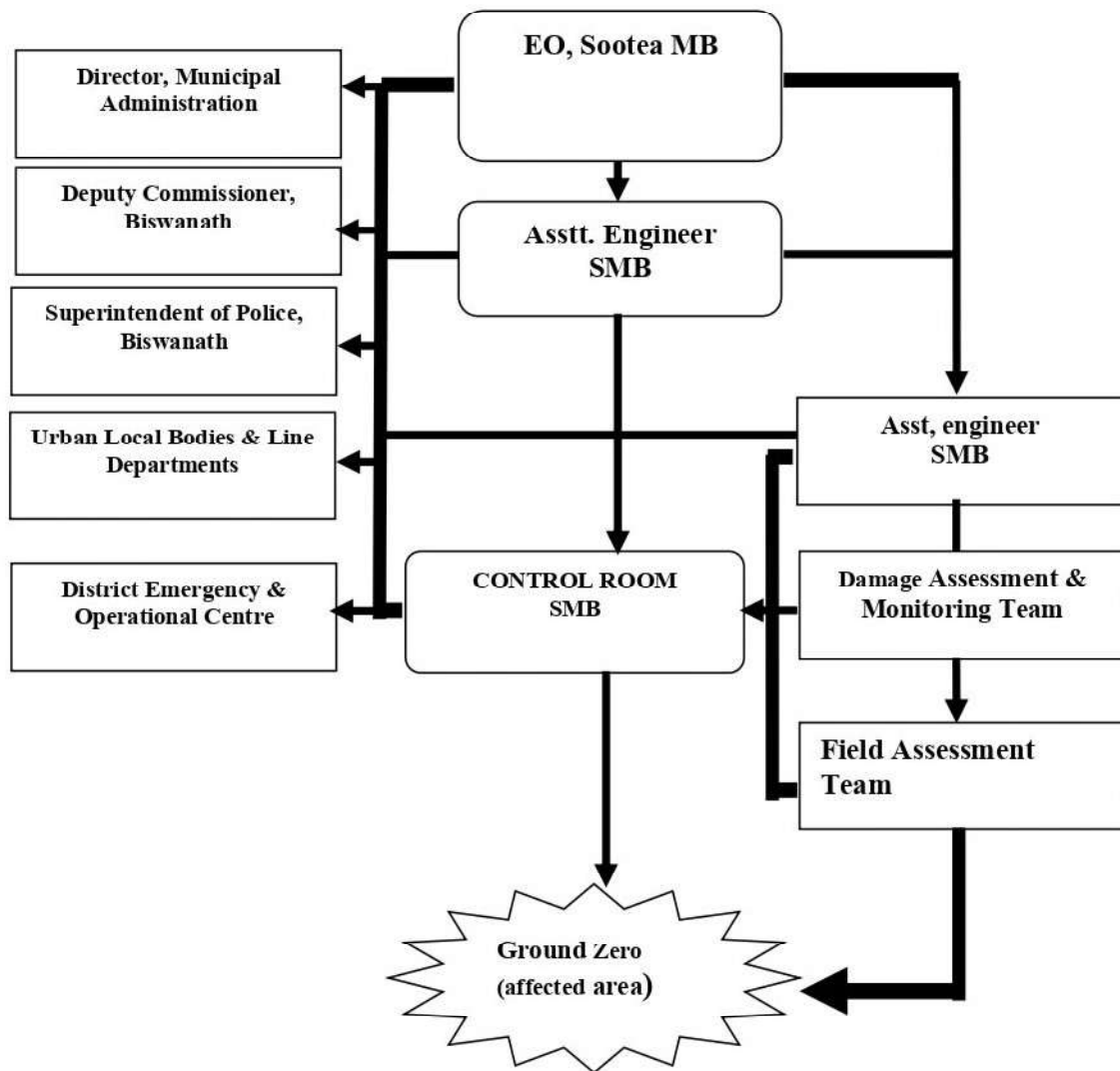


Fig.12 Command and Control (SOP)

**ANNEXURE – 1****1. Functional organization structure:**

- a) Department of Housing & Urban Affairs at State Govt.
- b) Director, Municipal Administration, Dispur, Guwahati-6.
- c) Revenue Circle Office, Sootea under Sonitpur DDMA.

**2. Inventory of departmental resources:**

- a) Resource : - Department provides technical support.
- b) Capacity :- Officials to be trained for Earthquake engineering & Rapid Visual Screening etc
- c) Location :-Sootea Municipality,  
NH-15  
PO - Sootea,  
Pin-784175

**3. Details of officers at State & District level:**

- 1. Director, Municipal Administration, Dispur, Guwahati.

Phone:

- 2. Revenue Circle Office, Naduar.

Phone:

**4. Special decision making procedure:** As per SOP.**5. Details of budget provision:** Budget provision is a must for successful implementation of SOP. Necessary direction to be received from Head office regarding such as provision related to Disaster.

**6. Details of departmental officials:**

SL. NO.	NAME	DESIGNATION	MOBILE NO.
1.		Executive Officer	
2.		Junior Engineer	
3.		Sub Junior Engineer	
4.		Head Assistant (in -charge)	
5.		UDA	
6.		LDA	
7.		Tax Daroga	
8.		Tax Collector	
9.		Asstt. Tax Collector	
10.		Supervisor	
11.		Driver including temporary & Tum tum	
12.		Grade IV	
13.		Labourer	
14.		Harijon	
15.		Water Supply Plumber/ Helper	
16.		Garbage collector	



**ANNEXURE – 2****Check list for damage assessment**

- i) Geographical area impacted
- ii) Structural damage to buildings etc.
- iii) Damage to roads and bridges, public buildings shops, workshops, stalls etc.
- iv) Damage to water supply lines, electricity supply lines, public utilities etc.

**Tools for rapid assessment**

- i) Photographs, video graph/film of the affected area
- ii) Field Report

Sl.No	No. of Buildings / infrastructure affected	Location	Action Taken	Remarks/ Any SOS to Control Room
Name:-				
Sign :-				
Date :-				
Note:- SOS related to Life trap, Emergency Medical support, Rescue etc.				

- iii) Report from Administration/ ULBs/ Media etc.
- iv) Rapid Visual Screening ( RVS) Survey
- v) Mapping of affected area / buildings / infrastructure
- vi) Safety Gear for officials.



Probable maximum Grade of Damage

Building Type	Masonry Building				RC or steel Frame Building				URM infill	Wood
	A, A+	B, B+	C, C+	D	C, C+	D	E, E+	F		
Damage Grade in Zone V	G 5	G 5	G 4	G3	G4	G3	G2	G1	G4	G4

Note: + sign indicate higher strength hence somewhat lower damage expected than that stated. Also Average damage in one building type in the area may be lower by one grade point than the probable maximum indicated. Surveyor will identify the Building Type, encircle it, also the corresponding damage grade and tick mark the recommendation.

*Recommended Action:*

- 1) A, A+ or B, B+ : Evaluate in detail for need reconstruction or possible retrofitting to achieve type C or D
- 2) C, C+ : Evaluate in detail for need of retrofitting to achieve type D
- 3) URM infill : evaluate for need of reconstruction or possible retrofitting to level D
- 4) Wood : evaluate in detail for retrofitting

Surveyor's Signature \_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_

The Final Uniform Zoning Regulation, 2000 prepared by the Director, Town & Country Planning, Govt. of Assam, and adopted by Town & Country Planning Department of the State Government of Assam under Section 10(2) of the Assam Town & Country Planning Act 1959 (as amended) and the Assam Unified Building Construction (Regulation) Byelaws, 2022 applicable to the municipalities under section 171 of the Municipal Act, 1956 (Assam Act no. 15 of 1957). The Development Authorities constituted under the provisions of the Assam Town and Country Planning Act, 1959, while taking any action under section 13 of the said Act **will be applicable for Sootea Master Plan Area.**

## **ZONING REGULATIONS FOR SOOTEA MASTER PLAN AREA**

*THE ASSAM GAZETTE, EXTRA ORDINARY, DEC 16, 2000*

### **NOTIFICATION**

**The 12th June, 2000**

**No. TCP.31/2000/54** :- In exercise of the powers conferred by sub-section (2) of Section 10 of the Assam Town & Country Planning Act, 1959 (as amended) and the Assam Town & Country Planning (Amendment) Act, 1994 (Assam Act No. XXIII of 1994) read with the Assam Town and Country Planning (Publication of Master Plan and Zoning Regulations) (Amendment) Rules, 1995, the Governor of Assam is pleased to publish the following Notice regarding the publication of the Draft Uniform Regulations.

#### NOTICE FOR PUBLICATION OF THE DRAFT UNIFORM ZONING REGULATIONS

1. It is notified that the Draft Uniform Regulation prepared by the Director, Town & Country Planning, Govt. of Assam, and adopted by the State Government of Assam under Section 10(2) of the Assam Town & Country Planning Act 1959 (as amended) is hereby published. The Uniform Zoning Regulations shall be applicable for all the Towns having approved Zoning Regulation except Guwahati.
2. The Draft Uniform Zoning Regulations may be inspected free of cost during office hours at the office of the Director, Town & Country Planning, Government of Assam, Dispur, Guwahati-6 all districts offices of Town & Country Planning, Development Authorities and Municipal Boards/Town Committees of Towns having approved Master Plan. Copies of the Draft Uniform Zoning Regulations are also available at the office of the Director, Town & country Planning, Govt. of Assam, Dispur, Guwahati-6 for sale on payment.

S. BARUAH,  
Deputy Secretary to the Government of Assam,  
Town & Country Planning Department, Assam.

পঞ্জীভুক্ত নম্বৰ - ৭৬৮ /৯৭

Registered No.-768/97



# THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্ব দ্বাৰা প্ৰকাশিত

PUBLISHED BY THE AUTHORITY

নং 688 দিশপুৰ, শনিবাৰ, 15 অক্টোবৰ, 2022, 23 আছিন, 1944 (শক)

No. 688 Dispur, Saturday, 15th October, 2022, 23rd Asvina, 1944 (S. E.)

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

DEPARTMENT OF HOUSING AND URBAN AFFAIRS

## NOTIFICATION

The 15th October, 2022

**No. DoHUA/ECF No. 236697/2.**- In exercise of the powers conferred by section 4 of the Assam Building Construction (Regulation) Act, 2010, the Governor of Assam is hereby pleased to make the following building byelaws to regulate the construction of buildings under the jurisdiction of areas under Development Authorities or Urban Local Bodies or the Panchayats as the case may be, namely:—

### Chapter-I

#### 1. Short title, extent and commencement.—

- (1) These Byelaws may be called the Assam Unified Building Construction (Regulation) Byelaws, 2022.
- (2) It shall extend to the master Plan areas or notified Planning areas of whole of Assam except for areas under Autonomous Districts, provided that if any District Council desires that all or any of the provisions of this byelaws shall apply to the Autonomous District concerned, a notification may be issued to that effect and this byelaws shall then extend to that Autonomous District subject to such exceptions or modifications as may be specified in the notification.
- (3) They shall come into force on the date of their publication in the Official Gazette.

#### 2. Definitions:— In these Byelaws unless there is anything repugnant in the subject or context, -

- (1) "Affordable Housing", means the housing schemes for providing affordable housing at low cost to economically weaker class (EWS) and low income group (LIG) of public and shall include housing whose carpet areas are less than or equal to 66 Sq. Mt.

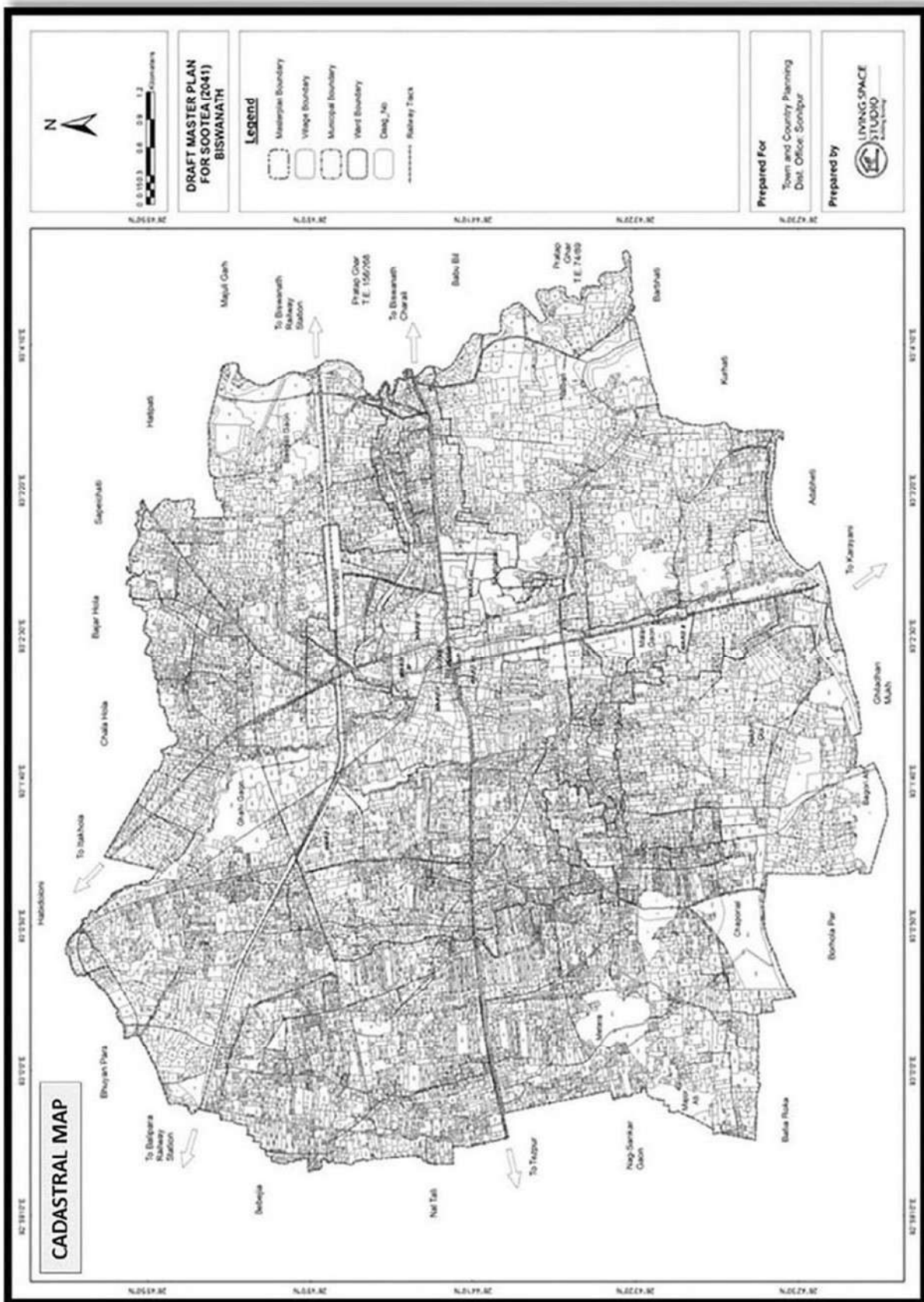


Fig. 13 Cadastral Map

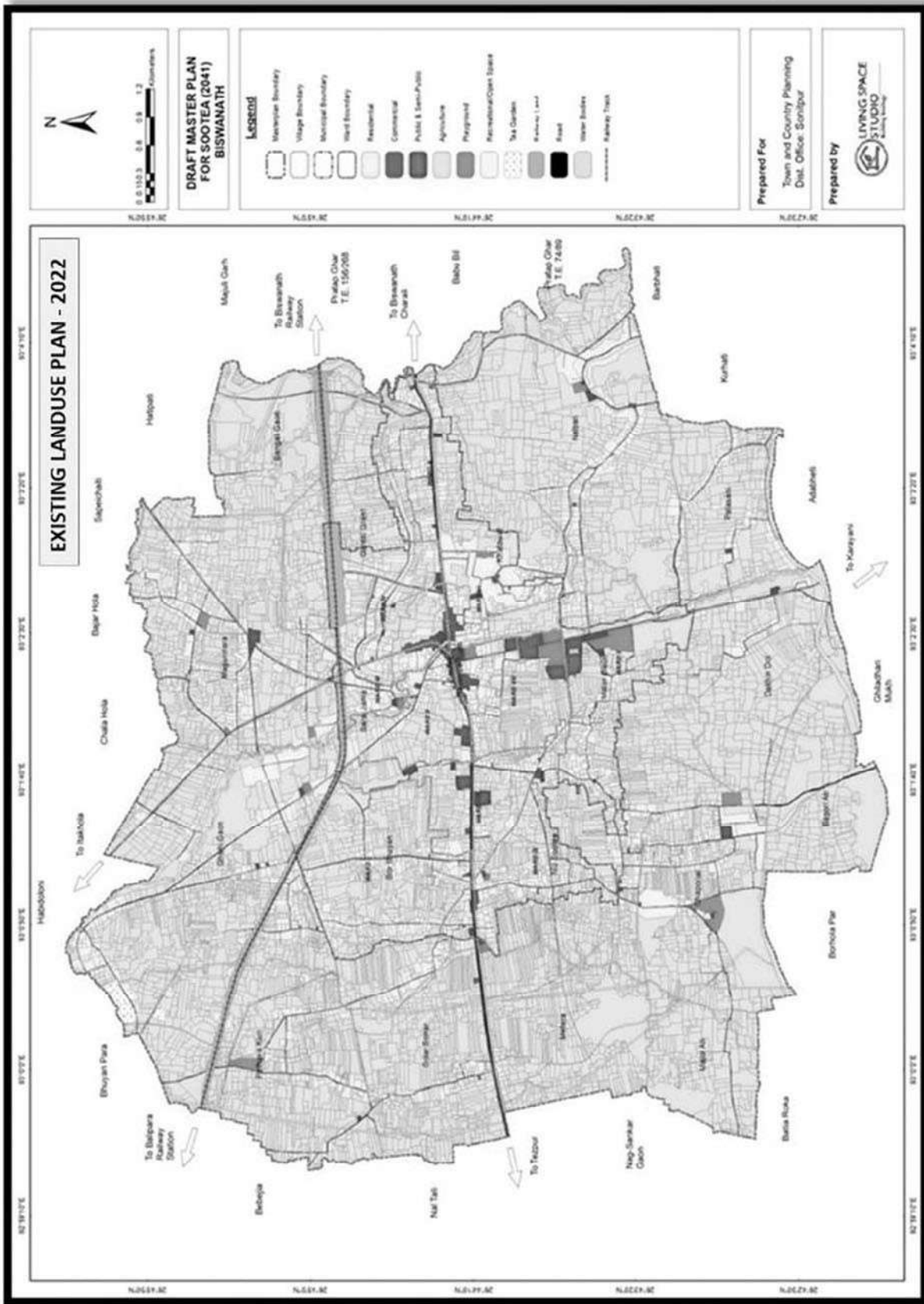


Fig. 14 Existing Landuse Plan 2022



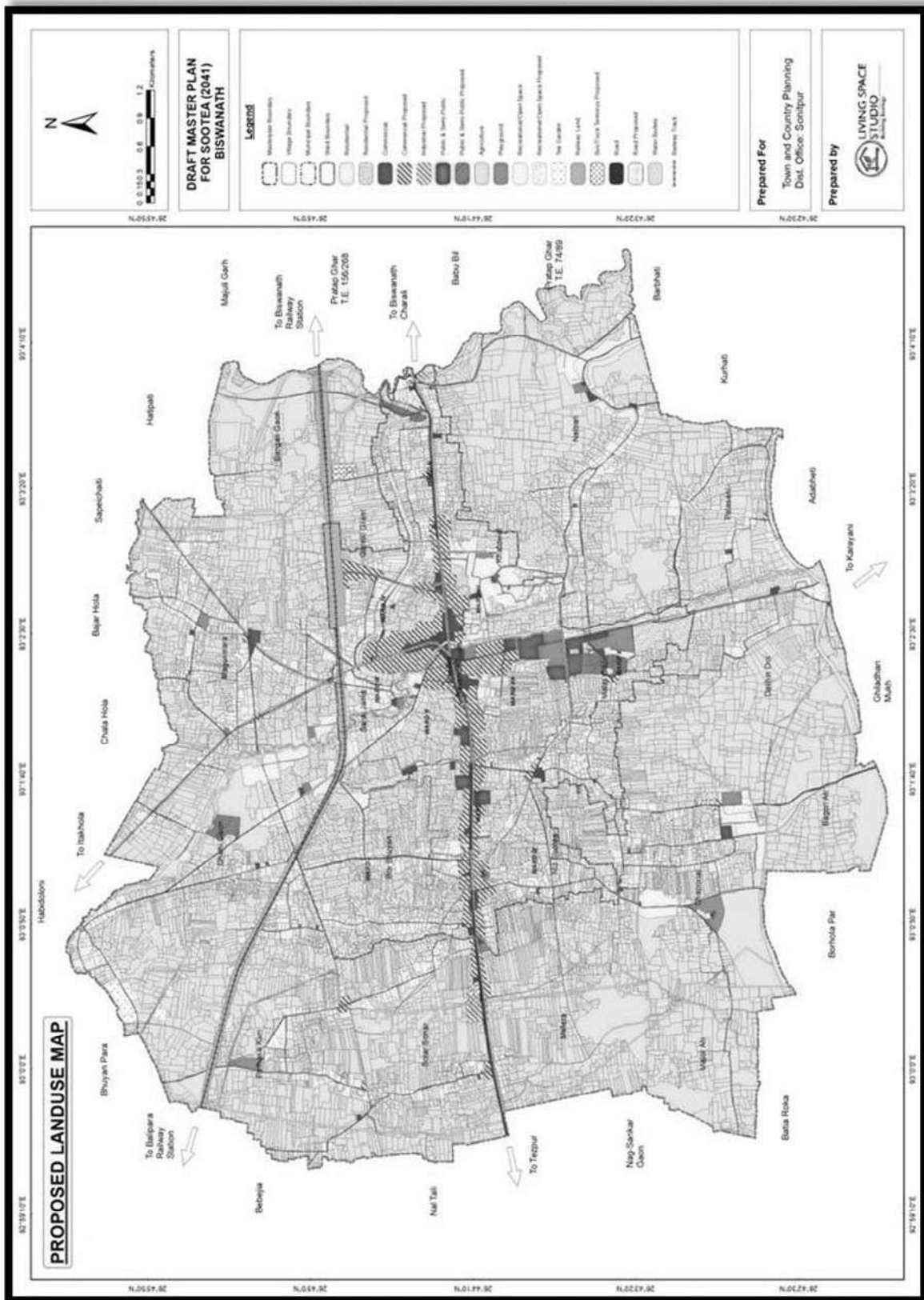


Fig. 15 Proposed Landuse Plan - 2041

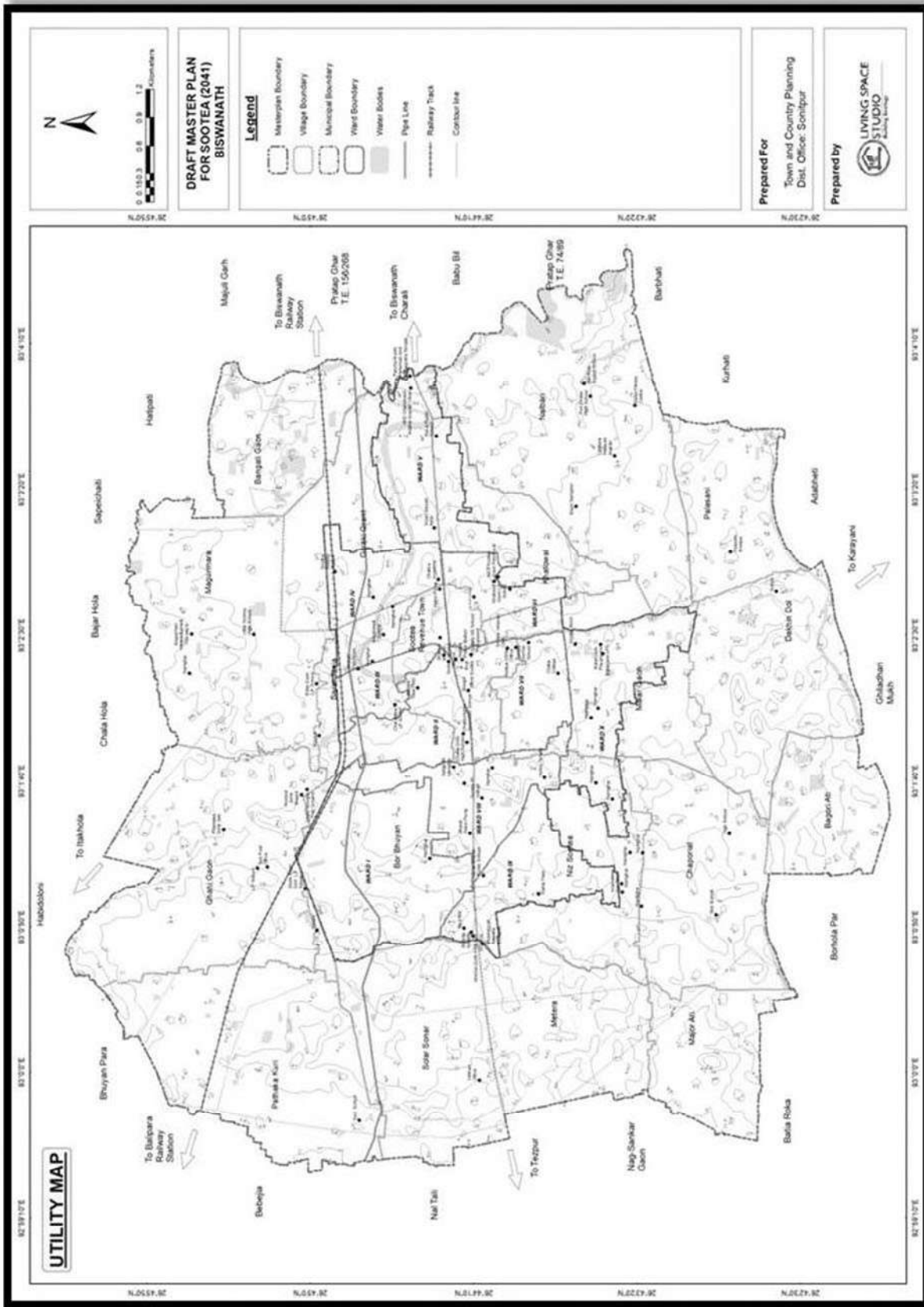


Fig. 16 Utility Map - 2041

