



# THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত

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No. 568 Dispur, Wednesday, 3rd August, 2022, 12th Sravana, 1944 (S. E.)

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

DEPARTMENT OF HOUSING AND URBAN AFFAIRS

## NOTIFICATION

The 11th July, 2022

**No. UDD(T)220/2022/2.-** In exercise of the powers conferred by the Section 9 and Sub-section(1) of Section 10 of the Assam Town & Country Planning Act, 1959 (as amended) and (Assam Act II of 1960) read with sub-rule (1) of Rules 3 of the Assam Town & Country Planning (Publication of Master Plan and Zoning Regulations) Rules 1962, the Governor of Assam is pleased to publish the following notice regarding the publication of the Draft Master Plan for Demow.

### **Notice for publication of the Draft Master Plan for Demow**

1. It is notified that the Draft Master Plan for Demow prepared by the Directorate of Town & Country Planning, Government of Assam, Town & Country Planning Act, 1959(as amended) read with Sub-section 1 of Section 10 of Assam Town & Country Planning Act, 1959 (as amended) for the area described in the schedule below is here by published.
2. Any person or persons affected by the Draft Master Plan may submit their objections or opinions in writing to the Director, Town & Country Planning, Government of Assam, Dispur, Guwahati-6 within two months from the date of publication.
3. The Draft Master Plan for Demow 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, the Deputy Director, Town & Country Planning, Dist Office –Sivasagar, the Circle Office , Demow Revenue Circle, Demow, office of the Chairman, Demow Municipal Board, Demow. Copies of the Draft Master Plan for Demow are available at the office of the Deputy Director, Town & Country Planning, Dist Office – Sivasagar for sale on payment.

## SCHEDULE

### A. SITUATION AND AREA:

DISTRICT	...	:	Sivasagar
Sub-Division	...	:	Sivasagar
Demow Municipality Area	...	:	4.05 Sq. Km.
Greater Demow Master Plan Area	...	:	171.18 Sq. Km.

Parts of 2(Two) Revenue Circles are included in the Draft Master Plan area for Greater Demow.

1. Sivasagar Revenue Circle.
2. Demow Revenue Circle.

### REVENUE CIRCLE AND MAUZA WISE VILLAGES INCLUDED UNDER DEMOW MASTER PLAN AREA - 2041.

Sl. No.	Census (2011) Code	Type of Settlement	Name of the Town/Village (As in Census of India 2011)	Rural/Urban	Mouza	Revenue Circle	Subdivision
1	493	Village	Nahat Garaimairi	Rural	Nitaipukhuri Mouza	Demow Revenue Circle	Sivasagar Sub-Division
2	494	Village	Deodubi	Rural			
3	495	Village	Sukan Pukhuri	Rural			
4	496	Village	Chakala Pathar	Rural			
5	497	Village	Gamiri	Rural			
6	498	Village	Gelgeli	Rural			
7	499	Village	Kenduguri	Rural			
8	500	Village	Duponi Pather	Rural			
9	501	Village	Raichai	Rural			
10	502	Village	Konwar Dihingia	Rural			
11	503	Village	Bhekela	Rural			
12	504	Village	Dehajan Habi	Rural			
13	505	Village	Demow Grant	Rural			
14	506	Village	Kaliyapani Grant	Rural			
15	507	Village	Ekarani Borhula Gaon	Rural			
16	508	Village	Naharani Habi	Rural			
17	509	Village	Bangali Gaon	Rural			
18	510	Village	Athabari Grant	Rural			
19	511	Village	Chanda Monda Changmai	Rural			
20	512	Village	Kathalbari	Rural			
21	513	Village	Bhaluka Guri	Rural			
22	514	Village	Kathal Guri Block	Rural			
23	515	Village	Khongia Grant	Rural			
24	516	Village	Mashoi	Rural			
25	517	Village	Chetia Gaon	Rural			
26	518	Village	Hiloidhari	Rural			
27	519	Village	Khoraihat Grant	Rural			
28	520	Village	Rajmai Grant	Rural			
29	521	Village	Loguwa Bari	Rural			
30	522	Village	Kachari Pathar	Rural			
31	523	Village	Dhundar Mukh	Rural			
32	529	Village	Charaguwa Gaon	Rural			
33	530	Village	Bokul Duba	Rural			
34	531	Village	Palengi P.G.R.	Rural			
35	532	Village	Jiyamari	Rural			
36	533	Village	Dhyan Pathar	Rural			
37	534	Village	Kesuwani	Rural			
38	535	Village	Araltali	Rural			
39	536	Village	Da Dhara Grant	Rural	Thowra Mouza	Demow Revenue Circle	Sivasagar Sub-Division
40	537	Village	Koiborta Dalani	Rural			
41	538	Village	Haluwating	Rural			
42	539	Village	Sorupalengi	Rural			

43	540	Village	Japisagiya Gaon	Rural			
44	541	Village	Rajabari Bagisha	Rural			
45	542	Village	Desang Deroi Habi	Rural			
46	543	Village	Ranjan Bagan	Rural			
47	544	Village	Saru Deroi	Rural			
48	545	Village	Barderoi	Rural			
49	547	Village	Deroi Habi	Rural			
50	548	Village	Barbam Block	Rural			
51	697	Village	CharulKora No.2	Rural	Konwarpur Mouza	Sivasagar Revenue Circle	Sivasagar Sub- Division
52	685	Village	Banmukh Chutia	Rural			
53	684	Village	Banmukh Dihingia	Rural			
54	682	Village	Barhoiting	Rural			
55	680	Village	Motha Dang	Rural			
56	671	Village	Kath Para Gaon	Rural	Betbari Mouza		
57	705	Village	Chetia Koiboria	Rural			
58	695	Village	GohainGaon	Rural			
59	696	Village	Joyapar Gaon	Rural			
60	704	Village	Kotoni Par	Rural			
61	698	Village	KowamoraHondique	Rural			
62	703	Village	Luthuri Chetia	Rural			
63	699	Village	Marbill Gaon	Rural			
64	697	Village	AkhoiPhutia Gaon	Rural			

**B.:Description of Boundary:**

- North : Bandarmari Gaon, Bogpara Gaon, Udaypur No.1.  
 South : Sivasagar Master Plan Boundary.  
 East : Dibrugarh District, Salaguri Bagisa, Chanbacha.  
 West : Narayanpur, Aoraitali, Udaipur No. 2, Outala, Debapur, Rupapur, Chiangdubi ,  
 Charaguwa Grant, Majumolia, Matak Gohain, Patar Chetia, Dhulia Habi,

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

## CHAPTER I

### 1. INTRODUCTION TO MASTER PLAN AREA

Urbanization is a continuous process. The process of urbanization in Assam is very slow and this is mainly due to industrial backwardness and dependence of agriculture on primitive method to a great extent. Recent trend reveals that growth and modernization in agricultural activities can also lead to urbanization by means of rural development strategy. According to 2011 census of India the percentage of urban population in Assam was 14.8% against all India figures of 31.1%. For Sivasagar district the figure is 9.57% which were quite below the state average. Demow town which came into being as urban centre in the year 2012 with an area of 2.27 Sq. Km. consists of 7 Wards. The first Town Committee was set up in 2012 and is upgraded to Municipal Board in the year 2020 with 10 Wards. It is class IV town according 2011 census with a population of 10,228 having area of 4.04 Sq. Km.

#### 1.1 HISTORY

Historically Demow is a famous place. During the reign of Ahom King Chulungmung (1497-1502) he settled the subjects on the non-fertile high land for dwelling on Northern and Southern banks of river Demow for cultivation in the nearby fertile low lands and collection of taxes from the Nagas who came for marketing. Some of them were entrusted with the task of controlling the Naga rebels. During the time of British rule this historical place was identified in the first settlement in the year 1902.

Demow is a small town in the Sivasagar district of Assam. Demow is circle head quarter under Sivasagar Civil Sub division in Sivasagar district. The NH-37 passes through this town and thereby heavy traffic from Dibrugarh and Sivasagar side passes through this plain terrain which creates traffic congestions due to existing two lanes of NH-37.

Demow being one of the important town of the upper Assam plays an important role as a centre of administrative, education, trade and commerce and tourism industry. A large number of interstate and intrastate traffic crosses the town every day. Demow town located on the side of the NH-37 which is now under construction to four lanes. The main trunk National Highway connecting to state capital Dispur and major parts of upper Assam on the south bank of the river Brahmaputra. The present infrastructure of the town is in deficit of a road and drainage infrastructure. The present scenario of roads and drains in the town is pathetic and cause of major water logging during monsoon. As a result, communication for dwellers of the town becomes very difficult.

Demow is the only town between Moran and Sivasagar Town. River Demow is flowing parallel to the town east to west at a distance of 400 meters. Demow revenue circle is bounded by Lakwa circle towards South, Sivasagar circle towards West, Moran circle towards East, mighty Brahmaputra towards North-West. Demow is surrounded by tea estates and paddy fields.

The nearest railway station to Demow is Sivasagar town and Moranhat Railway station. The following table shows other railway station and its distance from Demow town.

1. Sivasagar Railway station	-	19.60 Km.
2. Simaluguri Railway station	-	35.60 Km.
3. Moran Railway station	-	23.00 Km.

and nearest Airport to Demow town is Jorhat Airport situated at a distance of 76.00 Km. And distance of Dibrugarh Airport is 63.90Km.

The nearest district headquarters of Nagaland is Mon at a distance of 50.60Km. and Mokokchung at a distance of 76.50Km. and the nearest interstate capital from Demow is Itanagar and its distance is 106.50Km.

Facilities available in the Demow town include a police station with outpost, Fire and Emergency services station, a Post Office, Govt. Model Hospital and Community Health Centre, Veterinary Hospital, Irrigation Office, PWD (Roads) Office, APDCL Office, One Degree College, One English Medium Private High School, One Polytechnic, Daily Market, Town Hall, Namghar, Rangamancha, Public Library, Bank branches of SBI, PNB and Bandhan Bank, all major Indian Telecom companies have their mobile coverage in Demow.

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

Demow Town is located at 27.07°N latitude and 94.44°E longitude. It has an average elevation of 95.00 metres above the mean sea level. General slope of the ground is from East to West. The region is drained mainly by the Brahmaputra River. The Disang River and its tributaries Demow River traverses the water of Demow region.

The climate condition of Assam is Tropical Monsoon Rainforest climate, summer temperature is max at 35-38°C and winter min at 6-8°C and experience heavy rainfall and high humidity. The climate is characterised by heavy monsoon downpours reducing summer temperature and affecting foggy nights and morning in winters frequent during the afternoons. Spring (March-April) and autumn (September-October) are usually pleasant with moderate rainfall and temperature. Rainfall is high from the month of May to September.

Demow Town and its neighbouring area enjoys a climate suitable for cultivation of paddy and tea. The soil within the Master Plan area is alluvial and less prone to annual floods.

Demow Master Plan area falls into two natural divisions so far as the physiographic is concerned viz. (a) Upland (b) low land. The upland forms the base of the Naga Hills where the geology is sandstones and shale. Many areas in this physiographic unit are under tea plantations and forest species.

The low lands are the areas between the foothills of Naga Hills and the flood plains. The natural depressions cause huge accumulation of both alluvial and colluvial materials suitable for cultivation of paddy.

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

The Demow town first sprawled surrounding the Demow ASTC bus stand situated at Demow Chariali. Later on the town sprawled along the major transport corridor NH-37 with ribbon type development. After the redevelopment of existing 2 lane NH-37 to 4 lane and the establishment of the Govt. Model Hospital and Stadium at Raichai gradual ribbon type development along the Nitai Road at Ward No1 and 10 up to Raichai Stadium, along the Kharahat, Demow Road and along the Polytechnic Road is seen.

## **1.4 NEED FOR THE MASTER PLAN**

Considering its past, present and importance in future it seems Demow Town is likely to grow more in the coming years ahead due to establishment of Sivasagar Cancer Hospital and Sivasagar Medical College Hospital at Ward No.9 covered by Ekorani village. Super speciality Hospital at Rajabai Bagisa village in association with Apollo Hospital, Madras and proposed Sivasagar District Jail at Rajmai village within the Master Plan area. Hence expansion will be in the sub-urban areas located immediately under the direct influence of the town. In this context "Draft Master Plan Demow-2041" has been prepared to guide the physical development of the town and its sub urban areas in future. Demow town and its neighbouring 50 (Fifty) villages of Demow revenue Circle and in the periphery 14 (Fourteen) villages under Sivasagar Revenue Circle is included in Demow Master Plan to have planned development of the region as a whole. The proposed draft Master Plan for Demow'2041 has been prepared considering different activities and land use in the planning area in future. For preparation of this Master Plan the provisions of

the URBAN AND REGIONAL DEVELOPMENT PLANS FORMULATION AND IMPLEMENTATION (URDPFI) GUIDELINES-2015, prepared by the MINISTRY OF URBAN DEVELOPMENT, GOVT. OF INDIA under the guidance of the Town and Country planning organisation and circular issued from time to time by the T&C. P. Department, Govt. of Assam. Uniform Zoning Regulations, The Assam Notified Urban Areas (Other than Guwahati) Building Rules'2014 are considered as it already approved for all the towns of Assam by the Government of Assam.

Lack of planning in physical development leads to various problems. A healthy town with planned development always stimulates generation of many activities by becoming a seat of administration and containing many central functions of economic, social, intellectual and cultural importance as such in order to achieve good living and working environment where the needs of housing, employment, transportation, recreational activities etc. of the whole community are suitably provided with the optimum utilization of available resources.

## CHAPTER II

## DEMOGRAPHY

The study of the growth of population in 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 GROWTH OF POPULATION

Demow has grown into multifunctional town with trade and commerce as its main activity. Demow Master Plan area had a population of 94,112 as per 2011 census and it had a gradual increase. The table shows the population growth of Demow Planning area.

Table No.1 : Population Growth of Demow Planning area, 1991-2011

Sl. No.	Name of Town /Villages	Year -1991	Year -2001	Year- 2011
1	Nahat Garaimairi	1249	1407	1411
2	Deodubi	1058	1198	1294
3	Sukan Pukhuri	699	804	838
4	Chakala Pathar	540	602	706
5	Gamiri	1488	1534	1629
6	Gelgeli	581	569	657
7	Kenduguri	214	276	408
8	Duponi Pather	1011	1171	1225
9	Raichai	2133	2963	3482
10	Konwar Dihingia	856	1002	1128
11	Bhekelai	234	237	208
12	Dehajan Habi	2772	3850	4804
13	Demow Grant	1863	2319	2832
14	Kaliyapani Grant	1060	3324	2354
15	Ekarani Borhula Gaon	559	753	1012
16	Naharani Habi	524	643	763
17	Bangali Gaon	1136	1603	1697
18	Athabari Grant	1978	2104	1912
19	Chanda Monda Changmai	1439	1828	1996
20	Kathalbari	1231	1493	1736
21	Bhaluka Guri	729	811	850
22	Kathal Guri Block	203	235	272
23	Khongia Grant	2200	2613	2909
24	Mashoi	2728	1206	3394
25	Chetia Gaon	848	938	1016
26	Hiloidhari	498	566	629
27	Khoraihat Grant	1219	1245	1514
28	Rajmai Grant	5720	6435	6326
29	Loguwa Bari	571	1274	1368
30	Kachari Pathar	1595	1293	1381
31	Dhundar Mukh	572	772	774
32	Charaguwa Gaon	1918	949	891
33	Bokul Duba	399	431	479
34	Palengi P.G.R.	118	91	105
35	Jiyamari	634	611	649
36	Dhyan Pathar	1164	1177	1200
37	Kesuwani	545	510	572

38	Da Dhara Grant	1787	1642	2395
39	Koiborta Dalani	1574	2057	2375
40	Araltoli	532	512	565
41	Haluwating	510	1090	809
42	Sorupalengi	620	691	828
43	Japisagiya Gaon	2130	2457	2845
44	Rajabari Bagisha	956	853	917
45	Desang Deroi Habi	1053	1088	1183
46	Ranjan Bagan	843	878	976
47	Saru Deroi	1099	1483	1495
48	Barderoi	1073	1320	1286
49	Deroi Habi	547	619	603
50	Barbam Block	238	236	210
51	CharulKora No.2	1401	1460	1567
52	Banmukh Chutia	848	924	1004
53	Banmukh Dihingia	570	589	635
54	Barhoiting	1105	1186	1243
55	Motha Dang	852	843	929
56	Kath Para Gaon	1355	2520	2697
57	Chetia Koiboria	1549	1746	1702
58	GohainGaon	1847	2121	2463
59	Joyapar Gaon	1016	1101	1163
60	Kotoni Par	1770	1871	2115
61	KowamoraHondique	1595	1475	1584
62	Luthuri Chetia	1367	1483	1619
63	Marbill Gaon	1023	1090	1192
64	AkhoiPhutia Gaon	1220	1283	1291
Total		74,766	85,455	94,112

The population growth of urban area could not be compared as Demow is declared Municipal town in the year 2012. The growth of population is from 1991-2001 is 15 %. This is due to the growth of tea gardens and establishment of new tea factories and growth of trade and commerce in the region. The figure shows steady growth of population in the Demow planning area due to scope for service sector, trade and commerce.

## 2.2 MIGRATION OF POPULATION

It has been observed from the 2011 census and 2001 census that villages like Bhekela, Kaliapani Grant, Rajmai Grant, Haluwating, Barbam Block, Athabari Grant, Charaguwa Gaon, Chetia Koibortya has shown negative growth rate. This may be because of migration of population either to new tea gardens and factory established within Master Plan area and to Demow urban area for housing and better employment opportunity.

**Table No.2: Shows the villages showing negative growth rate from 2001 to 2011.**

Sl. No.	Villages	Year		Difference of population	% of growth
		2001	2011		
1	Bhekela	237	208	29	-12.24
2	Kaliapani Grant	3324	2354	971	-29.21
3	Athabari Grants	2104	1912	192	-9.13
4	Rajmai Grant	6435	6326	109	-1.69
5	Charaguwa Gaon	949	891	58	-6.11
6	Haluwating	1090	809	281	-25.78
7	Chetia koibortya	1746	1702	44	-2.52
8	Barbam Block	236	210	26	-11.01

*Source: Census,2011*



### 2.3 POPULATION DENSITY

The population density of Demow town area was 2532 persons per Sq. Km. as per 2011 census population. The density of population in Master plan area during 1991 was 436.77 persons per Sq. Km. and in the year 2001 was 499.21 persons per Sq. Km. and in the year 2011 was 549.78 persons per Sq. Km. which shows that there is an increase of density in Demow Master Plan area which is more as compared to density of Sivasagar district which was 431 persons per Sq.km. This is due to occupational pattern of the plan area.

### 2.4 AGE SEX COMPOSITION

The sex ratio of a settlement is expressed as the number of females per 100 males. The analysis of sex ratio of municipal area, Master Plan area and of Sivasagar district revealed that the planning area has balanced population of sex ratio as compared to the district.

The sex ratio in Demow Municipal area was 947.80, Proposed Master Plan area was 951.07 and that of Sivasagar district was 954 as per census,2011.

**Table No. 3 PERCENTAGE DISTRIBUTION OF BOARD AGE GROUP, DEMOW MASTER PLAN AREA,2022.**

Age Group	% of Male	% of Female	Total
0-6	6.33	6.18	12.51
6-18	10.45	9.93	20.38
18-60	32.38	30.66	63.04
Above 60	2.09	1.98	4.07
Total	51.25	48.75	100.00

*Source: Census,2011 and Town and Country Planning survey,2022.*

Above table shows that percentage of total worker in Demow Master Plan area is high. It indicates that due to absence of major industry the percentage of non worker person is more.

### 2.5 POPULATION PROJECTION

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

The average decadal growth rates of population in the planning area is for the last two decades 1991-2001 and 2001-2011 have been calculated. The decadal growth rates of population for the next 3(Three) decades have been assumed average decadal growth rate.

#### FACTORS CONSIDERED FOR POPULATION PROJECTION OF PLANNING AREA

In projection the future growth of population up to 2041 the following factors has been taken in to consideration.

1. The population growth anticipated to be average decadal growth due to infrastructure facility proposed during the plan period and the planning areas is projected to act on a transport node for the district connecting all major urban centres.
2. More population immigration is estimated with the establishment of Cancer Hospital and Medical College Hospital and Super Speciality Hospital in planning area.
3. More population immigration is estimated with the establishment of small and medium scale industries with better infrastructure facilities to be provided in the vacant Govt. lands available in the planning area.
4. Demow is proposed to be growth centre and satellite town in between Sivasagar and Moran town for its better locational factor.

5. Potentialities out of tea gardens for allied tea based industries i.e. packaging industries, local trading etc.

**Table No.4: Population Projection up to 2041.**

Year	Master Plan Area	Decadal Growth
1991	74,766	-
2001	85,455	14.30%
2011	94,112	10.13%
2021	1,05,612	12.22%
2031	1,18,518	12.22%
2041	1,33,000	12.22%

*Source: 1991,2001 and 2011 District census hand book.*

## CHAPTER-III

## 3. ECONOMIC BASE AND EMPLOYMENT

A sound economic base with the optimum use of local and regional resources is a basic requirement for all round development. A small town like Demow acts as a powerful link between rural settlement and more urbanized centres with regards to collection and distribution of economic inputs of the region and these influenced the physical development of the region. The economy of Demow Town depends on trade and commerce. Cultivators of nearby villages find a good market to sell their products. Demow is surrounded by Nine big Tea gardens with 12 factories for which many small and medium scale Tea garden machineries has been set up in the town. Some other commercial industries such as Rice and Oil are set up in the town. On availability of Rice and Mustard produced in the nearby villages on river banks and there are 22 Brick fields nearby the town which is providing best quality bricks due of soil suitable for brick. Some industries are setup based on everyday needs of the public. Demow occupies a fairly good position being rich in agriculture especially rice, tea cultivation and forest resources like bamboo and cane.

Demow is situated in the midst of rice and tea growing area from Ahom era. Service of NH-37 passing through the town connects it with other major towns of the region.

It is hoped that with the establishment of Cancer Hospital and Medical College Hospital and recent construction of Prasanti tourist lodge at Demow under Assam Tourism department along with conversion of NH-37 to four lanes passing through Demow Town the tourism industry in Demow town will flourish. The place is full of natural beauties and aesthetic views specially the Pani Dehing Bird Sanctuary. There are also Namghars, Natya Mandirs and Temples of Ahom era situated in the town which reflects the Ahom culture of the society.

## 3.1 OCCUPATIONAL PATTERN

Table No.5: Occupational Pattern of Demow Master Plan Area-2011

Sl. No.	Category	No. of Workers	Percentage
I	Main worker	23410	25.00%
II	Marginal worker	15620	16.68%
III	Non Worker	54620	58.32%

## No. of Industrial Category of Main Workers

Sl. No.	Category	No. of Workers	Percentage
I	Cultivators	3523	15.04%
II	Agricultural Labourers	554	2.37%
III	Household Industrial Workers	613	2.62%
IV	Others	18720	79.97%

## No. of Industrial Category of Marginal Workers

Sl. No.	Category	No. of Workers	Percentage
I	Cultivators	5331	34.11%
II	Agricultural Labourers	2795	17.89%
III	Household Industrial Workers	919	5.88%
IV	Others	6581	42.12%

Source: Census of India-2011

As per 2011 census 58.32% of the total working population were Non workers and 16.68% were Marginal workers in Demow Master Plan area including Municipal area which shows Demow needs setting up of industrial and economic activities.

**Table No.6 PERCENTAGE DISTRIBUTION OF WORKERS IN DEMOW MASTER PLAN AREA,2022**

Sl. No.	Category	%
1	Cultivation	15.05
2	Agriculture Labourer	2.37
3	Live Stock and Forestry	4.71
4	Mining and Quarry	0.07
5	Construction	3.66
6	Manufacturing	6.38
7	Trade and Commerce	36.11
8	Transport and Communication	0.53
9	Other/ Service	31.12
Total		100.00

*Source: Town and Country Planning, Sivasagar survey'2022*

The above table shows that high percentage of workers prevails in the tertiary sector and it clearly indicates that the population of Demow Plan area is involved in service cum trade and commerce oriented works.

### 3.2. TRADE AND COMMERCE

As per 2011 census most of the workers were engaged in other category in Demow Master Plan. The house hold industries found in the planning area are mainly Weaving, Embroidery, Cutting and Tailoring 200 nos, Jam, Jelly and Pickles making 1000 nos. etc. Manufacturing units found in the planning area are wooden furniture making 10 units, steel fabrication 30 units, Paver Block units 3, Mustard Oil units 4 nos., Packaged drinking water unit 2, Cane and Bamboo furniture unit 300, Mini Rice Mill 171 nos, the construction units found in the planning are Civil construction units only.

Demow Town is a trade and commerce oriented town. The Trade and Commerce activities both retail and whole sale have sprung up along the NH-37 with the improvement of NH-37 to 4(Four) lane and establishment of 30 bedded Model Hospital the commercial activities along the Netai road developed rapidly. There is only one big weekly market in the district at Rajmai in planning area. As per 2011 census 6.95% of main workers were engaged in the household industry in planning area.

Three most important commodities exports from the town are Rice, Tea, Cane and Bamboo. Most important commodities imported to the town are Sugar, Pulses, Wheat, Steel and Cement. About 40% of the total work forces in the planning area were directly engaged in the trade and commerce which was revealed from planning survey conducted by Town and Country Planning, Dist. Office: Sivasagar.

**Table No. 7 : Demow Municipal Board Licence Registered Shops**

Year	Retail Shop	Whole Sale Shop	Total	% of increase of Retail Shop	% of increase of Whole sale Shop
2019-20	112	-	112	-	-
2020-21	117	-	117	4.6	-
2021-22	193	3	196	67.52	-

*Source: Demow Municipal Board,2022*

The figure shows that there is an increase of trade and commerce in Demow Town.

The following table shows the Weekly/ Daily Market in the Planning Area of Demow Master Plan area

**Table No.8: Daily/Weekly Market in the Demow Planning Area.**

Sl. No.	Town/Village	Daily/ Weekly Market
1	Demow Town	Ward No. 7
2	Rajmai	Daily Market
3	Demow Town	Weekly Market of Ward No. 7 and 10
4	Rajmai	Weekly Market (Sunday)

*Source: Field survey, 2022-05-02*

The few whole sales trading for rural areas of planning areas and Daily/Weekly markets are located along the NH-37. The Rajmai weekly market in the biggest whole sale vegetable market in the district trading of the market is also famous for cows, rice.

### 3.3 INDUSTRY

In the Demow Planning area there are 2 big Rice mills, 12 Tea factory, Mustard Oil mills and 3 Paver Block manufacturing industry. 1 Drinking Water packaged unit and 30 Steel fabrication units excluding the 130 rural small units.

There is one industrial estate under AIDC at Ekorani where at present there are 2 Plastic industries, 1 Silk yarn industry and 1 Bamboo Tiles industry. The region is rich in agriculture, Bamboo and Canes. The scope for establishment of agro based and Bamboo based industry is wide. Due to high lease rate and rent development of industry in industrial estate is slow.

### 3.4. SERVICES

As per 2011 census, 76.40% of the total workers were engaged in other category in the whole planning area out of which a major portion of workers engaged in service sector.

As Demow has to function as circle head quarter of Demow circle, there are 16 nos. of Govt. offices an approx. 26 nos. private offices established in the town. Besides the offices a quite number of educational institutions are in the planning area and because of all these workers engaged in the service sector in the planning area are quite high.

### 3.5 INFORMAL SECTOR AND URBAN POVERTY ALLEVIATION, INFORMAL TRADE AND COMMERCE, TRANSPORT, HOUSEHOLD INDUSTRIES

Informal sector trade and commercial activities are generally seen in all the urban centres of the state. Demow town is also not exception in this respect. As per NULM, Demow MB'2022 survey there are 119 Street Vendors are found along NH-37 and ASTC Bus station doing business in different times of the day and in the villages specially near road junction are seen.

Informal transport has been seen in the form of slow moving vehicle only. A large number of E-rickshaws are playing in the planning area without license. Few household industries are running in the planning area without registration. Weaving, Cutting and Tailoring, Embroidering, food related items etc. are some of these kinds of industries seen in the planning area. This informal sector business has been increasing due to urban poverty under NULM (V) the registered vendors and Self Help Groups have been provided loans to improve livelihood and similarly in rural areas under NULM (R) financial assistance with training is provided to women Self Help Group to improve livelihood.

## CHAPTER – IV

### 4. HOUSING AND SHELTER

#### 4.1 Housing Condition and Scenario

Housing especially in an urban context occupies an important position and is one of the key metrics which measures the welfare of the urban dwellers. Lack of adequate housing for all is not only a major human security issue; it also significantly compromises social development.

Without access to adequate shelter the poor live in miserable conditions that compromise their general health and make them more susceptible to disease.

It is also universally recognized that adequate housing is the key to sustainable livelihoods. Adequate shelter forms the foundation of basic needs in addition to food, health, education and employment.

The conditions and scenario of the housing in the proposed Demow Master Plan area given in the table below. As per 2011 census 25.46% houses of proposed Demow Master Plan area excluding Municipal area are permanent and again the semi permanent houses in the planning area excluding municipal area about 57.55%.

**Table No.9: Type of Dwelling Units in proposed Demow Master Plan Area.**

Sl. No.	House Type	DMB	%	DMPA	Excluding DMB
1	Permanent	2016	87.65%	8146	25.46
2	Semi Permanent	216	9.39%	18412	57.55
3	Temporary	68	2.96%	5399	16.88
	Total	2300	100	31957	100

*Source: Census 2011 and assessment made by T & C.P, Sivasagar'2022*

The reason for 87.65% of permanent houses is due to reconstruction of houses after getting compensation for acquisition of land and building for widening of existing NH-37 to 4(Four) lane and conversion of 270 kutchha houses to permanent house under PMAY(U).

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 7.80% of the total residential houses are rented in Demow Town. According to 2011 census, the average house hold size in Demow Municipal area is 4.25 a proposed DMP area excluding the Demow Municipal Board area is 4.72 respectively. The Pradhan Mantri Awas Yojana (Urban) has already taken care of the up-gradation of temporary structure of poor within Demow Town and PMAY(Gramin) has started the same in the villages within villages of proposed Master Plan area.

#### 4.2 SLUM-SQUATTERS AND INFORMAL HOUSING SHARE

There is no identified/ notified slum area in Demow Municipal area and census 2011 reveals that there is practically no shortage of dwelling units in proposed Demow Master Plan area. However about 2.96% (68) of the existing houses are kutchha in Demow Municipal Board area due to land issue ( Line 60 DV on Tea Garden land and 8 nos due to non submission of NOC by other family members for hereditary land) (As per 2022 survey).

#### **4.3 HOUSING STOCK, SHORTAGE AND NEED ASSESSMENT**

As per projected population and existing deficit, housing requirement in the proposed planning area estimated for the year 2041 is about (40981/5) 8196. Assuming that the existing deficit will be taken care of through PMAY (U) and (G). Housing for needy ones is to be promoted with assistance for the Bank/ HUDCO/ Budgetary assistance and local mobilisation of resources in cash or in kind. Upper poverty alleviation scheme training to be provided to weaker section, that they may construct houses. 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 of sanctions.

## CHAPTER V

### TRANSPORTATION

#### 5.1 Overview of Traffic and Transportation

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 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 Municipal Board, PWD (Roads) and NHIDCL.

#### 5.2 Major Road Network

The NH-37 Roads which is under improvement to 4 lanes passing through Demow Town connects with other towns. The Demow Master Plan area is well connected with the NH-37 and Demow Municipal area through major district road and village roads which are constructed and maintained by the PWD (Roads) department and rural roads are constructed by Gram Panchayat for connectivity. (Source Demow PWD (Roads) and Town and Country Planning survey 2022.

**Table No.10. Major PWD Road Network of Demow Master Plan area.**

Sl. No.	Name of Road	Category	Length in Km.	Existing Width (m)	Proposed Width (m)
1	Demow Dehing Road	MDR	10.60	7.50	7.50
2	Demow Deroighat Road	VR	8.30	7.50	7.50
3	Lachit Nagar Ali	VR	1.00	6.00	6.00
4	NH-37 to Krishna Bihari	VR	5.40	6.00	6.00
5	NH-37 to Demow Polytecnic Road	VR	3.00	6.00	6.00
6	9 <sup>th</sup> Km. Of Sepon- Sunpora to 21 <sup>st</sup> Km. Sepon-Sunpora	VR	11.60	7.50	7.50
7	Netai Bhibor Road	MDR	7.00	6.00	7.50
8	NH-37 to Dhai Ali (Sensua Ali)	VR	6.70	6.00	6.00
9	Kushal Path	VR	1.60	6.00	6.00
10	Gojali Ali	VR	2.50	6.00	6.00
11	Raisai Stadium to Demow River	VR	1.44	6.00	6.00
12	Raisai Model Hospital to Gelgeli Gaon road	VR	3.00	6.00	7.50
13	Tajmai Ali	VR	1.60	6.00	6.00
14	Bamrajabari to Dhaibari road	MDR	7.00	6.00	7.50
15	Netaipukhuri to Konwar Dihingia Road	VR	2.70	6.00	6.00
16	Paraliguri to Batonibam Road	VR	1.44	6.00	6.00
17	Borphukan Ali	VR	1.00	6.00	7.50
18	Laokhuwa Ali	VR	1.72	6.00	6.00
19	Rajmai to Deorighat Road	VR	1.80	6.00	6.00
20	Rajmai to Sarugua	VR	6.70	7.5	7.5



### 5.3 MAJOR TRAFFIC NODES (AREAS OF CONGESTION)

**Table No. 11: Major traffic Nodes in the planning area.**

Sl. No	Road Junction	Description
1	Rajabari Tini Ali	To Siu-ka-Pha Hospital
2	Palengi Tini Ali	To Panidihing Bird Sanctuary
3	Raichai Tini Ali	To Stadium
4	Raichai Adarsha Hospital Tini Ali	To Adarsha Hospital

(Town and Country Planning Survey, 2022)

### 5.4 TRANSPORT TERMINALS

As per the information collected from the different transport association of Demow Town ASTC & Public buses are not originates from Demow Town. All the buses are passes through Demow Town having stoppage at Demow Chariali along the NH-37. Due to demolition of ASTC bus terminal for widening of NH-37 to 4 lane.

There are 35 Winger /Traveller, 32 Max Magic which serves the rural population to Demow Town and nearest towns. Demow Municipal Board has registered 120nos of E-rickshaws up to 2021-22 and approx 180 nos of E-rickshaws are running in the rural area without any registration.

It has been seen that there is no any organised parking area in Demow Town for Buses and other public and private vehicles. ASTC bus terminus at Demow Grant within Demow Municipal Board, Ward No.10 has been proposed with planned parking area. Due to widening of NH-37 with over bridge.

### 5.5 RAILWAYS

Railways one of the prime mode of transportation. The railway line from Simaluguri junction to Dibrugarh junction passes on eastern side of Demow Planning area. The nearest Railway Station to Demow is Sivasagar Town which is located 18.9 Km. Away.

**Table No.12 Passenger Train Passing having stoppage at Sivasagar and Moran**

Sl. No.	Name of Trains	Days of Operation
1	Guwahati- Dibrugarh- Guwahati Nagaland Express via Sivasagar	Daily
2	Simaluguri-Dibrugarh Passenger via Sivasagar	Weekly Six days
3	Rangia- New Tinsukia New Tinsukia Express via Sivasagar	Four days weekly
4	Dibrugarh Bangalore- Dibrugarh Express via Sivasagar	Weekly
5	Dibrugarh- New Delhi- Dibrugarh via Muzaffarpur (Stoppage at Moranhat)	Weekly

### 5.6 FOOTPATH

As per Demow Municipal Board record 0.200 Km. Covered drain to be used as footpath has been constructed in Municipal area. NHIDCL has undertaken construction of 4.71 Km. length with Demow municipal Board area R.C.C drain with Footpath on both side of four lane NH-37.

**5.7 CONDITION OF ROADS AND JUNCTIONS**

<b>Sl. No.</b>	<b>Types of Road</b>	<b>Existing Length in Km.</b>	<b>Proposed Length in Km.</b>	<b>Total Length</b>
1	Bituminous Road	5.30	0.00	5.30
2	C.C Paver Block Road	1.50	18.00	19.50
3	Gravel Road	0.85	0.00	0.00
4	Earthen Road	10.35	0.00	0.00

**5.8 PROPOSED WIDTH OF THE ROAD/CIRCULATION**

Proposed growth and functioning of any area and its efficient management is very much dependent on the circulation pattern and it is a 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 (Minimum width)

- (a) NH-37 - Width 60.00 M (4 Lane)
- (b) Major roads will cater major movements between areas – 7.50 M.
- (c) Minor roads and secondary distributor will distribute traffic within each area – 6.0 M.
- (d) Local access road will carry traffic to each locality and lead to individual – 6.00 M.
- (e) Local access road to existing developed..... and lead to individual – 4.50M.

## CHAPTER-VI

### 6. INFRASTRUCTURE, PUBLIC UTILITIES AND SERVICES

#### 6.1. WATER SUPPLY

At present Demow Municipal Board do not have any reated Tape Water Supply scheme. Out of total 2757 household only 251 household are getting Tap Water from PHE 100m depth Deep Tube Well water supply scheme supplying 0.15 MLD. Municipal Board supply water directly through tankers in 0.01MLD to household no failure of alternate source and demand of more water on special occasions. Municipal area depends on Tube Well; Bore well and uncovered well for the source of water.

#### 6.1.2. DRAINAGE AND SEWARAGE SYSTEM

At present Demow Master Plan Area 531 Household is covered under closed drainage system which covers a percentage of 1.66%. 9184 household is under the open drainage system covering around 28.71%. Rest 22277 household do not have access to any form of drainage which comprises of around 69.63%.

At present due to widening of NH 37 passing through the town, which divides the town in two parts is now facing water logging at many places due to change of gradient of road-side drains. At Demow, there is one natural drain (Demow Jaan), connecting to the Demow river which carries the total storm water of Demow town to Demow river.

Keeping in mind the coming up of major buildings and development of commercial activities, a drainage master plan is highly necessary for Demow Town with immediate construction of major natural drains.

#### Statement of the Present Status and Length of Drains in Demow Municipal Area.

Sl. No.	Types of Drain	Existing Length (In Km.)	Proposed Length (In Km.)	Total Length (In Km.)
1	R.C.C Cannel	0.00	0.800	0.800
2	R.C.C Covered Drain	0.200	12.70	12.900
3	R.C.C. Drain	0.00	5.100	5.100
4	Kutchra Drain	18.6	0.00	0.00
5	Kutchra Cannel	0.00	0.00	0.00
Total Length		18.800	18.600	18.80

#### 6.1.3. SOLID WASTE MANAGEMENT

At present in the Demow town for management of Solid Waste, there is no scientific Land Fill Site. At present Demow Municipal Board has a dumping ground at Deroi Habi Gaon for dumping the non segregated solid waste including the carcasses collected from the town area.

Demow Municipal Board presently with the help of two no. of Tractors/ Trailors, one Cess pull cleaner and seven nos of Tri cycle with separators and five nos of Safai workers disposed of approximately 70% of 2.56 tone of solid waste generated daily in Demow Town collected from various points of commercial areas, residential areas and institutions dumped at road side.

At present in Demow town through NGO started door to door collection of segregated solid waste from 5 Wards.

**Table No.13. Composition of Solid Waste generated in Demow Town.**

Sl. No.	Waste Type	Amount
1	Plastic	10%
2	Paper	3%
3	Rages	2%
4	Metals	0.6%
5	Glass	2%
6	Rubber/ Leather	0.4%
7	Inert	40%
8	Compostable Materials	43%
Total		100%

An area of approximately 0.12Sq.km has been selected for land fill site at Ekorani Borhula Gaon which will be sufficient for the entire planning area. The approach road, boundary wall and other scientific approaches as per hon'ble NGT guideline will have to be taken care of while implementing the same.

In the villages of Demow Master Plan area there is no any system of Solid waste collection and disposal.

#### 6.1.4. POWER AND ENERGY

Assam Power Distribution Company Limited (APDCL) is the only source of power supply to the entire proposed planning area of Demow. 132/33 KV Grid substation at Betbari and 132/33 KV Grid Substation at Moran are the source of power supply to four substations for distributing power to proposed Demow Master Plan Area.

Sl. No.	Name of Substation	Load	Capacity of Control Room
1	Demow	7 MW	10MVA
2	Nemugulri	2MW	10MVA
3	Nitaipukhuri	2MW	10MVA
4	III Maskara	1MW	2.5MVA

Another substation at Rajabari Sui-ka-pha Super Speciality Hospital at capacity 2.5 KVA has been already sanctioned and it has been proposed for augmentation of Demow substation capacity to 15 KVA.

In the Demow proposed Master Plan area there are 40175 LT customers out of which domestic connection under Jevan Dhara less than 0.5 KW is 7117, 0.5 KW-5KW is 307963 and above 5.0 KW is 122 nos. 20KW Commercial is 1505, General purpose 462, Public lighting 18 nos., Small industry rural is 130, Small industry urban is 4 nos., Agriculture pump irrigation 54 nos., Public Water works 47 nos. High Tension (HT) connections above 20KW commercial and industrial is 32 nos.(Source primary survey-2022).

#### 6.1.5. HEALTH

Within Demow Municipality under Konwar Dihingia Gaon notified area there is a 30 (thirty) bedded Govt. Hospital and C.H.C named by Demow Model Hospital with 7(Seven) nos of doctors and 12(Twelve) para medical staffs. There is also one Block Primary Health Centre at Demow Town. There is one Veterinary Hospital in Demow. There is no any private Nursing Home in Demow Town. Considering the present rash is the hospital it is necessary to upgrade the Model Hospital to 100 bedded Hospital to serve entire Demow Master Plan area and surrounding villages. With the addition of a Super speciality Hospital in Demow named Siu-ka-pha Hospital at Rajabari Bagisa serving the people of Demow and surroundings within a minimum distance.

The proposed Cancer Hospital and Medical College Hospital at Ekorani Borhula Gaon and part of Ward No.9 of Demow Municipal Board when completed will solve the problem of medical services of Sivasagar district and nearby district with minimum travel time.

In Demow Master Plan area there are 8 nos. of mini PHC and 52 nos. centres to serve the rural population.

#### 6.1.6. POLICE PROTECTION AND FIRE PROTECTION

At Demow town there is one police station namely Demow police Station and there are two police outpost under Demow Police Station. The whole planning area covers under the control of Demow Police Station and one Outpost at Nitaipukhuri. Moreover, Central Reserve Police Force or Indian Army Company are generally kept under commandant CRPF at Sivasagar which is deployed by the Superintendent of Police to safeguard the people of the entire planning area from the bad elements of the society.

There is a Fire and Emergency Service Station at Demow town with two Fire tenders under the Directorate of Fire services, Assam, which serves the entire planning area as and when emergency arises.

#### 6.1.7 Cremation Grounds and Grave Yards.

There are two Cremation Ground within Demow Municipal area. One is at Dihajan Tini Ali and another at Sukafa Nagar. There are two Grave Yards within planning area. One is at Dihajan Gaon for Muslim and Christian people. As the existing cremation at Sukafa Nagar is water logged during summer. So for all weather land has been reserved at Raichai for a modern cremation ground at Ward no.1.

### 6.2. SOCIAL INFRASTRUCTURE

#### 6.2.1 EDUCATION

The total literacy rate of Demow Master Plan area was 79.5% in 2011 which is less than average literacy rate 80.4% of Sivasagar district.

The distribution of educational institution within the Demow planning area is given below.

**Table No.14. Educational Institutions in the Demow Master Plan area.**

Sl. No.	Category	No. of Institutions					
		Within Demow MB		Within DMP excluding Demow MB		Total	
		Govt.	Private	Govt.	Private	Govt.	Private
1	Primary School	3	1	284	-	287	1
2	M.E/ M.V School	1	-	56	-	57	-
3	High School	2	3	36	-	38	3
4	H.S School	-	1	-	-	-	1
5	Junior College	-	1	-	-	-	1
6	College	1	1	-	-	1	1
7	Poly- technique	1	-	-	-	1	-
	Total	8	7	376	-	384	7

*Source: Census,2011 and Town and Country planning, Sivasagar'2022 survey*

## CHAPTER VII

### 7. ENVIRONMENT AND CITY BEAUTIFICATION PLAN

#### 7.1. ECO-FRIENDLY AREAS

In present town or city planning most emphasis must be given to the eco friendly area for mitigation of global warming and to reduce the impact of pollution by providing better air quality to the citizen.

All the water bodies and low lying areas Parks, Playgrounds, Forest areas, Tea Garden areas of the proposed Demow Master Plan is considered as eco-friendly areas for planning areas. Now in proposed Demow Master Plan area there is not any organised park in Demow Town.

#### 7.2 PLAN/MEASURES FOR PROTECTION AND CONSERVATION OF ENVIRONMENTALLY FRIENDLY ZONE.

The vacant land on western bank of river is marked as green belt zone and human habitation and other construction activities are restricted accordingly. An area of 2.15 Sq. Km. is marked as green belt zone in the entire Master Plan area which is 1.26 of total area.

#### 7.3 CITY BEAUTIFICATION PLAN PROPOSAL

It has been mentioned that there is not any organized parks maintained by Demow Municipal Board. Now Demow Municipal Board has taken two areas, one on the side of public field at Demow Grant adjacent to Demow field and the vacant land at Kowar Dihingia Gaon near Demow Model Hospital to develop as Children Park and also to be developed a recreational centres with all modern facilities as per National standards with all the modern children playing equipments will be placed. Another beautification plan is to be taken for Demow public field with boundary walls and lights and also beautification of roads junctions are proposed with high mast light, railing etc.

For beautification of the town NHIDCL has proposed to provide 4.71 Km. of NH-37 passing through Demow Town with divider along with plantation of ornamental trees with street lights and both side footpaths and over bridge at Demow Chariali with lights on it which will create a good look to the entire town.

## CHAPTER-VIII

## LAND USE PLAN

## 8.1 EXISTING PHYSICAL CONDITION

As per census 2011 of India, the total land area within the proposed Demow Master Plan is 171.18 Sq.km. which is almost equal to area as derived from GIS map prepared from the Cadastral Maps collected from the Land Revenue Department which is 170.74 Sq. Km.

**Table No. 15: TOWN /VILLAGE WISE GEOGRAPHICAL AREA WITHIN MASTER PLAN AREA FOR GREATER DEMOW AS PER 2011 CENSUS.**

Sl.No.	Village Code as per 2011 Census	Village Name	Area (HA)
1	510	Athabari Grant	214.97
2	545	Barderoi	210.00
3	548	Barbam Block	94.24
4	503	Bhekelai	99.86
5	513	Bhaluka Guri	141.29
6	530	Bokul Duba	153.41
7	509	Bangali Gaon	255.00
8	491	Duponi Pather	366.02
9	511	Chanda Monda Changmai	400.71
10	517	Chetia Gaon	148.00
11	496	Chakala Pathar	207.29
12	529	Charaguwa Gaon	402.67
13	536	Da Dhara Grant	296.00
14	494	Deodubi	225.18
15	533	Dhyan Pathar	224.00
16	523	Dhundar Mukh	93.00
17	504	Dehajan Habi	313.71
18	505	Demow Grant	259.64
19	547	Deroi Habi	274.49
20	491	DopaniPathar	366.02
21	507	Ekarani Grant	2.40
22	498	Gelgeli	157.47
23	497	Gamiri	286.87
24	538	Haluwating	159.25
25	518	Hiloidhari	226.00
26	544	SaruDeroi	210.00
27	539	Sorupalengi	181.00
28	495	SukanPukhuri	298.89
29	540	JapisagiyaGaon	349.58
30	532	Jiyamari	273.00
31	514	KathalGuri Block	28.95
32	534	Kesuwani	229.00
33	499	Kenduguri	59.75
34	515	Khongia Grant	566.90
35	519	Khoraihat Grant	164.00
36	522	Kachari Pathar	317.00
37	537	Koiborta Dalani	286.03
38	506	Kaliyapani Grant	231.35
39	502	Konwar	188.61
40	512	Kathalbari	386.56
41	521	Loguwa Bari	291.00

42	542	Desang Deroi Habi	492.57
43	516	Mashoi	594.64
44	508	Naharani Habi	114.64
45	493	Nahat Garaimairi	294.88
46	531	Palengi P.G.R.	175.89
47	501	Raichai	189.30
48	520	Rajmai Grant	799.00
49	543	Ranjan Bagan	138.00
50	541	Rajabari Bagisha	230.06
51	697	CharulKora No.2	185.74
52	685	Banmukh Chutia	214.00
53	684	Banmukh Dihingia	235.73
54	682	Barhoiting	224.50
55	680	Motha Dang	115.57
56	671	Kath Para Gaon	303.90
57	705	Chetia Koiboria	370.88
58	695	GohainGaon	446.77
59	696	Joyapar Gaon	270.16
60	704	Kotoni Par	375.97
61	698	KowamoraHondique	316.70
62	703	Luthuri Chetia	170.98
63	699	Marbill Gaon	235.97
64	697	AkhoiPhutia Gaon	270.41
Total Area			17118.00

Existing uses of land is one of the fundamentals of planning process. It has been indicated that Demow town is of recent origin where there is ribbon type development along the NH-37. After the widening of NH-37 in to 4 lane rapid development of commercial activities along Nitaipukhuri Road have taken. Gradually with the growth of trade and commerce activities, urban expansion has taken place in Demow Master Plan area. The existing land use in the Master Plan area has been broadly grouped in to the following categories and is prepared in the following table:

**Table No.16: Existing Land Use of Proposed Demow Master Plan Area**

Sl. No.	Land Use Category	Area (Sq. Km.)	Percentage to Developed Land	Percentage to Total Area
1.	<b>Residential Use</b>	<b>27.90</b>	<b>74.26</b>	<b>16.30</b>
2.	<b>Commercial Use</b>	<b>0.69</b>	<b>1.84</b>	<b>0.40</b>
3.	<b>Industrial Use</b>			
	Industrial Use	0.64	1.77	1.03
	Brick kiln	1.13.		
4.	<b>Public &amp; Semi Public Use</b>	<b>1.04</b>	<b>2.77</b>	<b>0.61</b>
5.	<b>Recreational Use</b>	<b>0.34</b>	<b>0.90</b>	<b>0.20</b>
6.	<b>Transport &amp; Communication</b>			
	Bus/Truck Terminus			
	Airport			
	Railways	1.14	5.83	3.41
	Roads	4.23		
	<b>Total Developed Land</b>	<b>37.57</b>	<b>100.00</b>	
7.	<b>Agriculture &amp; Bamboo Plants</b>			
	Agriculture	86.57	123.82	72.59
	Bamboo Plants	11.23		
	Tea Garden	26.46		
8.	<b>Water Bodies</b>			
	Drain	1.38	6.74	3.94



	River	4.61		
	Pond	0.45		
9.	<b>Waste Land</b>		2.61	1.52
	<b>Total Area</b>		170.74	100.00

*Survey conducted by T & C P, Sivasagar, 2022.*

The above table depicts that the land use distribution in the proposed Demow Planning area and the percentage of area covered by each type of land use. The residential use in the major land use within the town and its immediate outskirts, while the villages within the Master plan area are predominantly covered by paddy fields and tea gardens.

## 8.2 PROPOSED PHYSICAL PLAN: CONCEPT AND PROPOSAL

### 8.2.1 SCOPE OF DEVELOPMENT

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

- i) Development activities in the Demow Town and trading transport activities and other functions like administration, education, culture and industrial activities.
- ii) Vacant land within the Master Plan area.

Before going to propose the required land uses in the Demow Master Plan area the availability of Government vacant land record has been searched at local Revenue Office and record of available non allotted vacant land has been found. On the basis of 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.

### 8.2.2 PROPOSED LAND USE PLAN

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

- i) Minimum dislocation of the present land use.
- ii) The trend of natural growth pattern of villages.
- iii) Interrelationship of various land use classification.
- iv) Possible spill over of various activities from the Demow Town.

**Table No. 17: Proposed Land use for Demow Master Plan Area-2041**

LANDUSE	Sub Class	Area_ Sqkm	Total Area (SqKm)
RESIDENCE	High Density Residential	27.4923	70.27
	Medium Density Residential	26.6543	
	Low Density Residential	16.1205	
COMMERCIAL	Composite Commercial	0.1767	4.15
	Other Commercial	3.9752	
INDUSTRIAL	Brick Kiln	1.1379	1.67
	Other Industries	0.5306	
PUBLIC & SEMI PUBLIC			1.47
OPEN SPACE			2.88
RECREATION/ PARKS/ PLAYGROUND			0.43
GREEN BELT			2.15
TRANSPORTATION	Roads	4.2583	5.41
	Railways	1.1472	
	Vending Zone	0.0040961	
CREMATION/ KABARSTHAN			0.01
LAND FILL SITE			0.21

AGRICULTURE	Paddy	44.7856	75.35
	Bamboo/ Forest	5.1320	
	Tea Garden	25.4337	
Waterbodies			6.73
			170.74

**8.2.2.1 Residential Use:**

An area of 70.27 Sq.Km. of land are proposed for residential use and divided in to three zones High, Medium and Low. However, in course of time residential land development schemes are to be taken up in Govt. vacant land or by way of acquisition at suitable location for planned development along with basic infrastructure. Main residential areas are proposed in the normal expansion of existing villages along with emerging development corridors. An area of 0.009 Sq.Km. is proposed at for EWS affordable housing scheme at Naharoni Habi Gaon.

**8.2.2.2. Commercial Use:**

An area of 3.9752 Sq.Km. is proposed under commercial use, whole sale and retail sale activities. Demow Town market will dominate the trading activities and Rajmai weekly market will dominate the whole sale trading. New commercial areas are proposed along the main transport corridors and commercial areas are also proposed in semi urban areas to sprawl the commercial activities.

**8.2.2.3. Industrial Use:**

An area of 1.67 Sq.km.including 0.03 existing industrial under AIDC and one site having area 0.0402 Sq.km. at Rajmai Bagan is proposed for industrial area under Industry department.

**8.2.2.4. Public and Semi Public Use:**

An area of 1.69 Sq.km. of land is proposed under public and semipublic use. The new office/ institution complexes are proposed to construct at Haripara Road, Janata Path at Ward no.9, Barbaruah Road.

**8.2.2.5. Recreational and open Space:**

An area of 0.43 Sq.km. of land is proposed under this category. All playground and other open land of Demow Municipal Board and other villages of Demow Master Plan area may be reserved as recreational and open space. The stadium at village Raisai may be developed to sports complex with all modern facilities.

**8.2.2.6. Transport and Communication:**

An area of 5.41 Sq.km of land is proposed under transport and communication. All major roads within the planning area to be widened and improved missing link if any is proposed for development to bring the road network efficiency.

**8.2.27. Agriculture Use:**

An area of 75.35 Sq.km. of land is proposed for agriculture use. These areas may provide vegetables and perishable requirement to the planning area and also cattle firm may be developed.

**8.2.2.8. Green Belt**

An area of 2.15 Sq.km. is proposed under Green Belt zone. Maximum green belts are proposed beside the river Demow.

**8.2.2.9. Composite Use:**

An area of 0.1767 Sq. km. is composite use and both residential and commercial and other uses are allowed in that zone.

The Drainage Master Plan for Demow will be prepared by Drainage and Sewerage Division, Guwahati, Town and Country Planning, Assam. The Sewerage network plan will be prepared the Drainage and Sewerage Division, Guwahati, Town and Country Planning, Assam. For scientific management of solid waste a land fill site has been proposed within the area at Ward No-9 earmarked for solid waste management. All the households within entire Demow Master Plan area will have pipe water supply connection under Jal Jeevan Mission(Urban) and Rural within year 2024.

#### **8.2.2.10. PROTECTION OF ECONOMIC BASE AND EMPLOYMENT**

Master Plan is to address the likely demands of land development for various economic activities the possible location of these activities within a city or city region, the broad relationship between these activities and the scale and timing of migration in to 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 service will provide income and employment. For weaker section care to be taken to provide employment and basic services under poverty alleviation programme/scheme. Localities of workers 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 are sufficient demand.

#### **8.2.2.11 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 and Country Planning Act,1959 (As amended) for the villages included in the Master Plan and Demow Municipal Board for the Municipal area with the provision of Uniform Zoning Regulations and the Assam Notified Urban Areas (Other than Guwahati) Building Rules,2014 already approved by the Govt. of Assam.

## CHAPTER-IX

### PROPOSED PROJECTS BRIEF AND TENTATIVE FUNDING SOURCE

#### 9.1. MAJOR PROJECTS REQUIREMENT FOR PLANNING AREA

Based on the existing condition different projects are to be required to fulfil the basic need and also to enhance the quality of life for the population of proposed Demow Master Plan area.

**Table No.18. Shows the name of some required projects in different sectors.**

Sl. No.	Sector	Name of the Required Projects
1	Housing and Shelter	Affordable Housing Projects
2	Transportation	Bus terminus, Widening and development of Roads, Improvement of junction point.
3	Infrastructure	Construction of Drains, Improvement of Public fields, Improvement of land fill site and installation of Waste treatment plant.
4	Environment and City Beautification Plan	Improvement of Parks, Solar Street light.

#### 9.2 TENTATIVE FUND REQUIREMENT AND SOURCE OF FUND

**Table No. 19. Shows the Tentative source of fund amount required**

Sl. No.	Name of Major Requirement Projects	Name of Fund/ Source of Fund (Tentative)	Tentative Amount (In Crores)
1	Affordable Housing	PMAY (U)	10.00
2	Bus Terminus.	UIDF Fund	8.00
3	Widening and Construction of MB Roads and PWD, MDR Roads.	UIDF/ PWD SOPD Fund	13.75
4	Construction of Drains.	UIDF Fund	22.5
5	Improvement of Land fill site and instalment of Waste treatment with Bio Mining Plant.	UIDF/ SBM Fund	6.00
6	Construction of Parks.	UIDF/ SOPD Fund	20.00
7	High Mast Light at Junctions and Solar Light at important town roads.	SOPD/ Fifteen Finance	2.00
8	Improvement Public Hall, Library, Public Field, Central Market, Construction of modern Cremation with Gas furnace.	UIDF Fund	12.00
Total			94.25

#### 9.3 IDENTIFICATION OF LAND SITE FOR PROPOSAL

Land area of 0.028 Sq.km is proposed at Naharani Gaon for Affordable Housing Scheme under PMAY (U). Bus terminus site is proposed at Demow Grant having .144 Sq. Km. vacant Govt. land. The proposed land fill site at Ward No-9 having 0.01 Sq.km. Two parks proposed by Demow Municipal Board at near Model Hospital and near Demow Public Field on vacant land and one at Rajabari Bagisa opposite Sui-ka-pha Hospital. The site for construction of modern Cremation ground is proposed at Ward No.1 and 2 on vacant land.

For the proposed Sivasagar Cancer Hospital and Medical College Hospital 120 Bighas land at Ekorani Borhula Gaon and Park of Ward No.9 and village Bhalukaguri has been already allotted for construction and shifting of District Jail from Sivasagar to Desang Deroi Habi Gaon 50 Bigha land has been proposed within Demow Master Plan area.

## **CHAPTER – X DISASTER PLAN**

### **10.1. HAZARDS SPECIFIC PRONENESS IN DEMOW:-**

➤ **Earthquake :-**

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

➤ **Flood :-**

Even Demow Town is also facing urban flooding in many localities due to low laying of NH-37 and lack of properdrainage system.

➤ **Soil Erosion :-**

The soil erosion is major threat to many areas due to the high undercurrent of river Demow River.

➤ **Fires :-**

The fire takes places in Demow due to short circuit in commercial areas, thatchedhouse. Mainly fire takes place from March to April when the climate remains very dry.

➤ **Cyclone:-**

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

### **10.2. NEED FOR DISASTER MANAGEMENT:-**

Data on disaster occurrence, its effect upon people and its cost to countries, are primaryinputs 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 outcomesembedded 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, adeparting point for the application of disaster reduction measures.

Development cannot be sustainable unless disaster mitigation is built into developmentprocess. Investments in mitigation are more cost effective than expenditure on relief andrehabilitation. Prevention and mitigation contribute to lasting improvement in safety and areessential to the integrated disaster management system. Disaster response alone is not sufficient as it yields only temporary results at a very high cost. So, emphasis must be onDisaster prevention,mitigation and preparedness, which help in achieving objectivity ofvulnerability reduction.

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

### **10.3. 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 takeplace in valleys and

flood plains, droughts in areas with unstable and low rainfall, and oilspills 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 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 natural and manmade disasters in the past. 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.

#### **10.4. PLAN OBJECTIVES:-**

The objectives of the Disaster Management Plan are:

- ❖ Disaster management in the routine affairs of the office
- ❖ To provide technical and humanitarian assistance during disaster
- ❖ Prompt and effective discharge of office responsibilities during disaster situations
- ❖ Ensuring safety of office 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.

#### **10.5. LIKELY GEOGRAPHICAL EXTENT AND MAGNITUDE/SEVERITY:-**

- 1) The Master Plan area is situated on a flat land with gentle slopes towards West to the river Demow which connects the tributary Disang in to mighty Brahmaputra towards West. During Monsoon, mighty Brahmaputra overflows and causes flood outside the Master Plan Area. Moreover, low lying area of National Highway-37 passing through the town and poor drainage system for unplanned development; enhance every chances of flash flood due to heavy rainfall. Such flash floods have been experienced during last five years.
- 2) Assam as a whole is within the Zone V of earthquake zone. Especially in 1950 Earthquake, Demow has witnessed a large devastation. So, it can be said that geographically and geologically Demow is situated in a very hazards prone zone.
- 3) Chances of Landslide are comparatively less in this district but might happen in the bank of Demow river. But fire can broke out in the congested residential and commercial areas, bazaars 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-storeyed buildings etc. can occur at any time. Of course riot is not so common in this district.

### 10.6. 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

#### During 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.



### 10.7. FORMATION OF DEMOW DISASTER MANAGEMENT CELL (DDMC):-

The Master Plan recommends for formation of a Demow Disaster Management Cell (DDMC) in the office of the Chairman, Demow Municipal Board, as per Section 40 of Disaster Management Act, 2005.

The DDMC has to be constituted with the functionaries like Chairperson (Chairman), Vice Chairman (Co-Chairperson), Chief Executive officer (Executive Officer), Members (SDO-Civil, Health, Roads, Building, Tea & Oil industries and other relevant department), and Nodal Officer (Jr. Engineer).

The DDMC will give emphasis towards the preparation of Demow Disaster Management Plan. The plan also recommends that the DDMC cell to co-ordinate during emergency with the District Disaster Management Authority (DDMA) located at the Head-Quarter of the District. The DDMC Cell will provide all the available resources and manpower for Disaster Management. This Cell will mobilize the service of technical personnel for the damage survey work to help the District Administration.

The DDMC must meet at least once in six months i.e. in the month of March and September before the Disaster Season (Flood & Cyclone) of Demow town under the chairmanship of the Chairman/Chairperson, Demow Town Committee & to update the plan. For this, one month's prior notice should be given to all concerned departments before convening the meeting. Chairman/Chairperson should review the work of DDMC. An emergency meeting will hold whenever information is received regarding calamity.

### 10.8. STANDARD OPERATION PROCEDURE (SOP):-

The Master Plan recommends the DDMC for formulation of Standard Operation Procedure (SOP) for automatic response of the members during disaster as follows:

- ❖ 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.
  - Promote coordination and communication amongst personnel.
  - Simplify decision making during potentially stressful conditions.
- ❖ Proper implementation of Assam Notified Urban Area Building Rules – 2014 (ANUABR) & Sensitization among stakeholders engaged for construction work/owners to use disaster resistant technologies.

### 10.9. RAIN WATER HARVESTING:-

Demow Zone has experienced heavy rainfall during summer season due to the south-western monsoon that leads to artificial floods not only in the plan area. So, the plan recommends adoption of rain water harvesting system in construction activities that will reduce the volume of artificial floods in the Master Plan Area and also help to maintain the ground water level.

### 10.10. DOs & DON'Ts:-

#### a) DURING EARTHQUAKE:





**b) DURING FIRE:**













