

CHAPTER II

MORPHOLOGY AND LANDUSE PATTERN OF THE MAJOR TOWNS
OF NORTH BENGAL

Morphology reveals the structural and visible skeleton of a town or the internal structure of the town. It encompasses the interpretation of the man-made fabric comprising the physical and social elements of a town, and interrelationships in respect of their location which ultimately explain the development process in the growth of the landuse pattern. Miss Taneja (1970)⁽⁴⁾ has compared the process of formation of city with the development of an organic form finding some similarities between these two systems in respect of their process, structure and stage.

In analysing the morphology of a town, the road pattern and the characteristics of the buildings representing the functions they carry on, are two important tools, specially the roads being the skeleton of the urban organism and the most important criteria for the development of transportation, have a direct impact on the centripetal and centrifugal forces which are responsible for the concentration and decentralization of the built up area in a town.

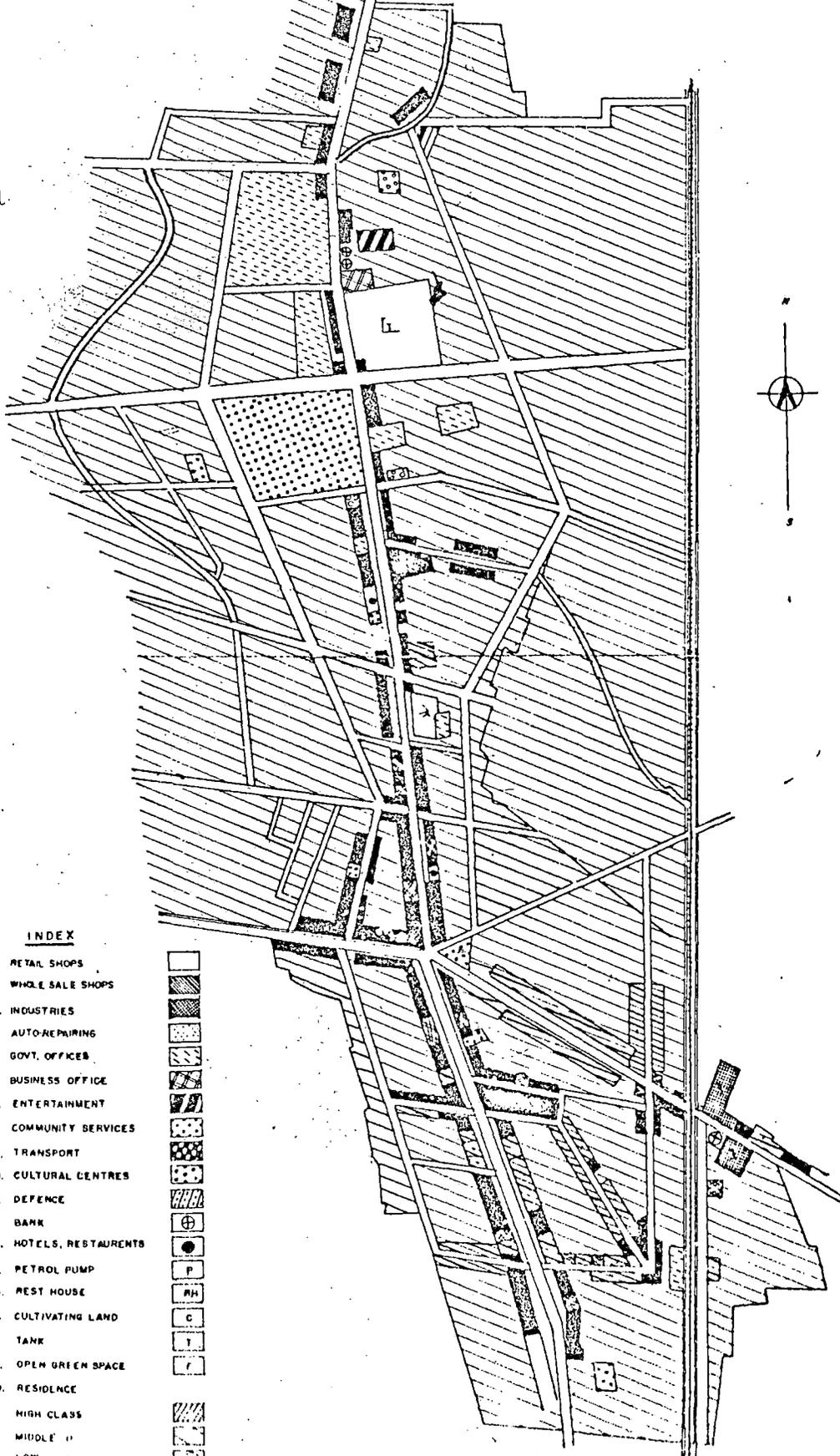
The development of roads also depend upon the interrelationships among the various nuclei of human settlements as well as the physical setup of that place. The influence of physical landscape in the development of street layout is prominent in the hill towns of

North Bengal, while the plains get the optimum facility in respect of slope and space in the formation of roads. The hill towns encounter hindrances put forth by the same factors. Besides due to unplanned growth, the roads in almost all the towns of North Bengal, excepting Cooch Behar, present a confused and complex type of network resulting from narrow lanes of labyrinthine nature. The roads in Cooch Behar town are grid-patterned, hence left scope for a systematic development of the town.

Among the various centripetal forces, the administrative functions and the residences of the private rulers have taken important roles in giving rise to the concentration of population and growth of various functions which gradually brought the towns into existence. In the case of hill towns, the administration and the British policy are jointly responsible for the concentration of population. In the case of Cooch Behar, it is the king's residence which is responsible for the growth of the urban settlements. In other towns, the administrative functions have played the most important role in the formation and development of urban centres. Of course, there are some towns where the market and port facilities together have provided the centripetal force, for example, Dinhata, Kalimpong, etc.. The former one being situated on the bank of a river enjoyed a good navigational facility and as a major tobacco growing area served the merchants coming from as far as Burma⁽²⁾.

MAP OF DINHATA TOWN

Showing the landuse pattern



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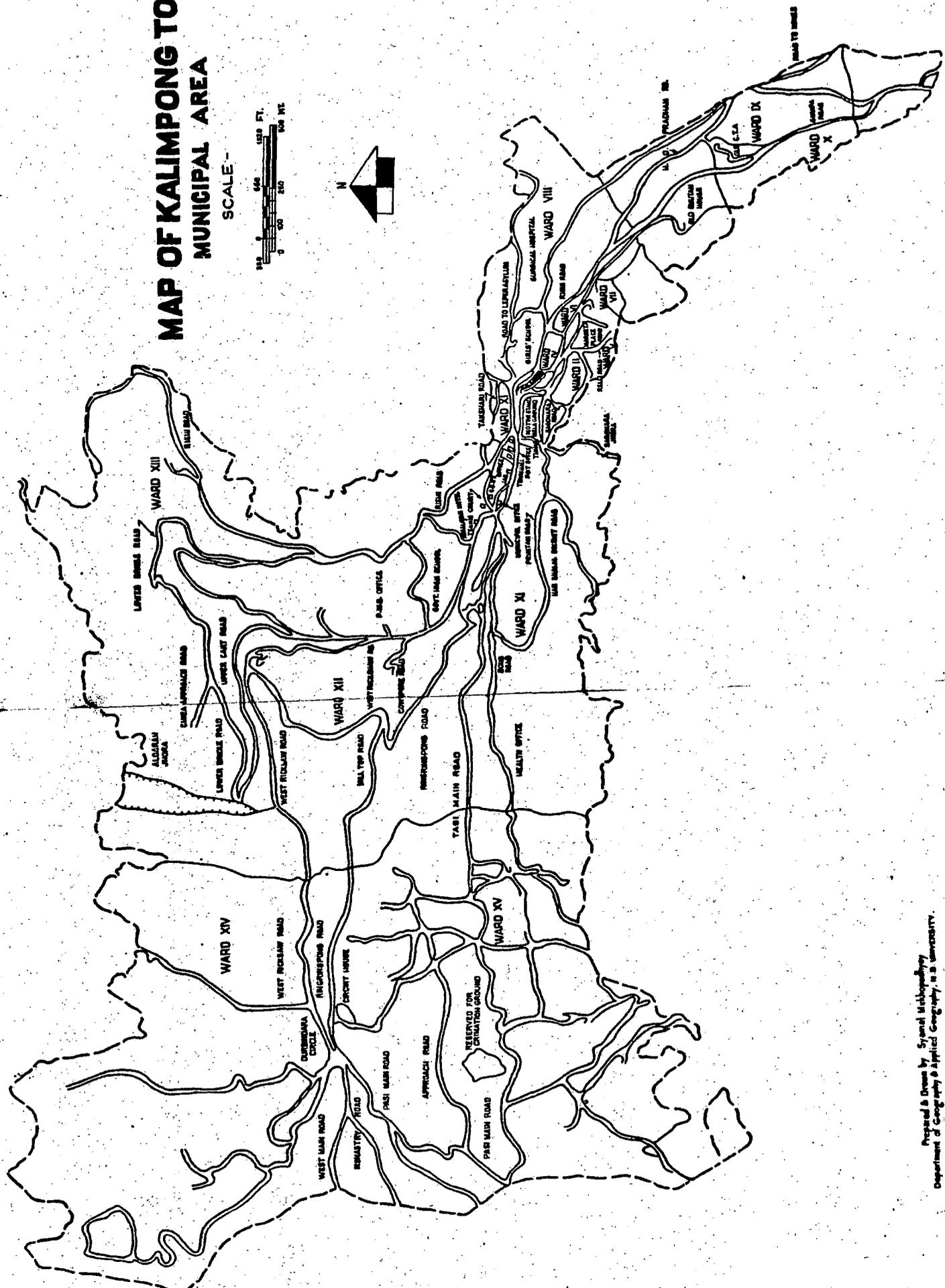


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MAP OF KALIMPONG TOWN MUNICIPAL AREA

SCALE--



Prepared & Drawn by Syamal Kishore
Department of Geography & Applied Geography, I.I.T. Kanpur.

There is another town in Cooch Behar district, Mekhhliganj, which also was an important trade centre⁽³⁾ during the rule of Koch Kings. At that time, the Mogh (Burmese) traders used to come to this town for collecting tobacco and cotton fabrics. This town also had a good navigational facility. The transactions were made through Tista by boat to Kaliganj of Rungpur where from the goods were ^{taken to} Chittagang for transshipment to Rangoon⁽⁴⁾. But in/course of time, the rivers lost their navigability and the towns deprived of the trade turned to tiny sub-divisional administrative headquarters. Similarly, Kalimpong was connected with Tibet, ^{by} a direct trade-route closed very recently. The trade between Tibet and India via this place gradually converted it into ^a twon.

Unlike many other towns or cities, in the towns of North Bengal, the centrifugal forces had not been operative in the same manner that is the congestion in the heart of the town, or the choice of alternative places for a better living or the outward shiftings were not the root cause for the spatial expansion of the towns. What actually happened here is the immigration of displaced persons from erstwhile East Pakistan (Now Bangladesh) and not the usual rural to urban migration, at least in the beginning, ~~resulting~~ in urban development beyond their municipal boundaries in unison with the extention of road-neatwork. Practically, North Bengal has witnessed a great leap in the growth of population between the

pre-Partition (1941) and the post-Partition (1951) period. After the Partition, the refugee influx dramatically changed the demographic picture of the towns of North Bengal. Many of them, having previously a very small population-size, turned into large centres, the people from the other side of the boundary constituting the major part of the total residents. The changes in the land use taking place at the same time resulted in the shifting of residences to the periphery of the towns. The political factor played a more vital role than the pure economic or social factors in respect of the growth and expansion of the towns during the recent decades. Further, it may be noted that though the first *raison d'etre* had taken a leading role in the growth of the towns of this region, the most towns of North Bengal do not exhibit any distinct process of growth patterns formulated by E.W. Burgess⁽²⁾⁽⁵⁾, Homer Hoyet⁽⁵⁾⁽⁶⁾ and Harris and Ullman⁽⁵⁾⁽⁷⁾, specially in respect of residential distribution, as the ^{actual} spatial expression of residences lack the distinctive economic - class segregation.

Among the six principal towns, such as Darjeeling, Jalpaiguri, Cooch Behar, Balurghat, English Bazar and Siliguri, five are District Headquarters while the last one is a Sub-Divisional town. Besides, there are twenty two urban centres in North Bengal but only a few exhibit true urban character and the rest are nothing but a conglomeration of residences of various size, ^{and} shape, and built

with a string of shops occupying the main road fronts, catering to the needs of the town-dwellers. As a matter of fact, except the main thoroughfare which in most cases is a part of the National Highway or State Highway, running through the heart of the town, the remaining areas are densely filled in by residences dotted with some community, administrative, recreational centres or small industrial units.

Practically no towns of North Bengal, whether district town or a small urban centre, present any distinct functional zone due to their small size and unplanned growth. There are, however, a few exceptions where some sort of planning in the spatial distribution of various functions may be traced; Cooch Behar is one of them with its administrative, commercial and recreational (Parks mainly) zones were clearly defined at its earlier stage of development. But this earlier attempt at planned development has become completely blurred in the successive decades by unchecked growth and encroachment following unexpected increase of population coupled with the withdrawal of the Native Ruler's constant supervision. In fact, the Kings of this native State were responsible for the planned growth of this town and the British Agents of British-India Government, had remarked that "Cooch Behar progressed further than Jalpaiguri, a British settled district in the same region, during 1869 to 1873", and still some parts of the town are bearing the imprints of past planning, like the administrative zone surrounding Sagardighi, the

park with a considerable big area, the old academic institutions etc., On the other hand, Darjeeling, originally developed as a completely European settlement, possesses some zoning, the retail market, the Mall, the old administrative sector, etc. Here also the increase of population in the latter periods, accompanied by the unplanned growth has largely altered the original appearance of the town. Among the other towns, Siliguri has followed some zoning, particularly in case of commercial and industrial centres. The most important factor for the haphazard growth of the towns of North Bengal, perhaps, is that no town in North Bengal developed with an introspective view of future population growth. The Partition brought in such a rush of refugees that the towns, all of a sudden, felt an impulse of growing almost overnight. Commercial and other related functions multiplied rapidly and urban expansion took place along the main roads, people making their houses wherever they got land, irrespective of its locational advantages, or ignoring the factor of site and situation. As a result, the development was of a haphazard and confused manner where the Government had no capacity to handle the problem. In the later periods attempts have been made to improve the scene with effective measures introduced in different fields of the urbanscapes and the region as a whole, through an improved and modernized communication network. The result has been quite impressive in view of the fact that

already a good number of the urban centres of this region have taken the role of influencing their surrounding areas, resulting in rural-urban migrations.

The landuse maps have been prepared based on municipality maps and only in case of Jalpaiguri town the mouza sheet maps of Settlement Survey Department have been used.

LANDUSE PATTERN

Before going to analyse the landuse pattern of the selected towns of North Bengal, it^{is} to be noted that except Darjeeling, none of the towns of North Bengal does exhibit combined Anglicised and indigenous growth. Though Cooch Behar reflects some British influence in its architecture and layout for which the town-plan was prepared by a British Engineer^{Colonel (S)}, it had practically been built-up by the native Kings.

Darjeeling, because of its British-creation and being the summer capital of British India was developed in some planned way. But the distinction between the two phases of development excluding the residential distribution, is less prominent excepting in the Mall which is originally a replica of British-Planning.

The road-network reveals it clearly that the growth of the towns followed least planning. Almost all the towns have two or

three major roads. These are the principal arteries of the towns. Most of the commercial and business functions have clustered along these roads, interspersed by residences. The shortage of open green space inside the residential areas is extremely felt. The sidewalks are encroached upon by unauthorised stalls. All these have brought the decadence of townscapes and are creating an unhealthy atmosphere. The co-existence of so many non-related units reveal the result of the unplanned growth of the towns of North Bengal. The main market or Bazaar, "is not quite equivalent to the Central Business District (Down-town) of an American city"⁽⁹⁾⁽¹⁰⁾. Out of the 28 urban centres in North Bengal, only Malda, Siliguri and Darjeeling have fully planned markets built up recently. Particularly in Malda and Darjeeling, the planned markets are the very recent landmarks in their landuse mosaic, while Cooch Behar exhibits a quasi-planned central market which was, at initium, a completely planned one, but the later growth followed no planning. The goods of perishable and non-perishable character are assembled in this market within the specified sectors, the latter specializing in one kind of article. The markets are characteristically located in the heart of the towns.

The expansion of the towns of North Bengal show a general spatial trend without much of vertical expansion. Only Siliguri, is

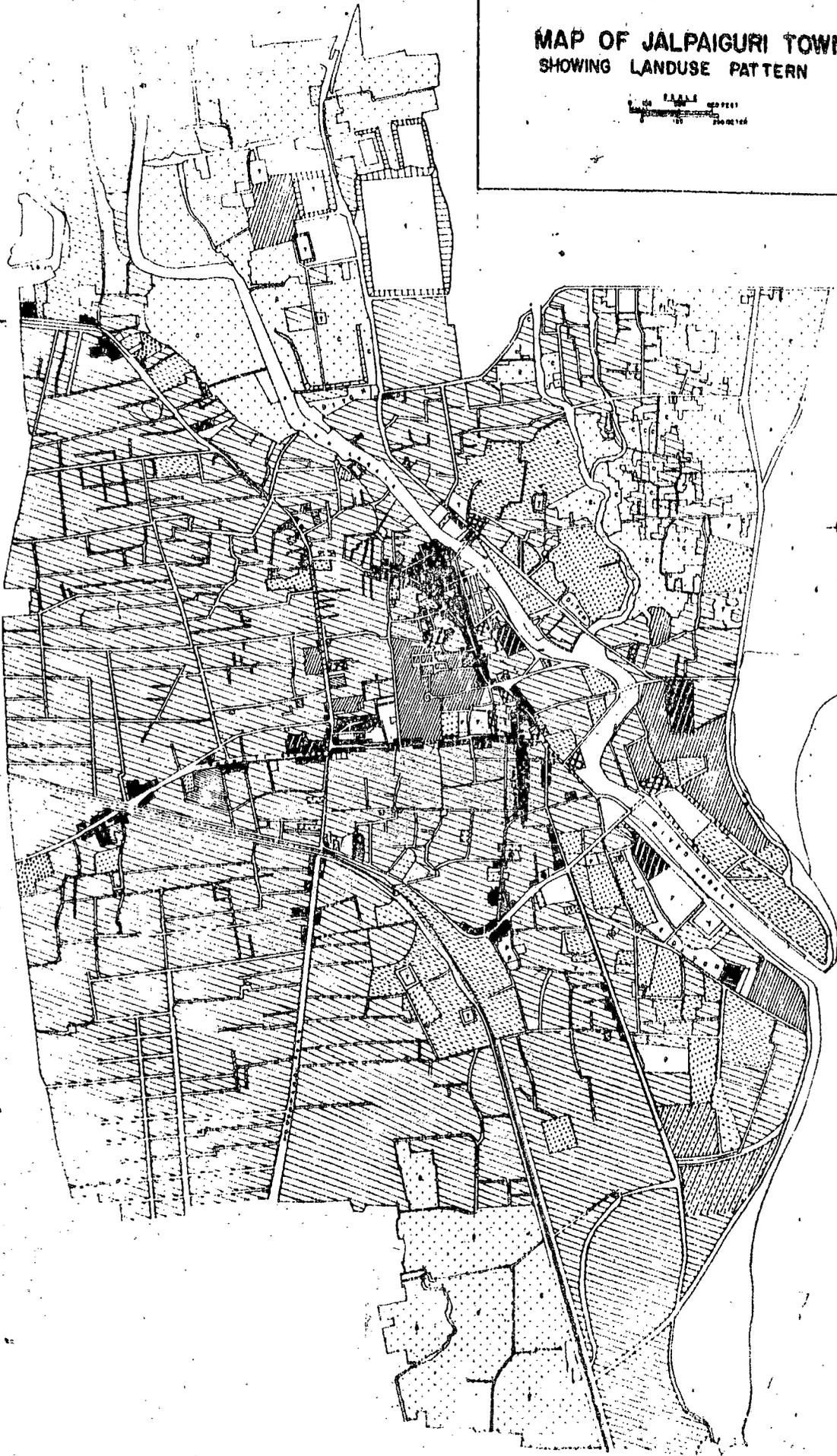
exhibiting a vertical development or expansion, particularly along the Hill Cart Road ~~is~~ ^hthe recent years. The vertical expansion in most of the towns ~~is~~ limited to four-storey and rarely five-storey buildings and in general the upper floors are used for residential purposes while the ground floors are usually occupied by commercial units.

The landuse-maps of the selected towns reveal these characteristic features of the towns. Out of 28 urban centres, seven have been selected on the basis of their administrative as well as commercial importance. It has already been mentioned that excepting the administrative headquarters, most other towns have no striking features in respect of their landuse pattern. So, from the point of view of administrative importance, five district headquarters of the respective districts of North Bengal have been selected for detailed landuse study. They are / Darjeeling, Jalpaiguri, Cooch Behar, Balurghat, ^{and} English Bazar. Besides, from ^acommercial point of view, two more towns - Siliguri and Dinhata - have been selected for the same purpose.

The Landuse Pattern : Jalpaiguri Town :

Once an important centre of North Bengal, the town of Jalpaiguri has turned almost into a sleeping residential centre after the

MAP OF JALPAIGURI TOWN
SHOWING LANDUSE PATTERN



Partition, mainly due to the orientation of transportation, particularly of the railway route. The river Karala which is still flowing through the town, dividing it into the eastern and the western quarters, played an important role in the growth of this township. The river, being connected with the river Tista and having a perennial course, helped greatly ⁱⁿ the movement of merchandise and people.

The town came into existence when it became the administrative headquarters of the district, bearing the same name, in 1869. Prior to that the area was under the native Kingdom of the State of Cooch Behar. Since 1869 upto the present date, the population has increased ^{by} over fifty five thousand.

Since its inception Jalpaiguri became the centre of the ^a tea-magnates and this gradually turned it into ^{the} leading place of elites. The reputation for its cultural activities has not waned in spite of economic deterioration. During the Post-Independence period, ^{it} has been made the administrative headquarters of the Political Division comprising the five districts of North Bengal. The presence of a large number of white collar-workers coming from different parts of the State of West Bengal was followed ^{by} an increase in the other activities like commerce, recreation, education, etc..

The market centre and the Nawab Palace, are the two principal nuclei around which the town first developed and later on extension

took place on all four sides. The growth towards, the south, however, has been more than on the north, the latter originally having been largely forested or marshy lands. The preponderance of agricultural lands is still, more on the north and north-eastern part than elsewhere. The Railway, the Siliguri-Jalpaiguri Road and the river Karala, provide the three main transportation routes along which the maximum growth has taken place. In the absence of planning the town has developed in a most haphazard manner which is more prominent in its road-network. Zoning is entirely absent. The central area of the town is occupied by commerce which is mostly located along the main thoroughfares, and the gaps are filled in by the residences. The remaining areas are covered by residences. In spite of that, a trend of concentration and decentralisation of certain functions is noticeable.

Jalpaiguri

The landuse map of Jalpaiguri town brings out the following characteristics regarding the spatial distribution of different uses of land. The town presents almost a mixed type of landuse. The commercial centres have developed on the western bank of the river Karala, with an extension in the south and westward direction. The community services, the public offices etc. have confined

themselves mainly to the eastern and south-eastern part of the town, while the industries, taking the advantage of the State High-Way, have developed on the northwestern part. The residences have occupied maximum land on the western part of the town. The extreme/north, northeast, and southern parts of the town are less inhabited because of the preponderance of fallow or agricultural lands.

On the basis of landuse, the urban area of Jalpaiguri Town may be divided into the following major groups: (A) Commercial Centres; (B) Autorepairing and Industrial Centres; (C) Community Service Centres and Public Offices; (D) Cultural and Recreational Centres; (E) The Residential areas. (Map No. 4)

(A) The Commercial Centres

The commercial activities of this town have developed within the triangle formed by three roads, namely the road following ^{the} river Karala, the D.B.C. Road and the Temple Road.

(I) The Central Market

The central market is located in the northern part of the town, between the Merchant Road and M.G. Road. The market has

developed by the side of the river Karala, showing a sprawl towards the south-west. The navigational facility in the past, resulted in the location of the market here. The market shows unplanned growth. Most of the stalls are small, stuffed with goods ranging from vegetables, fish, meat, to luxurious articles, including garments and gadgets of different kinds. The market is partly under sheds and partly in the open air. The stalls have followed some sort of specialization in the distribution. The inner lanes of the market are extremely narrow and crooked for vehicular traffic. The market is characterised by the presence of a religious centre which is almost common in every market centre of the towns of North Bengal. The market, connected by all the major thoroughfares, enjoys good accessibility. The whole-sale business is mainly concentrated within this market and in its vicinity. There is another market present along the Goonti No-4 Road, consisting of some retail stalls mainly catering to the needs of the residents of the localities.

Similar minor shopping ribbons have developed along the Merchant Road, the Thana Road, the D.B.C.Road, the Temple Road and the M.G.Road. The most compactly built-up commercial areas are those located along the Merchant Road and the D.B.C.Road. Most of the retail stalls comprising stationery-goods, book stall, restaurants, hotels, readymade garments, etc., are located along these roads.

There are some isolated shopping spots developed mainly along the Station Road, the Siliguri - Jalpaiguri Road, and the Hospital Road.

The business offices, like the General Insurances, Tea Garden Companies and Road Transport and offices of other organizations, are situated either in the central market area or along the D.B.C. Road and the Hospital Road.

(B) The Autorepairing And Industrial Centres :

While the autorepairing units are functioning adjacent to the Railway Station, the industrial units are to be found mainly along the Siliguri - Jalpaiguri Road and at the junction of Coomti No.4. The important industrial units operating here include, Aluminium manufacturing units, Saw Mills, Trunk and Suitcase manufacturing units, etc., and they have developed along the main thoroughfares. The Siliguri - Jalpaiguri Road and the State highway provide the most important example in this respect.

(C) The Community Service Centres and Public Offices :

The health institutions like hospitals, etc., have clustered along the Hospital Road, on the west bank of the river Karala. The hospitals, consisting of Sadar Government Hospital, Chest Clinic, Nurses' Quarters, Doctors' Residences, occupying a considerable of the

area, introduce a variety in the landuse mosaic of this town. The location of the hospital, ^{although} having some sort of calmness, suffers greatly due to the low elevation of the ground, mainly during the rains and this was severely felt during the flood of 1968. Besides this main hospital enclave, one nursing home is located amidst one of the residential areas.

The academic institutions have scattered locations, with minor clusterings here and there. On the eastern part, the girls' college and schools are located along the same road; two of the boys' and girls' schools are located along the Siliguri-Jalpaiguri Road. The Junior B.T. College is located along the same road while the B.Ed. college is located near the Police lines in the far south-east. The Government Boys' School is located amidst a residential area, while the colleges are located either along the D.B.C. Road or away from the heart of the town. Other academic institutions are in the heart of the residential areas, following no planning in their siting.

The town, being the administrative headquarters, presents a number of Government establishments, most of which have concentrated in the southeastern part of the town along the Kachari Road. Among the government offices located along the Kachari Road, the Commissioners' Office, the Deputy Commissioners' Office, the District Court, the Deputy Inspector General of Police's Office, are noteworthy. The

other Government offices established lately are mostly in the residential areas, or along the main thoroughfares.

(D) The Cultural and Recreational Centres :

The Recreational and Cultural functions of an urban centre are no less important than its economic functions. In Jalpaiguri Town, the cinema houses, the religious centres, the open green fields and a few libraries represent the main recreational and cultural elements. Characteristically, they do not form any zone but are scattered following the main thoroughfares. While the cinema houses are located along the D.B.C. Road, the open green space of playing field (Stadium, etc.,) are located near the river Karala. The temples, etc., are on the Temple Road, the Merchant Road and the Hospital Road. The Ram Krishna Mission, an important cultural as well as religious centre, is squeezed within a residential area to the south of the Railway Station. A small but beautiful park on the embankment of the river Tista, named Jubilee Park, has been opened very recently at the southern end of the Kachari Road. Besides this (during ^{and before} 1974-75 year), there is another little children's park maintained by a private organization. The District Library and a few other smaller ones are sprinkled within the residential areas.

(E) The Residential Areas

The residences take up the major portion of the urban land area, making encroachments everywhere. However, the landuse map reveals that they have mainly developed on the two sides of the railway line and along the Jalpaiguri - Siliguri Road. The western part is more densely built up than the other. The economic - class segregation of residences is absent, and some of the high class residences are also found within the middle class residential areas.

The High Class Residences :

The residences of the high class Government officials are located along the Kachari Road. On the far northern side, the residences of the Raikots, who once belonged to the most elite class of the society, are located. The Nawab Palace is located along the Merchant Road, while several high class residential pockets have appeared on the both sides of the Siliguri - Jalpaiguri Road. The high class residences belong mainly to the traditionally rich families and the emerging class of industrialists.

The Middle Class Residences |

Most of the residential landuse of this town falls under this

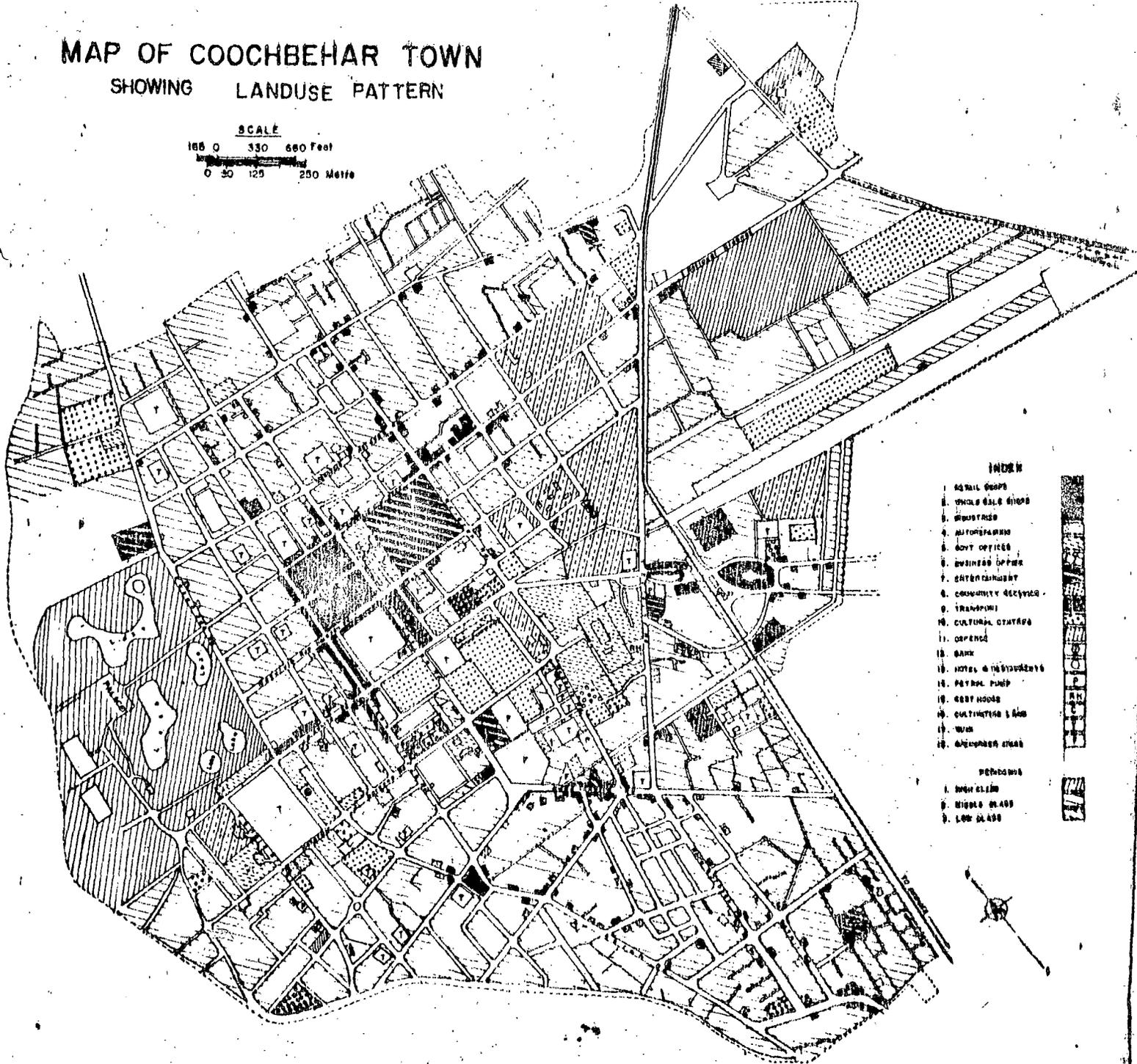
category. The town, being ^a principal centre of administration, provides desk-jobs to a large number of its inhabitants. The western part of the town has ^{the} most densely built-up residential sector. Though a number of the two or three storeyed buildings break the monotony of the skyline of the town, most ^{of} these large houses, let to the various government offices have introduced a different element to the residential character of these sectors. In the north and northeastern part of this town, however, residential development is less conspicuous. There cultivating land still occupies a considerable portion of the land and often paddy lands intervene, leaving wide gaps between residential lots. The typical residential pocket of any particular community is absent in this town. The Government quarters belonging to the lower group are mainly located on the east of the railway line, and in the southern sector.

The Poor Class Residences :

Unlike the big cities or towns, where the low class residences for the poor or labour ^{class} are to be found near the hub of the town, here the picture is different. The poor class residences ^{are} mostly pushed to the periphery of the town. The largest of these pockets is found in the extreme northwestern part of the town. Here the houses are mostly in poor condition, The people are either cultivators or

MAP OF COOCHBEHAR TOWN SHOWING LANDUSE PATTERN

SCALE
 180 0 330 660 Feet
 0 90 120 250 Metre



- INDEX**
1. RAIL STATION
 2. GOVT. COLLEGE
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 17. PARK
 18. AIRPORT ROAD
- RESIDENTIAL**
1. HIGH CLASS
 2. MIDDLE CLASS
 3. LOW CLASS



Prepared by the Survey of India, Bangalore

milkmen or engaged in some low class job in the town. The Harijans (Sweepers) have mainly clustered near the Railway Station. A few more poor class residential pockets exist in the southern part.

2. The Landuse Pattern : (II) Cooch Behar Town (Map No. 5)

The capital of the Princely State of that name, the present Cooch Behar Town was built on a planned layout : The setting of various functional activities like, markets, hospitals, academic institutions, parks, administrative blocks, etc., were pre-determined and so that most of these are located along the major thoroughfares accessible to the residents of the town. But with the increase of population, the estimation, based on which the town was built, became invalid and this gave rise to the unplanned growth as noticed in the other towns of the region. This haphazard growth took place mostly in the later phase of the development of the town, particularly in the post-Partition era. Looking at the landuse map of Cooch Behar, one finds that the street lay-out has a checker-board pattern, every road meeting at a right angle with the other roads. This trend is still very much pronounced in the main built-up area surrounded by the Maharaja S.N. Road on the north, Nara Narayan Road on the east, Kalica Das Road on the southwest and the Palace itself on the west.

Cooch Behar

The landuse map of Cooch Behar Town brings out the following salient features in respect of its spatial distribution of different users of land. The central market is located almost in the central part of the town, with an outlier in the south. The central square bounded by four principal roads, is almost completely built-up, having the buildings of various institutions and organizations, from transport to community services. A few concentration of various services can be found along the Sagardidhi Square in the southwestern part of the town and in the northeastern part along the railway line. The town lacks any large or medium size industrial complex but the small - sized units are extremely isolated in respect of their locations. The Palace, being located on the western part of the town, attracted the high class residences while the middle class residences have developed mainly in the north and the south. The town has a greater tendency to expand south and south eastwards which are mainly residential areas.

The principal types of landuses of Cooch Behar Town are as follows : (A) The Commercial Centres; (B) The Autorepairing and the Industrial Centres; (C) The Community Services and the Public Offices; (D) The Cultural and The Recreational Centres; (E) The Residential areas.

(A) The Commercial Centres

The Central Market Centres

It was basically a planned market. The market is located in a square surrounded by the Maharaja Nripendra Narayan Road on the north, the Maharaja Rupendra Narayan Road on the south, the Silver Jubilee Road on the east and the Viswa Singha Road on the west. Here most of the stalls are retail in character, dealing with a variety of articles ranging from vegetable, fish, meat, groceries to stationery and cosmetics. A part of the market is occupied by the wholesale depots which are mainly concentrated along the main western entrance of the market. The market is partly roofed and partly in the open air. The vegetable and fruit shops occupy the central part, while the stationery and others are located around the former. A new section, mainly dealing with readymade garments, has been added to this market. The market, being well connected with all other major roads, enjoys good accessibility.

On both sides of the four roads, which run around the central market centre, various types of shops are located. While on both sides of the Rupendra Narayan Road, the shops are mainly retail stores dealing in goods of daily use, the Viswasingha Road on the west, the Nripendra Narayan Road on the north and Silver Jubilee

Road on the east are mainly occupied by both retail and wholesale stores. Another small market is located in the southern part of the Kalica Das Road.

Besides the principal shopping centre, a number of shopping ribbons consisting of some retail stores of readymade garments, hotels, restaurants, bar, medical stores and some commercial business offices are located along the Viswa Singha Road, the Sunity Road, the Silver Jubilee Road, the Bangchatra Road, ^{and} the Nripendra Narayan Road. Small retail shopping pockets also are found distributed throughout the town, mainly at the junction of two or more roads near the residential areas.

The Railway Station is located along the Nara Narayan Road and the Bus Terminus and the Taxi stands are located along the Silver Jubilee Road.

(B) The Industrial And the Autorepairing Centres :

The industrial units have developed in a very isolated manner, and they are mainly located along the railway line, the Silver Jubilee Road, the Maharaja Prana Narayan Road, the Bangchatra Road, the Kalica das Road, the Vivekananda Road, etc., A weaving factory is functioning on the Sunity Road.

The autorepairing units are mainly concentrated along the eastern part of the Maharaja Nripendra Narayan Road, Silver Jubilee Road and the Magazine Road. A number of clay-modelling units, ^{the} appear on the road lying to east of the Bus Terminus.

(C) The Public Offices and the Community Service Centres.

The main cluster of public buildings is located around the Sagardighi Tank comprising the heart of the town. The complex contains the Judges' Courts, the Deputy Commissioner's Office, the Superintendent of Police's Office, the Old Record Room, the Municipality Office, the Treasury Office, the Sub-Divisional Officer's Office, the Settlement Office, etc. Among the other important Government offices, the Central Excise, the Post and Telegraphs, the Food and Supplies, the State Electricity Board, the Public Works Department, the District School Board's Office, etc., are located along the Maharaja Jitendra Narayan Road, the Silver Jubilee Road, the Sunity Road ^{and} the Viswa Singha Road. The Forest Office is located further away from this complex on the National Highway No.31, at one end of the town. The different nationalised banks, including the State Bank of India ^{are} within this complex. The new offices which have been opened in the later periods, find their location in the residential parts of the town.

Among the Community Service Centres, the Jitendra Narayan Hospital established by one of the Maharajas of Cooch Behar, is located along the junction of the Silver Jubilee Road and the Sunity Road. Another charitable hospital is located along the Maharaja Nripendra Narayan Road. The Jitendra Narayan Hospital is located almost in the heart of the town. The hospital has sufficient open space inside its compound. The nursing homes are located within the residential areas.

The important and old academic institutions are located along the Maharaja Jitendra Narayan Road, while the girls' schools and other academic institutions are located along the Maharaja Jitendra Narayan Road, the Kesab Sen Road, the Nripendra Narayan Road, and the others are sparsely distributed over the town.

(D) The Recreational And Cultural Centres

The open spaces, like parks and play grounds of an urban centre, may be compared with the lungs of human body. The recreational and cultural centres should not be concentrated in any particular area of ^{the} town, so that they may serve all the residents of the town. In Cooch Behar Town ^{there is} the Narendra Narayan Park, which, barring the Botanical Garden of Darjeeling, is the only large and beautifully-laid park among the towns of North Bengal. It was

established during the reign of the Cooch Behar Kings when it used to be the only medium of entertainment to the people of this town. But with the increase of various new medias, like cinema, etc., it has lost its attraction as well as its glamour also. There are altogether twelve parks, covering 25 acres of land of this town. Besides these parks, the Sagardighi Square, being away from the commercial chaos, and well-decorated, is a good place of recreation, and particularly during the summer evenings it attracts a lot of town-dwellers. The theatre Halls, cinema houses and the play grounds are located along the bank of Sagardighi, the Silver Jubilee Road, the Bangchatra Road, the Kesab Sen Road, the Nar Narayan Road, the Magazine Road, etc. Cooch Behar can be called a town of tanks, as one will find at least one tank in every residential and commercial area. No other town of North Bengal possesses this character.

The Ramkrishna Mission, the Brahma Samaj, the Rabindra Sadan, the Madan Mohan Temple, the District Library, and other important cultural clubs or religious centres are located along the Asram Road, the Sunity Road, the Maharaja Jitendra Narayan Road, and the Debibari Road.

The landuse in Cooch Behar town, specially in the old built-up area, shows a grid pattern revealing the linear form of growth along the major thoroughfares. The palace itself was the back-bone of communications and most of the important establishments are located along these roads.

(E) The Residential Zones :

The residential zones are not characterised by economic class segregation, hence one may find isolated high class residences in the heart of the middle class residential areas. Most of these high class residences are old but still in good shape.

Except in the northeastern part along the National Highway No. 31 and the southwestern part along the Hitendra Narayan Road and Maharaja Jitendra Narayan Road, where some high class residential pockets exist, the remaining other residential areas of this town is filled in by middle class residences with isolated poor class residential patches here and there.

The High Class Residences :

The Palace itself played an influential role in the allocation of high class residences. A cluster of high class residences are found along the Hitendra Narayan Road skirting the southern boundary of the Palace. Along the National Highway No. 31, the residences of high class Government officials, like the S.P.'s Bungalow, the Divisional Forest Officer's Bungalow, the Additional Deputy Commissioner's Bungalow and the Deputy Commissioner's Bungalow are situated. Besides these pockets, there are some other high class residences appearing in isolated fashion all over the town, forming no particular zone.

The Government quarters are mainly located along Maharaja Jitendra Narayan Road, the Silver Jubilee Road, the Magazine Road, at the crossing of the Nripendra Narayan Road and the Vivekananda Road.

The Middle Class Residences :

The town being an administrative centre and being devoid of large industrial establishments, has most of the inhabitants belonging to the middle class in respect of their economic status. The residents representing this major economic class live around the central part of the town which is bounded by Maharaja Sibendra Narayan Road on the north, Kalica Das Road and Bangchatra Road on the south, Nara Narayan Road on the east and Silver Jubilee Avenue on the west. From this area, the residential sprawl has further taken place ^{to} the south and west. The new residential areas have been formed by the refugee population who came from the erstwhile East Pakistan. The most compactly-built residential areas are found within the zone surround by the Kalica Das Road, the Asram Road and the embankment. The new town, on the west of the Asram Road, also represents another compact built-up area. In contrast, residences have a thinner distribution along the Maharaja ~~Hitendra~~ Narayan Road ^{and} the Magazine Road extension.

The Low Class Residential Areas :

The residences of this class appear in scattered formations. Most of them, however, are on the northern and the eastern part of the town. The most compact poor/class residential area is located between the Nripendra Narayan Park and the Military Barracks, surrounded by the Rup Narayan Road. on the south Prana Narayan Road on the west and Nripendra Narayan Road on the north. The residents are mostly sweepers and are employees of the Municipality or doing other low jobs. There is another poor/class residential pocket situated near the Plywood Industry and along ^{the} railway line. Their rehabilitation is a long standing demand.

3 Landuse Pattern : Darjeeling Town (Map No.)

Darjeeling originally built as the replica of an English town, presents a different urbanscape in respect of its landuse pattern. The built of the town creating an atmosphere of Home towns naturally had immense attraction for the Europeans. Besides, the number of schools run by different European Missionaries for educating the children of the European residents of British India gave it a special character. The year-round cool climate and the

MAP OF DARJEELING TOWN SHOWING THE
LANDUSE PATTERN



grandeur of the Himalayas made it a holiday resort from the very beginning of its life and this reputation has not waned till now. No town of its size in India can boast of so many Hotels, many of them being posh with complete arrangements for rich foreign tourists, Darjeeling is, par excellence, a tourists' paradise. The development of the town as one of the principal tourist centres of India, as rightly expressed in its name - "the Queen of the Hill stations"-has found full expression in its landuse. Thus the functional character originating from its special role in serving a floating community of different nationalities of the world, as well as its role as a seat of higher learning, makes it different from the towns in the plains in many respects. Added to this, the physical set up, with variations of slope and altitude, has vitally affected the distribution of different functions. The entire development is rather controlled by the physical factors like altitude and slope, as both of them define the degree of sunny aspects. The towns has developed in a tier/system, ^{the} higher the tier, ^{the} higher being the social status. The higher tiers are mostly occupied by the Governor's house, the palaces or mansions, the big hotels, the important Government offices, the Clubs, the Missionary Colleges and Schools and the posh market while the lower terraces or tiers contain the principal market complex, the houses of the middle class

population, the ordinary hotels, the schools etc. The poorer section of the residents are shelved out on the still lower terraces. But an extreme scarcity of space has acted as the chief control in giving rise to a high degree of crowding and vertical expansion of the town, not so far witnessed in the towns of the plains. The typical linear growth of the town having been pre-determined by the run of the range on which it is situated has further been accentuated by space - shortage. Every inch of growth is oriented to the main roads, running parallel to each other. Diagonal accessibility for vehicular traffic is out of question. The town in the shape of a pre-historic reptile sprawls from east to west and northwest with its closely knit mass of buildings, the latter being taller and taller from the middle tier upwards, interspersed with fast~~ly~~ vanishing green~~s~~ of tall pines. In spite of the crowded character of its physical build, the neat order of difference in land use is prominently revealed through the distribution of different functional zones. The heart of the town or the main centre around which later developments took place, may still be distinguished. This lies between and around the Nehru-Ladenla Road on the south and the Cart Road on the north. The town has unevenly spread out from this central core, with maximum extension east and northwest ^{ward} along the Cart Road and the Labong Cart Road.

The urban landuse of the Darjeeling Town makes an interesting study in view of its different physical background. The town in appearance looks like a reptile, while the eastern and the southern parts are occupied by two cantonments. The commercial centres have developed in the central part of the town. The shortage of space and slope-factor are responsible for the growth of a mixed type of landuse. Even then, the community services are mainly confined to the northern and the southern parts of the town. The maximum concentration, is within the place which is bounded by the two cantonments on the east and the south and by the Governor's House in the north. On the Mall, a number of services of different types are compactly located. The town has grown more on the eastern and southern sides. The residences have occupied the flat spaces of the south-western and the northern part with an extension eastward. From the point of view of landuse, the town can be divided into the following sections:

- (A) The Central Commercial area.
- (B) The Industrial and the Autorepairing Centres.
- (C) The Government Offices and the Community Centres.
- (D) The Recreational and the Cultural Centres.
- (E) The Residential Areas.

(A) Commercial Centres

The central market centre, forming a part of the original core of Darjeeling Town, has developed on both sides of the Bazar Cart Road and is bounded by Sonam Wangdi Road on the west and the M.D.Lama Road on the east. This is, by and large, the principal market of the town in contrast to that of the plains where subsidiary retail markets are common features, in most of towns. The market is easily approachable from all parts and its location near the Bus and the Taxi Stand has greatly eased the transportation problem, where every item or usable article is to be fetched from the plains. The market does not wear a prosperous look. The restriction of space has not allowed it to grow in a big way. The shops dealing in merchandise of various descriptions consisting mostly of daily needs - perishable and non-perishable - are arranged very thickly along the main road as well as the lanes and the by-lanes; vegetables, fish, meat, garments, utensils, etc, all are available here. There is virtually no order in their arrangement; goods of contrasting types appear in shops standing side by side. The shops are generally small in size, housed in the lower storey of the buildings, ^{the} majority of which are badly in need of repair. Besides the permanent shops, ^a large number of semi-permanent stalls and ground-stalls with articles spread on the pavements, make another

picture of this market. The new super-market which is already under construction below the Eden Hospital, near the Motor Stand, will definitely enliven the otherwise dull atmosphere of the market area. The wholesale establishments located within this market area are quite smaller in member.

(B) The Industrial and the Autorepairing Centres :

Industry in ^{the} true sense of the term, takes a very minor role in the functions of the town. Those present are of moderate scale, and few in number and are not concentrated in any particular area of the town. The scattering, as defined by the land shortage, is obvious. Most important among the industries are the woollen garment-making and the knitting units, the Tibetan Handicrafts and the Darjeeling knitting co-operatives. The first one is located between St. Joseph and the Lebong Cart Road, while the latter is located in the lower tier of the Zila Parishad building, where the land is cheap. Apart from these, a few char-coal units are located along the R.N.Sinha Road. The two saw mills of medium size are located along the Cart Road, south of the Darjeeling Railway Station.

The autorepairing units are located along the Lochnagar Road and near the Bus and the Taxi terminals.

(C) The Administrative and the Community Service Centres X

The growth of Darjeeling has largely been ^{governed} governed by three factors, viz. its climate, its ^{scenic} beauty and its strategic location as well as political status. The landuse map of the town of Darjeeling reveals this distinctly. For instance, the two cantonments, the Jalapahar cantonment and the Lebong Cantonment, occupying together about ^{2.17 square kilometres} ~~555-covert-into-sq.km.-mile~~ of the total land area of the town, are located on both the east and west ^{end} end of the municipal area. Of them, the Jalapahar Cantonment is located on the highest tier and the Lebong Cantonment is located in the middle tier.

The main administrative cluster is located along the Lebong Cart Road. Here the important Government ^{offices, like the} Deputy Commissioners', ^{office} the Hill Development Office, the District Judge's Court, etc., are situated. The other Government ^o offices have mainly developed along the Cart Road ^x near the Bazar area, the Laden La Road, the Gandhi Road, the Robertson Road, etc. Some are also situated around the Observatory Hill and the Mall.

Similarly, ~~the~~ scattering is also observed in the case of the community service centres, though they are concentrated ^{more} ~~more~~ on the higher than the lower tiers. For instances, ^{s'} the District Hospital, the Planter's Hospital, the Eden Hospital, and the Deshbandhu Chest

Clinic are located in and around the middle tiers.

The landuse map of Darjeeling town reveals academic functions till now, as one of the major functions of the town. This is also true about the English-medium schools and colleges run by the Missionaries. Though scattered in location, they invariably occupy the higher and the highest tiers of the town. This further includes the recently-established Himalayan Mountaineering Institute.

(D) The Cultural And Recreational Centres

Being a resort town, the cultural and recreational activities have developed here to a great extent, leaving inprints of British culture and living. The town of Darjeeling is mainly a summer-resort for this country's people while, it is a winter-resort for most of the Europeans. Among the cultural associations, the Gymkhana Club, the District Library, the National History Musium, the Hayden Hall, the Christian church, etc., are located around the Mall and mostly are on higher tiers. The religious institutions belonging to different communities like the Hindus, the Muslims and others, are located on the middle tiers, occupying either the road front or occurr in the heart of the residential areas.

Among the recreational centres the Zoo, ^{the} Botanical Gardens, the Shutterry Ground, the Cinema houses, ^{the} Victoria Park, are located

on the higher terraces. Above all, the 'Mall', giving ^a wonderful view of the mighty Himalayan peaks and the glistening gold of the Kanchenjunga under the rising sun adds a special feature to the urbanscape of Darjeeling where the people arriving from different parts of the world assemble for the heavenly view.

(E) The Residential Areas :

The compact residential areas as in the plains are not so common in the landuse map of the town of Darjeeling. The slopes and altitude accompanied by the shortage of flat space has made the residential pockets mostly isolated in their appearance. The high class residences are to be seen on the higher terraces, while the middle class and poor class residences are to be found on the middle and far lower terraces.

Highclass Residences :

The highclass residences are mainly located surrounding the Jalapahar Cantonment area, particularly on the west of Jalapahar Cantonment. The Governor's House, the Deputy Commissioner's Bungalow, etc., are located on the Birch Hill, situated on the northern part of the town. Surrounding ^{the} Mall, a few highclass residential pockets have developed.

Middle Class Residences :

Most of the middle class residences are located in the north and east of the Botanical Garden area and along the R.N.Sinha Road. Most of the houses are more than double-storied but the total space used by every house is too limited. The occupants are generally service holders or businessmen. Another densely built-up residential area is located on the C.R.Das Road.

Poor Class Residences :

The poor class residential pockets are mostly located away from the heart of the town, along the Cart Road, the Tenzing Norkay Road, and the C.R.Das Road. These, known as "Bastis" or slums, have developed on the lower tiers. Most of residents are working class people, covering a wide variety of occupations.

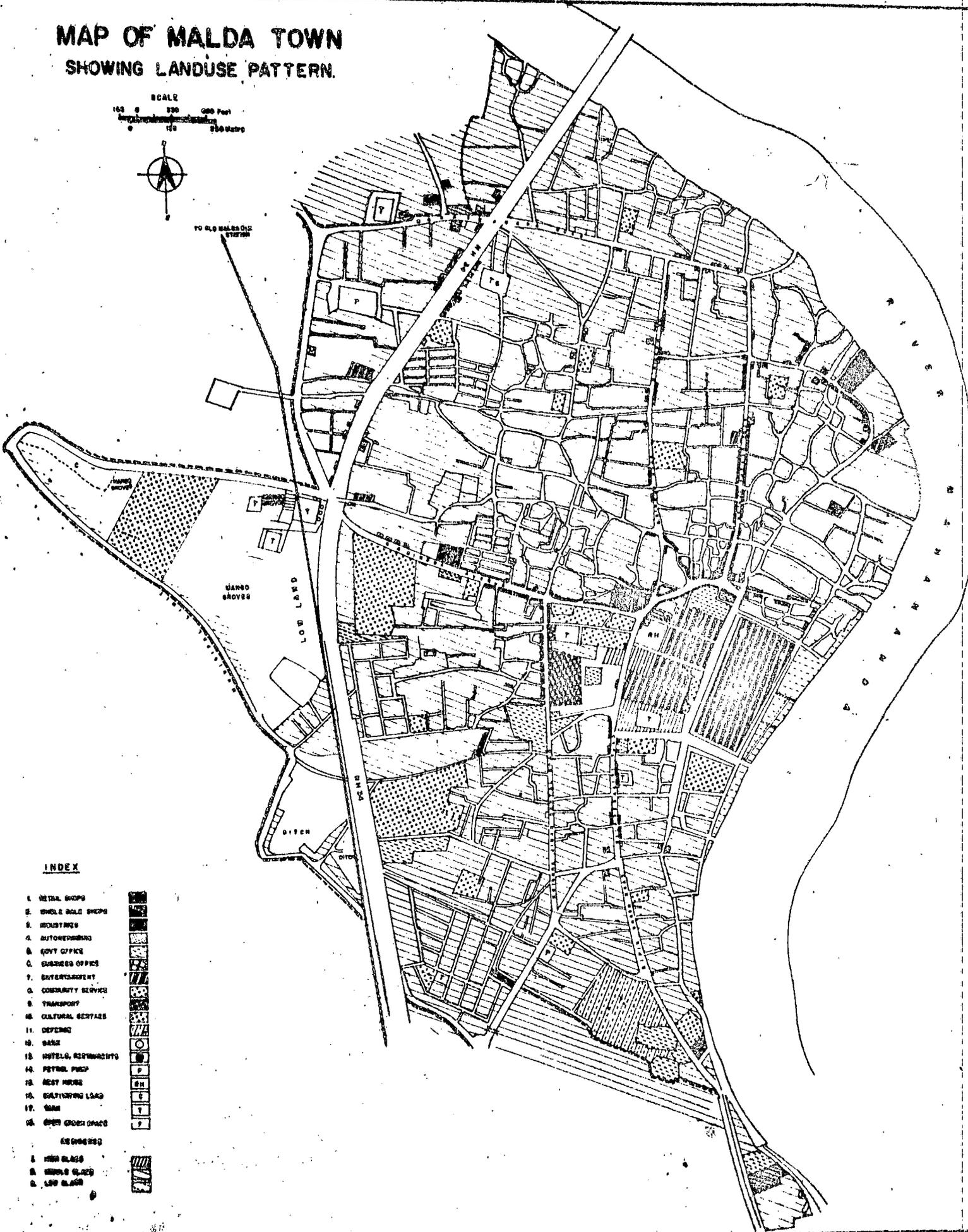
The characteristics of the residential areas is that while the elites have made edifices on large plots, keeping some open space, for creating beautification in their gardening surroundings, the middle class or lower class of people are living in a sub-standard condition in respect of space. The high land prices and the high house rent have are mainly responsible for this.

MAP OF MALDA TOWN SHOWING LANDUSE PATTERN.

SCALE
100 0 200 400 Feet
0 100 200 Meters



TO OLD MALDA C/O
STATION



INDEX

- 1. RETAIL SHOPS
- 2. WHOLE SALE SHOPS
- 3. INDUSTRIES
- 4. AUTOREPAIRING
- 5. GOVT OFFICE
- 6. BUSINESS OFFICE
- 7. ENTERTAINMENT
- 8. COMMUNITY SERVICE
- 9. TRANSPORT
- 10. CULTURAL SCYTAES
- 11. DEFENSE
- 12. BARRACK
- 13. HOTELS, RESTAURANTS
- 14. PETROL PUMP
- 15. REST HOUSE
- 16. CULTIVATING LAND
- 17. WHEAT
- 18. OPEN GREEN SPACE



LEGEND

- 1. HIGH CLASS
- 2. MIDDLE CLASS
- 3. LOW CLASS



(4) Landuse Pattern : English Bazar

English Bazar is another town on the plains, situated in the extreme south of the region on the major transportation route between South and North Bengal.

The landuse maps of Malda do not show much difference in its character of urban landuse from those of others. The commercial centre is located almost in the heart of the town, and has further expanded northwards along the two main thoroughfares, on both sides of which the residences have developed. The rest of the land presents a mixed landuse pattern. Among these, the community services, the public offices, etc., are mostly confined to the southern part of the town, and less to the north, where the residences of middle class have occupied a major part of the land. The industries are mainly confined to the north and northeastern periphery of the town and the autorepairing units have clustered along the National Highway No.34 in the north. The roads running in every direction and presenting a most confused picture, have occupied a considerable part of the land. The residences are more in the north which is the oldest

part of the town, than in the south. A new expansion of the town is taking place in the extreme west, beyond the railway line.

The principal divisions of the urban landuse are as follows:

A) The Commercial Centre; B) The Industrial and Autorepairing Units; C) The Public Offices and the Community Services; D) The Recreational and the Cultural Centres; E) The Residences.

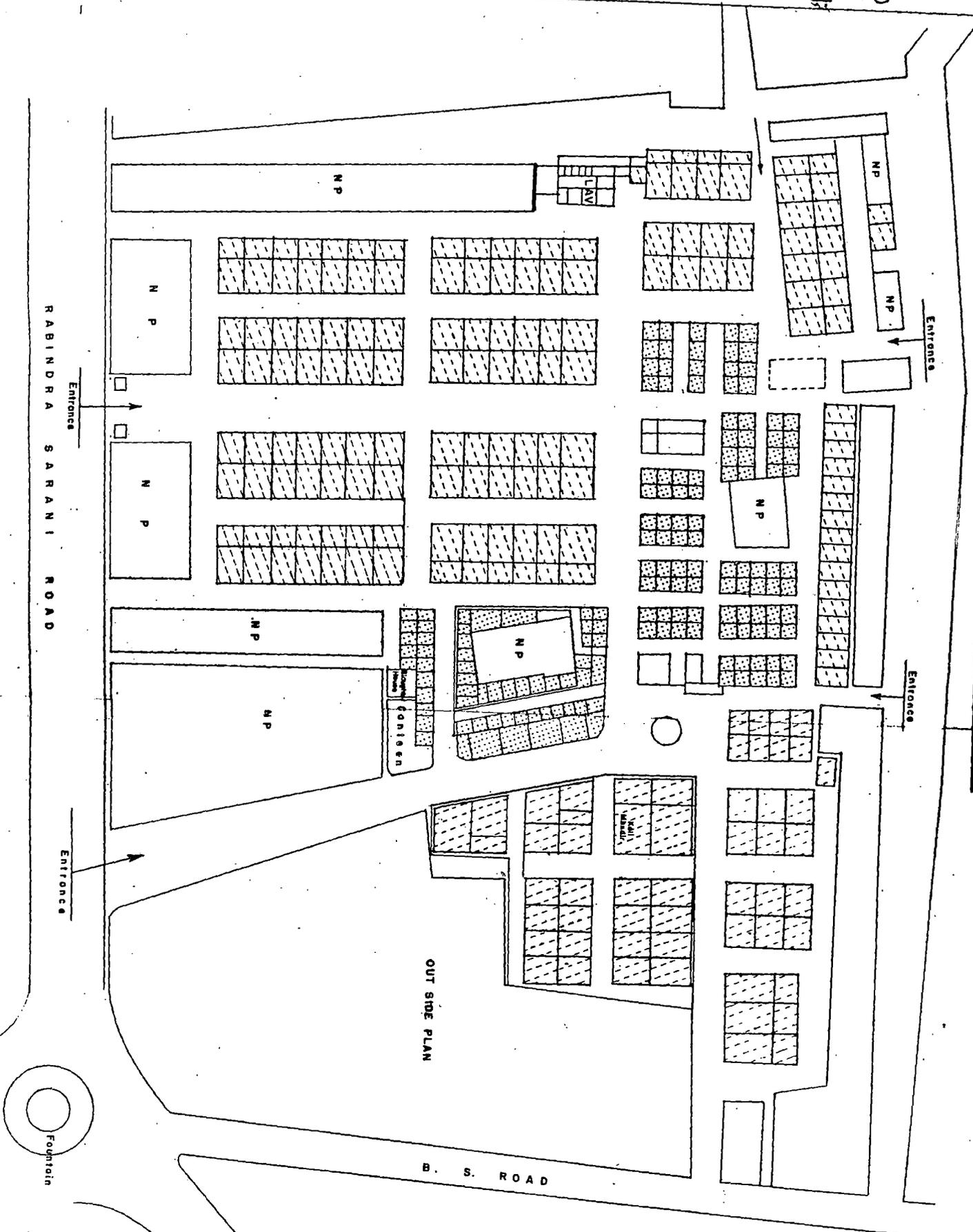
A) The Commercial Centres :

In English Bazar, the commercial activities have clustered along the three major roads in the northern part of the town. These are Rabindra Avenue, Benoy Sirkar Road and Netaji Subhash Road.

The Central Market Centre :

The main retail market is located at the junction of Rabindra Avenue and Benoy Sirkar Road, almost in the heart of the town. The Chittaranjan Municipal Market is also located here. The main retail market covers all sorts of goods, most of which are green vegetables and fish, meat, etc. Besides these, the different types of retail stores dealing in goods ranging from leather to groceries have assembled here for the facility of direct accessibility.

PLAN OF DESHBANDHU CHIT TARANJAN MUNICIPAL MARKET AT MALDA



INDEX

Sector I	Stationery and Clothing	
Sector II	Vegetable & Groceries	
Sector III	Stationery	
Non Plan		

RABINDRA SARANI ROAD

OUT SIDE PLAN

B. S. ROAD

Fountain

Entrance

Entrance

Entrance

Entrance

N.P.

N.P.

N.P.

N.P.

N.P.

N.P.

N.P.

N.P.

N.P.

LAV

COUNCIL

WATER

The road-fronts are occupied by "pucca"-buildings bearing their respective sign boards. Most of the people of the town visit this market almost daily. There is another market offering retail goods comprising green vegetables, fish, meat, etc., located on the west side of the Rathbari Road. Very recently, a planned wholesale market has been opened here, replacing the old open market on the southern part of the town.

Other minor shopping centres have sprung-up along the Netaji Subhash Road, the Benoy Sirkar Road and Rabindra Avenue. Most of the important hotels, restaurants, sweet-meat stalls, cinema house, and, last but not the least, the various types of retail stationery stores, are located along these roads. The shops occupying the road front display their stores with colourful arrangements. Besides these main concentrations, as the sign of unplanned growth, some isolated shopping clusters are to be found in the town of English Bazar. Most of these shops are characteristically located within the residential areas to cater to the needs of the nearby dwellers.

In ~~the~~ ^{of} town, English Bazar, from 1972 onwards, three planned markets have appeared, replacing the old unplanned congested markets as a part of the redevelopment programme. One of them, the Chittaranjan Municipal Market, is located in the centre along the Rabindra

Avenue. Another is located on the Baladeba Giri Road, while the last one is located near the Rathbari Road in the southern part of the town. The Chittaranjan Municipal Market (map shown) has been divided into several sectors, each sector (such as sector I, II and III) specializing in one type of goods, like, clothing, gadgets, fish and meat, etc.

The wholesale shops have clustered along the Saraju Prasad Road in a chain on the north-eastern part of the town.

(B) The Industrial And the Autorepairing Units :

The industrial units, most of which are wood-based industries, have concentrated along the Bundh Road in the western part and in its extension, the latter joining the Netaji Subhash Road, in a semicircle in the northwestern part of the town, while the autorepairing units have occupied the front of the National Highway No-34, remaining confined mainly between the junctions of Manaskamana Road and the National Highway No-34 in the north, and the Rabindra Avenue and National Highway No-34 in the south. Besides, a few small autorepairing units are also found amidst the retail chain. The reason behind the clustering of the autorepairing units along the National Highway No-34 is that they can offer immediate service to the heavy Vehicles using the route. Besides, the location of two large

petrol pumps are also responsible for this sort of clustering. A few other industrial units are located along the Manaskamana Road and on the Rabindra Avenue which runs through the centre of the town.

(C) The Public Offices and the Community Centres :

The administrative centres do not follow any arrangement in their distribution. They are ^{scattered} all over the town from north to south and from east to west in a most confused manner. The main reason behind this growth is that, most of the Government offices are situated in rented houses and most of them have been established in the post-independence period. However, the important Government offices are located along the Netaji Subhash Road, in the north, the Rabindra Avenue, the Jibankrishna Sanyal Road, the Bipin Ganguly Road on the south-east and on the right-hand side of the National Highway No. 34. One of the oldest nuclei of this town, ^{containing} the District Magistrate's Office, the Municipal Office, etc., is located along the Netaji Subhash Road, in the heart of the town, while the State Electricity Board's Offices, the Post and Telegraph Office, the Land Reform Office, etc., are located along the Rabindra Avenue. The Police Station, Water Works, Forest Office, the District Handloom

Office, etc., are located along the Jibankrishna Sanyal Road. In the south and the Public Works Department's Office, the Jail, the Settlement Office, etc., are located along the Baladeba Giri Road and the Bipin Ganguly Road, in the extreme south and south-eastern part. The scattered location of the offices further reveals the sprawl of the town in both north-ward and southward direction, of which the southern extension has got the largest concentration of the public offices.

The community centres are mostly composed of academic institutions and hospitals. Like the administrative centres, the community service centres also have followed an unplanned growth and mostly are situated in the southern part of the town. The New Hospital is located on the National Highway No-34, while the old one is situated on the Rabindra Avenue Extension. Among the academic centres, the Malda College is on the Rabindra Avenue. The newly built Malda Women's College has come up close^{to} the new hospital. The B.Ed. College is situated along the Cemetery Road. But the Polytechnic is situated away from the heart of the town, along the Manikchak road. Among the other academic institutions, the schools of both the boys' and girls' are located along the Rabindra Avenue the Benoy Sirkar Road, the Ramkrishna Mission Road and near the Bundh Road, which are located either in the central part or in the northern or southern part of the town.

(D) The Recreational And the Cultural Centres

For a long time, the cinema houses were the only recreational centres in the town of English Bazar but recently, the creation of a park and a swimming pool has enlarged the scope.

The cinema houses and the theatre hall are located along the Rathbari Road, the Netaji Subhash Road, the Bundh Road and at the junction of the Manaskamana Road and the National Highway No-34, in the northeastern and northwestern part. Among the cultural institutions, the Ramkrishna Mission, District Library, Town Hall etc., are located along the Ramkrishna Road, on the eastern side of the sports ground, and other small religious institutions are scattered in their locations. The cultural and religious institutions often do not fit in with the environment, since in most of the cases a church has grown side by side with a saw mill, or a temple is found amidst the retail shops. This actually reveals the state of unplanned growth or the absence of any sort of landuse control in the town of English Bazar.

(E) Residential Zones

It has already been pointed out that the economic-class-segregation is almost absent in the spatial expression of residences in the towns of North Bengal. Some sort of religious segregation,

however, may be noticed in the case of the Muslim residents who are mostly confined to the central part of the town.

Besides, the towns do not exhibit much of vertical development, i.e. the skyline of most of the towns is homogeneous, with one-storey buildings, having isolated two or three-storey buildings, most of which have occupied the main thoroughfares, letting the ground floor for commercial purposes. In general, the residential areas have expanded spatially following the major roads.

Highclass Residences :

The most striking highclass residential pocket is found on the north of the Ramkrishna Mission Road. This pocket contains the quarters of the highclass Government Officials, like the District Magistrate, the Superintendent of Police, etc. Excepting the distinct ~~existing~~ highclass residential pockets, some highclass residences have also developed in a scattered fashion mainly on the west of the Netaji Subhas Road, along the Bundh Road on the east, the Jiban Krishna Synnal Road, the Bipin Ganguly Road on the south and on the eastern part of the Rabindra Avenue.

Middle Class Residences :

Most of the residences of the town of English Bazar fall in

this category. The most compact middle class residential area is found on both sides of the Netaji Subhas Road in the north. Here the houses exist leaving no space between the two houses. The next compact middle class dwelling area is known as Mucdampur, extending along the two sides of the Bipin Ganguly Road and the Baladeba Giri Road, ^{and} the Singatola Road in the south. Lack of open greenspace among the middle class residential areas is noticeable. The Muslim community has clustered along the Hyderpur Road and the Dosadpara Road in the central part of the town.

The Government Quarters belonging to middle class job ^{are} holders, ^{are} located along the National Highway 34. There are two Housing Estate colonies, built by the Government. The buildings show uniformity in architectural aspect and are generally single-storied. Another Housing Estate which is in the extreme west, is under construction. They have added a special distinction to the town of English Bazar, and the future sprawling might taken place in this direction.

Poor Class Residences :

Though typical industrial slums ^{are} absent in this town, the poor class residences have a close similarity with these in respect of their housing conditions, civic amenities, and the geographical

location. In general, the poor class residences are found all over the town, appearing in tiny lots on poor ground. One of the main concentrations has developed along the Gour Road on the extreme west and another by the side of the river Mahananda. Generally they occupy the low lands of the town, making small huts.

Land use Pattern : Siliguri Town (Map No - 7)

Siliguri, the sub-divisional headquarters of the district of Darjeeling, became a commercial magnet in its later phase of development which started from the decade of the 60's and is still continuing at a faster rate than before. Prior to 1962, the town had an insignificant place among the other towns of this region. But the development of ^{the} communication network including both railways and roadways and the strategic importance, enhanced since the Sino-Indian conflict of 1962, have boosted up its economic growth. The phase is still continuing. The New Jalpaiguri Railway Station having all three gauges (viz. broad, metre and narrow gauges) connecting the town with ^{the} rest of India, and the National Highway maintaining the link between the Eastern and Western India via Siliguri, have equally contributed to the unprecedented growth of this town. On the other hand, the large scale development

of the defence establishments located in the outskirts of this town had a great impact on the growth of this centre as the principal market of the locality. On the top of these, the tea-gardens situated far and near to the town, depend on Siliguri for their onward movement.

The urban landuse of Siliguri reveals many of these aspects of her hectic activities. The heart of the town has developed around the Hill Cart Road which maintains direct connection between the hills and the plains. The shops occupying the ground floors of the buildings, located on the road front along the Hill Cart Road, well-decorated with show-rooms dressed with luminous-neon advertisements, present an appearance of a posh area. During the day, the commercial core remains always busy and crowded with people and unending streams of vehicles of all sorts. The retail shops have given rise to ribbon-growth along the Bidhan Sarani the Sevoke Road and along the Station Feeder Road, all of which emerge from this core area. The defence establishments are mostly found on the periphery of the town and along the National Highway No.31 and in the farther western part of the Sevoke Road.

The town exhibits a concentration of industrial and auto-repairing engineering units along the Sevoke Road. The transactional facilities have played an important role in locating these

units along these roads.

The railway marshalling yards have occupied a considerable part of the town and mostly are located on the southern and northern ends. The town has sprawled on all sides beyond its municipal limitations, and the latest growth is taking place along the National Highway No-31 heading westward ^{to} Bagdogra. The space between Siliguri town and Bagdogra, truly speaking, has taken a suburban look, already filled by a few very Highclass residential pockets and the big educational institutions like the University, Zonal Board Office, the Headquarters of the WBSEB, one of the renowned Missionary Schools, and Government establishments. A compact linear sprawl is slowly taking shape along the entire length of the National Highway.

Siliguri

The landuse map of Siliguri brings out the following characteristics regarding the spatial distribution of different users of urban land. The commercial centre has developed almost in the heart of the town within the triangle of three principal roads with an important outlier further south. Surrounding these two, residences have developed, spreading in all directions, more towards the south and east than north or westwards. Lands devoted to other uses,

such as community services, government offices, etc., are found within the residential zones but in many cases these are confined to the main thoroughfares. The most important industrial zone has developed in the western part of the town, taking the advantage of river-frontage, and a number of small outliers have already emerged alongs the Sevoke Road in the north, spreading beyond the municipal boundary. Except in the railway colonies, covering large portions of the urban land both inside as well as outside the municipal boundary of the town, the roads, running in every direction, have taken a lot of land. On the whole, the landuse is extremely mixed in character barring the cases mentioned above.

The landuse of the town of Siliguri may be divided into the following categories :

A) The Commercial Core/Areas; B) The Industrial and the Autorepairing Areas; C) The Community Services and the Government Establishments; D) The Recreational and the Cultural Centres; E) The Residential Areas.

A) Commercial Areas

Central Market Area :

The central market area is located within the triangle formed by the Hill Cart Road, the Sevoke Road and the Bidhan Sarani. Both

the wholesale and the retail markets are located here, while the stationery and other types of stalls have captured the road front of the Hill Cart Road and the Sevoke Road, the wholesale depots are mainly located along the Bidhan Sarani. The big hotels, restaurants, entertainment halls, book stalls, and sophisticated readymade garment stalls with showroom representing famous textile companies, are mostly located on both sides of the Hill Cart Road and Sevoke Road.

The New Market, located within this triangle, is a planned development. It is divided into several sectors for particular specialized stalls, like fish, meat, etc., on one side, the green vegetables and groceries on other side, with the stationery stalls, readymade garments stall, etc., placed between these two sectors. The market enjoys a good accessibility.

The retail zone of this town has extended along the Hill Cart Road in a northwest to southeast direction, from the Mahananda Bridge upto the crossing of the Bidhan Sarani. Again, from the Hill Cart Road, in the southeastern part, it has proceeded along the Station Feeder Road upto the crossing of Babupara Road. Beyond that the shops become thinner or less frequent.

Along the Station Feeder Road, another old market is located. This area is the oldest built up area of this town and is the old commercial core. Most of the wholesale depots of the town are located

here and a retail market of perishable and nonperishable goods is also present for the benefit of the nearby residents. Besides, these two retail concentrations isolated retail stalls are located here and there along the major thoroughfares running through the residential areas.

(B) The Industry And the Autorepairing Units

The maximum concentration of industrial and autorepairing units has taken place along the Burdwan Road and the Sevoke Road. Most of the plots of land along the Sevoke Road are occupied either by the autorepairing or by the industrial establishments, the latter being mostly wood-based or engineering units. A few industrial units are located along the National Highway No.31. The industrial and the autorepairing units have a tendency to concentrate in a particular zone which is characteristically on the periphery of the town, while the other activities have not given rise to any concentration so far like the other towns of North Bengal, revealing the typical unplanned growth.

(C) The Public Offices and the Community Service Centres

No town of North Bengal has shown such a haphazard location

of administrative or Government centres as the town of Siliguri. Most of the Government Offices are scattered all over the town. The only pocket showing a slight concentration is noticed along the Kachari Road, which is on the north eastern side, by the Railway Station, where the Sub-divisional Court, the Post and Telegraph offices, the Departmental Telegraph office and the Sub-divisional officer's Office, etc., are situated. All others are located mostly along the major thoroughfares like the Hill Cart Road, the Burdwan Road, the Station Feeder Road, the Bidhan Sarani, the Sevoke Road, etc., and, in many cases, in the heart of the residential areas, wherever houses could be rented for the purpose. Similarly, the community service centres are distributed all over the town, but most of them are located in the eastern part. The Hospital complex has developed along the Kachari Road. The college, the girls and the boys schools are located on the east of the Kachari Road. Other academic institutions are characteristically located inside the residential areas or along the major roads. The Nursing homes are mostly located on the two sides of the Bidhan Sarani and amidst the residential areas.

(D) The Recreational and the Cultural Centres

Unlike other towns, like Jalpaiguri, Cooch Behar and Darjeeling, Siliguri deserves less credit in respect of recreational

and cultural activities. The cinema houses are the only medium of entertainment and are located mostly along the Hill Cart Road, the Burdwan Road, and the Station Feeder Road. The cultural institutions like Bangiya Sahitya Parishad Bhawan, library, theatre hall etc., are located either along the Hill Cart Road or on the east of the Kachari Road. The only playground is located on the east of the Bidhan Sarani and the only small children's park is situated on the north of Subhas Pally main road.

(E) The Residential Areas

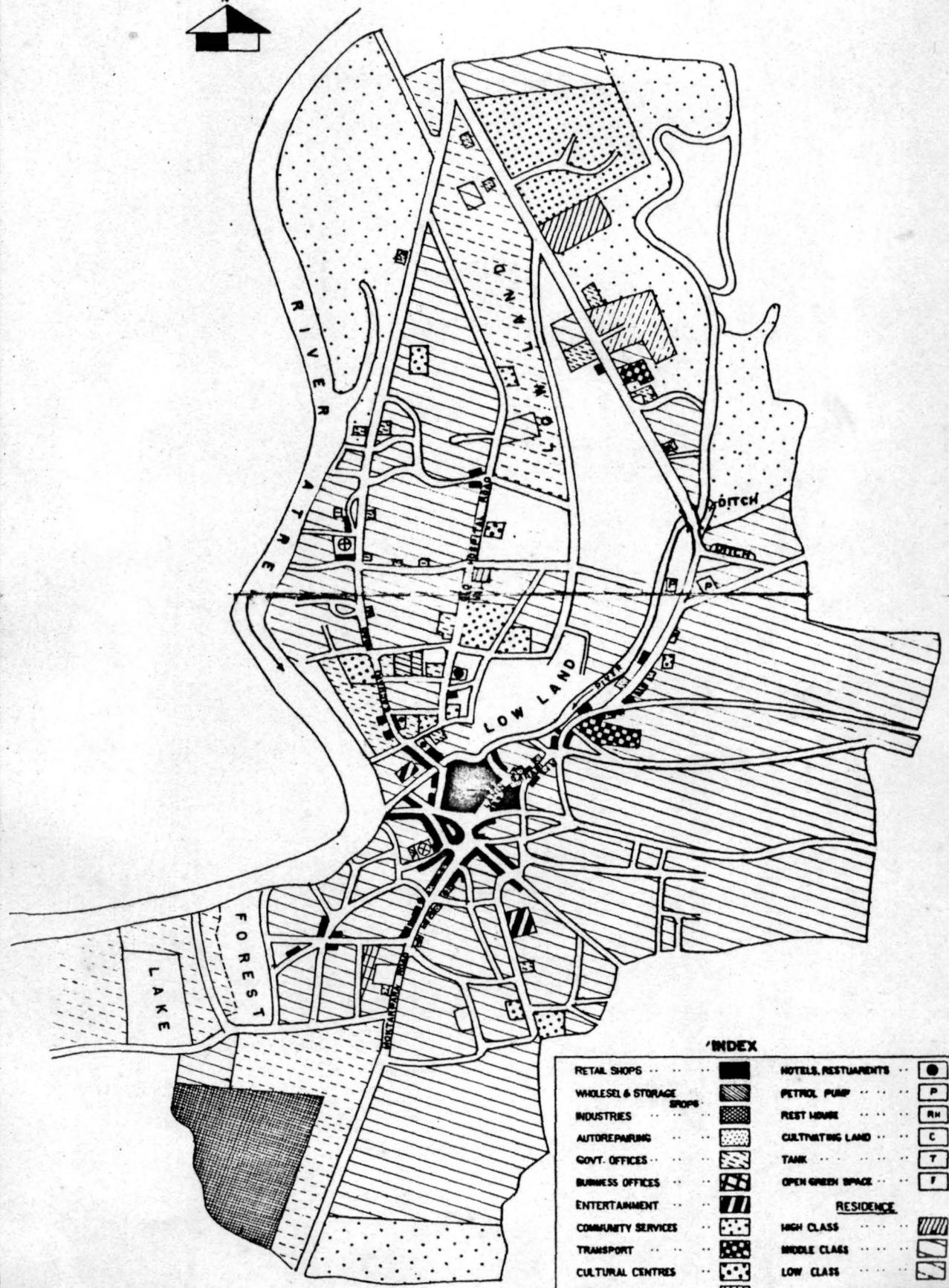
Though Siliguri witnessed a quick development in the commercial field, following which an elite or economically rich class of people have emerged in this town, yet they do not show any specific choice in regard to housing sites. As such, economic class-segregation is also absent in this town and lack of planning is extremely vivid in the growth of residential areas.

The High Class Residences

Excepting some Government Officials quarters, a few high class residences are located here and there. Quite a number of the

MAP OF BALURGHAT TOWN

SHOWING THE LAND USE PATTERN



INDEX

RETAIL SHOPS		HOTELS, RESTAURANTS	
WHOLESALE & STORAGE SHOPS		PETROL PUMP	
INDUSTRIES		REST HOUSE	
AUTOREPAIRING		CULTIVATING LAND	
GOVT. OFFICES		TANK	
BUSINESS OFFICES		OPEN GREEN SPACE	
ENTERTAINMENT		RESIDENCE	
COMMUNITY SERVICES		HIGH CLASS	
TRANSPORT		MIDDLE CLASS	
CULTURAL CENTRES		LOW CLASS	
DEFENCE			
BANK			

high class residences, however, have developed on the Sevoke Road, and the Babupara Road and others are distributed unevenly in the various middle class residential areas.

The Middle Class Residences

The most compact middle class residential areas are situated in the eastern and southern part of the town. These are located mainly along the Bidhan Sarani, Subhash Pally main Road, Babupara Road, etc. In the western part, along the Burdwan Road, a densely built up middle class residential area is located. Along the Hill Cart Road in the northern part, middle class residences along with some high class residences are growing up, and gradually filling the vacant lands.

A considerable part of the residential area, particularly in the northern part, is covered by railway colonies. The Housing Estates for Government employees are located along the Station Feeder Road and Kachari Road.

Poor Class Residences

The maximum concentration of poor class residences are

located on the side of the river Mahananda and by the Railway Colony along the Hill Cart Road. The houses are characteristically located in the lowlands.

Landuse Pattern : Balurghat Town (Map No. 18/10)

Balurghat was an important administrative centre of Dinajpur district in undivided Bengal and after Independence, Balurghat became the administrative headquarters of the district of West Dinajpur in West Bengal. Prior to the partition of India, the small populace, the few administrative units and a completely agrarian background characterised the rustic life of this town. During the post - Independence period the town witnessed a rush of refugee population from the neighbouring country Bangladesh, then East Pakistan, and this was further accompanied by administrative changes when urban growth took place.

At the early stage, the town grew up on the bank of the river Atrai, which was the main internal water route in this region and the market centre gradually extended eastward, taking a circular shape. As the western and southern part are blocked respectively by the river Atrai and the international border, the town expanded northward and eastward.

The street layout followed no planning. The existence of a large amount of lowlands and agricultural fields inside the municipal area reveal that the town still requires great deal of planning to make it worth living in. The absence of railway lines and maximum dependence on road-transport left the town almost devoid of industrial ventures.

The principal types of the landuse of Balurghat ^{Town} ~~area~~ are as follows :

- A) The Commercial Centres; B) The Industry and Autorepairing Centres; C) The Public Offices and the Community Services;
- D) The Cultural and the Recreational Centres; E) The Residences;

A) The Commercial Centres

The Central Market

The central market centre, forming a part of Balurghat town, has developed on the western bank of the river Atrai and takes a circular form. From there, the other roads emerge in all directions and the retail and other shops have occupied the road fronts. The stalls in the market are mainly retail and wholesale in character and district zoning is absent due to unplanned growth. Most of the stalls are in one-storey buildings and occupy the road-fronts. The Lenin Sarani, running through the

heart of the town in a south to north direction, is the busiest area of the town where most of the commercial units as well as the important Government offices are located. The shop is visible mostly along the Moktarpara Road, Bhosila Road, Congress Para Road and Dhamarhat Road, in the southern and south-eastern part of the town.

B) The Industry and the Autorepairing Centres

The industrial landuse is very insignificant in this town. The autorepairing centres are situated in the central area of the town along the Lenin Sarani. The industries, represented mainly by brick-manufacturing units and some other small units, are scattered in their location; the brick-fields are characteristically located at the periphery of the town.

(C) The Public Offices and the Community Services

The landuse map of Balurghat town shows that, excluding residential areas, public offices and the community services have occupied the major part of the urban land. The town, being the

district headquarters, has attracted a good number of Government offices which are located in a scattered manner throughout the town. The only concentration is found in the south western part where the District Magistrate's Office along with its sub-offices is located. The community service centres have not formed any zone; rather they are located along the different major thoroughfares.

D) The Cultural and the Recreational Centres

The cultural and recreational centres are few in number. Among them the cinema houses are located in the southwestern and eastern part of ^{the} town. The theatre hall, the library, etc., are located along the Old Hospital Road, in the south western part.

E) The Residences

The major portion of suitable land is occupied by residences. While the southern and eastern part are densely inhabited, the northern part exhibits less concentration because of the existence of lowlands and cultivated lands. The high class

residences are few in number and are sprinkled amidst the middle class residences. The eastern, western, and southern part are thickly inhabited by the middle class people who mainly came to this town during the post-Independence period. The poor class residences are located in the low-lands, which often become water-logged during the rainy season.

Comparative Analysis of Landuse of the Towns of North Bengal

The general pattern of urban landuse in the towns of North Bengal is more or less the same, but the actual proportion of land used by individual users differs widely.

The table-1 gives the distribution of land under each category like Residences; Community Services and Public Offices; Entertainments and Cultural Activities; Retail and Wholesale business, etc. Transport; Industry and Autorepairing; Defence; Forest, Tea Gardens and Railway Colony; Cultivation, Fallow, Tanks, etc.

The data given in this table have been worked out from the landuse maps of the individual towns, namely, Darjeeling, Jalpaiguri, Cooch Behar, English Bazar and Siliguri, with the help of Planimeter.

The table reveals that the maximum portion of the urban land in almost all the towns has been occupied by residences. Among the five towns, land devoted for this purpose is higher in Jalpaiguri (7.10 Sq.Km) and in English Bazar (2.65 Sq.Km.) than in the other towns in respect of their total municipal area. The land occupied by Industry and Autorepairing and Transport is too insignificant except in Siliguri where 1.08 Sq.Km. and 74 Sq.Km. respectively, are occupied by these two functional activities. The table further reveals that among the five towns, the land occupied by entertainment and cultural activities is maximum in Darjeeling, with 1.22 Sq.Km. against its total area of 12.63 Sq.Km., while Cooch Behar's place is next to Darjeeling in respect of land occupied by such activities (.40 Sq.Km.) against its total area of 8.40 Sq.Km. Siliguri has the minimum land (.10 Sq.Km) occupied by these activities against its total area of 15.54 Sq.Km.

In respect of the land used by community services and administrative activities, Cooch Behar tops the list having 1.32 Sq.Km. against its total area of 8.40 Sq.Km., and Malda or English Bazar is next to Cooch Behar with 1.24 Sq. Km. against its total municipal area of 4.66 Sq.Km. On the other hand, defence has taken the highest portion of land in Darjeeling with 2.17 Sq.Km, and Siliguri is next to Darjeeling with 1.50 Sq.Km. The same table(8) also shows the percentage of the total municipal land of each town utilized by different functional organisations.

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