CHAPTER VII

INFRASTRUCTURE

Introduction

The district is well connected by good metalled roads and there are also unmetalled roads connecting rural areas with the metalled roads. Practically this district is well served by both railways and roadways. The district headquarters is connected by different roads which are fanned out from the capital to different directions. So transportation in the district can be said to be well maintained. Most of the places, where new industries could be started are well connected by Broad gauge or Metre gauge railways.

Because of its locational factors this area had to develop transportational network. Broad gauge and Metre gauge railways were constructed in a number of phases. During, 1875-1878, the northern section of the then Eastern Bengal State Railway or Northern Bengal State Railway, was opened to traffic as far as Jalpaiguri in 1878 and was extended to its present terminus at Siliguri in the district of Darjeeling. It was created as a part of the communication between Calcutta and Darjeeling, due to heavy rush, particularly at that time when the Government of Bengal moved to the hills at the beginning of the hot weather or returned to Calcutta at the end of the rainy season. Before it was constructed travellers to Darjeeling proceeded by rail as far as Sahibganj on the banks of the Ganga and after crossing the river had to travel long and weary journey by road from Khejurie Ghat to
to Siliguri. The railway entered into the district South of Jalpaiguri town and ran in a northerly direction to Jalpaiguri where it turned to North West direction. It served the whole of the tract lying west of Tista river. There were only 3 railway stations on the line within the district viz. Mandal Ghat, Jalpaiguri & Belackoba. This railway tract was roughly parallel to the line of drainage system of that part. Railway tracts were well protected from occasional floods in Tista. Only when the Tista rose extra-ordinarily high and overflowed its banks that it did massive damages near Mandal Ghat in 1902 and 1906.

The Bengal Duars Railway

This railway line was constructed with the purpose of opening up new channels to develop tea industry in Western duars. With this object in view a contract was entered into between the Secretary of State for India and Messrs. Octavius Steel and Company of London and Calcutta which provided for the construction of a railway from Barnes Ghat junction to Dam Dim with a branch from Lataguri to Ramshai Hat which is situated east of Lataguri across the Jaldhaka river. There was a contract with the the Govt. which agreed to give the land needed for the railway free of cost and to supply free timber for sleepers from the reserved forests during the first phase of construction. Financial assistance was also provided by the Jalpaiguri district Board. This contract was
entered in April 1891 and a company was then formed and the construction work started. The line from the east bank of the Tista to Dam Dim, a stretch of 50 k.m. with the branch from Lataguri to Ramshai Hat, being 8 k.m., were opened to traffic in 1893. The southern extension from Barnes Junction to Lalmanir Hat, 104 k.m. was completed in 1900. The western extension from Dam Dim to Bagarokot, 11 k.m. was opened in 1902 and the eastern extension from Mal to Madarihat 70 k.m. in 1903. Therefore the railway existed from Lalmanirhat to Madarihat on the Torsa river and two short branches from Lataguri to Ramshai and another from Mal to Bagarokota. After Seven years during 1907 the railway carried 6,06,000 passengers and 114,000 tons of goods. The principal items imported were coal 14,910 tons, foodgrains 19,507 tons, salt 4,458 tons, metal manufactured 3,397 tons and cotton goods 952 tons, and the items carried out of the district were Jute - 17,106 tons, tea 16,229 tons and tobacco 6342 tons. The major bulk of Coal was for the use of tea gardens. The food grains carried were mainly rice for the tea garden workers.

The Coochbehar State Railway

It runs from Gitaldaha junction on the Dhubri branch of the eastern Bengal State Railway to Jainti and Buxa road station. It is a feeder line. It runs from South to North direction and turns right towards east and reaches Jainti. It enters into the Jalpaiguri district at Alipurduar where there
is a long bridge over the Kaljani river. The timber collected from Buxa forest is carried down to Alipurduar by train and then floated there down the Kaljani river.

**Assam Rail Link** This was established in 1949 to provide all India link to those portion of Jalpaiguri which were on the East of the River Tista and whose links were cut off. The links provided were(a) between Siliguri and Baghatak with a giant bridge over Tista near Sevoke (b) between Madarihat and Hasimara with a large bridge over the river Torse (c) from Alipurduar to Kokrajhar with a large bridge over the Sankos. The whole section was strengthened between 1950 and 1958 by replacements of old bridges and reconstruction of weak culverts. Subsequent to Chinese aggression in 1962 a new broad gauge line was constructed from Khajuria ghat on Gang to New Jalpaiguri which is South of Siliguri but within the jurisdiction of Jalpaiguri district; Thereafter by following old track on Haldibari line upto a point at Raninagar— which runs to the east crossing Tista, Jaldhaka and Diana and passing through Dhupguri and Falakata. From this point it turns Southward and enters into Kuch Behar district. It again runs over the district from Alipurduar Town and then terminates at Newbongaigon in Goalpara district with a branch upto the river Brahmaputra at Jogighopa.

To-day the district has a railway track of 457 kms. of N.F. Rly. which traversed the district. Two main important Rly. stations of this district are New-Jalpaiguri and Alipurduar junctions. Altogether there are 61 railway stations out of which
21 stations are on Broad Gauge lines and 40 on meter gauge lines. The district possesses 164 kms of Broad gauge Rail tracks and 292 kms. of Metre gauge line.

Present Railway system

At present all the railways in the district are under the North-east Frontier railway. The Broad gauge (mainline) from New Jalpaiguri to New Bongaigon (in Assam) passes through the following stations. They are Raninagar - Jalpaiguri, Jalpaiguri Road, New Domohani, New Maynaguri, Betgara, Attagram, Dhupguri, Khoralgram, Salbari, Khirerkote, Falakata and Gumani Hat and then entered into Kuch Behar district and again came back and had gone through New Alipur Duar, Samuktala and Kamakhyaguri Stations.

The metre gauge (mainline) from Katihar junction advanced to Kamakhyaguri through several stations on its way within the district. They are Begrakot, Oodlabari, Dam-Dim, New Mal Jn, Chasla Junction Chapramari, Nagrakata, Carron, Chengmari, Banarhat, Binnaguri, Dalgaon, Mufnai, Madarihat, Hasimar, Hamittonganj, Kakhini, Garopara, Rajabhatkhawa Junction, Damanpur, Alipur Duar Junction, Salsalabari, Samuktala Road and Chapani Hat.

River Ways

Though the district is traversed by many streams and rivers but most of them are non-perennial in nature. Only
Tista, Dudya, Mujnai, Kaljani and Torsa are navigable for a short distance, and few are navigable during rainy season. River transport is uncertain and insignificant. There are 78 public ferries controlled by the Zilla Parishad of the district.

**The Road system**

The road network is in a good condition within the district. The roads are also improving in Eastern and Western Duars. They are linked by bridges over the rivers. Road communication is the main means of transport. State highway connects the district Head-quarters with Alipurduar, Cooch Behar, Bhutan etc. All the thirteen block Head-quarters are connected either by State highways or metal roads. Distant places like Delhi, Patna, Lucknow, Calcutta, Gauhati etc. are connected by National Highways. The length of the roads in the district is 1644 kms of which P.W.D. Roads are 891 km, Zilla Parishad Roads are 634 kms, and Municipal Roads are 119 kms. These are the figures of the roads maintained by P.W.D. and other local bodies.
Transportation of tea from a factory

Transportation of Logs
Table No.40  Road maintained by Different Organisation
(in km.)

<table>
<thead>
<tr>
<th>Year</th>
<th>P.W.D.</th>
<th>Local Bodies</th>
<th>Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meta-</td>
<td>Un-Meta-</td>
<td>Meta-</td>
</tr>
<tr>
<td></td>
<td>lled</td>
<td>lled</td>
<td>lled</td>
</tr>
<tr>
<td>1978-79</td>
<td>969.75</td>
<td>114.31</td>
<td>255.11</td>
</tr>
<tr>
<td>1979-80</td>
<td>983.00</td>
<td>108.00</td>
<td>266.87</td>
</tr>
<tr>
<td>1980-81</td>
<td></td>
<td></td>
<td>164.44</td>
</tr>
</tbody>
</table>

Source: District statistical office  
Bureau of Applied Economics and  
Statistics, Govt. of West Bengal  
1983.

National Highway No.31 traversed the Western part of the  
district and finally entered Cooch Behar district after crossing  
the Mulnuddy River. National highway traverses the district from  
North Western Section near Begrakot and passes through Dam Dim,  
Mal, Chalsa, and then turns abruptly towards south with a slight  
bent towards south east and reaches Maynaguri. From here it  
runs eastward to Dhupguri and then again Northward to Gairketa.  
It turns eastward upto Birpara. From here with a sharp turn  
towards south it reaches Falakata and finally to Cooch behar  
district. In Western Duars nine roads are under the public  
works departments, and the rest are controlled by the District  
Board or by the Alipurduar local Boards. The roads which are
constructed by the public works department was to serve the interest of the tea industry. Both in eastern and western duars roads are improved and are connected by a road link with a long bridge over Toras at Hasimara at about 1956. Subsequently the Tista near Jalpaiguri town is also bridged in 1963 and thereafter approach road to connect Siliguri – Haldibari Road and Assam Access Road, i.e., National Highway 31 are constructed.

Table 41  
Motor Vehicles on Road

<table>
<thead>
<tr>
<th>Year</th>
<th>Motor Cars</th>
<th>Motor Cycles</th>
<th>Public Service Vehicles</th>
<th>Goods Vehicles</th>
<th>Trac-Trailor lor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Motor-Stage</td>
<td>Pub-Private Car Carrier Car</td>
<td>carri-carrier er</td>
</tr>
<tr>
<td>1980</td>
<td>616</td>
<td>801</td>
<td>295</td>
<td>84</td>
<td>875</td>
</tr>
<tr>
<td>1981</td>
<td>828</td>
<td>1021</td>
<td>270</td>
<td>87</td>
<td>1061</td>
</tr>
</tbody>
</table>

Source: Deputy Commissioner, Jalpaiguri.

Jalpaiguri district has a large number of routes on which different types of public service vehicles ply regularly. In the last two decades, the development of the arterial road network in the district has achieved phenomenal increase in the number of passengers who have sought to avail the facilities provided by these vehicles.
Bus Services

Presently the bus services include, stage carriages, Mini Buses, and the Buses of North Bengal State Transport Corporation are playing regularly from Jalpaiguri to Alipurduar, from Siliguri to Jalpaiguri and Siliguri to Alipurduar through various other urban and semi-urban parts of the district. There are about 19 trips going from Jalpaiguri to Alipurduar via Maynaguri, Dhupguri, Gairkata, Birpara, Madarinhat, Hashimara, Kalchini 24 trips are made from Jalpaiguri to Dhupguri of which 16 are going further upto Gairkata. 7 trips to Birpara and others are going further east ward. Some 8 buses are plying from Jalpaiguri to Chengmari, Metiali, Samsing, Nagrakata, Thaljhore, Malbazar, Mingleas, Bagramota and terminated at Kranti.

Inside the district the main communication system depends on North Bengal State Transport Corporation (NBSTC) and also on private buses operators. There are hat (Market) buses organised by private operators and taxis including station wagons. North Bengal State Transport Corporation plys its buses in 33 routes in the district. Private buses are also plying throughout the district. There are about 87 Mini buses operating here.

About 160 weekly markets are operating within the district. These are weekly or bi-weekly markets and are attended by several people living surrounding this region. The hat bus services operate regularly to these areas owing to the vastness
of the markets. The hat bus services are exclusively run for the traders and buyers of these markets. With the permission of the Regional Transport Authority, these buses could ply from their notified garages to particular hats. They are not allowed to take passengers from midways. RTA allotted 90 buses to ply in the different hats of the district. Though, the number of the buses are not adequate for the increasing number of vendors and other traders of the district as a result of which overcrowding and rooftop travelling are increasing day-by-day, specially on sundays which is a traditional Hat day.

Private taxis are also operating in the district. There are about 300 taxis including 10 station wagons running in this district. These taxis are usually plying from Jalpaiguri town to Siliguri and Bagdogra and to Haldibari (Cooch Behar) from Jalpaiguri. Taxi stand is situated in Kadamtala in Jalpaiguri Town. Many other places are there like, Maynaguri, Gaikata, Banarhat, Mal Birpara, Falakata, Hasimara, Kalchini and in Alipurduar, taxis are available from these places.

Air Service

At present there is no direct air service to Jalpaiguri district. Bagdogra air terminal caters to the needs of the people who are taking air service. Recently Indian Airlines have introduced air service facilities to Malda, and West Dinajpur. The Air lines also have the proposal to extend
air service to Jalpaiguri district in near future. Previously, there were two air strips at Amleri Falakata and Panga respectively. These air strips were long discarded and the private air services withdrawn. It is quite possible that the Indian Air lines might revive one of the air strips because of their locational advantages and introduce air services for the benefit of people of Jalpaiguri.

**Power**

Before the introduction of Chukha Hydel project, electricity was supplied by the State Electricity Board. This was the main source of power. Electricity is generated in Jaldhaka Hydel Project situated within Darjeeling district on the Jaldhaka River. The present demand load of the district is 37.5 MVA. The sources of West Bengal State Electricity Board reveal that 1x3 MVA transformer will be augmented into 1x5 MVA at Mohitnagar 33/11KV substation, which is very close to Jalpaiguri town. It is also known that 1x1.5 M.V.A. Transformer will be augmented 1x3 MVA at Maynaguri 33/11KV substation together with 1x3 MVA Transformer to 2.5 MVA at Chalsa 66/11 KV substation.

There are 3 Diesel stations situated at different points of the district. Jalpaiguri Diesel Station, Cooch Behar Diesel Station and Small diesel stations at Mal and Birpara. The voltage supplied by these stations are very low. The bulk of the power supplied from different sources of West Bengal State Electricity Board in the district is consumed for domestic uses. The monthly generating capacity of Jalpaiguri diesel
station is 1169 KW, Mal 357 KW, Birpara 669 KW, and the supply from Cooch Behar Diesel Station situated in the Cooch Behar district is 840 KW. The total capacity of these centers is altogether 3.04 MW. Out of 744 villages situated within the district, 500 villages have been covered by electric power so far. Most of the tea gardens in the district have their own power generating plants.

Now, Jalpaiguri district has started receiving supply of power from Chukha installed in Bhutan over Maidakriver. National Hydel Power Corporation (NHPC) installed Chukha hydel Plant in Bhutan in 1982 having a total installed capacity of generating 300 MW of electricity of which 30 MW is to be supplied to Jalpaiguri district. For this purpose sub-stations have already been setup in Birpara, Siliguri and Falakata. The full load of Chukha power could not be supplied to the district from the substation as the overhead transmission lines in different parts of the district do not have the strength to transmit full power to the district and require replacement which is likely to involve heavy investment.

Finance:
The main financial agencies operating in the district are the commercial banks, the co-operative banks, Post offices, Life insurance corporation and a large number of money lenders. But majority of urban centers are getting bank facilities but the same facilities are not extended to rural areas as much as
it should have been. The Co-operative credit societies operate in some of the rural areas but the whole structure of the co-operative credit Society is not in good shape rather in a State of disorganised condition.

Jalpaiguri district central co-operative Bank functions in Sader-Division with 187 numbers of PACS and West Bengal State Co-operative Bank, functions in Alipurduar sub-division with 30 units of PACS. Most of them are not functioning well and the co-operative Bank suffers from paucity of fund. The govt. has added 8 units of PACS to the Leading Bank of the district, i.e. Central Bank of India. About 6 Lamps are operating in the district out of which 3 of these are in Sader Sub-division and the rest are working in Alipurduar Sub-division.

In addition, there is one F & B. at Jatemwar under CADP organised by the leading bank of the district.

About 8,74,872 acres or 3,54,199 hectare of land is under crop production in the district. The main crops produced in the district are Aus, HYV and Aus local, Aman HYV and Aman local Jute and Wheat. Only 5% of the land is under irrigation. Low inheritance capacity of the soil to produce crops, resulting low yield, general apathy of the cultivators to use chemical fertiliser, pesticide and others, due to inadequate knowledge about improved method of farming resulting incapability to generate adequate surplus to take care of the repayment schedule of the financial institutions.
Table: 42 The Scale of Finance for Principal Crops.

<table>
<thead>
<tr>
<th>Name of Crop</th>
<th>Total Acreage Under Cultivation (in Acre)</th>
<th>Scale of Finance per Acre (Rs.)</th>
<th>Total Cost (in 1,000 Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AUS H.Y.V.</td>
<td>49,457</td>
<td>420</td>
<td>20,771</td>
</tr>
<tr>
<td>2. AUS Local</td>
<td>1,33,948</td>
<td>250</td>
<td>33,487</td>
</tr>
<tr>
<td>3. Jute</td>
<td>62,821</td>
<td>500</td>
<td>31,410</td>
</tr>
<tr>
<td>4. Aman H.Y.V</td>
<td>54,074</td>
<td>390</td>
<td>21,088</td>
</tr>
<tr>
<td>5. Aman Local</td>
<td>3,60,742</td>
<td>250</td>
<td>90,040</td>
</tr>
<tr>
<td>6. Wheat</td>
<td>80,041</td>
<td>470</td>
<td>37,618</td>
</tr>
</tbody>
</table>

The cost of cultivation is calculated on the basis that these crops are grown in unirrigated condition. Irrigated condition will impose a bit of cost, though this will not affect the total estimated credit of 23,44,14,000. Some of the farmers will meet their requirements from their own resources; self involved labour cost will be deducted and not all the farmers would go in for the recommended doses of fertilizers and pesticides. Banks have provided 50% of the total estimated credit as it needed, i.e. Rs. 11,72,000.00 p.

Irrigation

Banks have tried to lay emphasis on small and minor irrigation schemes instead of major irrigation projects, such as Deep Tube Wells etc. The figures below indicate the different sources and existing position of irrigation sources of the district.

<table>
<thead>
<tr>
<th>S.T.W.</th>
<th>Pumpset without shallow Tuba Well</th>
<th>S.T.W. without Pumpset</th>
<th>R.L.I. Dug Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shallow Tuba Wells with pump set</td>
<td>1014</td>
<td>527</td>
<td>1000</td>
</tr>
</tbody>
</table>
To explore the possibility of new irrigation channels the State Water Board conducted a potentiality survey. The blocks covered by the team are (1) Sadar (2) Rajgunj (3) Maynaguri (4) Dhupguri (5) Alipurduar I and (6) Alipurduar II. Considering the requirement and the past growth, a special emphasis has been given on ring wells, R.L.I. and Irrigation tanks of this district. Installation of pumpset is being restricted due to power crisis. So the suggestion has been made that the financial assistance for minor irrigation may on the above mentioned items may be given top priority.

Table 43 Financial Assistance for minor irrigation scheme

<table>
<thead>
<tr>
<th>Ham</th>
<th>Unit cost (in Rs)</th>
<th>Subsidy of credit required</th>
<th>No. of units</th>
<th>Total credit (in lacs)</th>
<th>Yearwise Break-up of total credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1980</td>
</tr>
<tr>
<td>STW</td>
<td>2500</td>
<td>625</td>
<td>1875</td>
<td>1522</td>
<td>28.54</td>
</tr>
<tr>
<td>RLI</td>
<td>120000</td>
<td>20000</td>
<td>100000</td>
<td>47</td>
<td>47.00</td>
</tr>
<tr>
<td>Irrigation Tank</td>
<td>6500</td>
<td>1500</td>
<td>5000</td>
<td>630</td>
<td>31.50</td>
</tr>
<tr>
<td>Ring well 4&quot;(ft) diam.</td>
<td>1600</td>
<td>400</td>
<td>1200</td>
<td>310</td>
<td>3.72</td>
</tr>
<tr>
<td>Diesel pumpset (5 to 6 H.P)</td>
<td>5350</td>
<td>350</td>
<td>4000</td>
<td>1425</td>
<td>57.00</td>
</tr>
</tbody>
</table>

Source: Lead Bank Survey Report.
Commercial Banks

During recent years, commercial banks are playing a vital role in the development of rural economy. Now as many as eight Nationalised banks viz. Central Bank of India (CBI), Allahabad Bank, State Bank of India (SBI), United Commercial Bank (UCo), United Bank of India (U.B.I), Indian Bank, Bank of India, and the three R.R.B branches are operating in the district. About 50 branches are located within the district. Some more branches are coming up soon.

Market

The main importing item of the district are rice, oils, species, wheat, sugar, iron and steel, Cement, Coal etc. Rice is carried from West Dinajpur, Siliguri and also from Nepal. The total quantity imported annually is about 10,000 tons. The total production of the district is 294.4 thousand tons. About 4 thousand tons of different kinds of pulses are imported annually from Bihar and U.P. The total demand for pulses stands at 10 thousand tons; the district produces about 6.0 thousand tons of pulses annually. Table potato, seed potato, wheat and edible oils are also imported from Darjeeling, Bihar, Assam and U.P. The approximate value of the imports is about 15 crores per year, (Fig. 29).

The major exports from the district are tea, timber tobacco, jute and oranges. The total marketable surplus of jute is estimated to be 314.9 thousand bales of 180 kg. each. Jute and oranges are exported to Calcutta area only, while tobacco is exported to Assam (30%), Calcutta (40%) and Orissa (30%) by road.
The imports into the district are mainly financed through institutional credits. The centres of import trade in the district are the two Municipal towns which are well served by banking institution.

The export trade of the district however, does not receive adequate assistance from financial institutions. The bulk of the trade is financed by the money lenders. The Co-operative marketing societies have since made some progress in this field.

There are 18 marketing Co-operative Societies in the district.

There are about 160 hats operating throughout the district, out of which 'A' class constitutes seven hats, 'B' class 123 and the balance falls under 'C' class. The markets under Rajganj Police station have been brought out under Market regulation Act.

Conclusion

The lack of irrigation facilities is an impediment to the intensive cultivation. The farmers are absolutely dependent upon the monsoon. The district is dependent on the sources of water from wells, tanks and canals. The main hurdle in sinking shallow tube well is the presence of underground boulders. Further the Sandy Soil stands in the way of deep tubewells and therefore it fails to cover long areas. Conservative ideas of cultivation stand in the way of accepting the improved method of farming. The efforts of the Government to educate the farmers to accept the modern techniques of cultivation have started yielding results. The availability of agricultural inputs is
unsatisfactory. The villages do not have the sale depots of the inputs and the farmers have to traverse a long way to the towns for receiving necessary inputs.

The financial agencies that operate in the district in giving the credit facilities to the farmers are the primary service Co-operative Societies, the district Central Co-operative Bank, the Central Co-operative Land Mortgage Bank and the Commercial Banks. But these agencies do not have sufficient fund with them to meet the credit requirement of the farmers. Only Land Mortgage Banks provide long term loan to the farmers. The contribution of Commercial Banks to the Agricultural Sector has so far been of little significance. They have just entered in this field. They are trying to evolve appropriate operational techniques and it is expected that the Commercial Banks will be in a position to play a vital role in the institutional agricultural loan operation in the district very soon. Development of institutional credit for agriculture is essential to protect the farmers from being exploited by the money lenders. Committees have been set up with the representatives of the Commercial Banks and the Government departments to evolve the principles of agricultural loan operations in the district.

The farmers face a lot of difficulty in marketing their produce due to transport problem. They are either compelled to sell their produce in the village at a low price or to incur huge expenditure on transport to bring their products to the nearest
market for sale. In both the cases, the farmers receive very low net price for their products.

Jalpaiguri district is considered as one of the most backward districts of West Bengal. The economy of the district is mainly based on agriculture. But the capital output ratio in agriculture is low and the district is deficient in food grain. The scope for extending the areas under cultivation is limited and the attempts are being made for development of industries in the district to create non-agricultural employment opportunities. But agricultural progress is normally a prerequisite for industrial development. The development of agriculture is essential for the movement of economy from a condition of stagnation to one/sustained growth.
REFERENCES


- Assistant Engineer, Jalpaiguri Construction Sub-division P.W. (Roads) department, Govt. of West Bengal.


- Directorate of Agriculture Marketing, Govt. of West Bengal.

- J. F. Grunning - Eastern Bengal and Assam District Gazetteers, Jalpaiguri, Dist, Allahabad.


- M. R. Choudhuri - Power Resources of India.


- Rural Credit follow-up Survey, 1956-57. Reserve Bank of India, Bombay.

- West Bengal State Electricity Board, Diamond Harbour Road, Calcutta.