CHAPTER - VIII

INDUSTRIAL GROWTH POTENTIAL OF THE DISTRICT

Introduction

The district of Jalpaiguri is considered to be a backward area. The economy of the district is mainly based on agriculture. But the output ratio in agriculture is low and the district is deficient in foodgrains. Out of 6245 sq. km, of the total land, 4.46% is only irrigated. So the scope for bringing more land under cultivation is limited. The development of agriculture is essential for the improvement of the economy from a position of stagnation to a point of sustained growth. The climate of the district is favourable, but implementation of various projects relating to modern improved methods of agriculture is tardy.

Tista Barrage Project

The Tista Barrage Project was prepared by the Government of West Bengal. This is the largest irrigation project in West Bengal. This project was approved by State Planning Board as far back as in 1974 and the work of the Project was formally undertaken in the same year. Since then more than a decade has passed yet the barrage is not complete. The estimated cost of the Barrage will be around Rs.300 crores, when completed. Upto 31st March 1986, Rs.186 crores were already
spent on the project. The main objective of the Barrage is to provide surface water for the irrigation of land for the 5 North Bengal districts. The salient features of the project are (1) facilities of irrigation for the cultivation of land (2) partial control of flood (3) generation of hydro-electric power and the creation of facilities for navigation.

Gazoldoba, a village in Jalpaiguri district only 20 kms. away from Tista Barrage inhabited by 2000 villagers, solely dependent upon and associated with agriculture; are disappointed by the slow-progress of the Barrage work, though they have sold away their ancestral land property at a throw-away price with the expectation of the flow of surface water for the irrigation of their lands.

Agricultural Possibilities

According to plan, the possibility of raising double or triple crops is there on the 25% of the land of western Duars. The estimated aman crop production will cover a land measuring 14 lacks and 82 thousand acres, aush paddy 5 lacks and 70 thousand acres, Rabi crops 4 lacks 56 thousand acres and sugar cane cultivation 1 lakh and 14 thousand acres in North-Bengal. The total crop produced before the irrigation is worth Rs.141 crores and 45 lacks and after the irrigation, the crop produced will be worth Rs.4,546 crores and 52 lacks. The construction
work in the first phase is continuing. It is expected that the irrigation work will be started from the year 1987.

**Irrigation**

A trial irrigation has been inaugurated in January '87. This will initially cover 1000 acres in the Rajgunj Police Station of Jalpaiguri district. This will be increased to 10,000 acres this year. In the vicinity of this Tista Barrage four artificial water falls had been constructed to generate power. This generating station will generate 67.5 MW of power soon. The expenditure incurred so far on the project was Rs.200 crores.

**Generation of Hydropower**

Tista has also potential to generate hydropower and its tributaries have considerable potential for the generation of hydro electricity. The water head created by the barrage at Tista is potent enough to produce hydropower. This would add to the potential of the Tista barrage which has already envisaged for hydro electricity.

A report of Power Planning Committee, while studying some of the characteristic features of the Himalayan rivers in North Bengal observed that it would be possible to utilise the drop in water levels in a series of cascading and minicanal
drop schemes as on the Tista, Jaldhaka, Torsa, Raidak, and Sankosh also offered such potentiality.

Of all the rivers mentioned here the Raidak has a significant potential for generation of hydel power. Entering the district from Bhutan, the river splits into two channels with enough gradient in both to provide a caseading series for power plants. The Raidak is already being harnessed by Bhutan for Power generation in the Chukha stage 1 whose ultimate capacity is conceived by the Bhutan authorities was of the order of 2,000 M.W. The hills in the north of the district also offer ample opportunity for setting up hydel units with small capacities.

The agricultural development is the pre-requisites for industrial growth. If the above mentioned irrigation facilities rendered by the Tista Project and also by other projects will certainly increase the agricultural activities. Rising agricultural productivity will raise agricultural income and thereby it will create rural purchasing power which is needed to buy industrial goods and will also make contributions to the general economic development of the district.

Tea industry is the only large scale organised industry in the district. Other industries are related to small scale and cottage industries. The scope for developing other
industries is immense in this district. There is a vast expansion of forest which directly serves the people with fuel, fodder and timber. Proper exploitation of these resources would have provided a wide scope for the development of wood based and other forest based industries within the district. But, indiscriminate felling of trees and rampant theft of forest products may soon lead to denudation of forests.

**Increasing Vandalism in Forest**

The illegal trade is flourishing day by day. The trees have been cut and felled and made into logs for easy despatch. These logs are transported out of the district to far away places by trucks or railway wagons. The vast foot-hill forests of Duars and Terai abound in valuable timber such as Sal, Segun, Sishu, Siris, etc. The forest of Baikunthapur within this district is a target for these illegal traders. A large amount of felled timber has been discovered deep inside the dense Baikunthapur forest but it could not be recovered because of the terrain pattern, which is interspersed with streams and rivulets and lack of manpower.

The value of the timber worth Rs. 50 lakhs had been carried out of the district during 1985-86. Another threat being that the firewood sent from forest to tea gardens, burning ghat, and municipalities at subsidised rates was
finding its way to railway stations for the despatch of this elsewhere. According to one estimate the tea gardens were getting only about one-third of their requirement of firewood. It is a very lucrative business as the market price of firewood is said to be about ten times the subsidised price at which the gardens and burning ghats get it. These have mostly been sold in the open market, fetching prices which are 150 to 200 percent more than the subsidised rates. About 5,000 metric tonnes of firewood had been despatched by wagons between January and March 1986, through the railway stations of New Jalpaiguri, Naxalbari, Rangapani, Bagdogra and Matigara. It is suspected that valuable species have also been transported along with the timber.

The ultimate result of this has not only been a colossal loss for the district in terms of revenue and lawful recipients of subsidised firewood being deprived of it but also the aggravation of an ecological crisis. The Government has now undertaken a drive to educate the forest fringe villagers about the disastrous consequences of deforestation through the Panchayats there.

Supply of Firewood to the Tea Gardens Workers

The recorded accounts of the tea industry at its rudimentary stage as far back in 1830's reveal that the
deep dense forests comprising of Sal, Segun and other valuable trees stood as an impediment to the pioneers of the tea industry for the reclamation of lands for the cultivation in Duars. This impenetrable forests with multiferious varieties of trees then posed no problem whatsoever for the requirement of the tea industry in this region for tea chest as packing material and firewood to the workers as fuel for cooking. Actually the abundance of timber and firewood contributed to a large extent to the gradual development of the growth of tea industry. But with the passage of time indiscriminate felling of trees, and the illegal trade in timber caused serious problems not only to the tea industry in this region but also became the effective cause for ecological imbalance.

The denudation of forests has created such a problem that the conservation of forest and fuel has become the crying need of the hour and it is the avowed policy of both the central and state governments to embark upon the scheme of afforestation for the maintenance of ecological balance and to cater to the needs of tea industry of this region.

The industry in Jalpaiguri has a contractual obligation to supply firewood to its workers free of cost, which is obtained by the industry from the Government at a subsidised rate. The requirement of the industry has to be procured from the forest coupe allotted by the Government to the tea estates.
But unfortunately the Govt. fails to supply the total requirement of the industry. Forest sources can now only meet 30% of the requirements. The paucity of firewood puts the management in a piquant situation. Inadequate supply of firewood to the workmen of the estates often creates tensions between the management and labour leading to labour unrest, resulting in go-slow and the loss of production. To resolve this problem, managements of tea estates resort to payment of cash compensation in lieu of firewood. But this ready method of resolving this issue lands the management into other problems. The ready money paid (in lieu of firewood) is often spent on alcohol causing absenteeism, affecting production adversely. It is observed that to meet the requirement of firewood for cooking, large scale felling of shade trees expose the tea bushes to harmful consequences. Rarely the workers use this ready money for the purchase of firewood for which it is given. Should the management decide upon the purchase of firewood in open market where the rates of firewood are exorbitant and the open market operation erodes the depleted resources of the tea estates further. The problem, thus remains as formidable as ever.

Solution

Partial solution to this problem lies in growing firewood plantation on the unutilised lands available within the tea grant lease after making necessary provisions for the retention of lands for ancillary purposes. It has been estimated that only
18% land or approximately 11,747 hectares are available for the growth of firewood plantation provided the chunks of lands on which firewood would be planted does not require any application of fertiliser and irrigation, for this will render the project uneconomic. And the fast growing firewood should give mean annual increments of 15 metric tonnes per hectares. On the basis of total number of workers engaged in the tea plantation industry in Dooars, 74,000 households are entitled to firewood at the rate of 6.5 cubic metres and on this, the total requirement works out to be 4,81,000 cubic metres of which 30% only is procured from the forest department and the remaining balance of 3,36,700 cubic metres or 3.4 lakh million tonnes falls short of requirement. Let us now turn to examine the requirement of the area for the growth of firewood plantation on the basis of the shortfall indicated above. The standard norms of rotational block plantation spacing 8' x 8' containing 1600 plants per hectare will yield 150 metric tonnes over a period of 10 years and on the basis of this calculation the area required, will be 22,670 hectare over a period of 10 years.

The standard investment pattern for the rotational block plantation per hectare works out to be Rs.3,800/- over a period of 3 years for the preparation of land and raising of nursery, creation and maintenance and from the fourth year, the project will require no further investment.
If this project is adopted in all the available lands in 11,747 hectares which comprise nearly 50% of the total required area of 22,670 hectares it will require the industry to invest Rs.9.96 lakhs for a period of 3 years which will yield 1.76 m. tonnes of firewood within a period of 10 years. The minimum cost of 1.76 tonnes of firewood in the open market works out to be Rs.211.2 lakhs. The project for fast growing firewood if adopted seriously on the unutilised available lands within the tea grant lease in Dooars will secure a savings for the industry to the tune of Rs.201.24 lakhs for a period of 10 years, which is indeed a formidable amount in these days of cost escalation. It will to a large extent resolve the problem for the supply of firewood to workers, give a forest cover to the tea estates and put a check to the denudation of forest which is responsible for ecological imbalance.

Supply of Plywood for Teachest

Simultaneously an age long use of wooden tea chest, which is very much the part of the industry brings another threat upon the conservation of forests. Traditionally, the use of wooden chest has earned a reputation as a product container of tea industry. The supply of chest is already strained owing to declining availability of raw-materials in the country. The ever expanding growth of the production has brought about a situation, in which, the tea chest should be regarded as an agent of deforestation.
The Tea industry of Jalpaiguri district produces 120 million kgs. of tea which is 18% of the total production of tea in India. The total requirement of timber for the wooden tea chest as product container is 11,070 tonnes and the total forest area required for the growth of such timber comes to 830 hectares annually. Because of the dwindling forest resources, its price as packing material is steeply increasing and with the passage of time, it will become further expensive. The continuing search for innovation has led to the use of polylined jute bags for packing C.T.C. tea for domestic market. But this substitute for conventional tea chest is fraught with certain disadvantages as the tea absorbs moisture and loses its aroma.

Substitute for Plywood Chest

Considering the disadvantages of polylined jute bag as a substitute packaging material, the use of paper sacks as an alternative packaging can be introduced. Paper sacks is perhaps the best substitute for tea chest and a number of major tea producing countries are using paper sacks as packaging materials. Kenya and Malaya regularly use paper sacks for exporting their teas. Srilanka, also, has recently introduced paper sacks for its export produce. It is known that London Auction Centre has accepted paper sacks as substitute for plywood chest. If paper can be used in future by the industry as substitute for tea chest, it will certainly lead to the conservation of costly
timber in our forests which is most desirable in view of the fast dwindling forest resources.

The paper sack is comparatively much cheaper than plywood chest. It offers a huge savings when compared with increasing cost for plywood tea chest. The cost of aluminium foil lining paper sack, would be Rs. 35/- each whereas the expected price of plywood chest would cost Rs. 55/- each in near future.

Potentiality for small scale and other footloose industry

The scope to develop the small scale industries based on the available raw materials as well as footloose industries is immense. New industrial units are opening up both from public and private sectors within the district. Hindustan Lever Limited, and Bata India Limited have proposed to set up manufacturing units at the industrial growth centre at Ramnagar near Jalpaiguri town.

The West Bengal Industrial Infrastructure Development Corporation (WBIIDC) has already started work on land and other infrastructure development on over 150 acres of land there and the setting up of units by these big companies would give a boost to the industrialisation of the district.

The prospects of setting up new medium and small industries in North Bengal, particularly in the district of Jalpaiguri, are indeed bright. The established and traditional tea industry
of Jalpaiguri district should take lead in industrialisation. North Bengal districts particularly Jalpaiguri were suffering from inadequate supply of power. But this situation will be reversed and the district will enjoy a surplus power situation with the flow of about 30 MW power from Chukha hydel project in Bhutan.

It may be mentioned here that Chukha Project will generate 368 M.W. of power and 100 MW will be given to West Bengal State Electricity Board for five North Bengal districts. The receiving centre for chukha power for eventual distribution to the State system was nearing completion and the power will start flowing to Jalpaiguri and other North Bengal districts from the third quarter of 1986.

With the flow of adequate power to the Jalpaiguri district it is hoped that the trading community should come forward to acquaint themselves with district plans drawn up by the various district industries centres and explore the avenues to enter into manufacturing units. North Bengal, particularly Jalpaiguri district grows plenty of Mango, Pineapple, ginger, jute, besides tea and timber. But they could not have been exploited properly so far, due to lack of proper transportation system and inadequate power. The lack of skilled man power is also another factor standing in the way of exploiting these resources. It is suggested
that a technical training institute should be set up in this district. It is also suggested that the co-operative should also be set up for the exploitation of the resources, safeguarding the interest of both labour and entrepreneurs.

Already, there are three medium scale industries established so far and a few are on the point of production. An oxygen plant having a project cost of around ₹1.5 crores to manufacture 65 metre cunes of industrial oxygen an hour, is expected to go in for production within a few days. Industrial oxygen to be manufactured by this company would be marketed to the Railways, Defence establishments, power generating plants and automobile repairing shops. Both the West Bengal Industrial Development Corporation and West Bengal Financial Corporation have provided a loan worth ₹1 crore to this plant.

A fruit processing unit, having an annual output of ₹4 crores with the latest fruit processing technology has also been set up. The products of this company are based on the abundant supply of pineapple, orange, tomato and mango, most of which would be exported. Both the WBFC and WBIDC had sanctioned a long-term loan of ₹1.30 crores to the project cost of the company at ₹2 crores.

A medium scale company to manufacture 2 PG Cylinders will also start production soon, while a paper mill...
10 tons of paper products each day with a project cost of Rs. 60 crores is likely to be established in the industrial estate.

A new chemical based industry has been set up in collaboration of a Swedish company in the fringe of Jalpaiguri town near Tista Bridge. The finished product of this unit is synthetic foam. Synthetic foam has been used to prevent devastating fire. It is a substitute for water. One of the major facilities of this foam is also to resist the fire to spreading. Once it is applied on fire it covers the entire flame and the air can not pass through this form or there will be no contact between flame and air and automatically the fire will stop in no time. Jalpaiguri district should be proud of this single unit which is the only unit in India making synthetic foam. This unit named "Integrated fire protection Private Limited" is ready to produce 3,00,000 litres of synthetic foam when 75% of its capacity will be utilised. The main raw material being "Uniform" has been imported from Sweden. The value of fixed assets is Rs.20,00,000/-. Import substitution is 100%. Finished product is synthetic foam compounds which are of National and international specifications. The entire process of manufacturing is operated by machine. So the number of employees is not much, only 10 persons including one technician. The main consumers of this synthetic foam are the different port authorities, viz., Calcutta Port Trust, Madras Port, Delhi Airport Authority and Bombay Port, etc.
In the initial stage raw materials were entirely supplied by the Swedish company. Now attempts are made to produce raw materials indigenously. The machinery and the equipments have been designed by the foreign collaborating company but these machineries are being manufactured in India. Testing equipments had been brought from Sweden because this type of machine is not available in India.

The interest of the large-scale corporate sector in the district has given a much needed boost for speedy industrialisation in the district. Setting up of such units would not only give a toe-hold to the corporate sector in the vast consumer market in North Bengal and the north-east region but also contribute to the growth of antillary units in the district.
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