

## CHAPTER I

### INTRODUCTION :

Transport, communication and energy play an important role in the economic development of a nation like ours. Among these infrastructural ingredients, transport is a single powerful factor on which economic, social and political activities of a nation depend. Dr. R.R.Khan pointed out "It is the de facto barometer of economic, social and commercial progress which has transformed the entire world into one organised unit"<sup>1</sup>. S.K.Srivastava also wrote, "It carries ideas and inventions to the evolution of civilisation"<sup>2</sup>. In fact, the entire structure of industry and commerce rests on the well-laid foundations of transport.

It is important that helps human beings in removing this unwarranted barrier of physical flow of resources. Earlier, it was the general thinking that only manufacturing

industries, advanced agriculture and banking can develop the national economy irrespective of the growth of transport. Now the idea has been changed and the indispensability of transport has been realised in nearly all the countries of the world. Prof. Alfred Marshall wrote --- "the growth of transport industries and not manufacturing industries is the dominant economic fact of our own age"<sup>3</sup>. Mr. Callender observed in the context of development of the U.S.A, "Historians have generally failed to appreciate the importance of this factor in American development. Much more attention has been given to the growth of manufacture, to currency and the banking system; but none of these matters has exerted the tithe of the influence upon our economic growth that has come from improvements in transportation. In fact since 1815 our most conspicuous economic achievements have depended directly upon this factor". It is needless to say that the nation's transportation system is both a major component of the national economy and an important factor in shaping our life style, community development and industrial location patterns.

Of all the modes of transport i.e. Air, Shipping, ---Railways and Road Transport, the road transport suits well to the Indian context because of its flexible operations, less capital investment and easy operation in the village where the majority of the people live. It constitutes the

essential infrastructure for the growth and development. The share of road transport in passenger traffic increased at a much faster rate than that of railways. The railways accounted for 74% of the total passenger traffic carried by rail in 1950-51. The respective share declined to 41% in 1977-78. The share of road transport increased from 26% in 1950-51 to about 60% in 1977-78. The growth and relative share of rail and road transport in passenger traffic is shown below<sup>5</sup>:

Table 1 (Billion Passenger Kms)

Year	Rail	Road	Total (Rail + Road)	Percentage share Rail	Percentage share Road
1950-51	66	23	89	74	26
1955-56	62	31	93	67	33
1960-61	78	57	135	58	42
1965-66	96	95	191	50	50
1968-69	107	140	247	43	57
1970-71	118	169	287	41	59
1973-74	136	208	344	40	60
1974-75	126	219	345	37	63
1975-76	144	225	374	40	60
1976-77	164	235	399	41	59
1977-78	177	250	427	41	59

Source : Report of National Transport Policy Committee - Govt. of India - Planning Commission, p.18.

From the above table it is clear that importance of road transport is increasing overtime relative to the rail roads. Even among the rail road the importance of public sector cannot be underestimated. The following table shows the growing importance of the public sector<sup>6</sup>.

Table 1.2

Ownership Pattern of Buses by Private and Public Sector

Year	Total No. of buses	Percentage of public sector	Ownership private sector
1960-61	56792	31.6	68.4
1965-66	73175	36.2	63.8
1970-71	106349	40.0	51.0
1976-77	116939	47.9	52.1
1977-78	117449	49.5	50.5

It appears that public sector buses is as important as in the private sector if not more. However, it is not true to suggest that there is any clear-cut policy of the government regarding the transport policy. It is necessary to point out that the percentage share of transport in India's NDP over the years is increasing. It has increased steadily from 2.81 percent in 1950-51 to 5.92 per cent in 1983-84, where as the percentage share of the transport sector in the United States GNP over the same period is decreasing from 5.61 to 3.53<sup>7</sup>. In a sense, it may be said that the law of increasing return to transport sector is operating

in India but in the United States the law of diminishing return has set in. Therefore, the potentiality of transport sector in terms of contribution to NDP is still very high. When the components of transport sector in India are taken separately the percentage share of railways in NDP is more or less constant over the years where as "other means" is increasing. In the share of transport the claim of "other means" is dominant. The increasing activities of manufacturing industry have been found to have greater link in the rise in percentage share of transport by "other means" where in road transport probably plays a major role. When transport, communication and trade are taken together then the share of transport is also found to be increasing over the years. In the first Five Year Plan the share was 12.2 per cent and in the Sixth Five Year Plan it became 17 per cent. In case of the United States the share of transport, communication and trade together was 25.2 per cent in 1950 and it came down to 22.7 per cent in 1986. Though the percentage share of transport, communication and trade in the NDP is on the increasing trend, the percentage share of transport and communication in total outlay is on the decrease. In the Sixth Five Year Plan the share of transport, communication and trade was 17.6 per cent but in the same period the percentage share in plan outlay of transport and communication was 12.5 per cent. The maximum share in favour of transport and communication was allotted in

Second Five Year Plan. This clearly shows inspite of promise and potential the transport sector is not popularly given attention. At least there is no clear cut policy regarding transport<sup>8</sup>.

Dr. Dilip Halder<sup>9</sup> made an inter state comparison in India taking eight states in consideration. The States are Bihar, Gujrat, Karnataka, Maharashtra, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal. From his study it is clear that availability of highways is the second lowest in West Bengal in the eight selected industrialised states in India in terms of percentage of total road length and cost per thousand person. The availability of highways per thousand person is the highest in Tamil Nadu followed by Karnataka. The third position is occupied by Maharastra. The per cent rise of highways is maximum in Tamil Nadu, but is nil in West Bengal and Bihar during the period from 1981-82. During the same period the percentage rise in Urban roads in West Bengal is 0.08 but in Punjab it is 43.54 per cent and in Bihar it is 12.76 per cent. When all categories of roads are taken together the availability of road in West Bengal per cent wise is the second lowest and per thousand person is the lowest and in terms of growth rate also position of West Bengal is the lowest. The growth rate in West Bengal in 1982-83 is 0.02 per cent, where as in Bihar in the same period it is 0.64 per cent, while the all India average is

0.53 per cent. Regarding percentage share of transport out of total development expenditure, the share of West Bengal decreases by 2.6 per cent from Third to Seventh Plan, though this fall is not the highest because the fall of Gujrat is 3 per cent during the same period. The share of Tamil Nadu is the lowest in the Seventh Plan but the trend is increasing, whereas the trend in West Bengal from first Five Year Plan to the Seventh Five Year Plan is decreasing. The share of Maharashtra is in decreasing order but it is greater than that of West Bengal in absolute terms. In case of Tamil Nadu the allocation is in increasing order. This shows that at present transport sector in West Bengal is much more neglected than it is in Maharashtra and Tamil Nadu. But in the 1950 's the allocation of developmental expenditure in West Bengal in this sector was greater than that of Tamil Nadu and Maharashtra.

It is interesting to note that when the allocation of transport in developmental expenditure is decreasing at the All India level, the contribution of transport in national income is not decreasing and in case of West Bengal while the allocation for transport sector is falling its contribution to the SDP is not falling at the same rate. It was 5.76 per cent in 1983-84 and came down to 5.15 in 1986-87 but the rate of falling in the SDP for West Bengal is far less than the fall in the allocation for transport sector.

This shows that inspite of less priority given to the plan outlay both at the centre as well as the state level transport sector reflects high potential for economic growth and development. But this potentiality has never been exploited fully.

The railways have not progressed much in West Bengal. The declining condition of railways is nothing particular in West Bengal because railways at the all India level got relatively lesser priority in the development schemes since late sixties. In 1984-85 the percentage rise in broad gauge of West Bengal was 1.19 and in the 1985-86 it was 0.38 percent, but in 1986-87 the growth rate was nil. In terms of metre gauge there was no growth during the years. It shows in West Bengal the railways have not increased much.

Even in some areas the railways have not even penetrated. Some districts of West Bengal are "no railway district" or only a few Kms are available. Most of the districts are located in the North of West Bengal. In terms of growth of railways the northern districts are backward than the southern districts on an average. In the districts buses are the only means of conveyances. In fact buses on road are the only means of transport in the norther districts of West Bengal<sup>10</sup>.

North Bengal consists of five districts of West Bengal

State viz. Cooch Behar, Jalpaiguri, Darjeeling, Malda and West Dinajpur. It approximately covers 21625 Km. which is about 1/6th of the total area of West Bengal. It consists of different geographical regions like Himalayas, Sub-Himalayas and the plains. As per 1981 Census about 17.3 per cent population of West Bengal live in the five districts of North Bengal. The region is extremely backward whatever may be the criteria. For example, per capita income of most of the districts are lower than the average of West Bengal. 95% of the industrial labours are concentrated in the southern districts and only 5% in the northern districts. Out of five districts of North Bengal four districts are officially declared as "no-industry districts". One Km of road in this region of North Bengal is required to serve 2,266 persons on an average as against the country's average of 443 persons per Km., 720 persons per km. in the U.P., 348 persons per Km. in Maharashtra, and 328 persons per Km. in Karnataka. North Bengal region is a relatively backward area of West Bengal<sup>11</sup>.

However, North Bengal has special importance in the economic development of West Bengal. The paper, jute and fruit processing industries located in and around in Calcutta are dependent on the districts of North Bengal for the supply of raw materials. Most of the forest areas in West Bengal are located in the Himalaya and sub-Himalayas region

of North Bengal. Tea, Timber and Tobacco are the most important products of North Bengal other than the crops. It is the centre for the collection of bamboos for the paper industries of West Bengal. It is also an important fruit producing belt in the state.

The growth of population in North Bengal shows a pattern over the last thirty years (1951-81). North Bengal constituted about 15.08% in 1951, 15.88% in 1961, 16.9% in 1971 and 17.31% in 1981 of the total population of West Bengal.<sup>12</sup> But there are considerable variations in the growth of population within five districts. The influx of refugees from erstwhile East Pakistan (Now Bangladesh) after partition coupled with the emergence of new urban centre like Siliguri may be advanced as the primary reason for the rapid rise in the growth of population within these thirty years. Siliguri is a very important outlet for the industries of South Bengal. Siliguri supplies finished products to the states of Sikkim, Assam, Meghalaya, Tripura, Nagaland, Manipur and Arunachal, besides serving the entire North Bengal. Because of wide hinterland and geographical locations wholesale markets have developed at Siliguri for a variety of consumer products. Besides this, North Bengal has a number of attractive tourist Centres. The hill stations like Darjeeling, Kalimpong, Kurseong and wild life sanctuaries like Jaldhaka and Hasimara attract people from

home and abroad. In spite of all these potentialities North Bengal has remained industrially backward. The growth of urbanisation is poor compared to South Bengal. In fact about 12% of people live in the urban areas whereas in West Bengal about 29% people live in the urban Centres. West Bengal is a relatively urbanised state of India but North Bengal is not.

North Bengal is primarily an agricultural region. The major economic activity is agriculture. Agriculture is the main source of Income for 80% of population of these districts. But it is often stated that agriculture of North Bengal is highly non-remunerative and backward. It is understood from the view point of sharp rise in agricultural labourers during the inter-Census years (1971-81) among the North Bengal districts. One of the important reasons for the backwardness of agriculture is the lack of rural road and lack of rural urban integration. The most disquieting feature is that where as the growth of agricultural labourers in West Bengal as a whole was 18.98% over the decade 1971-81, the five districts of North Bengal experienced a growth rate of 65.66%. The growth rate of landless agricultural labourers in each of the five districts surpassed the State average with Cooch Behar showing a rate as high as 129.76% followed by Jalpaiguri with 105.62%. Among the districts, Darjeeling had the lowest rate of growth of

24.58%. The agricultural sector is not prosperous in North Bengal<sup>13</sup>.

There are various reasons for this backwardness, but one of the major reasons is the lack of rural and urban integration, because of absence of communication net work. The net works of rural roads are 13 Km. in Darjeeling, 33 Km. in Jalpaiguri District, 44 Km. in Cooch Behar, 101 Km. in Malda and 182 Km. in West Dinajpur. A large number of villages are not accessible by road. In Cooch Behar, for instance, only 361 villages out of 1144 villages are provided with some sort of rural roads. In-adequacy of road is one of the major reasons of the agricultural backwardness, though the area is rich with forest resources, tea, tobacco and other raw materials<sup>14</sup>.

In this context of backwardness it was suggested that the transport sector should be nationalised. It has argued that the nationalisation of transport will change the face of the economy. The development of nationalised transport was considered vital for the development of agriculture and industry. It was considered that since railways have not invested much in the area, so road transport system should be properly developed to give boost to the economy, comfort to the passengers and create opportunities for the growth of other infrastructure.

If we look back to the literature of "Growth of government" which is implied in this nationalisation, we can find certain arguments for this kind of "nationalisation" or "Growth of Government" in the transport sector<sup>15</sup>. The possible explanations of Government size stem from two quite different corruptnalisations of the states. The traditional explanation of why Governments exist is that they exist to provide public goods and to eliminate or alleviate externalities<sup>16</sup>. Let us assume that this is the only function governments perform. Each citizen can then be posited to have a demand for the public goods, which is a function of the individual's income, the relative price of public to private goods and perhaps other taste variables. If it is assumed that voting takes place using majority rule, the citizens vote directly on the government expenditure side issue and the only issue to be decided is the level of government expenditure, then we can apply Black's<sup>17</sup> medium voter theorem and write government expenditure as a function of the median voter. Under this theorem it is assumed that public sector and private sector are equally "productive" and "efficient". But what will happen if the public sector lags behind the private sector? A fair consensus exists as Buchanan<sup>18</sup> shows that "Government productivity lags private sector productivity and public sector productivity may in fact be Zero or negative". Under the circumstances of lagging productivity and loss of the

nationalised sector, the assumption that "public sector eliminates externalities" or "public sector quickens development" is not always tenable.

Several writers have criticised the view that government exists to provide public goods and alleviate externalities, arguing that this is essentially a "normative" description of government - a theory of what government ought to do — not a description of what it actually does. These writers argue that a positive theory of Government must analyse the redistribution nature of government activity. Aranson and Ordeshook (1981)<sup>19</sup> pressed the point most forcefully, emphasising that all government expenditure have a redistributive component.

But if redistribution is the primary activity of the government then some additional logical arguments are missing to explain the growth in government to the size now observed in many developing countries<sup>20</sup>. Alternatively government activity is not exclusively redistributive if the government sector suffers a huge loss which could have been avoided. Government has grown to far greater size than is necessary just to achieve redistribution<sup>21</sup>. A second set of logical difficulties besets Meltzer and Richard's<sup>22</sup> use of median voter theorem to explain the growth of government and nationalised sector. This theorem postulates a single dimensional issue space in which issues are decided

by a direct vote of the individual citizens. Outside of Switzerland no country makes much use of direct (as opposed to representative) democracy. Even in Switzerland it is not employed generally, nor are political agenda limited to single dimension tax subsidy or expenditure issue. Now it is common in economics to assume that the outcomes of a theorem hold in the real world even if the assumptions underlying the theorem are only roughly satisfied. But usually when this is done there is no alternative theorem whose assumptions better fit the conditions observed in the real world. Here this is not the case — at least in India. Theorems do not exist about what happens when issue spaces are multi-dimensional and representative democracy rather than direct democracy is used. Many of these theorems suggest that no equilibrium outcome may result. An additional conceptual difficulty surrounds Meltzer and Richard's reliance on the extension of suffrage as an explanation of the growth of government in commercial enterprises. The addition of individuals with productivity and income below median changes the identity of the median voter, making the former median voter, no longer decisive and horse off than before the extension of suffrage. Thus an extension of suffrage that would result in a median voter of lower income would never be approved under majority rule. If the size of the government is endogenous to a political process that uses majority rule

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and the median voter theorem is applicable, then the extension of suffrage cannot be endogenous to the same political system<sup>23</sup>.

Governments has grown to far greater size than is necessary, just to achieve re-distribution. If one group or a coalition of groups can make use of the democratic machinery of government to achieve a greater share of the pie, then one would think that the group or coalition ought to be able to do so in such a way as not to use up such a large fraction of the pie in bringing about the distribution. The number of programme seems much larger than just to achieve redistribution. But what happens when pie or cake to be distributed shrinks because of loss and inefficiency and *bad* management ? The redistribution argument loses much of the appeal when it is found that government sector is running at a loss<sup>24</sup>.

The redistributive theory of nationalised enterprises is basically based on two basic assumptions — (1) The government sector is running efficiently and at a profit (2) The redistributive nature is such that there is always a transfer from the rich "to the poor. This means that taxation system is mainly biased against the rich and direct taxation play a greater role in raising subsidy for the poor. This assumption may not be true if the government relies more on indirect taxation to increase the revenue. In this proportion of indirect tax to the total revenue is much larger than the direct taxes. Such

re-distribution is difficult to categories in terms of rich and poor. Indeed if all government activity can be characterised as some form of redistribution, the most salient feature of this process of redistribution is probably its lack of single directional flow. Brunner<sup>25</sup> emphasised the multi-dimensional character of redistribution process in view of the complex tax structure of the economy. Oates<sup>26</sup> has developed a theory of "fiscal illusion" in this context. He shows that "tax burden or subsidy burden is more difficult to judge the more complex in the tax structure".

It is in this context a theory has developed which shows that the "bureaucratic power as inducer of nationalised industry in the face of huge losses". The nationalised industries exist inspite of heavy losses because the preference of "individuals of the government is more important than the preference of citizens. The citizens are "loose constraints" against the political leaders and bureaucrats who pursue their own personal interests. The hypothesis of bureaucratic power has been discussed by Niskanen (1971)<sup>27</sup>, Brennan and Buchanan<sup>28</sup> (1980). Bureaucratic power stems from bureaucratic size. Growth in size than is a function of absolute size, which leads to the prediction that government grows exponentially inspite of all inefficiencies, losses and subsidies.

The citizen's role in a representative democracy is more passive than in a direct democracy and Pommershree and Schneider<sup>29</sup> (1982) work suggests that even this difference leads to a significant fillip to government size. To-day's citizen, confronted by expanded and more complex government structure must feel that he is more a passive spectator of the democratic process.

### 1.1 Purpose of the Study :

In this study we have taken the North Bengal State Transport Corporation. We have attempted to study the causes of growth of this corporation. We have analysed the "productivity" aspect of the Corporation. We have examined the "quality" and "reliability" of services. We have studied the "operational efficiency or inefficiency" of the Corporation. We have made a study of the cost-fare relationship and sources of financial losses. We have attempted to know the impact of losses on the Corporation. We have measured the deviations from the "optimum". In spite of losses the Corporation have grown in size. Is it because of "bureaucratisation" of the system? We have tried to raise questions and tried to find answers to them within the limitation of the data and scope of the study.

In spite of the continuous losses and inefficiencies the North Bengal State Transport Corporation has grown in

size. This seems to be a relentless process. In this study we have analysed why it is running at a loss. What are the factors that had to its continuous "lead management" ? But it still grows in Size, diversification and method. Perhaps the "theory of bureaucracy" may be of help to know its growth.

NBSTC came into existence as a Corporation on 15.4.1960 under the Road Transport Corporation Act 1950. Actually the origin dates back to 1945 when the Cooch Behar State started a Motor Transport Service in Cooch Behar in the month of April with fleet of 3 buses and 3 trucks under the postwar reconstruction scheme promulgated by the said government for giving road transport facilities to the general public specially to those living in the interior places where there were no railway communication. The above service was that time limited to the State of Cooch Behar with only one route in the Jalpaiguri district. Subsequently more vehicles were added and more services were introduced and extended to the Siliguri Sub-division of the Darjeeling district and to the Kissenganj in the province of Bihar. The bus services between Cooch Behar and Siliguri were patronised by the travelling public who wanted to travel by all India route. In the year 1947 of the partition of Bengal the mails of the Government of India were also carried by this organisation till the Railway link between Siliguri and Hassimara

was completed in 1950. After the merger of the Cooch Behar State with the State of West Bengal from 1.1.1950, the government of India took over control of this undertaking under Home (Transport) Department. The operation of this transport was extended to the district of West Dinajpur and Malda in the year 1956 and thereby covered all the five districts of North Bengal. It is also providing its services to the people of Murshidabad, Birbhum, Calcutta, 24-Parganas, Nadia and also in some districts of Assam and Bihar. It is the recommendation of the planning commission that where-ever road transport services are run by a state, a Corporation should be formed to provide the necessary economy and lead to a more efficient administration. In pursuance of this plan and keeping in view of the following points the North Bengal State Transport Corporation was established with the participation of the Railway Board under Home (Transport) Department vide notification no. 25/11/W.T. dated 11.4.1960 of the Government of West Bengal with effect from 15.4.1960 on which date West Bengal handed over this undertaking to the Corporation to operate their bus services in the aforesaid five districts of North Bengal. The objectives were :-

1. To give advantages to the public in trade and industries by the development of road transport in the districts of Cooch Behar, Darjeeling, Jalpaiguri, West Dinajpur and Malda in West Bengal.

2. To co-ordinate the road transport with rail transport in the said region and,
3. To improve the facilities for road transport in the said region.

#### Transport

As on 15.4.1960, the North Bengal State Corporation owns a fleet of 87 buses. The Corporation does not operate any city services. All services are "Moffusil" services. Percentage of ordinary service 45%, Express service 42% and Deluxe service 13%. The number of persons employed on 15.4.1960 was 651 and the amount of Capital contribution by State Government was 28.74 lakhs.

As on 31.3.1987, the Corporation operates in 236 routes with 37,200 route Kilometres and provides 75,728 effective kilometres daily by bus only. The number of vehicles owns 439 and the number of persons employed 4,604. It is the second biggest state transport undertaking in the State next only to Calcutta State Transport Corporation. The NBSTC has grown in size.

The proposed study is divided in the following chapters:

Chapter I is introductory in nature and presents the position of road transport in the national economy. It also spells out the objectives, methodology adopted, the historical background of North Bengal State Transport Corporation,

sources of data. So this Chapter acts as the introduction to the present study.

Chapter II deals with management and organisation of NBSTC. At first it presents the forms of organisation prevailing in India. We have studied the compositions of the NBSTC Board, its jurisdiction, organisation at Head office level, division level and depot level, number of Depots, number of buses, controlling system at Divisions and Department level.

Chapter III covers "Personnel" and "Productivity" aspects of the Corporation. It includes Man-power planning, Vehicle Staff Ratio, Staff used for 100 kms. of operation in NBSTC, Comparison Vehicle Staff Ratio with six other State transport service Corporations, Comparative statement of staff used for 100 kms. of operation with six other state transport corporations, employee's productivity in terms of kms., comparative statement of kms. operated per employee per day with six other state transport Corporations<sup>27</sup>, Comparative statement of personnel cost per km (paise) with six other STU's, Recruitment procedure, training, promotion.

Chapter IV deals with quality of services. The quality of service of a passenger road transport can be evaluated by studying various factors. We have studied incidences of accidents, comparative statement of accidents in NBSTC with six other State Transport undertakings, breakdowns in NBSTC, comparative statement of breakdowns with six other state

transport undertakings, percentage of vehicles off the road, comparative statement of vehicles off the road, percentage of total number of trips cancelled to scheduled trips, leakage in Revenue.

Chapter V devotes itself to the operational performance of the Corporation. It analyses the fleet utilisation in NBSTC, comparative statement of fleet utilisation. Vehicle utilisation in NBSTC, comparative statement of vehicle utilisation, kilometers obtained per litre of fuel in NBSTC, comparative statement of kilometers obtained per litre of fuel, total passenger carried, passenger carried per bus per day, comparative statement of passenger carried per bus per day, "occupation Ratio", comparative statement of occupation ratio, total effective kms. performed, number of routes and route kms. (scheduled), statement showing the Ratio of number of routes to number of schedules in different years, etc.

Chapter VI is divided into two sections. Section I - studies the tools for measuring the financial performance. It shows earnings per km., comparative statement of earnings per km. with six other state transport corporations, expenses per km., comparative statement of expenses per km. with six other state transport corporations, Net profit/Loss per km., comparative statement of net profit/loss per km. with six other state transport corporations, total revenue and total

cost per vehicle (on road) per day, comparative statement of total revenue on vehicle (on road) per day with six other state transport corporations, comparative statement of total cost per vehicle (on road) per day with six other state transport corporations, cost revenue Ratio, Revenue Capital Ratio etc.

Section II devotes itself to the cost fare relationship. It explains the objectives of cost analysis and cost control, classification of costs functionwise, application of multiple regression model to find out the costs responsible for huge loss, costs per km. and fare per km. etc.

Chapter VII studies the Fund Flows between the Corporation and the participating Governments and also the impact of it on the fulfilment of the objectives.

Chapter VIII deals with minimisation of cost of running a vehicle per day. We have used the linear programming method for the calculation of optimum efficiency with sensitivity analysis of the cost and requirement vectors and its deviation by the NBSTC.

Chapter IX besides suggestion, findings are made in the light of the discussions in the foregoing chapters for the operational and managerial improvements and their bearing on the present financial performance of the corporation chapterwise. In this Chapter we have tried to understand

the growth of the NBSTC in terms of bureaucratisation process".

### 1.2 Scope of Study :

We find that the public sector road transport Corporation is plagued by falling productivity and rising costs. It is an interesting problem of economic investigation to find out reasons why a public transport undertaking runs at a loss. So the present study titled as "performance and Appraisal of North Bengal State Transport Corporation" will make an assessment of the operational and financial performance of this Corporation which is a losing concern.

### 1.3 Period of Study :

Our study covers a period of not less than twenty years to get a representative picture of the working of the Corporation. The study period incidentally includes of full-term of five years of a local politician who discharged managerial functions as Chairman of the Corporation, in addition to his primary responsibility for policy formulation as Minister of Transport in the Government of West Bengal.

#### 1.4 Sources of Data :

As the study relates to a single undertaking, the published reports and the Annual Administrative Reports of the Corporation form the main source. For comparative analysis regarding performance with other sector undertakings, the performance reports compiled by the Central Institute of Road Transport (Research and Training), Pune has been consulted. Further discussions are also made with officials of the Corporation and to obtain side view of the problem faced. In addition, the Road Transport Act, Motor vehicles Act and the official records of the Corporation form an available source of information.

#### 1.5 Research Methodology :

The methodology of the present study is an empirical investigation of a micro-nature. Thus it is not a sample study. Secondly, both primary and secondary sources of data are utilised. Thirdly, the broad inference is drawn from analysis of discussions with the concerned officials.

The performance of a passenger road transport Corporation is dependent on many factors and quite a few of them fall outside the control of the organisation. As there is no accepted norms on which public sector road transport can be compared, the generally accepted methods of analysis is

suitably modified. General statistical measures average, percentages is used when the data lend themselves to such application. Various accounting and financial measures are also employed. In the last chapter we have used the Linear Programming method for the calculation of "optimum efficiency" and its deviation by the NBSTC.

An organisation's performance can be compared with own part, with the average for the period and also with that of sister undertakings at appropriate places.

#### 1.6 Limitation of data :

The data was mainly collected from Annual Administration report. But the Annual Report after 1978-79 was not published and hence details regarding the period from 1978-79 were not readily available. As the study covered a period of twenty one years, certain details regarding the earlier period were also not readily available. The personnel in the statistical section were not well equipped with the transport accounting systems and as such lot of troubles were faced in collecting the data. An important point to be noted here is that although NBSTC has become a member of the Association of State Road Transport undertakings, yet they do not send information as required by the Association regularly. This practical difficulty actually limited the greater scope of the present study.

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