

CHAPTER VI

FINANCIAL PERFORMANCE OF NORTH BENGAL STATE TRANSPORT CORPORATION AND COST-FARE RELATIONSHIP

SECTION I

FINANCIAL PERFORMANCE OF NBSTC

Finance plays an extremely crucial role in the continuity and growth of any organisation. "It is said to be the circulatory system of an enterprise making possible the needed co-operation between diverse units of activity"¹. It serves two important functions. The first one is that it is a means of assembling the funds necessary to initiate a new activity. The second one is that it provides the basis for continued operation - furnishing additional capital, covering the costs of operation and generally synchronising the various factors of a gaining enterprise"².

Peter F. Drueker, known as the father of the corporate world in the management circles, puts the economic performance first in every activity of business management. According to him, "a business management has failed if it fails to produce an economic result. It has failed if it does not supply goods and services desired by the customer at a price the customer is willing to pay. It has failed if it does not improve, or at least maintain, the wealth producing capacity of the economic resources entrusted to it. And this, whatever the economic or political structure or ideology of a society, means responsibility for profitability"³.

Financial performance is an important factor which influences the finances of the organisation. The purpose of this chapter is to analyse profits. It is better to refer certain basic issues in the context of profit such as the need for profit, whether profit is an index of efficiency, whether a public sector transport corporation should aim at making profit etc. As regards the need for profit the sayings of Garfield, J. Paul and Lovejoy, and Peter F. Drucker are as follows respectively.

"It is the prospect of which gives business the incentive to work harder, to produce more efficiently, and to experiment with new ideas which will give a competitive advantage"⁴. "Finally, there is a need for profit - otherwise none of these objectives can be attained. They

require effort, that is cost and they can be financed only out of the profits of a business. They all entail risks, they all therefore, require a profit to cover the risk of potential losses. Profit is not an objective but it is a requirement that has to be objectively determined in respect to the individual business, its strategy, its needs, and its risks"⁵.

As regards profit - an index of efficiency, there are two schools of opinions. According to G.K.SANT, "The word profit is linked with profiteering and is considered undesirable and antisocial in a socialistic economy. It should, therefore, be substituted by the word 'net income' or 'net earnings'. It will be seen from the above that the net income if not adjusted for uncontrollable factors merely represent the difference between inflow and outflow of cash and does not necessarily the efficiency of the management during the year or from year to year"⁶.

But according to S.S.Khera, "Profitability is a useful indicator of efficiency in management. That profitability should be demonstrated objectively, and in quantitative, terms such as contribution to the general welfare of the community ..."⁷.

Profits for public sector are more important since these could be ploughed back to finance its developmental

needs"⁸. The Corporations are to run on Commercial lines and the principle of "no profit no loss" is out dated in any organisation, be it a private or public service organisation like state Transport Corporations. Profit is one of the major objectives, since profit and growth go together. It helps growth and growth produces more profits"⁹.

After the discussion of the conceptual and contextual background of profit, it is considered as the profit of efficiency and the higher the profitability, the more efficient the organisation is. It is done through the use of selected financial indicators like cost per vehicle kilometre, Revenue Capital Ratio, cost Revenue Ratio, Level of Deficit, Total cost per bus per day, Total Revenue per bus per day etc.

6.1 Earnings per kilometre (Revenue) :

The earnings per vehicle km. measures the earning of the undertaking. It can be improved by increasing load factor, reducing revenue leakage, using buses of different capacity depending on traffic demand and selecting appropriate fare structure. The following table will show the earnings per vehicle kilometre of NBSTC from 1967-68 to 1987-88.

Table 6.1

Earnings per kilometre

Year	Earnings per Km. (paise)
1967-68	120.63
1968-69	120.83
1969-70	125.12
1970-71	121.44
1971-72	131.00
1972-73	115.00
1973-74	132.00
1974-75	145.60
1975-76	161.25
1976-77	157.00
1977-78	158.00
1978-79	169.00
1979-80	182.00
1981-82	203.00
1982-83	209.00
1983-84	237.00
1984-85	251.00
1985-86	280.00
1986-87	289.00
1987-88	313.00

Source : Compiled from Administrative Reports and Office Records of NBSTC, Report on performance of Nationalised State Road Transport undertakings, Pune.

The above table speaks that the revenue was 120.63 paise per kilometre at the beginning of the study period and increased to 313.00 paise by the end of the study period, recording 160.83 per cent increase during the period. The increase in paise per kilometre terms can be mainly attributed to the effect of upward revision in fares and partly to the improved operations as reflected in an increase in effective kilometres. During the first fourteen years of the study period the increase in paise per kilometre terms was rather gradual compared to the relatively steep increase during the last six years.

6.2 Comparative Statement of Earnings (Revenue) per Kilometre :

The following table will show the comparative statement of earnings per kilometre of Six Corporations including NBSTC from 1974-75 to 1986-87 :

Table 6.2

Comparative statement of earnings per kilometre (paise)

Year	PRTC	APSRTC	Gujrat SRTC	Rajasthan SRTC	Kerala SRTC	NBSTC
1974-75	145.94	184.65	178.93	140.93	160.40	145.60
1975-76	149.89	196.91	202.61	150.00	172.94	161.25
1976-77	155.66	205.98	217.55	166.00	199.20	157.00

contd ...

Table 6.2 contd ...

1977-78	168.30	208.18	223.58	173.00	209.90	158.00
1978-79	180.14	220.07	229.57	199.00	222.50	169.00
1979-80	184.40	232.59	239.02	204.00	235.30	182.00
1980-81	203.58	271.30	248.25	227.08	272.10	203.00
1981-82	232.68	322.67	272.50	249.09	323.50	215.00
1982-83	244.00	352.00	349.60	278.00	371.90	209.00
1983-84	249.40	381.50	367.50	413.00	358.10	237.00
1984-85	261.90	384.50	360.20	420.00	383.53	251.00
1985-86	262.20	427.20	364.40	440.00	442.00	280.00
1986-87	NA	422.90	376.20	456.00	467.00	285.00

Source : Compiled from Report on the performance of Nationalised State Road Transport undertakings, Pune.

The above table reveals that NBSTC revenue earnings to be the lowest amongst all the Corporations. Its revenue earnings per kilometre have not increased as rapidly as the other Corporations' earnings have during the period of comparison except PRTC. However, the NBSTC performance is equally good or bad and does not come anywhere near the undertakings like Andhra Pradesh SRTC and Rajasthan SRTC.

6.3 Cost Per Vehicle Kilometre :

The cost per vehicle kilometre (CPKM) measures the economy achieved in operation. It means the operation or

providing services to the public per effective kilometre.

The following table will show the cost per vehicle kilometre of NBSTC from 1967-68 to 1986-87.

Table 6.3

Expenses/Cost per vehicle km. of NBSTC from 1967-68 to 1986-87

Year	Cost per effective vehicle (Km.)
1967-68	124.55
1968-69	138.69
1969-70	149.96
1970-71	153.45
1971-72	160.00
1972-73	154.00
1973-74	180.00
1974-75	221.30
1975-76	149.30
1976-77	260.00
1977-78	278.00
1978-79	293.50
1979-80	318.30
1980-81	385.00
1981-82	447.00
1982-83	486.00
1983-84	NA

contd ...

Table 6.3 contd ...

1984-85	469.00
1985-86	522.00
1986-87	440.00
1987-88	543.00

Source : Compiled from Office Records of NBSTC.

It is seen from the above table that the costs per kilometre increased from 124.55 paise to 440.00 paise during the study period, registering a 253.27 per cent increase. This was mainly due to the effect of items like staff costs, fuel cost and motor vehicle Taxes and the general inflationary trend. The impact of such steep rise in the costs can be considered as resulting in the erosion of the margin, with resultant consequences on the finances of the organisation.

6.4 Comparative Statement of Cost Per Kilometre :

The following table will show the comparative statement of cost per km. of six Corporations including NBSTC.

Table 6.4

Comparative statement of cost per km. (paise)

Year	PRTC	APSRTC	Gujrat SRTC	Rajasthan SRTC	Kerala SRTC	NBSTC
1974-75	155.67	170.65	193.73	137.00	190.60	221.30
1975-76	173.88	190.75	210.21	153.00	195.74	149.30
1976-77	185.17	200.16	223.02	170.00	205.00	260.00
1977-78	192.95	210.85	232.69	193.00	222.00	278.00
1978-79	246.47	233.87	237.79	221.00	260.60	293.50
1979-80	251.35	252.16	249.42	235.00	273.90	318.30
1980-81	277.04	315.81	294.67	271.00	306.20	385.00
1981-82	320.73	361.15	332.22	313.00	416.70	447.00
1982-83	341.60	366.60	358.90	314.00	422.00	486.00
1983-84	390.60	390.60	376.10	407.00	439.20	NA
1984-85	431.10	380.70	416.10	400.00	463.40	469.00
1985-86	439.60	413.80	431.40	433.00	551.00	522.00
1986-87	NA	415.50	441.20	448.00	546.00	440.00

Source : Compiled from NBSTC Office Records and Report on the Performance of Nationalised State Road Transport undertakings, Pune.

The table clearly speaks that the cost per km. of NBSTC is higher than that of all the Corporations taken for comparison in each years excepting 1986-87.

6.5 Net Profit/Loss Per Km :

Net profits in Road Transport undertakings is the difference between revenue per km. and cost per km. The following table will show the profit/loss position of NBSTC over a period of 20 years of 1967-68 to 1987-88.

Table 6.5

Net Profit/Loss per km. of NBSTC (Paise)

Year	Net Profit/Loss
1967-68	(-) 3.92
1968-69	(-) 7.86
1969-70	(-) 24.84
1970-71	(-) 32.01
1971-72	(-) 29.00
1972-73	(-) 39.00
1973-74	(-) 48.00
1974-75	(-) 75.70
1975-76	(-) 88.05
1976-77	(-) 103.00
1977-78	(-) 120.00
1978-79	(-) 124.50
1979-80	(-) 136.00
1980-81	(-) 182.00
1981-82	(-) 232.00

contd ...

Table 6.5 contd ...

1982-83	(-) 277.00
1983-84	NA
1984-85	(-) 218.00
1985-86	(-) 242.00
1986-87	(-) 151.00
1987-88	(-) 230.00

Source : Calculated

The aim of every transport operator is to maximise the returns from the services offered. The returns are essential for its growth as well as operating some surplus for other sectors of the economy. J.M.Thomson is of the opinion that "under certain conditions, the ability to make profit is ... a reasonable indication of the community value of an enterprise whether it is publicly or privately owned."¹⁰

The above table clearly shows that profitability picture of NBSTC is quite dismal and the losses have been increasing and there is need for some radical steps to control the costs. The loss per km. was 3.92 (paise) on the year 1967-68 and 230 (paise) in 1987-88, recording 5,767.34% increase over the period.

6.6 Comparative Statement of Net Profit/Loss From 1974-75
(Per Km)

The following table will show the comparative statement of Net Profit/Loss per km. in terms of paise of six Corporations including NBSTC.

Table 6.6

Comparative statement of net profit/loss per km.
(paise)

Year	PRTC	APSRTC	Gujrat SRTC	Rajasthan SRTC	Kerala SRTC	NBSTC
1974-75	9.73	14.00	-14.80	3.00	-30.20	- 75.70
1975-76	24.39	6.16	-7.60	- 3.00	-22.80	- 88.05
1976-77	- 29.51	5.82	- 5.47	- 4.00	- 5.80	-103.00
1977-78	- 24.65	- 2.67	- 9.11	- 20.00	-11.80	-120.00
1978-79	- 66.33	-13.80	- 8.22	- 22.00	-38.10	-124.50
1979-80	- 66.95	-19.57	-10.40	- 31.00	-38.40	-136.30
1980-81	- 73.46	-44.51	-46.42	- 42.00	-34.10	-182.00
1981-82	- 88.05	-38.48	-59.72	- 64.00	-93.20	-232.00
1982-83	- 97.60	-14.50	- 9.30	- 36.00	-50.10	-277.00
1983-84	-141.20	- 9.10	- 8.70	6.00	-81.10	NA
1984-85	-169.20	3.8	-55.90	20.00	-79.90	-218
1985-86	-177.40	13.4	-67.00	7.00	-87.00	-242
1986-87	NA	7.4	-65.00	213.08	-79.00	-151

Source : Compiled from Report on the Performance of Nationalised SRTU, Pune.

The table depicts a dismal picture for all the State Road Transport Corporations. Worst performance comes from North Bengal State Road Transport Corporation. The second position among the worst performance belongs to PRTC. The only Corporation whose position is a bit better is APSRTC which has been able to register profits in three years out of eight.

6.7 Total Revenue and Total Cost per Vehicle Per Day (ON Road) in NBSTC

The following table will show the total Revenue and total cost of vehicle per day.

Table 6.7

Total Revenue and Total cost per vehicle per day		
Year	Total Revenue per vehicle per day (Rs.)	Total cost per vehicle per day (Rs.)
1967-68	180.82	186
1968-69	282.19	315
1969-70	197.25	235.61
1970-71	210.95	293.15
1971-72	NA	NA
1972-73	NA	NA
1973-74	NA	NA
1974-75	328.76	526.02

contd ...

Table 6.7 contd ...

1975-76	320.54	506.84
1976-77	323.28	558.90
1977-78	315.06	558.90
1978-79	339.72	594.52
1979-80	386.30	673.97
1980-81	427.39	780.82
1981-82	457.53	942.46
1982-83	441.09	1027.39
1983-84	512.32	1252.05
1984-85	506.84	1265.75
1985-86	454.79	1252.05
1986-87	602.73	1205.47

Source : Calculated

The above table speaks that the total revenue per vehicle per day was Rs. 180.82 in 1967-68 and Rs. 602.73 in 1986-87, recording an increase by 233.33 per cent while the total cost per vehicle per day was Rs. 186 in 1967-68 and Rs. 1205.47 in 1986-87 and records an increase by 548.10 per cent. It is evident that the total cost per vehicle per day is increasing at a higher rate as compared to the total revenue per vehicle per day.

6.8 Comparative Statement of Total Revenue Per Vehicle Per Day

The following table will show the comparative statement of total revenue per vehicle per day of six Corporations including NBSTC.

Table 6.8

Comparative statement of total revenue per vehicle per day

Year	PRTC	APSRTC	Gujrat SRTC	Rajasthan SRTC	Kerala SRTC	NBSTC
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1980-81	481	711	578	559	724	437
1981-82	533	831	565	914	873	467
1982-83	602	1019	1058	713	1032	449
1983-84	614	1090	1107	1040	984	514
1984-85	625	1133	1100	1109	1038	507
1985-86	612	1300	112	1168	1244	456
1986-87	NA	1275	1159	1223	1283	603

Source : Compiled from Report on the Performance of Nationalised SRTC, Pune.

For NBSTC - Calculated.

Table shows that the total revenue per vehicle per day of NBSTC is the lowest among all the Corporations. Its performance in this regard does not come anywhere near the undertakings like APSRTC, Rajasthan SRTC, Gujrat SRTC and Kerala SRTC.

6.9 Comparative Statement of Total Cost Per Vehicle Per Day :

The following table will show the comparative statement of total cost per vehicle per day of six Corporations including NBSTC.

Table 6.9

Total Cost per vehicle per day

Year	PRTC	APSRTC	Gujrat SRTC	Rajasthan SRTC	Kerala SRTC	NBSTC
1980-81	657	784	686	682	893	797
1981-82	733	956	811	1096	1124	960
1982-83	843	1066	1086	805	1208	1047
1983-84	962	1116	1133	1037	1207	1254
1984-85	1028	1122	1271	1058	1254	1267
1985-86	1025	1259	1316	1150	1503	1207
1986-87	NA	1253	1359	1201	1619	1283

Source : Report on the Performance of Nationalised SRTU, Pune.

For NBSTC - Calculated

The table speaks that worst performance regarding total cost per vehicle per day comes from Kerala SRTC. The second position and the third position amongst the worst performance belongs to Gujrat and APSRTC. The performance of NBSTC in this regard is in the fourth position.

6.10 Cost Revenue Ratio :

It measures the extent to which cost incurred are covered by the revenue. A ratio more than 100.00 indicates that the undertaking has increased a loss. The cost revenue ratio of NBSTC is shown in the following table :

Table 6.10

Cost Revenue Ratio

Year	Cost/Revenue Percentage
1967-68	103.25%
1968-69	110.88%
1969-70	120.00%
1970-71	138.28%
1971-72	125.26%
1972-73	137.00%
1973-74	139.08%
1974-75	160.00%
1975-76	157.59%
1976-77	173.42%
1977-78	177.02%
1978-79	174.39%
1979-80	174.76%
1980-81	182.50%
1981-82	205.27%
1982-83	232.82%

contd ...

Table 6.10 contd ...

1983-84	243.96%
1984-85	250.00%
1985-86	274.20%
1986-87	200.24%

Source : Calculated

The above table depicts a dismal picture of the Corporation. The ratio is always more than 100.00 and it is losing very heavily. In 1967-68 the cost revenue ratio was 103.25 per cent and in 1986-87 it has become 200.24 per cent. It means that the percentage of cost Revenue ratio has been doubled over the period of study.

6.11 Revenue Capital Ratio :

It measures the level of capital turnover. Higher the capital turnover ratio, better are the asset utilisation and financial performance. Undertaking with low investment in productive assets will have low capital turnover. The following table will show the revenue capital ratio of NBSTC.

Table 6.11

Revenue - Capital Ratio

Year	Capital	Revenue	Revenue/Capital Ratio
1967-68	129.90	123.25	94.88%
1968-69	135.90	193.45	142.34%
1969-70	198.35	155.87	78.50%
1970-71	201.35	175.94	87.29%
1971-72	286.34	190.16	66.41%
1972-73	344.91	227.24	65.88%
1973-74	377.91	261.20	69.22%
1974-75	477.85	240.96	50.42%
1975-76	644.85	283.65	43.98%
1976-77	829.45	285.66	34.56%
1977-78	1032.90	309.54	29.96%
1978-79	1360.61	371.91	27.33%
1979-80	1693.40	428.67	25.31%
1980-81	2004.10	512.14	20.44%
1981-82	NA	439.93	NA
1982-83	NA	NA	NA
1983-84	2977.69	505.50	16.97%
1984-85	3117.04	472.42	15.15%

Source : Calculated

It is evident that revenue capital ratio has come down from 94.88 per cent in 1967-68 to 15.15 per cent in the year 1984-85. The asset utilisation and financial performance are not better.

SECTION II
COST - FARE RELATIONSHIP

One of the main constituents contributing to the financial difficulties of nationalised road transport undertakings is the rigid fare structure which is not keeping pace with the increasing cost of operation. The profitability of an organisation is a function of both costs and prices, which are equally valid in the case of passenger road transport industry also. An organisation may incur loss either because costs go up, the price (fare in the case of road transport industry) remaining the same; or costs remaining the same, price/fare coming down. The second phenomenon of fare coming down is not appropriate in the case of road transport industry for reasons of elasticity of demand, for the services of monopoly rights conferred on the services and State regulation of fares¹.

B.N.Adarkar says, "If a Corporation, is to run on business principles, it should be able, interalia, to adjust its fares as costs increase unfortunately, while paying a lip services to business principles, the motor vehicles Act places all manners of obstacles in the way of these Corporations following business principle in this vital respect. The Corporations, can not, on their own, adjust their fares to match increases in costs, because the fares are controlled by the government under the provision of section 43(1)

of the motor vehicles Act"².

The price hike in fuel, oils and indeed in everything else, is too well known to need any elaboration. The costs of operation in a road transport industry and the fares charged by it are directly correlated, it is to run on sound commercial lines. This is true for every industry whether it is private sector or public sector. In fact, profits are more important for a public sector undertaking committed to obligatory social services, since these could be ploughed back to finance its development needs. On account of rise in the operational cost, the profitability of the Corporation has fallen in recent years to a very low level.

The two systems of fare are - "Flat Rate System" and "Zonal System". The Flat Rate does not depend upon the distance travelled. Long Journey Passengers are to pay at the same rate. The Zonal system is the system of charging according to which the route covered by a bus is divided into certain stages and for the distance between two stages, a uniform fare is charged. It has gained popularity in these days over and above, the two systems, sometimes the "tapering principle" is applied to the fixation of passenger fares, according to which the fare declines as the distance increases³.

The object of this Chapter is at the outset to analyse the trends in costs and costs structure so as to have an idea of the extent of increase in costs and the contribution of different items of costs. The increase in costs, either in the aggregate or in the case of individual items, could be because of one of the reasons- (a) inflation (b) operational inefficiency. (c) governmental influence. The Government influences the profitability of an organisation in a number of ways, such as taxation policy, social policy thrust on the organisation and so on⁴. After analysing the trends in costs and cost structure an analysis is made to identify the extent of increase in costs in the case of some important individual items attributable either to inflation or to inefficiency. At last a study is made on cost-fare relationship and also to see how far these can be considered as constituent with the statutory obligation to follow business principle.

6.12 Analysis of Costs and Trends in Cost Structure :

The functional classification of grouping the items by the Corporation in their published accounts has certain limitations. For instance, the staff cost, i.e. wages and salaries, are split and will appear as component parts of various items. Consequently, it will not be possible to study the total cost of personnel, for the organisation,

whether such cost is on the increase and further, whether such an increase has kept pace with the increases in respect of other items or has outstripped them and so on. Similarly, it is necessary to have an idea of the amount spent on materials like spare parts, tyres and tubes separately⁵. Hence costs grouped on the basis of nature of expenses for meaningful evaluation of the financial performance and operational economics of passenger road transport organisations. It is also necessary to analyse the operating cost critically, element by element, in order to examine cost effectiveness.

According to P.G.Pantankar, "A cost analysis will help to achieve the following objectives :-

- To get an insight into the relative significance of different cost components;
- To assess the relative degree of variations in costs components and search for causes of such variations;
- To estimate the trend in cost of operations overtime;
- To provide a comparative analysis on the basis of operational unit size and
- To forecast future operating costs"⁵.

According to nature of expenses the costs can be grouped as follows :

(a) Staff (cost of personnel) : (i) administration
(ii) traffic (iii) maintenance and repair.

(b) Cost of material : (i) fuel, (ii) lubricants;
(iii) tyres and tubes (iv) batteries (v) stores, spares
and other consumables (vi) tickets and ticket equipments.

(c) Depreciation : (i) vehicles (ii) other assets.

(d) Other overhead : (i) rent, and rates and taxes
(ii) welfare and super annuation benefits (iii) general
contingencies.

(e) Taxes : (i) registration and license fees and
(ii) passenger tax⁷.

Now the costs are analysed in absolute in the following tables bearing number 6.13 to 6.25. A study of absolute amounts of operating costs will enable us to understand the various items of costs in terms of actual amounts spent and in analysing the size of increases that took place during the period under study.

6.13 Cost of Personnel :

The following table will show the cost of personnel in absolute of NBSTC in different years.

Table 6.12

Cost of personnel (in Lakhs)

Year	Staff cost	Percentage to total cost	Percentage over 71-72
1971-72	82.22	34.46	..
1972-73	110.60	35.45	34.51
1973-74	153.60	42.09	85.81
1974-75	159.59	41.47	94.10
1975-76	168.28	37.67	104.67
1976-77	177.89	35.81	116.35
1977-78	109.72	38.29	155.07
1978-79	245.43	37.93	198.50
1979-80	298.32	39.88	262.84
1980-81	314.65	35.89	282.69
1981-82	348.19	33.11	323.48
1982-83	415.03	36.43	404.77
1983-84	547.61	44.42	566.03
1984-85	494.30	41.88	501.19
1985-86	620.00	43.81	654.07
1986-87	693.00	39.35	742.85
1987-88	697.00	39.37	747.72

Source : Provisional B/S. of NBSTC and Office Records of NBSTC.

The above table shows that the cost of personnel of NBSTC has recorded an increase over the period of seventeen

years is at 747.72 per cent. The table also reveals that there is not much variation in the percentage of staff cost to total cost. It has almost been constant around 38.66 per cent. This increase during the period may be either due to additional emoluments or due to increase in the vehicle-staff ratio or because of both.

In the personnel and productivity chapter (Chapter III), we have seen that the vehicle staff ratio has increased from 6.07 in the 1967-68 to 10.8 in 1987-88. There was no significant improvement in the man-power productivity and the staff used for 100 kms. of operation. This shows that the significant increase in the staff cost was mainly due to high-vehicle staff ratio, low manpower productivity and partly due to revised pay scales.

6.14 Cost of Material (Fuel) :

The following table will show the cost of fuel in NBSTC from 1971-72 to 1987-88.

Table 6.13

Cost of Fuel (in Lakhs)

Year	Fuel Cost	Percentage to total cost	Percentage over 71-72
1971-72	37.14	15.37	..
1972-73	50.55	16.20	36.10
1973-74	50.99	14.01	37.29
1974-75	42.66	11.03	14.85
1975-76	59.94	13.42	61.38
1976-77	57.45	13.58	81.61
1977-78	74.27	13.56	99.97
1978-79	102.25	15.85	175.30
1979-80	107.64	14.39	189.82
1980-81	155.13	17.69	317.68
1981-82	196.63	18.70	429.42
1982-83	236.85	20.79	537.72
1983-84	198.89	16.25	435.51
1984-85	172.77	14.64	365.18
1985-86	181.00	12.79	387.34
1986-87	316.00	17.94	750.83
1987-88	367.00	20.73	888.15

Source : Provisional B/S. and Office Records of NBSTC.

The second important constituent of cost is the fuel cost which is recorded an increase of 888.15 per cent over a period of 17 years. Much variation is followed in the

last three years of table (i.e. 1985-86, 1986-87 and 1987-88). In this context, it is interesting to note that Kms. obtained per litre of fuel by Gujrat State Road Transport Corporation is 4.90 in the year 1986-87 while NBSTC obtains 3.85 kms. There was also no significant improvement in the vehicle-utilisation in terms of kms. which was 209 kms. in the year 1986-87 while Gujrat State Road Transport Corporation performs 308.10 kms. in the same year. So the increase in fuel cost is not only due to increase in the cost of HSD oil but also due to operational inefficiency with regard to kms. obtained per litre of fuel and effective kms. obtained per vehicle per day.

6.15 Debt Charges :

The third dominant constituent of the cost is debt charges. The debt charges of NBSTC from 1971-72 to 1987-88 is shown in the following table :

Table 6.14

Interest on Capital and Long Term Loans : (in Lakhs)

Year	Debt charges	Percentage to total cost	Percentage over 1971-72
1971-72	19.90	8.34	..
1972-73	24.50	7.85	23.11
1973-74	36.13	9.93	81.55

Contd ...

Table 6.14 contd ...

1974-75	42.53	11.05	113.71
1975-76	45.83	10.25	130.30
1976-77	62.65	12.61	214.82
1977-78	74.47	13.60	274.82
1978-79	74.05	11.44	271.97
1979-80	114.76	15.34	467.68
1980-81	137.76	15.69	592.26
1981-82	167.73	15.94	742.85
1982-83	177.97	15.62	794.32
1983-84	216.69	17.57	988.89
1984-85	232.59	19.70	1069.29
1985-86	288.00	20.35	1347.23
1986-87	214.00	12.15	975.37
1987-88	243.00	13.72	1121.10

Source : Provisional Balance Sheet of NBSTC and Office Records of NBSTC.

The table reveals that total interest cost has increased from 19.90 lakhs in 1971-72 to Rs. 243 lakhs in 1987-88, recording 1121.10 per cent increase. This is due to considerable increase in the capital contribution and borrowings of the Corporation.

6.16 Depreciation :

The next important constituents of costs is depreciation. The amount of Depreciation of NBSTC from 1971-72 to 1987-88 is shown in the following table :

Table 5.15

Depreciation (in Lakhs)

Year	Depreciation	Percentage to total cost	Percentage over 1971-72
1971-72	18.65	7.82	..
1972-73	34.05	10.91	82.57
1973-74	30.99	8.52	66.16
1974-75	32.22	8.37	72.76
1975-76	37.05	8.29	98.65
1976-77	46.71	9.40	150.45
1977-78	53.02	9.58	184.28
1978-79	50.00	7.72	168.09
1979-80	53.02	7.09	184.28
1980-81	63.40	7.23	239.94
1981-82	96.18	9.14	415.71
1982-83	96.55	8.47	417.69
1983-84	81.79	6.63	338.55
1984-85	88.05	7.45	372.11
1985-86	98.00	6.92	425.46
1986-87	200.00	11.35	972.38
1987-88	100.00	5.64	436.19

Source : Provisional Balance Sheet and Office Records of NBSTC.

The table speaks that the cost of depreciation of NBSTC records an increase of 436.19 per cent over a period of seventeen (17) years. This is partly due to 89.60 per cent increase in the fleet strength (i.e. 279 in 1971-72 and 529 in 1987-88) and increase in the cost of fleet.

6.17 Spare Parts :

The extent of spare parts depends upon many external factors like the conditions of the road. Thus it can not be considered as strictly controllable⁸.

The following table shows the cost of spare parts of NBSTC from 1971-72 to 1987-88 :

Table 6.16

Cost of Spare parts (in lakhs)

Year	Spare parts	Percentage to total cost	Percentage over 1971-72
1971-72	22.63	9.49	..
1972-73	27.69	8.87	22.35
1973-74	26.07	7.16	15.20
1974-75	22.09	5.74	(-) 2.38
1975-76	31.54	7.06	39.37
1976-77	38.16	7.58	58.62

contd ...

Table 6.16 contd ...

1977-78	37.74	6.89	66.76
1978-79	72.09	11.14	218.55
1979-80	51.24	6.85	126.42
1980-81	78.62	8.96	247.41
1981-82	88.82	8.45	292.48
1982-83	52.88	4.64	133.67
1983-84	37.80	3.07	67.03
1984-85	23.30	1.97	2.95
1985-86	60.00	4.24	65.13
1986-87	69.00	3.91	204.90
1987-88	104.00	5.87	359.56

Source : Provisional Balance Sheet and Office Records of NBSTC.

The cost of spare part records an increase of 359.56 per cent during a period of seventeen years and the percentage of spare parts cost to total cost has come down 9.49 per cent to 5.87 per cent in 1987-88. So it has shown a consistent improvement in reducing the consumption of spares, although there is considerable room for improvement.

6.18 Cost of Tyres and Tubes :

The cost of tyres and tubes are also uncontrollable like spare parts and the extent of use depends upon many external factors like the conditions of the road. The

following table will show the cost of tyres and tubes of NBSTC from 1971-72 to 1987-88.

Table 6.17

Cost of Tyres and Tubes (in Lakhs)

Year	Tyres and Tubes cost	Percentage to total	Percentage over 1971-72
1971-72	18.78	7.9	..
1972-73	18.63	5.9	(-) 0.79
1973-74	24.59	6.7	30.77
1974-75	33.40	8.6	77.84
1975-76	39.76	8.9	111.71
1976-77	32.77	6.6	74.49
1977-78	29.50	5.3	57.08
1978-79	33.07	5.1	76.09
1979-80	43.43	5.8	131.25
1980-81	46.00	5.25	144.94
1981-82	56.85	5.40	202.71
1982-83	74.85	6.57	298.56
1983-84	48.65	3.95	159.05
1984-85	55.84	4.73	197.33
1985-86	72.00	5.08	283.38
1986-87	92.00	5.22	389.88
1987-88	97.00	5.48	416.50

Source : Provisional Balance Sheet of NBSTC and Office Records of NBSTC.

The table shows that the percentage of cost of tyres and tubes to total cost has come down from 7.9 per cent to 5.48 per cent during the period of seventeen (17) years. This decline in the cost of tyres and tubes is mainly due to better kilometres obtained per tyres.

6.19 Cost of Lubricant :

The cost of lubricant of NBSTC is shown in the following table :

Table 6.18

Cost of Lubricant (in Lakhs)

Year	Lubricants cost	Percentage to total cost	Percentage over 1971-72
1971-72	5.20	2.18	..
1972-73	7.26	2.32	39.61
1973-74	5.81	1.60	11.73
1974-75	11.11	2.88	113.55
1975-76	15.96	3.57	206.92
1976-77	15.26	3.07	193.45
1977-78	14.80	2.70	184.61
1978-79	14.70	2.27	182.69
1979-80	14.50	1.95	180.76
1980-81	15.99	1.82	207.50

contd ...

Table 6.18 contd ...

1981-82	15.60	1.48	200.00
1982-83	14.31	1.25	175.19
1983-84	13.03	1.06	150.57
1984-85	17.23	1.46	231.34

Sources : Provisional Balance Sheet of NBSTC.

This cost is showing a decline trend from the year 1976-77 and onwards except 1984-85 where it marginally high. The whole credit may go to the Maintenance and Repair Department which helps in obtaining improved kilometres per litre.

6.20 Cost of Battery :

The following table will show the cost of battery of NBSTC from 1971-72 to 1987-88.

Table 6.19

Cost of Battery (in Lakhs)

Year	Battery cost	Percentage to total	Percentage over 1971-72
1971-72	1.90	0.8	..
1972-73	1.09	0.35	- 42.63
1973-74	2.07	0.56	8.94

contd ...

Table 6.19 contd ...

1974-75	1.51	0.39	-	20.52
1975-76	.97	0.22	-	48.94
1976-77	1.03	0.20	-	45.78
1977-78	1.59	0.29	-	16.31
1978-79	1.07	0.16	-	43.58
1979-80	3.17	0.42		66.68
1980-81	4.90	0.56		157.89
1981-82	2.41	0.23		26.84
1982-83	2.48	0.21		30.52
1983-84	3.00	0.24		57.89
1984-85	3.45	0.29		81.57
1985-86	4.54	0.32		138.94
1986-87	5.29	0.30		178.42
1987-88	6.00	0.33		215.78

Source : Provisional Balance Sheet and Office Records of NBSTC.

The above table speaks that while this item generally inhibited a declining trend till 1981-82 with the exception 1980-81, it increased substantially towards the end of the study period i.e. from 1982-83 and onwards.

This sudden and rapid increase shows scope for exercising better control. The cost of battery increased by 215.78 during the period of 17 years. The cost of battery as a percentage to total cost was 0.8% in the year 1971-72

and has become 0.33% in the year 1987-88. The increasing trend in the cost of battery means it is not used and maintained in a better way and the kms. obtained from a battery is not improved.

6.21 Cost of Stores :

The following table will show the cost of stores of NBSTC from 1971-72 :

Table 6.20

Cost of Material (Stores) (in Lakhs)

Year	Cost of stores	Percentage to total	Percentage over 1971-72
1971-72	6.82	2.85%	..
1972-73	10.51	3.36%	54.10%
1973-74	5.67	1.56%	16.86%
1974-75	7.77	2.03%	13.92%
1975-76	7.04	1.57%	3.22%
1976-77	10.44	2.10%	53.07%
1977-78	9.19	1.67%	34.75%
1978-79	11.51	1.77%	68.76%
1979-80	13.83	1.85%	102.78
1980-81	15.46	1.76%	126.68
1981-82	24.26	2.30%	255.13

contd ...

Table 6.21 contd ...

1982-83	20.43	1.79	199.56
1983-84	16.5	1.32%	139.06
1984-85	16.39	1.39%	139.50

Source : Provisional Balance Sheet of NBSTC.

The above table speaks that the cost of stores is increased from Rs. 6.92 lakhs in 1971-72 to Rs. 16.39 lakhs in 1984-85 in absolute. The cost of stores as percentage to total cost has been decreased from 2.85% in 1971-72 to 1.38% in 1984-85. This cost has registered an increase by 139.50% during the study period i.e. from 1971-72 to 1984-85.

6.22 Change in Cost Due to Change in Tax Rates :

The following table will show the tax cost of NBSTC :

Table 6.21

Tax Cost

Year	Tax cost (in lakhs)	Percentage to total cost	Percentage over 1971-72
1971-72	6.85	2.87	..
1972-73	8.49	2.72	23.94
1973-74	8.12	2.23	18.54
1974-75	9.51	2.50	40.29

contd ...

Table 6.21 contd ...

1975-76	9.41	2.11	37.37
1976-77	9.49	1.91	38.54
1977-78	10.69	1.95	56.05
1978-79	9.84	1.52	43.64
1979-80	9.00	1.27	31.38
1980-81	9.60	1.09	40.14
1981-82	11.00	1.04	60.58
1982-83	12.5	1.09	82.48
1983-84	14.00	1.13	104.37
1984-85	16.00	1.35	133.58

Source : Provisional Balance Sheet of NBSTC.

The tax cost is increased by 133.58% during the period from 1971-72 to 1984-85. This is partly due to increase in the fleet strength and seating capacity besides the upward revision of motor vehicle Tax. It is interesting to note that the tax cost in NBSTC is very low as compared to other State Transport Corporations (e.g. in case of Andhra Pradesh State Transport Corporations) tax cost has been increased by 634.60% for the period from 1965-66 to 1976-77⁹ as no passenger tax is levied in West Bengal.

6.23 Other Costs - (Not Included in the Above Heads) :

It includes all costs other than the costs discussed

earlier. The following table will show "the other costs" of NBSTC :

Table 6.22

Other Costs

Year	Other Cost (in lakhs)	Percentage to total cost	Percentage over 1971-72
1971-72	18.32	7.58	..
1972-73	18.42	5.90	0.54
1973-74	20.04	5.51	9.38
1974-75	22.42	5.82	22.37
1975-76	20.96	6.93	69.99
1976-77	34.83	7.01	90.12
1977-78	32.55	5.94	77.57
1978-79	35.79	5.53	95.38
1979-80	39.04	5.21	113.10
1980-81	35.21	4.02	92.19
1981-82	43.94	4.18	139.94
1982-83	49.43	7.00	169.81
1983-84	54.92	5.25%	199.78
1984-85	60.89	5.15	132.37

Source : Provisional Balance Sheet of NBSTC.

The above table shows that other costs increase at 232.37% during the period from 1971-72 to 1984-85. But the percentage of these costs to total cost has been

reduced from 7.68% to 5.15% in the year 1984-85. So the increase in this cost shown scope for exercising better control on the various items included here.

6.24 Analysis of Total Cost :

The following table will show the total cost of NBSTC from 1967-68 to 1987-88.

Table 6.23

Total Cost of NBSTC (in Lakhs)

Year	Total Cost	Percentage over 1967-68
1967-68	127	..
1968-69	214	68.50
1969-70	186	46.45
1970-71	242	90.55
1971-72	238	87.40
1972-73	311	160.62
1973-74	353	185.82
1974-75	384	102.36
1975-76	446	251.18
1976-77	496	290.55
1977-78	547	330.70
1978-79	647	421.25

contd ...

Table 6.23 contd ...

1979-80	748	488.97
1980-81	876	589.76
1981-82	1,051	727.55
1982-83	1,139	796.06
1983-84	1,232	870.07
1984-85	1,180	829.13
1985-86	1,415	1,014.96
1986-87	1,761	1,286.61
1987-88	1,770	1,293.70

Source : Provisional Balance Sheet and Office Records of NBSTC and Annual Administrative Reports of NBSTC.

The total cost in absolute term records an increase by 1293.70 per cent during the study period. This increase is mainly due to operational inefficiency like high vehicle staff Ratio, less kms. per bus per litre of fuel, less productivity of employees and partly due to inflation.

6.25 Analysis of Total Revenue :

The following table will show the total revenue of NBSTC :

Table 6.24

Total Revenue

Year	Total Revenue (in lakhs)	Percentage over 1967-68
1967-68	123	..
1968-69	193	56.91
1969-70	155	26.01
1970-71	175	42.27
1971-72	190	54.47
1972-73	227	84.55
1973-74	261	112.19
1974-75	240	95.12
1975-76	283	130.08
1976-77	286	132.52
1977-78	309	151.21
1978-79	371	201.62
1979-80	428	247.96
1980-81	480	290.42
1981-82	512	316.26
1982-83	489	297.56
1983-84	505	310.56
1984-85	472	283.73
1985-86	535	335.77
1986-87	828	573.17
1987-88	1,020.49	729.66

Source : Provisional Balance Sheet, Administrative Reports and Office Records of NBSTC.

The above table shows that the total revenue increased by 729.66 per cent during the study period as compared to the increase in the total costs at 1293-70 per cent, in absolute terms. This has naturally had its effects on the profitability of the corporation.

6.26 Analysis of Total Deficit :

The following table will show the total deficit from 1967-68 to 1987-88 :

Table 6.25

Total Deficit of NBSTC (in lakhs)

Year	Total Deficit	Percentage on 1967-68
1967-68	4	-
1968-69	21	425
1969-70	31	675
1970-71	67	1575
1971-72	48	1100
1972-73	84	2000
1973-74	102	2450
1974-75	144	3500
1975-76	163	3975
1976-77	210	5150

contd ...

Table 6.25 contd ...

1977-78	238	5850
1978-79	276	6800
1979-80	320	7900
1980-81	396	9800
1981-82	539	13375
1982-83	650	16150
1983-84	727	18075
1984-85	708	17600
1985-86	880	21900
1986-87	933	23225
1987-88	749.51	18637

Source : Calculated

The above table shows that the total deficit records an increase by 18637 per cent during the study period.

In order to get a feel of the impact of various cost items on the total loss (deficit), we perform a multiple regression analysis. The purpose is mainly to identify quantitatively the significance of the different cost components in influencing the total loss. For operational purposes, the various items of costs we considered can be classified into two groups :-

- 1) Components which can be manipulated by the management and

2) Components which are basically in the nature of exogeneously given i.e. can not be easily manipulated by the management. In the first group we consider the following cost components :

- a) cost of personnel
- b) fuel cost (H.S.D + Lubricant + Battery)
- c) others (cost of spares + cost of tyres and tubes + cost of stores + other cost not included in a, b and above the exogeneously given)

For our regression analysis, we consider these cost components as three explanatory variables to explain the behaviour of loss of the Corporation. We use the following simple linear regression model :

$$Y = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + u$$

where,

Y = Values of loss

X_1 = Staff cost component

X_2 = Fuel cost component

X_3 = Other costs

u = The error term

The estimated regression equation is the following :-

$$Y = -84.782 + 1.0649X_1 + 1.5129X_2 - 0.4593X_3$$

$$(-2.4293) \quad (6.8639) \quad (2.8525) \quad (-0.8763)$$

$$R^2 = 0.9881 \quad D.F = 10$$

$$D.W = 1.8466$$

The figures in the parentheses show respective estimated "t" values.

Coefficients with "t" values (within parentheses)

X_1	1.0649 (6.8639)
X_2	1.5129 (2.8525)
X_3	0.4593 (-0.8763)

It is seen that excepting X_3 the coefficients of the other two variable i.e. of X_1 and X_2 are both significant at 1% level of significance. Given that R^2 is quite high and the d.w. statistic is not significant. The estimated equation serves well for our purpose. We can infer that staff cost (X_1) and fuel cost (X_2) are the important components of controllable costs that explain significantly the loss (deficit) incurred by the Corporation over time.

6.27 Cost Fare Relationship :

Fare policy ensures the economic viability of the STU. It is a crucial area for survival as well as for growth of the operations. It is a direct link between the passenger and the organisation. STUs should be financially self-supporting and should be able to grow independently by generating internal resources for augmentation and expansion of services without depending upon the Government. The financial position of the STU in the country today is far from satisfactory. They are constantly starved for want of finances. Financial Institutions do not pay any attention in their operations, in spite of the fact that transport is a basic infrastructure for development. State and Central Governments do not evince any interest to their needs. They are interested in earning tax revenue from STU but not inclined for extending helping hand at times of crisis. In this regard the saying of Dr. M.V. Bagade, Dy. Director, CIRT is, presently, STUs are facing unprecedented financial crisis. This is mainly due to escalation of prices of resources required by the road transport and disproportionate fares not keeping in pace with cost incurred¹⁰.

The study conducted by CIRT, IHO and UNCP in relation to the trend in the passenger fare and its relation with work concerned, fare increased in state Road Transport Undertakings have not been able to meet the increase in

cost over five year period from 1975-76 to 1979-80¹¹.

The following table will show the cost per kms. and fare per kms. (in paise) of NBSTC :

Table 6.26

Cost per kms. and Fare per kms.

Year	Cost per km. (paise)	Average fare per km. (paise)
1967-68	124	4
1968-69	138	4
1969-70	149	4
1970-71	153	4
1971-72	NA	4
1972-73	NA	4
1973-74	NA	4
1974-75	182	4
1975-76	206	4
1976-77	260	4
1977-78	278	4
1978-79	293	4
1979-80	318	4.5
1980-81	385	6.4
1981-82	447	6.4
1982-83	486	6.4
1983-84	585	7.4

contd ...

Table 6.26 contd ...

1984-85	633	7.4
1985-86	768	8.9
1986-87	NA	8.9

Source : Administrative Reports and Office Records of NBSTC.

The table speaks that the cost are rising in each year and the fares are not revised in each year. Revision of fares is always a crucial and sensitive issue, a public service undertaking has to face. It has to take all its achievements and popularity to withstand public apprehensions and misconceptions. Increased fares immediately become a general issue for severe criticism and becomes a target of attack. It is also the fact that the revision of fares are not in the hands of Corporation and as such in actual practice the autonomy given to the Corporation is not helpful in running the Corporation on business principle¹². In the interest of better financial discipline, it is necessary for the Corporation as well as the Govts. to realise the harmful effect of artificially concealing the real low operating and net losses.

6.28 Reasons For Delay in Fare Revision :

There are various reasons for delay in fare revision. Among them the following are important :

a) Procedural Requirement :-

The revision of the fare structure needs a notification of the proposal for public hearing. The Transport Minister of the State and Transport Commissioner are expected to give hearing to anyone from the public who is directed to send the objections within 30 days after publishing the proposal. This allows the politically motivated leaders to raise issues and create problems causing delay in the fare revision¹³.

b) Hesitation on the Part of the State Government :

The adjustment in fares in response to escalation of cost due to non-controllable factors like inflation is a politically unpopular decision which the Government hesitates to take. It is generally observed that for political instability and for due elections in the state, the proposals get postponed¹⁴.

6.29 Adverse Implications to the Organisation for Delays in Fare Revision :

The following are the effects of delays in fare revision¹⁵.

a) Huge Losses : As the rise in cost is not shifted to the passenger in the same year, the accumulated increase in cost results into huge losses.

b) Crisis of Cash Management : The delay in fare revision sometime creates the problem of meeting no recurrent expenditure which signifies crisis of cash management. It prevents from purchasing good quality of materials resulting into supply of spurious sparts on credit by unsuitable vendor. It also prevents from procuring new vehicles for replacement resulting into high cost of operation as well as higher frequency of breakdowns.

c) Additional Burden of Fixed Cost : In the situation of general inflation, unrevised fare leads to fall in real fare boosting up the passenger traffic to be served by expansion of the operations. This expansion is achieved by procuring new vehicles and employing more personnel by imposing extra burden of fixed cost.

d) Keeping Secret the Operational Inefficiency : The absence of reasonable fare helps the management to conceal operational inefficiency. In case of loss, their argument

is that the losses occur because of low fares.

e) Erosion of Capital : The delay in fare revision erodes the capital base of the organisation. It affects not only the profit and loss account but subsequently the balance sheet that showing higher liability than assets which creates a basic doubt regarding the economic feasibility.

6.30 Breakeven Cost Per Seat Kms. for NBSTC

The following table will show the Break even cost per seat kms. for NBSTC.

Table 6.27

Breakeven cost per seat kms.

Year	Total cost per kms.	Seating Capacity (Average)	Cost per seat kms.	Occupation Ratio	Breakeven cost per seat kms.	Index
1974-75	182.00	45	4.04	.71	5.59	100
1975-76	206.00	45	4.57	.77	5.93	104
1976-77	260.00	45	5.77	.76	7.59	133
1977-78	278.00	45	6.17	.70	8.81	154
1978-79	293.50	45	6.52	.76	8.57	150
1979-80	318.30	45	7.07	.60	11.78	207
1980-81	385.00	45	8.55	.61	14.01	246
1981-82	447.00	45	9.93	.58	17.12	300
1982-83	486.00	45	10.80	.60	18.00	316
1983-84	469.00	45	10.40	.60	17.33	304
1984-85	522	45	11.60	.60	19.33	339
1985-86	440.00	45	9.77	.63	15.50	272

Source : Calculated

SUMMARY

SECTION I

Finance plays an extremely crucial role in the continuity and growth of any organisation. It is an important factor which influences the finances of the organisation. The purpose of this chapter is to analyse profits. Profits for public sector are more important since this could be ploughed back to finance its developmental needs. It is one of the major objectives, since profit and growth go together. It helps growth and growth produces more profits.

Profit is considered as the proof of efficiency and the higher the profitability the more efficient the organisation is. It is done through the use of selected financial indicators like cost per vehicle km. Revenue per vehicle km., Revenue Capital Ratio, Cost revenue ratio, level of deficit total cost per vehicle per day, total Revenue per vehicle per day etc.

Earnings Per Kilometre :

The earnings per vehicle kilometre measures the earning of the undertaking. This can be improved by increasing load factor, reducing revenue leakage, using buses of different capacity depending on traffic demand and selecting appropriate fare structure. The revenue per km. was 120.63 paise at the beginning of the study period and increased to 313.00 paise at the end, recording 160.83 per cent increase during the period. The increase in paise per km. terms can be mainly attributed to the effect of upward revision in fares and partly to the improved operations as reflected in an increase in effective kilometres. The comparative table in this regard shows that revenue earnings of NBSTC per kilometre is the lowest among all the Corporations taken for comparison.

Cost Per Vehicle Kilometre :

The cost per vehicle kilometre measures the economy achieved in operation. It measures the operation or providing service to the public per effective kilometre. The costs per km. increased from 124.55 paise to 440.00 paise during the study period, registering a 253.27 per cent increase. This was mainly due to the effect of items

like staff cost, fuel cost, motor vehicle taxes and the general inflationary trend. The comparative table in this regard speaks that the cost per km. of NBSTC is higher than that of the Corporations taken for comparison.

Net Profit/Loss Per Kilometre :

Net profit in road transport undertakings is the difference between revenue per km. and cost per km. The aim of every transport operator is to maximise the returns from the services offered. The returns are essential for its growth as well as operating some surplus for other sectors of the economy. The profitability picture of NBSTC is quite dismal and the losses have been increasing and there is need, for some radical steps to control the costs. The loss per km. was 3.92 paise in 1967-68 and 230 paise in the year 1987-88, recording 5,757.34% increase on the period. The comparative table in this regard shows that worst performance comes from NBSTC.

Total Revenue and Total Cost Per Vehicle Per Day :

The total revenue per vehicle per day was Rs. 180.82 in 1967-68 and Rs. 602.73 in the year 1986-87, records an increase by 233.33 per cent. The total cost per vehicle

per day was Rs. 186 in 1967-68 and Rs. 1205.47 in the year 1986-87 and records an increase by 548.10 per cent. It shows that total cost per vehicle per day is increasing at a higher rate than the total revenue per vehicle per day.

The comparative table of total revenue per vehicle per day of six Corporations including NBSTC shows that the total revenue per vehicle per day of NBSTC is the lowest. Its performance in this regard does not come anywhere near the undertakings like APSRTC, Rajasthan SRTC, Gujrat SRTC and Kerala SRTC. The comparative table as regards total cost per vehicle per day shows that the worst performance comes from Kerala SRTC. The performance of NBSTC is in the fourth position.

Cost - Revenue Ratio :

It measures the extent to which cost incurred are covered by the revenue. A ratio more than 100.00 indicates that the undertaking has incurred a loss. The table in this issue depicts a dismal picture of the Corporation. The ratio is always more than 100.00 and it is losing very heavily. In 1967-68 the cost revenue ratio was 103.25 per cent and in 1986-87 it has become 200.24 per cent.

Revenue Capital Ratio :

It measures the level of capital turnover. Higher the capital turnover ratio, better are the asset utilisation and financial performance. Undertaking with low investment in productive assets will have low capital turnover. The revenue capital ratio of NBSTC has come down from 94.08 per cent in 1967-68 to 15.15 per cent in the year 1984-85. It indicates that asset utilisation and financial performance are not better.

SECTION II

One of the main constituent contributing to the financial difficulties of Nationalised Road Transport undertakings is the rigid fare structure which is not keeping pace with the increasing cost of operation. The cost of operation in a road transport industry and the fares charged by it are directly correlated, if it is to run on sound commercial lines. This is true for every industry whether it is a private sector or a public sector.

The two systems of fare are - Flat Rate System and Zonal System. The Flat Rate does not depend upon the distance travelled while the Zonal system is the system of charging according to which the Route covered by bus is divided into certain stages and for the distance between two stages, a uniform fare is charged.

The object of this chapter is at the outset to analyse the trends in costs and costs structure so as to have an idea of the extent of increase in costs and the contribution of different items of costs. The increase in costs, either in the aggregate or in case of individual items, could be because of one of the three reasons - (a) Inflation; (b) Operational inefficiency; (c) Governmental influence.

After analysing the trends in costs and cost structure an analysis is made to identify the extent of increase in costs in the case of some important individual items attributing either to inflation or to inefficiency.

For analysing the costs, it is grouped on the basis of nature of expenses because functional classifications has certain limitations. According to nature of expenses it is grouped as follows : (a) Cost of personnel; (b) Cost of material; (c) Depreciation; (d) Other overhead (e) Taxes. The costw are analysed in absolute because it enables to understand various items of costs in terms of actual amounts spent and in analysing the size of increases that took place during the period under study.

Cost of Personnel :

The cost of personnel has recorded an increase over the period of seventeen years (17) is at 747.72 percent.

There is not much variation in the percentage of staff cost to total cost. It has almost been constant around 38.56 per cent. This increase may be either due to additional emoluments or due to increase in the vehicle staff ratio or because of both. But one thing is observed from the "personnel and productivity Chapter" that there was no significant improvement in the Man Power productivity and the staff used for 100 kms. of operation. This shows that the significant increase in the staff cost was mainly due to high vehicle staff Ratio, Low man Power productivity and partly due to revised pay scales.

Cost of Fuel :

It is the second important constituent of cost and records an increase of 888.15 per cent over a period of seventeen years. Much variation in this cost is followed in the last three years i.e. from 1985-86 to 1987-88. In this context, it is important to note that kms. obtained per litre of fuel by Gujrat State Road Transport Corporation is 4.90 in the year 1986-87 while NBSTC obtains 3.85 kms. So the increase in fuel cost is not only due to increase in the cost of HSD oil but also due to operational inefficiency with regard to kms. obtained per litre of fuel.

Debt Charges :

The third dominant constituent of the cost is debt charges. The total interest cost has increased from 19.90 lakhs in 1971-72 to Rs. 243 lakhs in 1987-88, recording 1121.10 per cent increase. This is due to considerable increase in the capital contribution and borrowings of the Corporation.

Depreciation :

It is the next important constituents of costs in order. The costs of depreciation records an increase of 436.19 per cent over a period of seventeen years. This is partly due to increase in the fleet strength i.e. 279 in 1971-72 and 529 in 1987-88 and increase in the cost of fleet.

Spare Parts :

The extent of spare parts depends upon many external factors like the conditions of the road. Thus it cannot be considered as strictly controllable. The costs of spare parts records an increase of 359.56 per cent during a period of seventeen years and the percentage of spare parts costs to total cost has come down from 9.49 per cent to

5.87 per cent in 1937-88. So it has shown a consistent improvement in reducing the spare consumptions, although there is considerable room for improvement.

Cost of Tyres and Tubes :

The cost of tyres and tubes are also uncontrollable like spare parts. The percentage of cost of tyres and tubes to total cost has come down from 7.9 per cent to 5.48 per cent during the period of seventeen years. This decline in this cost is mainly due to better kms. obtained per tyre.

Cost of Battery :

The cost has increased substantially towards the end of the study period. This sudden and rapid increase shows scope for exercising better control. The cost of battery as a percentage ^{to} total cost was 0.8% in 1971-72 and 0.33% in 1937-88. This increasing trend in the cost of battery means it is not used and maintained in a better way and the Km. obtained from a battery is not improved.

Cost of Lubricant :

This cost shows decline trend from the year 1976-77 and onwards except 1984-85 where it is marginally high. The whole credit may go to the Maintenance and Repair Department which helps in obtaining improved kms. per litre.

Cost of Stores :

The cost of stores has increased from Rs. 5.82 lakhs in 1971-72 to Rs. 16.39 lakhs in 1984-85 in absolute recording 139.50 per cent increase during the period from 1971-72 to 1984-85. The cost of stores as a percentage to total cost has been decreased from 2.85 per cent in 1971-72 to 1.38% in 1984-85.

Tax Cost :

The tax cost is increased by 133.58 per cent. during the period of seventeen years. This is partly due to increase in the fleet strength and seating capacity besides the upward revision of Motor vehicle tax. It is interesting to note that the tax cost of NBSTC is very low as compared to other State Transport Corporations as no passenger tax is levied in West Bengal.

Other Costs :

The cost has increased by 232.37 per cent over 1971-72. But the percentage of other cost to total cost has been reduced from 7.68% to 5.15% in the year 1984-85. So the increase in this cost over 1971-72 shows scope for exercising better control on the various items included here.

Analysis of Total Cost :

The total cost in absolute term records an increase by 1293.70 per cent during the study period. This increase is mainly due to operational inefficiency like high vehicle staff ratio, less kms. per litre of fuel, less kms. per bus per day and partly due to inflation.

Analysis of Total Revenue :

The total revenue increased by 729.60 per cent during the study period as compared to the increase in the total cost at 1293.70 per cent, in absolute terms.

Analysis of Total Deficit :

The total deficit records an increase by 186.37% during the study period.

In order to get a feel of impact of various cost items on the total loss (deficit), a multiple regression analysis is performed. The staff cost and fuel cost are important components of controllable costs that explain significantly the loss (deficit) incurred by the Corporation over time.

Cost-Fare Relationship :

Fare policy ensures the economic feasibility of the STU. It is a direct link between the passenger and the organisation. STUs should be financially self-supporting and should be able to grow independently by generating internal resources for augmentation and expansion of services without depending upon the government. The financial position of STU in the country today is far from satisfactory. State and Central Governments do not evince any interest to their needs.

It is observed in NBSTC that cost rises in each year and the fares are not revised in each year. Increased fares immediately become a general issue for severe criticisms and becomes a target of attack. The revision of

fares are not in the hands of the Corporation. As such in actual practice the autonomy given ^{to} the corporation is not helpful. The revision of fares will be the only alternative to meet increasing operational cost if the State and Union Government does not come forward by contributing sufficient capital and intervene effectively with regard to chassis, spare parts, fuel, tyres and tubes etc. at reasonable prices.

Among all the reasons for delay in fare revision, the important ones are (a) procedural requirement and (b) hesitation on the part of the State Government to adjust the fares as it is a politically unpopular decision.

The adverse effects for delay in fare revision are (a) It causes huge loss; (b) It signifies crisis of cash management; (c) It imposes additional burden of fixed costs (d) It keeps secret the operational inefficiency; (e) It erodes the capital.

Lastly, a breakeven cost per seat Km. is calculated which tells us that the fare charged by the Corporation per Km. is much lower than the breakeven cost per seat Kms.

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