CHAPTER - VII

PERFORMANCE EVALUATION OF S. T. PUNJAB AND IT'S COMPARISON WITH NBSTC.

The punjab a land of five rivers, a prominent State of Indian Union since the days India was Independent in the year 1947 on the 15th August. It was divided into two, being a considerable portion included with Pakistan, the rest being merged with that we constitutionally call the State of Punjab with a historical background and topographical importance from the defensive point of view. The State is located on the converging point of the rivers Jhelum, Chenab, Ravi, Beas and Sutlej and subsquently joined the Indus. Those rivers play a vital role in the matter of economic enrichment of the State. Unfortunately since the partition of India only two of those five great rivers flow through the besitary that is under the jurisdiction of Indian union. The present topographical position came into existence after the internal reorganisation of the state on the 1st November 1966 on language basis used by the Local people. The reorganised form is Punjab & Haryana, Chandigargh being the common capital of both the states, the peculiar feature of the Indian constitution as well as administrative reality. Although the original Punjab has been partitioned and reorganised geographically, the people of the state are strong and very resourceful. The people of the state are more or less economically sound by dint of their laborious, resourceful and brave character. The State produces the largest quantity food materials like wheat, milet, pulses etc.

The State consists 50,376 square kilometre with a population 2.30 crores as on 31.03.96. It also holds the leading position in the matter of economic growth & development. It is also a matter of pride that the state occupies the high priority in respect of power generation too and extension of road and road transport and the asfounding development of human resources in all respects.

The magic of the continuous trends of development is periodical plans chalked out by the state. The construction and numerical development of road communication all over the state linking villages, towns and cities with the State capital, Chandigarh, District Head Quarter, Railway Stations, Market place, Industrial towns aids the main National Highways deserves mention. By March, 1989 the state had 91 kilometres of roads in per 100 square klometres of the area and 97.68 percent of all the inhabited villages had been provided with all season roads, and thereby opening the remote villages to trade and commerce.[1] The total road length in March, 1996 was 54,096 kilometres. The State has two public transport undertakings with a fleet of 3,390 buses in addition 1637 operated by private sectors. The State had also 2,39,121 units of carriers which were used both for carrying goods & passengers during 1987-88.[2]

The State was served by two airlines – Indian Airlines and Vayudoot before through four airports of Chandigarh, Ludhiana, Amritsar and Pathankot. But now the state is served by Indian Airlines, Air-India and other private airlines through four airports of Chandighar, Ludhiana, Amritsar and Pathankot. Water transport is almost non-existant as the State is a land locked territory. Long distance transport is provided mainly by the Indian Railways which has only marginally increased its network since the reorganisation of the State. Board & Narrow gauge taken together worked out 3,291 kilometres during 1971 and 3,636 kilometres during 1989.[3]

During 1988-89 Post, Telegraph and Telephone services are provided by 3,728 Post Offices, 230 Telephone Exchanges & 579 Telegraph Offices. Broadcasting regional News is done by two radio station located at Chandigarh and Patiala. Television programme are transmitted from three centres Jalandhar, Amritsar & Bhatinda.

In respect of industrial development the Punjab is still in early stage. As mentioned, the State is still in the early stages of industrial evolution and lacks even in medium and large size industrial enterprise.

Though the State has good accessibilities, rapid industrialisations and the ever increasing movement of food grains from Punjab to other states but it creates demand for additional transport capacity both by road & railways.To meet this additional demand, capacities of the major road sections will have to be increased.

The traffic orgination and terminating within the boundaries of Punjab is mostly moved by road while the inter-state transportation of goods, and passengers is mainly carried out by Railways. The major commodities are transported from Punjab to other states, are food grains, oil seeds, oil cakes, cotton, timber, cement, coal, petrolium, iron & steel, salt, tea, footwears, sugar and other products are transported in Punjab from other states.

From 1965-66 onwards Punjab has shown a steady & continuous increase in road length. Overall the roads have shown a compound growth rate of 6.44 percent per annum. The undivided Punjab took the first step towards nationalisation in respect of road transport in July, 1959, when 50% of the scheduled kilometres was brought under the State Sector, covering the Punjab regions by the Punjab Roadways and Pepsu regions by the Pepsu Road Transport Corporation respectively. The next step was taken after a decade in July 1, 1969, when 60% of the scheduled kilometres was brought under the State Sector, covering the Punjab regions and the same increase was effected in respect of Pepsu Road Transport Corporation in the former Pepsu region in February, 1970.

It is also to be noted that a notification was issued for maintaining 60 : 40 ratio No. 12748-IHT-69 Dated November, 19, 1969 till 1976. After that, the operation of kilometres by the private operators were to be taken over the Government over a period of three years for the achievement of complete nationalisation by the year 1979 November, in the former Punjab region and in the year 1980 June, in the former Pepsu region. After March, 1976, the previous ratio (60:40) has been remain unchanged even today, only temporary permits for 3 months as a trial is issued by the Transport Commissioner / Regional Transport Authorities for complete nationalisation of the passenger Road Transport services in the state.

It should be pointed out that Punjab will achieve the complete nationalisation of passenger road transport and it will be relevant due to the total commitment of Punjab Government. The Punjab Bidhan Sabha took a resolution on this subject on 20th November, 1981 far and no one oppose this. The Ministers also reiterated

the Government's intention of the Nationalisation of passenger road transport in almost every session of Punjab Bidhan Sabha.

The Punjab Government is inspired to nationalise the road passenger transport by the blessings of the Central Government and Planning Commission. For this reason the state Government is also interested for this matter and the finance is the main reason which exists behind this.

In January, 1974, a committee was set up under the Chairmanship of the then transport minister Mr. Dilbag Sing Dalever and this Committee was very much powerful for the study of working of S. T. Punjab go through in details and recommend measures for progressing efficient economical profitability of its day to day operation and the employees discipline.

The above committee not only recommended for the complete nationalisation within 1979-80 but also recommended to set up of 4 corporation under the Road Transport Corporation Act 1950. Starting with the conversion of S. T. Punjab into one such corporation with effect from April, 1975. The revival of the State Road Transport Board (which has been dorment) was also recommended as an interim measure by the committee. The chairman of this board would be Chief Minister, the vice-chairman would be the Transport Minister and the other members would be Transport Secretary, Legal Remembrancer, Finance Secretary, The Director State Transport. The Board was formed but no function was done by it effectively.

It was valued that Rs. 22.3 crores was needed as the total outlay to fulfill the nationalisation of the Road Passenger Transport. Among them Rs. 13.6 crores are needed for taken over in the erstwhile Punjab area as Rs. 8.7 crores are needed for take over in the erstwhile of Pepsu area. But it was not a easy task to carry out the order and this was realised by the board after consideration of all the relevant facts. Rs. 40 crores will be needed for the complete nationalisation and it will also take 4 years was estimated in 1980. But the policy of the Central Government and Planning Commission in respect of nationalisation of Road Passenger Transport, the state and the said board considered that nationalisation policy could not be abondoned from long term perspective and so it had to be reiterated. And it should

be noted here that the complete nationalisation of Road Passenger Transport is not possible till today, and the capital cost having inflated appreciably.

Origin and growth of State Transport Punjab :

State Transport Punjab is an integral part of the Ministry of Transport (Punjab) and it is run as a government department, headed by the Director, State Transport (DST). The origin of the State Transport Punjab goes back to March, 1948, when the first depot was set up at Jalandhar, with a fleet of 13 buses, and the organisation has been steadily growing ever since.[4] Following the bifurcation of the erstwhile composite state into Punjab and Haryana on November 1, 1966, 726 buses and the four depots at Jalandhar, Amritsar, Chandigarh and Pathankot come to the share of Punjab Roadways.[5] The growth of Punjab Roadways continued manifold during the period of the study (1980-81 to 1997-98); there were three divisions controlling 20 depots with a total fleet of 2,369 buses covering a total of 1909.22 lakh effective kilometres per annum in 1997-98.[6]

The conversion of Punjab Roadways into corporation under the Road Transport Corporation Act. 1950 was first evaluated by the Punjab Administrative Reforms Commission. It was established by the Punjab Government. The Reform Commission was recommended for the abolition of commercial wing of the transport department and set up a separate zonal corporation in place of commercial wing of transport department. The recommendation of the Reform Commission was not accepted by the Punjab Government, but they had accepted a modified approach in this regard and setting up the State Road Transport Board under the Chairmanship of the Chief Minister. The other members of the board are Chief Secretary, Finance Secretary, State Transport Commissioner (STC), Legal Remembrancer and the Director of State Transport. It was realised that the Board will act between the government department and a corporation and enjoy the advantage of both system.

Further a high power committee was set up in 1974, which was headed by the then Transport Minister Dilbag Sing Dateke. But the recommendation of this committee was not accepted in practice which I have mentioned earlier in this

chapter.

But the issue of conversion from departmental undertaking into Road Transport Corporation is something that could be examined in its own right. There are various problem, such as various union should at first agree for this conversion, Punjab Roadways have already incurred heavy burden of debt, so all these problems should be solved first before taking any major change in case of Punjab Roadways. The Transport Secretary is the head of the State Transport Authority. The other members are Transport Commissioner and other official and non official members are the top level authority and entrusted the power for implementing the Motor Vehicle Act in the state, issuing of route permits, certifying the roadworthiness of vehicles etc. and also quasi-judicial functins to enforce many legal provisions in respect of Road Transport. Jalandhar, Ferozpur and Patiala are the three regional Transport Authority working under the directions of the State Transport Authority (RTA's). The State Transport Commissioner and different District Transport Officers works as chief Executive under the State Transport Authority, which head office is situated in Chandigarh. They also co-ordinates the activities of the above Regional Transport Authorities.

Partial implementation for nationalisation of road transport in Punjab, Punjab Roadways has to face problems from the private operators. In many cases, Punjab Roadways in real sense does not enjoy monopoly routes and has to face competetion from the private operators for the same routes. In theory such a competetion can be deemed very healthy. But in practice, however, Punjab Roadways has to face various problems arising out of this competetion. In this regard a high power committee was set up to look into the matter, but the committee itself felt constrained to record that some malpractices are done by the private operators to harm the Punjab Roadways. The State Transport Director generally reports to the Transport Secretary in respect of administrative functions. He has been able to reckon with the restrictive influence of the other State Government Ministries such as Finance and Planning, Industry and Public Works.

The objective of the Punjab Roadways can be taken as under.

1. To run the buses in a particular area which is alloted by the State Transport Authority.

2. To give extreme conveniene to the travelling public.

3. To create an atmosphere of unity, harmony and integrity among the people.

4. To create logistics plan for the region.

5. Minimum fare with a provision for replacement and expansion of bus services in course of time.

Organisational Structure and Management Pattern of Punjab Roadways:

There are three-tier Management system.

i) Head Office.

ii) Divisional Offices.

iii) Depot management.

i) Head Office :

In the Head Office, The Director, State Transport is assisted by five officers in the Directorate. The head office is located in chandigarh.

a) Deputy Director : Administrative and personnel.

b)Chief Account Officer : Looks after accounts.

c) Mechanical Automobile Engineer : Looks after the various workshop, tyre retreading shop and other important engineering works.

d) Deputy Director : He looks upon all operational functions of Punjab Roadways and,

e) Executive Engineer : He looks all civil works of Punjab Roadways.

Divisional Offices :

This is second tier of the administration in Punjab Road ways.The divisional Offices are situated at Chandigarh, Firozpur and Jalandhar.Each division has a seperate Divisional Manager. Every Divisional Manager has been provided with

a number of Officers who assist him in exercising proper control and supervision over the various types of works. The Officers helps the divisional Manager in respect of inventory, operation, store purchase, receipt and expenditure of the depot.[7] The Divisional Manager post is filled up from the P. C. S.(E. B.) cadre.

Depot Management :

This is third-tire of the administration in Punjab Roadways. It is under the control and charge of the General Manager. During the year 1997-98, there were 20 depots in Punjab Roadways.[8]

Each depot of the Punjab Roadways is the functional unit. The entire depot management is under the control and charge of General Manager, who is assisted by the following officers.

a) Work Manager : He looks upon the maintenance and repair of the fleet.

b) Traffic Manager : He looks smooth operation of traffic.

c) Accounts Officer : He looks upon the accounts and financial work.

In 1988-89, there are two sub-depots and each sub-depot was headed by the station supervisor and he also works under the full control of general manager. All minor and major repairing works are done by the central workshop which is situated in Chandigarh. The Head in Charge of central workshop is Mechanical Automobile Engineer. Service Engineer helps in this regard. The budget of the State Transport Punjab supplied the budget of the central workshop.[9]

Performance Appraisal :

There are two kinds of appraisal in the case of Road Passenger Transport undertaking.

i) Operational Perormances.

ii) Financial Performances.

The object of this chapter is to compare the performance of NBSTC with S.T. Punjab. Both Transport Undertaking ply their buses in plain areas. Punjab is

agriculturally developed. NBSTC is in Corporation form whereas S. T. Punjab is Departmental Undertaking form. S. T. Punjab is a profit making organisation (before Tax) during the study period. NBSTC is in Eastern Zone and S. T. Punjab is in north zone. Considering all these points the comparison is made to locate the weak areas of NBSTC with reference to the said organisation.

Comparative Performance Evaluation of S. T. Punjab and NBSTC. :

The financial and physical performance of NBSTC has been evaluated in chapter four on the basis of data since both these undertakings ply their buses mainly in plain areas. It will be proper and also analytically useful if their performance is compared with each other. So, in this chapter, we have compared the performance of S. T. Punjab and NBSTC with each other in terms of the following two parameters.

a) Efficiency trends in terms of physical parameters.

b) Efficiency trends in terms of financial parameters.

(a) Efficiency trends in terms of Physical parametres.

i) Bus -Staff Ratio :

Table 7.1 shows the Bus-Staff ratio of S. T. Punjab and NBSTC. And it is noticed from the table that it is constantly in is favour of S. T. Punjab, which has utilised less staff per bus during the period from 1980-81 to 1997-98. Staff Bus ratio has shown a diminishing trend in S. T. Punjab whereas it has been higher and almost constant in NBSTC. This shows that NBSTC is spending more on its staff but S. T. Punjab spending less on its staff, though both undertakings are identical. When we will compare with all India average 8 person per bus and in this way S. T. Punjab has been able to achieve referred target which is mentioned in earlier chapter.

However, Bus-staff ratio is deceptive and does not reflect the true position. There is a better index for measuring the staff used per 100 kilometres of operation, which is shown in table 7.2. It is the second parametre used for measuring the efficiency of State Transport undertaking. The second criteria used, that is, staff employed per 100 kilometres of operation, shows that S. T. Punjab has performed

better than NBSTC. In the case of S. T. Punjab begining with the year 1980-81. Staff employed per 100 kilometres of operation has been less than 3 throughout the study period. But in the case of NBSTC begining with the year 1980-81, staff employed per 100 kilometres of operation has been always more than 3. So we can say that S. T. Punjab has consistently been using less staff and in this way this undertaking is more economical. So, from the table it is clear that from the very begining of the study period S. T. Punjab has been using less staff in the case of staff employed per 100 kilometres of operation than NBSTC. Hence we can say, it used more persons per 100 kilometres of operation and is thus less efficient. If we take into account that wages of the staff are same then it suggests that S. T. Punjab has more labour productivity.

Table - 7.1

Staff Bus Ratio in S. T. Punjab and NBSTC

Year	S. T. Punjab	NBSTC
1980 - 81	4.77	14.20
1981 - 82	4.92	15.00
1982 - 83	5.13	14.20
1983 - 84	5.09	15.70
1984 - 85	5.05	16.40
1985 - 86	5.05	12.00
1986 - 87	5.36	12.00
1987 - 88	5.22	10.80
1988 - 89	5.31	N. A.
1989 - 90	5.53	8.35
1990 - 91	5.22	8.01
1991 - 92	5.28	8.19
1992 - 93	5.30	8.93
1993 - 94	5.30	9.05
1994 - 95	5.25	8.93

Table contd. next page

Table 7.1 Contd.

1995 - 96	5.16	10.30
1996 - 97	5.66	11.04
1997 - 98	5.69	10.87

Source : Calculated.

[The all India average in respect of Bus-staff Ratio is 8. As has been calculated by the CIRT (Training and Research) Pune, India.]

Table - 7.2

Staff Employed per 100 kms. of operation per Day in S. T. Punjab and NBSTC

Year	S. T. Punjab	NBSTC
1980 - 81	2.09	6.45
1981 - 82	2.20	7.14
1982 - 83	2.17	6.40
1983 - 84	2.07	7.13
1984 - 85	2.36	8.20
1985 - 86	2.16	7.36
1986 - 87	2.31	5.74
1987 - 88	2.21	5.16
1988 - 89	2.26	N. A.
1989 - 90	2.11	3.28
1990 - 91	2.20	3.28
1991 - 92	2.11	3.12
1992 - 93	2.14	3.64
1993 - 94	2.06	3.42
1994 - 95	1.97	3.36
1995 - 96	1.93	3.84
1996 - 97	2.16	4.07
1997 - 98	2.27	4.11

Source : Calculated.

[The all India average in respect of staff employed per 100 kms. of operation

is 2. As has been calculated by the CIRT (Training and Research), Pune, India.]

ii) Fleet Utilisation :

It is also one of the criteria for measuring the physical performance of State Transport undertaking. Table 7.3 shows the comparative picture of both transport undertakings in terms of percentags of buses on the road. S.T. Punjab has increased its performances from 91 percent buses in use during 1980-81 to 96 percent during 1988-89, the lowest being percent during 1997-98, compared to all India average of 85 to 90 percent. But in the case of NBSTC fleet utilisation is far below than S.T Punjab. It was 68 percent buses in use during 1980-81 and ended with 66.3 percent during 1997-98. It was achieved all India average only in the year 1985-86, 1989-90 and 1991-92. Therefore, on this account S.T Punjab has performed far better than NBSTC.

Table - 7.3

Number of Buses on Road in S.T. Punjab and NBSTC (Percentage)

Year	S. T. Punjab	NBSTC
1980 - 81	91.0	68.0
1981 - 82	91.0	64.0
1982 - 83	91.0	57.0
1983 - 84	92.0	59.0
1984 - 85	91.0	55.0
1985 - 86	94.0	85.0
1986 - 87	94.0	86.0
1987 - 88	96.0	N.A.
1988 - 89	96.0	N.A.
1989 - 90	95.0	93.4
1990 - 91	93.5	90.9
1991 - 92	94.3	88.2
1992 - 93	93.9	81.4

Table contd. next page

Table 7.3 Contd.

1993 - 94	95.1	78.2
1994 - 95	94.8	78.8
1995 - 96	91.3	67.4
1996 - 97	90.2	67.4
1997 - 98	89.7	66.9

Source : Annual Administrative Report of S.T. Punjab and NBSTC from 1980 - 81 to 1997 - 98.

[The all India average in respect of fleet utilisation is 90 percent. As has been calculated by the CIRT (Training and research), Pune, India.]

iii) Consumption of Diesel, Lubricants and Oil.

This is the indicator for measuring the physical performance of State Transport undertakings. Table 7.4 brings out the comparative performance of consumption of Diesel, Lubricants and Oils of both undertakings.

Low consumption of oil indicates an economy in fuel consumption, higher efficiency/productivity and better performance. S.T. Punjab has been showing better efficiency throughout the period from 1980-81 to 1997-98 except in the year 1987-88, 1989-90 and 1990-91. But the performance of NBSTC in terms of kilometres obtained per litre of oil has not been quite consistent, it was 3.70 during the year 1980-81 and 3.88 in the year 1997-98. It has been the maximum during 1987-88 and 1989-90 i.e. 4.00. During the last four years, it has been 3.91 to 3.88. But in the case of S.T. Punjab, Pruthi committee report including various reports, emphasis has been given on increasing kilometres obtained per litre of Oil.[9] S.T. Punjab has achieved nearest 4 from 1982-83, it is not bad. But in the case of NBSTC it has not been able to achieve 4 kilometre in most of the year during the study period.

However, we compare it with S.T. Punjab and it does not look impressive. S.T. Punjab has obtained 4 and above and has been consistent at 4. So, by this criteria, S.T. Punjab seems to have performed better vis-a-vis NBSTC.

Table - 7.4

Kilometres obtained per Litre of oil in S.T. Punjab and NBSTC

Year	S. T. Punjab	NBSTC
1980 - 81	3.70	3.70
1981 - 82	3.86	3.60
1982 - 83	3.96	3.60
1983 - 84	3.96	3.50
1984 - 85	3.96	3.60
1985 - 86	4.01	3.70
1986 - 87	3.99	3.85
1987 - 88	3.99	4.00
1988 - 89	3.99	N.A.
1989 - 90	3.96	4.00
1990 - 91	3.95	3.97
1991 - 92	3.98	3.79
1992 - 93	3.98	3.70
1993 - 94	4.03	3.75
1994 - 95	4.09	3.91
1995 - 96	4.10	3.90
1996 - 97	4.12	3.89
1997 - 98	4.16	3.88

Source : Annual Administrative Reports of Punjab Road Ways and NBSTC from 1980-81 to 1997-98.

[The all India average in respect of KMPL (HSD) is 4.48. As has been calculated by the CIRT (training and Research), Pune, India.]

iv) Breakdowns :

It is one of the criteria for measuring the operational efficiency of State Transport undertakings during a given period of time. Table 7.5 exibits that NBSTC has not an impressive record of avoiding breakdowns. It was starting with 1.41

breakdown per 10,000 kilometres and increased to 2.17 in 1997-98. However S.T.Punjab in comparison with NBSTC is in very good position. So, S.T. Punjab has been more efficient than NBSTC. It was 0.78 during the year 1980-81, then fell to 0.39 in 1993-94. From 1985-86 onwards, it has shown a continuous declining trend except in the year 1988-89 and finanlly declined to 0.57 per 10,000 kilometres in 1997-98. It is clear from the table that the declining growth rates in the case of S.T. Punjab is more than NBSTC. This is the hypothesis that if any undertaking who has lower the breakdowns, the higher the efficiency of the undertaking. By this hypothesis, S.T. Punjab has performed better than NBSTC. It is also clear from the table that NBSTC has the higher number of breakdowns than the S.T. Punjab. Therefore, even on this criteria/parameter, S.T. Punjab has been more efficient than NBSTC.

Table - 7.5

Breakdowns per 10,000 kms. Run in S.T. Punjab and NBSTC

Year	S. T. Punjab	NBSTC
1980 - 81	0.78	1.41
1981 - 82	0.67	1.40
1982 - 83	0.71	1.50
1983 - 84	0.66	1.50
1984 - 85	0.65	1.60
1985 - 86	0.53	1.50
1986 - 87	0.53	1.50
1987 - 88	0.49	1.50
1988 - 89	0.56	N.A.
1989 - 90	0.48	N.A.
1990 - 91	0.45	1.80
1991 - 92	0.41	2.02
1992 - 93	0.41	2.03
1993 - 94	0.39	2.37

Table contd. next page

Table 7.5 Contd.

1994 - 95	0.41	N.A.
1995 - 96	0.52	N.A.
1996 - 97	0.57	2.17
1997 - 98	0.57	2.17

Source : Annual Administrative Reports of S.T. Punjab and NBSTC from 1980-81 to 1997-98.

[The all India average in respect of breakdowns per 10,000 kms. (gross) is 0.65. As has been calculated by the CIRT (Training and Research), Pune, India.

v) Accidents :

Accidents is also one of the indicator for measuring the efficiency of State Transport undertakings during a given period of time. The relationship of accidents with efficiency is inverse. Table 7.6 clearly shows that in the initial years from 1980-81 to 1983-84 the performance of NBSTC has been far better than that of S.T.Punjab. However after 1983-84, S.T. Punjab has been able to reduce accidents per lakh kilometres to a considerable extent than that of NBSTC. As a result after 1983-84 S.T. Punjab has shown better performance than NBSTC in respect of accidents per lakh kilometre. So we can say even on this parametre, S.T. Punjab has been more efficient.

Table - 7.6

Accidients per lakh kilometres in S.T. Punjab and NBSTC

Year	S. T. Punjab	NBSTC
1980 - 81	0.26	0.23
1981 - 82	0.30	0.24
1982 - 83	0.26	0.20
1983 - 84	0.21	0.20
1984 - 85	0.19	0.21
1985 - 86	0.17	0.21

Table contd. next page

Table 7.6 Contd.

1986 - 87	0.18	0.19
1987 - 88	0.17	0.27
1988 - 89	0.16	N. A.
1989 - 90	0.14	0.16
1990 - 91	0.11	0,15
1991 - 92	0.10	0.11
1992 - 93	0.12	0.14
1993 - 94	0.13	0.19
1994 - 95	0.11	0.28
1995 - 96	0.11	0.18
1996 - 97	0.12	0.13
1997 - 98	0.09	0.19

Source : Statistical Abstracts of S. T. Punjab and NBSTC. from 1980-81 to 1997-98.

[The all India average in respect of Accidents per Lakh kms. is 0.33. As has been calculated by the CIRT, Pune, India.]

vi) Vehicle Utilisation :

Vehicle Utilisation is the indicator for measuring the physical performance of State Transport undertakings. It is defined as assets utilisation expressed as the volume of operation in terms of kilometres operated, passenger carried and route with bus services. The more is the seat kilometres offered and served is the more the vehicle utilisation.

Comparing the performance of NBSTC with S. T. Punjab, it is very much clear from table 7.7 that bus utilisation per day (kms.) on road, S. T. Punjab has done better than NBSTC over time. Though NBSTC also has to match with S. T. Punjab. Inthe case of NBSTC, average bus utilisation per day (kms.) on road is 232.81, while in the case of S. T. Punjab, average bus utilisation per day (kms.) on road is 237.43. Thus S. T. Punjab has done to some extent better than NBSTC. So, both these undertakings should give attention for better performance on bus

utilisation per day (kms.) on road.

Table 7.7

Performance of S.T. Punjab and NBSTC is respect of vehicle utilisation per day on road in terms of kilometres

Year	S. T. Punjab	NBSTC
1980 - 81	206.0	220.0
1981 - 82	218.0	210.0
1982 - 83	228.0	215.9
1983 - 84	237.0	220.0
1984 - 85	206.0	220.0
1985 - 86	225.0	163.0
1986 - 87	223.0	209.0
1987 - 88	237.0	209.0
1988 - 89	235.0	N. A.
1989 - 90	260.0	254.2
1990 - 91	235.5	243.7
1991 - 92	245.6	246.8
1992 - 93	246.6	244.8
1993 - 94	256.6	246.2
1994 - 95	263.9	265.7
1995 - 96	264.1	267.7
1996 - 97	241.1	271.2
1997 - 98	246.0	264.0

Source : Office Records, Annual Administrative Reports and performance of State Transport Undertakings, published by CIRT, Pune.

[The all India average in respect of vehicle utilisation per day on Road (in terms of kms.) is 308. As has been calculated by the CIRT, Pune, India.]

vii) Passenger Carried :

It is also one of the parameter for measuring the physical performance of

State Transport Undertakings. S. T. Punjab and NBSTC are quite good in terms of the passengers carried by them. Table 7.8 shows the comparative picture of passenger carried of both undertakings. From the table it is clear that S. T. Punjab has been able to achieve a target of 400 passengers per bus per day from 1980-81 to 1985-86, but after that passenger carried per bus per day has been declining and not been able to achieve above referred target, but in the case of NBSTC, it has been able to achieve target 400 passenger carried per bus per day from 1980-81to 1997-98 except in the year 1989-90, 1990-91, 1991-92 and 1992-93. In the initial years, NBSTC has done much more better than S. T. Punjab in this regard. During the year 1980-81, passenger carried per bus per day, in the case of S. T. Punjab was 413 and ends in the year 1997-98 was 405. While in the case of NBSTC it was 446 in the year 1980-81 and ends with 450 in the year 1997-98. Thus, it is clear from the table 7.8 that in most of year NBSTC had carried more passengers in their buses than that of S. T. Punjab. With the passage of time, both undertakings are to give attention for boosting passenger carried.

After analysing all six parameters, on the basis of efficiency trends, one comes to the conclusion that the S. T. Punjab has performed far better than NBSTC. According to Planning Commission report, this is mainly due to well management and also for providing better operational facilities and supplying buses to the routes on the basis of correct information and timely met the additional traffic demand.

Table 7.8

Passengers carried per Bus per day in S.T. Punjab and NBSTC

Year	S. T. Punjab	NBSTC
1980 - 81	413	446
1981 - 82	400	465
1982 - 83	421	547
1983 - 84	439	611
1984 - 85	403	686
1985- 86	419	815

Table contd. next page

Table 7.8 Contd.

1986 - 87	386	671
1987 - 88	371	643
1988 - 89	344	N. A.
1989 - 90	363	200
1990 - 91	340	200
1991 - 92	343	253
1992 - 93	351	365
1993 - 94	377	410
1994 - 95	379	424
1995 - 96	391	488
1996 - 97	391	493
1997 - 98	405	450

Source : Calculated.

[The all India average in respect of passengers carried per bus per day is 650. As has been calculated by the CIRT, Pune, India.]

b) Efficiency Trends In terms of Financial Parametres :

Financial performance of State Transport undertakings can be viewed in terms of the following variables.

i) The growth of Revenue per Effective Kilometre.

ii) Increase in cost per effective Kilometre.

iii) Net profit/loss per kilometre.

iv) Impact of Taxation and

v) Return on Investment.

(i) Growth of Revenue per Effective Kilometre :

S. T. Punjab and NBSTC, both these undertakings collect their revenue mainly by the sale of tickets to the passengers who travel in their vehicles. Table 7.9 reveals revenue per effective klm. for both these undertakings. The performance of NBSTC is quite comparable with that of S. T. Punjab upto 1982-83, marginally in favour of S. T. Punjab. But after that NBSTC was doing well in this regard.

From 1983-84 to 1992-93, Revenue per effective kilometre is marginally in favour of NBSTC. And again after 1992-93 upto end of the study period S. T. Punjab has earned more revenue per effective kilometre in compare with NBSTC. In absolute terms, S. T. Punjab has earned 1023.0 paise per kilometres as compared to 693.5 paise per kilometre of NBSTC during 1997-98. The compound growth rate in the case of NBSTC is 1.46 and in the case of S. T. Punjab is 2.93 per annum respectively. But it is clear from the table 7.9 that S.T. Punjab has increased revenue per effective kilometre during the last four years of our study period.

Table 7.9

Growth of Total Revenue per EKM. in S. T. Punjab and NBSTC.

(Paise/Km).

Year	S. T. Punjab	NBSTC
1980 - 81	204.8	209.0
1981 - 82	229.9	203.0
1982 - 83	245.4	209.0
1983 - 84	245.8	337.0
1984 - 85	253.5	251.0
1985 - 86	248.7	280.0
1986 - 87	272.5	289.0
1987 - 88	310.1	313.0
1988 - 89	317.4	N. A.
1989 - 90	325.3	N. A.
1990 - 91	377.9	498.6
1991 - 92	439.0	551.3
1992 - 93	503.4	603.7
1993 - 94	744.4	703.8
1994 - 95	815.8	585.7
1995 - 96	859.2	637.5
1996 - 97	972.1	683.5
1997 - 98	1023.0	693.5

Source : Calculated.

[The all India average in respect of Total Revenue per EKM (Paise) is 1026. As has been calculated by the CIRT (Training and Research), Pune, India.]

(ii) Cost/Expenditure :

It is also one of the indicator for measuring the Financial performance of State Transport undertakings. Here cost or expenditure means the cost of operation or providing services to the public per effective kilometre/ Table 7.10 shows the comparative analysis of cost/expenditure of both undertakings. From the table 7.10, it is clear that from the begining of the study period NBSTC has been incurring higher cost per kilometre, whereas, S. T. Punjab has been incurring lower cost per kilometre in compare with the NBSTC. Incidence of taxes, bad road condition, unprofitable routes, number of breakdowns, personnel and establishment, fuel and lubricants, materials depriciation, overaged buses, higher maintenance cost and some other factors are responsible for the higher cost of operation in the case of NBSTC. Though the cost per kilometre is lower in the case of S. T. Punjab in compare with NBSTC, but cost per kilometre is increasing year after year and some above factors are also responsible for increasing cost in the case of S. T. Punjab. The cost of S. T. Punjab has been increased mainly due to the higher incidence of taxes.

Thus in terms of revenue and cost S. T. Punjab has performed better than NBSTC.

Table 7.10

Total Expenditure/cost per EKM. in S. T. Punjab and NBSTC

(Paise/Km.)

Year	S. T. Punjab	NBSTC
1980 - 81	278.5	385.0
1981 - 82	285.3	447.0
1982 - 83	301.0	486.0
1983 - 84	312.9	N. A.

Table contd. next page

Table 7.10 Contd.

1984 - 85	349.4	469.0
1985 - 86	350.6	522.0
1986 - 87	373.4	440.0
1987 - 88	383.7	543.0
1988 - 89	426.7	N. A.
1989 - 90	451.8	N. A.
1990 - 91	536.5	562.5
1991 - 92	563.9	638.1
1992 - 93	616.2	773.1
1993 - 94	791.5	818.4
1994 - 95	859.3	896.5
1995 - 96	973.3	1080.8
1996 - 97	1180.5	1247.4
1997 - 98	1302.2	1313.2

Source : Calculated.

[The all India average in respect of Total Expenditure per EKM. (paise) is 1140. As has been calculated by the CIRT (Training and Research), Pune, India.]

(iii) Profitability :

It is the criteria for measuring the financial performance of State Transport undertakings. Net profit of STU's means the difference between revenue per kilometre and cost per kilometres including depriciation, taxes and interest payments.

Table 7.11 shows the comparative analysis of Net profit/loss (Before Tax) per effective kilometre of operation in S. T. Punjab and NBSTC. Table 7.11 makes it manifest that the S. T. Punjab has suffered losses for 13 years out of 18 years of its operation during the period under study i. e. during 1980-81 to 1992-93, while NBSTC has also suffered losses during the whole of the period under study. This implies that over a span of 18 years, S. T. Punjab has suffered losses from 1980-81 to 1992-93 and the loss has been moving downward every year except 1982-83, 1983-84, 1984-85, 1985-86, 1989-90 and 1990-91. In those years S. T. Punjab

has been able to reduce losses. After that period i. e., from 1993-94 to end of the study period, S. T. Punjab has been running with profit. But in the case of NBSTC over a period of 18 years under study, it has suffered losses continuously. Thus, it is to be noted that NBSTC has been suffering losses more than S. T. Punjab and should give proper attention to find out the cause of losses and try to minimise the losses of both undertakings.

Table 7.11

Net Profit/Loss per Effective Kilometre of operation in S. T. Punjab and NBSTC (Before Tax) (in paise)

Year	S. T. Punjab.	NBSTC.
1980 - 81	(-) 17.6	(-) 179.7
1981 - 82	(-) 15.9	(-) 230.0
1982 - 83	(-) 22.6	(-) 275.0
1983 - 84	(-) 30.5	N. A.
1984 - 85	(-) 60.4	(-) 415.0
1985 - 86	(-) 69.0	(-) 241.7
1986 - 87	(-) 68.5	(-) 150.2
1987 - 88	(-) 42.3	(-) 229.5
1988 - 89	N. A.	N. A.
1989 - 90	(-) 100.4	(-) 55.0
1990 - 91	(-) 123.9	(-) 62.0
1991 - 92	(-) 91.3	(-) 86.2
1992 - 93	(-) 78.9	(-) 167.7
1993 - 94	131.5	(-) 113.8
1994 - 95	166.3	(-) 310.5
1995 - 96	127.9	(-)442.9
1996 - 97	49.4	(-) 563.4
1997 - 98	44.2	(-) 619.4

Source : Calculated.

[The all India average in respect of net profit/loss (Before Tax) is 5.8 paise.

As has been calculated by the CIRT (Training and Research), Pune, India.]

(iv) Impact of Taxation :

It is also one of the indicator for measuring the Financial performance of State Transport undertakings. Among the various reasons of losses, which have an adverse feature, causing a drag on financial viability of State Road Transport undertakings. The one of the main reason is heavy burden of taxes. The table 7.12 clearly shows that the Government of Punjab levied various rates of taxes on their undertakings from time to time. And it is quite high as compared to the tax rates applicable in other states as shown in the table. The table clearly indicates that S.T.Punjab's position is third in respect of tax rate. The position of NBSTC is more lower in compare with the S. T. Punjab and other undertakings. So, it is clear that, the incidence of taxation is very high in the case of S. T. Punjab than NBSTC.

It is justified to point out that the incidence of various taxes imposed by the central and state Government on their undertakings should be carefully studied because it not only influenced profit/ loss per km. of the undertakings by the rate of tax but also by fleet and vehicle utilisation. Therefore, taxes paid per bus held per year by various undertakings should be the another basis for comparison. Again Tab;e 7.12 clearly shows that S. T. Punjab's position is third. And the position of NBSTC is lower than S. T. Punjab and other undertakings.

Thus it is relevant to point out that heavy burden of taxation on state transport undertakings is responsible for taking away the revenue of the undertakings. And as a result, the profit/loss analysis of the State Transport undertaking in the state adversely affected. Deficit of these undertakings are also affected heavily. The taxation system of State Transport undertakings has been debated very much throughout the country and the Government also trying to solve the problems by appointed Committees from time to time to give suggestions and suitable measures to solve the problems. The committee on Transport policy and co-ordination has suggested, the tax system should be so devised as to contribute to the maximum extent to the development of efficient, well organised and techonologically progressive road transport industry.[10] It has also been recommended that the

Taxation policy should be such as to maximise the growth of internal resources so that these can be ploughed back into the capacity expansion programmes and the creation of sufficient supporting facilities.[11] A report on state Transport undertakings in India by CIRT, Pune, and ILO/UNDP project has observed that the main cause of financial losses of state transport undertakings is the impact of taxation system.The project report recommended the relief of 60 percent taxes immediately. It recommended that the fares should be revised every two years to account for increase in operating costs owing to factors like inflation and rising cost etc.[12] Therefore, it is necessary to review the tax structure of state Road Transport undertakings to make it viable and relevant to the present day context.

Table -7.12

Incident of Taxation in STU's 1997-98.

Sl. No.	Undertaking	Total taxes per km. (paise)	Total Tax paid per bus held per year (Rs)
	1	2	3
1.	Maharashtra SRTC	178.8	1,64,312
2.	A.P. SRTC	143.9	1,63,531
3.	Karnataka SRTC	66.8	69,948
4.	Gujrat SRTC	139.3	1,52,700
5.	U.P. SRTC	50.0	39,660
6.	Kerala SRTC	21.0	20,389
7.	S.T. Haryana	307.1	3,28,249
8.	Rajasthan SRTC	147.4	1,50,213
9.	M.P. SRTC	219.5	1,66,955
10.	S.T. Punjab	305.0	2,45,758
11.	Bihar SRTC	95.3	5,612
12.	Cheran TCL	75.0	1.03,319
13.	Pepsu RTC	316.5	2,88,112
14.	NBSTC	0.3	208

Table contd. next page

Table 7.12 Contd.

15.	KUM - II	70.5	1,04,059
16.	VPM - I	73.0	1,11,791
17.	KUM - I	72.0	1, 12, 934
18.	SLM - I	73.0	1,07,529
19.	CBE - II	70.0	1,07,000

Source : Performance Statistics of STU's 1997-98 compiled by CIRT. Pune.

[In the case of S.T. Punjab, total taxes per kilometre (paise) and total tax per bus held per year (Rs) is high in compare with NBSTC. This is observed in performance Statistics, published by CIRT, Pune. (Date - 31.03.98 P- 101, 102 and 103)]

v)Return on Investment :

It is the parametre for measuring the financial performance of State Transport undertakings. Table 7.13 clearly shows that S. T. Punjab and NBSTC, both have earned positive and negative return on investment. S.T. Punjab only has earned positive return on investment during the year 1980-81, 1981-82 and 1982-83, where as NBSTC also earned only positive return on investment during the year 1990-91 and 1991-92. In the year 1997-98, the ROI was 48.8731 in the case of S.T. Punjab and it has done well in respect of rate of return criteria than that of NBSTC and it can be further proved by the report of the planning commission.

Table - 7.13

Return on Investment for S.T. Punjab and NBSTC

Year	S. T. Punjab	NBSTC
1980 - 81	3.4964	– 122.0584
1981 - 82	9.4024	– 91.0259
1982 - 83	4.0330	– 99.7304
1983 - 84	– 2.5380	N.A.
1984 - 85	– 11.9898	– 168.0812
1985 - 86	– 18.0160	– 161.4038

Table contd. next page

Table 7.13 Contd.

1986 - 87	– 16.5064	– 162.1648
1987 - 88	– 4.1929	– 156.0384
1988 - 89	23.3681	N.A.
1989 - 90	33.3953	N.A.
1990 - 91	39.2208	7.7769
1991 - 92	18.2923	4.98265
1992 - 93	– 9.4014	N.A.
1993 - 94	92.0298	N.A.
1994 - 95	107.3991	N.A.
1995 - 96	87.5679	– 226.9071
1996 - 97	69.5039	– 268.7485
1997 - 98	48.8731	– 293.9681

Source : Calculated

[Negative ROI (percent) means lower the financial performance and positive ROI (percent) means better the financial performance. It is recommended by the Government of India, report on the performance of State Road Transport undertakings, Planning Commission, New Delhi, 1989, P-79]

SUMMARY

The object of this chapter is to compare the performance of S.T. Punjab with NBSTC. Both the transport undertaking ply their buses mainly in plain areas. Punjab is agriculturally developed and situated in western side of India. But North Bengal situated in eastern side of India. NBSTC is in corporation form where as S.T. Punjab is departmental undertaking. The performance of NBSTC has been evaluated in chapter three on the basis of data, since both S.T. Punjab and NBSTC ply their buses mainly in plain areas, it will be proper and analytically useful if their performance is compared with each other. Considering all these points to locate the weak areas of NBSTC we have compared the performance of S. T. Punjab and NBSTC with each other in terms of the following two parameters.

(a) Efficiency trends in terms of Physical Parameters.

(b) Efficiencey trends in terms of Financial Parameters.

a) Efficiency trends in terms of physical parametres :

1) Bus-Staff Ratio :

Table 7.1 shows the Bus-staff ratio of S. T. Punjab and NBSTC. The table clearly reveals that it is constantly in favour of S. T. Punjab. It has utilised less Bus-staff ratio during the period of our study. Staff Bus Ratio has shown a decreasing trend in S. T. Punjab whereas it has been higher and almost constant in NBSTC. It is 4.7 during the year 1980-81 in the case of S. T. Punjab while it is 14.2 in the case of NBSTC. Again, during the end of the study period it is 10.87 in the case of NBSTC, while it is 5.69 in the case of S. T. Punjab during the year 1997-98. So, it is clear that NBSTC is spending more on its staff but S. T. Punjab is spending less on its staff, though both undertakings are identical. All India average is 8 person per bus and in this way S. T. Punjab has been able to achieve referred target but NBSTC has not been able to achieve referred target stated in earlier chapter.

2) Staff employed per 100 kms. of operation per day in S. T.Punjab and NBSTC :

Table 7.2 clearly reveals that S.T.Punjab has performed better than NBSTC during the period of our study. Sometimes Bus-staff ratio is deceptive and does not reflect the true position. But the above criteria is a better index for measuring the efficiency of STU's. In the case of S.T.Punjab, staff employed per 100 kms. of operation is less than 2 whereas in the case of NBSTC it is higher than 3 during the period of our study. So we can say that, S.T.Punjab is more efficient than NBSTC.

3) Fleet Utilisation :

Table 7.3 clearly reveals that S.T.Punjab has increased its performances from 91 percent buses to 96 percent buses in use on the road during the period of our study, whereas the all India average is 85 to 90 percent which is referred in the earlier chapter. But in the case of NBSTC, at the beginning of the study period

the percentageof fleet utilisation was 68 percent and at the end of study period (97-98) it was 66.3 percent. It has not been able to reach 90 percent target stated in earlier chapter. So we can say that, the performance of S.T.Punjab is better than NBSTC.

4) Consumption of Diesel, Lubricants and Oils :

Table 7.4 reveals the comperative performance of consumptin of Diesel, Lubricants and Oils of S.T.Punjab and NBSTC. S.T.Punjab has achieved nearest 4 kilometres per litre of oil during the study period, but in the case of NBSTC, it has not achieved 4 kilometres per litre of oil during the period of our study. So we can say that, the performance of S.T.Punjab is better than NBSTC.

5) Breakdowns :

Table 7.5 exhibits that NBSTC has not an impressive record of avoiding breakdowns. It was starting with 1.41 breakdown per 10,000 kms. and increased to 2.17 breakdown per 10,000 kms. at the end of the study period. However S.T.Punjab in comparison with NBSTC is in very good position. At the beginning of the study period it was 78 per 10,000 kms. and at the end of the study period it was 0.57 per 10,000 kms. run. Therefore, even on this critical parameter S.T.Punjab has been more efficient than NBSTC.

6) Accidents :

The relationship of accidents with efficiency is inverse. Table 7.6 clearly exhibits the comparative analysis of accidents for S.T.Punjab and NBSTC. The table clearly shows that, in the initial years, from 1980-81 to 1983-84, the performance of NBSTC has been far better than S.T.Punjab. However, after 1983-84, S.T.Punjab has been able to reduce accident per lakh kilometre than NBSTC. As a result, after 1983-84 S.T.Punjab has shown better performance than NBSTC. So we can say S.T.Punjab, even on this parametre, is more efficient than NBSTC.

7) Vehicle Utilisation :

Table 7.7 shows the comparative analysis of vehicle utilisation for S.T.Punjab

and NBSTC. It is clear from the table that in Bus utilisation per day (kms.) on Road is S.T.Punjab has done better than NBSTC over time. In the case of NBSTC, average bus utilisation per day (kms.) on Roads is 232.81 while in the case of S.T.Punjab, average bus utilisation per day (kms.) on road is 237.43. Thus S.T.Punjab has done better than NBSTC and in the other way we can say that , the performance of S.T.Punjab is better than NBSTC.

8) Passenger Carried :

Table 7.8 shows the comparative analysis of passenger carried for S.T.Punjab and NBSTC. The table clearly shows that in respect of passenger carried NBSTC has done better than S.T.Punjab. At the beginning of the study period, NBSTC carried 446 passengers per bus per day but at the same period of time S.T. Punjab carried 413 passengers per bus per day . Again, at the end of the study period (1997-98), NBSTC carried 450 passengers per bus per day, while S.T.Punjab carried 405 passengers per bus per day. Thus it is clear from the table 7.8 that, NBSTC had carried more passenger in their buses than that of S.T.Punjab. So, in this respect, the performance of NBSTC is better than S.T.Punjab during our study period.

After analysing all six parametres, on the basis of efficiency trends we can draw the conclusion by saying that S.T.Punjab has performed better than NBSTC. According to the Planning Commission report this is mainly due to well management, and also for providing better operational facilities and supplying buses to the routes on the basis of correct information and timely met the additional traffic demand.

b) Efficiency trends in terms of financial parametres :

Financial performance of state Transport undertakings can be viewed in terms of the following variables.

1) The growth of revenue per effective kilometre.

2) Increase in cost per effective kilometre.

3) Net profit/loss per kilometre.

4) Impact of Taxation and

5) Return on Investment.

1) Growth of revenue per effective kilometre :

Table 7.9 reveals the comparative analysis of growth of total revenue per EKM. for S.T.Punjab and NBSTC. At the beginning of the study period (1980-81) NBSTC, has collected more revenue per EKM than S.T.Punjab. But after 1993-94, S.T.Punjab has collected more revenue per EKM than NBSTC up to end of the study period (1997-98). Thus we can say that, the table clearly reveals that S.T.Punjab has increased revenue per EKM and performed better than NBSTC during the study period.

2) Cost/Expenditure :

Table 7.10 shows the comparative analysis of cost/expenditure of S.T.Punjab and NBSTC. The table clearly shows that at the beginning of the study period (1980-81) total expenditure/cost per EKM. in NBSTC was 385.0 paise/km. whereas it was 278.5 paise/km. in the case of S.T.Punjab. Again, at the end of the study period (1997-98) it was 1302.2 paise/km. in the case of S.T.Punjab and 1313.2 paise/km. in the case of NBSTC. Some factors are responsible which increase the cost in the case of NBSTC such as maintenance cost, Bad road conditions, unprofitable routes etc. The cost of S.T.Punjab has increased mainly due to the higher incidence of taxes. Thus in terms of revenue and cost S.T.Punjab has performed better than NBSTC.

3) Profitability :

Table 7.11 shows the comparative analysis of net profit/loss per effective km. of operation before tax in S.T.Punjab and NBSTC. The table clearly reveals that S.T.Punjab has suffered losses from 1980-81 to 1992-93 but after that period it has made profit till the end of our study period. But in the case of NBSTC it has suffered losses during all the period of our study and the amount of losses has increased every year. Both undertakings are identical, and plying their buses in plain-areas. But it is to be noted that NBSTC has been suffering losses more than S.T.Punjab and should give proper attention to find out the causes of losses and

try to minimise the losses of both undertakings.

4) Impact of Taxation :

It is one of the indicator for measuring the financial performance of State Transport undertakings. The table 7.12 clearly shows that the Government of Punjab levied various taxes on their undertaking from time to time. The table clearly indicates that S.T.Punjab's position is first in respect of tax rate. The position of NBSTC is lower in compare with S.T.Punjab in respect of total taxes per km. (paise). So the incidence of taxation is very high in the case of S.T.Punjab than NBSTC.Inspite of that S.T.Punjab has been able to reduce losses in respect of NBSTC during the period of our study. The rate of taxes not only influence the profitability of the undertaking but also fleet and vehicle utilisation. So taxes paid per bus per year should be the another basis for comparison. Again, the table 7.12 shows that S.T.Punjab's position is second but NBSTC's position is much lower than S.T.Punjab. The taxation of STU's has been delated very much throughout the country, because this system affect the profitability of STU's.

5) Return on Investment :

It is one of the indicator for measuring the financial performance of STU's. Table 7.13 shows the comparative analysis of both undertakings. It reveals that ROI during the beginning of the study period in the case of S.T.Punjab was positive i. e. 3.4966 but it was negative i. e. (-) 122.05 in the case of NBSTC. Again, at the end of the study period it was positive in the case of S.T.Punjab but it was negative in the case of NBSTC. So it can be said that S.T.Punjab has done well in respect of ROI than NBSTC.

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