CHAPTER - V

FINDINGS, CONCLUSION AND SUGGESTIONS
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MAJOR FINDINGS

The road length increased 5 times from 1950-51 to 1991-92. The number of passenger buses increased by 11 times. The plan investment for public sector transport shows that during the first plan period it formed 22.14 percent of total investment. Then it gradually came down to 12.70 percent in the Sixth plan. After slight increase in Seventh plan again it came down to 12.93 percent in the Eight plan. The total length of roads in India was 19,98,434 km. (both surfaced and unsurfaced roads) in 1988-89.

Maharashtra had the longest roads followed by Kerala and Tamil Nadu. During 1960-61 the public transports formed 31.6 per cent and the private transports formed 68.4 per cent of buses. This proportion changed to 38.4 percent and 61.6 percent respectively in 1984-85. So the private transport sector dominated in the scene. Fleet utilization increased from 76 per cent in 1971-72 to 88 per cent in 1993-94. Labour productivity in terms of kms increased from 22.4 to 35.3 and kilometre productivity increased from 165 to 264. In total fleet strength Andhra Pradesh stood first followed by Tamil Nadu.
The number of routes operated was high in Karnataka followed by Tamil Nadu. The number of passengers carried was high in Tamil Nadu. Occupancy ratio was high in Kerala and percentage of fleet utilisation was high in Andhra Pradesh. The total revenue for 1993-94 was high in Tamil Nadu followed by Andhra Pradesh. The total cost was also high in Tamil Nadu. The revenue per bus per day was also high in Tamil Nadu but the loss was high in Karnataka. The loss went on increasing from Rs. 111.36 crores in 1979-80 to Rs. 510.96 crores in 1986-87 and stood at Rs. 621.54 crores in 1993-94. The Delhi Transport Corporation took the lead sharing 45.33 per cent of total losses. The Pepsu RTC was the least with 1.56 per cent loss. Among the profit making SRTUs, Maharashtra SRTC stood first followed by Rajasthan SRTC, four transport corporations from Tamil Nadu earned profit.

In terms of number of buses Tamil Nadu stood first, in terms of road length per lakh of population Kerala stood first and in terms of buses for one lakh of population Kerala stood first. The distribution of road lengths provided a pattern that showed the southern states more favourably placed than those of the Northern States except Maharashtra, Orissa and Uttar Pradesh. Among the Southern States, Tamil Nadu had the largest number of registered motor vehicles (15,38,743) followed by Andhra Pradesh (14,60,792), Karnataka (14,32,843) and Kerala (6,47,742) in 1990-91. An overview of the length of roads in Tamil Nadu showed that the Panchayat and the Panchayat Union Roads formed the top place followed by District roads.
The total number of vehicles stood at 11.49 lakhs in 1989 and increased to 19.21 lakhs in 1993. Two wheelers formed the major part of motor vehicles followed by motor cars and goods vehicles. Stage carriages (passengers buses) take the sixth place. The total number of buses operated in Tamil Nadu over the various years shows that public sector owns more number of buses than private sector.

The number of Public Transport Corporations increased from 15 in 1989-90 to 19 in 1993-94. The fleet strength increased from 13,640 to 14,952. Gross income increased from Rs. 752.89 crores to Rs. 1,308.39 crores. Net loss increased from Rs.22.17 crores to Rs. 59.86 crores. Inaugurated on 01.04.1985, the Dheeran Chinnamalai Transport Corporation at present has 15 depots in Tiruchirapalli district. Besides, unit for body building purpose is functioning in Karur. It has a unit for re-condition at Thoovakudi and one tyre retreading unit at Dheeran Nagar. There are two F.C units at Dheeran Nagar and Ariyalur. The number of buses increased along with the number of routes during the study period. The sample corporation routes are high in town areas and the strength of operational fleet is equal for both, town and mofussil routes. The maximum number of new routes (35) was introduced during 1985-86 and 1986-87. Less number of new town routes (9) was introduced during 1992-93. The cumulative total of villages covered was 80 in 1985-86 and 323 in 1992-93. The population covered increased from 0.62 lakhs in 1985-86 to 3.40 lakhs in 1992-93. The cumulative total of new mofussil routes increased from 119 to 152 during the study period. The number of mofussil buses operated increased from 230 in 1985-86 to 446 in 1993-94. During 1986-87 more number of buses were
added. Of the total fleet strength, mofussil and town services were equal in number. Among the mofussil bus services, Karur mofussil had the largest services (59), and Musiri (18) the lowest. With regard to town bus services, the highest number of services were operated at Contonment and Rockfort-II. The lowest number of services were operated at Ariyalur (15). During the study period the fare was raised five times. The tax per seat per quarter for mofussil bus was Rs.310.00 during 1990-91. It rose to Rs.406.25 during 1992-93. The rate of increase in motor vehicle tax was comparatively less for town buses. The quarterly tax per seat for mofussil buses increased from Rs. 70 in 1967 to Rs. 406.25 in 1995.

Every Driver and Conductor was entitled to receive an incentive from their daily collection of their routes. It varied for town services, mofussil services and limited stop services. For town services, the incentive was high and was low for mofussil buses. During 1985-86, 173 chassis were purchased. During the year 93-94 only 150 chassis were purchased. When DCTC was bifurcated on 01.04.1985 the staff strength was 2,367. It increased to 5,890 on 31.03.94. The average strength of operational staff, drivers and conductors was 70 percent. Whereas the average strength of administrative staff was 7.66 per cent, a ratio of 10:1. The number of bus days during 1985-86 was 1,30,200. It gradually increased and stood at 2,78,618 days during 1993-94. Majority of the bodies were built by the corporation's own body building unit. Condemned vehicles were sold every year. The number of such vehicles was considerably high during 1992-93 (150) and low during 1985-86 (26).
Payment towards bonus increased from Rs. 18.86 lakhs in 1985-86 to Rs. 152.00 lakhs in 1993-94. The number of employees benefitted also increased from 2,065 in 1985-86 to 5,763 in 1993-94. The contributions to Institute of Road Transport also increased from Rs.30.00 lakhs in 1986-87 to Rs. 140 lakhs in 1992-93. The notable feature was the continuous loss incurred by the corporation except in the year 1989-90. The contribution to the Institute of Road Transport, Tharamani, Madras, was controversial and had telling effect upon the profit of the corporation, as special contribution to these funds with secret norms was made. The contribution to I.R.T (Regular) was Rs. 3.01 lakhs in 1988-89 and stood at Rs.5.78 lakhs during 1993-94. But contribution to I.R.T. (Special) was Rs.30 lakhs during 1988-89 and rose to Rs.140 lakhs during 1992-93. Borrowing from TNTDFC formed 61.56 percent of the total during 1985-86, it was all time high with 76.72 per cent in 1986-87 and low with 60.86 per cent in 1991-92. Another source of borrowings was the Government of Tamil Nadu, which provided 21.81 percent during 1985-86 and the borrowing went on declining and stood at 0.72 per cent during 1991-92. In 1993-94, the corporation’s fleet strength stood at 861 and the buses were plying on 440 routes and they covered a distance of 3.19 lakhs kilometres every day. About 8.34 lakhs people travelled in buses owned by the corporation every day, and the public was served by 5,890 employees in the corporation.

According to the plan for 1994-95, the Dheeran Chinnamalai Transport Corporation replaced the old and damaged buses by acquiring
150 new buses. To show its sense of social welfare to the comfort of the travelling public, it constructed 2 shelters and 2 motels for the benefit of the people. In spite of loss during the year 1993-94, DCTC continued to extend free travel concession to blind persons, physically handicapped persons, freedom fighters and allowed free travel concessions to students upto VIII standard and concessional fares to other students. The co-operative store run by the corporation rendered valuable services. In the canteen, the food items were sold at concessional rate for the employees. It provided medical facilities, rest rooms and vocational training to the children of the employees. In 1993-94, it sanctioned Rs. 32.44 lakhs for distribution as performance incentive to the workers. It spent Rs. 152 lakhs on bonus and ex-gratia to the employees of the corporation.

During the year 1993-94, DCTC held 861 buses. It occupied the sixth rank in terms of fleet strength in Tamil Nadu. The PRC and PT Dr. JJTC occupied the first and last ranks respectively. The total number of buses introduced during the study period increased to 1393. Replacement of buses was calculated to be 823 and 570 new services were introduced. During the year 1993-94, the percentage of kilometre efficiency in DCTC was 97.5 per cent and that of JJTC was as high as 99.4 percent and of PTC as low as 91.3 percent. The percentage of fleet utilisation was high during 1988-89 (96.52 per cent), and low during 1987-88 (91.87 per cent). Compared to All India statistics of fleet utilisation the sample corporation's performance was better.
There has been an upward trend in the km. operated per bus per day from the beginning. In 1985-86 it was 398 km. and it increased to 399 in 1986-87, it has been more or less stabilised at 425. During 1993-94, TTC in which vehicle utilization was for 692 km. per day and MKBTC was for 252 km. per day per vehicle. During the year 1985-86 the corporation covered 517.62 lakhs kilometres. This rose to 1,166.03 lakhs kilometres during 1993-94. Regarding km. per day, it was 1.42 lakhs km. per day in 1985-86 and this increased to 3.19 lakhs km. per day during 1993-94. During 1985-86 to 1993-94 there has been 2.4 times increase in the average number of passengers carried per day.

During 1985-86 the occupancy ratio of the DCTC was 64 percent. There had been steady rise till it touched a maximum of 70.55 percent. But from 1991-92 there was a sudden decline which may probably be due to stiff and unfair competition faced from other operators. However, during 1993-94 there was an increase in the percentage to 70.67. In DCTC, KMPL increased from 4.05 in 1985-86 to 4.41 in 1993-94. But compared with other SRTCs, KMPL had more than 4.5 in Andhra Pradesh SRTC and Gujarat SRTC. Therefore, there was every possibility to improve the KMPL in the DCTC. From 1985-1994 the number of breakdowns were due to mechanical defects (10,701), Electrical defects (955), tyres and tubes (6,691) and others (226). Totally 18,573 breakdowns were reported during the study period. There was a progressive decrease in the rate of breakdown of the vehicle from 0.32 percent per 10,000 km. in the year 1985-86 to 0.17 per cent in the year 1993-94 except for an increase in the breakdown rate for the years 1987-88, 1990-91 and 1993-94.
Accident rate of DCTC in 1993-94 was 0.53 per one lakh operated kilometres. The Haryana Roadways had the lowest accident rate in the country with 0.18 per lakh kilometres operated.

The bus staff ratio in the corporation fluctuated between 6.65 and 7.05. In a transport industry, the work relating to staff strength was fixed at 7.50 per bus by the Transport Expert Committee. In comparison to other SRTCs, the ratio in DCTC had been the lowest. There were variations in the number of kilometres run by each tyre during the study period. The average life of a tyre was 1,30,936 kilometres. Although the corporation incurred km. losses due to several factors, the total km. loss due to want of crew members was appreciably less than that of other factors.

In comparison with the other transport corporations, in Ahmadabad MTS which had 70.86 percentage of over aged fleet, Tripura RTC with 48.53 per cent, Cheran TC with 43.19 per cent, the DCTC had only about 7.08 of over aged fleet and it had therefore lastly been the continuing factor to the operational efficiency of the DCTC.

Capital employed was steadily increasing from Rs. 551.10 lakhs in 1985-86 to Rs. 1,467.00 lakhs in 1993-94. But the return on investment over the years was not steady. It was very erratic with steep ups and downs. Return on investment was as low as 0.87 per cent during 1990-91 and as high as 16.23 per cent during 1989-90.
During 1985-86 earnings per kilometre was 371 paise, it was 505 paise during 1990-91 and stood at 668 paise during 1993-94. The cost per kilometre was also increasing year after year from 371 paise to 681 paise. The average earning per bus per day was Rs. 1,474 in 1985-86 and this has grown steadily and stood at Rs. 2,794 during 1993-94. During the year 1985-86 the total variable cost was 41.98 per cent and the total fixed cost was 58.02 per cent. There was downward trend in the variable cost upto 1992-93 and it slightly increased to 40.15 per cent during 1993-94. With regard to fixed cost over the period of study it increased. Fixed cost was 58.02 per cent in 1985-86 and it touched a peak of 63.66 per cent in 1992-93 and came down to 61.82 per cent in 1993-94. During the year 1985-86 the average operating revenue per kilometre was 371 paise, it increased to 668 paise during 1993-94. On the other hand, the average operating cost per kilometre was 371 paise during 1985-86 and it increased to 681 paise during 1993-94. The loss of the corporation was mounting from Rs. 0.35 lakhs in 1985-86 to Rs. 153.62 lakhs in 1993-94. The main reason for the loss was that the corporation had been shifting a huge portion as of surplus contribution to the Institute of Road Transport (IRT), Madras.

During the year 1985-86 the investment of vehicles formed 84.57 per cent of the total capital investment. This came down to 60.40 per cent during 1989-90 and stood at 73.17 during 1993-94. Investment on land and building formed 10.05 per cent in 1985-86, was high at 22.04 per cent in 1990-91 and came down to 18.41 per cent during 1993-94. The return on
capital employed was 6.00 per cent in the first year. It was fluctuating during the study period. It was highest during 1989-90 (19.61). Strangely during the year 1990-91 it had dropped to 0.97 per cent which was the least. Table 4.8 shows the ratio of the Current Assets and Current Liabilities. Generally it was not satisfactory. During the first year of the study it was the highest. During the years 1985-86, 1989-90, 1990-91, 1992-93 and 1993-94 the liquidity position of the corporation was satisfactory. But during the years 1986-87, 1987-88, 1988-89 and 1991-92, the quick ratio was below, because out of the total current assets of the corporation, the stock was more than any other components of current assets. During these years the liquidity position of the corporation was poor. The debt-equity ratio showed an upward trend from 4.18:1 to 17.44:1. The income to equity share also increases on the increase of the debt-equity ratio. The equity shares decreased during the period of study gradually when compared to the creditors, because the resources of the equity contribution of the Government of Tamil Nadu were more than total assets. In these years the resources were utilised by the corporation for its expansion. The ratio of fixed assets to proprietors fund was more satisfactory in this corporation, because every year the corporation had been getting new buses for its expansion. Therefore, every year the fixed assets of the corporation increased constantly. There was a fluctuation between the ratios of currents Assets to proprietors' fund, because of the increase or decrease in current assets. Except in the year 1986-87 the ratio showed improvements in financial strength.
CONCLUSION

The present study is an empirical study which covers the operational efficiency and financial performance of Dheeran Chinnamalai Transport Corporation. This is one among the 19 Public Sector Transport Corporations in Tamil Nadu and located at Trichy. Data have been gathered from primary and secondary sources. Comparison with other Transport Corporations in Tamil Nadu and other SRTUs has been made wherever needed. This study covers a period of 9 years (from 1.4.85 to 31.3.94). To measure the operational efficiency, 15 indicators have been used. The financial performance has been measured using financial ratios. An opinion survey among a cross section of the consumers has been conducted to gather opinions relating to customer service.

The sample corporation which was inaugurated on 1.4.1985 had 15 depots in the erstwhile Tiruchirapalli district. Now it has a body building unit at Karur, a re-conditioning unit and one tyre retreading unit at its disposal. The corporation has increased the number of buses over the years. The number of routes was more in town areas and the fleet strength is more or less equal in town and mofussil areas. A large number of new routes have been introduced during 1985-86 and 1986-87. The number of villages covered increased four fold and the population covered has increased six fold during the study period. During the study period bus fare
have been raised five times, the staff strength of the corporation increased twice. The number of bus days has increased two fold during the study period. Payment towards bonus has increased by 9 times and the controversial contribution to the Institute of Road Transport increased 5 times over the study period.

The sample corporation gets funds from Tamil Nadu Transport Development Finance Corporation (TNTDFC) and goes on increasing the fleet strength as well as replacement of old buses. DCTC occupies sixth rank in terms of fleet strength among the TCs in Tamil Nadu. Likewise the percentage of fleet utilization is also higher compared to the All India statistics.

There is progressive decrease in the breakdown of vehicles. Further the corporation has been working with the lowest bus staff ratio compared to other SRTCs. The height of the operational efficiency was found with the lowest percentage of overaged fleet.

While the operational efficiency of the sample corporation in terms of operational parameters was satisfactory the financial performance in terms of return on investment has not been steady over the years. The cost per kilometre has been increasing year after year but the earnings per bus per day over the years have risen slowly. The result is a net loss for the corporation. The notable point is that the corporation has earned profit only during one year of the study period. The reason cited is that a huge amount of money has been transferred to the contributions of IRT. Though the
liquidity position of the corporation is satisfactory, the ratio of current assets to current liabilities is not satisfactory. Every year the fixed assets of the corporation have increased constantly thereby increasing the ratio of fixed assets to proprietors' fund.

The performance of the corporation in rendering various amenities and increasing the service conditions of the employees is very much appreciable. But compared to the private bus operators the sample corporation has not maintained customer satisfaction in terms of punctuality, maintenance, courtesy etc. The final conclusion is that the DCTC though running on loss is able to have operational efficiency on many counts. But on financial side the ultimate performance is poor as it is facing continuous loss. Even this loss can be rectified if the profit is not diverted for funding the IRT and nobody exactly knows the purpose and operations of the fund.

SUGGESTIONS

1. One of the problems faced by the sample corporation is lack of maintenance of the buses. Though the number of new buses introduced and replacement are appreciable, poor maintenance upsets the entire performance of the fleet. Only by proper maintenance fuller capacity utilization can be ensured.

2. One of the basic infrastructures for efficient public transport system is the maintenance of roads. Roads in and around the area of operation of DCTC are maintained very poorly and roads in rural areas give a
deplorable picture. Poor roads increase the breakdowns, the wear and tear, restrict punctuality and earn the displeasure of the passengers. Hence the concerned authorities must come forward to repair and replace the roads frequently.

3. The sample corporation gets the major part of finance from the Govt. and Govt. controlled financial organisations. The rate of interest on such loans is slightly higher and a portion of the loans can be converted into equity to avoid the burden of heavy interest payment.

4. In the name of service to the community unviable and remote routes are compulsorily allotted to the corporation. This trend must be stopped and such routes must be equally given to the private sector to avoid loss on social cost for the corporation.

5. While repairing the old vehicles a lot of time is taken due to the absence of latest techniques and machines. Having obsolete machines the cost of operations increases. Hence the corporation can think of introducing latest technology and machinery in the fields of repairs, re-conditioning and tyre re-treading.

6. In purchasing the merchandise, raw-materials, spare parts, stationery etc., a centralised system is being followed for all the corporations in Tamil Nadu. Individual corporation's are not allowed to choose their own purchasing. We can observe nepotism and corruption in the centralised purchase which can be avoided by giving autonomy to the
corporations.

7. There are several sources through which the corporations can increase the income. In this context our corporations have to learn a lot from the practices of BEST (Bombay), which auctions the spaces in the bus for advertisement which fetch a sizeable income to the corporation.

8. Individual corporations must be allowed to raise money from the public by way of deposits and debentures. This can reduce the dependence of the corporation on Government Agencies for finance. We can also increase the confidence of the public in the corporations by investing their savings.

9. Attractive incentives have not been given to the staff for the efficient working in terms of fuel saving, accident free driving and courteous service. The corporation should identify such staff and provide them with financial incentives and promotions.

10. For the size and the geographical area covered by the corporation, we have very poor and outmoded communication system. Whenever breakdown occurs, it takes hours to rectify the mistake due to absence of modern communication system. Hence, the corporation must think of installing wireless sets atleast on the long run routes to start with.
11. To improve the alertness and efficiency of the corporation, representation to workers and public must be given in the management bodies of the corporation. At present such bodies are heavily represented by high profiled Government officials. The practice that is followed in Indian Railways can be imitated as a model.

12. In the selection of employees a centralised system at the state level must be followed. At present employees for various transport corporations are selected by the respective corporations using short cut methods. Due to this process inefficient and incompetents easily enter the services. Provision must be made to select employees through service commissions.

13. Steps must be taken to reduce the overhead charges, at various levels like reducing the supervisory staff, condemning the over used bus and following computerised accounting system.

14. With regard to the accounting system the public sector corporations follow a lethargic and evasive system. We can come across instances of manipulation of profit and loss which led to corruption and misuse of cash which can not show accurate fund flow analysis. A sound accounting system which can prevent malpractices and manipulations must be introduced.
Areas for further study


2. Causes for the poor financial performance of Public Sector Transport Corporations.


10. A Study of the History and Performance of State Transport Undertakings at All India Level.