CHAPTER-II

REVIEW OF RELATED LITERATURE

Review of literature pertaining to the problem makes the researcher familiar with the summary of the previous researches and the writings of recognized authors with what is already known and what is still unknown and untested. This review of literature can also help the researcher in delimiting the research problem, seeking new approach, having insight into methods and sampling errors already declared by previous investigators. Having understood the importance of review of literature, a systematic procedure has been followed by the investigator in reviewing the literature related to the study. The investigator has carefully analyzed various studies relevant to central institute of road transport, Association of state road transport undertakings, Special division of planning commission and ministry of surface transport etc. and has taken special interest for the researches in this sector. Several studies have paid attention to the transport industry. The existing literature related to the present topic can be viewed from the different perspectives as review of literatures within India and out of India.

Post War Policy Committee (1943)\(^1\) The Indian Motor transport was put into the deep waters with the Second World War because of two reasons, the first is that the import of motor vehicles was stopped during the war period and the other one is that the demand for motor transport increased enormously. To study the situation, the Government of India setup the ‘Post War Policy Committee’ in 1943. The committee made a study and recommended to change the step motherly treatment by the Government with motor transport and to reduce the burden of tax on it; but the Government took no notice of these recommendations.

Planning Commission (1953)\(^2\) “The Study Group on Transport Planning, Planning Commission” appointed a Study Group in 1953 with the object to suggest ways and means for the development of transport as per requirements of passenger

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\(^1\) The post—war policy Committee, Government of India, 1943.

traffic in the country. The recommendations of the Study Group are: (1) to let the competition continue among different modes of transport for the proper development of motor; (2) to reduce the motor transport at least by 20 per cent; (3) to provide opportunity for the development of weak units; (4) to relax the ‘code of principles and practices’ immediately and to change the zone limits from 75 miles to 150 miles. The Planning Commission accepted all the recommendations.

Mathew M.O (1964) in his book “Rail and Road Transport in India” said that the efficiency of the transport Industry as a whole was determined by organizational considerations in the context of unit sizes. He also opined that transport, being a public utility industry, was regulated by Government policies in many ways, of which some have a direct or indirect impact on the evolution of size.

Halder D.K (1967) in his book titled “Public Undertakings in Road Transport in the City of Culcutta; An Economic Investigation into Public Utilities in Calcutta” extensively studied Calcutta’s traffic problem with focus on Calcutta State Transport Corporation (CSTC). He partly evaluated the performance of CSTC for the period from 1964–65 to 1972–73. For the lower productivity of the CSTC, he held the following factors responsible:

1. Low fleet utilization (as a result of lack of proper preventive maintenance).
2. Higher absenteeism and
3. Evasion of fare.

However, his special contribution lied in applying Linear Programming (LP) Model to the problem of efficient allocation of buses on different routes.

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3 Mathew M.O., “Rail and Road Transport in India – A Study in Optimum Size and Organization”, Book Agency, culcutta, 1964, Pg.no 117

4 Halder Dilip Kumar, “Public Undertakings in Road Transport in the City of Culcutta – An Economic Analysis and Programming Solutions, Gokhale Institute of Politics and Economics, Poona, 1967, Pg.no 29
Kalyanaraman and Sehgal (1968)\(^5\) in their “Methods for Estimating Future Road Traffic” examined a few methods for estimating future road traffic. They advocated two methods, viz., mechanical and analytical. The mechanical method simply projected the past trends assuming that future experience was direct function of past experience, whereas analytical method classified and analyzed the several related components or factors that have caused the historical trend pattern.

Satyanarayana (1971)\(^6\) in his “Cost Structure of Road Transport Industry” observed that the cost of service of road transport depends upon the size of the fleet, the vehicle condition and the length and road condition. His study attempted to find out the inter-relationship between these factors on the basis of the data collected from a representative sample of motor vehicle operators in Andhra Pradesh. He had observed that the size of the motor transport unit has been a fundamental factor influencing the cost of operations of motor transport industry.

Manjula Singh (1973)\(^7\) observed in her study “Road Transport in India” that in India the operating ratio (revenue-expenditure) was always above 100 for rail and less than 80 for road transport. She recommended a well-coordinated road transportation system on the basis of such factors as assessment of demand for roads on vehicle requirement, distance from main roads, and coordination of local bodies, land surfaces regional development and employment considerations.

Santosh Sharma (1976)\(^8\)’s “Productivity in Road Transport – A Study in Innovative Management” what are we trying to do not only for today but for tomorrow and next year and for the unforeseeable future? How do one best uses the talents of the staff and how should they be rewarded? Instead of talking about one’s

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\(^7\) Manjula Singh, “Road Transport in India”, in D.M. Nanjundappa (ed.), Transport Planning and Finance, Karnataka University, Dharwar, 1973, Pg.no 67

\(^8\) Santosh Sharma, “Productivity in Road Transport – A Study in Innovative Management”, Association of State Road Transport Undertakings, Research Paper, New Delhi, 1976, Pg.no 116-119
duty to the passenger, can one find out how to get him across Delhi at the lowest costs in both time and money?

Khan R.R (1980)\(^9\)’s “Transport Management” presented a broad outline of the network of transport system in India. He covered a wide range of information falling within the broad sphere of the subject matter of transport management. Apart from continuing systems approach, a model to build up a comprehensive transport system and demographic data for transport planning, the book set out benchmark data and provides an analytical study of several vital areas of transport management.

The National Transport Policy Committee (NTPC) (1980)\(^10\) “Central Institute of Road Transport” carried out a study on “Passenger Road Transport in India”, taking the cross-sectional data of 31 undertakings for 1976–1977 and finds that the unit cost was mainly influenced by two variables namely fleet utilization and vehicle utilization. The Committee advocated a direct exchequer subsidy to urban transport undertakings in view of the social benefits that they extend.

Ali El-Mezawie. A (1982)\(^11\) as a part of ILO/UNDP project of Central Institute of Road Transport, Pune, namely “State Transport Undertakings in India: A Study of Performance, Problems and Prospects”, studied the problems and prospects of STUs in India. He studied 32 undertakings comprising of 18 corporations, 9 companies, and 5 departmental undertakings from 1975–76 to 1979–80 and concluded that the performance of company form of organization was better on almost all important counts.

Central Institute of Road Transport (CIRT)(1983)\(^12\) “The National Transport Policy Committee” contributed a paper to a seminar on “How to Make STUs Financially Viable?” held by Association of Road Transport Undertakings,

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\(^10\) Central Institute of Road Transport (CIRT), Pune, 1983, Pg.no 73-75

\(^11\) Ali El-Mezawie A, ILO/UNDP project on STUs in India – A Study of Performance, Problems and prospects, CIRT, Pune, 1982, Pg.no 65

\(^12\) The National Transport Policy Committee (NTPC), 1980, Pg.no 81-84
New Delhi and identified interest burden, constraints on increasing fare, leakages of traffic revenue, and traffic management as major problems in the way of effective management of State Transport Undertakings and made some practicable suggestions.

**Patankar (1983)** studied the different dimensions of “Road Passenger Transport in India” since 1950s and analyzed the operational productivity and efficiency of STUs for the period 1973-74 to 19979-80. He opined that the future of road transport sector in India would brighten only with productivity oriented planning.

**Srivastava (1987)** “in his Economics of Transport” has presented the historical development of various modes (air, water, road and railways) of transport in India. He has attempted to discuss various operating variables like rates, fares, low productivity, state regulations, administration, competition, financing, aspects of different modes of transport. He has analyzed the effect of efficient, cheap and well coordinated development of transport system on Indian economy.

**Rajeswari R (1987)** made “A study on profitability and productivity of Chera Transport Corporation Ltd Coimbatore” aiming to measure the productivity of CTC in terms of various parameters such as charges collected by the corporation, Operating efficiencies, profitability etc. The study concluded that the productivity of CTC has been increasing during the study period.

**Prasad Kumar (1987)** examined the “Operational Effectiveness in Public Sector Road Passenger Services” with reference to Tamil Nadu Public Transport Corporation in his study. He made an attempt to identify the variable affecting the efficiency of public sector road passenger unit and ascertained the relative role of cost size organization design on efficiency and the pattern of relationship between them and the effect of optimizing them so as to maximize managerial efficiency and provide the best operational efficiency.

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13 Patankar P.G, “Road Passanger Transport in India”, Central Institute of Road Transport, Pune, 1983,Pg.no 105-109
Krishnan R (1987)\textsuperscript{17} studied on “Financial Management in Anna Transport Corporation” and analyzed the existing capital structure of ATC sources of long term funds utilized and the working capital position of the Corporation. The study observed that during the period the capital structure of the corporation was far from satisfactory and the profitability had also been considerably reduced.

Bagade (1988)\textsuperscript{18} in his “Passenger Tax and Rational Fare Policy From STU’s” suggested a model for rational fare which was applicable in different operating conditions, constraints and limitations and took care of economic viability of State Transport Undertakings and affordability of fare to common man.

Kulkarni (1989)\textsuperscript{19} in “Recruitment, selection and placement in Road Transport” devoted his attention to the organizational and administrative aspects in road transport. He also discussed the personnel and Research Methodology administration, and after a detailed description, had given suggestions for bringing about improvements in the areas of recruitment, selection and training.

Baig, Natees, Iqbal B.A. (1990)\textsuperscript{20} in their book “Transport as a constraint for Agro – Industrial Development in Uttar Pradesh” pointed out that transport provided both backward and forward linkages to the economy of a region or a state or a country. The dependence of India and more so of Uttar Pradesh on agriculture, provided large scale opportunities for developing agro-based industries and the same required adequate availability of transport infrastructure.

Sudarshanam Padam(1990)\textsuperscript{21} discussed in detail, in “The history of bus transport in India”, the various forms of organizations in State Transport Undertakings, its management and performance by way of comparison from 1970-

\textsuperscript{17}Krishnan R,(1987) Financial Management in Anna Transport Corporation (M.Phil. Dissertation Submitted to Chikkaiah Naiker College, Erode)
\textsuperscript{18} Bagade M.V., Passenger Tax and Rational Fare Policy From STU’s, Journal of Transport Management, Vol. 12, 1988,Pg.no 51
\textsuperscript{21} Sudarshanam Padam, “Bus Transport in India”, Ajanta Publications,Delhi, 1990,Pg.no 115-119
1980 in Andhra Pradesh, Maharashtra, Gujarat and Karnataka State Road Transport Corporations. He also identified the problems in performance.

**Asaithambi S (1990)**\(^{22}\) in his “A study on supervisory pattern in Marudhu Pandiyar Transport Corporation Ltd”, concluded that the supervisory pattern of their corporation for better and harmonious relationship between supervisors and the workers would certainly help to increase the productivity of the organization.

**Venkatachalam R (1991)**\(^{23}\) made “A study on lorry Service Brokers Business at Namakkal Town”. An attempt was made to study the relationship between the brokers and owners, at the same time, the study aims to highlight the business set up and problems of brokers. His conclusion was that Government should take necessary steps to regulate and safeguard their business, and also legal provisions was to be enacted to prescribe some regulatory measures to be implemented by the RTOs for better future service to clients.

**Buvaneswari P (1991)**\(^{24}\) made a case study on the “Problem of fuel conservation in M.P.T.C. Ltd, Karaikudi”. For better maintenance of vehicle, the corporation adopted the 15 technical measures as recommended by PCRA to conserve the fuel and maintenance schedules were tightened and streamlined as half yearly overhauls be monthly, weekly, daily. To identify the defective engines immediately the corporation introduced smoke meters and further steps, were taken in order to reduce fuel consumption due to bus body weight.

**Balaji R (1991)**\(^{25}\) made “A study on evaluation of fuel efficiency measures in State Transport Undertakings (with special reference to Rani Mangammal Transport Corporation)” The study concluded that the government was taking steps to find more oil. Increase the yield from existing oil wells reduce flaring of gas, reduce fuel loss percentage in processing of crude oil in refineries. The people should contribute their mite in taking this billion dollar question for every developing economy in the

\(^{22}\) Saithambi, A (1990) A Study on supervisory pattern in maruthu Pandiyar Transport Corporation Limited A case study (M.Phil Dissertation Submitted to Alagappa University Karaikudi.
\(^{23}\) Venkatachalm. R (1991) a study on lorry Service Broker business at Namakkal Town. (M.Phil Dissertation Submitted to, Alagappa University, Karaikudi.)
world. The finite reserves of oil and gas would last much longer if a little bit of case was taken by everyone.

**Saradha P (1992)**[^26] in her dissertation “A study on productivity and profitability of Jeeva Transport Corporation Ltd Erode” attempted to highlight the organizational setup and working of JTC and evaluate its operating management. The study had also given suggestions for enhancing the productivity and profitability of the Corporation.

**Kulshrestha(1994)**[^27] selected a new area of study in the State Road Transport Undertakings. He explained that as the public sector transport had been facing competition with other means of transport and from the private operators, bus station management was important. He threw light on the bus station management and offers some practical ways and means to improve the conditions with special reference to UPSRTC.

**Vijayaraghavan T.A.S (1995)**[^28] in his research paper “Strategic options for state road transport undertakings in India” published in International Journal of Public Sector Management, highlighted that the criticism of SRTUs had become more transparent with the recent policy changes. One of the major criticisms was that they were, by and large, operations-oriented rather than strategy-oriented. He showed that the SRTUs in India were not really Research Methodology competing well in an industry, which was becoming more and more unstable. He suggested competitive types of strategies emphasizing the importance of service marketing approach.

**MohanaSundaram M (1996)**[^29] has examined the “Financial structure of Chera Transport Corporation” in his study; the study aimed to analyze the trends in the principal source of financing and to evaluate the role of internal source, external sources and long term financing of CTC. The study revealed that CTC depended more

upon external sources and stated that there was an urgent need for a balanced financial structure in CTC.

**Rajeswari Gundam (1998)**, in her book titled “Public Sector Performance of State Road Transport Corporation: A Case Study of Andhra Pradesh”, examined both the financial and social performance of Andhra Pradesh State Road Transport Corporation both at the state and regional levels. Particularly she dealt with the pricing policies of the transport service as being implemented by the corporation. She described in detail the organizational set up of the corporation along with its various features like capital investment and staffing. The Government of India appointed various Committees from time to time to study various aspects of passenger transport sector for the purpose of initiating policy measures based on the recommendation of such committees in order to strengthen and develop transport sector in the country.

**Karpagam C.R. (1998)** analyzed and compared the “Financial and non-financial performance at Cheran Transport Corporation” and an attempted to find out the relationship among selected variables attesting the performance. The study observed that a continuous evaluation of the Performance in terms of each financial and non-financial factor would have a significant role on improving the performance of the Corporations.

**Kannan K (1999)** made “An economic analysis of cost structure. Profitability and vehicle retirement model in CTC” and observed that the corporation earnings per kilometer increased gradually over years. His conclusion was that fleet utilization was high but the occupancy ratio is above 2/3 which is mainly due to unscientific time scheduling. It was suggested to modify the time schedule in all the routes to increase occupancy ratio. An earnings per Km was significantly influenced by staff cost.

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32 Kannan.K (1999), A Study on Profitability and Vehicles retirement need in Cheran Transport Corporation Limited (M. Phil., Dissertation, submitted to Bharathiyar University, Coimbatore)
Koteswaran M (2000)\(^{33}\) examined and analyzed the “Physical and financial performance of the State Transport Corporations” to assess the true nature of their performance vise-a-vise their states as public enterprise, there instead of judging performance by comparisons, an attempt had been made to arrive of the performance standards for each of the cost element constituting the total cost. The study tried to identify the extend to what basic fixing policy of the government affects the financial performance of the public enterprises and the extent to which the in effective and inefficient use at resources affected the performance.

Subramaian A (2003)\(^ {34}\) made a study on Small Road Transport operators (SRTOS) financed by the Tamilnadu Industrial Investment Corporation Limited (TIIC), The growth in transport sector; led to growth in agricultural and industrial sectors Rapid Industrialisation could not take place, unless adequate transportation was available. The study concluded that the contribution to transport sector by TIIC, the TICC provided financial facility and drew back of TIIC, Many private financiaries were already in the market with the terms more (or) less similar to TIIC, TIIC had to compete with them in securing good clients by better service.

Muthuraman R (2006)\(^ {35}\) in his study “A study on motor Accidents in Marudhu Pandiyar Transport Corporation Limited”, mentioned the causes and relief measures for the accident occurring while handling any hazardous substance, Machine could not control automatically but man can control them effectively with concentration.

Sivaparakasam D (2011)\(^ {36}\) made “A study on employee morale in Maruthu Pandiyar Transport Corporation at Karaikudi Region”. The study concluded that in his study area high morale prevailed among the employees. High morale was mainly due

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\(^{34}\) Subramanian,A (2003) A Study of small Road Transport operators (SRTOS) Financing by the Tamilnadu Industrial Investment Corporation Limited (TIIC) (M. Phil Dissertation ,Submitted to Alagappa University Karaikudi)


\(^{36}\) Sivaparakasam .D(2011) A study on employee morale in Maruthu Pandiyar Transport Coraporation Karaikudi (M.Phil Dissertation Submitted to Alagappa University Karaikudi)
to the labour welfare measures adopted by the Corporation. The study brought to day
light the fact that there was still scope for further escalation on the morale scale.

Moorthy K (2012) carried out a study on “Effectiveness of competency based education programme on operational efficiency of states transport under takings, the vision and goals of the Management” he insisted that the vision and goals of the management should be explained and all the drivers should be made aware of the goals and their role in the achievement of the goals and the responsibilities they owe and the rewards that are awaiting for their better performance. Drivers’ inclination to discharge their role meticulously by their enhanced competence should be encouraged. Environment should be conducive for the work force to learn more and more new concepts.

Niraikalai K (2012) made “An analysis of productivity in selected state transport undertakings” She selected Andra Pradesh, Karanataka, Rajasthan and Kerala State road Transport Corporations. Her conclusion identified the trends of labour productivity, capital and material productivity of selected STU’s, She mentioned that the efficiency of productivity service depended upon the quality of labour, capital and material productivity.

Studies Abroad

Fascinating studies on evolution of transportation system in different countries and the role they have played in the economic development of the respective nations provide rich insights in retrospect. Such studies are also of immense practical use in prospect since they form the basis for perspective planning in transportation and development efforts undertaken by the underdeveloped countries. Tripp Alker H (2005) in his book “Road Traffic and its Control” examined the traffic problem and relation of road to rail, sea and air transport and the science of traffic control to reduce accidents and for the smooth running of the traffic.

Bonavia M.R. (2006)\textsuperscript{40} in his “The Economics of Transport highlighted the role and significance of transport system for the development of a country and discussed the utility of good transport system from industrial, political, social and cultural angles.

Lowe (2007)\textsuperscript{41} carried out “A Study on the Development of Transportation System in Japan”. He dealt with the transport and communication system during the Tokugawa Era (1600-1686) and has described the process of the development of certain features which ultimately helped the establishment of modern transport in Japan.

A study made by the Ministry of Transport (2008)\textsuperscript{42} Scottish Development Department highlighted that the free flow of traffic at reasonable speed required planned improvement of urban road systems. The study also suggested constructing secondary means of access to enable goods and service vehicles to load and unload at the stops.

John Hibbs (2009)\textsuperscript{43} “Transport Studies an introduction” explained various approaches to study the function of transport along with control aspects.

Locklin (2010)\textsuperscript{44} “Economics of Transportation” concentrated on the study of rail-road systems. He opined that the Government ownership of transport system facilitated the planning and execution of transport system very effectively and the Government, in one way or the other was capable of providing necessary capital.

\textsuperscript{40} Bonavia M.R., “The Economics of Transport”, James Nisbet &Company, Cambridge,2006,Pg.no 42
\textsuperscript{42} Ministry of Transport, Scottish Development Department, the Welsh Office, Roads in Urban Areas, Her Majesty’s Stationery Office, London, 2008,pg.no 21
\textsuperscript{44} Locklin D.P., “Economics of Transportation”, Rechard D. Irwin, Inc., Hornewood,2010,Pg.no 22-23
**Sharp C.N. (2011)** in his work on Transport Economics, examined the studies undertaken in the field of transport system of U.K. and studied a number of basic problems like transport economics, transport investment, transport pricing and reduction in accident rate.

**Payne (2012)** in “A European Transportation System” tracing the history of development of transport in Europe suggested that as the transportation facilities were established by the private sector on the basis of free competition, the private sector should be allowed to continue as such. He also discussed the implications of Treaty of Rome on transportation in Europe.

**Conclusion**

In this chapter the researcher has reviewed the related literature of previous studies to understand the problems which are not covered by the previous studies so as to analyze them in this research. This study assesses the problems of lorry owners in various departments.

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