CHAPTER 1
INTRODUCTION AND DESIGN OF THE STUDY

1.1 Introduction
1.2 Statement of the Problem
1.3 Review of Literature
1.4 Scope of the Study
1.5 Objectives of the Study
1.6 Collection of Data
1.7 Sampling Design
1.8 Period of the Study
1.9 Operational Definitions of Concepts
1.10 Framework of Analysis
1.11 Scheme of Report
1.1 INTRODUCTION

In keeping pace with the economic development and consequent surge in demand for transport services, both passenger and freight, the various modes of transport have registered substantial growth over the years.¹

Road transport, the most dominant mode of transport, is likely to play a larger role in the coming years. ‘India has one of the largest road networks in the world. The volume of road transport has been growing at an average rate of 10 per cent, and it has emerged as one of the preferred modes of transport. It is estimated that road traffic, which accounts for 80 per cent passenger traffic and 60 per cent goods traffic, will account for 87 per cent and 65 per cent respectively by the end of the present millennium.’²

Bus transport had its beginning as a ‘Feeder Service’ to the railways, since the First World War and within a short period of time it became so popular as to effectively compete with the railway system. This led to Government intervention in the interest of co-ordination between rail and road transports.

---


Transport, especially passenger transport, is a public right. The demand for transport is largely a 'derived demand' and mainly it reflects the level of economic activity. Public road passenger transportation system in India operates with two objectives namely (i) to provide adequate economical and efficient service to all towns and villages in the area of operation and (ii) to operate on business principles.3

The Committee on transport policy and co-ordination has rightly stated in 1996 that the significance of the transport sector lies not only in the specific services it renders, but also in the unifying and integrating influence it exerts upon the economy by enhancing productivity, widening the market, introducing new stimuli to economic activity and bringing village and town nearer to each other.4

Road transport, apart from helping agricultural and industrial development, creates employment opportunities as well. Recognising the importance of passenger road transport as a prime utility service and a basic infrastructure for economic and social development, the Government of India passed the Road Transport Corporation Act in 1950. This Act was aimed at helping the formation


of the state level Public Sector Road Transport Corporations to provide an adequate, efficient, economic and a well co-ordinated service to the travelling public.  

Since the private bus operators were reluctant to become viable units, there was no alternative except to promote the form of viable units through large size public sector undertakings. The National Transport Policy Committee observed that Public Sector Undertakings had been providing satisfactory services with regularity of bus schedules and lesser malpractices in fares charged and collected. Better scales of pay to the employees, operational efficiency, passenger benefits and employees’ welfare are more tangible in State Transport Undertakings (STUs) than in private sector transport industry.

The Association of State Road Transport Undertakings (ASRTU) came into existence on September 13, 1965. The main objective is to help the member undertakings to improve their performance through training and management development. For the said purpose Central Institute of Road Transport (CIRT) was formed in Pune. ASRTU is the largest Indian Organisation in the public sector, having a membership of 71 STUs. (Vide Appendix-C)

In the year ending March 31, 1999, there were 71 STUs in India having a fleet strength of 1,07,514 vehicles, providing transport in various parts of the country. These public sector undertakings together carried nearly 61.2 million passengers every day. The total number of personnel employed in all STUs in India were 8,04,508.7

As on March 31, 1999, 21 STUs were there in Tamil Nadu having a fleet strength of 17,418 vehicles and the total personnel employed in Tamil Nadu State Transport Corporations were 1,21,915.8 TNSTC, Madurai (Division-II) Limited (earlier named KTC) is one among the STUs in Tamil Nadu. On March 31, 1999, the Corporation had 902 vehicles and the total number of personnel employed was 6,794.9

Productivity and profitability depend, to a great extent, on the interest and enthusiasm of the industrial worker towards his company and this applies to transport undertakings also.10

Transport Undertakings, being a highly labour intensive service organisation, its ability to improve productivity, profitability and service excellence is determined by the co-operation, co-ordination, collaboration and commitment of its work-force. More often than not, these public passenger road transport organisations tend to focus on performance criteria such as operational coverage, fleet performance, cost control, technical and financial performance measures, to the utter neglect of an effective and efficient human resource management. It is worth noting that performance failure in labour intensive public road transport organisation may be largely due to 'human failure' rather than 'system failure'.  

Managers of the current generation are keenly aware of the importance of people, people as individuals as well as human beings, who contribute to the profit or loss of the Corporation. Manpower Management Practices in a STU have their impact on its overall performance.

1.2 STATEMENT OF THE PROBLEM

There is a significant growth of public sector in India since independence and a large number of persons are employed in these organisations. Majority of

the public sector undertakings are being criticised for their unsatisfactory performance. The State Transport Undertakings (STUs) have also not been spared from such a criticism. The STUs employ about 8 lakh persons and their manpower cost is around 40 per cent of the total cost which is rather high. Many STUs are criticised for their unsatisfactory working and also for not making effective use of their human resources. In this context, the human resource cannot be neglected in managing the STUs and it is important that the STU managers use their skills to help their subordinates to make the best use of their abilities and increase efficiency. It is also the managerial task to plan the development of employees in the areas of knowledge, skills and attitudes, with a view to help employees to improve their performance. If the managers fail in their task, it has great adverse consequence on the performance of a group of employees who are working under them since the performance of employees depends upon the way they are managed.12

STUs in Tamil Nadu are fully owned by the State Government. Among 21 STUs in Tamil Nadu, Madurai (Division-II) Limited (earlier named as Kattabomman Transport Corporation) was established in the year 1974 operating

buses through 16 depots in Tirunelveli and Tuticorin Districts. The success and profitability of STUs largely depend on effective manpower management.

In TNSTC, Madurai (Division-II) Limited, as on March 31, 1999, 6,794 employees were working in different sections such as traffic, maintenance, administration and the like.\(^{13}\) Hence, there is a need for sound personnel practices. Eventhough the personnel policies are common to all STUs in Tamil Nadu, each STU has a separate standing order which is enforced in dealing with the employees.

\[\text{Many executives realise that the richest assets as well as the most difficult problems of a company are its people. People provide business with their strength and, at the same time, require management to do its best creative thinking.}^{14}\]

The importance of manpower management becomes evident when one recognises the fact that a Corporation's vitality and growth are determined by its manpower. Hence, in the present study an attempt has been made to study the Manpower Management Practices of TNSTC, Madurai (Division-II) Limited.

\(^{13}\) Unpublished Records of TNSTC, Madurai (Division-II) Limited.

STUs play a major role in the nation's economic progress. As one among 71 STUs in India, TNSTC, Madurai (Division-II) Limited plays a vital role in the national economy. As a public sector unit, it is supposed to be a model employer in terms of manpower management practices.

1.3 REVIEW OF LITERATURE

This part briefly reviews the studies made on different aspects of road transport connected with the present study, directly and indirectly. The review was highly useful to design the present study, as it indicated the research gap in the area of Road Transport. Studies on road transport industry in Tamil Nadu are scanty and scattered between individual self-interested efforts and the Government departments' annual statistical statements.

M.V. Bagade, by adopting the Data Envelopment Analysis, found that Tamil Nadu State Road Transport Corporations ranked first in their physical performance when compared with Andhra Pradesh, Gujarat, Maharashtra and Uttar Pradesh States Road Transport Undertakings, in 1985-'86.15

M. Kotteeswaran presented a package of possible measurable factors to analyse and assess the quality of service of State Transport Corporations in four major areas:

i) effectiveness ii) efficiency - physical iii) efficiency - economics and iv) social obligations. Applying the yardsticks, he found that the nationalised bus service system in Tamil Nadu maintained a high level of effectiveness, physical efficiency, financial viability and fulfilling social obligations in terms of bus shelters, bus terminals, comforts to passengers and employees’ welfare.16

A. Sankaraiah in his study entitled ,”Management Control in Road Transport Service” made an in-depth study of management control and reporting, at the divisional and depots level with reference to Warangal Division of the Andhra Pradesh Road Transport Corporation.17 S. Mahesh Chand in his study, “Current Issues in Public Road Transport Management” attempted to evaluate critically the merits and demerits of nationalisation and he studied the constraints of public transport management.18


A study, ‘Road Users Cost Study in India’ conducted by the Central Road Research Institute, New Delhi, yielded valuable results relating to traffic flow under typical Indian road and traffic conditions, cost of operation of vehicles, accident rate and cost and the savings in travel time.\textsuperscript{19}

A study of Bihar Road Transport Corporations undertaken by the Planning Commission, Government of India stressed the need for decentralising the management in order to utilise the human resources for better performance.\textsuperscript{20}

C.D. Jacob, Maunder D.A.C. and P.R. Fouracre in their study, “Characteristics of Conventional Public Transport Services in Third World Cities”, analysed the growing demand for public transport that had taken place in recent years. The study suggested that the transport policies obviously had to be planned in the highlight of urban development objectives, operating circumstances and resources available.\textsuperscript{21}

\textsuperscript{19} “Road Users Cost Study in India”, \textit{Central Road Research Institute}, New Delhi, 1982, p.16.


In a study on the Performance of State Transport Undertakings (1986) conducted by the Indian Planning Commission, both physical and financial performances were analysed by taking into account all the state transport undertakings in India. The study group pointed out that the corporations in Tamil Nadu were examples of more efficiently-run organisations. In this context, the study group further suggested probing into the organisational structure and management of Tamil Nadu Transport Corporations to determine their contribution towards improved performance.22

P.G. Patankar in his study, “Road Passenger Transport in India” analysed the operational efficiency and financial performance of State Road Transport Corporations. He had measured the operational economics by taking into account the difference between revenue and cost. The problem of uneconomic fares and unlimited financial resources had been analysed in detail.23


D.M. Nanjundappa who edited the book, "Transport Planning and Finance", stressed the need for expansion of capacity, the role of subsidies in State-owned organisations and the efficient use of existing network and the like. His article dealt with transport economics such as transport planning, transport and industrial location, transport pricing and finance and transport management.24

The report of the Commission of Transport in London City indicated the lack of an integrated approach to transportation problems in view of the piecemeal character of transport decisions.25

S. Smith provided rich insights into the problems faced by local Governments in administering public transport and provided a modus operandi for a change in policy and administrative set up.26

A special study conducted by the Central Institute of Road Transport revealed that the taxes levied by various Governments were not uniform. This


study stated that the road transport taxation had assumed critical dimension as its incidence was dominant. The State Transport Undertakings under the present system required tax relief.27

P.G. Patankar in his study, "Quality in Road Passenger Transport", stressed the quality in the service sector, especially, the road transport. He prescribed certain parameters to judge the quality of service offered by the transport undertakings such as punctuality, reliability, passenger amenities and comfort, incidence of breakdown, accidents and nature and quantum of public complaints. He concluded with an appeal to the State Transport Undertakings to uphold the motto, 'Service to Travellers'.28

The late president of United States, John F. Kennedy observed, "The basic objectives of our nations' transport system must be to assure availability of fast, safe and economical transport services needed in a growing and changing economy to more people and goods, without waste or discrimination in response to private and public demand at the lowest cost consistent with health, convenience, national security and other broad public objectives. Investment or capacity should be

27. "Road Transport Taxation in India, A Study of its Incidence and Impact of STUs", Central Institute of Road Transport, Pune, 1986.

be neither excess nor substantially below these requirements, for chronic excess capacity involves misuse of resources and lack of adequate capacity jeopardises progress"29

C.H. Hanumantha Rao, in his paper, “Comparative Study of Certain Traffic Parameters in Selected STUs” evaluated the performance of the major STUs in India using certain selected traffic parameters such as vehicle utilisation, crew utilisation and occupation rate”30

A. Carlin illustrated the usefulness of a sectoral approach to developmental constraints in the transport sector of the Indian economy. He analysed the constraints on some of the major sub-sections on different modes of transport and concluded that the best way to co-ordinate transport policy was by the operation of competitive market forces.31

N. Markkandayan in his study “Human Resource Management in State Road Transport Undertakings in Tamil Nadu” analysed the performance of Ranimangammal Transport Corporation, Dindigul. The various aspects analysed


in his thesis included Human Resource Management in State Road Transport Undertakings in Tamil Nadu, such as personnel policies and practices and Job Satisfaction of workers in Ranimangammal Transport Corporation. He analysed also the workers’ participation in management and the problems of crew in STUs in the State of Tamil Nadu, with special reference to Ranimangammal Transport Corporation, Dindigul. 32 M.P. Hrishikesh in his Ph.D. thesis, “An Evaluation of Human Resource Management in Karnataka State Road Transport Corporation”, evaluated the human resource policies, systems, procedures, programmes and practices in Karnataka State Road Transport Corporation. 33

M. Gangadhara Rao’s research work entitled, “Industrial Relations in Indian Railways” is a study of the personnel and union management relations with special reference to the post-independence period. 34 This study examined in detail the facts that operational efficiency of the railway had increased over the


period and labour productivity had gone up on account of the introduction of incentive plans. The study also emphasised the paramount necessity of bringing about a harmonious relationship between the workers and management.

P.P. Arya, in his research work entitled, ‘Labour Management Relations in Public Sector Undertakings’ stated that an important role had been assigned to the public sector and they should function as model employers.

Guru Charan Patro, in his study, “Human Resources Management in Different Manufacturing Industries” investigated empirically into the personnel policies, structure and functioning of personnel departments besides highlighting the practices relating to personnel administration, industrial relations and labour welfare in selected industries in India.

Jerome Joseph in his article, “Political and Legal Framework of the Right to Strike - A Macro Level Case Study” in the State-owned passenger road transport Corporations in South India stated that the major causes of planned strikes were


wage settlements, bonus and working conditions. According to him, the planned strikes had declined since 1977. He stated also that the major causes for wildcat strikes were busmen-traffic police altercations, busmen-public problems, busmen-student problems and worker-supervisory staff altercations.

1.4 SCOPE OF THE STUDY

The study is confined to one of the STUs in Tamil Nadu namely, TNSTC, Madurai (Division-II) Limited. The approach of the study is from the stand point of manpower management practices followed by the managerial personnel in TNSTC, Madurai (Division-II) Limited.

Since the number of total employees of TNSTC, Madurai (Division-II) Limited constitutes 90 per cent of the total manpower, the present study has attempted to measure the attitude of the employees also, towards manpower management practices.

1.5 OBJECTIVES OF THE STUDY

In order to describe and evaluate the Manpower Management Practices in Tamil Nadu State Transport Corporation with Special Reference to Madurai (Division-II) Limited, this study has been undertaken. The main objectives of the study are:

1. to evaluate the overall operational performance of TNSTC, Madurai (Division-II) Limited.
2. to study the manpower management practices relating to Manpower Planning, Recruitment, Training and Development.

3. to study the manpower management practices relating to rewards and benefit packages for employee in TNSTC, Madurai (Division-II) Limited.

4. to ascertain the factors influencing employer-employee relations in TNSTC, Madurai (Division-II) Limited.

5. to study the attitude of the employees towards the manpower management practices in TNSTC, Madurai (Division-II) Limited, and

6. to offer suitable suggestions on the basis of the findings of the study.

1.6 COLLECTION OF DATA

Required primary data were collected from the employees with the help of a comprehensive interview schedule. Before constructing the interview schedule the researcher contacted the personnel manager of the Corporation to have a broad idea of the manpower management practices. The researcher also met few employees and a few trade union leaders. On the basis of the information collected and also keeping the objectives of the present study in mind, the researcher constructed the interview schedule. The interview schedule was finalised after conducting a pre-test. Besides, secondary data were collected from Books, Articles, Journals, Government Orders, Transport Department (Research and Analysis Wing), Records, Performance Statistics of Central Institute of Road
Transport, Pune, Annual Reports of TNSTC, Madurai (Division-II) Limited and also Unpublished Records of the Corporation under study.

1.7 SAMPLING DESIGN

For the purpose of survey, 4 per cent of the population were selected as sample. Samples were selected both from the head office and all the 16 branches of TNSTC, Madurai (Division-II) Limited. Proportionate stratified random sampling technique was adopted in selecting the samples. The samples were selected in proportion to the numerical strength of the three categories of employees, namely administration, maintenance and traffic. Contingent workers were not covered. Among the total population of 6712 workers as on March 31, 1999, 268 employees (4% approximately) were selected as samples. Out of 268 sample employees, 18 employees did not properly respond and hence they were removed from the sample. For the present study, the total number of sample respondents is 250 employees and they form approximately 3.7 per cent of the total population. For selecting samples under the management category, 25 samples were selected through convenient sampling technique. Table 1.1 shows the sampling design of the study for employees.
TABLE 1.1
Category-wise Sampling Distribution

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Category of Employees</th>
<th>Total Number of Employees as on 31.3.1999</th>
<th>Total Number of Sample Respondents (3.70%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Traffic</td>
<td>4,930</td>
<td>184</td>
</tr>
<tr>
<td>2.</td>
<td>Maintenance</td>
<td>1,080</td>
<td>40</td>
</tr>
<tr>
<td>3.</td>
<td>Administration</td>
<td>702</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6,712</td>
<td>250</td>
</tr>
</tbody>
</table>

1.8 PERIOD OF THE STUDY

The data relating to manpower management practices in TNSTC, Madurai (Division-II) Limited, have been collected for a period of ten years from 1989-’90 to 1998-’99.

1.9 OPERATIONAL DEFINITIONS OF CONCEPTS

In order to present the concepts used in the study precisely and without ambiguity, the operational definitions of certain concepts are presented here.
1.9.1 Fleet Utilisation

Fleet utilisation is the ratio of average number of buses on road to the average number of buses held by the unit.

1.9.2 Route

A route is the road section between two terminal points of a regular service in operation.

1.9.3 Trip

A trip is the operation of a vehicle in a single direction between two points.

1.9.4 Schedule Trips

All the trips planned as per the approved vehicle schedule.

1.9.5 Scheduled Kilometres

The revenue-earning kilometres planned to be operated by a unit as per the vehicle schedule of the unit for a specific period.

1.9.6 Effective Kilometres

Kilometres actually operated by the public service vehicles for the purpose of earning revenue.

1.9.7 Dead Kilometres

Dead Kilometres refer to the distance covered by the public service vehicles for which no revenue is earned.
1.9.8 Gross Kilometres

The total kilometres covered by public service vehicles for earning revenue and other purposes.

1.9.9 Kiolometre Efficiency

The ratio between effective kilometres and scheduled kilometres.

1.9.10 Occupancy Ratio

It is the ratio of passenger kilometres to seat kilometres offered.

1.9.11 Vehicle Utilisation

Kilometres run per vehicle on road/per vehicle held.

1.9.12 Fuel Efficiency

It is the productivity of high speed diesel in terms of gross kilometres per litre.

1.9.13 Bus-staff Ratio

It is the ratio between the total staff employed to the number of buses held for operation during a specific period.

1.9.14 Manpower Productivity

It represents effective kilometres operated per staff per day.
1.9.15 Year

'Year' means financial year. The financial year commences from April 1, and ends on March 31, of the following year.

1.9.16 Corporation

The term 'Corporation' means Tamil Nadu State Transport Corporation Madurai (Division-II) Limited.

1.9.17 Physical Performance

It indicates the operational efficiency of the transport undertaking.

1.9.18 Operative Fleet

The number of motor vehicles used in operation for public service.

1.9.19 Passenger

A passenger means any person travelling in a public service vehicle, other than the driver or the conductor or an employee or the permit holder while on duty.

1.9.20 STUs

State Transport Undertakings (STUs) means any undertaking providing road transport service, where such undertaking is carried on by

i) The Central Government or State Government

ii) Any Road Transport Corporation established under Section (3) of the Road Transport Corporation Act 1950 and
iii) Any municipality or any corporation or company owned by the Central Government or one or more State Governments or by the Central Government and one or more State Governments.

1.9.21 Traffic Staff

Drivers and Conductors (Crew), Checking Inspectors and Driving Instructors working in the Corporation.

1.9.22 Maintenance Staff

The technical staff and technical supervisory staff in the workshop for the repair and maintenance of buses.

1.9.23 Operative Staff

This includes traffic staff and maintenance staff,

1.9.24 Administrative Staff

Workers engaged in maintaining the records and accounts of the Corporation.

1.9.25 Contingent Staff

Staff engaged in body-building unit, tyre-retreading unit, spring manufacturing, printing press, hospitals, gardening, canteen and civil works.

1.9.26 Management/Employer

All top level administrative people namely, Managing Director, General Manager, Department Heads, Deputy Managers, Assistant Managers, Chief
Medical Officer and Branch Managers of all depots are known as Management/Employers of the Corporation.

1.9.27 Depot

The organisational unit of a transport undertaking directly responsible for the operation of the bus service.

1.10 FRAMEWORK OF ANALYSIS

For analysing the physical performance of TNSTC, Madurai (Division-II) Limited, the compound growth rate as per semi-log model and trend analysis have been used. For analysing the various manpower management practices, simple linear trend, regression analysis, averages and percentage analysis have been used.

The responses collected for each of the items in the interview schedule have been scored and tabulated on a master sheet.

The level of attitude of the employees towards manpower management practices has been measured with the help of 51 statements. The scoring of levels of attitude in the third part of the interview schedule is based upon ‘Likert’s Five Point Scales’. To secure the total attitude of employees, five points are given for ‘strongly agree’ four points for ‘agree’, three points for ‘no opinion’, two points for ‘disagree’ and one point for ‘strongly disagree’ responses. Thus, the total
attitude score of the respondent is obtained by adding up the scores of all 51 statements. The extent of variation in the levels of attitude of the employees has been analysed with the help of standard deviation and the co-efficient of variation. The relationship between the levels of attitude and their employment background has been examined by adopting chi-square test.

To compare the opinion of the employees and management, regarding TNSTC, Madurai (Division-II) Limited, Rank Correlation Co-efficient Method has been adopted. The scores of all the 51 statements have been classified into five parts. For each part, the statements are ranked as per the responses ranked by both the employees and the management. Total mean scores are given on the basis of rank. For analysing the Rank Correlation Co-efficient Technique, only the first five ranks given by the employee and the employer are taken into consideration.

To assess the various problems and constraints encountered by the employees, Garrets’ Ranking Technique has been adopted. The views of the employees regarding the problems and perceptions are analysed on the basis of mean-scores.
1.11 SCHEME OF REPORT

The thesis has been organised in Seven Chapters. In the first chapter, the research design is presented with an introduction, statement of the problem, review of previous studies, scope of the study, objectives, collection of data, sampling design, period of study, operational definitions of concepts, and framework of analysis, along with the scheme of report.

The second chapter pertains to an over-view of Tamil Nadu State Transport Corporation Madurai (Division-II ) Limited. It deals with the physical and financial performances and traffic management in TNSTC, Madurai (Division-II) Limited, in particular.

In the third chapter, manpower planning, recruitment, training and development have been discussed.

The fourth chapter deals with rewards and benefit packages in TNSTC, Madurai (Division-II) Limited.

The fifth chapter discusses the factors influencing employer-employee relations. The factors like health and safety, disputes, trade union management, grievance management and workers’ participation in management, have been discussed and analysed through percentage analysis.
The sixth chapter measures the attitudes of employees towards manpower management practices in TNSTC, Madurai (Division-II) Limited. It also analyses the opinions of the employees and management regarding manpower management practices and the constraints and problems encountered by the employees in the Corporation.

The last chapter is a summary of the findings revealed by the investigation, along with suggestions for effective and efficient manpower management practices in TNSTC, Madurai (Division-II) Limited.