CHAPTER 1

INTRODUCTION
A) HUMAN RESOURCES MANAGEMENT

Significance of Human Resources Management

Human resources constitute the most important and indispensable factor in any economy. Their uniqueness renders it practically impossible to substitute them with any other factor, however important it might be, as nothing can match the human mind in working out unprecedented marvels at times. Hence human resources world have come to claim "a paramount importance in the organising of human resources."

The human factor comprises skills, aptitude, knowledge and innovative spirit enshrined in the human minds involved in a particular organisation. An observation made by Adam Curle in this regard is that a country's underdevelopment is a direct consequence of the underdevelopment of its people. Furthermore, "the difference in the level of economic development of the countries is largely a reflection of the differences in the quality of their human resources. The key element in this proposition is that the values, attitudes, general orientation and

quality of the people of a country determine its economic development.

Human resources are said to be the major factors behind the progress or fall of an organisation or a nation. Worldwide realisation as to this fact is responsible for the change in the treatment meted out to an employee by his employer. An employee is no longer treated as a mere working tool or labourer but as part of human resources, with the 'human' element, which distinguishes human resources from machines, given importance. In other words, an employee is treated as a dignified and respectable individual. With the attention having shifted to the human factor, people have been emphasizing the need to probe into the differences in human behaviour. Because of the knowledge obtained from the subsequent studies into human behaviour, certain noticeable changes have been taking place in the field of human resources management. Management has actually come to identify itself with human resources management entirely. Improper management of human resources has often been cited as the cause behind the underdevelopment.

of certain countries such as India where there is no scarcity of natural resources. Further, it is necessary to have the right kind of human resources and the right approach towards them, the absence of which happens to be the cause behind the backwardness of certain countries which would, otherwise, have been prosperous countries.

Human behaviour has a strong influence on the working environment of an organisation. It is capable of making the organization flourish or perish. Hence an employer should satisfy the physical and psychological needs of the employees in order to make them strive for the achievement of the organisational goals. The recognition of the superiority of the human element over the so called impeccable technical elements can be summarized very aptly in the words of Miners: "People are the essential ingredients in all organisations, be the organisations business, educational, governmental or religious. And the way in which people are recruited and utilised by the leadership largely determines whether the organisation will achieve its objectives."

Complexities Involved in Human Resources Management

Any factor with so much of importance and significance annexed to it is bound to pose certain complex problems to an organisation. Complexities in human resources management arise mainly due to the fact that people are essentially self-managed. Further, understanding human resources is a complicated task as it includes "the total knowledge, skills, creative abilities, talents and aptitudes of an organisation's workforce as well as the value, attitudes and beliefs of the individuals involved." The complexities are chiefly the resultant of the varying permutations and combinations of various types of human resources and human mentality. Since each human mind is a unique system functioning in its own peculiar way, each individual worker is prone to become a challenge to the organization and, consequently, to the economic system of the nation at large.

In order to deal with human resources and to direct them properly, a perfect understanding of the individual as well as the external and internal influences on him gains importance. The external factors constitute the environment in which he moves and works, and this environment has various

dimensions—social, cultural, and religious. The internal factors constitute the employee's mental make-up and general inclinations. All these factors contribute to the complexity of human resources by being responsible for the frequent changes that occur in the employee behaviour. Unlike the other resources, human resources are dynamic and decide the nature, time and place of their employment. The role of the personnel manager, thus, becomes a special one. Since change is a regular phenomenon in industrial life, the personnel manager is called a special agent of change. So, he has to go beyond activities like philanthropic (welfare), procedural (cost-controlling, techniques of recruitment, training and development), prevention and cure of trouble (Industrial relations), and acquire leadership qualities.

An employee's family background and his familial relationships tend to influence the job involvement of the employee. Cultural and national differences have their own say


in the determination of employee behaviour, and so the strategies of human resources management should also vary according to the culture of a country. This aspect is noticeable even in countries like Canada and the United States of America, which are similar in many respects. In such cases, if care is not taken to eliminate the effects of cross-cultural conflicts, it would lead to the impairing of employee performance.

Technology has been advancing in leaps and bounds for the last two decades, thus posing a variety of challenges to managers of human resources. The influence of technology on human resources management may be positive or negative. While enhancing job opportunities for creative employees on the one hand, technological progress has also resulted in cutting short the number of unskilled jobs. Further, automation and computerization created alienation among the then existing interacting groups of employees. All these changes call for a need to update the strategies to deal with human resources.

The educational environment also changed considerably in the last two decades. The increase in the literacy level of the employees results in the higher productivity of the employees and, automatically, their earning capacity. On the other hand,

2. Leon C. Megginson, Personnel and Human Resources Administration, p.97.
the uneducated employees may have to forego their jobs. In addition, educated employees expect more benefits and if they are not satisfied, they become frustrated and alienated, and their frustration and alienation adversely affect the activities of the organization.

Besides these factors, the varying connotations of work constantly pose a challenge to the manager of human resources. Earlier, work was regarded as a universal activity of man by which he subjugated many of nature’s phenomena for his own benefit. But lately, the new and younger generation of employees have begun to view 'work' as something through which they can express themselves and find the meaning of life. Consequently, it becomes necessary for an organization to keep an eye on the changing trends and modify its strategies of human resources management accordingly.

In addition to the external factors, internal factors such as an employee's own mental make-up, his aspirations, and the psychological environment that prevails within the organisation - the last among these determines the extent of trust that the manager lays on the work force - also exist. It is the realisation of this factor that has led to the introduction of such innovative schemes like flexitime, flexi work, quality of work life, quality circles and organisational climate.

2. Ibid., p.13.
All these measures help in creating a congenial psychological environment within the organisation. Hence to lead an organisation and the country in the direction of progress, it is necessary to integrate and organize human resources into a whole and channelise them properly.

It is important to pay equal attention to the quantity and quality of human resources. Each employee is a different individual with his own unique principles and perceptions. He brings with him not only the technical skills but all the things which determine the performing capacities of the employees. Managers must be ready to go to any extent to deal properly with each and every employee so that his creative abilities are manifested completely in his work. The performance of the people—all employees—is a major factor that makes the difference between the achievements of any two organisations.

Various psychological studies conducted with a view to studying employee behaviour are of great help in enriching the knowledge of managers. Some of the notable studies are those by Munsterberg and Elton Mayo. These studies and experiments called

forth the need to consider an organisation as a social system which helps in establishing a proper interaction between employees and employers, and in inculcating a sense of responsibility, interest and participation in the employees' mind.  

The various complications involved in human resources management and the means suggested by certain psychologists to overcome them affirm the fact that the concept of treating the worker as a mere economic factor of production has become outdated with the adoption of humanitarian approach in recent years. This approach pointed out the instant need to change the work environment in such a way as to restore man's dignity. It is, therefore, not advisable for managers to take the employees' services for granted by paying them salaries. They have to undertake the responsibility of encouraging the employees, bringing forth to light the hidden talents - which, otherwise, would remain dormant - and directing them properly for the achievement of their individual, collective and organisational


goals.

To sum up, the dynamic nature of human resources may be considered the primary cause behind the multi-dimensional complexity that surrounds the management of human resources. In fact, management of human resources is more complex in public enterprises. But there are some desirable aspects that follow from this dynamic trait: "People are ... in a continuous process of change and maturing. In maturing, they are characterized by increasing self-determination in place of passive activity; increasing varieties of behaviour in place of limited ways of behaviour, increasing ability to concentrate in place of short interest span; increasing time span of planning in place of short range perspective; increasing movement to equality with others in place of subordinate positions and increasing awareness of others in place of self-concern and just self-awareness."

Given the multiple complexities -- physiological, social, technical, cultural, psychological -- that surround human resources, employees have rightly been termed "complex creatures". Hence, they need to be taken care of in various ways and

protected from the calamities that might ensue from all these factors. The public sector is expected to act as a model employer in this respect.

B) SIGNIFICANCE OF PUBLIC ENTERPRISES IN INDIA:

Profit is the overriding objective of the private sector and it may not be true in the case of public sector enterprises. The primary objective of most of the public enterprises is to cater to the ever increasing needs of the people they serve and profit making is secondary in importance. A public enterprise is always accountable to the government and decisions taken by its management have to be approved by the government. Public enterprises are considered the key instruments with the help of which the welfare of the public and the progress of the economy can be achieved in a balanced manner.

A public enterprise has a pivotal role to play in the process of the socio-economic development of a country. It is the only appropriate body in which public funds can be invested and utilised in a socially and economically desirable manner. It helps in safeguarding the welfare of the people and, at the same

Lime, contributes to the gross national product of a country.

In India, most of the industrial activity was in the private sector before independence and the creation of the public sector is a post-independence phenomenon. There are mainly three forms of organisation of public undertakings in India, viz., departments, public corporations, and companies. Generally, the corporation form of public enterprise is suitable to public utility services as it is based on democratic ideals, and can have flexibility and autonomy. Public utility services, in addition to fulfilling their social obligations, must also operate on business lines.

Public utility services provide basic infrastructure facilities to industrial and agricultural sectors of the economy. This helps in having a balanced development and in improving the standard of living of the citizens. Management of public utility services is a very complex task—as these services have to meet the common man's needs—and hence a matter of concern for the

4. Second five year plan, the Government of India 1957, P.138
Transport is one of the most essential public utility services. The cultural, social, and economic advancement of a nation directly depends upon the transport facilities available in the country. Among all the modes of transport, road transport has an important role to play in ensuring sustained economic growth and is vital for the development of various sectors of a country as it meets the travelling needs of the people in every nook and corner of the country. It has dominated the transport scenario for the last two decades as the unit of carriage is compact and of convenient size and the vehicle, unlike a railway engine, is not confined to a particular type of track.

The passenger road transport assumes a greater significance as it helps in strengthening the unity among the people by transporting people of different languages, regions, communities, and religions together to different places. Transportation by bus, due to its flexibility in operation, is more convenient to passengers, particularly for short and medium distances.

Private transport organisations have been providing passenger transport facilities for a long time. But these organisations provide travelling facilities only in those areas which are quite convenient and profitable to them. So

transport facilities were not extended to rural and hilly areas where the operations are quite difficult and less profitable. But the objective of the government is to provide passenger transport facilities to people in all regions, including rural and hilly areas. In order to achieve this objective, the Government of India enacted the Road Transport Act in 1950, which empowers the state governments to nationalise the routes of the road transport. Consequently, various state governments started nationalising the routes of passenger road transport. As a result, the nationalised road transport industry has been expanding its operations to meet the increasing needs of the growing population in the vast geographical area. State road transport undertakings play a vital role in the progress and reconstruction of 'Rural India', unlike the railways and private road transport organisations. Among the various resources, human resources occupy a crucial position in the attainment of the socio-economic goals of state transport undertakings.

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Significance of Human Resources Management in Road Transport Industry

A passenger transport organisation expands its operations throughout the length and breadth of its area. The geographical and ecological conditions are more favourable to the expansion of the operations of road transport organisations than to the expansion of the railways. Therefore, a road transport organisation can spread its operations geographically to almost all parts of the country including hilly areas, valleys, etc.

The road transport industry is highly labour-intensive by its nature. The survival and success of this industry mostly depends on human resources. The employees have to be service-oriented in their approach and have to assure maximum satisfaction and comfort to the passengers.

Human resources are expected to play a vital and crucial role in providing smooth and uninterrupted transport services to people of different geographical areas, communities, occupational groups, etc.

In view of this, the human factor assumes great significance in the passenger transport industry. Further, the expectations of the people from the passenger transport industry can be met mostly through the qualitative and effective service rendered.

Significance of the Study

The road transport industry in Andhra Pradesh transports people of three different regions with different geographical characteristics, viz., Rayalaseema, Telangana, and Coastal Andhra. Further, it also transports people of different regions of the country as the state is a centre of business, education, and other economic and social organisations. In view of the failure of the private organisations to meet the demands of the passengers of the state, the Government nationalised the passenger transport industry and set up the Andhra Pradesh State Road Transport Corporation (APSRTC) in 1958. The APSRTC has undertaken the great responsibility of transporting people in a geographically wide-spread state where the railway facilities are less when compared to other states.

The effectiveness of a road transport organisation depends mostly on the people who work for the organisation. This is true in the case of the Andhra Pradesh State Road Transport Corporation also. The performance of the APSRTC, in terms of fuel consumption, operation of the buses, financial position, offering courteous services to the passengers and running the buses safely and punctually, is mostly influenced by the human

factor. Further, the poor financial performance of the APSRTC during the late 1970s and the early 1980s is also attributed, to some extent, to the human factor. It is also felt that the human factor can make or mar the performance of any organisation. However, the role of the human factor in the APSRTC - the extent of its contribution to the success or failure of the organisation - cannot be judged without a detailed study. As such, a study of human resources management in the APSRTC assumes greater significance.

Review of Literature

An attempt is made to review the existing research studies and other literature which have a bearing upon the study of human resources management in the APSRTC. The first study conducted on the road transport industry was that of Ramanadhan on the "Functioning of the Road Transport Department of Nizam State Railway" (part of the erstwhile Nizam State is now in Andhra Pradesh and forms part of the present Corporation). He briefly described the form of the organisation in this study. He also conducted another study, viz., "Nationalised Road Services in

2. V.V.Ramanadhan, Road Transport in India (Lucknow Universal Publishers, 1948).
Hyderabad. He analysed the growth of the road services and pointed out the problems they might face and suggested a Corporation form of organisation under the Road Transport Corporation Act, 1950, with greater autonomy.

Santosh Sarma, in his study, suggested some of the modern management techniques the passenger road transport industry should follow. Though human resources management has been briefly dealt with, the importance and vast potential of this aspect has not been adequately emphasized in this study.

There are some studies which deal with the working of various transport undertakings. One among them is the study report of the National Transport Policy Committee of the Planning Commission. This committee analysed the passenger and freight traffic and suggested means for the improvement of the financial and operational efficiency of the State Transport Undertakings (STUs).

Krishnan of T.V. Sundaram Transport, Madurai, in his study (1957), discussed the vehicle maintenance practices and the vehicle scrappinig policies of various road transport

1. V.V. Ramanadhan, Nationalised Road Services in Hyderabad (Madras: The Orient Publishing Company, 1955).
2. Santosh Sarma, Productivity in Road Transport (New Delhi: ASRTU).
corporations. Patambar studied the passenger and goods transport business in 1962. The APSRTC itself constituted a committee (1960) to study its method of operation and to suggest measures to improve its operational efficiency. The National Productivity Council, at the request of the APSRTC made another study on the organisation structure of the corporation in 1965 and recommended the depot set-up, which has become a permanent characteristic of the Corporation.

There are two more studies which are worth mentioning at this juncture. The Road Transport Taxation Enquiry Committee (1967) under the Chairmanship of Keskar B.V. studied the cost aspects in the transport industry for evaluation. Nagaraj, in his study, "Nationalised Road Transport in Hyderabad State," examined the nature of technical changes and the impact of these changes on the profits of the road transport services during the period 1932 to 1958.

Satyanarayana made an extensive study of the cost structure

and the factors that influence the cost of road transport. He recommended total decentralisation of the Corporation through divisions as small, autonomous units like the State Transport Undertakings in Tamilnadu. Nagabrahmam analysed the trends of absenteeism in the APSRTC. Krishna Murthy examined the incentive schemes in the APSRTC. Murthy studied the cash management in the APSRTC. Jaya Sankaran, in his thesis entitled "APSRTC. - An Economic Analysis," analysed the behaviour of real wages, cost-fare relationships, utilisation and productivity of assets, etc. Swarna Kumari, in her study entitled "Labour in the APSRTC.," described the wage structure and labour productivity.


Narasimhaloo, in his thesis, analysed the quantum of depreciation in terms of historical cost vs. acquisition cost and determined the correct retirement policy. Viswanadham, in his study "Finance of the APSRTC.," studied the nature and resources of finance, funds utilisation, etc., in the APSRTC. Gangappa analysed the organisational structure and the operational efficiency of the Anantapur depot of the APSRTC. Sastry analysed the physical and financial performance of different state transport undertakings. Harish Chandra Joshi studied the problems and prospects of road transport undertakings.

Panduranga Rao and Sivayya reviewed the research studies and literature of 221 studies and books relating to transport in 1981. Amazingly, not even a single study which focussed on human resources management in the APSRTC. was identified by them. However,

two studies relating to human resources management were carried out during the late 1980s.

Phaniswara Raju, in his thesis entitled "Materials Management in APSRTC," analysed the material cost and its trends and compared them with those of the other state road transport undertakings. Satyanarayana, in his study on the working of the APSRTC, discussed the performance of the APSRTC in terms of various physical and financial indicators like kilometres per litre, bus-staff ratio, vehicle utilisation, cost - fare relationship, personnel policies, etc.

Madan Mohan Reddy analysed the personnel policies and practices in the APSRTC. In this study he covered only the theoretical aspects based on circulars issued by the Corporation from time to time, various reports of the committees, and the conceptual analysis of the trade unions. Thus, this study lacks objectivity and data. Lakshmi Prasad, in his study entitled "Human Factor in APSRTC - A Focus on Conductors," analysed various aspects of personnel management exclusively related to the conductors. This study emphasised the various important

aspects of personnel management, but it concentrated on only one
category of employees despite the fact that there are more than 100
categories of employees. Hence, this study cannot provide a comprehensive outlook on human resources management in
the APSRTC.

Need for the Study

The literature reviewed above reveals that there are very few
studies on the human factor in the APSRTC. In view of this, there is every need for a comprehensive and objective study
of human resources management in the APSRTC. Hence, an
ttempt is made to study the human resources management in the
APSRTC during the last one and a half decades, i.e., 1973-74
to 1987-88, to arrive at meaningful conclusions. Thus the
present study is very important and is expected to be useful not
only to the employees of the APSRTC and the APSRTC as
such, but also to the policy makers and the public at large.

Objectives

The objectives of the present study are:

i) to study the size and structure of employment and the
practices of training,

ii) to inquire into the structure and trends in monetary
emoluments and non-monetary benefits,

1. J. Lakshmi Prasad, "Human Factor in APSRTC - A Focus on
iii) to study the system of industrial relations and problems, if any, with a view to suggesting appropriate measures, and

iv) to measure the operational efficiency of the APSRTC, highlighting the contribution of human resources management thereto.

Methodology

In order to realize the above stated objectives, information was collected both from primary and secondary sources. The primary data was collected through interviews, detailed discussions and by administering separate questionnaires to selected representatives of the management, leaders of the union, and employees. Opinions of the selected employees on various important aspects of human resources management like recruitment, training, remuneration, incentives, industrial relations, unionism, were collected. Apart from adopting formal techniques of obtaining information, informal discussions were also held with a few employees, representatives of the management, and union leaders to understand their inner feelings and problems. Fortunately, the researcher got cooperation from all the respondents. The canvassing of the schedules, interviews and discussions were done from July, 1988 to May, 1989.

In addition to the primary data collected, secondary sources were also relied upon for information on the organisation set-up, progress of the APSRTC, recruitment, size and structure of employment, training practices, wage and salary administration,
fringe benefits, incentive schemes, industrial disputes, trade unionism, collective bargaining, employee productivity, capital productivity, vehicle utilisation, etc. Secondary data was chiefly obtained from the annual accounts and administration reports published by the APSRTC, Central Office, Hyderabad, performance reports on state transport undertakings published by the Central Institute of Road Transport, Puna, and minutes of the collective bargaining meetings available with the APSRTC, Central Office, Hyderabad. Further, the data and literature gathered from the libraries of the APSRTC, Hyderabad, Central Institute of Road Transport, Puna, Sri Krishnadevaraya University, Anantapur, Andhra University, Visakhapatnam, Osmania University, Hyderabad, were of great help.

Presentation of the study

The study is presented in six chapters.

Chapter I discusses the significance and complexities of human resources management, the significance of the present study, the literature available, objectives of the study, methodology applied, and the genesis and growth of the APSRTC. The size of human sources in terms of the growth of employees in the various Regions of the APSRTC, in the corporation as a whole, and the state transport undertakings (STUs) selected for study is presented in chapter II. This chapter also discusses the structure of employment in terms
of the group-wise and designation-wise growth of employees in the different Regions of the APSRTC, in the entire Corporation, and in the state transport undertakings selected for study and training programmes, content, cost etc.

Chapter III analyses the composition of monetary emoluments, factors influencing structures and levels of wages, different types of fringe benefits provided to the employees of the APSRTC and their cost to the Corporation.

Different aspects of industrial relations like origin of the unions, growth of membership, leadership, financial position and the functions of trade unions in the APSRTC, the number, nature, causes and consequences of industrial disputes, and the functioning of collective bargaining in terms of number of meetings held and nature of settlement of issues are dealt with in Chapter IV.

Operational efficiency in the APSRTC and the role of the human factor therein are examined in Chapter V. Indices of the productivity of human resources, capital, material and vehicles, punctuality of buses, public complaints, and accidents are analysed in this context.

Chapter VI presents the findings of the present study and offers suggestions which are expected to improve further the human resources management in the APSRTC.
Limitations of the study

An academic study of this kind has its own limitations such as restricted access to governmental records and reports, and the general confidentiality that prevails in the APSRTC offices. These, however, could be minimised to a great extent through the interview method. Another major limitation is the non-availability of up-to-date information. This is due to the delay in compiling and publishing the data by the APSRTC. Only data up to the year 1987-88 was available. Lastly it is difficult for an individual to present an accurate picture of human resources management as the 90,000 employees of the APSRTC are divided into more than 100 categories, scattered geographically all over the length and breadth of the state, and working under different circumstances and environment. However, every effort has been made to evaluate the situation as accurately and objectively as possible.

D) GENESIS OF THE APSRTC

It is quite a worthwhile exercise to take a bird's eye view of the various forms that the state transport system of Andhra Pradesh underwent before it reached the existing corporation form of organisation. The road transport services in their original and unsophisticated form originated in the year 1932. Most of the changes that were brought into effect were to be in line with the changing political and administrative scenarios in the state and also to cater to the needs of the public.
To begin with, the passenger transport services were organised as a commercial department by the Nizam State Railway from 1932 to 1947 (i.e., before India attained independence) when part of the state of Andhra Pradesh was in the princely State of Hyderabad. Soon after independence, the Road Transport Department was separated from the Nizam State Railway and was organised on an agency basis till October 31, 1951. It was run as a government department of the Hyderabad State from November 1, 1951. Actually, the Government of Hyderabad thought of bestowing the status of a corporation on the transport organisation even earlier but could not do so because it failed to satisfy the provisions of the Road Transport Corporation Act of 1950. The state continued to have two types of transport operations with the Telangana region having the government owned transport services run as a government department and the Andhra region having private transport services until 1957. The State had two alternatives, either to denationalise the bus services in the Telangana region or to nationalise them in the Andhra region in order to bring forth a unitary form of road transport system. Having these two options, the State Government, on the advice of the Planning Commission, decided to opt for the latter. As a consequence, the corporation form of organisation was established on 11 January 1958, and was named the Andhra Pradesh State Road Transport Corporation (APSRTC).

2. G.O.Ms.No.38 Home (Transport Department), Dated 6-1-1950.
Thus, it took as many as 26 years for the transport system in Andhra Pradesh to become a Corporation which is not only efficient and autonomous but also, economically and commercially, a competent set-up. The Corporation was set up considering the following aspects.

a) the advantages offered to the public, trade and industry by developing the road transport,

b) the desirability of coordinating one form of transport with another form of transport, and

c) the desirability of extending and improving the facilities for road transport in every area and of providing an efficient and economical system of road transport services there.

The Corporation is expected to exercise its power progressively to provide and promote an efficient, adequate, economical and properly co-ordinated system of road transport services in the state or part of the state for which it is established and in any extended area. It shall be the general principle of a corporation that in carrying on its undertaking it shall act on business principles.

The statutory objectives of the Corporation include (i) efficiency, (ii) adequacy, (iii) co-ordination, (iv) economy, and (v) operating on business lines.

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3. Ibid., Section : 22.
Thus it is clear that the APSRTC was set up to provide transport facilities to the public by functioning on business principles.

Organisation Structure

The APSRTC is managed by a Board of Directors headed by a Chairman. The Vice-Chairman and Managing Director is the chief executive of the Corporation. There are 15 other directors in the Board - eight officials and seven non-officials - nominated by the Government, who constitute the top management team of the Corporation. The organisational structure of the Corporation is shown in Chart 1.1. At the executive level, the Vice-Chairman and Managing Director is assisted by a Financial Adviser and Chief Accounts Officer, four Executive Directors, a Director (Vigilence and Security), and an Engineer-in-Chief of Civil Engineering at the Headquarters. Each of the four Executive Directors looks after one function: operations, mechanical engineering, administration, and planning. Each Executive Director is assisted by two or three Heads of Departments. At the field level, there are seven Regions headed by Regional Managers, two located at Hyderabad, and one each at Vijayawada, Cuddapah, Karimnagar, Nellore, and Vizianagaram. The Regional Office set up at the Regional Headquarters is an approximate replica of the set-up at Headquarters. Regional Managers are assisted by four or five Divisional Managers of whom each heads a Division. Normally each of the administrative Districts of the Government of Andhra Pradesh comprises a
Chart 1.1: Organisation Structure of APSRTC
division. But some of the large districts like Hyderabad City, Krishna, Guntur, Visakhapatnam, and East Godavari have two divisions each. Thus there are 31 Divisions at present. Each Divisional Manager is assisted by a group of five or six Depot Managers who head the depots which are generally located at the towns which were taluq headquarters in the former revenue set-up. There are at present 163 depots (and 163 Depot Managers) situated all over the state.

As there was an increase in the operations, the APSRTC was decentralised in January, 1978, with the approval of the Government. Five Regions were formed with area offices (now called Regional Offices) at Hyderabad, Karimnagar, Vijayawada, Cuddapah, and Vizianagaram. The Hyderabad Region was bifurcated into the Bhagyanagar (City) Region and the Golconda (Hyderabad) Region in 1982. The Vikramasimha Region, a sixth region, came into existence, with its office at Nellore in 1984-85. Some of the functions of the Central Office were transferred to the Regional Offices, with appropriate delegation of authority in respect of administrative and financial matters.

The area covered by each Region and the population of the Region are shown in Table 1.1. It is clear from the table that the Raja Raja Narendra Region, with its headquarters at

3. Ibid. p.3.
<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of the Region</th>
<th>Area</th>
<th>Population</th>
<th>Density of population per square kilometers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bhagyanagar (city)</td>
<td>200</td>
<td>22,60,702</td>
<td>11,304</td>
</tr>
<tr>
<td>2.</td>
<td>Golconda (Hyderabad)</td>
<td>49,900</td>
<td>81,13,505</td>
<td>163</td>
</tr>
<tr>
<td>3.</td>
<td>Kakatiya (Karimnagar)</td>
<td>64,800</td>
<td>98,06,878</td>
<td>151</td>
</tr>
<tr>
<td>4.</td>
<td>Satavahana (Vijayawada)</td>
<td>27,900</td>
<td>93,57,145</td>
<td>335</td>
</tr>
<tr>
<td>5.</td>
<td>Raja RajaNarendra (Vizi anagaram)</td>
<td>34,300</td>
<td>1,00,41,062</td>
<td>293</td>
</tr>
<tr>
<td>6.</td>
<td>Vikramasimha (Nellore)</td>
<td>45,800</td>
<td>70,81,766</td>
<td>155</td>
</tr>
<tr>
<td>7.</td>
<td>Sri Krishnadevaraya (Cuddapah)</td>
<td>52,200</td>
<td>68,89,615</td>
<td>132</td>
</tr>
</tbody>
</table>

a) Bhagyanagar Region was set up in 1982, and serves the twin cities of Hyderabad and Secunderabad.

b) Vikramasimha Region was set up in 1985.

Vizianagaram, covers Srikakulam, Vizianagaram, Visakhapatnam, and East Godavari districts. It stands first among the Regions of the Corporation in terms of population, and fifth in terms of the area covered. The Kakatiya Region which covers five districts, viz., Karimnagar, Warangal, Khammam, Adilabad and Nizamabad, stands first in the area covered and second in the population served. The Satavahana Region covers West Godavari, Krishna, and Guntur districts and stands sixth in the area covered and third in the population served, while the Sri Krishnadevaraya Region covers Anantapur, Cuddapah and Kurnool districts and stands second in the area covered and sixth in the population served. It is interesting to note that the Bhagyanagar Region stands last in the area covered and the population served, but stands first in terms of the density of population. It serves the twin cities of Hyderabad and Secunderabad.

As per the density of population per square kilometre, which is an important determinant of the traffic potential of a particular area, the Bhagyanagar Region stands first (11,304), followed by Satavahana (355), Raja Raja Narendra (293), Golconda (163), Vikramasimha (155), Kakatiya (151), and Sri Krishnadevaraya (132) Regions.

Progress of The APSRTC

The progress in the different aspects of an organisation contributes to its overall progress. The growth of various organisations contributes to the growth of the economy. However, the growth of the economy of a state in its turn helps
the organisations to develop. Hence, an attempt is made to study the growth in the various aspects of the APSRTC, their contribution to the development of the Corporation, and the mutual influence of the APSRTC and the economy of Andhra Pradesh.

**Progress of The APSRTC vis-a-vis The Economy of The State of Andhra Pradesh**

The progress of the economy of Andhra Pradesh vis-a-vis the APSRTC during the period 1960-61 to 1987-88 is presented in Table 1.2. The area of Andhra Pradesh is 2,76,814 square kilometres. The density of population per square kilometre increased from 129.07 to 220.26 during the period 1960-61 to 1987-88 as a consequence of the increase in population from 357.26 lakhs in 1960-61 to 609.71 lakhs in 1987-88. The income of the state gradually increased from Rs.1891.81 crores in 1960-61 to Rs. 4,496.00 crores in 1987-88 due to the increase in income from agriculture, industry, and other sectors of the state.

Roads are the commercial arteries of the state. There has been a rapid growth in population and mechanised transport which has increased the necessity of good roads. In order to meet the necessity, the Government of Andhra Pradesh constructed surfaced and unsurfaced roads. The length of the roads was 24,720

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1. The state of Andhra Pradesh was formed in the year 1956 comprising Andhra, Rayalaseema and Telangana Regions, with 2,76,814 square kilometres of area. The area did not change till date.
Table 1.2 ■ PROGRESS OF ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION VS-14 VIS ECONOMY OF ANDHRA PRADESH 1960-61 TO 1987-88

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Road Length (Kilometres)</td>
<td>24.72</td>
<td>37.51</td>
<td>56.24</td>
<td>73.46</td>
<td>99.21</td>
<td>135.18</td>
<td>147.96</td>
<td>111.89</td>
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<td>112.19</td>
<td>121.49</td>
<td>131.59</td>
<td>142.88</td>
<td>155.24</td>
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<td>Road length per lakh Population (Kms.)</td>
<td>69.19</td>
<td>95.58</td>
<td>136.60</td>
<td>168.46</td>
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<td>5996</td>
<td>7660</td>
<td>8018</td>
<td>8656</td>
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<td>10282</td>
<td>117.76</td>
<td>11596</td>
<td>12866</td>
<td>14180</td>
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<td>Buses of APSRTC</td>
<td>1302</td>
<td>2864</td>
<td>4641</td>
<td>5246</td>
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<td>7394</td>
<td>8114</td>
<td>9157</td>
<td>10571</td>
<td></td>
</tr>
<tr>
<td>Percentage of APSRTC Buses to Total Buses</td>
<td>58.45</td>
<td>49.72</td>
<td>46.51</td>
<td>34.84</td>
<td>64.43</td>
<td>67.25</td>
<td>62.56</td>
<td>69.68</td>
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<tr>
<td>Passengers carried per day (in lakhs)</td>
<td>2.14</td>
<td>6.92</td>
<td>9.88</td>
<td>12.56</td>
<td>27.18</td>
<td>31.96</td>
<td>34.46</td>
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<td>35.45</td>
<td>39.54</td>
<td>42.30</td>
<td>46.46</td>
<td>55.41</td>
<td>64.56</td>
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Sources: Calculated and tabulated from:
1) Statistical abstracts of Andhra Pradesh State for the years 1960-61 to 1987-88, Government of Andhra Pradesh, Hyderabad.
2) Annual Administration reports of APSRTC for the years 1960-61 to 1987-88, APSRTC, Central office, Hyderabad.
kilometres in 1960-61. It increased to 1,23,000 kilometres, over five times, in 1987-88. It is interesting to note from the table that the road length per one lakh population increased over three times from 69.19 kilometres to 201.74 kilometres during the period 1960-61 to 1987-88. This indicates that the growth in the road length has been faster than the growth of population in the State. This facilitates the growth of passenger transport.

There were 3,388 passenger buses in 1960-61. They increased to 14,100 in 1987-88. It shows that the growth rate of buses was higher than that of population. The percentage of the APSRTC buses to total passenger buses was 38.43 in 1960-61. It gradually increased to 74.97 per cent in 1987-88. The above data proves that the APSRTC has been ahead of private passenger transport organisations. This shows that the APSRTC realised its responsibility of coping with the increase in passenger traffic demands and the increase in population. As a result, the number of passengers carried per day increased from 3.14 lakhs to 64.36 lakhs, or nearly 20 times during the period under study.

The growth rate of passengers carried was higher than that of the number of buses operated and that of population. This shows the increase in the traffic demand due to the increase in income, education, culture, and mobility of the people consequent upon the socio-economic development of the country in general and that of Andhra Pradesh in particular.
The physical growth of the APSRTC can be studied in terms of the increase in the number of divisions, depots, and staff, in the number of buses, number of effective kilometres, number of passengers carried, and in the total earnings.

Table 1.3. presents the physical growth of the APSRTC in terms of selected indices. The Corporation was divided into five divisions at the time of its inception in 1958. The number of divisions increased from nine to 31 during the period 1973-74 to 1987-88. The phenomenal growth in the number of divisions was due to the fact that the area of each division was reduced to one administrative district of the Government of Andhra Pradesh and/or to the area of a city consequent upon the nationalisation of private routes. The number of depots increased more than two and a half times, i.e., from 60 to 159, during the period under study. The significant growth in the number of depots was due to the setting up of new depots based on optimum depot-routes ratio.

The average number of buses increased from 2665 to 10,571 during the period 1973-74 to 1987-88. It is also clear from the table that the bus-depot ratio (i.e., number of buses per depot) shot up from 44.42 to 66.48 during the period under study despite the fact that the average area covered by each depot declined from 4,613.57 square kilometres in 1973-74 to 1,740.97 square kilometres in 1987-88. This was probably due to the

<table>
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<th>75-76</th>
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<td>75</td>
<td>82</td>
<td>92</td>
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<td>112</td>
<td>114</td>
<td>116</td>
<td>115</td>
<td>124</td>
<td>120</td>
<td>147</td>
<td>159</td>
</tr>
<tr>
<td>Average Number of Buses per 1000 Route Kilometres</td>
<td>2565</td>
<td>3143</td>
<td>3005</td>
<td>4266</td>
<td>4152</td>
<td>5567</td>
<td>5527</td>
<td>6134</td>
<td>6258</td>
<td>6253</td>
<td>7082</td>
<td>7294</td>
<td>8114</td>
<td>9137</td>
<td>18571</td>
</tr>
<tr>
<td>Number of Buses per Route Kilometres</td>
<td>143</td>
<td>162</td>
<td>163</td>
<td>144</td>
<td>144</td>
<td>144</td>
<td>144</td>
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<td>154</td>
<td>159</td>
<td>159</td>
<td>154</td>
<td>165</td>
<td>175</td>
<td>192</td>
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<tr>
<td>Total Earnings (Rupees in crores)</td>
<td>41.66</td>
<td>58.13</td>
<td>72.32</td>
<td>82.29</td>
<td>81.35</td>
<td>112.48</td>
<td>123.65</td>
<td>127.73</td>
<td>125.14</td>
<td>254.52</td>
<td>282.62</td>
<td>559.71</td>
<td>413.82</td>
<td>515.52</td>
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</table>

Sources: Calculated and tabulated from:
1. Annual Administrative Reports for the years 1973-74 to 1985-86
   APSRTC Central Office, Hyderabad.
2. Annual Audit Reports for the years 1987-88, APSRTC, Central Office, Hyderabad.
increase in the passenger traffic as a result of the rise in per capita income, educational trips, business trips, social trips, etc. The increase in the number of buses results in an increase in the number of buses per 1000 route kilometres provided the growth rate of the number of buses is higher than that of route kilometres. It is clear from the table that the number of buses per 1000 route kilometres increased from 143 to 192 during the period under study. This shows that the Corporation has been providing more number of buses in order to make travel convenient and comfortable.

The physical growth of a corporation should be accompanied by a growth in the number of employees, though it may not be in the same rate. It is clear from the table that the number of employees increased from 28,969 to 90,792, or by 213.41 per cent, during the period under study. It is further observed that the growth rate of the number of buses (296.66 per cent) was higher than the growth rate of the number of employees (213.41 per cent) during the period under study. This was probably due to the fact that the number of certain categories of staff like work shop and maintenance, and administrative staff need not be increased in the same rate as the number of buses. The growth in the number of employees and number of buses are shown in the Exhibit 1.1.

The growth in the number of buses and the number of employees, normally the result of the increase in the passenger traffic demand, should result in an increase in the number of effective kilometres operated. It is observed from the table
EXHIBIT 1: GROWTH OF NUMBER OF EMPLOYEES AND BUSES
During 1973-74 To 1987-88
(Index numbers only)
that the number of effective kilometres operated per day increased from 7.16 lakh kilometres to 31.05 lakh kilometres during the period under study. Thus, the growth in the number of buses and the number of employees resulted in an increase in the operations of the Corporation. But it is also observed from the table that the number of effective kilometres operated per bus per day declined from 291 in 1973-74 to 261 in 1983-84, which shows the underutilisation of buses and/or an increase in the number of buses beyond requirement. Hence it is suggested that the management should plan in advance and ensure the introduction of the required number of buses on the road and the optimum utilisation of buses. Otherwise, its financial position may be adversely affected. However, the number of effective kilometres operated per bus per day increased to 294 in 1987-88. The growth of the Corporation in terms of various physical indices generally results in the growth of total earnings. The table shows that the total earnings of the Corporation increased from Rs.41.66 crores to Rs.515.52 crores during the period under study.

The physical growth of the APSRTC. shows that the Corporation has developed in terms of the number of divisions and depots consequent upon the nationalisation of bus routes and the setting up of divisions based on administrative districts and depots based on the optimum depot-routes ratio. More buses were to be added depending upon the requirement. But it seems that the Corporation did not plan properly and lack of proper planning
adversely affected the financial position of the Corporation. Hence it is suggested that the Corporation should have effective planning.

Growth in The Number of Buses

Despite the remarkable progress of the APSRTC in terms of the number of buses, there was a criticism that the Corporation was unable to provide the required number of buses for passengers, which resulted in the unauthorised operation of buses by private transport operators. But it is pointed out that the paucity of funds and staff were responsible for the inability of the Corporation to provide requisite number of buses.

Both buses and human resources play a pivotal role in the development of a passenger transport organisation. They are the instruments by which a passenger-transport organization can achieve its goals by rendering service to the public. Their quality and quantity determine the volume of operations, the extent of services the organisation provides, and the extent of satisfaction derived by the passengers.

In order to meet the travel demands of the public, a road transport organisation must possess an adequate number of buses,

2. Information collected from the management representatives of the Corporation at the time of interview during April - July, 1989.
which requires a huge capital and a long-term commitment. Surplus buses result in dead capital and lower productivity, while shortage of buses leads to a reduction in passenger earnings, and failure to meet the demands of passengers, which would lead to a grave dissatisfaction of and inconvenience to them (passengers). So the fleet strength required should be cautiously planned.

The overall growth rate of a corporation generally results in the growth of the various physical facilities of the regions. A balanced growth among these regions is essential for a uniform and even distribution of facilities like buses based on the needs of the travelling public of the regions. Hence an attempt is made to study the growth in the number of buses in the various Regions of the APSRTC.

The distribution of buses among the various regions of the Corporation from 1973-74 to 1987-88 is presented in Table 1.4. It is clear from the table that the number of buses in the Satavahana Region went up from 1,102 in 1973-74 to 1,761 in 1983-84 but declined to 1,526 in 1984-85. The decline was due to the transfer of one of its divisions to the Vikramasimha Region at the time of its formation in 1984. However, the number of buses increased continuously after 1985-86 and reached 1884 in 1987-88.

1. Though the regions were formally set up in January, 1978, the area presently covered by these regions is taken as basis to prepare the region-wise classification of the data.
TABLE 14. REGION-WISE ANALYSIS OF GROWTH OF AVERAGE NUMBER OF BUSSES DURING 1973-74 TO 1987-88

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<td>Bhagyanagar (city) region</td>
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<td>N.C</td>
<td>N.C</td>
<td>N.C</td>
<td>N.C</td>
<td>N.C</td>
<td>N.C</td>
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<td>789</td>
<td>659</td>
<td>922</td>
<td>1029</td>
<td>1159</td>
<td>12</td>
<td></td>
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<tr>
<td>Golconda, (Hyderabad) region</td>
<td>763</td>
<td>612</td>
<td>855</td>
<td>966</td>
<td>985</td>
<td>1141</td>
<td>1231</td>
<td>1444</td>
<td>552</td>
<td>866</td>
<td>942</td>
<td>967</td>
<td>1842</td>
<td>1164</td>
<td>12</td>
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<tr>
<td>Kakatiya (Karimnagar) region</td>
<td>653</td>
<td>742</td>
<td>851</td>
<td>833</td>
<td>959</td>
<td>958</td>
<td>1066</td>
<td>1892</td>
<td>-668</td>
<td>-1181</td>
<td>1105</td>
<td>1267</td>
<td>1382</td>
<td>1412</td>
<td>15</td>
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<tr>
<td>Satavarna (Vijayawada) region</td>
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<td>1216</td>
<td>1321</td>
<td>1250</td>
<td>1301</td>
<td>1329</td>
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<td>1673</td>
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<td>1526</td>
<td>1681</td>
<td>1790</td>
<td>19</td>
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<td>Raja Raja Narendra (Vijayawada) region</td>
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<td>N.C</td>
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<td>136</td>
<td>459</td>
<td>584</td>
<td>635</td>
<td>685</td>
<td>722</td>
<td>715</td>
<td>777</td>
<td>838</td>
<td>916</td>
<td>1048</td>
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<td>Ulagasimha (Nellore) region</td>
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<td>N.C</td>
<td>N.C</td>
<td>N.C</td>
<td>N.C</td>
<td>N.C</td>
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<td>N.C</td>
<td>N.C</td>
<td>956</td>
<td>1813</td>
<td>1254</td>
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<td>Sru Krishna Devaraya (Cuddapah) region</td>
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<td>646</td>
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<td>944</td>
<td>1172</td>
<td>1263</td>
<td>1375</td>
<td>1489</td>
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<td>1479</td>
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<td>1137</td>
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<tr>
<td>TOTAL</td>
<td>2665</td>
<td>3145</td>
<td>3805</td>
<td>4201</td>
<td>4650</td>
<td>5087</td>
<td>5673</td>
<td>6134</td>
<td>6351</td>
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<td>7002</td>
<td>7394</td>
<td>8114</td>
<td>9157</td>
<td>103</td>
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</table>

Note: N.C Not Created.

Sources: 1. Annual Administration Reports for the years 1973-74 to 1986-87, APSRTC, Central Office, Hyderabad.
It is interesting to note that the Satavahana Region stood first with regard to the number of buses throughout the period of study even though it stood sixth with regard to the area governed and third with regard to the population served.

The number of buses in the Kakatiya Region went up from 653 in 1973-74 to 1615 in 1987-88. The fleet in the newly-formed Vikramasimha Region increased from 956 in 1984-85 to 1668 in 1987-88, and it occupied the second place in terms of the number of buses by the end of the period of study despite the fact that it stood fourth in the area covered and stood fifth in the population served. The fleet in the Raja Raja Narendra Region, which stood first in the population and fifth in the area served, went up from 132 in 1975-76 to 1448 in 1987-88. It stood fourth among the Regions in the number of buses. The process of nationalization of bus routes gathered momentum in 1984 in this Region. The Golconda Region (Hyderabad) had 763 buses in 1973-74. The number rose to 1552 in 1981-82 but declined to 866 in 1982-83 when it was divided into two regions, viz., Golconda and Bhagyanagar (City) Regions. Then on, the number of buses continuously increased. It stood seventh (last) among the Regions in the number of buses eventhough it stood third in the area served and fourth in the population served. The main reason for this was the low traffic potential due to the backwardness of the Region.

The fleet in the Sri Krishnadevaraya Region also had similar trends. It increased from 147 in 1973-74 to 1479 in 1983-84 but
declined to 986 in 1984-85 when one of its divisions was transferred to the newly-formed Vikaramasimha Region. Its fleet again increased to 1402 in 1987-88. It stood fifth among the Regions with regard to the fleet strength even though it was in the second position in the area covered and sixth in the population served. The fleet in the Bhagyanagar (City) Region, which was set up in 1982, went up from 789 to 1285 during the period 1982-83 to 1987-88. It serves only the twin cities of Hyderabad and Secunderabad.

It is further observed from the table that there was no perfect correlation either between the number of buses and the area served by each Region or between the number of buses and the population of the Region. This was probably because of the fact that the demand for passenger services depends not only on the area and population, but on the potentiality of the people of the region in terms of per capita income and educational, social, and business advancement of the region. It results in the mobility of people from place to place and thereby determines the passenger traffic demand. Consequently, the Corporation provides buses depending on the traffic demand. This might be the reason for running more number of buses in the Satavahana Region.

It is also essential to compare the growth in the number of buses in the APSRTC with that of the other state transport undertakings to find out the position of the APSRTC. The other STUs selected for comparison are: The Karnataka State Road Transport Corporation (KSRTC), The Maharastra State Road
Transport Corporation (MSRTC), The Gujarat State Road Transport Corporation (GSRTC), and The Uttar Pradesh State Road Transport Corporation (UPSRTC).

Table 1.5. shows the growth in the average number of buses in the state transport undertakings selected during the period 1980-81 to 1987-88. It is observed from the table that the MSRTC maintained the first position throughout the period of study with an increase in the number of buses from 9,384 in 1980-81 to 12,569 in 1987-88. The number of buses in the APSRTC increased from 6,134 in 1980-81 to 10,571 in 1987-88 and consequently the APSRTC rose from the third to the second position. The GSRTC experienced a decline from the second position to the fourth. The UPSRTC fell from the fourth position to the fifth position while the KSRTC rose from the last position to the third.

As per the rates of increase during the period of study, the KSRTC stood first (76.89 per cent), followed by the APSRTC (72.33 per cent). While the MSRTC and the UPSRTC occupied the third and fourth positions respectively, the GSRTC came down to the last position.

Thus, the APSRTC compared favourably with all the other corporations selected with regard to the number of buses and compared favourably with the other corporations except the KSRTC in terms of the growth rate during the period 1980-81 to 1987-88.
TABLE 1.5 : Growth of Number of Buses in the Other State Transport Undertakings (1980-81 to 1987-88)

<table>
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<tr>
<th>Years/Corporation</th>
<th>APSRTC</th>
<th>KSRTC</th>
<th>MSRTC</th>
<th>GSRTC</th>
<th>UPSRTC</th>
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</thead>
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<tr>
<td>1980-81</td>
<td>6134(100.00)</td>
<td>4686(100.00)</td>
<td>9384(100.00)</td>
<td>6483(100.00)</td>
<td>5769(100.00)</td>
</tr>
<tr>
<td>1981-82</td>
<td>6351(106.54)</td>
<td>5098(108.79)</td>
<td>10298(109.74)</td>
<td>6907(106.44)</td>
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<td>1982-83</td>
<td>6533(106.50)</td>
<td>5390(115.19)</td>
<td>10592(112.07)</td>
<td>7000(107.88)</td>
<td>6435(111.54)</td>
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<tr>
<td>1983-84</td>
<td>7002(114.15)</td>
<td>5909(126.10)</td>
<td>10514(112.84)</td>
<td>7021(108.20)</td>
<td>6915(119.00)</td>
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<td>1984-85</td>
<td>7394(128.54)</td>
<td>6256(133.50)</td>
<td>10696(112.92)</td>
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<td>12569(133.94)</td>
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<td>7374(127.62)</td>
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NOTE: a) Figures in parenthesis are index numbers with 1980-81:100.00
b) N.A: Not Available

SOURCE: Reports on the performance Nationalised Road Transport undertakings for the years 1980-81 to 1987-88, Central Institute of Road Transport, Pune.
Growth in The Number of Passengers Carried

The overall progress of a road transport corporation also depends on the number of passengers carried. The Region-wise growth in the number of passengers carried in the APSRTC during the period 1973-74 to 1987-88 is presented in Table 1.6. It is clear from the table that the Bhagyanagar (City) Region occupied the first place as the number of passengers carried increased from 2,455.36 lakhs in 1982-83 to 4,126.59 lakhs in 1987-88, or by 68.06 per cent. This was due to the high density of population of the area it operates in and the nature of its services, i.e., city services.

The number of passengers carried in the Satavahana (Vijayawada) Region increased from 1,685.90 lakhs in 1973-74 to 3,871.20 lakhs in 1987-88, or by 129.62 per cent, and it stood second in the density of population (335) of the area governed. The Vikramasimha Region recorded a growth rate of 72.71 per cent in the number of passengers carried though it was formed only in the year 1985-86.

The progress of the Golconda Region in terms of the number of passengers was more than two times during the period 1973-74 to 1980-81. But it experienced a drastic set-back as the number of passengers carried in 1982-83 was the lowest in the entire period of study. This situation was due to the fact that the city services in this Region were separated to form the Bhagyanagar Region in this year. This decline need not be treated as
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**NOTE:** NC - Not Created

**SOURCES:**
1. Annual Administration Reports of APSRTC for the years 1973-74 to 1986-87, APSRTC, Central Office, Hyderabad
2. Data Bank for the year 1987-88, Management Information Cell, APSRTC, Central Office, Hyderabad
negative development because the number of passengers carried in both the Regions put together showed an increase over the figures of the previous year in the Golconda Region.

The number of passengers carried in the Raja Raja Narendra (Vizianagaram) Region increased more than 16 times from 168.92 lakhs in 1975-76 to 2,924.80 lakhs in 1987-88 (with minor fluctuations), and this Region occupied the sixth position despite the fact that it stood first in the population served and third in the density of population. This was due to the operation of private services upto 1988 in the area.

It is clear from the above analysis that all the Regions except the Golconda Region experienced a growth in the number of passengers carried in 1982-83. The exception was the result of the creation of the Bhagyanagar Region by separating the city services from this Region. But the decline in the number of passengers carried in the Kakatiya Region during 1980-81 and 1981-82, and in the Raja Raja Narendra Region during 1980-81 and 1983-84 shows the inability of these two Regions to arrest the decline despite the increasing demand for passenger road transport. Private services must have snatched away the remaining share of passenger traffic. Thus unauthorised operation of private buses and vans must have affected the overall growth in the number of passengers which otherwise would have been higher than what it was (401.76 per cent). Hence it is suggested that the Corporation should arrest this
practice by running an adequate number of buses in times convenient to the travelling public.

Though the overall growth of the APSRTC in terms of passengers carried seems to be less, a comparative study with the other state transport undertakings selected will present a clear picture. The growth in the passengers carried in the APSRTC and that in the other state transport undertakings selected during the period 1980-81 to 1987-88 are presented in Table 1.7. It is observed from the table that the APSRTC had the credit of having carried the highest number of passengers throughout the period of study. However, the MSRTC improved its position from third to second as a result of the increase in the number of passengers carried from 11,901.05 in 1980-81 to 20,538.32 in 1987-88, or by 72.58 per cent. The number of passengers carried in the KSRTC shot up from 8,770.23 lakhs in 1980-81 to 16,908.53 lakhs in 1987-88. The GSRTC's position declined from second to fourth as the number of passengers carried in the corporation went up marginally from 12,133.96 lakhs in 1980-81 to 12,737.24 lakhs in 1987-88, the rate of increase being a meagre 4.97 per cent. However the UPSRTC was in the last position throughout the period of study.

The analysis of the two tables clearly proves that though the growth rate of the APSRTC seems to be less, it compared itself favourably with the other state transport undertakings
TABLE 1.7: GROWTH OF NUMBER OF PASSENGERS CARRIED IN THE OTHER STATE TRANSPORT UNDERTAKINGS (1980-81 to 1987-88)

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<td>15132.07</td>
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Note: N.A. = Not Available.

Source: Reports on the Performance of Nationalised Road Transport Undertakings for the years 1980-81 to 1987-88, Central Institute of Road Transport, Pune.
selected for study. However, the APSRTC should take steps to improve its performance in this regard in view of the unauthorised operation of private bus services. 

**Growth in The Number of Effective Kilometres**

Transport corporations introduce new buses in the existing routes and run buses in new routes depending on the estimated traffic. The number of employees also increases consequent upon the increase in the number of buses, number of services, and number of routes. This increase should normally result in an increase in effective kilometres. If it does not, it may be due to an improper estimation of traffic demands or the inefficiency of the management. Against this background, an attempt is made to study the growth of the APSRTC in terms of effective kilometres.

The increase in the number of effective kilometres operated in the various Regions of the Corporation during the period of study is presented in Table 1.8. The table shows that the Satavahana Region operated the highest number of effective kilometres throughout the period of study. It operated 1221.88 lakh effective kilometres in 1973-74 and 2096.85 lakhs in 1987-88 despite the fact that it stood sixth in the area of operation. This was due to the highest traffic potential of the area. Despite this fact, there was a decline in the effective kilometres.

1. The term effective kilometres denotes the distance travelled by buses on the actual route or only the kilometres travelled by buses that fetch revenue.
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<td>852.17</td>
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<td>975.11</td>
<td>1164.58</td>
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**NOTE:** NC: Not Created

**SOURCES:**
1. Annual Administration reports of APSRTC for the years 1973-74 to 1985-86. APSRTC Central Office, Hyderabad.
2. Data Bank, Management Information Cell, APSRTC, Central Office, Hyderabad.
kilometres of this Region in 1976-77, 1983-84, and 1985-86, which shows a decline in the performance of the Region in this respect.

The Bhagyanagar Region stood last in respect of the number of effective kilometres operated as against its first position in the number of passengers carried. This was due to its last place in the area of operation. The effective kilometres operated in the Kakatiya Region increased more than two times, from 618.03 lakhs in 1973-74 to 1908.52 lakhs in 1987-88 (with minor fluctuations), and this Region occupied the second position. The effective kilometres operated in the newly-formed Vikramasimha Region went up from 779.27 lakhs in 1984-85 to 1874.66 lakhs in 1987-88.

The Raja Raja Narendra (Vizianagaram) Region registered an average annual growth rate of 74.76 per cent during the period of 1975-76 to 1987-88. The rate of increase in the Region was very high from 1984-85 onwards due to the speeding up of the nationalisation process. The effective kilometres operated in the Sri Krishnadevaraya and the Golconda Regions increased by 777.57 per cent and 144.89 per cent respectively (with minor fluctuations).

Consequently, the total number of effective kilometres increased more than three times in 15 years. This analysis shows that there were some instances of decline in the effective kilometres in the various Regions, probably due to cancellation of services because of natural calamities, break-down of buses and
slack seasons. It is suggested that the Corporation should take steps to reduce break-downs and improve the effective kilometres operated. Though the Corporation nationalised a number of bus routes and introduced new routes and new buses in the last 15 years, the total effective kilometres increased slightly over four times. Hence, an attempt is made to compare the performance of the APSRTC with the performances of the other corporations.

Table 1.9. shows the growth in the effective kilometres operated in the APSRTC and the other state transport undertakings selected during the period 1980-81 to 1987-88. It is clear from the table that the KSRTC occupied the first place (112.25 per cent). Owing to a higher growth rate of the effective kilometres operated in the APSRTC (83.24 per cent) compared to that of the MSRTC (51.50 per cent), the former improved its position from the second to the first, whereas the position of the latter declined from the first to the second during the period of study. The remaining corporations except KSRTC were only next to the MSRTC. In fact, the positions of some of the corporations dwindled during the period.

The above analysis shows that the performance of the APSRTC was remarkable not only in terms of the number of effective kilometres but also in terms of the improvement of its position over all the other state transport undertakings selected for study. However, in view of the decline in the effective
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Note: 1. N.R. = Not Available.

Source: Reports on the performance of Nationalised Road Transport undertakings for the years 1980-81 to 1987-88, Central Institute of Road Transport, Pune.
kilometres in some Regions and also due to the wide scope for increasing its operations, it is suggested that the Corporation should take all possible steps to accelerate its growth in terms of effective kilometres operated as there is wide scope for an increase in its operations.

Conclusion

The human factor is relatively more significant in a passenger transport organisation in the public sector, which has to discharge multifarious responsibilities. The APSRTC has developed in terms of the number of buses, number of route kilometers, number of passengers carried, etc. But the above analysis shows that though the APSRTC made considerable progress, its growth in all the Regions seems to be not consistent and also not based on the needs of the Regions. Declining trends in the growth in the number of buses, passengers carried and number of effective kilometres are also observed which may be attributed to the lapses on the part of the Corporation in terms of supplying the buses based on the needs of each Region, in arresting unauthorised operations of private passenger transport organisation and the like. Hence it is suggested that the management of the Corporation should take effective steps to provide the services according to the needs of the passengers, which in turn, improves the growth of the Corporation provided
the passengers are satisfied with the services. However, the effective contribution of human resources can also minimise the negative effects of the above mentioned lapses of the Corporation. The contribution of human resources depends to a large extent on the right size and structure of human resources.