CHAPTER -4

RESEARCH METHODOLOGY

4.1 Introduction
The increasing pressures from various rapid changes that are occurring in the business environment have led to a variety of responses among industrial organizations. Globalization of production and markets, increasing rate of technological innovation and fluctuation in consumer demand are among the factors that have increased the dynamism of the competitive environment to which organizations must respond.

The present study is an attempt to study "Human Resource Practices" of selected Engineering and Pharmaceutical / Chemical industries in the States of Gujarat and Andhra Pradesh. It also tries to study and examine the impact of Human Resource Practices over these industries and the innovative practices evolved to meet the future demands and threats. Present research work is of descriptive in nature and it tries to compare various Human Resource practices over two states followed by selected Engineering and Pharmaceutical/Chemical companies.

4.2 Problem Statement

Human Resource Management is that branch of management that deals with managing one of the most important resources of the organization-Human Resources.

Fast population growth has been recorded in our country for past several years. Population of our country has been increasing by every Census year after 1921. In 1921, the total population of country was 25.1crores, which increased to 120.70crores according to Census of 2011. Being a knowledge-driven industry, the growth and development of the engineering and pharma sector to a great extent depends upon the working, skill, talent and caliber of the people working in it.

Therefore, the success and growth of any organization depends highly upon the knowledge, skills, talents and working of these personnel. Efficient Human Resource practices are very important for the success and meeting future challenges of the
pharmaceutical industry. Thus, human elements acts like Blood as in human body, to keep industry active.

Having understood the importance of Human Resources today, most companies spend huge amount for efficient Human Resource Management/Development by adopting and implementing various training and development programs, adopting good recruitment and selection methods for selecting and recruiting right qualified persons, various motivating compensation schemes, etc.

Our problem arises here that how various organizations manages its most important resource i.e. Human Resource for its success and growth. The problem studied in the present study is, "Human Resource Practices of selected Engineering and Pharmaceutical/Chemical organizations in the states of Gujarat and Andhra Pradesh."
The research focuses on the Human Resource Management practiced by the selected companies.

4.3 Research Design

The present study is purely of comparative and descriptive type and holds Ex Post Facto design. It is not possible to carry out the present research work experimentally by manipulating variables. Here in the Ex Post Facto it is not possible to have control over variables. Here it becomes necessary to hold variables constant so as to minimize the errors and maximize the objectivity of the study. The present study is primarily focused on comparison of various HR practices followed by the industries in these two states. Here, data is collected from selected companies and same information is used to make cross-classification comparisons and in determining relationship between them.

For the given research both exploratory and descriptive research designs have been used. Initially secondary data were collected from various books, magazines, journals, annual reports, company websites, internet etc.. Thereafter with the help of a structured questionnaire primary data was collected. Besides, this study also included qualitative research in which discussions were carried out with departmental heads and various senior managers to gain insight into HR practices adopted by Indian organizations.
4.4 Objectives of the Study

The objectives of the present study are as follows:

4.4.1. To understand and analyze the recruitment and selection of selected Engineering and Pharmaceutical / Chemical industries in the states of Gujarat and Andhra Pradesh.

4.4.2. To review existing practices of various methods of training and development with respect to all the levels in the organization.

4.4.3. To review the current practices of Performance Appraisal.

4.4.4. To suggest ways and means to align Human Resource practices adopted by these companies to meet future challenges effectively and to generate sustainable competitive advantage.

4.5 Universe of the Study

For the given study, universe refers to all the Indian companies and population refers to the Engineering and Pharmaceuticals / Chemical industries in the States of Gujarat and Andhra Pradesh of India.

Chart 4.1

Universe of the study

<table>
<thead>
<tr>
<th>H.R. Practices in India</th>
<th>Gujarat</th>
<th>Andhra Pradesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Industries</td>
<td>Pharmaceutical / chemical industries</td>
<td>Engineering Industries</td>
</tr>
</tbody>
</table>

At present there are almost 24 thousand companies in the Pharmaceutical/ Chemical industries in India with almost 330 companies in the organized sector. The top 10 companies hold almost 33.33 percent of the market. In the Engineering sector there are more than 30 thousand companies in India and almost 700 companies in the organized sector. Therefore, these 330 companies in Pharmaceutical / Chemical industries and 700 companies in Engineering industry can be defined as universe for the given study. Lastly the 102 Pharmaceutical / Chemical & approx. 225 Engineering organizations respectively in the state of Gujarat and 38 Pharmaceutical / Chemical
and approx. 110 Engineering organizations respectively in the state of Andhra Pradesh is defined as the population of the given study.

4.6 Sample Selection

4.6.1 Sampling Unit

From the above universe of 330 Pharmaceutical / Chemical organizations in organized sector and approx. 700 Engineering organizations in organized sector in India was defined as sampling unit for the purpose of the study.

4.6.2 Sample Size

The study was narrowed down to two States of India namely [1] Gujarat and [2] Andhra Pradesh. And further 15 Pharmaceutical / Chemical industries from each state were drawn and 15 Engineering industries from each state were drawn. Hence the sample size for the given study is 60 organizations from the states of Gujarat and Andhra Pradesh.

4.6.3 Sampling Methods

Stratified Convenience Sampling

For this study, stratified convenience sampling has been adopted to broadly classify the industrial sector into two groups namely

1. Engineering, 2. Pharmaceutical / Chemical. Then from each group 15 industries have been contacted using convenient sampling technique.

4.7 Data Collection

4.7.1 Primary Data

For the present study, the primary data has been collected through questionnaire and through personal visits and interaction with the personnels of the HR department of the selected companies.

4.7.2 Secondary Data

For the present research study, the secondary data is taken from various magazines, books, journals, organizational in-house magazines, articles in newspapers, internet, etc.
The present study is purely a 'Cross-sectional' study and thus a 'snapshot' of Human Resource practices adopted and followed by selected companies in Gujarat and Andhra Pradesh.

4.8 Research Instrument

Questionnaire was used to collect necessary data from the companies regarding their current HR practices. However, information collected being descriptive in nature, personal interaction with the personnel of HR department of the selected companies became inevitable. This is necessary to have clarity about the thoughts, for better understanding of the concept and also to remove any doubts about the same on the spot.

Questionnaire was designed to collect information based on broad objectives such as:

4.8.1 Recruitment Process

To collect information on the recruitment at various levels in the organization along with the sources and methods of procuring employees.

4.8.2. Training Issues

To make a comparative study of training in two main industries i.e. Engineering and pharmaceutical / Chemical, in the states of Gujarat and Andhra Pradesh, the respondents were asked to rate on five point scale pertaining to the importance of objectives of training as well as the various methods used for training.

4.8.3. Compensation Issues

In this section of the questionnaire information collected was regarding percentage of wage increase, the incentives given to the employees as well as the expected compensation at various levels of the organization.

4.8.4 Performance and Legislative Issues

The instrument was designed to know how many times does the organization conduct performance appraisal, the rewards offered as a result of performance evaluation and how effective are these rewards to improve employee motivation.
Further researcher decided to collect the information on five point scale about the clarity of labour issues by managers, and also what are the various issues concerning the stability of the work force, as well as the kind and quality relations between management and workers followed by effects of strikes if any.

4.9 Tools for Analysis
Present research study being of descriptive type and nature, it requires qualitative and quantitative analysis for the purpose of comparison between two states and two industrial sectors i.e., Engineering and Pharmaceutical / Chemical organizations. Statistical tools such as Analysis of Variance. Post-Hoc analysis, T-test, Chi-square test, Cross-Classification etc., were used.

4.10 Scope of the Study
The present study is confined to States of Gujarat and Andhra Pradesh, wherein 15 companies have been selected from Engineering and pharmaceutical / Chemical companies.