CHAPTER - I

INTRODUCTION

The achievement of a sustained and equitable development remains the greatest challenge for the human race. Despite good progress over the past generation, more than one billion people still live in acute poverty and suffer grossly inadequate access to the resources – education, health services, infrastructure, land and credit - required to give them a chance for a better life. Human capital accumulation has long been stressed as a pre-requisite for economic growth and the educated labour-force is more equipped with skills for creating, implementing, adopting new technologies, which are essential for economic growth. It is not only that the technological innovation depends upon the level and nature of human capital of a nation, the speed of technological catch-up and diffusion also depend upon the level of domestic human capital stock. The basic objective of the development is to provide opportunities to all those millions of people living in deprivation so that they can also develop their potential (World Bank, 1992, p.1). The world faces two major developmental challenges - the first is to ensure that the fruits of development reach the neediest through equitable distribution of resources, opportunities and benefits. The second is to develop the human resource.

In the modern world where the competition is hard among different production units, human resource is considered the most valuable and challengeable asset of an organisation. An organisation, may be small or large, formal or informal, is composed of heterogeneous human resources who differ from each other in their skill, knowledge and psychology. Thus, human resource is the finest asset of any type of the organisation. Earlier organisations employed hands and obviously, hands have limited productive potential. Today, an organisation employs additional minds and a creative mind has unlimited profit potential. In global and knowledge-based economy, business has become more competitive and tough due to rapid changes in demand, market structure, market imperfections, technologies, national and international policies etc. such changes can be accommodated only by competent, efficient and skilled human resource (Rao, T.V., 1997, p.23; Mamoria, C.B., 2002, p.541).
Human resource is the most vital factor in the process of development of an economy or an organisation. The term human resource refers to the knowledge, skills, creativities, abilities and talents. These attributes ultimately determine the efficiency and productivity of work-force. There must be improvement in values, beliefs, aptitudes and attitudes in accordance with the changing requirement of groups, organisations and society. The term human resource development was first introduced in 1969, by Leonard Nadler at the annual conference of the American Society for Training and Development (ASTD). Nadler and his wife, Zeace, have defined human resource development as, “Organized learning experiences in a definite time period to increase the possibility of improving job performance growth.” This definition involves the intention, design and delivery of formal learning events with the intention of improving job performance (Rao, Subba P., 2002, pp.5-6; Yorks, Lyle, 2006, pp.5-6).

Rao, T.V., defined, “Human resource development as a process in which the employees of an organisation are helped in a continuous and planned way to - (1) acquire or sharpen capabilities to perform various activities associated with their present and expected future role, (2) develop, discover and exploit their inner potential for organisational development purpose and (3) develop an organisational culture and strong relationship between employer-employee” (Rao, T.V., 1990, pp. 5-7).

Watkins stated that human resource development is, “The field of study and practices responsible for the fostering of a long term, work-related learning capacity at the individual, group and organisational level of organisations.” Thus, Watkins definition emphasizes human resource development as a long-term development activity that focuses on multiple level learning facility and involving individuals, group and organisational-level interventions in the organisation. Armstrong said, “Human resource development is about enhancing and widening these skills by training, by helping people to grow within the organisation and by enabling them to make better use of their skills and abilities” (Yorks, Lyle, 2006, p.7).

According to Dayal, Ishwar, “Human resource development involves as (a) ways to better adjust the individuals to have job and the environment, (b) the greatest involvement of employees in various aspects of their work and (c) the greatest concern for enhancing the capabilities of the individual” (Dayal, Ishwar, 1991). Vetter, E.W.,
viewed, “Human resource development as a process by which an organisation should move from its current manpower position to its desired manpower position. Though planning management strives to have the right number and right kind of people at the right place at the right time doing things which, results in both the organisation and the individual receiving maximum long-run benefits” (Vetter, E.W., 1967).

Thus, human resource development is a function that would fit a person to his job. It develops positive personality traits, skills, knowledge, commitment, value and ability in a person to perform his duties smoothly and effectively. The human resource development is a technique to transform workers into knowledge workers. Here, inputs are workers and outputs are knowledge workers. Hence, an economy can be ultimately converted into knowledge economy (Fig.1.1).

**Fig. 1.1**

Transformation of Workers into Knowledge Workers

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers</td>
<td>Human Resource Development</td>
<td>Knowledge Workers and Knowledge Economy</td>
</tr>
</tbody>
</table>

The transformation process involves the management systems for acquiring, developing, allocating, conserving, utilizing, evaluating and rewarding human resource. The outputs are services rendered by the employees to the organisation. Human resource development is a challenging task of each and every organisation not only to maintain a competent and productive work-force but also to translate the worker’s expectations into realities. Once a well-known scholar Henry Ford said, “take out my building, take out machines and all capital but leave my men with me, I will become Henry Ford again”. This statement indicates that human resource is a crucial asset for an organisation (Bhatia, B.S., H.L. Verma and M.C. Garg, 1997, pp.20-28; Yorks, Lyle, 2006, pp.5-8; Vetter, E.W., 1967; Rao, T.V., 1990; Dayal, Ishwar, 1991, pp.4-7; Gupta, C.B., 2001, pp.12-19).
History of Human Resource Development:

Human resource development as a separate field of study, gained popularity in the 1960s. However, its origin dates back to around 18 B.C., when the concept of minimum wage rate was included in the Babylonian code of Hammurabi. Span of Management and related concepts of organisation were well conceived by Moses around 1200 B.C. The historical growth of human resource development is evolutionary. However, the foundation of human resource development dates back to the era of industrial revolution.

Industrial revolution in Europe during the later part of the 18th century and early part of the 19th century had a vital influence on the development of industry and commerce. It consisted mainly of the development of machinery, linking of power to machines and establishment of factory system and mass production. Increased mechanization and specialization make job’s routine monotonous. However, labour was looked upon as a commodity that could be bought and sold. As a result, the employer lost personal touch with his employees.

Many management experts and thinkers have contributed towards the evolution of human resource development as it exists today. Robert Owen has been referred to as the father of personnel management. He introduced various labour welfare reforms during the period of 1800 and 1828. He made various provisions for reasonable working hours, housing facilities, education for workers and their children. He also took an active part in the introduction of British Factory Act, 1819. He was greatly admired for giving human treatment to workers. Charles Babbage invented a mechanical calculator in 1822. In 1832, he published his famous book, on the economy of machinery and manufactures. He stressed on the importance of division of physical and mental labour, suggested the idea of profit sharing and timing work. Denial C. McCollum tried to find solutions to managerial inefficiencies. He initiated for job description, made promotions on the basis of merit

With the rise of factory system, the workers faced several problems in the factories. They got lower wages and worked under poor working conditions. So, they organized themselves into trade unions to secure better wages and better conditions of work. The weapons used included strikes, slowdown, walkout, lockout; sometimes even physical force was used. Trade unionism was influenced by the human resource development in such fields of activity as the adoption of employee grievance handling systems, the acceptance of arbitration as a means of resolving conflicts, disciplinary
practices, clear definition of job duties and defensible wage structure. As a result, in several companies, personnel departments were set-up around 1910 to look after functions like recruitment, training, motion study, record keeping, welfare etc.

Taylor, F.W. is considered the father of scientific management. Taylor’s contribution has two dimensions (i) mechanical and (ii) philosophical. On the mechanical side, Taylor introduced time and motion studies, standardization of tools, methods and working conditions, differential piece rate for the payment of wages. On the philosophical side, he tried to develop the science of management based on scientific investigation and experiment. The scientific management is based on five principles - replacement of rule of thumb method, scientific selection and training of workers, cooperation between labour and management maximum output and equal division of responsibility (Taylor, F.W., 1947).

Hugo Munsterberg is regarded as the father of industrial psychology. His contribution to industrial management was particularly notable in respect of his analysis of jobs in terms of their mental and emotional requirements and in terms of the development of testing devices. The advancements were made in selection, placement, testing, training and research practices. It emphasized the use of psychology in the field of personnel testing, interviewing, attitude measurement, learning theory, safety, training and monotony study, job analysis and human engineering. A number of other psychologists such as Poffenberger, Burtt and Hepner also made significant contributions in the field industrial psychology.

Using the techniques developed by the psychologists, George Elton Mayo and Fritz J. Roethisberger and William J. Dickson conducted some experiments in the field of industrial psychology in 1932. Mayo and his associates followed up their experiments investigated the myriad of informal groupings, informal relationships, patterns of communication and patterns of informal leadership. This trend was eventually termed as ‘the human relations movement’.

By the end of the 1940s, the increasingly widespread acceptance of human relations movement led to the formulation of a new discipline known as behavioural science. Abraham Maslow, Douglas McGregor, Fredrick, Herzberg, Mouton, Sayles, Bennis etc. made significant contributions to the development of the behavioural science approach. It led to the development of new techniques of motivation and leadership, for example – job enrichment, employee participation, effective communication and
management by objective. A key feature of behavioural science philosophy is that productivity is directly related to worker’s individual and group feelings, motivation and job satisfaction (Mayo, George Elton, 1933; Koontz and O’Donnell, 1976, p. 26; Mooney, J.D., 1947, pp. 62-67; Chopra, Rakesh K., 1989; George, Claude S., 1974, pp.82-84; Roethisberger, J. Fritz and William J. Dickson, 1939).

The growth of personnel management in USA and UK is evolutionary in nature. It took place because of the voluntary efforts of employers. The scope of personnel management has expanded throughout the world. The task of the personnel management is not confined only to the recruitment of employees, but also to look after their welfare and handling their grievances. It deals with the management aspects of personnel functions – recruitment, selection, placement, transfer, promotions and wages and incentives.

Human resource development occurred due to unsatisfactory functions of personnel management and labour’s dissatisfaction from it. The personnel management had a limited scope. It viewed labour as a tool, the behaviour which could be manipulated for the benefits of the organisation and replaced when it was worn-out. The personnel function was treated as a routine activity and this department itself was not treated with respect. Historically, personnel management preceded human resource management. Human resource management views people as an important resource to be used for the benefits of organisations, employees and the society (Fig.1.2). It promotes mutuality – mutual goals, mutual respect, mutual rewards and mutual responsibilities. It includes human resource planning, job analysis and design, recruitment and selection, orientation, training and development, promotion appraisal, motivation and communication, welfare, safety etc.

For many people human resource development and human resource management convey the same meaning. Nevertheless, it may not be true. The guiding principle of human resource management can be expressed as positioning the right people to achieve the highest possible performance to achieve strategic goals, whereas human resource development can be expressed as preparing and continually developing people and learning systems. Human resource development is a function more concerned with training and development, career and development, counselling, performance appraisal, potential appraisal and welfare (Fig. 1.3) (Yorks, Lyle, 2006, pp.5-8).
Fig. 1.2

Historical Developments in Human Resource Development

- Industrial Revolution
- Growth of Trade Unionism
- Principles of Scientific Management
- Industrial Psychology
- Human Relation Movement
- Impact of Behavioral Sciences
- Personnel Management
- Human Resource Management Approach
- Human Resource Development Approach
Fig. 1.3

Wilson's Human Resource Wheel

The purpose of the Human Resource department is to ensure the effectiveness of all employees in achieving organizational objectives.

Source: Yorks, Lyle, 2006, pp.9-10
Thus, now-a-days there has been an increasing realization that the organisation's success is dependent on the synergies created by its human resources. Human resource development is said to be the core of a larger system known as human resource system, wherein human resource development is mainly concerned with providing learning experiences for the people associated with an organisation through behavioural processes.

Human resource development is concerned with managing all types of people at all levels in the organisation. Its task is to deal with human relationship to achieve the goals of an organisation. It focuses on action rather than on record keeping. It stresses the solutions of personnel problems. It provides services and programmes to facilitate employee satisfaction and growth. It takes into account personality, interests, opportunities and capacities of employees for developing their potential. It is not confined to industry alone but is equally useful and necessary in government, armed forces, sports organisations and the like. It permeates all the functional areas that are production, marketing, finance, research etc. The development of human resource is an ongoing exercise rather than a short-term function. It is concerned with helping an organisation to achieve its objectives in the future by providing competent and well-motivated employees. It attempts to obtain willing co-operation of people for the attainment of the desired objectives. Managing of human resource is a challenging job due to the dynamic nature of people. People have sentiments and emotions, so they must be handled tactfully. Human resource development is a science as it contains an organized body of knowledge consisting of principles and techniques. It is also an art because it involves application of theoretical knowledge to the problems of human resource. Human resource development involves application of knowledge drawn from several disciplines – sociology, anthropology, psychology, economics etc. In order to deal with human problems effectively one must depend upon such knowledge (Gupta, C.B., 2001, pp.1.3-1.7; Chhabra, T.N., 2000, p.357).

People in any organisation manifest themselves, not only through individual interactions but also through group interactions. When individuals come to workplace, they come with not only technical skills and knowledge but also with their personal feelings, perception, desires, motives, attitudes and values. Hence, human resource
development must equip itself with good knowledge of disciplines, viz., economics, commerce, management, sociology, psychology, engineering, technology and law. Scope of human resource development is very wide, it includes following functions –

(A) Managerial functions – Managing people is the essence of being a manager. Like other managers, a human resource manager performs the functions of planning, organizing, staffing, directing and controlling.

- Planning in the area of human resource development, involves deciding personnel goals, formulating personnel policies and programme, preparing the human resource budget.
- Organizing is a process of allocating tasks among the members of the group, establishing authority – responsibility relationships among them and integrating their activities towards the common goals.
- Staffing is a process of obtaining and maintaining capable employees. It includes manpower planning, recruitment, selection, placement, orientation and transfer.
- Directing is the process of motivating, activating, leading and supervising people. It helps to secure the willing and effective co-operation of employees for attaining organisational goals.
- Controlling helps to minimize the gap between desired results and actual performance. It involves auditing and training programmes, analyzing labour turnover records, directing morale surveys and conducting separate interviews.

(B) Operative functions are concerned with specific activities of procuring developing, compensating and maintaining an efficient work-force.

- Procurement function is concerned with securing and employing the right kind and proper number of people required accomplishing organisational tasks. It includes job analysis, human resource planning, recruitment, selection, placement and induction.
- The main goal of development function is to improve the knowledge, skills, aptitudes and values of employees, so that employees can perform present and
future job more effectively. It comprises performance and potential appraisal, training and development, executive development and career planning.

- Compensation function refers to providing equitable and fair remuneration to employees for their contribution to the attainment of organisational objectives. It consists of job evaluation, bonus, wages and salary.

- Integration function is the process of reconciling the goals of the organisation with those of its members. Integration involves motivating employees through various financial and non-financial incentives, providing job satisfaction, handling employee grievances through formal grievance procedures, collective bargaining, worker’s participation in management, conflict resolution, employee counselling and improving quality of work-life.

- Maintenance function is concerned with protecting and promoting the employees. For this various types of fringe benefits such as housing, medical aid and educational facilities are provided to employees. The social security measures like provident fund, pension, gratuity, maternity benefits, injury/disablement allowance and group insurance etc. are also arranged (Fig 1.4).

The Indian Institute of Personnel Management (IIPM) includes personnel aspect, welfare aspect and industrial relation aspect in the scope of human resource development. All major activities in the working life of a worker from the time he comes into an organisation until he leaves, come under the scope of human resource development. The scope of human resource development has expanded considerably in recent decades. It has become equally significant in offices, hospitals and government organisations (Chhabra, T.N., 2002-03, pp.24-28; Gupta, C.B., 2001, pp.1.12-1.17; Aswathappa, K., 2002, pp. 4-5; Gupta, S.K., 2000-2001, pp. 5-7; Mamoria, C.B. and S.V. Gankar, 2002, p.855; Rao, Subba P., 2002, pp.5-7; ICFAI, 2004 (a), pp.8-14).
Various environmental factors influence the human resource development of an organisation. The term environmental factors in human resource development have reference to the totality of all factors, which influence both – the organisation and human resource development sub-system. Working of an organisation is affected by two types of environment – (i) Internal and (ii) External (Fig. 1.5).

Internal environment exercises have profound influence because they interact closely and frequently with the human resource development function in an organisation. It consists of organisational objectives, policies, formal structure and human resource system. The external environment influences on human resource development are equally important like internal environment. External environment includes various external factors like economic factors, demographic factors, socio-cultural factors, political factors, technological factors, legal and governmental factors, international factors and business environment. Thus, an analysis of organisational environment is useful for the human resource manager and his team in order to become proactive and not remain reactive to the environment (Gupta, C.B., 2001, pp.1.38-1.41; Rao, Subba P., 2002, pp.111-112; Ibid, pp.15-19; Aswathappa, K., 2002, pp.23-32).

According to the Indian Institute of Personnel Management, human resource development aims to achieve both efficiency and justice, neither of which can be pursued successfully without the other. It seeks to bring together and develop into an effective organisation, the men and women who make up an enterprise, enabling each to make his or her contribution to its success both as an individual and as a member of a working group. It seeks to provide fair terms and conditions of employment and satisfying work for those employed (Indian Institute of Personnel Management, 1973, p.31). The objectives of human resource development are as following -

- To help the organisation to attain its desirable goals.
- To enhance job satisfaction and self-actualization of employees by encouraging and assisting every employee to realize his full potential.
- To employ the skills and knowledge of employees effectively.
- To establish and maintain productive, self-respecting and internally satisfying working relationship among all the members of the organisation.
Fig. 1.4
Functions of Human Resource Development

Managerial Function
- Procurement
  - Planning
    - Job Analysis
  - Organizing
    - Human Resource Planning
  - Staffing
    - Recruitment
  - Directing
    - Selection
  - Controlling
    - Placement
    - Induction
    - Transfer
    - Promotion
    - Separation

Development
- Performance appraisal
  - Training
  - Executive development
  - Career planning

Compensation
- Job evaluation
  - Wages and Salaries
  - Bonus and incentives
  - Payroll

Integration
- Motivation
  - Job satisfaction
  - Grievance redressal
  - Collective bargaining
  - Conflict management
  - Employer's participation
  - Discipline

Operative Functions
- Health
  - Safety
  - Social security
  - Welfare
  - Schedule
  - Personnel records
  - Personnel research
  - Personnel audit

Source: Gupta, C.B., 2001, p.1.15
Fig. 1.5

Environmental Factors of Human Resource Development

Source: Gupta, C.B., 2001, p.1.40
➢ To do maximum development of employees by providing opportunities for training and development.
➢ To secure the integration of all the individuals and group with the organisation by reconciling individual/group goals with an organisation.
➢ To develop and maintain a quality of work-life.
➢ To maintain high morale and good human relations within the organisation.
➢ To help to maintain ethical policies and behaviour inside and outside the organisation.
➢ To manage the change to the mutual advantage of individuals, groups, organisations and the society.
➢ To recognize and satisfy individual needs and group goals by offering appropriate monetary and non-monetary incentives. To recruit and retain the human resource of require quantity and quality.
➢ To foresee the employee turnover and to make the arrangements for minimizing turnover and filling up of consequent vacancies.
➢ To foresee the impact of technology on work, existing employees and future human resource requirements.
➢ To improve the standards, skill, knowledge, ability and discipline etc.
➢ To assess the surplus or shortage of human resource and take measures accordingly.
➢ To maintain congenial industrial relations by maintaining optimum level and structure of human resource.
➢ To minimize imbalances caused due to non-availability of human resource of right kind, right number in right time and right place.
➢ To estimate the cost of human resource.
➢ To make the best use of its human resource.
➢ To develop the capabilities of each individual in relation to his or her present role as well as to his or her expected future role.

Thus, the objectives of human resource development include the utilization of human resource effectively and establishing rapport relationship between employees and

**Evolution of Human Resource Development in India:**

There are references to systematic management of human resource in Kautilya's Arthashastra as early as the 4th century B.C. The government then took an active interest in regulating employer-employee relationship in various public and private sector enterprises. The experts of human resource development in India have tried to chronicle the growth of the subject only since the 1920s. In 1920s, industrial disputes arose at large scale in various parts of the country. To solve this situation, the government and producers took various steps – labour unions were recognized, labour officers were appointed and interest was taken to do the welfare of workers. The calico mills, Ahmedabad opened a creche for the children of the workers and engaged a doctor and a nurse for them. In 1918, Tatas in Bombay appointed a medical officer. Likewise, in 1937, Tata, Iron and steel company at Jamshedpur appointed their first labour officer in India. In 1929, Royal commission on labour was set-up. In, 1931 the Royal commission recommended for the appointment of labour officers in order to protect the rights of workers and to promote an amicable settlement between the workers and management. After this various mill-owners in textile, jute and other industries appointed labour officers to look after the recruitment of employees, handle grievances and administer welfare measures. In 1934, Bombay Industrial Development Settlement Act was passed. Under this act, labour welfare officers were appointed for the settlement of labour disputes.

After independence, the government of India for the development and welfare of human resource enacted several laws. An important landmark in the growth of human resource was the enactment of the Factories Act, 1948, the Plantation Labour Act, 1951 and the Mines Act, 1952. Section 49 of the Factories Act requires the appointment of qualified welfare officers in factories employing more than 500 employees each. Two professional bodies – the Indian Institute of Personnel Management (IIPM), Calcutta and
the National Institute of Labour Management (NILM), Bombay were set-up during the 1950s. During the 1960s, the personnel functions widened beyond the welfare aspect, three major areas of practices viz labour welfare, industrial relations and personnel administration emerged as the complimentary part of personnel management. Rapid industrialization and the development of public sector during the Five Years Plan accelerated the growth of personnel management and professionalization of management. In 1970s the concern for welfare shifted towards higher efficiency. A change in professional values of personnel managers was visible during 1980s due to new technology and other environmental changes; human resource development became a major issue. The two professional bodies IIPM and NILM were merged to form National Institute of Personnel Management (NIPM) at Calcutta.

During the 1990's the overwhelming role of human resource in industry has been realized. This has led to the growth of human resource development as a distinct discipline and as a profession. Now the employees are considered as partners in the organisation. They are gradually, being made shareholders through ESOP (Employees Stock Option). The workers representatives are appointed in the board of directors. The government has made wide-ranging arrangements for the development of workers’ representatives as directors. For the development of human resource, several training centers and institutes have been established. The important institutes – Xavier Institute of Labour Relations (Jamshedpur), Indian Institute of Personnel Administration (Calcutta) and Indian Labour Management Organisations are playing crucial role in this field.

Thus, human resource development in India has grown from various stages - labour welfare, industrial relations, labour administration, personnel management, human resource management and at last human resource development. Hence, beginning in the 1920s, the subject of human resource development has grown into a matured profession in India (Gupta, C.B., 2002, pp.1.33-1.34; Gupta, S.K., 2000-2001, pp.20-21; Aswathappa, K., 2002, pp.15-16; Report of the Royal Commission of Labour, Simla, 1931, pp.24-25).

In a fast changing environment, an organisation can become dynamic and competitive only when employee capabilities are sharpened by the development of human resource. The human resource development plays a vital role in the success and
growth of an organisation. The significance of human resource development can be discussed at four levels -

(1) Significance for an Enterprise – Human resource development can help an enterprise in achieving its goals more efficiently and effectively in the following ways –

- Attaching and retaining the required talent through effective human resource planning, recruitment, selection, placement, orientation, compensation and promotion policies.
- Developing the necessary skills and right attitudes among the employees through training and development, performance appraisal etc.
- Secured co-operation of employees by motivation, participation and grievance handling.
- Utilizing effectively the available human resources.
- Ensuring that the enterprise will have a team of competent and dedicated employees in future.

(2) Professional Significance – Effective management of human resources helps to improve the quality of work-life. It permits team work among employees by providing a healthy working environment. It contributes to professional growth in the following ways –

- Providing maximum opportunities for personal development of each employee and maintaining healthy relationships between individuals and different work groups by allocating work properly.

(3) Social Security – Sound human resource management has a great significance for the society. It helps to enhance the dignity of labour in following ways –

- Providing suitable employment that provides social and psychological satisfaction to people.
- Maintaining a balance between the jobs available and the job seekers in terms of numbers, qualifications, needs and aptitudes.
- Eliminating waste of human resource through conservation of physical and mental health.

(4) National Significance – The effective exploitation and utilization of a nation's natural, physical and financial resources, requires an efficient human resource. There are
wide differences in development between countries with similar resources due to
difference as in the quality of their people. Thus, in the modern era of automation and
computerization, machine is useless without competent people to run it.

(5) Personal Significance – Human resource development creates skills and
efficiencies in a person through continuous development training and life-long learning.
It increases the level of confidence in an employee (Mamoria, C.B. and S.V. Gankar,

The business environment has become very fluid, competitive and dynamic in
these days. Due to globalization, it is very challenging task to attract, manage, develop,
mould and retain desirable human resources. The expectations of the employees have
also increased, which are difficult to satisfy. There are various challenges being faced by
organisations for human resource development. The organisations are ever increasing in
size and complexity, multiplying the number of people working therein. The
development of an increased work-force, poses serious problems and challenges
especially since the workers are becoming more conscious of their rights. Many
organisations are willing to take the risks involved in giving more autonomy and
responsibilities to their employees. They are confident of their employees and their
capabilities. Self-managed teams are now common and have replaced supervisors in
various competitive companies. Today, all the companies have woken up to the reality of
excellent quality and are trying to meet the quality challenge.

So, every company has to continuously strive to improve the quality of human
resources in an organisation. Technological changes have been rapid in recent times.
Today, many companies are using advance technologies for faster and dependable
decision-making. The technical advancement and its adaptation are necessary for an
organisation for its own development. But there is also a need for continuous learning
and training for human resource, which is difficult because most of employees are
reluctant to the adaptation of new technology. Now a days, organisations are
continuously striving to improve the quality of work-life for their employees by making
work more rewarding, reducing employee’s anxieties and team building. It is very
challengeable for an organisation to maintain rapport relationship between employees and
management. New Economic Policy (NEP - 1991) has changed the face of Indian
Before 1991, the words like liberalization, globalization, disinvestment, were completely absent in the dictionary of Indian economic planners. So, various Labour Laws and Acts have been formulated and amended as per requirement of organisations and the employees in India.

Hence, human resources are the most valuable and unique asset of an organisation. Now a days, the world has become a global village, so managing and developing different employees belonging to different cultures under one organisation is a very dynamic and challenging task. The nature of human resource is not similar in mental abilities, traditions, sentiments and behaviour. They are widely different from each other as an individual person and as a group of persons. It is very difficult to attract, develop, retain and satisfy all employees simultaneously for an organisation to get a desirable outcome. It is therefore necessary for all human resources managers to understand and give due importance to the different human resource policies and activities in the organisation (Mamoria, C.B. and S.V. Gankar, 2002, pp.8-10; ICFAI (a), 2004, pp.17-20).

Now-a-days, the business has become more dynamic, competitive and tough. This can be handled only by competent, efficient and skilled human resource. In this global and knowledge-based economy, the firms will gain their competitive advantage through the integration of the new information and communication technologies (ICTs) to their production and services system together with the human resource systems, with the emphasis on developing and nurturing a strategy-based human resource development system. In a rapidly changing world economy, the driving force for the advancement of a nation is innovation through technological evolution and this is embedded in knowledge acquisition, knowledge discovery and knowledge creation. The concept of ‘Knowledge Economy’ or the ‘New Economy’ is used to describe an economy, in which the generation and exploitation of knowledge plays the predominant role in the creation of wealth. It is about the more effective use of all types of knowledge and creativity in all types of economic activities (www.aomi.amo.org; www.afbis.com; www.egovmonitor.com). Prime Minister Tony Blair of Great Britain has said, knowledge economy is not a new economy but it is just a transformation of traditional economy by information technology and it is a profound economic revolution.
Figure 1.6, depicts societal transformation of an economy through various growth stages. In agriculture society, the natural resources were a necessity to produce agricultural products, in industrial society, explicit knowledge was a necessity to generate products and in information society, knowledge was explicating through networks these are internet and communication tools. Information products generate knowledge products, through utilization of knowledge in an economy. Hence by gradual societal transformation, the agriculture society has ultimately been converted into knowledge society.

The knowledge economy consists of two types of valuable assets – (a) knowledge assets, represent the ‘stocks of knowledge’ and ‘capabilities’ of a nation which is essential for economic growth, human development and competitive advantage (b) The term intellectual capital (IC) represents knowledge, information, intellectual property and experience to create wealth. It is a subset of knowledge assets. Intellectual capital can be categorized into two parts – (1) Structural capital refers to things like distribution network, supply chain and proprietary software system. In simple words it relates to information technology. (2) Human capital refers to human resource and stakeholders (distributors, suppliers, customers) of an organisation. However, knowledge economy includes update knowledge, skilled and educated human resource; continue research and development, investment in information technology and infrastructure (Malhotra, Yogesh, 2003, pp.3-8).

Peter Drucker, who is credited with first coining of the term ‘Knowledge Workers’ or ‘Knowledge HR’, observed in his book, Post Capital Society (1993) that we are entering in a knowledge society. Where the basic economic resource is no longer capital, natural resource or labour but is and will be knowledge workers who play a central role. He suggested that various classes of knowledge workers, of which high knowledge workers include professionals such as doctors, teachers and consultants, who deal mainly in the realm of the mind. While on the other hand, another class of knowledge workers is – the knowledge technicians who work with their hands and brains in the industries of IT, medical and other areas.

With knowledge becoming the key factor, organisations world over are reappraising the ways to manage their newly empowered resource that is knowledge
Fig. 1.6: Economic Growth and Societal Transformation

Source: www.pib.nic.in
workers. The conventional assumption that capital (physical) is rare and expensive and people are abundant and cheap is no longer valid. Today, capital is mobile and cheap, because it is global. People, especially competent and knowledge-led people (workers) are becoming rare. Now every additional person with effective skills and competencies means additional profit. Earlier organisations employed ‘hands’ (have limited potential) and now they employed ‘minds’ (have unlimited profit potential). In the knowledge economy, HR is at the heart of business (ambani at rit.com).

Knowledge workers usually perform with their analytical skills and are expected to continuously improve their performance. They are also to be the ones who can create new products and services. They are encouraged to do experiment and are not punished for failures, as organisations believe that their creativity will be more enhanced through risk-taking behaviour. Tremblay (2002) said that, in new knowledge economy, the organisation should develop individual and collective learning to the maximum in order to obtain better performance, better management and integration of the knowledge of workers. Thus, organisations must have capability to develop, nurture and utilize its HR to enjoy better performance (Tremblay, 2002, pp. 165-175).

As far as India is concerned knowledge economy is still in its infancy. Hence, to make India a truly knowledge economy, there must be huge investment in technology and for this objective workers must be converted into knowledge workers through providing formal education, research and development (R&D), life-long training and development and learning environment within and outside of the organisations. Hence, ‘Digital Revolution’ has opened up new opportunities for humanity to generate new kinds of wealth and prosperity by ushering in the knowledge economy. The success of information technology revolution in India has opened the gate for knowledge economy. The knowledge led-industries like information technology are ever changing; hence there is a need for knowledge-workers to handle it. In information technology industry, where the competition is cut-throat, only knowledge workers have skill, capabilities and competencies to face it.

Information technology, a knowledge-based industry, has the tremendous potential of becoming an engine of accelerated economic growth. It enhances access to information, protects consumers, provides access to government services, makes skill-
formation and training more effectively, improves health delivery services and promotes transparency. A huge investment in knowledge-led industry will determinate the superpower position of India in next two decades. The Indian information technology industry has played a vital role in putting India on the global map. According to NASSCOM, the revenue of the information technology industry has increased from 1.2 percent of GDP in 1998 to an estimated 5.8 percent in 2008-09. The Indian domestic information technology market (including hardware) reached USD 24.3 billion in 2009 as against USD 23.1 billion in 2008. Indian information technology industry grew by 12 percent in 2009 to reach USD 71.7 billion as against USD 64 billion in 2008 of this the software and services segment accounted for USD 59.6 billion. Information technology industry's exports grew by 16 percent from USD 40.9 billion in 2007-08 to USD 47.3 billion in 2008-09. According to a report prepared by Mckinsey for NASSCOM, total information technology industry will contribute USD 225 billion in 2020 in revenue (www.nasscom.in).

Research by Gartner forecasts India as the undisputed leader in the outsourcing space in the year 2008. It is estimated that India has over 4 million technical workers, over 1,832 educational institutions and polytechnics, which train more than 67,785 computer software professionals every year. The major factors that facilitated the growth of this sector are as following – abundant human resource, relatively low cost of technical labour, familiarity with English language, reverse brain drain and the role of Diaspora. The Indian software companies have exported information technology services to as many as 100 countries around the world, but there is a heavy reliance on the US market, which accounts for 60 percent of the total software exports.

Besides this, Indian companies are becoming proficient in chip design, web-based services and telecom software among other fields. The Indian universities are pumping out 1,20,000 engineering graduates in a year and the number reaches nearly one million, when polytechnics and country’s 3,000 computer training institutes are included and nearly 100 such institutes are opening every month. According to NASSCOM’s findings Tata Consultancy Services, Wipro and Infosys have emerged as best among global information technology industries. According to a survey (2004-05) Tata Consultancy Services has emerged as the frontrunner clocking revenues of Rs.7449 crores, followed
by Infosys technologies at Rs.6806 crores and Wipro Technologies with Rs.5426 crores respectively. Of the 21 companies worldwide which hold Carnegie Mellon Software Engineering institute’s highest ranking, 12 are from India – including Infosys, Wipro, Flex Solutions, Citigroup Software Subsidiary, Motorola Inc's Bangalore Subsidiary. Out of top 300 Companies more than 170 are ISO 9001 certified. Ministry of information technology, Government of India has taken major steps toward promoting the domestic industry and achieving the full potential of the Indian information technology entrepreneur. This industry is expected to be India's growth engine. It is expected that the Indian IT-BPO is on track to reach USD 60 billion in exports and USD 73-75 billion in overall software and services revenues by 2010.

In knowledge economy, both human resource and information technology are the backbones of the economy. Information technology being a knowledge-led industry needs knowledge workers. India is enjoying the robust growth of information technology industry and to continue it also in future, India needs not only information technology professionals, but professionals that have specific expertise for different industry segments and domain knowledge. In uncertain, hi-tech and dynamic economy, human resource development practices have become the vital and life-long function in information technology industry. In spite of this, there are various human resource challenges, which are faced by information technology industry like – managing large number of people at a short span of time, development of soft skills, demand and supply gap of human resource, attrition rate and recruitment of employees in information technology industry. Thus, information technology industry needs to focus on its human resource development practices in recruitment, selection, training, health, promotion, career and development, worker’s participation in management and quality of life (www.nasscom.in; www.ibef.org; www.mit.gov.in).

**NEED/SIGNIFICANCE OF PRESENT STUDY:**

In order to attain rapid development in the modern and competitive era, it is essential to give adequate importance to human resource. In knowledge economy, it is believed that by investing in human resource, desired and rapid growth rate can be attained by any organisation. In India, the case studies show that only some of the large
and knowledge-led organisations practiced the human resource development policies in the organisations, which are not so effective to improve quality, skill and performance of human resource. Thus, there is a need to motivate the organisations to adopt human resource development practices. The present study, ‘Human Resource Development Practices in Information Technology Industry in India,’ has been taken up, keeping in view the significance of human resource development and extent of practical implementation of human resource development policies in information technology industry. The information technology industry is the most important industry in India, because it is one of the fastest growing industries, export-oriented, knowledge and skill-intensive industry, which will motivate the human resource development practices rapidly and effectively in various sectors of the economy. The objectives of above study are as following:-

1. To study and analyse the various theoretical issues in human resource development and their evolution over time.
2. To assess how human resource development sub-systems are helpful to attain skilled, knowledgeable and effective employees.
3. To study the growth and performance of information technology industry in India.
4. To study the profile and history of selected information technology organisations.
5. To study human resource development practices in selected information technology organisations, particularly the policies related to recruitment, selection, worker’s participation in management, team development, training, promotion, performance appraisal, leadership, collective bargaining etc.
6. To observe and analyse the human resource development climate prevailing in the information technology industry.
7. To compare human resource development climate in various categories of information technology industry, i.e., software, BPOs and hardware.
8. To analyse and compare the human resource development climate prevailing in the selected information technology organisations.
TENTATIVE CHAPTER SCHEME:

It involves the systematic chapters plan to complete the present study -

1) Introduction.
2) Review of Literature.
3) Data Base and Research Methodology.
5) Information Technology Industry in India Growth Structure and Performance.
6) Overview of Surveyed Information Technology Organisations.
8) Human Resource Development Climate Survey in Information Technology Industry in India.
10) Summary and Conclusions.

Bibliography