CHAPTER–I

Introduction and Methodology
Human Resource is one of the five essential resources available to any organisation. It is also considered as the most significant and valuable asset which a company possesses and on which its profitability depends, yet the accountants have not given adequate attention to develop criteria to value Human Resources (Assets) and to show them in the Balance Sheet. If the accounting is to provide meaningful information about the state of affairs of a company, it must develop standards to measure the value of Human Resources both for financial reporting and also as an aid to managerial decision-making.

**Traditional Accounting Practices**

Traditionally, the only entries are made in the income statement (i.e. Profit and Loss Account) about “Human Resources” in respect of their wages, salaries and fees and a “statutory statement” is generally included in the report of the Board of Directors u/s 217(2-A) of the Companies (Amendment) Act, 1974 read with the Companies (particulars of employees) Rules, 1975 showing (1) the names, and (2) all other prescribed particulars (i.e. designation, experience, age, date of present employment, particulars of the last employment etc.,) of all the employees who were in receipt of remuneration of not less than twelve lakhs for the financial year or of not less than one lakh per month. If an employee is employed for a part of financial year, and (3) if any such employee is a relative of any Director or Manager of the company, the name of such Director or Manager with this inclusion, it is not possible to evaluate the value of these top level employees. So, at present, various methods have been developed to calculate the costs or values of such resources. Some companies calculate the value or costs for their Human Resources. But they do not show the values either in income statement or position statement. They only give additional information with respect to their Human Resources in their “Annual Report”.¹
Accounting is a man-made art and its principles and procedures have been evolved over a long period of time to aid business in reporting for management and public.\(^2\)

Most of the literature in the discipline of accounting is so far concentrated on the aspects of physical and financial resources, which are well accounted universally with accepted standards of preparation and presentation. Very recently the idea of accounting for human resources attracted the minds of many scholars.\(^3\)

The Indian corporate world is attracted by the latest concepts like Accounting for Human Resource value, Social Responsibility Accounting, Current Cost Accounting etc. The concept of Human Resource Accounting can be basically examined from two dimensions, viz., (1) the investments in human resource, and (2) the value of human resource. The expenditure undertaken for creating, increasing and updating the human resource quality is known as investment in human resources. Such investment yields fruitful results like higher productivity and higher income to the organisation.

The investments in human resource are spreaded at many stages like investments incurred by parents to impart education, the investment costs incurred by the State and employers etc. Therefore, it will be extremely difficult to arrive at an accurate estimate of the investments made in human resources, due to the fact that no common standard of any of the above kinds of expenditure is available. However the productivity of the investments may drastically differ from person to person, time to time, and organization to organisation.

**Evolution of the Concept of Human Resource Accounting**

The valuation of human resource, generally mean monetary valuation. As the history of evolution of the concept of Human Resource Accounting, find that most of the significant work has been done in past two or three decades. However, attempts were made by many thinkers in
this field years ago, but the real work regarding consideration of Human Resource as an asset had started after the evolution of behavioral approach, that is after 1960.

Different types of models have been suggested by many thinkers. Out of those some are Shultz (1960), William C. Pyle (1967), Brummet, (1969), Flamholtz (1971, 1972, 1973), Lev and Schwartz (1971), Gibbs and Robinson (1972), Morse (1973), Jaggi and Lau (1974), Kenneth Sinclare (1978) etc. In this regard, it is relevant to include the two Indian names of Prof. S.K. Chakraborty (1976) and Prof. M. Dasgupta (1978) for their contributions. However, Sir William Petty (1691) may be considered as the first who advocated to include the Human Resource in the estimation of national wealth. William Far (1853), Earnert Enegele (1883) may be considered for making further attempts in this subject.

The basic objective of Human Resource Accounting is the valuation of human assets. In fact it was the main barrier in the way of development of this concepts. Barrier in the sense that various thinkers have different approaches for valuation of Human Resources which are different not only in methodology but also in concepts. Till now, there is no generally accepted method for valuation of Human Resources. Some of the approaches for valuation are:
Different Approaches

Out of monetary and non-monetary measures, the former is found to be relevant and in accordance with the accounting purposes. Again if one tries to evaluate the Human Resource, he may consider two aspects of monetary valuation, those are cost and value.
**Historical Cost Method**

Initially the task of valuation of Human Resources was generally assigned to the accountants. They felt convenient and conventional using Historical Cost for valuation. Originally this method was given by Brummet, Flamholtz and Pyle. Historical cost consists of costs of recruitment, selection, hiring, training, development etc. Again historical cost may be categorized into two, acquisition costs and learning costs. Recruitment cost, selection cost, hiring cost and placement costs are the examples as former while training costs, development costs are examples of later.

The main advantage of this method is ease in computation. In this method Human Resources are treated as physical assets and the recording and disclosure of Human Assets is not very difficult. Any cost incurred against above stated heads will increase the value of Human Assets. Amortization of Human Assets is also done in similar manner.

Beside these advantages this method suffers from several limitations. It does not consider the aggregate value of potential services of employees. Due to amortization the value of Human Asset goes on decreasing but in actual practice the value should increase with time due to experience.

**Replacement Cost Method**

This approach has much similarity with Historical Cost Method. This method was suggested by Rensis Likert and Eric Flamholtz. In this method of valuation they consider the cost incurred in replacing the employee with its substitute having same efficiency and experience. Generally the replacement cost comprises of cost of acquiring, training, development etc.
Replacement Cost may be of two types: Positional Replacement Cost and Personal Replacement Cost. In the Positional Replacement Cost method the employee and the substitute are of the same talent and experience for a particular position. In the Personal Replacement Cost method the employee and substitute are of same talent and experience for all types of positions that the employer might occupy.

Since this approach is similar to Historical Cost Method, it also suffers from all those disadvantages through which the Historical Cost Method suffers.

**Standard Cost Method**

This approach was given by David Watson. In this method the standard costs of recruiting, hiring, training and development are accumulated every year for each grade of employees. However, this method is found to suitable for control and variance analysis purposes. It has also the disadvantages of amortization etc.

**Opportunity Cost Method**

This approach was suggested by Hakimions and Jones in (1967). In this method they have advocated “competing bidding price”. It means that opportunity cost of an employee or a group of employees in one department is calculated on the basis of the bids (offers) by other department for those employees. Thus the value of Human Resource is determined on the basis of the value of an individual employee in alternative use.

Significant disadvantages of this method are. It does not consider those employees as an asset who are not scarce. Also a person specialized in one type of work and having no knowledge of alternative work may get zero valuation. This problem may mislead the information collected on the basis of whole organisation.
Adjusted Present Value Method

This approach was first developed by Hermanson in his book “Accounting for Human Assets”, (1964). According to this method present value of future wages and salaries is to be estimated of employee/employees for five years by using discounted rate. This value is then multiplied by a factor named average efficiency ratio. The efficiency factor may be calculated by taking a ratio of weighted average of the return on investment of the firm to that of the industry.

i.e. efficiency factor = ROI of the firm / ROI of the industry.

For recording the disclosure, Hermanson suggested that the amount of future wages payable represents liabilities, while Human Resources an asset in balance sheet.

The main drawback of the approach is the subjectivity in the method of calculation of efficiency ratio. While calculating efficiency ratio Hermanson assured that the performance of the firm was entirely due to the efforts of employees and there is no any extraneous cause. But if there be any method for deleting the effect of these extraneous factors, this approach may reflect some what approximate value of Human Resource.

Measurement and Valuation Models:

Different models have been suggested by different authors for the measurement and valuation of human resources. The models suggested by Lev and Schwartz, Flamholtz, Jaggi and Lau, Chakravarthy, Dasgupta and Raul are noteworthy. They are discussed in detail hereunder.
**Lev and Schwartz’s Model (1971)**

This model is popularly known as “present value of future earnings”. According to this model the value of Human Resource is obtained with the help of the following formula:

\[ V_r = \sum_{t=R}^{T} I(t)/(t + R)^{t-R} \]

where

- \( V_r \) = the value of individual
- \( r \) = years old
- \( I(t) \) = the individual’s annual earning up to the retirement.
- \( t \) = retirement age
- \( R \) = discount rate.

Although this model was found to be most famous and is being used very frequently by different organisations, it suffers from some serious drawbacks.

The basic defect is that it assumes remuneration of an employee as being equal to his value. Also this model ignores the possibility of early leaving and effect of seniority, bargaining capacity, skill, experience etc. Actually in practice the salary of a person does not reveal the above attributes. That is why, it is not practicable to say that salary of an employee represents the employee’s real worth.

**Flamholtz Model (1971)**

This model is popularly known as “Reward Valuation Model” or “individual’s expected realizable value”. According to Flamholtz individual’s value in organisation can be defined as the present worth of the set of future services that he is expected to provide during the period he remains in the organisation. Flamholtz also implies that individual’s value is a function of two
things. First one is individual conditional values which is again a function of abilities and activation level, while second one is his likelihood of remaining in the organisation which is a function of job satisfaction, organisation commitment and motivation and similar variables. However, this model holds more practical idea about employees movement, it suffers through most of the draw backs of present value of future earnings model. Also it is difficult to get reliable data of employee’s contribution in each expected state of service.

Jaggi and Lau (1974) have made a modification in the above model and suggested to take group as the basis instead of individuals.

**Morse Model (1973)**

This model is popularly known as “net benefit model”, Morse has suggested that human asset value is determined by applying discounted rate to net benefit to the excess of gross value of services rendered over the value of future payment, direct as well as indirect, expected to provide to.

Pekin Organ in 1976 gave an approach, which was the extension of net benefit approach of Morse. He introduced a certainty factor, to be multiplied with net benefit of employees and then make to valuation of Human Resource.

**Dasgupta Model (1978)**

In this model, popularly known as “Total Cost Concept”, Dasgupta has taken some what different and broad canvas. According to him the total cost incurred by the individual up to that position in the organisation should be taken as the value of a person, which is further, adjusted by his intelligence level. The value thus calculated is revised from time to time on the basis of age, performance, experience and other capabilities.
**Chakraborty Model (1976)**

Chakraborty suggested to calculate the value of the Human Resources by dividing the employees into two categories, Managerial and Non-Managerial, and then multiplying the average tuner of group of employees with average salary of them. The value thus obtained is discounted at the expected average after tax return on capital employed over the average tuner period, so that value of Human Asset does not fluctuate frequently.

Chakraborty further suggested to consider the recruitment, selection, training and development, cost as deferred revenue expenditure. For disclosure he suggested that the balance sheet of the organisation consists of the different portions of above expenditure, not written off and Human Assets under the head investment consideration of Human Asset under fixed asset may cause problem of depreciation, capital gain and losses etc.

**Raul’s Model**

Raul’s model is the most scientific and recent and in a vary brief discussion on all important aspects may not be touched.

---

**Human Resource Accounting: Concept and background**
Accounting of human resource is nothing but the valuation of Human Asset in monetary terms and the process of their recording and disclosure.⁴

According to American Accounting Association (1973) “Human resource accounting is the process of identifying and measuring data about Human Resources and communicating this information to interested parties”.⁵

Eric Flamholtz defines human resource accounting as “accounting for people as an organisational resource. It involves measuring the costs incurred by business firms and other organisations to recruit, select, hire, train and develop human assets. It also involves measuring the economic value of people to the organisations”.⁶

Similar is the definition given by C.S. Venkata Ratnam and B.K. Srivastava which is “Human Resource Accounting may be referred to as a process of identifying, measuring and communicating information about Human Resources in financial terms to aid HRP and control”.⁷

Woodsuff defines “Human resource accounting is an attempt to identify and report investments made in Human Resources of an organisation that are presently not accounted for in conventional system that tells the management what changes over time are occurring to the Human Resources of the business”.⁸

Objections against Human Resource Accounting:

Inspite of having atmost importance, no proper attention was given to Human Resource Accounting. The main cause behind it was the controversy related to its consideration as an asset. There was a stream of thinkers who always appose to consider Human Resource as Asset. S.N. Maheshwary in his book, “Management Accounting and Financial Control” has
accumulated some of those arguments which are generally kept forward in the favour of objections against considering Human Resource as an asset, these objections are.

a. Human Resource cannot command any value because they cannot be owned.

b. The different tax law do not recognize Human Resource as asset.

c. There is not any generally accepted model for valuation of Human Resource.

d. Also there is not any codified mode of presentation.

e. Again valuation of Human Resource consists of many subjective steps, thus should not be considered as a scientific approach.

In spite of these objections there are a number of authors, who prefer to consider Human Resources as assets. Also some thinkers say that assets should be recognized because they are used for production purposes and thus Human Resources may claim to be assets. Again, as far as importance of Human Asset and needs of organisations are concerned most of the financial management experts felt that recording and disclosure of Human Asset is a must in financial statements.9

**Statement of the problem**

Human Resource is one of the essential resources to any organization irrespective of its size and nature. It is also considered as the most significant and valuable asset which a company possesses and an which its success and more so profitability depends. Human Resource Accounting is one of the latest accounting systems that is evolved to examine the investments in human resources and the value of the human resource itself in the day-to-day functioning of a modern corporate giants. It is a man made art and its principles and procedures have been evolved over a long period of time to aid business in reporting for management and public at
large. Traditionally, the only entries are used to show in the income statement such as profit and loss account about Human Resources in respect of the wages, salaries, fees and a statutory statement of the report of the Board of Directors. But at present various methods have been developed to calculate the costs or values of such resources. Some companies show the values of human resources in their income statements while others do not show. However, in the recent past, the idea of accounting for human resources has been widely recognized and is being practiced both by public and private sector undertakings across the world. Against this background, the present study is a comparative attempt to analyse the Human Resource Accounting Practices in select Undertakings in India.

Review of Literature

Ranga Rao (1979)\textsuperscript{10} in his paper “Human Asset Accounting – A point of view”. Two important approaches to Human Resource Accounting were mentioned here. One is the “Investment Approach” and the other is “Organisational Climate Approach”. The investment approach accounts for all the money directly invested in each employee as an asset which gets depreciated during the expected service of the employee. The organisational climate approach uses survey method from period to period to determine the changes in the organisational climate. Some selected items in the profit and Loss Accounts published by a large engineering company for a decade taken(Table 1). The data in Table 1 is graphed as chart 1. For control purposes, a standard measure of profit is usually fixed committees like Accounting Standards Steering Committee U.K. should probably take the initiative.

Srivastava (1979)\textsuperscript{11} examined the need for Human Resource Accounting. The accounting information regarding Human Resources can provide information of the quantity employed in a
firm, how effectively it is being used, and changes in its value over time. In our country, the reflection of Human Resource Accounting can be seen in some public sector companies in our country. The need for study of Human Resource Accounting has emerged due to the following reasons (1) Scarce means of Human Resources. (2) Low degree of Inter and Intra-Organisational mobility of Human Resources. (3) Increasing number of service rendering sectors. He states some valuation Methods of Human Resources. There are lots of problems in the study of Human Resource Accounting. If Human Resource Accounting is adapted, it would provide an information systems to the top management.

Sharma (1979)\textsuperscript{12} studied need for developing Human Resource Accounting. He states the accounting procedures of most companies reflect the level of inventories the investment in the plant and equipment and the condition of plant and equipment. But much less attention is given to what might be called “Intervening Factors” which significantly influence the end results. The executive does not receive the information which may indicate the degree to which human capabilities are being acquired, developed, maintained and utilized. He states some requisites for the development of Human Resource Accounting. It may be concluded that far from being an isolated development in accounting. Human Resource Accounting is merely one aspect of wide-ranging developments in the social sciences. The benefits may come out as the non-financial rewards accruing to employee in the form of job satisfaction and to the organisation in the added element of organisational effectiveness as attributed to this factor.

Makarand Kulkarni (1979)\textsuperscript{13} examined Micro Analysis, Methods and problems in Human Resource Accounting. The purpose of this article is to examine the resource of labour in a nutshell and the methods we use in planning the manpower. Various agencies were involved in this research task e.g. Institute of Applied Manpower Research, International Institute of
A number of organisations in the U.S.A and Japan have already set-up accounting systems for Human Resource Cost. With the increased population-growth in India communication gap in certain sectors, in plan for target priority fisatation, to generate monetary and non-monetary information about people to have the clear-cut picture of relation between man-at-work and social cost, manpower is the need of time.

Modi (1979) studied Accounting for Human Resources. Alfred Marshall states in his “Principles of Economics” that “The Most valuable of all capital is that invested in Human beings”. There can be no two opinions about the significance of the concept of treating Human as an Asset. There are some problems in treating Human as an Asset. In author thinks that Human organisation is a better source of capital than Non-Human Fixtures. A number of methods for measuring the value of Human Resource have been developed but the perfect method is yet to be seen. He mentions about the subject that it will take quite some time when we can start capitalizing Human Organisation as an Asset.

Tiwary and Malkani (1979) studied Human Resource Accounting and Economic Development in India. He states to achieve some objectives, the employers must need to provide some facilities. The Government of India has classified manpower into eight categories (1) Professional Technical (2) Administrative, Executive (3) Farmers, Fishermen, Hunters etc. (4) Clericals (5) Salesman (6) Service worker (7) Production and Transport workers (8) Workers not classified under any occupation, Manpower planning has drawn the attention of the Government of India to this since 1947. Researchers in India have ignored so far the study of Human Resource Accounting. Human Resource Accounting should be developed at the Central as well as at the State level. There has to be a periodic review of the changing demands of man
power in the economy. There is need for studies to be undertaken both region wise and industry wise.

Sharma (1979)\textsuperscript{16} studied a New Approach to Human Resources Accounting. In the changed perspective, the concept of Human Resources Accounting cannot be considered the brain child of the Intellectuals and the Accountants. Precise estimates of the value of these scarce Human Resources is essential for their systematic deployment. There are certain operational difficulties in adapting a comprehensive and uniform system of Accounting for Human Resources. There is an urgent need for adapting a precise and uniform basis for the valuation and Accounting of the productive Human Resources now than was the case over before. He suggests: (1) The Human Resources should be valued on the basis of their ‘net contribution’ to the profits of the firm. (2) Besides Accounting a precise system for the audit of the Human Resources should be adapted. The auditors should vouch for the safety, correct valuation and proper Accounting of these Resources.

Sahu, Rout, and Choudhury (1982)\textsuperscript{17} in their paper “Human Resources Accounting-A conceptual Analysis” made an attempt to Examine the Accounting problems and valuations of Human Resources Accounting. Very often, most personal costs are treated as periodic expenses during which they are incurred. The pioneer work in India on Human Resource Accounting has been made by Chakrabarty. Whether the lease concept or investment concept of Human Resource Accounting will suit the Indian conditions is still a debate. As an alternative, Human Resource Accounting valuation measurements can be annexed to the Financial Statements.

Prabhakar Rao (1983)\textsuperscript{18} developed accounting systems for Human Resources in Indian industry and illustrated its application in a transport equipment manufacturing concern. He used secondary data, collected from the published annual reports of the selected companies. He has
taken four units namely BHEL, SAIL, MMTC, SPIC. A co-ordinated effort by the International Accounting Standards Committee and the other professional bodies in the development and preparation of guidelines, format and procedures of Human Resource Accounting will be of immense service to the world.

Rajkumar Gupta (1988) studied Human Resource Accounting (Managerial Implications). He used the survey method through questionnaires and follow-up interviews. Questionnaires were addressed to (a) Senior Executives in 33 private sector and 21 public sector organisations (b) 100 professional accountants and auditors (c) 60 Institutional investors and financiers and 60 individual investors in corporate securities. Responses were received from 49 executives in private sector companies and 51 in public sector companies. Follow-up interviews were held in the metropolitan cities of Delhi, Bomboy, Madras and Calcutta. The survey revealed that the internal as well as external users of Human Resource data consider information regarding Human Assets and changes thereof as valuable aids to management.

Shankaraiah, Sudarshan and Subrahamanya Sarma (1993) studied “Human Resource Accounting in public sector : An Appraisal”. They took for sample two public sector undertakings BHEL and MMTC. These two public sector undertakings have adopted Lev-Schwartz present value model. They have developed a more pragmatic approach for measuring the value of Human Assets in the name of “Differential Weighted Average Replacement Cost (DWARC)”.

Jagdish Prakash (1993) examined Human Resource Accounting Practices in Public Enterprises with special reference to BHEL. Only few enterprises have been valuing their Human Resources and Reporting them in their annual reports. BHEL, A public sector undertaking is, the pioneer in this regard. The BHEL has adopted Lev and Schwartz model in
the valuation of Human Resources. Under the Lev and Schwartz model the economic concept of capital has been used to valuate the Human Resources. The BHEL conducts various specific\general training programmes for it’s employees at all levels. BHEL employs six categories namely Executives, Supervisors, Supporting Technical Staff, Artisan, clerical, Unskilled, Semi-skilled Workers and has 10-15 grades in each category. More Public Sector Enterprises should be encouraged by the government to come out with this information in their annual reports.

Gupta (1993)\(^{22}\) conducted a survey on probable problem areas confronting Human Resource Accounting. He used the Annual Reports of 100 top public sector and 100 top private sector undertakings for the period 1980-81 to 1986-87. Apart from this, a small questionnaire was sent to 50 top public sector and 50 top private sector undertakings. The output of Human Resource Accounting information system can be used to take a variety of managerial decisions. In the area of Human Resource Management. But the number of organisations which have adopted Human Resource Accounting in India and abroad is quite low.

Subhash Chander (1993)\(^{23}\) studied Human Resource Accounting Practices in India. His paper aims at critically analyzing the practices being followed by the corporate sector in India for reporting Human Resource Accounting. Some US Companies reported Human Resource Accounting in their annual reports. The R.G. Barry Corporation, a leisure footwear manufacturer based in Columbus, Ohio, is the pioneer in this regard. In his paper, Table’A’ shows a comparative view of the total value of Human Resource and average value of an individual in different organisations. Human Resource Accounting has a great potential in the modern age of professionalisation particularly in the case of labour intensive service industries,
where Human Resources play a major role. ICAI should recommend proper accounting treatment of the expenditure incurred building Human Resources.

Agarwal (1994) studied “Disclosure of Human Resource Information by Central Public Enterprises (a case study)”. He selected a sample of seven public sector undertakings which were awarded for best-presented accounts (by ICAI) for a period of Five years (1986-87 to 1990-91). It also was await construction of a comprehensive list of items with five main groups. His major findings are about the value assigned to Human Resource being not the part of the financial statements. Valuation of Human Resources cannot be compared due to such different rates for which inter-firm comparison of Human Resources value cannot be done. He recommended that an attempt should be made to scrutinize the information and models which can be reported by Indian companies in present time. Initiative should be taken by professional bodies in this regard.

Malayendu Saha (1997) studied Human Resource Accounting with special reference to charitable institutions. His study covered Rahara North 24-parganas, West Bengal, India. He selected nonprofit organisations (NPOs). The Rama Krishna Mission Hospital and Charitable Unit, both under the supervision of Rama Krishna Boys’ Home. He used the financial reports of the organisations and through administering questionnaire, various bits of information are collected for Human Resource Accounting. The physical and monetary assets constitute the Human Resource Assets of the organisation. Analysis based on data of a sample year has some importance. Inter-unit comparison is of much use to have an idea about the relative performance of the organisations. Non Profit Organisation does not mean a welfare organisation alone.
Sonara (1999)\textsuperscript{26} analysed Human Resource Reporting – Practice and Problems in India. The author argues for statutory evaluation and reporting of Human Resource. Human Resource Reporting in BHEL was taken as a sample. The BHEL has been valuing and reporting Human Resources for the past 20 years. The company adopts the Lev and Schwartz model for the valuation of Human Resources. Among the reporting companies, no uniform model is followed for valuation of Human Assets of their companies. A proper reporting of Human Resource in the financial statements of a company will go a longway in getting a fair and complete view of the Accounting Information.


Franko Milost (1999)\textsuperscript{28} studied the attitude towards Human Resource Accounting in solvent companies. “An attitude survey on Human Resource Accounting”. He used the questionnaires. The first one was destined to the Accountant. The second questionnaire was destined to the Director. He believes that the reserved attitude expressed by the respondents is largely due to their poor knowledge of this nation. He intends to repeat the research in the next few years. He is convinced that by then the idea of Human Resource Accounting will have been better accepted by the respondents.
Parvinder Arora (1994) studied “Recent developments in accounting: A study of perceptions of users of accounting information”. He classified the users of accounting information in five categories. He selected a random sample of 25 subjects was taken in each category. His study covered Chandigarh. He used a pretested questionnaire containing 13 questions. His findings the level of awareness of these concepts among managers and investors happens to be the minimum.

Bansal (New Delhi) In his paper on “Accounting” for Investment in Man Bansal tried to refer the macro approach in the form that Managerial Economists tend to analyse the Human Resources in the accounting terms and they equate modernization and development with economic growth. He stressed that it is a fallacy to argue that education and other means of human development should be considered as ‘human rights’. He gave a galaxy of questions in the process of generation and utilization of manpower for measurement and valuation purposes.

Madhu Kapoor and Bakshi (Delhi) The monetary models and non-monetary models were listed by Miss Madhu Kapoor. Miss Bakshi referred to the behavioural implications, which can be studied by publishing the experiments through collection of information by interviewing the managerial and lower cadre of employees, in outliving the problems she posed a question as to how the financial statements should be published so that the relevant information of Human Resource Accounting can be displayed.

Gopal Ji (Delhi) confining his study on the personnel aspect, advocated that the Human Resources should be measured in the organisational hierarchy. He suggested a good deal of practical framework in the form of proforma.

Jena (Bhubaneswar) in his article on ‘Some Aspects of Human Resource Accounting’ stressed that there is no justification in treating Human Resources as a cost rather than as an
asset given the logical arguments. Referring to the empirical studies he advocated the need for and impact of Human Resources on managerial decision making. He concluded that techniques of Human Resources Accounting are in the process of experimentation and refinement.

Mehrotra (Agra) and Kulshresta (Moradabad)\textsuperscript{34} Referring to the formula of present value method for the measurement of Human Resources, he expressed the doubts of probabilities for the loss of efficiency and for outgoing employees the liability is to be calculated. They advocated that the Human Resources may be shown as Goodwill of the firm under the groupings of 1). Internal Human Resources, 2). External Human Resources (customers) 3). Other factors, i.g. Trade Marks, patents, license. He also referred that the disclosure in terms of monetary value may not be sufficient, because the study on the area is itself in the pregnancy stage.

It is evident from the literature reviewed above that research studies on Human Resource Accounting Practices especially in the Indian Organisations are very scanty and some sporadic attempts are made. Besides, no specific attempt was made companing the Human Resource Accounting Practices between public and Private sector undertakings in India. The current study is an humble attempt in this direction.

\textbf{Need for the present study}

It is evident from the research studies reviewed above that some studies are made on Human Resource Accounting Practices exclusively in a single organization. Besides, some stray research articals and papers are found on Human Resource Accounting practices. But surprisingly no study is carried out comparing the Human Resource Accounting Practices being followed by both public and private sector undertakings. Therefore the present study is a maidin research attempt to fill this gap.
Objectives of the Study

The main objective of the present research is to study the Human Resource Accounting Practices being followed by the public and private sector undertakings. However, the following are the specific objectives.

(1). To examine and discuss the need for importance of Human Resource Accounting Practices in the changing scenario.

(2). To analyse the Human Resource Accounting Practices followed by the select public sector undertakings.

(3). To highlight and discuss the Human Resource Accounting Practices being followed by the private sector undertakings.

(4). To make a comparative study on the Human Resource Accounting Practices being followed by both public and private sector undertakings in India.

(5). To offer suggestions for effective implementation of Human Resource Accounting Practices both in public and private sector undertakings.

Hypotheses

For the purpose of the study the following hypotheses have been formulated. These hypotheses give direction to the study.

(I) Many companies do not follow Human Resource Accounting.

(II) Even in the other companies, which follow Human Resource Accounting do not specify the objectives, methods and approaches.

(III) Many companies comply only with statutory requirements.

Sampling techniques
For the purpose of the study, purposive sampling technique has been used in selecting both public and private sector undertakings operating in India.

**Scope of the Study**

The scope of the study has been confined to selected six public sector undertakings and six private sector undertakings which are following human resource accounting practices. Besides, the period of study has been restricted to the annual reports of the selected undertakings for two years i.e. from 2008-2010.

**Method of data Collection**

Data required for the research has been collected from the secondary sources.

The following units are selected for the purpose of this study.

I. Public Sector Undertakings

1. Engineers India Limited.(EIL)
2. Hindustan Petroleum Corporation Limited.(HPCL)
3. Minerals and Metals Trading Corporation of India Limited.(MMTC)
4. National Thermal Power Corporation of India Limited.(NTPC)
5. Oil and Natural Gas Corporation Limited (ONGC)
6. Steel Authority of India Limited.(SAIL)

II. Private Sector Undertakings

1. Associated Cement Companies Limited (ACC)
2. Chennai Petroleum Corporation Limited (CPCL)
3. Infosys Technologies Limited (ITL)
4. Infotech
5. Reliance Industries Limited (RIL)
6. Tata Motors Limited (TATA)

The selection of the above organisations is influenced by their favourable response and encouragement for the study and the representative nature of the selected enterprises in their respective industries as well as the Indian economy. All the above units observed basically Lev and Schwartz model (1971) with a few additional features.

**Statistical tools used for analysis of data**

Statistical tools like average, percentage have been used to analyse and interpret the data supplemented by graphical and tabular representation.

**Limitations of the Study**

The concept of Human Resource valuation is only of recent origin. No standard principles, procedures, methods are yet evolved. As such, only a few organisations in India attempted implementing Human Resource valuation and publishing the information as supplementary to their annual reports. The practices and methods followed are divergent. Due to the recent origin of the subject, the literature available is mostly at the concept level. However, every effort is paid to make the study useful for further research.

**Chapter-Scheme**
An outline of the Chapter Scheme of present study is as follows.

**CHAPTER-I** : Introduction and Methodology.

**CHAPTER-II** : Profile of the Select Public Sector and Private Sector
Undertakings


**CHAPTER-VI** : Summary of findings and Suggestions.
REFERENCES


