

HUMAN ASSET ACCOUNTING:

“ADOPTION AND ABANDONMENT IN PUBLIC SECTOR IN INDIA WITH SPECIFIC REFERENCE TO ONGC”

Sadhwani Narendra Kumar, Khalsa Amarjeet Singh (Dr.)

Assistant Professor, Institute of Professional Education and Research, Bhopal,

Group Director, Institute of Professional Education and Research, Bhopal.

ABSTRACT

Human assets are the real resource of a company. HRA is a new unique branch of accounting for identifying, measuring, classifying, summarizing and reporting the data about human resources. The basic objective underlying human resource accounting into facilitation the effective and efficient management. An attempt is made to analyze the HRA practices in selected Indian companies. Public sector spearheaded in valuing human resource and publishing the same in their annual reports. However, in contrast to other resources e.g. money, material and machines which are treated as an asset given a place on the asset side of the balance sheet, the value of human asset is not given such treatment and hence does not occupy any place on the balance sheet, instead it is published as an additional information. Present study is carried on to portray the array of adoption and abandonment in public sector in India in general and ONGC in particular.

Keywords: Money, Machines, Materials and Men, Human Resource, Human Asset Accounting, Human Asset Valuation.

INTRODUCTION

In the knowledge-based society Human is the buzzword, in common parlance human asset is the real asset of an enterprise. The other physical assets will not be effective without Human Resource. It is the Human knowledge and their sincere efforts that lead the enterprise towards success.

Human resource accounting is the process of identifying and reporting investments made in the human resources of an organization that are presently unaccounted for in the conventional accounting practices. It is an augmentation of standard accounting principles. Measuring the value of human resources can assist organizations in accurately logging their assets.

It is only through the integrated efforts of human resource that monetary and the material resources can be best utilized to achieve organizational goals. Without human resource all other resources remain inert. Human resources therefore, are the most important assets of an organization. Strangely the other resources are recognized as assets and find a place on the asset on the side of the balance sheet of an organization, but the men do not.

The Costs of Human Resource: All expenses relating to acquiring, training and developing employees are charged to Profit & Loss Account in a particular accounting period. Theory of Rensis Likert says, that the acquisition expenses on human resources are fixed in nature and do not realize an immediate profit. The profits ensue to the organization in due course till the employee remains associated with the company. Hence the acquisition costs should be capitalized and amortized in due course. This way the balance sheet will depict a true picture.

Human Resource Accounting measures both the “Cost” and the “Value” of the people to an organization.

The Concept of Human Resource Accounting:

Human Resource Accounting (HRA) is similar in principle to the preparation of an accounting statement. As financial accounting reflects the cost of assets i.e. buildings, land and machinery etc., HRA tries to place value on organizational human resource by formulating a human resource balance sheet. Here the human resources are presented as assets, not as expenses. As such HRA shows the investment which an organization makes in its employees and also how the value of such employees changes over time.

According to American Association of Accountants (AAA), HRA is “A process of identifying and measuring data about human resources and communicating this information to interested parties”.

The concept of HRA was first disseminated by BHEL (Bharat Heavy Electrical Ltd), a prominent name public sector, in the year 1972-73. Thereafter in the array were (SAIL 1983- 84), (ONGC 1981-82), (MMTC 1982-83), (NTPC 1984-85 (HPCL 1981-82), (CCI), (KRL-Kochi Refineries ltd), (EIL-Engineers India ltd), (OIL), (HSL-Hindustan Shipyard ltd), (HZL- Hindustan Zinc Limited), (MRL).

STATEMENT OF PROBLEM

Ideally, few studies have been conducted in connection with adoption of valuation practices of Human Resource in public enterprises in India. The present study is an attempt to analyze the tendency in adopting and abandoning practice of valuation of Human Resource in ONGC.

Here the pain point for the stakeholders is absence of any statutory stipulation in the Indian Companies Act 1956 and 2013. Accounting Standards set by ICAI (The Institute of Chartered Accountants of India) are also silent on the aspect of Human Asset Valuation and Reporting thereof as an Asset in the Balance Sheet of a company.

REVIEW OF LITERATURE:

Dr. M. M. Goyal, Geetu Nijhawan (2014); “Human Resource Accounting: A study of Prevailing Practices in India”. In this paper the authors highlighted the significance of valuing human resources for depicting the true and fair view of the organization’s financial statements.

Dasari Pandurangarao, Dr. S.Chand Basha, Devarapalli Rajasekhar (2013); Carried out a study “A study on human resource accounting methods and practices in India”. The authors highlighted the significance of Human resource valuation and methods to measures human assets value. The article described views of the authors and mentioned out the organizations those have tried to implement human resource accounting. The article depicted the advantages of human resource valuation.

Chaturvedi Ankita (2013); Published a research paper titled as “Human Resource Accounting and Its Effect on Organizational Growth” (A Case Study of Steel Authority of India Ltd.). This paper investigates the impact of investment in human resource training and development on employees' effectiveness in SAIL. A quantitative measure published by the Institute of Intellectual Capital Research and approved by the Saratoga Institute database was used to assess human resource effectiveness in SAIL.

Kashive Neerja. (August 2018). “Importance of Human Resource Accounting Practices and Implications of Measuring Value of Human Capital: Case study of Successful PSUs in India”. XIMB Journal of Case Research, Volume IV Issue 02. Importance of Human Resource Accounting Practices and Implications of Measuring Value of Human Capital: Case study of Successful PSUs in India.

Dr. Samir Mazidbhai Vohra (2015); In his research paper “Human Resource Accounting Disclosure Practices in selected Indian Public Enterprises – An Empirical Analysis”, attempted to highlight the disclosure pattern of Human Resource Accounting Variables by selected public enterprises in India.

Dr. F.B.Singh and Brajesh Kumar (2016); “Human Resource Accounting Practices in ONGC – An Appraisal”, appraised the human resources in financial terms in ONGC and analyzed the Productivity of employees. Human resource is the most valuable asset held by an organization today. It represents the single greatest potential asset and the single greatest liability that an organization acquires as it goes about its business. Still, the Human Resource is one of the most neglected aspects of Financial Statement disclosures of corporate entities in India. The major findings of this study are that ONGC spends more amounts on social security rather than salary and wages. Average of annual growth rate shows the continuous growth in HR variables in ONGC, there is high degree positive correlation between selective HR variables.

OBJECTIVE OF STUDY

- i. To study the significance of HRA to the organizations.
- ii. To study the array of adopting and abandoning Human Asset Valuation and reporting by the Oil and Natural Gas Corporation.

RESEARCH METHODOLOGY

The study is exhaustive / elaborative and descriptive in nature. The content of the paper is founded on the investigation, analysis of the secondary data secondary data published in annual reports of the companies and other pertinent publications and conclusion taken therefrom.

SIGNIFICANCE OF HRA

Human Resource Accounting as a peculiar branch of accounting, is useful tool for companies' management in making organizational policies and to take managerial decisions.

While, this research work has been pursued with a scholarly drive, it would help Business Executives, Accountants, Government planners, Research Scholars too. Adoption of Human Resource Accounting (HRA) will improve the asset side of the balance sheet of the organization.

Limitations of the study:

1. The study is confined to ONGC, HPCL, CCI, KRL, OIL in general and ONGC in particular, which, in the recent past were found to be valuing human resource and practicing disclosure of information relating to Human Resource Accounting in their annual report.
2. Although these PSUs published information about human resource valuation in the annual reports, but as an additional information / or in annexures.
3. The study is based on secondary data taken from published annual reports of the companies, websites and the other literature.

Period of study:

The study is meant to observe the trend in the HRA practices being adopted and discarded by the selected five public sector enterprises in India in an array, hence the starting and end period are varied.

Current status of HRA practices selected PSUs in India:

In this paper an attempt has been made to research the trend and the current status of the HRA Practices being followed by the above five organizations in the recent past, i.e. ONGC, HPCL, CCI, OIL, KRL.

SOME VARIABLES IDENTIFIED BY THE COMPANIES:

To ensure the practicality of HRA and to find responses to key questions relating to valuation, reporting and disclosure of Human Resources, certain variables have been identified, analyzed and disclosed by the organizations adopting practice of HRA. Some of these variable are are as under:

1. "Valuation Model Used",
2. "Employees (no.)",
3. "Age Wise Distribution of Employees",
4. "Cataloguing of employees",
5. "Discount Rate Applied",
6. "Aggregated Annual Increment Rate"
7. "Group Wise HRV",
8. "Total HRV",
9. "Total income"
10. "Net profit"
11. "Ratios" -

- i. “Value of Human Resources per Employee”,
- ii. “HRV to Total Resources”,
- iii. “Total Income / Human Resources Value (Ratio)”,
- iv. “Return on Human Resources Value (%)”,

BRIEF DESCRIPTION OF MODELS USED BY SELECTED PUBLIC SECTOR UNITS:

1. Lev and Schwartz’s present value of future earnings model:

Baruch Lev and Aba Schwartz used the economic concept of human capital propagated by Irving Fisher and contend that “capital is defined as a source of income stream and its worth is the present value of future income discounted by a rate specific to the owner of the source.”

According to this model, the value of human resources is calculated as the present value of estimated future earnings discounted by the rate of return on investment (cost of capital).

$$V_y = \frac{I(t)}{(1+r)^{t-y}}$$

Where,

V = the value of an individual ‘y’ years old.

I (t) = the individual’s annual earnings up to retirement.

t = retirement age.

r = a discount rate specific to the cost of capital to the company.

This is the most commonly used method for HRA used by most companies in India.

2. Flamholtz Model (Reward Valuation Method) – 1971. The Eric Flamholtz Model

This is an improvement on ‘**Present Value on Future Earnings Model**’, since it considers the possibility or probability of an employee’s movement from one role to another in his career and also of his leaving the firm earlier, that is his death or premature retirement.

The model suggests a five-step approach for assessing the value of an individual to the organization:

- ✓ Forecasting the period will remain in the organization, i.e., his expected service life;
- ✓ Identifying the services states, i.e., the roles that they might occupy including, of course, the time at which he will leave the organization;
- ✓ Estimating the value derived by the organization when a person occupies a particular position for a specified time period;
- ✓ Estimating of the probability of occupying each possible mutually exclusive state at specified future times; and
- ✓ Discounting the value at a predetermined rate to get the present value of human resources.

3. Jaggi & Lau Model –

The model suggested by Jaggi and Lau is based on valuation of groups rather than individuals. A group implies homogeneous employees who may or may not belong to the same department or division. It might be difficult to predict an individual’s expected service tenure in the organization or at a particular level or position, but on a group basis it is easier to ascertain the percentage of people in a particular group likely either to leave the firm during each of the forthcoming period, or to be promoted to higher levels.

The value of the services an organization's current employee render in a future period is computed by multiplying the estimated number of current employees that will be in each service state in that period, by the value of the service an employee in each state (i.e. rank) renders to the organization. The equation for the computation of value of human resources of an organization using Jaggi & Lau models is given below.

$$TV = (N) r^n (T)^n (V)$$

Where:

TV = Column vector indicating the current value of all current employees in each rank.

(N) = Column Vector indicating the number of employees currently in each rank.

n = time period

r = Discount rate

(T) = Rank transitional matrix indicating the probability that an employee will be in each rank within the organization or terminated in the next period given his current rank.

(V) = Column vector indicating the economic value of an employee of rank 1 during each period.

The model given by Jaggi & Lau tries to simplify the calculations of the value of human resources by taking groups of employees as valuation base. However, this method is also difficult to apply in practice because of difficulty in obtaining reliable data.

HUMAN RESOURCE ACCOUNTING IN OIL AND NATURAL GAS COMMISSION (ONGC)

ONGC had been publishing the information relating to Human resource Valuation and the models applied therefor in its annual reports are as under:

- Uniform Age Wise Distribution of Employees – ≤ 31, 31 – 40, 41 – 50, 51 – 60.
- Valuation based on “Lev & Schwartz” model. (Table-2)
- Aggregate future earnings (increment @ 4% p.a. / normal incremental profile) during remaining employment period of employees, discounted between @7% to 8.5% p.a., provides present valuation.

ONGC - Value of Human Resource calculated using “Lev & Schwartz” model:

Table 1

Financial year	HR value Rs. (Million)	No. of employees	Value of HR per employee (Million) Rs.	Discount Rate for Present Valuation of Aggregate Future Earnings
2003-04	247214.5	38033	6.5	NA
2004-05	240455.5	36185	6.6	8%
2005-06	274303.8	34,722	7.9	8%
2006-07	285120.4	33,810	8.4	8%
2007-08	290528.9	32996	8.8	8%
2008-09	385169.2	33035	11.7	7%
2009-10	431354	32826	13.1	7%
2010-11	489,555	33,273	14.7	8%
2011-12	500974	32,909	15.2	8.5%
2012-13	--	Human Resource Evaluation Practices since discontinued wef. F.Y 2012-13 onwards.		
2013-14	--			
2014-15	--			
2015-16	--			

2016-17	--	
2017-18	--	
2018-19	--	

Source: Annual reports of company from 2003-04 to 2018-19

Table 1 – Depicts that future earnings discounted between @7% to 8.5% p.a., provides present valuation.

Variables Considered by Selected Indian Public Enterprises Practicing HRA:

Table 2

Name of Public Enterprise	Score	Point Out of 18	Status of Human Asset
1. ONGC	9		
2. HPCL	10		
3. CCI	7		
4. KRL	2		
5. OIL	4		

Source: Annual Reports of Public Enterprises up to March 2009.

Table – 2. Annual Reports of five selected Indian Public Sector Enterprises portray that they follow no common practice in selecting variables for valuing human assets.

Problems of HRA in India

The above analysis makes it clear that although using common methods or model for valuation of human resources, Indian public enterprises do not follow a uniform policy regarding reporting of HRA. The information about human resource value and accounting is largely unregulated.

The expectations from HRA are great, varied and diverse. Simultaneously it is not free from problems and limitations. Some of the problems faced by HRA are as follows:

- i. **Companies Act 1956:** There is no statutory requirement under the act for inclusion of Value of Human Assets in the financial statements. As such, there was no compulsion on the companies in this regard. Resultantly, in spite of its existence, the HRA concept remained in infancy stage since its inception.
- ii. **No standardized reporting practice:** In the absence of standardized reporting practices, the human resource value and disclosing patterns are not comparable among public enterprises in India.
 - a. **Variables Disclosed:** There is no uniform practice of selecting variables amongst organizations. These are selected by the different organizations as per their own preferred rationale. Hence there exists the differences in number of willingly disclosed variable.

This makes it difficult to interpret the information in proper context as the human resource valuation and disclosure practices made it difficult for the users to retrieve the required information for decision making. Out of 18 variables, following pattern is observed to be adopted:

- HPCL reported : 10 variables,
 - ONGC reported : 9 variables,
 - CCI reported : 7 variables,
 - OIL reported : 4 variables, and
 - KRL reported : 2 variables.
 - iii. **Models Used for HR Valuation:** Till date, a number of models for valuation of human resources have been developed and suggested but still one does not find a generally accepted approach, as each model / approach for valuation has its own limitations.

Findings of the study are tabulated and presented as under:*Table 3***Findings:**

1. **Valuation Models used:** It is deduced from the study that in the absence of a perfect, clearly described and unanimously accepted model for evaluation of the economic worth of human assets of a company, each company arbitrarily adopted different valuation methods and models with modifications suitable for their organization.

S NO	VARIABLE / METHOD	ONGC	HPCL	CCI	OIL	KRL
1.	Valuation Model Used	Lev & Schwartz	Lev & Schwartz	Eric Flamholtz and Jaggi & Lau model	Lev & Schwartz, refined with Flomholtz and Jaggi & Lau suitable to OIL	Lev and Schwartz
2.	Discount Rate Applied	@7% to 8.5% p.a.	7.76% to 11.00%	Not disclosed	Not disclosed	5%
3.	Aggregated Annual Increment Rate	4%	As per Corporate policies	Not mentioned in annual report	As per Increments policy of the company	As per company policy
4.	Age Wise Distribution of Employees	≤ 31 31-40 41-50 51-60.	18-30 31-40 41-50 Above 50.	<30 31-35 36-40 41-45 46-50 51-55 58-60 Varying intermittently	<30 30-35 36-41 42-47 48-53 54-60	20-30 30-40 40-50 Over 50
5.	Cataloguing of Employees	Executive. Non-Executive. (Technical & Non-Technical both)	Management Non-Management	Executives. Supervisors Non-Supervisors	Technical. Administrative (Executive and Workmen both)	Executives. Other Staff
6	Status of HRV and Report.	Abandoned from 2013.	Still continuing.	Abandoned from 2017.	Abandoned from 2006.	Abandoned from 2003.

- a. The study of the HRA system of the five Indian Public Sector Units reveals that four PSUs i.e. ONGC, HPCL, OIL, and KRL- applied the Lev & Schwartz model for valuation of their human resources. This model considers “The value of human capital is the present value of the future earnings of people till retirement”.

- b. OIL used Lev & Schwartz and incorporating therein refinements as suggested by Eric Flomholtz as also by Jaggi and Lau.
 - c. Whereas Cement Corporation of India considered Eric Flamholtz and Jaggi & Lau model in valuing human resources of their organization.
2. There exists no stipulation and / or uniformity with regard to the following practices in vogue:
- a. Cataloguing of Employees.
 - b. Age wise distribution of Employees.
 - c. Aggregated Annual Increment Rate, and
 - d. Calculating Discount Rate to be applied for Present Valuation of Aggregate Future Earnings,

Hence, adopted by each organization in a different manner with its rationale, what so ever.

Conclusion:

1. Although several Indian companies have recognized the importance of evaluating human capital and disclosing its value in their annual results. Yet in the absence of any statutory provision under Indian Company's Act 1956 / Accounting Standards issued by ICAI, some organizations, though valued their Human Assets, have not given place on the Asset Side of the final Balance Sheet.
2. However HRA information is disclosed for the interested stakeholders on the Annexures to the Annual report or additional information in the Annual Reports.
3. Finally it is deduced from the study that out of selected 5 public sector enterprises 4 public enterprises have subsequently discarded valuing Human Asset and reporting thereof.
4. Presently only one public enterprises, i.e. HPCL is adopting Human Resource Accounting practice and disclosing Human Resource Valuation.
5. The present study depicts the tendencies in Human Resource Accounting Practices adopted by the public sector enterprises in India. It is always updatable whenever any organization adopts or abandons the practice in future.

SUGGESTIONS

The American Association of Accountants (AAA) defines HRA as 'HRA is a process of identifying and measuring the data about human resources and communicating this information to interested parties.

Considering this and the rationale behind the objectives, it is vital that the appropriate authorities may review the existing provisions in the Indian Companies Act and the Accounting Standards. Accordingly, HR Accounting and reporting must be made mandatory and be subjected to audit.

Human Asset Value, if incorporated on the asset side of the balance sheet, will logically improve the picture of the asset side of the company. **On national level, this may have a gigantic impact on the industrial scenario.**

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