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### **CONTRIBUTIONS TO BOOKS**

• Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

### JOURNAL AND OTHER ARTICLES

• Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

### **CONFERENCE PAPERS**

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• Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

### **HUMAN RESOURCE ACCOUNTING IN KRL: A CASE STUDY OF KOCHI REFINERIES LIMITED**

# DR. SAMIR M. VOHRA PRINCIPAL HNSB COLLEGE OF MANAGEMENT STUDIES MOTIPURA, HIMMATNAGAR

### **ABSTRACT**

The success of any enterprise to a great extent depends upon the quality, caliber and character of human resource working in it. The economic growth of any nation depends upon the harnessing and exploitation of human resources as well as non-human resources along with their blending in a proper ratio. Human Resource (HR) is the most valuable asset in an enterprise. HRA is the identification and measuring process of HR and its communication to the interested parties. It is an extension of the basic functions of accounting and communications of information to the internal and external parties. To ensure growth and development of any organization, the efficiency of employees must be accounted in the right perspective. Human resource accounting is one of the latest concepts adopted by Indian companies in recent times. In view of the growing importance of HRA, many companies in India are voluntarily disclosing information about their human resources. Hence, an attempt is made for a case study on Human Resource Accounting in Nochi Refineries Limited.

### **KEYWORDS**

human resource accounting, variables, reporting and annual reports.

### INTRODUCTION

he success of any enterprise to a great extent depends upon the quality, caliber and character of human resource working in it. The economic growth of any nation depends upon the harnessing and exploitation of human resources as well as non-human resources along with their blending in a proper ratio. Human Resource (HR) is the most valuable asset in an enterprise. HRA is the identification and measuring process of HR and its communication to the interested parties. It is an extension of the basic functions of accounting and communications of information to the internal and external parties.

The concept of HRA was first pioneered by Public sector giant BHEL in India during the year 1974-75. Likert(1967), Johnson & Kaplan (1987) said that absence of human resource as an asset in the balance sheet, violates the accrual principles of disclosure, underrates the firms net worth and current income and thereby not reflect the true and fair view of the organization.

"Accounting for people as an organizational resource. It involves measuring the costs incurred by business firms and other organizations to recruit, select, hire, train and develop human assets. It also involves measuring the economic value of people to the organization" – Eric Flamholtz.

It was pioneered by BHEL and SAIL back in the 1970's. The service, technology and other knowledge based sectors recognized the importance of the contribution of HR. Infosys technologies was the first software company to value HR in India, followed by many other leading software companies. Now a day's many other public and private sector enterprises are reporting HRA information in their financial statements. They are (CCI), (MMTC), (ONGC), (NTPC), (EIL), (OIL), (HPCL), (HSL), (HZL), (INFOSYS) etc.

### **OBJECTIVES OF THE STUDY**

- 1. To examine the prevailing HRA reporting practices in KRL.
- 2. To enlist the items of human resource information to be disclosed in the annual reports.
- 3. To examine model used for the valuation of human resources in KRL.
- 4. To derive conclusions and suggest measures for improvement of HRA practices in KRL.

### KRL MERGE WITH BPCL

Bharat Petroleum Corporation Limited (BPCL) acquired the Government of India's shares in KRL in March 2001. Consequent to the merger Order dated 18 August, 2006 issued by Ministry of Company Affairs; the refinery has been amalgamated with Bharat Petroleum Corporation, hence forth to be known as BPCL – Kochi Refinery.

### **SCOPE OF THE STUDY**

The present study is undertaken to study on Human Resource Accounting Practices in KRL. For this purpose, HRA practices followed by KRL have been examined for the period from the financial year 1998-99 TO 2004-05.

### **PERIOD OF THE STUDY**

The period of the study is selected seven consecutive years which are from the financial year from 1998-99 to 2004-05. The study is mainly based on published annual reports of KRL.

### RESEARCH METHODOLOGY

The study is mainly based on the secondary data's. The secondary data are extracted from the sources like annual reports, different books of management accounting, journals, research papers and website of KRL.

To investigate the efficiency of the HRA model adopted by KRL, the study is carried out by analyzing the behaviour of all the important variables indicating efficiency and profitability and also the components used for the valuation of human resources.

### These variables are:

- 1. Total Number of Employees
- 2. Average Age of Employees
- 3. Manpower Cost per Employee
- 4. Discount Rate
- 5. Human Resource Value per Employee
- 6. Turnover per Employee
- 7. Value Added per Employee
- 8. Return on HRV
- 9. Profit After Tax

The collected data is further analyzed and then the qualitative analysis is done.

### DISCLOSURE RELATING TO HUMAN RESOURCE ACCOUNTING IN KRL

Disclosure in corporate, annual reports has been identified as "... the companies need to provide information externally to investors in order to attract capital" The large amount of studies conducted in recent years, is concerned with disclosure research and is taking a user approach. Very few authors carried out disclosure studies taking a company approach.

TABLE - 1.1: HRA PRACTICES IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05

Public Enterprise	HRA Introduced	Valuation Model Used	Discount Rate (%)
KRL	1987-88	Lev & Schwartz Model	15

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.1** shows HRA practices in KRL in India during the period from 1998-99 to 2004-05. KRL is continuously valuing and reporting HRA information during the period from 1998-99 to 2004-05. KRL had introduced HRA from 1987-88. It had adopted the salary based economic valuation model proposed by Lev & Schwartz and the discount rate is 15%.

### **BEHAVIOURAL ANALYSIS**

This section studies the behavior of individual variables over the period of our study. The present analysis uses the Index number analysis.

### **TOTAL NUMBER OF EMPLOYEES**

KRL reports total number of employees excluding the number of apprentices. Whereas for the purpose of reporting the value added per employee they consider the total employee including the number of apprentices.

TABLE - 1.2: TOTAL NUMBER OF EMPLOYEES IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05

Particulars	1999	2000	2001	2002	2003	2004	2005
Total Number of Employees	1825	2035	2062	2067	2082	2055	2047
(Index)	100	111.51	112.99	113.26	114.1	112.6	112.16

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.2** shows total number of employees in KRL during the period from 1998-99 to 2004-05. During, all these years total number of employees increased from 1825 to 2047. In the last seven years, number of employees increased by 1.12 times.

### **AVERAGE AGE OF EMPLOYEES**

At the KRL, number of employees increase by 1.12 times in the last five years, but during these years the average age of employees increased by three years only.

TABLE - 1.3: AVERAGE AGE OF EMPLOYEE IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05

	Particulars	1999	2000	2001	2002	2003	2004	2005
	Average Age	36	36.5	37	38	39	NR	NR
Γ	(Index)	100	101.39	102.78	105.56	108.3	NR	NR

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.3** shows average age of employees in KRL during the period from 1998-99 to 2004-05. The above table makes it clear that average age increased by 1.08 times in last five years. For the remaining year average age is not reported.

### TOTAL MANPOWER COST

KRL reports salaries, wages, ex- gratia etc. contribution to provident and other funds, provisions for gratuity, provision for leave encashment and staff welfare expenses as the manpower cost.

TABLE - 1.4: TOTAL MANPOWER COST IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (Rs. In Crores)

Particulars	1999	2000	2001	2002	2003	2004	2005
Manpower cost	34.4	55.37	55.88	109.96	81.13	101.6	114.37
(Index)	100	160.82	162.3	319.37	235.6	295.1	332.18
Manpower Cost per employee	0.02	0.03	0.03	0.05	0.04	0.05	0.06
(Index)	100	150	150	250	200	250	300

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.4** shows total manpower cost and manpower cost per employee in KRL during the period from 1998-99 to 2004-05. Total Manpower Cost increased by 3.32 times in last seven years and the manpower cost per employee also increased by 3 times in last seven years. As KRL is merged with BPCL in 2005-06, the further analysis for two years is not possible.

### **DISCOUNT RATE**

The discount rate is one of the most important factors in the valuation of the human resources of KRL because the company follows the Lev & Schwartz Model where the valuation of human resource is the present value of future expected earnings. Therefore, the discount rate is an imperative factor in the human resource valuation following the Lev & Schwartz Model.

TABLE - 1.5: DISCOUNT RATE IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (In Percentage)

Particulars	1999	2000	2001	2002	2003	2004	2005
Discount Rate	15	15	15	15	15	15	15
(Index)	100	100	100	100	100	100	100

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.5** shows discount rate in KRL during the period from 1998-99 to 2004-05. KRL is discounting the future expected return of employees at the constant rate of 15 percent. This helps in keeping the HRV near to reality based on the input of the model.

### **HUMAN RESOURCE VALUE**

The concept of human value is derived from general economic value theory. The human value as a whole is the present worth of its expected future services to an enterprise.

TABLE - 1.6: HUMAN RESOURCE VALUE IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (Rs.ln Crores)

Particulars	1999	2000	2001	2002	2003	2004	2005
Human Resource Value	337.14	396.1	503.28	572.94	770	NR	NR
(Index)	100	117.49	149.28	169.94	228.4		
HRV per Employee	0.18	0.19	0.24	0.28	0.37	NR	NR
(Index)	100	105.55	133.33	155.55	205.6		

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.6** shows human resource value and human resource value per employee in KRL during the period from 1998-99 to 2004-05. The total HRV at KRL was Rs. 337.14 crores at the year end 1998-99, which increased during last five years to reach to Rs.770 crores at the year end 2002-03. This increase is 2.28 times over the base year i.e. 1998-99.

Increase in number of employees by 1.12 times would persuade the HRV due to direct relationship between number of employees and HRV. HRV per Employee increased by 2.05 times in last 5 years. This means that the total HRV increased at a higher rate than HRV per employee.

#### **TOTAL TURNOVER**

The turnover is the mirror of resources performance. Therefore to have an idea about the performance of the employees, we have also calculated the turnover per employees. The turnover of the organization reflects the performance of resources.

KRL reports the total turnover as well as turnover per employee.

TABLE - 1.7: TOTAL TURNOVER IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (Rs. In Crores)

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Particulars	1999	2000	2001	2002	2003	2004	2005
Total Turnover	4171.47	5798.5	8071.1	6762.1	10598	11721	15450.83
(Index)	100	139	193.48	162.1	254.1	281	370.39
Turnover per Employee	2.29	2.85	3.91	3.27	5.09	5.7	7.55
(Index)	100	124.45	170.74	142.79	222.3	248.9	329.69

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.7** shows total turnover and turnover per employee in KRL during the period from 1998-99 to 2004-05. From the year 1998-99 to 2004-05, KRL had experienced tremendous increase in the total turnover by 3.7 times in the last seven years. The turnover per employee at KRL increase by 3.3 times during the same period. Increase in total turnover is at higher rate than the turnover per employee.

#### **TURNOVER & COST RELATIONSHIP**

Turnover and Cost Relationship is studied to know, what proportion of profit is shared by company with employee payments. To check the same thing let us match the turnover with the employee cost.

TABLE - 1.8: TURNOVER & COST RELATIONSHIP IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (In Percentage)

Year	Total Turnover	<b>Total Manpower Cost</b>	Manpower cost as a % age of Total Turnover
1999	4171.47	34.43	0.82
2000	5798.54	55.37	0.95
2001	8071.13	55.88	0.69
2002	6762.08	109.96	1.63
2003	10597.5	81.13	0.76
2004	11721.4	101.6	0.87
2005	15451	114.37	0.74

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.8** shows turnover and cost relationship in KRL during the period from 1998-99 to 2004-05. In the year 2001-02 it was RS. 109.96 crores, which is 1.63 percent of the total turnover which is highest. Again it was 0.76 percent in 2002-03, 0.87 percent in 2003-04 and final 0.74 in 2004-05. So, it is clear from the above figures that with the increase in profit and turnover, payment to employees decreased.

### VALUE ADDED

KRL calculates the total value added by deducting the raw materials, power and fuel cost, other manufacturing expenses and miscellaneous expenses from the total revenue earned during the year. The amount of value added is before deducting or charging employee cost other operational cost, financial expenses, tax liability and depreciation. Therefore, the value added indicates the earning power of all the resource of organization or enterprise.

TABLE - 1.9: VALUE ADDED IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (Rs. In Crores)

Particulars	1999	2000	2001	2002	2003	2004	2005
Value Added	689.52	516.92	464.31	531.09	1048	1442	1703.18
(Index)	100	74.97	67.34	77.02	152	209.1	247.01
Value Added per Employee	0.38	0.25	0.23	0.26	0.5	0.7	0.83
(Index)	100	65.79	60.53	68.42	131.6	184.2	218.42

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.9** shows value added and value added per employee in KRL during the period from 1998-99 to 2004-05. Value Added was Rs. 689.52 crores in the year 1998-99 and with total increase of 2.47 times, it reached to Rs. 1703.18 crores at the year end 2004-05. Value Added per Employee was Rs. 0.38 crore per employee in the year 1998-99 and with a total increase of 2.18 times it reached to Rs. 0.83 crore per employee for the year 2004-05.

### RETURN ON HRV

KRL does not publish the information about the return on HRV in the annual report .Here it is calculated as profit after tax divided by the human resource value. Return on HRV of the enterprise reflects the efficient use of resources.

TABLE - 1.10: RETURN ON HRV IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (In Percentage)

Particulars	1999	2000	2001	2002	2003	2004	2005
Return on HRV	100.32	59.38	21.75	12	59.22	NR	NR
(Index)	100	59.2	21.68	0.12	59.04		

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.10** shows return on HRV in KRL during the period from 1998-99 to 2004-05. Return on HRV depends upon profit after tax and HR value. So, the above effect of Return on HRV is due to low PAT and HRV of the enterprise in subsequent year.

TABLE - 1.11: PROFIT AFTER TAX IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (Rs. In Crores)

Particulars	1999	2000	2001	2002	2003	2004	2005
Profit After Tax	338.23	235.21	109.46	68.76	456	555.1	842.12
(Index)	100	69.54	32.36	20.33	134.8	164.1	248.98

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.11** shows profit after tax in KRL during the period from 1998-99 to 2004-05. In last seven year, it increased by 2.48 times from the base year. Due to low PAT, Return on HRV is also low.

TABLE - 1.12: RETURN ON HRV PER EMPLOYEE IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (In Percentage)

Particulars	1999	2000	2001	2002	2003	2004	2005
Return on HRV per Employee	105.5	63.16	20.83	10.71	59.46	NR	NR
(Index)	100	59.87	19.74	10.15	56.36		

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

**Table 1.12** shows return on HRV per employee in KRL during the period from 1998-99 to 2004-05. Return on HRV decreased by 41% from the base year and Return on HRV per Employee decreased by 44% from the base year.

TABLE - 1.13: PROFIT AFTER TAX PER EMPLOYEE IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05 (Rs. In Crores)

Particulars	1999	2000	2001	2002	2003	2004	2005
PAT per Employee	0.19	0.12	0.05	0.03	0.22	0.27	0.41
(Index)	100	63.16	26.31	15.8	115.8	142.1	215.8

Source: Annual Reports of KRL during the period from 1998-99 to 2004-05

Table 1.13 shows profit after tax per employee in KRL during the period from 1998-99 to 2004-05.PAT per Employee increase by 2.15 times in seven years. DESCREPTIVE SUMMARY: KOCHI REFINERIES LIMITED (KRL)

Most of the companies had experienced changes in almost all the variables. Therefore, to check the nature of change, the volatility analysis has been carried out using standard deviation (SD) and volatility coefficient.

HRV is a result of multiparty impact of variables like total number of employees, average age of employees, discount rate, turnover, value added, profit after tax and return on HRV etc.

TABLE - 1.14: DESCRIPTIVE SUMMARY IN KRL DURING THE PERIOD FROM 1998-99 TO 2004-05

Particulars	N	Average	Std. Deviation	Volatility
HRV per Employee	5	0.252	0.077	0.307
Total No. of Employees	5	2,014.200	107.120	0.053
Average Age of Employees	5	37.300	1.204	0.032
Manpower Cost per Employee	5	0.034	0.011	0.335
Turnover per Employee	5	3.482	1.076	0.309
Value Added per Employee	5	0.324	0.115	0.354
Return on HRV per Employee	5	51.932	37.812	0.728

Table 1.14 shows descriptive summary in KRL during the period from 1998-99 to 2004-05.

KRL has experienced changes in almost all the variables. The following observations are made from the above table:

- (i) Total Number of Employees is highly variable among all, as it shows highest S.D. value 107.120 and manpower cost per employee shows very low variability as it shows low S.D. value 0.011.
- (ii) In case of volatility, average age of employees shows more stability as it has low volatility value 0.032 among all variables while return on HRV per employee shows less stability as its volatility value is 0.728.

### CONCLUSION: DESCREPTIVE SUMMARY

- L. Total Number of Employee is highly variable and manpower cost per employee has very low variability.
- 2. Average Age of Employee variable is more stable and return on HRV per employee is less stable.
- 3. Average Age of Employees is highly correlated with HRV per employee.
- 4. Return on HRV per Employee is negatively correlated with HRV per employee.
- 5. Correlation coefficient with discount rate cannot be computed since discount rate is constant throughout the period.
- 6. The value of regression coefficient with respect to manpower cost per employee is highly positively correlated, which indicates that one unit change in this variable lead to (4.731) unit change in HRV per employee at KRL, assuming other factors to be constant.
- 7. The value of regression coefficient with return on HRV per employee is negative, which will decrease HRV per employees.

### **FINDINGS**

- 1. One of the first attempts to estimate the value of human resource in monetary terms was made around 1691 by Sir William Petty.
- 2. In India, the first initiative in the direction of human resource accounting and valuation came from the public sector giant BHEL from the financial year 1974-
- 3. KRL- divides its total staff into two main groups management and non- management employees
- 4. There are several approaches or models for valuation of human resources. All these models have different backgrounds and different theoretical foundations. It was observed that KRL had adopted the Lev & Schwartz Model (1971) of economic value and have used an employee's anticipated future earnings as a surrogate of his value.
- 5. It was observed that KRL had variable discount rate 8%.
- 6. It is concluded that human resource value totally depends upon the variables. So, individual variables total number of employees, discount rate, average age of employees, manpower cost, turnover, valued added, profit after tax and return on HRV do equally affect the valuation of human resources.
- 7. It was observed that among 7 variables identified for the study, total number of employees' variable is found highly variable in KRL (325.025). While, manpower cost per employee variable is found least variable at KRL (0.009).
- 8. The variables which are highly correlated are return on HRV per employee (1.000\*\*) at KRL
- 9. The variables which are highly negatively correlated are: total number of employees at KRL (-0.770). The result of regression coefficient with total number of employees at KRL (-3.86E-04) is highly negative.

### LIMITATIONS OF THE STUDY

- The study is limited to only one company only.
- 2. The present study is limited for a specified period of seven years from 1998-99 to 2004-05.
- 3. This study is mainly based on secondary data from published annual reports, websites and literature. The limitations of secondary data influence the study.

### **CONCLUSION**

In the present study an attempt has been made to evaluate the Human Resource Accounting practice in KRL. The conceptual thinking about valuation of human resources is still in a developing stage. No model of HR Accounting is accepted by the accounting bodies all over the world, therefore Human resource valuation is the most confusing and critical problem for companies in India.

Hence, considering the great significance of HRA proper initiation should be taken by the government along with that other professional and accounting bodies both at the national and international levels for the measurement and reporting of such valuable assets.

### **REFERENCES**

### **BOOKS**

- 1. Flamholtz, Eric.G., Human Resource Accounting: Advances in Concepts, Methods and Applications, Second Edition, Jossery-Base INC, Sanfrancisco, California, 1986.
- 2. Kolay, M.K., Human Resource Accounting, The Institute of Cost And Works Accountants of India, Calcutta, 1996.

- 3. Kothari, C.R., Research Methodology: Methods & Techniques Revised Edition, New Age International Publishers, New Delhi, 1990.
- 4. Patra, R. K., Human Resource Accounting In Public Enterprises, Himalaya Publishing House, Mumbai, 2005.

### ANNUAL REPORTS AND JOURNALS

- 5. Bharat Petroleum Corporation Limited
- 6. Kochi Refineries Limited
- 7. The Management Accountant

### WEBSITES

- 8. http://www.bharatpetroleum.com
- 9. http://www.dpe.nic.in/cpesweb.htm
- 10. http://www.kochirefineries.com



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