## Asian Resonance

# Environment Reporting and Disclosure Practices of Selected Maharatna Companies in India



Manoj Kumar Research Scholar, Faculty of Commerce, Dayalbagh Educational Institution, Deemed University, Agra



Jyoti Kaushik
Research Scholar,
Faculty of Social Sciences,
Dayalbagh Educational Institution,
Deemed University, Agra

#### **Abstract**

The scarcity and deprivation of natural resources, as well as the accidents related to environmental pollution emitted by multinational corporations have incited economical, political and social debates concerning these issues and generated significant concerns from many companies and governments. The industrial development, sustained by the economic and technological progress had been criticized for its demoralizing impact on the environment; these companies have been urged to become responsible as far as their impact on the environment is concerned. In response, many companies have begun to report ecologic activities and environmental performance and these aspects fall under the attention of the company's management, accounting professionals, researchers, regulation bodies and media. Environmental disclosure of manufacturing activities has become a significant concern in business management. Impact of business on the environment is likely to be of increasing importance for managers over the coming decades. This paper reflects the environment disclosure and reporting practicesofselected Maharatna Companies. For this purpose two (2) Maharatna Companies i.e., BHEL and SAIL had been selected. Reporting practices were quantified by the well designed checklist of environment reporting items. The result of the study shows that selected companies i.e., BHEL &SAIL disclosed environment reporting information in their annual report in qualitative as well as quantitative manner.

**Keywords:** Environment, Reporting, BHEL, SAIL, Companies, India. **Introduction** 

## **Environment Reporting and Disclosure Practices of Selected Maharatna Companies in India**

The scarcity and deprivation of natural resources, as well as the accidents related to environmental pollution emitted by multinational corporations have incited economical, political and social debates concerning these issues and generated significant concerns from many companies and governments. The industrial development, sustained by the economic and technological progress had been criticized for its demoralizing impact on the environment; these companies have been urged to become responsible as far as their impact on the environment is concerned. In response, many companies have begun to report ecologic activities and environmental performance and these aspects fall under the attention of the company's management, accounting professionals, researchers, regulation bodies and media. Environmental disclosure of manufacturing activities has become a significant concern in business management. Impact of business on the environment is likely to be of increasing importance for managers over the coming decades. Indian companies increase to exceed their existing legal obligations and anticipate more future legislation on environmental issues. Good environmental disclosure performance is provide to societal benefit, more by reducing risk than by increasing prospects.

Corporate reporting is expanding beyond financial and environmental performance. A major challenge to reporting community at large in India is to improve comparability among environmental reports. Most of the reports reviewed in this survey, did not explain how Indian companies decide on what issues to be addressed or left out, in its environmental report. In India, the incorporation of environmental costs and benefits into mainstream financial reporting is an developing field at present but it is certain to grow. Involvement and commitment of corporate

P: ISSN No. 0976-8602

accountants in environmental management, appears to be limited due to lack of regional reporting guidelines. Formulated guidelines will be a valuable means of engaging stakeholders for enhancing mutual interests and priorities. Such a bold participative approach would ensure benefits of enduring value both to the company and its stakeholders.

#### **Review of Literature**

- 1. Dr. Manoj Goswami (2014) "Corporate Environmental Accounting: The issue, its practices and challenges: A study on Indian corporate accounting practices". This study reveals that many efforts have been done to mechanism incorporating develop of environmental data with national income to compute economic development. Moreover, all such attempts do not address the micro economic aspect of environmental data as such interaction between a specific firm and environment. The accounting of interaction between firm and environment is a pre-requisite to find out sustainability gap in micro level. This study attempts to address the development of corporate level environmental accounting and the problems associated with that. The study is under taken considering the environmental accounting and reporting adopted by sample companies in India.
- 2. Chaklader Barnali and Aggarwal Gulati Puja (2013) "A Study of Corporate Environmental Disclosure Practices of Companies Doing Business in India" In this study researchers had founds that in all the four years, size and environmental certification are statistically significant at 1% level and is positively associated with EDI. Environmental certification reduces the agency cost as it reduces the monitoring cost since the firms voluntarily follow a set of externally set of measured objectives. No other variable was found to be significant. We have tried to link our findings with legitimacy theory and agency theory.
- 3. Dalvadi Yagnesh (2012) "Measurement of Environmental Reporting Practices of the Selected Index Based Indian Companies: An Integral Part of Triple Bottom Line Reporting" The objective of this study is to investigate the quantity and quality of voluntary environmental disclosures in the annual reports or sustainability reports of the few selected index based Indian companies listed on the stock exchange. In order to evaluate the environmental reporting practices, the categorization contained in the Global Reporting Initiatives guidelines has been used to an extent. We found that all the companies selected for the study were found to be at their progress towards better environmental reporting practices year by year, which are a positive sign for the country as well as a benchmark for the other companies who still have not taken initiative in this area. The result may serve a base or the

## Asian Resonance

path towards better Environmental disclosures in India.

- Sen Mitali, Mukhergee Kushali and Pattanayak (2011)"Corporate environmental disclosure practices in India" The purpose of this study is to identify the existing status of environmental disclosure practices in Indian core sector companies. The study shows that the level of disclosure of environmental information varies across industries as well as companies and the information revealed in the annual reports is be more qualitative to quantitative. This study contributes to the literature by evaluating voluntary environmental disclosures made by Indian core sector companies in their annual report. Further work based on this preliminary finding may be done to assess the status of environmental disclosure for a larger sample of Indian core sector companies.
- Dr Prem Lal Joshi, Dr. Mishiel Said Suwaidan, Dr. Rajesh Kumar (2011) " Determinants of Environmental Disclosures Indian by Industrial Listed Companies in Their Websites: Empirical Study" The purpose of this study is to examine the factors influencing the level of environmental disclosure information from a sample of 45 Indian industrial listed companies in their websites and annual reports. evidence shows that there is a tendency to disclose the environmental protection information but the level of disclosures is still low. Multiple regression analysis shows a positive association between log of total assets, and industry type with the disclosure index. Large sized firms which are heavily polluted, tend to disclose higher level of information. However, profitability and financial leverage have no impact on the disclosure level. The study's findings help understand Indian industrial listed firms behavior in terms of environmental disclosure.

#### **Objectives of the Study**

- To find out the awareness level of environmental reporting and disclosure practices of selected Maharatna Companies in India.
- To make a comparative analysis of environmental reporting and disclosure practices of selected Maharatna Companies i.e., BHEL & SAIL.

#### **Research Methodology**

In this research paper the researcher had been selected the two (2) Maharatna Companies for the purpose of study. In order to assess the structure and process for environmental reporting practices followed by the selected companies.

The list of the companies is given blow:

#### Table-1

| S. | No. | Name of Selected Company              |  |  |  |  |  |
|----|-----|---------------------------------------|--|--|--|--|--|
|    | 1   | BHEL-Bharat Heavy Electricals Limited |  |  |  |  |  |
|    | 2   | SAIL-Steel Authority of India Limited |  |  |  |  |  |

#### **Justifications of Selection of Samples**

The selected companies are reputed and established companies. These companies are having business in all over India covering the huge market share in his sector in the world.

The selection of banks has been made on the following ground:

- 1. These companies are listed in BSE & NSE
- International rating given by the Agencies (ICRA, CRISIL)

#### Sampling Approach

These companies were selected on the basis of judgment sampling approach.

#### Sources of Data

The study was based on the secondary information that was collected from the annual report of the selected Companies. Other information collected from books of Accounting, Corporate Social Responsibility Reporting, Environmental Accounting and Reporting; Views and Recommendations of Committees on Social and Environmental Reporting and Articles published in this area were consulted in determining the items for inclusion in the 'index'.

#### Scope of the Study

The study coverstotal 20 items for environment reporting practices in the selected

## Asian Resonance

companies. All the selected items were voluntary in nature.

#### Period of the Study

The environmental reporting practices of the selected companies were examined for three financial year i.e., from 2011-12, 20012-13 and 2013-14.

#### Hypothesis H0

There is no significance difference between the average environment disclosure practices of selected Maharatna companies i.e., BHEL and SAIL. H1

There is significance difference between the average environment disclosure practices of selected Maharatna companies i.e., BHEL and SAIL.

#### **Statistical Tools**

Percentage (%), Simple Mean and Student ttest were used for the purpose of analysis and interpretation of data.

#### **Data Collection**

#### 1=Item Disclosed 0=Item Not Disclosed

|   | Information of Items                          |        | BHEL   |        |        | SAIL   |        |  |
|---|---|--------|--------|--------|--------|--------|--------|--|
|   | information of items                          | Y1     | Y2     | Y3     | Y1     | Y2     | Y3     |  |
| Α | Board Environmental Objectives (7)            |        |        |        |        |        | _      |  |
|   | Specific targets                              | 1      | 1      | 1      | 0      | 0      | 0      |  |
|   | Management's environmental policy statement   | 1      | 1      | 1      | 1      | 1      | 1      |  |
|   | Environmental budget                          | 1      | 1      | 1      | 1      | 1      | 1      |  |
|   | Environment management system                 | 0      | 0      | 1      | 0      | 0      | 0      |  |
|   | Environment auditing                          | 0      | 0      | 0      | 0      | 0      | 0      |  |
|   | Legal compliance                              | 0      | 0      | 0      | 0      | 0      | 0      |  |
|   | Award obtained for environmental protection   | 1      | 1      | 1      | 0      | 0      | 0      |  |
|   | Disclosures (A)                               | 4/7    | 4/7    | 4/7    | 2/7    | 2/7    | 2/7    |  |
|   | % of Disclosures                              | 57.14% | 57.14% | 57.14% | 28.57% | 28.57% | 28.57% |  |
| В | Prevention or Repair of Environmental Dama    | ge (1) |        |        |        |        |        |  |
|   | Waste management                              | 1      | 1      | 1      | 0      | 0      | 0      |  |
|   | Disclosures (B)                               | 1/1    | 1/1    | 1/1    | 0/1    | 0/1    | 0/1    |  |
|   | % of Disclosures                              | 100%   | 100%   | 100%   | 0%     | 0%     | 0%     |  |
| С | Aesthetic Improvement (1)                     |        |        |        |        |        |        |  |
|   | Tree plantation                               | 1      | 1      | 1      | 1      | 1      | 1      |  |
|   | Disclosures (C)                               | 1/1    | 1/1    | 1/1    | 1/1    | 1/1    | 1/1    |  |
|   | % of Disclosures                              | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   |  |
| D | Pollution Control Measures (1)                | 1      | 1      | 1      | 1      | 1      | 1      |  |
|   | Disclosures (D)                               | 1/1    | 1/1    | 1/1    | 1/1    | 1/1    | 1/1    |  |
|   | % of Disclosures                              | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   |  |
| Е | Conservation of Natural Resources (1)         | 1      | 1      | 1      | 0      | 0      | 0      |  |
|   | Disclosures (E)                               | 1/1    | 1/1    | 1/1    | 0/1    | 0/1    | 0/1    |  |
|   | % of Disclosures                              | 100%   | 100%   | 100%   | 0%     | 0%     | 0%     |  |
| F | Environmental Accounting (4)                  |        | 1      |        |        |        |        |  |
|   | Environmental cost                            | 1      | 1      | 1      | 0      | 0      | 0      |  |
|   | Environmental liabilities and assets          | 1      | 1      | 1      | 0      | 0      | 0      |  |
|   | Scientific accounting and reporting practices | 1      | 1      | 1      | 1      | 1      | 1      |  |
|   | Extraordinary items                           | 1      | 1      | 1      | 0      | 0      | 0      |  |
|   | Disclosures (F)                               | 4/4    | 4/4    | 4/4    | 1/4    | 1/4    | 1/4    |  |
|   | % of Disclosures                              | 100%   | 100%   | 100%   | 25%    | 25%    | 25%    |  |
| G | Project Planning and Management (3)           |        |        |        |        |        |        |  |
|   | Environmental management                      | 1      | 1      | 1      | 1      | 1      | 1      |  |
|   | Environmental risk management                 | 1      | 1      | 1      | 1      | 1      | 1      |  |
|   | Accident and emergency response               | 1      | 1      | 1      | 0      | 0      | 0      |  |

## Asian Resonance

|    | Disclosures (G)   | 3/3  | 3/3    | 3/3   | 2/3    | 2/3    | 2/3    |
|----|---|------|--------|-------|--------|--------|--------|
|    | % of Disclosures  | 100% | 100%   | 100%  | 66.67% | 66.67% | 66.67% |
| Н  | Social Cost (2)   |      |        |       |        |        |        |
|    | Impact of organizational activities on environment                  | 1    | 1      | 1     | 1      | 1      | 1      |
|    | Scientific environmental risks not required to be disclosed legally | 1    | 1      | 1     | 1      | 1      | 1      |
|    | Disclosures (H)   | 2/2  | 2/2    | 2/2   | 2/2    | 2/2    | 2/2    |
|    | % of Disclosures  | 100% | 100%   | 100%  | 100%   | 100%   | 100%   |
|    | Total Items disclosed by the selected companies(A+B+C+D+E+F+G+H)    |      | 17/20  | 18/20 | 9/20   | 9/20   | 9/20   |
| %a | %age of Total Items disclosed by the selected                       |      | 85%    | 90%   | 45%    | 45%    | 45%    |
|    | companies (A+B+C+D+E+F+G+H)   |      |        |       |        |        |        |
|    | Mean Value  |      | 86.67% |       | 45%    |        |        |

Source: Annual Reports of Selected CompaniesTable-2

Note

**BHEL**-Bharat Heavy Electronic Limited **SAIL:** Steel Authority of India Limited

Y1: Financial Year 2011-12 Y2: Financial Year 2012-13 Y3: Financial Year 2013-14

#### Interpretation

In the above table clearly shows that environmental reporting items selected for the purpose of study were categorized in eight (8) broad categories. FromEnvironmental Objectives, BHEL disclosed 57.14% of selected items in all selected three financial years. In those selected financial years SAIL disclosed 28.57% of selected items. BHEL 100% of selected items were disclosed from Prevention or Repair of Environmental Damage. And SAIL disclosed 0% of selected items. BHEL and SAIL both were disclosed 100% of selected items from the Aesthetic Improvement and Pollution Control Measures in all three financial years. From Conservation of Natural Resources, BHEL 100% of selected items were disclosed in all three financial years. And SAIL 0% of selected itemsdisclosed in all selected three financial years. BHEL 100% of selected items were disclosed from Environmental Accounting in all selected three financial years. And SAIL 25% of selected Environmental Reporting items were disclosed in all three financial years. 100% of selected items were disclosed from Project Planning and Management by BHEL. And SAIL disclosed 66.67% of selected items in all selected three financial years. BHEL and SAIL were made 100% of selected items from Social Cost in all three financial years.

Therefore, BHEL disclosed total 85% of selected items in first two financial years i.e., 2011-12 and 2012-13. And in financial year 2013-14 it disclosed 90% of selected Environmental Reporting items. SAIL, 45% of total selected Environmental Reporting items were disclosed in all selected three financial years.

The mean value of BHEL and SAIL were 86.67% and 45% respectively in all selected three financial years.

#### Summarized Table

| Information of Items                   | BHEL   | SAIL |
|--|--------|------|
| Specific targets                       | 100%   | 0%   |
| Management's environmental policy      | 100%   | 100% |
| statement                              |        |      |
| Environmental budget                   | 100%   | 100% |
| Environment management system          | 33.33% | 0%   |
| Environment auditing                   | 0%     | 0%   |
| Legal compliance                       | 0%     | 0%   |
| Award obtained for environmental       | 100%   | 0%   |
| protection                             |        |      |
| Waste management                       | 100%   | 0%   |
| Tree plantation                        | 100%   | 100% |
| Pollution Control Measures             | 100%   | 100% |
| Conservation of Natural Resources      | 100%   | 0%   |
| Environmental cost                     | 100%   | 0%   |
| Environmental liabilities and assets   | 100%   | 0%   |
| Scientific accounting and reporting    | 100%   | 100% |
| practices                              |        |      |
| Extraordinary items                    | 100%   | 0%   |
| Environmental management               | 100%   | 100% |
| Environmental risk management          | 100%   | 100% |
| Accident and emergency response        | 100%   | 0%   |
| Impact of organizational activities on | 100%   | 100% |
| environment                            |        |      |
| Scientific environmental risks not     | 100%   | 100% |
| required to be disclosed legally       |        |      |

### Table-3

| t-Test: Two-Sample Assuming Equal Variances |            |                               |  |  |  |  |
|---|------------|-------------------------------|--|--|--|--|
|   | Variable 1 | Variable 2                    |  |  |  |  |
| Mean  | 86.666     | 45                            |  |  |  |  |
| Variance                                    | 1099.433   | 2605.263                      |  |  |  |  |
| Observations                                | 20         | 20                            |  |  |  |  |
| Pooled Variance                             | 1852.348   |                               |  |  |  |  |
| Hypothesized                                |            |                               |  |  |  |  |
| Mean Difference                             | 0          |                               |  |  |  |  |
| Df  | 38         | For testing hypothesis, p     |  |  |  |  |
| t Stat                                      | 3.061439   | value (0.004031) is less      |  |  |  |  |
| P(T<=t) one-tail                            | 0.002015   | than <b>0.05.</b> Hence, null |  |  |  |  |
| t Critical one-tail                         |            | hypothesis has been           |  |  |  |  |
| P(T<=t) two-tail                            |            | rejected at 5% level of       |  |  |  |  |
| t Critical two-tail                         |            | significance.                 |  |  |  |  |

Results: MS Excel 2007 Table-4

The above table shows that the mean value of Environmental Disclosures of BHEL (86.67) is higher than the mean value of SAIL (45). So it found

P: ISSN No. 0976-8602

that difference between both BHEL and SAIL was significance. According to the test result t Stat = 3.061 and the t critical two-tail value = 2.024 with .05. Therefore, the t Stat value is greater than the Critical value on two-tail. Hence, Researchers reject the null hypothesis and accepts the alternate hypothesis at 95% level of confidence.

#### **Findings**

- BHEL disclosed most of the selected components of environmental reporting in all selected three financial years.
- BHEL disclosed higher environmental reporting items than SAIL.
- Some components like, Aesthetic Improvement, Pollution Control Measures and Social Cost were fully disclosed both the selected companies i.e., BHEL and SAIL.
- BHEL is much aware about the environmental reporting practices then SAIL.
- Selected items from Social Cost were fully disclosed by both the selected companies.
- Difference between environmental disclosure practices of BHEL and SAIL were significance. Hence, Null hypothesis has been rejected.

#### Conclusion

Financial managers, need to be aware of how environmental matters, affect the fundamentals of financial accounting & reporting practices of concern companies. Researches around the world, shows that annual reports are most effective channel of disclosures. A reference to environmental reporting means different effects to different group of users. Some tend to think of separate environmental reports and for others the focus will be on environmental contents in the annual report itself. It is evidence from this study that Indian companies have not yet developed a holistic approach to environmental disclosure& reporting practices, as there is lack of environmental reporting guidelines in Indian corporate. For e.g., BHEL disclosed appropriate environmental reporting items but on the other hand poor gave SAIL performance.National international higher authorities (State/Central Government) provide appropriate mandatory guidelines for environmental reporting practices to the different corporate.

#### References

- Chaklader Barnali and Aggarwal Gulati Puja (2013) "A Study of Corporate Environmental Disclosure Practices of Companies Doing Business in India" http://ssrn.com/abstract =2331223
- Dalvadi Yagnesh (2012) "Measurement of Environmental Reporting Practices of the

## **Asian Resonance**

- Selected Index Based Indian Companies: An Integral Part of Triple Bottom Line Reporting" Global Journal of Research in Management, Volume 2, No. 2 (2012), Pages: 41-57
- Dr. Manoj Goswami (2014) "Corporate Environmental Accounting: The issue, its practices and challenges: A study on Indian corporate accounting practices". IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p ISSN: 2319-7668. Volume 16, Issue 5. Ver. III (May. 2014), PP 36-42, www.iosrjournals.org.
- Dr Prem Lal Joshi, Dr. Mishiel Said Suwaidan, Dr. Rajesh Kumar(2011) "Determinants of Environmental Disclosures by Indian Industrial Listed Companies in Their Websites: Empirical Study" International Journal of Accounting and Finance, –Inderscience Publications, Volume 3, No. 2, Page 109-130,2011
- Global Reporting Initiative (GRI). 2006. Sustainability Reporting Guidelines Draft. Version for Public Comment, January 2–March 31, 2006, GRI: Amsterdam.
- Gray, R. 1993. Accounting for the Environment. Paul Chapman Publishing Ltd: London
- 7. Isenmann, R. 2004. Internet-based Sustainability Reporting. International Journal of Environment and Sustainable Development **3**(2): 145–167.
- 8. Jain, A.K. 2001. Descriptive Law on Pollution and Environment, Akalank Publications, New Delhi.
- Mitali Sen, Kuhali Mukherjee, J.K. Pattanayak (2011). "Corporate Environmental Disclosure Practices in India", Journal of Applied Accounting Research, Volume 12 Issue: 2, pp.139 - 156
- P. Davis-Walling, S. Batterman, "Environmental Reporting by the Fortune 50 Firms", Environmental Management, volume.21 no. 6, 1997, pp 865–875.
- R.W. Roberts, "Determinants of corporate social responsibility disclosure: an application of stakeholder theory", Accounting, Organizations and Society, Volume 17 No.6, 1992, pp. 595-612.
- Sustain Ability Ltd, United Nations Environment Programme (UNEP). 1999. Engaging Stakeholders 1999. The Internet Reporting Report. Beacon: London.
- 13. United Nations. 1991, Accounting for Environmental Protection Measures, Paper E/C.10/AC.3/1991/5, United Nations CTC ISAR, New York. Willits S D and Giuntini R. (1994), Helping Your Company go Green, Management Accounting, volume 75 (8), pp. 43-47.