

Comparing Environmental Disclosure Standards: A Study of Leading Cement Companies in India

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Abstract:

This study investigates the extent of reporting by employing content analysis to compare environmental disclosure practices. It evaluates the quality of information using a disclosure index from the Business Responsibility and Sustainability Reporting (BRSR). The researchers found a strong correlation between various content analysis methods used to assess the level and breadth of disclosure when examining the environmental reporting of the same group of corporations. There is a notable correlation between the extent of disclosure and the volume of reporting, as measured by the quality of disclosure. Researchers propose that a quality score metric, which considers both the quantity and the quality of disclosures, could be effective in distinguishing between companies with high-quality versus low-quality reporting. The survey indicates that Ambuja Cements demonstrates more effective disclosure practices compared to Shree Cements.

Keywords: Environmental Disclosure practices, Environmental Reporting, GRI, BRSR, Cement Company.

1. INTRODUCTION:

Numerous issues, such as the increasing concern over environmental degradation and resource depletion, contribute to widespread anxiety. Today, environmental challenges have become globally significant. Cement companies could face substantial impacts on their profits if they neglect or improperly manage environmental concerns. It is unreasonable for any organization to damage or mishandle a profitable or promising venture while expecting significant returns. In other words, cement companies should inherently consider the pollution, emissions, and environmental harm caused by their operations. Shareholders should recognize more than just financial returns in their assessments.

Addressing the lack of understanding of environmental costing concepts and methods has become increasingly important. Financial statements cannot accurately reflect a "true and fair view" if significant environmental issues and actions are omitted. Epstein (2004) observed that standard-setters have been working to establish a consistent set of disclosures and performance metrics to enable cross-sector comparisons of corporate social and environmental performance. In response to the Global Reporting Initiative's (GRI) call for input, several organizations, including price water house coopers and the New Economics Foundation, have developed social indicators to be incorporated into proposed external sustainability reporting standards.

The cement industry is one of the largest contributors to carbon emissions globally. Besides CO₂ emissions from fuel combustion, the cement production process itself is a major source of CO₂ emissions from industrial activities (Mikulčić, Vujanović, Markowska, & Filkoski, 2013). The production of cement releases a substantial amount of greenhouse gases, primarily CO₂. The cement sector alone is responsible for approximately 5% of global anthropogenic CO₂ emissions and 41% of the EU's industrial CO₂ emissions (Mikulčić et al., 2013).

2 Environmental Disclosure Practices (EDPs):

EDP refers to the processes and guidelines through which organizations and companies report information related to their environmental impact, sustainability initiatives, and ecological performance. These disclosures typically include data on energy use, greenhouse gas emissions, waste management, resource consumption, pollution control, and efforts to mitigate climate change or enhance environmental sustainability.

Basically, Environmental Disclosure Practices are the part of Sustainability Reporting. Hence, these disclosures can be voluntary or mandatory, depending on the regulatory framework of the country or industry in which the organization operates.

Common frameworks and standards for Environmental disclosure include:

- Global Reporting Initiatives (GRI)
- Sustainability Accounting Standards Board (SASB)
- CDP (formerly Carbon Disclosure Project)
- Integrated Reporting (IR)
- Business Responsibility and Sustainability Reporting

3 Business Responsibility and Sustainability Reporting (BRSR):

A Business Responsibility and Sustainability Reporting (BRSR) report is a report that eligible companies are required to file with the SEBI to present information on their environmental, social, and governance activities. BRSR reporting is mandatory for the top 1000 listed companies in India. The BRSR report has to be included in the company's annual report that is filed with SEBI.

The Global Reporting Initiative (known as GRI) is a global reporting standard that helps businesses, governments, and other organizations understand and communicate their impacts on issues such as human rights, climate change, and corruption. On the other hand, Business Responsibility and Sustainability Reporting (BRSR) is a reporting regulation under Indian laws that require enterprises to report environmental, social, and governance (ESG) performance indicators to ensure that they practise responsible business and achieve sustainable development.

4 Review of Literatures:

Jing & Qamaruzzaman (2023) conducted a study aiming at the role of Environmental and financial disclosure on sustainability. The study revealed that the sustainability was positively affected by good environmental disclosure. And the other firms are also adopting this in their practices to get more advantages in short as well as long run.

Faozi (2023) examined the impact of Environmental Disclosure on firm performance. The study revealed that disclosure of the Environmental performance indicators had positive impact on the firm performance and ESG disclosure.

Yuhan, Xuan & Lei (2023) conducted the research to check the effect of environmental disclosure on corporate performance and financial performance. The result showed that the Environmental disclosure improved the corporate performance.

Haixia & Jianping (2022) examined the relation between financial performance and environmental disclosure. The outcome shows a positive relation between the both financial performance and disclosure. It also inferred that disclosure reflects in many ways.

Vineet & Raj (2021) conducted a study to analyze the current Sustainability of Accounting Practices in Indian Cement Companies. The study suggested following the best standards for strengthening their activities on sustainable growth.

Johnson & Ayuba (2021) examined the impact of Environmental accounting on the financial performance. The result showed the positive impact of disclosure on the financial performance. It also plays a key role in the long term survival of the business.

Emrald & Godfred (2017) surveyed the type of environmental related disclosure to be report by the firms. Nd the outcomes revealed that, GRI disclosure was not up to the mark and the firm size, auditing level, type of industry and age of the firm play a significant role as determinants of environmental related data.

Aisyah (2017) conducted a study to check the sustainability reporting impact on firm's performance. The result showed that it had positive impact on the performance and the firm whose sustainable report was good, it termed as economic value gain in the society.

Mao (2017) made an attempt to check the firm's characteristics and sustainability performance. The study supported the stakeholders role in sustainability performance as well as the other factors were also reflecting the sustainability reporting practices.

Jariya (2015) used content analysis to analyze the environmental disclosures made by Sri Lankan listed corporations in their annual reports. The data found that only 60.29% of the sample firms reported on the environment in their annual reports, and these disclosures were voluntary, falling under sustainability reporting or CEO reports.

Kundra (2013) conducted a study on the environmental initiatives implemented by Indian companies, analyzing the annual reports and websites of Nifty companies using content analysis. The study concluded that environmental awareness and concern have significantly grown in the Indian corporate sector.

5 Objectives of the Study

1. To check the level of Environmental disclosure practices of the selected Cement companies
2. To make a comparative analysis of Environmental disclosure practices of selected Cement companies

6 Research Methodology:

In this paper, two (2) Cement companies are selected for the purpose of checking the level of Environmental Disclosure Practices. These companies are as given:

| S. No. | Name of the Selected Companies | Net Profit (Rs. Cr) |
|--------|--------------------------------|---------------------|
| 1 | Shree Cement | 2468.44 |
| 2 | Ambuja cement | 2334.69 |

(Source: Annual Reports)

7 Justification of the Sample:

1. Both the companies are well established and reputed power generation companies in India.
2. Both the companies are listed in BSE and NSE.
3. On the basis of Net Profit, Shree cements and Ambuja Cements lie on the 2nd and 3rd position as on 31 August, 2024 (as there is very much difference between the net profit of Ultratech Cements on 1st position with the Shree Cements and Ambuja Cements).
4. Both the companies are having business in India and also have overseas operation.

8 Research Methodology

1.8.1 Source of the Data:

The data have been collected from the Annual reports of the sample companies. Here for the purpose of study, the Environmental performance indicators have been taken from the Sustainable Reporting.

1.8.2 Scope of disclosure:

The study has taken total 37 items of Environmental Disclosure performance Indicators.

1.8.3 Duration of the study:

The study has taken three financial years (i.e. 2021-22, 2022-23, 2023 -24) into consideration. It means the data has been taken from the Annual reports of three financial years.

1.8.4 Hypothesis

Ho: There is no significant difference between the Environmental Disclosure of selected Cement Companies, i.e. Shree Cements & Ambuja Cements.

H1: There is significant difference between the Environmental Disclosure of selected Cement Companies, i.e. Shree Cements & Ambuja Cements.

9 Data Analysis and Interpretation:

1.9.1 Comparative Analysis of Environmental Disclosure Practices of Selected companies

Table: Environmental Performance Indicators

| S. No. | ENVIRONMENTAL PERFORMANCE INDICATORS | Shree Cements | | | Ambuja Cements | | |
|--------|--------------------------------------|---------------|------|------|----------------|------|-----|
| | | Y1 | Y2 | Y3 | Y1 | Y2 | Y3 |
| A | PRODUCT AND PACKAGING (4) | 4 | 3 | 3 | 4 | 4 | 3 |
| | TOTAL | 4 | 4 | 4 | 4 | 4 | 4 |
| | PERCENTAGE DISCLOSURE | 100 | 75 | 75 | 100 | 100 | 75 |
| B | ENERGY CONSUMPTION(6) | 4 | 5 | 5 | 6 | 5 | 6 |
| | TOTAL | 6 | 6 | 6 | 6 | 6 | 6 |
| | PERCENTAGE DISCLOSURE | 66.7 | 83.3 | 83.3 | 100 | 83.3 | 100 |
| C | WATER (5) | 5 | 5 | 5 | 5 | 4 | 5 |
| | TOTAL | 5 | 5 | 5 | 5 | 5 | 5 |
| | PERCENTAGE DISCLOSURE | 100 | 100 | 100 | 100 | 80 | 100 |
| D | BIODIVERSITY (1) | 1 | 1 | 1 | 1 | 1 | 1 |
| | TOTAL | 1 | 1 | 1 | 1 | 1 | 1 |
| | PERCENTAGE DISCLOSURE | 100 | 100 | 100 | 100 | 100 | 100 |
| E. | RESOURCE CONSERVATION | 13 | 13 | 13 | 13 | 12 | 13 |

| | | | | | | | |
|---|---|-------------|------|------|-------------|------|------|
| | TOTAL | 13 | 13 | 13 | 13 | 13 | 13 |
| | PERCENTAGE DISCLOSURE | 100 | 100 | 100 | 100 | 92.3 | 100 |
| F | GHG EMISSIONS (6) | 5 | 5 | 5 | 5 | 5 | 5 |
| | TOTAL | 6 | 6 | 6 | 6 | 6 | 6 |
| | PERCENTAGE DISCLOSURE | 83.3 | 83.3 | 83.3 | 83.3 | 83.3 | 83.3 |
| G | EFFLUENTS AND WASTE MANAGEMENT (2) | 2 | 2 | 2 | 2 | 2 | 2 |
| | TOTAL | 2 | 2 | 2 | 2 | 2 | 2 |
| | PERCENTAGE DISCLOSURE | 100 | 100 | 100 | 100 | 100 | 100 |
| | OBTAINED SCORE OF THE DISCLOSURE | 34 | 34 | 34 | 36 | 33 | 35 |
| | TOTAL SCORE OF DISCLOSURE (A+B+C+D+E+F+G) | 37 | 37 | 37 | 37 | 37 | 37 |
| | PERCENTAGE DISCLOSURE | 91.9 | 91.9 | 91.9 | 97.3 | 89.2 | 94.6 |
| | MEAN VALUE | 91.9 | | | 93.7 | | |

(Source: Annual reports of the Companies)

Interpretation:

The table above shows the environmental disclosure practices of the selected cement companies. Total 37 items has been taken into consideration from the Sustainability Reporting categorized into six (6) groups. From Product and Packaging group, Ambuja cement covered every aspect and disclosed the relevant data, while Shree cements disclosed lesser than that of Ambuja cements. In the Energy Consumption Disclosure, Ambuja cement is better than Shree cements. In the third group of Water related disclosure, Shree cements has disclosed better than the Ambuja Cements. In case of Biodiversity, the disclosure pattern of both the companies is same. In the category of Resource conservation, Shree Cements has disclosed better than that of the Ambuja Cements. In group of GHG emission, both the companies follow the same pattern. In Effluent and Waste Management, the disclosure pattern of both the companies is same.

1.9.2 Normality test of the data

Table: Independent sample T-test

| Independent Samples Test | | | | | | | | | | |
|--------------------------|----------------|-------|-------|------------------------------|----|-----------------|-----------------|-----------------------|---|---------|
| | | | | t-test for Equality of Means | | | | | | |
| | | | | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Score | Equal variance | 0.000 | 0.993 | -0.047 | 12 | 0.963 | -0.09667 | 2.05800 | -4.58067 | 4.38734 |

| | | | | | | | | | | |
|------------------------------|--|--|--------|--------|-------|----------|---------|----------|---------|--|
| s assumed | | | | | | | | | | |
| Equal variance s not assumed | | | -0.047 | 11.988 | 0.963 | -0.09667 | 2.05800 | -4.58116 | 4.38783 | |

(Researcher calculation on SPSS 24)

Interpretation:

The outcome of the two-tailed t-test suggests a p-value of 0.963 exceeding the significance threshold of 0.05. Consequently, the Null hypothesis is failed to reject, indicating no significant distinction in Environmental Disclosure Practices between Shree Cement and Ambuja Cement.

10 Findings, Conclusion and Suggestion:

10.1 Findings

1. Ambuja Cements disclosed most of the selected items of Environmental performance indicators in the three financial years.
2. Ambuja Cements disclosed more items as comparison to Shree Cements.
3. Some of the items are fully disclosed by both the companies. For example- items related to Biodiversity, GHG emission and waste management.
4. Ambuja cements is more aware about the Environmental disclosure practices in BRSR.
5. Difference between Environmental Disclosure practices of both the sample companies is less than the significance level, hence the null hypothesis is failed to reject.

10.2 Conclusion

Environmental Disclosure practices are an important part of the reporting, as this report is used by many stakeholders. It is helpful in decision making for every stakeholder. Government agencies do take the help of these reports in framing their Environmental related policies, Management and BODs get the advantages by promoting their company as an Environmental friendly. These reports are also beneficial for the society as it address the environmental problems and solution of these problems. Sometimes these reports reflect the buying decision of the consumers. Hence EDPs are an important element of Sustainability reporting. And Cement companies do pollute the environment in many ways. So, these kind of reporting must be done from their side.

10.3 Suggestions:

This study has some limitations, which are given as below along with future scope of study:

1. The study includes only two cement companies for study. Further study can be done including more companies in this regards.
2. The study is only for the Three financial years, which can be increased by the further researchers.
3. The study is based on the Environmental indicators, it can include the others factors also.
4. The study is based on the BRSR guidelines. It can include the comparative study with the other guidelines for disclosure.

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