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## Sustainable accounting reporting practices of Indian cement industry: An exploratory study

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### CHRONICLE

*Article history:*  
Received September 10, 2013  
Received in revised format  
10 December 2013  
Accepted February 25 2014  
Available online  
February 27 2014

*Keywords:*  
Cement Industry  
Sustainability  
Financial Information  
Environment  
Accounting Reporting  
Sustainable Reporting Practices

### ABSTRACT

Cement is the single most important and profitable product in the building material sector. With the economic boom, in India, Indian cement industry is a market of opportunities waiting to be tapped. However, at the same time cement industry is also experiencing a surge in demand. Production of Cement will always release carbon dioxide and change in the climate of the earth that is why despite its profitability, the cement industry faces many challenges regarding environmental concerns and sustainability issues. In order to minimize the impact of all of the above mentioned issues, it is clear that the cement and construction industry will have to adapt to remain sustainable and in this process a number of innovative and new practices have to be adopted. The objective of this paper is to analyze the gap between the existing reporting practices and level of disclosure desired by stakeholders of cement companies and to identify the areas under which Indian Cement companies can report accounting information in sustainable way. Furthermore it is also required to align the reporting is as per stakeholder's requirement. The accounting areas of reporting will be explored so that the requirements of reporting in terms of financial character can be filled in. This may lead to change in the practices under which the current financial statement provides financial information of sustainable activity as non-financial activity and its cost has been shown in the miscellaneous expenditure.

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## 1. Introduction

Environmental degradation is a burning issue that requires the attention of the whole world, specifically, when the effect of global warming has reached its height and has taken a shape of a monster that is going to gobble the earth very soon. However, the consequences of environmental disaster have resulted some alertness in peoples mind. Living in a world of limited resources business must concern itself with issues such as environmental damage, the treatment of workers, and product safety (Ho et al., 2007). In the past decade, issues related to climate change are gathering enormous public attention, while the governments nationally and internationally have lagged behind in

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developing a policy framework to address these issues at the face values. The role of India pertaining to the related issues is increasingly significant. The forthcoming challenges are global and thus, must be dealt with alacrity. The most acclaimed and widely agreeable way to address climate change is to adopt sustainable path of development, which can be gained by environmentally sustainable technologies; promoting renewal energy and encouraging the business community to demonstrate some sense towards environment accountability. A host of sustainable activities, so far, has been carried out at the different levels viz. government, NGOs', and international forum (like UNCED, 1992 at Rio de Janerio; UNFCCC and Kyoto Protocol etc.) but results are not fructifying to the desired extent "(Perry, 2000).

As all the stakeholders i.e., investors, insurers, bankers and others are increasingly aware of business ethics, environmental liabilities and risks. Thus, environmental reporting(ER) is at the heart of this agenda (Perry, 2000). GRI has added to the value of ER practices by remarking that sustainability reporting helps sharpen management ability to access the organization's contribution to natural, human, and social capital. Reporting helps highlight the societal and ecological contribution of the organization and "sustainability value proposition" of its products and services. ER is essential for corporation as it serve as an indicator for corporate consciousness through a moral disclosure on environmental issues (Suminai et al., 2007; Brown & Deegan, 1998). It also gives companies the opportunity to gain many benefits (KPMG Stockholm, 1997).

KPMG international survey ER (1999) shows that out of 13 major countries surveyed, ER has become part of the annual reporting process (KPMG, 1999). It may appear that greater attention to environment issues may led to an increase in cost and hence lower profit, but in real world environmental reporting practices have real advantages (Fortes, 2002). The disclosure of environmental information attracts attention as the information itself involves the living quality despite the fact that such reporting is voluntary in nature (Ahmad et al, 2003). In the current scenario stakeholders require that companies should provide its sustainable information in financial terms not in the form of non-financial Information (Lorenz et al., 2007; Sharma et al., 2003; Hira, 2012 ), Thus, as per the stakeholders requirement the current study explore the environmental, social and economic dimensions, in which the requirement of stakeholders can be met.

The main objectives of the current study are enlisted as below:

1. To identify the prominent sustainability factors on environmental, social and economic dimension from review of related literature,
2. To identify the reporting pattern of sustainability factors for select cement companies in India,
3. To analyze the gap between the existing reporting practices and level of disclosure desired by stakeholders of cement companies.

## **2. Indian cement industry**

Cement is the single most important and profitable product in the building material. With an 8% GDP growth rate, governmental infrastructure augmentation and population expansion, the Indian cement industry is a market of opportunities waiting to be tapped. India has become the second largest producer of Cement in the world after China. As per a survey sector, the consumption of cement in India will be increased by 600 million tonnes by the year 2020 (Shankar et al., 2011) and with the economic boom in India, the cement industry is experiencing a surge in demand. It is a well-established and widely believed in society that greenhouse gases are the major contributor behind the changes in the climate of the planet. It is equally well established from many scientific investigations that one of the prime culprits is carbon dioxide, and recent years have seen increasing legislation to

try and limit carbon dioxide emissions. Protesters often confront car makers, oil companies, power companies, shipping firms and the airline industry for their contribution to emissions, but one low-profile business which contributes a sizeable portion of 5-6 % to greenhouse gas emissions. This Industry has so far escaped attention of strategy makers (Adam, 2007; Rodrigues et al., 2010). Furthermore, cement production will always release carbon dioxide, because one cannot change the chemistry of the process.

Despite its popularity and profitability, the cement industry faces many challenges due to environmental concerns and sustainability issues. It is fundamentally an energy intensive operation and not at all environmentally friendly by nature. Furthermore, it consumes large amounts of non-renewable raw materials and generates substantial amounts of carbon dioxide and environmental particulate matter in the process.

In order to minimize the impact of all of the above mentioned issues, it is clear that the cement and construction industry will have to adapt to remain sustainable and in the process adopt a number of innovative and new practices. It should be fairly obvious that a holistic approach is being called for to ensure survival and prosperity for the cement industry in future. The cement companies over the period have been recognizing their sustainable practices but there is meager commitment to disclose the financial information related to these activities. Only a few concerns have separately recognized this amount in the Profit and Loss account as green belt development or horticulture expenses. Many few companies have reported “any significant accounting or reporting policies” or “extraordinary items” in the annual report. This shows that in India, quantitative /financial reporting on Environmental issues is still at the infancy stage. It has been seen from the annual reports that most polluting companies disclose more environmental information than the entities in the less polluting industries.

The common practice followed by the companies regarding environment disclosure is to offer descriptive information in the annual reports. This trend is increasing over time. Nevertheless, the companies that disclose financial information on environmental issues do not include do not provide any item-time wise break up of expenditure or its accounting treatment in these reports. However, some companies have given elaborate information through charts and tables on pollution levels or emission of pollutants. The majority of companies disclose only qualitative/descriptive information on the environment in the annual report. Though a few companies have started reporting quantitative /financial figures on the issue, the information provided is generally brief and lacks specific details. Moreover, there is no consistency in this kind of reporting (Andreson & Skjott-Larsen, 2009).

### **3. Literature review**

The issue of environmental disclosure has received the attention of researchers and academicians from many different points of view. One strand of literature deals with the nature and extent of environmental disclosure, while the other strand captures the impact of environmental information on the various users and the market. There is however, another section of researchers who have started to extend the empirical environmental disclosure literature by focusing on a number of firm specific characteristics, which are potential determinants of environmental reporting practices. The present study attempts to explore the area in which there is a requirement to provide sustainable accounting reporting. The current section will provide selective review of literature in context to only determinants of sustainable accounting reporting /disclosure factors. The reviews of literature in this section are presented through Table 1.

**Table 1(a)****Review of literature of sustainable factors: environmental factors**

Author	Factors	Country	Sample size and Industry	Results
Wiseman, 1982	Environmental disclosures made in corporate annual reports	US	26 firms in environmentally sensitive industries	Corporate Environmental Disclosures are incomplete and are not related to the firms' actual environmental performance.
Adhikari & Tondkar, 1992	Environmental factors	Global Stock Exchanges.	35 Stock Exchanges in different countries	Size of the equity market is found to be a significant explanatory variable.
Al-Tuwaijria et al., 2004	Environmental disclosure, environmental performance, economic performance	Florida, California	Alcoa company 1992-94	Environmental Performance is significantly associated with "good" economic performance, and also with more extensive quantifiable environmental disclosures of specific pollution measures and occurrences
Bowman & Haire, 1975	Profitability and corporate social responsibility disclosure	US	food processing business companies	Relationship between corporate profitability and corporate social responsibility disclosures in food processing business companies in US
Cowen et al., 1987	Corporate characteristics and specific types of social responsibility disclosures	US	US corporate annual reports	Found that corporate size and industry category correlates with certain types of disclosures while the existence of a corporate social responsibility committee appears to correlate with one particular type of disclosure
Hackston & Milne, 1996	Description of corporate social disclosure practices	New Zealand	New Zealand companies	Found that size disclosure relationship is much stronger for the high profile industry companies than for the low profile industry companies.
Adams et al., 1998	Corporate social reporting practices	European countries	a sample of 150 annual reports from six European countries	The findings of the study indicate that the amount and nature of social disclosure varied significantly across countries However, the overall result show that the firm size and industry membership are important determinants of the level of social disclosures in all the six European countries
Reverte (2009)	firm characteristics and environmental disclosure	Spanish listed firms	Spanish listed firms	The findings of the study revealed that firms with higher corporate social responsibility disclosure (CSR) rating has statistically significant larger size and a higher media exposure and belong to more environmentally sensitive industries, as compared to firms with lower CSR ratings
Maria et al., 2010	Extent of environmental disclosure practices	Portugal	109 Large firms	They found that the firm size and the fact that a company is listed on the stock market are positively related to the extent of environmental disclosure
Gamble et al., 1995	the quality of environmental disclosures	Fortune 500 companies	Annual reports of 234 companies, 12 industries, 1986 and 1991.	An instrument was designed to measure the content of environmental disclosures, and descriptive reporting codes were used, based on the manner in which the sample firms disclosed environmental information in Cement Companies.
Fekrat et al., 1996	the scope and accuracy of environmental disclosures made in corporate annual reports	US	Environmental disclosures of 168 companies in six industries from 18 countries	The result indicated significant variations in environmental disclosures, and no clear support for the voluntary disclosure hypothesis, as well as a lack of association between disclosures and environmental performances.
Walden & Schwartz, 1997	quantity and quality of information related with Environmental disclosures	1989 Exxon Valdez oil spill, off Alaska	53 companies in four industries for 1988-90	The authors interpret the results as showing that environmental disclosures in these industries were time or event specific, and made in the self-interest of the firm.
Lawrence & Khurana, 1997	the financial reporting and public policy issues	US municipal landfills	Municipalities	The extent of municipal landfill cleanup costs is revealing since the earliest site was dated at 1880, and a great many dated from the '930s. This aspect along suggests that in some cases the extent of environmental cleanup extends further in both extent (public sector as well as private sector responsibilities) and time period.

**Table 1(b)**

## Review of literature of sustainable factors; economic disclosure

Author	Factors	Country	Sample size and Industry	Results
Idowu, 2011	Accounting for Decision Makers in a Sustainable Environment	London	Not mentioned	Accounting under Sustainable Environment is an important factor for Decision Makers.
Fernandez-Feijoo et al., 2013	Transparency of the sustainability reports	Spain and USA	Not mentioned	Transparency is affected by ownership, along with size and global region
Perego & Kolk, 2012	shape the quality of sustainability assurance	Various countries	Fortune Global 250 firms, Period 10 years	Need to enhance theory-based, cross-disciplinary knowledge related to auditing and accountability processes for sustainability
Michelon & Parbonetti, 2012	board composition, leadership and structure on sustainability disclosure	US and European companies	100 companies of various industries	board composition effect sustainability disclosure,
Lülfes & Hahn, 2013	GRI, Corporate Governance	German companies	Various industries	It aims to improve the overall “balance” of sustainability true and fair view in sustainability disclosure required
Samaha et al., 2012	Corporate Governance	Egypt	active share trading firms in Egypt.	corporate governance code has not improved information symmetry as the overall level of Disclosure.
Steurer et al. 2005	Stakeholder relations, economic, social, and environmental stakeholder	Austrian companies	Various industries	Significance of societal guiding models
Mook, 2006	Economic, Social and Environmental Performance	Canada	Various industries	Social environmental values added statement
Mäler, 1999	Resource Accounting, Sustainable Development	Netherlands	Various industries	environmental resources were cheerfully ignored
Simnett et al., 2009	Assurance of financial performance	31 countries	2,113 companies	Companies operating in stakeholder-orientated countries are more likely to choose the sustainable practices as an assurer.
Cohen et al., 2012	economic performance	UK	2004 by a sample of 50 publicly traded firms across five industries	The findings of this paper revealed types of sustainable accounting disclosures would benefit the company

**Table 1(c)**  
Review of literature of sustainable factors; social factors

Author	Factors	Country	Sample size and Industry	Results
Leigh & Williams, 1998	Voluntary environment and social accounting disclosure practices	Asia pacific country	Listed companies' of seven countries in Asia-Pacific region	This study provides insight into the understanding of variables that explain variations in voluntary environmental and social accounting disclosures across national and regional boundaries.
Ali & Rizwan, 2013	Corporate Environment and social accounting disclosure practices in developing countries	Developing Countries	An Institutional theoretical perspective of CSED in developing countries	This study contributes to the literature on Corporate Social and Environmental Disclosure (CSED hereafter) in the developing countries by exploring various influential factors for CSED and grouping them into three categories: normative, interest, and company groups
Kuasirikun & Sherer, 2004	Corporate social accounting disclosure	Thailand	Thai companies	It concern is to gain insights into and to critically appraise various dimensions of these annual reports, so as to construct a critique of corporate social disclosure in Thailand.
Orij, 2007	Corporate Social Disclosures and Accounting Theories	500 companies of 22 Countries	13 scoring items, 186 CSR items	This study reviews the use of accounting theory in explaining corporate social disclosure Behaviour. The combination of social disclosures behaviour and voluntary accounting disclosures turns out to be a promising new field of Research.
Gray et al., 1995	categorisation of corporate social and environmental disclosure studies	U. K. Companies, 13 year data.	Decision Usefulness Studies, Economic Theory Studies, Social and political	Explain decision-usefulness studies by describing some studies and their results. The decision usefulness generally relates to the usefulness of accounting information, which is social accounting information in this case
Milne, 2010	Positive accounting theory, political costs And social disclosure analyses: a critical look	US	large US oil companies	The positive accounting based social disclosures literature fails to provide distinct arguments for self-interested managers wealth maximising. This paper also shows that the empirical evidence gathered to date in support of a positive accounting theory of social disclosures largely fails in its endeavour.
van der Laan, 2009	Corporate Social Disclosures: Voluntary Disclosures vs 'Solicited' Disclosures	Australia	Non-government organizations (NGOs)	Theoretical perspectives may provide greater insights into managerial motivation for disclosure if they are linked more explicitly to the nature of corporate social disclosure under examination: voluntary or solicited.
Guthrie & Parker, 1990	Corporate social disclosure types and practices	UK, US and Australia	UK, US and Australia	This study makes use of 15 content categories divided into four main classificatory groupings which aim to analyze the material contained in corporate annual reports in terms of theme, evidence/method, amount and location of disclosure
Lydenberg & Grace, 2008	Innovations in Social and Environmental Disclosure Outside the United States	Brazil, France, Malaysia, South Africa, Sweden	116 companies	This paper highlights various noteworthy developments worldwide on environmental and social reporting requirements by regulatory bodies and stock exchanges.

#### 4. Sustainability reporting factors

For the purpose of current research, initially a sample of 10 cement companies will be taken to identify the sustainable accounting practices and to check out the areas in which companies are reporting sustainable accounting. With this, an emphasis will also be given to know the area which will be utilized under the proposed research study. As the research progresses a large sample of cement companies will be taken to ensure a broad research analysis. The table 1 shows area covered under various factors of sustainability development.

**Table 1**  
Areas Covered under Various Factors relating to sustainability

Environmental Factors	Social Factors	Economic Factors
<ul style="list-style-type: none"> <li>• Energy</li> <li>• Water</li> <li>• Greenhouse Gases Emission</li> <li>• Hazardous and non-hazardous waste</li> <li>• Recycling</li> <li>• Agro based Livelihood</li> <li>• Mine development</li> <li>• Waste Heat Recovery</li> <li>• Concrete Recycling</li> <li>• Packaging</li> </ul>	<ul style="list-style-type: none"> <li>• Community investment</li> <li>• working condition</li> <li>• Human rights and fair trade</li> <li>• Public Policy</li> <li>• Diversity</li> <li>• Safety</li> <li>• Education</li> <li>• Health and family welfare</li> <li>• Anticorruption</li> <li>• Woman Empowerment</li> <li>• Self Help Groups SHG's</li> </ul>	<ul style="list-style-type: none"> <li>• Accountability/Transparency</li> <li>• Corporate Governance</li> <li>• Stakeholder Value</li> <li>• Economic performance</li> <li>• Fuels and Material</li> <li>• Training</li> <li>• Financial Performance</li> </ul>

On the basis of the 28 variables selected from the review of literature related with sustainable accounting reporting practices, 10 cement companies were selected as a representative sample among cement companies in India. The annual reports and sustainability report of various sample companies were analyzed to identify their sustainability reporting. For this purpose, the information received is divided into 3 parts i.e., non-disclosed (3), non-Financial disclosure (2) and financial disclosure (3). The best way of reporting this sustainable information is to report for all the above items financially (3). As per the objectives of this paper, first it is analyzed that whether there is a difference between the sample companies in terms of accounting reporting. For this purpose, one sample T test is being used for the data collected from the sample cement companies. The descriptive of the data are shown in Table 2.

**Table 2**

Descriptive Statistics of current sustainable reporting practices of Indian Cement Companies

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
ACC	28	2.00	1.00	3.00	2.2500	.14203	.75154
AMBUJA	28	2.00	1.00	3.00	2.7143	.10102	.53452
BINANI	28	2.00	1.00	3.00	2.0357	.14069	.74447
JK	28	2.00	1.00	3.00	2.2500	.13239	.70053
SHREE	28	2.00	1.00	3.00	2.8214	.08988	.47559
ULTRATECH	28	2.00	1.00	3.00	2.6071	.13934	.73733
RAIN	28	2.00	1.00	3.00	2.1071	.10714	.56695
PRISM	28	2.00	1.00	3.00	1.9643	.14980	.79266
MADRAS	28	2.00	1.00	3.00	2.1071	.18068	.95604
INDIA	28	2.00	1.00	3.00	2.0000	.14548	.76980
Valid N (listwise)	28						

Table 2 shows that there is a significant difference between the reporting patterns of sustainability, as the standard deviation of the reporting varies between 0.4 to 0.9. The results of t test were shown in Table 3.

**Table 3**

One-Sample T Test

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
ACC	-5.281	27	.000	-.75000	-1.0414	-.4586
AMBUJA	-2.828	27	.009	-.28571	-.4930	-.0784
BINANI	-6.854	27	.000	-.96429	-1.2530	-.6756
JK	-5.665	27	.000	-.75000	-1.0216	-.4784
SHREE	-1.987	27	.057	-.17857	-.3630	.0058
ULTRATECH	-2.819	27	.009	-.39286	-.6788	-.1070
RAIN	-8.333	27	.000	-.89286	-1.1127	-.6730
PRISM	-6.914	27	.000	-1.03571	-1.3431	-.7284
MADRAS	-4.942	27	.000	-.89286	-1.2636	-.5221
INDIA	-6.874	27	.000	-1.00000	-1.2985	-.7015

One sample Test of various cement companies shows that in only one company a similar pattern of reporting is adopted ( $t=-1.987$  and  $p=0.057>0.05$ ), while on rest of the companies the difference in reporting of sustainable accounting reporting is significant (as  $p=<0.05$ ). This is also shown by the mean difference, as the difference from the mean in case of SHREE Cement is minimum (-0.17857) while is more in other companies and highest difference were found in Prism Cement company (-1.03571).

To identify the differences between the reporting of sustainable variables by selected cement companies, t test was again being used. This test will be useful to identify that the item-wise reporting of selected variables were similar among the different companies or not. The data collected for the above t test was being used, which were divided into same 3 parts i.e., non-disclosed (1), non-

Financial disclosure (2) and financial disclosure (3). The best way of reporting this sustainable information is to report for all the above items financially (3). As per the objectives one sample T test is being used for the data collected from the sample cement companies. The descriptive of the data were shown in Table-4.

**Table 4**

**Descriptive Statistics of Item wise disclosure of sustainable reporting by Indian Cement Companies**

	N	Range	Minimum	Maximum	Mean	Std. Error	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Energy	10	1.00	2.00	3.00	2.8000	.13333	.42164	.178
Water	10	1.00	2.00	3.00	2.3000	.15275	.48305	.233
Greenhouse Gases Emission	10	2.00	1.00	3.00	2.1000	.23333	.73786	.544
Hazardous and non-hazardous waste	10	2.00	1.00	3.00	2.1000	.23333	.73786	.544
Recycling	10	2.00	1.00	3.00	1.9000	.27689	.87560	.767
Agro based Livelihood	10	2.00	1.00	3.00	1.7000	.30000	.94868	.900
Mine development	10	2.00	1.00	3.00	2.2000	.24944	.78881	.622
Waste Heat Recovery	10	2.00	1.00	3.00	1.8000	.24944	.78881	.622
Concrete Recycling	10	2.00	1.00	3.00	1.4000	.22111	.69921	.489
Packaging	10	2.00	1.00	3.00	2.4000	.22111	.69921	.489
Community investment	10	1.00	2.00	3.00	2.5000	.16667	.52705	.278
working condition	10	2.00	1.00	3.00	2.3000	.21344	.67495	.456
Human rights and fair trade	10	2.00	1.00	3.00	2.3000	.21344	.67495	.456
Public Policy	10	1.00	2.00	3.00	2.3000	.15275	.48305	.233
Diversity	10	2.00	1.00	3.00	2.3000	.21344	.67495	.456
Safety	10	1.00	2.00	3.00	2.4000	.16330	.51640	.267
Education	10	2.00	1.00	3.00	2.0000	.29814	.94281	.889
Health and family welfare	10	1.00	2.00	3.00	2.5000	.16667	.52705	.278
Anticorruption	10	2.00	1.00	3.00	2.0000	.25820	.81650	.667
Woman Empowerment	10	2.00	1.00	3.00	1.4000	.22111	.69921	.489
Self Help Groups SHG's	10	2.00	1.00	3.00	1.5000	.26874	.84984	.722
Accountability/Transparency	10	1.00	2.00	3.00	2.8000	.13333	.42164	.178
Corporate Governance	10	.00	3.00	3.00	3.0000	.00000	.00000	.000
Stakeholder Value	10	.00	3.00	3.00	3.0000	.00000	.00000	.000
Economic performance	10	.00	3.00	3.00	3.0000	.00000	.00000	.000
Fuels and Material	10	1.00	2.00	3.00	2.7000	.15275	.48305	.233
Training	10	2.00	1.00	3.00	2.3000	.21344	.67495	.456
Financial Performance	10	.00	3.00	3.00	3.0000	.00000	.00000	.000
Valid N (listwise)	10							

Table 4 shows that there is a significant difference between the item wise disclosures by the selected companies. Corporate Governance, Stakeholder Value, Economic performance and Financial Performance are among the variables in which no differences were observed as the standard deviation is 'zero', while in case of Agro based Livelihood the standard deviation is highest (0.94). T test were further calculated for calculating the mean difference, results of which were shown in Table 5.

**Table 5**

**One-Sample Test of Item wise disclosure of sustainable reporting by Indian Cement Companies**

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Energy	-1.500	9	.168	-.20000	-.5016	.1016
Water	-4.583	9	.001	-.70000	-1.0456	-.3544
Greenhouse Gases Emission	-3.857	9	.004	-.90000	-1.4278	-.3722
Hazardous and non-hazardous waste	-3.857	9	.004	-.90000	-1.4278	-.3722
Recycling	-3.973	9	.003	-1.10000	-1.7264	-.4736
Agro based Livelihood	-4.333	9	.002	-1.30000	-1.9786	-.6214
Mine development	-3.207	9	.011	-.80000	-1.3643	-.2357
Waste Heat Recovery	-4.811	9	.001	-1.20000	-1.7643	-.6357
Concrete Recycling	-7.236	9	.000	-1.60000	-2.1002	-1.0998
Packaging	-2.714	9	.024	-.60000	-1.1002	-.0998
Community investment	-3.000	9	.015	-.50000	-.8770	-.1230
working condition	-3.280	9	.010	-.70000	-1.1828	-.2172
Human rights and fair trade	-3.280	9	.010	-.70000	-1.1828	-.2172
Public Policy	-4.583	9	.001	-.70000	-1.0456	-.3544
Diversity	-3.280	9	.010	-.70000	-1.1828	-.2172
Safety	-3.674	9	.005	-.60000	-.9694	-.2306
Education	-3.354	9	.008	-1.00000	-1.6744	-.3256
Health and family welfare	-3.000	9	.015	-.50000	-.8770	-.1230
Anticorruption	-3.873	9	.004	-1.00000	-1.5841	-.4159
Woman Empowerment	-7.236	9	.000	-1.60000	-2.1002	-1.0998
Self Help Groups SHG's	-5.582	9	.000	-1.50000	-2.1079	-.8921
Accountability/Transparency	-1.500	9	.168	-.20000	-.5016	.1016
Fuels and Material	-1.964	9	.081	-.30000	-.6456	.0456
Training	-3.280	9	.010	-.70000	-1.1828	-.2172

One sample Test of various sustainability factors shows that in only three factors were having a similar pattern of reporting i.e., Energy ( $t=-1.5$ ,  $p=0.168 >0.05$ ), Accountability/Transparency ( $t=-1.500$ ,  $p=.168 >0.05$ ) and Fuels and Material ( $t=-1.964$  and  $p=0.081 >0.05$ ), while on rest of the variables the difference in reporting of sustainable accounting reporting factors were significant (as  $p < 0.05$ ).

## 5. Conclusion

Cement consumption is one of the major factors, which are behind the growth of the country, but manufacturing of cement is always creating carbon and other factors which damage the environment due to which these companies are called as environment hazardous companies. To convert these environmental hazardous companies sustainable, compulsory regulations are required in terms of disclosure under accounting and reporting related to sustainable issue in proper format i.e., in terms of financial character which effect and convert them into sustainable. Environmental Sustainable Accounting is helpful for these companies in this regards. The current study has unrevealed the fact that Sustainable Accounting reporting factors collected through reviews of literature which were examined under current study by taking sample of top 10 Indian cement companies results that except one company Shree Cement, uniform reporting pattern has not found. Not only that the reporting of the various sustainability variables were also found to be uncommon accept Energy efficiency, accountability, use of sustainable fuels and material. Hence, it can be finally concluded that unless there is a uniform accounting reporting system for sustainability practices, comparison between different companies will not be possible. Hence, it can be proposed that a framework of sustainable accounting reporting must be developed which provide a details of similar factors on which sustainable reporting should be done by in Indian Cement companies.

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