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Checking the Item wise Variation in the Environmental Reporting Practices of Indian Companies

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Abstract

Corporate environmental reporting is the outcome of corporate environmental responsibility. Corporate environmental reporting although very advanced in developed countries but recently adopted by Indian Companies. The research related to corporate environmental reporting very limited in developing countries. This paper attempts to explore the item wise variation in the environmental reporting practices of Indian Companies.

Keywords: Corporate environmental, corporate environmental responsibility, India

1. Introduction

The term environment can be defined as surroundings in which an organization operates, including, air, water, land and natural resources. Environmental threats have become matter of both national and international concern in the recent times. Increase in the pollution level has led to serious environmental hazards such as global warming, droughts, floods, extinction of species and spread of diseases. Corporate sector is one of the major agents of environmental pollution. Business firms while operating within environment have to consume natural resources and in majority of the cases they cannot avoid polluting environment. Fundamental principal of management is authority and responsibility must go hand in hand. Corporate sector while using the natural resources must remain accountable towards the nature. Corporate Environmental Responsibility (CER) manifests itself in a strategy that the managers of a company decide to follow sustainable development principles. The purpose of this paper is to check item wise difference in the environmental reporting practices of Indian companies. Items of the environmental reporting means the different headings or categories under which environmental information is reported by companies in annual report or sustainability report or on the website. Environmental reporting is not mandatory under any accounting standard so there are not standardised categories or items to be reported. But at the international level there are many environmental reporting indices such as Global reporting initiative guidelines, the Australian SAM Sustainability index and The Ethibel Sustainability Indices. The companies which are voluntarily reporting environmental information base their reporting as per the items specified in these indices. On the basis of above mentioned global indices and considering actual environmental reporting practices of Indian Companies an environmental Disclosure Index has been developed covering six major environmental categories which constitute thirty five different

environmental items. The environmental reporting practices of Indian Companies have been analysed on the basis of above mentioned index primarily developed for the purpose of this study. This paper empirically explores item wise variation in the environmental reporting practices of Indian Companies.

2. Review of Literature

Increasing evidences of awareness on corporate environmental impacts has witnessed the heightened interest in the practices of environmental reporting, particularly by large corporations worldwide. Recent research has suggested that majority of the international companies are publishing environmental reports (**Davis-Walling P, Davis and Batterman, 1997**) while 60 percent of the global hundred (excluding financial services companies) are producing global environmental report (**Kurt and Moretz, 2000**). Major studies in this section are reviewed as below:

Walling and Batterman (1997) have examined the environmental reporting practices of 50 largest U.S. corporations in the view of the guidelines issued by several organizations. There has been found significant differences in the content and depth of reports. The most complete reports have been published by the industries with controversial public image. Authors have concluded the study with recommendation to increase the quality and effectiveness of environmental reporting. **Choi (1998)** has made an investigation of voluntary environmental reporting practices of Korean companies. Study has used the source of semi annual reports. The Study has concluded that most of the disclosures have been qualitative and declarative statements. There is lack of quantitative and monetary information. **The report of KPMG (1999)** has explained the state of environmental reporting by the largest companies worldwide. An analysis of environmental reporting practices have been made for 250 companies in the world based upon fortune list covering 19 countries as well as survey of top 100 companies in eleven countries. Results have revealed that environmental reporting among top global companies is clearly different among various sectors. U.S.A., Japan and Germany have been leading in the world with regard to such reporting. **Moneva and Fernando (2000)** has analyzed the environmental reporting practices found in the annual reports published by the companies operating in Spain. The main objective of this thesis is to determine the evolution of these practices on the basis of stakeholder theory. Study has examined the annual report of seventy large companies operating in industries considered to be sensitive for the environment. It has been found that the practices of these companies have a fundamental narrative character, although there have been an increase in quantitative reporting. **Chandra (2001)** in his empirical study has analyzed the extent of environmental reporting practices of companies in India. It has been found that corporate reporting is gaining the momentum with the passage of time. There has been shifting inclination from qualitative to quantitative reporting. He has found that such reporting has been very limited in terms of both quantity and quality of data. Author has concluded that there is still a long way to go before an adequate level of such information reporting can be achieved. **Dwyer, O., Brendan (2001)** has assessed the current state of external environmental reporting by Irish listed Companies and commercial state sponsored bodies. Disclosures have been analyzed under six categories i.e. environmental policy, environmental products and processes, environmental audit, sustainability, financial and miscellaneous. The most popular categories of environmental disclosures have been found to be environmental policy and the information on the environmental benefits of products and processes. The main disclosing sectors have been the manufacturing processing, extraction and food & drink sector.

Copeland and Coppell (2002) have assessed the state of environmental, social and sustainability performance reporting in Hong Kong. It has been found that reporting is at an early stage. Study has concluded that public sector has been reporting on its environmental performance and private sector has also started reporting with varying degrees. **Ghosh and Mishra (2003)** have studied the environmental reporting practices of Indian companies and compared it with 25 major companies across six continents of the world, which have been global benchmark in environmental reporting. Study has also reviewed the environmental reporting practices of companies from major Asian economies and highlighted the importance of such reporting in corporate governance. Study has found that among Asian countries, Japan is reporting extensively on environmental issues followed by Korea, Hongkong and India. Authors have concluded that most of the Indian companies are providing the generic statements about their commitment to environment while global companies are making extensive disclosures in this regard. **Guo Peiyan (2005)** in his paper has provided an overview of legal framework of corporate environmental reporting in China and compiled the results of three surveys for such reporting practices. Results have revealed that around one third of listed companies are publishing some form of environmental information although reporting is increasing with passage of time. Author has concluded that corporate environmental reporting is still at an initial stage in china and there is need of further development in parallel with the improvement of corporate governance. **Shukla (2005)** has studied the environmental reporting practices of 92 companies of the private sector for the period 2003-04. He has found that only 37 percent of companies are making such disclosures to some extent with pharmaceuticals, fertilizers, petro products and engineering companies have been more inclined to make such disclosures. **Rohman and Badrul (2005)** have examined the environmental reporting practices in selected manufacturing companies. The study has identified the companies making the disclosures of environmental information, legal status of environmental reporting and position of environmental information in the annual reports. It has been found that this information has been disclosed in rudimentary form. With respect to poor environmental reporting the problems identified are lack of provision of environmental reporting in Companies Act, lack of separate accounting standard, lack of understanding and awareness and lack of motivation in this regard. **Yusoff and Glen (2005)** have examined the differences of environmental disclosure practices between Malaysian and Australian companies. Study has explored the international differences on environmental disclosure practices. The findings have indicated that the Australian companies' disclosures are more extensive as compared to Malaysian companies. Director's report and a separate section for environmental disclosures tend to be favourable location for Australian disclosures while review of operations for Malaysian companies. **Hossain, Alam & Jane, Andrew (2006)** have examined the corporate environmental reporting practices in Bangladesh. They have developed and utilized the disclosure index to measure the extent of disclosures made by companies in corporate annual reports. The Study has reported significant differences in the level of social and environmental disclosures. Disclosures have been made by a few companies, which are mostly qualitative in nature. It has also been found that significant number of lowest ranking companies have suffered losses during the period under study. **Stephen & Stephen (2006)** have examined the patterns in environmental disclosures made by large U.K. companies. The analysis has distinguished between the decision to make such disclosures and the quality of disclosures. The Study has found significant cross sector variation in the determinants of both the participation and quality decisions. **Neetu, Parkash (2006)** has observed the annual reports of randomly selected Indian companies belonging to various sectors. Reports are analyzed on the basis of six broad elements. It is found that only 38.82 percent of companies are making such disclosures, and companies

from oil and petroleum sector, steel and engineering sector are ranked highest in making such disclosures. **Reddy (2007)** has presented an overview of sustainability reporting in Asia and also the impetus for Indian companies to improve their environmental and social performance. The Study has just discussed the percentage of companies providing sustainability reports and major companies in each country in this regard. The Study has found that sustainability reporting in Asia with the exception of Japan is at nascent stage. The Study has concluded that there had been sporadic growth in sustainability reporting among Asian countries and in future it is expected to increase. **Radiahthman and Rashid Ameer (2009)** has proposed an alternate corporate responsibility reporting format based on earth, water and air sustainability and suggests the corporate accountability result card as an important medium for corporate responsibility reporting. The authors believe that this new format is a culmination of a combined review of the corporate social and environmental themes that have appeared in corporate annual reports and websites, and that have been analysed in various studies. This alternate discourse of corporate accountability would help to resolve today's business dilemma of why, what and where to disclose corporate responsibility.

3. Objectives of the study:

The major purpose of this study is to review current state of corporate environmental reporting practices of Indian Companies and to study the item wise variation in the reporting practices. The detailed objectives are listed below:

1. To study the total number of items disclosed by Indian companies under each environmental category.
2. To study the top ten and bottom ten environmental items disclosed by Indian Companies.
3. To rank the different environmental disclosure categories on the basis of level of disclosure.
4. To find out the maximum and minimum disclosure level under each category.
5. To check the item wise variation among key environmental categories.
6. To check the item wise variation among sub environmental variables.
- 7.

Hypothesis of the study:

H1: There is insignificant item wise variation among key environmental categories.

H2: There is insignificant item wise variation in the sub environmental reporting variables.

4. Research Methodology:

Population for the study: Universe of the study of Indian companies consists of Top 500 Companies in India as per Compendium of Top 500 companies, 2013.

Sample of Indian Companies

Non probability sampling method has been used for the selection of Indian companies. Multi stage sampling has been adopted. First of all Top 500 Companies as per 2013 compendium of Indian companies were selected. The website of Top 500 Companies were scanned to search for the companies actually reporting environmental Information. There were 133 such companies'. Out of these 133 companies the required data was available only for 99 companies.

So the actual analysis is based upon these sample 99 companies which were disclosing environmental information. List of the Sample Indian companies is provided in the annexure.

Data for the Study: The study is based upon Secondary data which has been collected from Web sites of each company ,Published annual reports , Director's report , Environmental or sustainability report (if any).

Index of disclosure

Corporate Environmental disclosure Index has been developed to study the extent and nature of environmental performance of companies. For the purpose of development of index, World level available indices such as Global Reporting Initiative Guidelines, The Australian SAM Sustainability Index and The Ethibel Sustainability Indices have been used. Along with these Indices in depth analysis has been made of Websites of companies, Research papers and annual and sustainability reports. On the basis of above environmental performance index was developed constituting six major heads and 35 environmental activities. The following table represent six major environmental categories and number of Sub Items under each heading:

Table 1
ENVIRONMENT DISCLOSURE INDEX
(Major Categories)

S.No.	Code	Key Categories	Number of Sub Items under each Category
1.	IA	Corporate commitment for Environment	10
2.	IB	Environment Management structure and System	5
3.	IC	Resource Usage and Conservation	7
4.	ID	Environmental Accounting and Auditing	6
5.	IE	Training and awareness for environment	5
6.	IF	Awards	2

*Scheme of analysis**Scoring of Items in Disclosure Index*

Disclosure Index can be assigned either weighted or unweighted scores. In this study Unweighted scoring has been used where 1 has been assigned for presence of disclosures and 0 has been assigned for absence of environmental disclosure.

Statistical tools applied

In this study simple statistical tool like percentage, frequency analysis, arithmetic mean and standard deviation has been used. Arithmetic mean and standard deviation has been applied to study Item wise variation in the environmental disclosures of companies. Standard deviation has been applied to find degree of variation in the item wise disclosures. The Total Disclosure (TD) has been calculated using the following formula:

$$TD = \sum_{i=1}^n di$$

Where,

d = 1 if the item is disclosed

= 0 if the item is not disclosed

n = number of items

Further in order to make a comparative analysis Disclosure Score has been calculated by using the following formulae:

Disclosure Score = $TD * (100/ 35)$

35 represent total number of items in the disclosure index.

Along with this to check the item wise variation among different disclosure categories Karl Pearsons coefficient of correlation has been applied and significance of correlation coefficient has been checked. To check the sub item wise variation in between different environmental variables Chi Square has been applied separately for all six groups of Environmental Index.

Analysis of the Data

Corporate environmental reporting practices have been analysed on the basis of scoring based upon corporate environmental disclosure index formulated for the purpose of the study. The analysis related to various objectives of the study is discussed below:

1. Total Number of Items Disclosed under each Environmental Category: Table 2 Shows total Number of Items disclosed under each environmental category. The Table presents the disclosures made by selected Indian companies in relation to all thirty five elements. Category wise analysis of elements reveals that under the corporate commitment for environment element like Corporate Commitment statements and separate environmental policy has disclosed mostly by Indian companies. Elements like environmental friendly products and support of environmental organization are moderately disclosed with total disclosure level of 30 percent and 24 percent for all companies. All other variables under this category are least disclosed by

companies. Under the second key area Environment Management Structure and system element ISO 14001 and other Certifications is widely disclosed and 48 percent Indian companies are disclosing this variable. Elements like Environment Management Structure and Plantation are moderately disclosed. Compliance with applicable legislations is least disclosed under this category. Under the third key area, Resource usage and conservation most of elements like Energy conservation, Water management, Raw material usage, Air Emission and waste management are highly disclosed by Indian companies. Element like use of recycled materials is moderately disclosed. Element ozone depleting substance disclosures is least disclosed under this category. Fourth category, environmental accounting and auditing elements are least disclosed by Indian companies. Under this category Internal environmental auditing and external environmental auditing elements are relatively moderately disclosed. All other elements are least disclosed in this category.

Under the fifth key area, Training and Awareness for environment element Community environmental education programmes is moderately disclosed. All other elements are least disclosed in this category .Under the sixth and last category of Awards environmental awards related information is disclosed by 34 percent of Indian companies while 24 percent Indian companies are disclosing Energy conservation award related information.

TABLE 2
Total Number of items disclosed under each environmental category

Codes	Category	Disclosed	Not Disclosed	Total
IA1	Corporate Commitment Statements	74	25	99
IA2	Separate Environmental Policy	46	53	99
IA3	Research and Development for Environment and Energy Conservation	16	83	99
IA4	Support of Environmental Organizations	24	75	99
IA5	Product Life Cycle Analysis	8	91	99
IA6	Environmental Friendly Products	30	69	99
IA7	Environmental Friendly Packaging	5	94	99
IA8	Environmental Concern in Supplier Procurement Policies	8	91	99
IA9	Response Card Providing Stakeholders Feedback on Environmental Efforts	1	98	99
IA10	Environmental Day/ Week Celebrations	8	91	99
IB1	Environment Management Structure/ System	34	65	99
IB2	Compliance With Applicable Legislations	29	70	99
IB3	ISO 14001& other Certifications	48	51	99
IB4	Plantation	34	65	99
IB5	Biodiversity Management	20	79	99
IC1	Energy Conservation	84	15	99
IC2	Air Emissions	45	54	99
IC3	Water Management	47	52	99
IC4	Waste Management	46	53	99

Codes	Category	Disclosed	Not Disclosed	Total
IC5	Reporting on Ozone Depleting Substances	9	90	99
IC6	Raw Material Usage	60	39	99
IC7	Use of Recycled Materials in Manufacturing	15	84	99
ID1	Past and Current Environmental Expenditures	8	91	99
ID2	Future Estimates of Environmental Expenditures	4	95	99
ID3	Environmental Performance Evaluation in Terms of Targets Set	8	91	99
ID4	Energy Audit	6	93	99
ID5	Internal Environmental Auditing	11	88	99
ID6	External Environmental Auditing	14	85	99
IE1	Employee Environmental Education Programme	14	85	99
IE2	Employees Recognition/ Awards	3	96	99
IE3	Community Involvement	19	80	99
IE4	Community Panels/ Information Centres	3	96	99
IE5	Emergency Response Teams	3	96	99
IF1	Environmental Awards	34	65	99
IF2	Energy Conservation Awards	24	75	99

2. Top ten and bottom ten environmental elements disclosed by Indian Companies

Overall analysis of item wise disclosures reveal that following are top ten and bottom ten elements disclosed by Indian companies:

Top Ten Environmental Items Disclosed	Bottom Ten Environmental Items Disclosed
Energy Conservation	Environmental Day/ Week Celebrations
Corporate Commitment Statements	Past and Current Environmental Expenditures
Raw Material Usage	Environmental Performance Evaluation in Terms of Targets Set
ISO 14001 & other Certifications	Energy Audit
Water Management	Environmental Friendly Packaging
Separate Environmental Policy	Future Estimates of Environmental Expenditures
Waste Management	Employees Recognition/ Awards
Air Emissions	Community Panels/ Information Centres
Environment Management Structure/ System	Emergency Response Teams
Plantation	Response Card Providing Stakeholders Feedback on Environmental Efforts

3. *Ranking of different environmental disclosure categories:* Table 3 shows ranking of different environmental disclosure categories on the basis of quantum of disclosure. It depicts that Resource usage and conservation category has maximum disclosures followed by corporate commitment for environment, Environment management structure and system and awards. Training and awareness for environment and Environment Accounting and auditing are least disclosed categories.

TABLE 3: ANALYSIS OF TOTAL NUMBER OF ITEMS DISCLOSED BY INDIAN COMPANIES PER HEAD

Codes	Items	Total Number of items Disclosed	Rank of category as per disclosure
IA	Corporate commitment for Environment	220	2
IB	Environment Management structure and System	165	3
IC	Resource Usage and Conservation	306	1
ID	Environmental Accounting and Auditing	51	5
IE	Training and awareness for environment	42	6
IF	Awards	58	4

4. Maximum and Minimum Disclosure Level Under each category:

Table 4 shows maximum and minimum disclosure level under each environmental category. It shows that the maximum number of environmental items disclosed by Indian companies is from Group IC (Resource Usage and Conservation). Maximum range and mean is also highest under this category. This is also due to the fact that this element information is mostly required by laws in India. The second highly disclosed category is 'IA' i.e. environmental commitment followed by Environmental management structure and system. The least disclosed categories are Environmental accounting and auditing and training and awareness for environment.

TABLE 4
A STATISTICAL ANALYSIS OF ITEM WISE DISCLOSURES

Codes	Items	Maximum	Minimum	Mean	S.D
IA	Corporate commitment for Environment	74	1	22	22.86
IB	Environment Management structure and System	48	20	33	10.15
IC	Resource Usage and Conservation	84	9	43.71	25.61
ID	Environmental Accounting and Auditing	14	4	8.5	3.56
IE	Training and awareness for environment	19	3	8.4	7.6
IF	Awards	34	24	29	7.07

5. Checking the significance of item wise difference in the environmental reporting practices of Indian Companies

This part of the paper checks whether the difference in the environmental disclosure level under different environmental disclosure characteristics is significant or insignificant. To check the disclosure variation item wise following hypothesis has been formulated:

H₀: $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6$ (Item wise variation among the key categories of environmental disclosure is insignificant)

H₁: $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5 \neq \mu_6$ (Item wise variation among the key categories of environmental disclosure is significant)

In order to check this hypothesis first of all Karl Pearson's coefficient of correlation has been calculated among different disclosure categories and significance of correlation coefficient has been checked. Following table represents correlation matrix and significance of correlation coefficient:

Table 7
Correlation among Different Environmental Disclosure Categories

Environmental Disclosure Categories		Corporate commitment for Environment	Environment Management structure and System	Resource Usage and Conservation	Environmental Accounting and Auditing	Training and awareness for environment	Awards
Corporate commitment for Environment	Pearson Correlation	1	.720**	.585**	.640**	.304**	.395**
	Sig. (2-tailed)		.000	.000	.000	.002	.000
Environment Management structure and System	Pearson Correlation	.720**	1	.639**	.544**	.281**	.468**
	Sig. (2-tailed)	.000		.000	.000	.005	.000
Resource Usage and Conservation	Pearson Correlation	.585**	.639**	1	.614**	.349**	.428**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
Environmental Accounting and Auditing	Pearson Correlation	.640**	.544**	.614**	1	.340**	.316**
	Sig. (2-tailed)	.000	.000	.000		.001	.001
Training and awareness for environment	Pearson Correlation	.304**	.281**	.349**	.340**	1	.214*
	Sig. (2-tailed)	.002	.005	.000	.001		.033
Awards	Pearson Correlation	.395**	.468**	.428**	.316**	.214*	1
	Sig. (2-tailed)	.000	.000	.000	.001	.033	
<p>** Correlation Coefficient is significant at the 0.01 level (2-tailed).</p> <p>*. Correlation is significant at the 0.05 level (2-tailed).</p>							

The above table shows that there is significant relationship among different categories with regard to environmental disclosures. It means relationship among different environmental disclosure categories is positive and significant. So it can be concluded that item wise difference among the key environmental disclosure categories is insignificant.

7. Checking the item wise variation in the sub environmental reporting variables.

To further analyse the significance of association among different disclosure categories Chi Square Test has been applied. This test has been applied to check the inter category association of all thirty five environmental variables falling under the six major heads. The following hypothesis has been tested:

H0: Item wise variation among the sub environmental disclosure categories is insignificant

H1: Item wise variation among the sub environmental disclosure categories is significant

Table 8

Association of Environmental Disclosure among Different Disclosure Categories							
Key Environmental Disclosure Categories		Corporate Commitment Statements		Total	Chi-square value	df	Sig.
		Non Disclosure	Disclosure				
Separate Environmental Policy	Non Disclosure	17	36	53	2.813	1	.093
	Disclosure	8	38	46			
Research and Development for Environment and Energy Conservation	Non Disclosure	25	58	83	6.447	1	.011*
	Disclosure	0	16	16			
Support of Environmental Organizations	Non Disclosure	25	50	75	10.703	1	.001*
	Disclosure	0	24	24			
Product Life Cycle Analysis	Non Disclosure	25	66	91	2.940	1	.086
	Disclosure	0	8	8			
Environmental Friendly Products	Non Disclosure	22	47	69	5.305	1	.021*
	Disclosure	3	27	30			
Environmental Friendly Packaging	Non Disclosure	25	69	94	1.779	1	.182
	Disclosure	0	5	5			
Environmental Concern in supplier Procurement policies	Non Disclosure	25	66	91	2.940	1	.088
	Disclosure	0	8	8			
Response card providing stakeholder on Environmental Efforts	Non Disclosure	25	73	98	.341	1	.559
	Disclosure	0	1	1			
Environmental Day/ week celebrations	Non Disclosure	23	68	91	.001	1	.986
	Disclosure	2	6	8			

*. Association significant at the 0.05 level (2-tailed).

Table 8 shows the association of environmental disclosures among different environmental disclosure categories for the key head corporate commitment for environment. This head has ten sub items. The maximum disclosure score is of first sub item corporate commitment for environment statements. So the association of all other sub items has been checked with sub items corporate commitment statements with the help of chi square test. The result of the test shows that corporate commitment statements have positive association with sub item Research and development, Support of Environmental Organizations and Environmental Friendly Products.

Table 9

Association of Environmental Disclosure among Different Disclosure Categories							
Key Environmental Disclosure Categories		ISO 14001 & Other Certifications			Chi-square value	df	Sig.
		Non Disclosure	Disclosure	Total			
Environmental Management System	Non Disclosure	39	26	65	5.455	1	.020*
	Disclosure	12	22	34			
Compliance with Applicable Legislations	Non Disclosure	40	30	70	3.030	1	.082
	Disclosure	11	18	29			
Plantation	Non Disclosure	39	26	65	5.455	1	.020*
	Disclosure	12	22	34			
Biodiversity Management	Non Disclosure	45	34	79	4.645	1	.031*
	Disclosure	6	14	20			

*. Association significant at the 0.05 level (2-tailed).

Table 9 shows the association of environmental disclosures among different environmental disclosure categories for the key head Environment Management Structure and System. This head has five sub items. The maximum disclosure score is of third sub item ISO 14001 & other Certifications. So the association of all other sub items has been checked with sub items ISO 14001 & other Certifications with the help of chi square test. The result of the test shows that ISO 14001 & other Certifications have positive association with sub item Environment Management System, Plantation and Biodiversity Management.

Table 10

Association of Environmental Disclosure among Different Disclosure Categories							
Key Environmental Disclosure Categories		Energy Conservation		Total	Chi-square value	df	Sig.
		Non Disclosure	Disclosure				
Air Emissions	Non Disclosure	9	45	54	.212	1	.645
	Disclosure	6	39	45			
Water Management	Non Disclosure	9	43	52	.396	1	.529
	Disclosure	6	41	47			
Waste Management	Non Disclosure	11	42	53	2.786	1	.095
	Disclosure	4	42	46			
Reporting on Ozone Depleting Substances	Non Disclosure	14	76	90	.126	1	.723
	Disclosure	1	8	9			
Raw Material Usage	Non Disclosure	10	35	45	3.276	2	.194
	Disclosure	5	48	53			
Use of Recycled Materials in Manufacturing	Non Disclosure	15	69	84	3.157	1	.076
	Disclosure	0	15	15			

Table 10 shows the association of environmental disclosures among different environmental disclosure categories for the key head Resource Usage and Conservation. This head has seven sub items. The maximum disclosure score is of first sub item Energy Conservation. So the association of all other sub items has been checked with sub item Energy Conservation with other sub heads with the help of chi square test. The result of the test shows that Energy Conservation has insignificant association with other sub items

Table 11

Association of Environmental Disclosure among Different Disclosure Categories							
Key Environmental Disclosure Categories		External Environmental Auditing			Chi-square value	df	Sig.
		Non Disclosure	Disclosure	Total			
Past and Current Environmental Expenditure	Non Disclosure	80	11	91	3.911	1	.048*
	Disclosure	5	3	8			
Future Estimate of Environmental Expenditures	Non Disclosure	83	12	95	4.414	1	.036*
	Disclosure	2	2	4			
Environmental Performance Evaluation in terms of Target Set	Non Disclosure	82	9	91	16.763	1	.000*
	Disclosure	3	5	8			
Energy Audit	Non Disclosure	80	13	93	.034	1	.855
	Disclosure	5	1	6			
Internal Environmental Auditing	Non Disclosure	82	6	88	34.983	1	.000*
	Disclosure	3	8	11			

*. Association significant at the 0.05 level (2-tailed).

Table 11 shows the association of environmental disclosures among different environmental disclosure categories for the key head Environment Accounting and Auditing. This head has six sub items. The maximum disclosure score is of sixth sub item External Environmental Auditing. So the association of all other sub items has been checked with sub item External Environmental Auditing with the help of chi square test. The result of the test shows that External Environmental Auditing has significant association sub item past and current Environmental Expenditure, Environmental Performance evaluation in terms of Target set and internal environmental Auditing.

Table 12

Association of Environmental Disclosure among Different Disclosure Categories							
Key Environmental Disclosure Categories		Community Involvement			Chi-square value	df	Sig.
		Non Disclosure	Disclosure	Total			
Employee Environmental Education Programme	Non Disclosure	75	10	85	21.380	1	.000*
	Disclosure	5	9	14			
Employee Recognition / Rewards	Non Disclosure	17	79	96	.735	1	.391
	Disclosure	3	0	3			
Community Panels	Non Disclosure	80	16	96	13.026	1	.000*
	Disclosure	0	3	3			
Emergency Response Teams	Non Disclosure	77	19	96	.735	1	.391
	Disclosure	3	0	3			

*. Association significant at the 0.05 level (2-tailed).

Table 12 shows the association of environmental disclosures among different environmental disclosure categories for the key head Training and awareness for environment. This head has five sub items. The maximum disclosure score is of third sub item community involvement. So the association of all other sub items has been checked with sub item community involvement with the help of chi square test. The result of the test shows that employee environmental education programmes, community panels has significant association with community involvement.

Table 13

Association of Environmental Disclosure among Different Disclosure Categories							
Key Environmental Disclosure Categories		Environmental Awards			Chi-square value	df	Sig.
		Non Disclosure	Disclosure	Total			
Energy Conservation Awards	Non Disclosure	61	14	75	33.719	1	.000*
	Disclosure	4	20	24			

Table 13 shows the association of environmental disclosures among different environmental disclosure categories for the key head Environmental Awards. This head has two sub items. The maximum disclosure score is of environmental awards. The result of the test shows that environmental awards have significant association with energy conservation awards.

5. Conclusion:

The paper has analysed item wise variation in the environmental reporting practices of top Indian Companies. The results revealed that items like Energy conservation, Corporate Commitment statements, Water Management, Waste Management, and Plantation etc. are mostly disclosed by Indian Companies. On the other hand items like environmental day celebration, Past and current environmental expenditures, emergency response teams are least disclosed by Indian Companies. Key head wise there are maximum disclosures under the head Resource usage and conservation followed by corporate commitment for environment and least disclosures are under the category Environmental Accounting and auditing and training and awareness for environment. Significant relationship has been found among different categories with regard to environmental disclosure.

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