

CORPORATE ENVIRONMENTAL REPORTING (CER) PRACTICES: EMPIRICAL EVIDENCE FROM SELECTED NON-FINANCIAL COMPANIES IN BANGLADESH

MD. ASADUZZAMAN¹, MD. KOWSAR HAMID² & SAMINA AFRIN³

^{1,3}Lecturer, School of Business Administration, East Delta University (EDU), Chittagong, Bangladesh

²Lecturer, Department of Accounting & Information Systems, University of Chittagong, Chittagong, Bangladesh

ABSTRACT

This article presents an empirical investigation into the corporate environmental reporting practices of a number of listed non financial companies from Bangladesh, based on both the primary and secondary data. The primary data were collected from the total number of 40 Chief Accountants and Senior Accountants using a structured questionnaire, and for the secondary data, Annual report of 44 companies has been selected. This study reveals that 61.36% of the listed companies made such disclosures. This article presents an extensive survey of the content, form, nature, and extent of corporate environmental reporting practices of the listed non-financial companies. Analysis over a wide range of industries reveals that companies in the pharmaceuticals and telecommunication sector secure the highest rank in terms of corporate environmental reporting; 88.90% of disclosures are generalized qualitative statements; 96.30% of CER is located in the director's report; and the mean amount of disclosures is less than one fourth of a page. The respondents have felt the strong need for CER in their Annual Reports, the respondents have also been aware of CER practices; the respondents have identified some major problems involved in CER and suggested some measures. From the above discussions, it is clear that CER practices in the selected companies have been far from satisfactory and hence poor in the real sense of the term. Therefore, in order to improve the CER practices in the selected companies, the concerned authority needs to implement the suggestions put forward by the respondents without any further delay.

KEYWORDS: Annual Reports, Content Analysis, Dhaka Stock Exchange (DSE), Environmental Reporting, Non-Financial Companies

INTRODUCTION

Bangladesh is facing the challenge of a very fast degrading environment. Some examples of this deterioration are Dhaka's Terrible air pollution (causing 15000 premature deaths and sickness every year), the clinically dead' river Buriganga and widespread arsenic pollution in the underground water. In the absence of pressure groups and appropriate regulatory measures, the degradation has gone to a level from which redress is necessary on an urgent basis before Bangladesh faces an environmental catastrophe (Ahmed, 2012). The concept of corporate environmental reporting (CER) is relatively new in Bangladesh. The last few decades of the 20th century have witnessed a growing awareness of not only the severity but also the diversity of environmental problems (Sahay, 2004). Further, the expansion of knowledge about ecosystems has resulted in concerns about the environmental effects of production processes, product performances and business practices (Sahay, 2004). Previous researchers that explore the presence of corporate environmental reporting are mostly focused on developed countries (Ho *et al.*, 1994; Choi, 1998; Tsang, 1998; Savage, 1994). Very few studies have been carried out in the context of developing countries (Bose, 2006; Rahman and Muttakin, 2005; Bala & Yusuf 2003).

As a result, an increasing number of companies are now making environmental disclosures. However, Developing countries like Bangladesh have become attractive destinations for global investors for the availability of cheap labor.

By disclosing information on environmental issues, companies can improve their brand image and obtain a competitive advantage. This issue of corporate environmental reporting (CER) is very vital from the view point of all the stockholders. Such CER can obviously enhance the green image of these companies. Due to these circumstances the authors have been interested to conduct a research on such vital issue of the organizations.

OBJECTIVE OF THE STUDY

The broad objectives of this study are to identify corporate environmental reporting (CER) practices in Bangladesh and to analyze the type and extent of such reporting in annual reports. However, the specific objectives of this study are:

- To identify the need and the awareness of the selected accountants as to the environmental reporting in the selected firms.
- To identify the problems involved in corporate environment reporting practices in the sample organization.
- To suggest some measure as to overcome the problems thereby improving environment reporting practices in the samples.

LITERATURE REVIEW

Corporate environmental reporting has been mainly a phenomenon of developed countries and consequently, most corporate environmental reporting studies were limited to the developed countries (Belal, 2000). A handful of studies concentrated on the newly industrialized countries such as Malaysia, Korea, Hong Kong, Singapore and African countries such as South Africa, Nigeria and Uganda (Belal, 2000). Since 1990s, Government of Bangladesh started paying attention to the environmental management of Bangladesh and in order to improve the environmental condition, the Bangladesh Environmental Protection Act, 1995 was passed. Presently, corporate environmental reporting is voluntary in Bangladesh. But under the Bangladesh Environmental Protection Act, 1995, companies may be asked to disclose environmental information as and when required (Belal, 2000).

By analyzing, 5 years' annual reports of 11 Petrobangla companies Bose (2006) conclude that in 1998-199 and 1999-2000, only 45.45% and in 2000-01, 63.63% and in 2001-02 and 2002-03, only 81.81% of Petrobangla companies disclosed environmental information in their annual reports. The nature of information disclosed was qualitative and descriptive either in the Chairman's Statement or Director's Report; In addition, companies provided only positive information and ignored negative information. Rahman and Muttakin (2005) examined 125 manufacturing companies listed on the Chittagong Stock Exchange (CSE) for the year 2003/2004 and found that only 5 companies (4 percent of 125 companies) disclosed environmental information in their annual reports. The information was descriptive in nature; no quantification thereof was made. Shil and Iqbal (2005) surveyed 121 manufacturing companies listed on the Dhaka Stock Exchange (DSE) and reported that only 13 companies (11 percent of 121 companies) disclosed qualitative environmental information in the Directors' Report in their annual reports. Bala and Yusuf (2003) analyzed the annual reports of 249 public limited companies for the year of 2001. They report that only 26 (10.4 percent of the total) companies disclosed environmental information in the Directors' Report or in the Chairman's Statement or elsewhere in their annual reports. The information disclosed was qualitative in nature and companies did not follow any uniform reporting format.

Hossain (2002) conducted a survey of annual reports of 150 non-financial companies (Listed on the Dhaka Stock Exchange) for the year of 1998-99. The study reveals that only 5 percent of the companies under study disclosed environmental information in the Directors' Report or in the Chairman's Report of their annual reports and not a single

company disseminated any quantitative information as to the environmental items. Imam (2000) analyzed annual reports of 34 companies listed with the stock exchanges of Bangladesh for the year of 1996-97 and found that only 22.5 percent of the sample companies provided environmental information in their annual reports. Belal (2000) covered 30% annual reports of Bangladesh companies relating to the 1996. The study showed that very limited environmental disclosures have been made in the Annual Reports of selected companies. Again, Belal (1997) surveyed annual reports of 30 companies of Bangladesh of which 28 were listed and 2 were unlisted. He found that 90 percent of the companies under study made some environmental disclosure.

METHODOLOGY AND DATA COLLECTION

The nature of this research is descriptive and both the primary and secondary data have been used. Taking 2012 as the target year, 44 companies were selected random sampling method out of 155 non-financial companies' listed in DSE. From the 44 selected sample companies 27 were found to disclose environmental issues. These 27 reporting companies were systematically analyzed using the technique of content analysis.

This technique has been used in other studies (Guthrie & Parker, 1990; Raman, 2006; Azim et al, 2009). The earlier works of Ernst and Ernst (1978), Guthrie and Parker (1990), and Gray et al. (1995) are used to categorize information into four dimensions: theme, form, amount, and location. For this study researcher also used four dimensional content analyses.

The present study has also considered primary data in order to assess the need and awareness of the respondents as to the environmental reporting practices. The primary data relating to the problems involved in CER and suggestion of some measures as to the overcome the problems were also collected. To this end, a total number of 40 Accountants were interviewed by direct method with the help of a structured questionnaire. A convenience sampling process has been used to collect data for this research. A quantitative analysis has been used to analyze the research data. All questions are closed-ended because all possible answers were given to the respondents.

EMPERICAL FINDINGS OF THE STUDY

In Table 1, overall 27 companies out of 44 non-financial companies disclose corporate environmental report (CER) in their annual report which is 61.36%. Industry-wise analyses revealed that Pharmaceuticals and chemicals and Telecommunications were ranked highest in terms of the percentage of companies making corporate environmental disclosures. Food and allied sector made no corporate environmental disclosures.

Table 1: CER by the Sample Companies in 2011-2012

Sector	Sample Companies	Companies Making CER Disclosure		Rank
		No. of Companies	%	
Cement	5	4	80.00	2
Ceramic	2	1	50.00	3
Engineering	8	4	50.00	3
Food and allied	4	0	0.00	5
Fuel and Power	5	4	80.00	2
Pharmaceuticals and chemicals	10	10	100.00	1
Tannery	3	1	33.33	4
Textiles	6	2	33.33	4
Telecommunications	1	1	100.00	1
Total	44	27	61.36	

Sources: Annual reports of sample companies

In Table 2, the top two themes of CER disclosure in annual reports are “Processes including technology employed and capital equipment” and “Litigation about environmental issues”. On the other hand, ‘Rehabilitation costs, operating costs, provisions, and contingent liabilities’ and “Awards” ranked 12 which are regarded as the worst performance of in the following list. Table 3, outlines the results of the degree of quantification. Content analysis revealed that 88.90% of disclosures were generalized qualitative statements without supporting evidence. 7.4% of companies used nonmonetary quantification.

On the other hand, monetary or nonmonetary quantification was 0 % disclosure, and 3.70 % gave only monetary disclosures. As per Table 4, the most popular place for locating CER disclosures was the director’s report (96.30%), 3.70 % used a separate section of the annual report. As per Table 5, 70.38% of companies devoted only one sentence to one fourth of a page for corporate environmental reporting (CER) disclosures where 18.52% companies allocate one fourth of a page to half page.

Table 2: Theme of Corporate Environmental Reporting Disclosures

S.L	Theme of CER	Frequency	%	Rank
1	Environmental policy	6	22.22	7
2	Environmental management system including ISO14000	2	7.40	10
3	Risk management including environmental impact assessment	3	11.11	9
4	Environmental audit	1	3.70	11
5	Goals and targets including performance against targets, and actions taken	4	14.81	8
6	Compliance with standards including benchmarks	1	3.70	11
7	Awards	0	0	12
8	Input including R&D, energy management, and non- renewable resources used	15	55.55	4
9	Processes including technology employed, and capital equipment	27	100	1
10	Product stewardship including life cycle analysis, and eco-labeling	7	25.93	6
11	Wastes consisting recycling, reduction, and reuse	16	59.26	3
12	Land rehabilitation and remediation	4	14.81	8
13	Air emissions	12	44.44	5
14	Water effluent	19	70.37	2
15	Spills	4	14.81	8
16	Noise and odors	7	25.93	6
17	Environmental spending and activity	1	3.70	11
18	Rehabilitation costs, operating costs, provisions, and contingent liabilities	0	0	12
19	Environmental cost accounting	1	3.70	11
20	Sustainable development reporting	2	7.40	10
21	Education and training	15	55.55	4
22	Litigation about environmental issues	27	100	1
Total (27*22)		174	29.29	

Sources: Annual reports of sample companies

Table 3: Forms of Corporate Environmental Reporting (CER) Disclosures

Quantification Categories	No. of Companies	%	Rank
Monetary and nonmonetary quantification	0	0	4
Monetary quantification	1	3.70	3
Nonmonetary quantification	2	7.4	2
Qualitative (declarative)	24	88.90	1
Total	27	100	

Sources: Annual reports of sample companies

Table 4: Locations of Corporate Environmental Reporting (CER) Disclosures

Locations	No. of Companies	%	Rank
Directors' report	26	96.30	1
Chairman's report	0	0.00	3
Separate section of annual report	1	3.70	2
In directors' and chairman's report	0	0.00	3
Separate report	0	0.00	3
Total	27	100	

Sources: Annual reports of sample companies

Table 5: Numbers of Pages Devoted to Corporate Environmental Reporting (CER) Disclosures

Pages Devoted	No. of Companies	%	Rank
One sentence – one fourth of a page	19	70.38	1
One fourth of a page – half page	5	18.52	2
Half page – three fourths of a page	2	7.40	3
Three fourths of a page – one page	1	3.70	4
More than 1 page	0	0	5
Total	27	100	

Sources: Annual reports of sample companies

Table 6: The Need/Awareness for Environmental Reporting Practices

Env. Issues for CER	Highly Essential/Aware	Essential/Aware	Neutral	Not Essential/Aware	Not at All Essential/Aware	WAS
Need	33 (82%)	7(18%)	0 (0%)	0 (0%)	0 (0%)	4.825
Awareness	27(67%)	7(17%)	3 (8%)	3(8%)	0 (0%)	4.45

Source: Field survey

It is revealed from the table 6 that the CER, 82% of the respondents were in favor of highly essential and the rest 18% were in favor of essential only. The WAS for need for ER has been computed at 4.825 in the 5 Point Likert type Scale. The table 6 signifies the strong need for CER in the Financial Statement and Reporting practices of the selected companies.

It is observed from the table 6 that 67% of the respondents were in favor of highly aware, 17% were aware only and the rest 8% were neutral; 8% were not aware of environmental reporting. Again WAS for need for awareness of CER has been computed at 4.45 in the 5 Point Likert type Scale. The table 6 signifies the strong awareness of the accountants for CER in the Financial Statement and Reporting practices of the selected companies.

Table 7: Specific Problem

A	Legal Issues	Respondents	%	Ranking
1	Insufficient provision regarding CER in the Companies Act-1994	40	100	1
2	Lack of provision in the National Environmental Management Action Plan regarding CER.	22	55	4
3	Lack of provision in the SEC Act regarding CER	26	65	3
4	Limited provision in Income Tax Ordinance -1984 regarding CER.	32	80	2
5	Inappropriate professional guidelines regarding CER.	18	45	5
B	Organizational Issues			
6	Lack of policies and management support regarding CER practices.	40	100	1
7	Scarcity of qualified and trained staff in Accounts Department	32	80	2
8	Disparity with business motivation with CER objectives	18	45	5
C	Individual Level Issues			
9	Dirt of knowledge and training of the Accounts Department staff on CER.	22	55	4
10	Meager of favorable attitude of the Accounts Department staff Regarding CER	22	55	4

Source: Field survey.

Problems Involved in CER Practices

One of the important objectives of the present study has been to identify the major problems involved in CER in the selected companies. To this end respondents were requested to put remarks to the major problems of CERP. It is revealed from the table 8 that the problems: 'Insufficient provision regarding CER in the Companies Act-1994' and 'Lack of policies and management support regarding CER practices' were identified as the top most problems of CERP which have been ranked 1. The next important problems are: 'Limited provision in Income Tax Ordinance -1984 regarding CER' and 'Scarcity of qualified and trained staff in Accounts Department' which were identified by 2. The next important problems are: 'Lack of provision in the SEC rules regarding CER' was 3 and 'Lack of provision in the National Environmental Management Action Plan regarding CER'; 'Dirt of knowledge and training of the Accounts Department staff on CER' and 'Meager of favorable attitude of the Accounts Department staff' have been ranked 4 . Finally, 'Disparity with business motivation with CER objectives' has been ranked 5. Therefore, it can be said that all the selected companies have been facing the above mentioned problems of CER practices in their respective organizations.

Suggestions to Overcome the Problems

It is revealed from the table 8 that the suggestion: 'Amendment of provision regarding CER in the Companies Act-1994' was ranked 1 and 'Continuous job training should be given to the Accounts Department staff regarding CER' was ranked 2. One the other hand, 'Attitude of the Accounts Department staff regarding CER should be made positive' has been ranked 10.

Table 8: Specific Suggestions

A	As to Overcome Legal Problems	Respondents	(%)	Ranking
1	Amendment of provision regarding CER in the Companies Act-1994.	40	100	1
2	Inclusion of provision in the National Environmental Management Action Plan regarding CER.	27	67.5	6
3	Making provision in the SEC Rules regarding CER	23	57.5	8
4	Making provision in Income Tax Ordinance -1984 regarding CER.	26	65	5
5	Existence of professional guidelines regarding CER.	28	70	4
B	As to Overcome Organizational Problems			
6	Provision should be made regarding CER in the organizational policies and management support.	29	72.5	3
7	Availability of qualified and trained staff in Accounts Department.	25	62.5	7
8	Removal of conflict of CER objectives with business motivation.	21	52.5	9
C	As to Overcome Individual Problems			
9	Continuous job training should be given to the Accounts Department staff regarding CER.	33	82.5	2
10	Attitude of the Accounts Department staff regarding CER should be made positive.	20	50	10

Source: Field survey

CONCLUSIONS

In the concluding note, the study reveals that the environmental disclosure of non-financial companies in Bangladesh is increasing but the quantity of disclosure is proportionately satisfactory. Most corporate environmental disclosures are qualitative in nature without any independent verification of the information, so the credibility of the information is questionable. 96.30% of CER is located in the director's report; and the mean amount of disclosures is less than one fourth of a page. Listed companies in Bangladesh emphasize the disclosure of 'Processes including technology employed and capital equipment', 'Litigation about environmental issues', 'Water effluent' and 'Wastes consisting recycling', reduction, and reuse'. Industry-wise analysis reveals that companies in Pharmaceuticals and chemicals,

Telecommunications, Cement, Fuel and Power sectors secure the to rank in terms of corporate environmental reporting. However, it is not clear why the food and allied, tannery and textile industries do not disclose environmental information at satisfactory level. This situation calls for further research to discover the causes of such variation.

The accountant of different companies believes that the need for environmental reporting practices in organization has become a vehement necessity. Moreover 67% of respondents believe that CER is essential for sustainable development of the developing countries like Bangladesh. The respondents' perception of shortfall of CER disclosure shows a lack of provision regarding CER in the Companies Act-1994 and a lack of policies and management support regarding CER practices. The respondents suggested that to overcome the problem in CER disclosure Government should include provision regarding CER in the Companies Act-1994. They further emphasize that continuous job training should be given to the Accounts Department staff regarding CER. Further study can be done in pharmaceuticals and telecommunication sectors to find out why there is such a high level of disclosure in these areas, what the motivation is behind such CER disclosures and why there is no/low CER disclosure in food and allied, tannery and textile industries.

REFERENCES

1. Ahmed, A. (2012). Environmental accounting & reporting practices: Significance and Issues: A case from Bangladeshi companies. *Global Journal of Management and Business Research*, 12 (14), 1-10.
2. Azim, M.I., Ahmed, S., & Islam, S. (2009). Corporate Social Responsibility Reporting: Illustrations from a Less-Developed Country. *Journal of the Asia-Pacific Centre for Environmental Accountability*, 15(1), 2 - 12.
3. Bala, S. K., & Yusuf, M. A. (2003). Corporate Environmental Reporting in Bangladesh: A Study of Listed Public Limited Companies. *Dhaka University Journal of Business Studies*, 24(1), 31-45.
4. Belal, A. R. (2000). Environmental reporting in developing countries: Empirical evidence from Bangladesh. *Eco-Management and Auditing*, 7 (3), 114–121.
5. Belal, A.R. (1997) Green Reporting Practices in Bangladesh. *The Bangladesh Accountant*, 5 (2), 107-115.
6. Bose, S. (2006). Environmental Accounting and Reporting in Fossil Fuel Sector: A study on Bangladesh Oil, Gas and Mineral Corporation (Petrobangla). *The Cost & Management*, 34 (2), 53-67.
7. Choi, J. S. (1998). An evaluation of the voluntary corporate environmental disclosures a Korean Evidence. *Social and Environmental Accounting*, 18 (1), 2-7.
8. Ernst and Ernst. (1978). *Social responsibility disclosure: Surveys of Fortune 500 annual reports*. Cleveland, OH: Author.
9. Government of Bangladesh. (1994, October 1). *The Companies Act.*: Government of Bangladesh, Ministry of Commerce.
10. Gray R.H., R. Kouhy & S. Lavers (1995). Corporate social and environmental ... A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing and Accountability Journal*, 8(2), 47-77.
11. Guthrie, J., & Parker, L. D. (1990). Corporate social disclosure practice: A comparative international analysis. *Advances in Public Interest Accounting*, 3, 159–175.
12. Ho, S. W. M., Ng, P.P.H. and Ng, A. Y. M. (1994). A study of environmental reporting in Hong. Kong. *The Hong Kong Accountant*, 5 (1), 62 -65.

13. Hossain, M. (2002). Corporate Environmental Disclosure in Developing Countries: Evidence from Bangladesh, *Bangladesh Environment*, 1 (12), 1077-1089.
14. Imam, S. (2000). Corporate social performance reporting in Bangladesh. *Managerial Auditing Journal*, 15(3), 133-141.
15. Rahman, A., & Muttakin, M. A. (2005). Corporate Environmental Reporting Practices in Bangladesh –A Study of Some Selected Companies. *The Cost & Management*, 27 (2), 10-14.
16. Raman, S. R. (2006). Corporate social reporting in India – A view from the top. *Global Business Review*, 7, 313-324.
17. Sahay, A. (2004). Environmental Reporting By Indian Corporations. *Corporate Social Responsibility and Environmental Management*, 11 (1), 12-22.
18. Savage, A. A. (1994). Corporate social disclosure practices in South Africa: a research note. *Social and Environmental Accounting*, 14(1), 2-4.
19. Shil, N. C., & Iqbal, M. (2005). Environmental Disclosure – A Bangladesh Perspective. *The Cost & Management*, 33 (4), 85-93
20. Sing, D. R., & Ahuja, J. M. (1983). Corporate social reporting in India. *International Journal of Accounting* 18(2), 151-169.
21. Tsang, E.W.K. (1998). A longitudinal study of corporate social reporting in Singapore: the case of the banking, food and beverages and hotel industries. *Accounting Auditing and Accountability Journal* 11(3), 624-635.