

Environmental Disclosure Practices in Annual Report of the Listed Textile Industries in Bangladesh

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Abstract

The present study is a critical examination of the environmental disclosure practices and extent of disclosure of listed textile industries in Bangladesh. The study reveals that more than two-third (69

Index terms— environmental disclosure, textile industries, annual report and Bangladesh.

1 Introduction

Environment is inseparable part of all aspects of human life, there is no scope to go overlooking environment. People, organization and other things of the world are directly or indirectly related with the environment. In the modern world with the advent of modern technology, environment of the world is highly affected and polluted. It is required to take proper initiatives to protect environment from such devastating pollution to make a congenial atmosphere in the world. Considering the situation of the last two decades, Environmental Accounting more specifically, Environmental Management Accounting has emerged. Environmental Accounting is considered as abroad term which is used in the different situations. Environmental Accounting mainly deal to provide better information to the stakeholders of the organization related to the actual environmental costs that have already been incurred (Shil & Iqbal, 2005).

According to Sahay (2004), it has been witnessed a growing consciousness of not only the acuteness but also the diversity of environmental. Moreover, the concern about environmental effects of production processes and other performances of business have been resulted by the expansion of knowledge about ecological systems (Sahay, 2004). In 1987, the Brundtland Commission published a report entitled 'Our Common Future' and in 1992, world leaders started raising their voice regarding the environment at the top of their agenda in the Earth Summit of Rio de Janeiro. After the holding of the Earth Summit in Rio de Janeiro in 1992, different organization started to increase their concern for the environmental effects of their operational activities and people started recognizing the need for sound environmental information for improved decision-making. For this reason, a good number of companies are now disclosing environmental issues (Belal, 2000). It has defined corporate environmental reporting as a process through which 'companies often disclose environmental information to their stakeholders to provide evidence that they are accountable for their activities and the resultant impact on the environment' (Lodhia, 2006).

In 1970s disclosure of various environmental related information has begun in the annual reports of different organizations and it continued in the 1990s (Kukobo et al, 2002). There was not found any specific evidence that any listed company in Dhaka Stock Exchange (DSE) has disclosed environmental information in their annual reports (Shil & Iqbal, 2005). Disclosure of environmental related information in the annual reports of textile companies of Bangladesh will be analyzed by this research. To find out scenario of environmental related information of textile sector of Bangladesh, a number of listed companies of textile have been selected for analysis. Textile sector is more related with environment that is textile companies are polluting environment in difference ways, hence it is required to identify their concern regarding environment and how much environmental related information is disclosing in their annual reports for creating consciousness among different stakeholders. The more environmental related information disclosed in annual reports of the companies supposed to create more concern regarding environmental aspects. Therefore, it is required to encourage them to disclose more

4 B) ENVIRONMENTAL REPORTING IN INTERNATIONAL PERSPECTIVE

environmental related information in their annual reports to make them aware to environment. This is an empirical investigation of the listed textile companies of Bangladesh so as to find out the companies concern regarding environmental aspects. It is tried to find out the how much textile companies are disclosing environmental information and the extent of its volume.

2 II.

3 Literature Review a) Environmental Reporting in Bangladesh

Bangladesh is one of the most environment vulnerable countries. The present environmental condition of Bangladesh is not at all equilibrium. Severe air, water and noise pollution are threatening human health, ecosystems and economic growth of Bangladesh. Air pollution caused due to increasing population, burning fossil fuels, industrialization and associated motorization. The water pollution caused due to industrialization. The underground water of Bangladesh has been polluted due to arsenic. The inhabitants of major cities of Bangladesh are also exposed to high level of noise pollution. Environmental degradation of Bangladesh is also caused due to poverty, over-population and lack of awareness on the subject. It is manifested by deforestation, destruction of wetlands, soil erosion and natural calamities (Alam G. M. J, 2009).

Bangladesh Government started taking different initiatives regarding environmental management of Bangladesh since the 1990s in order to develop the environmental condition of Bangladesh, 'The Bangladesh Environmental Protection Act, 1995' was passed. In present, corporate environmental reporting is not compulsory in Bangladesh. But under the Bangladesh Environmental Protection Act, 1995, companies may be asked to disclose environmental information as and when required (Belal, 2000). The only mandatory environmental disclosure requirement in Bangladesh is the disclosure of expenditures on energy use. Under Schedule-XI, Part-II of the Companies Act 1994 and under Schedule, Part-II of the Securities and Exchange Rules, 1987, the total amount spent on the use of energy is to be shown in notes to the financial statements under a separate head of expenditure (Dutta P, and Bose S., 2008).

4 b) Environmental Reporting in International Perspective

Environmental reporting practices has been an important phenomenon of developed countries and most environmental reporting studies were confined to the developed countries (Belal, 2000). Numerous studies have conducted on the newly industrialized countries such as Malaysia, Hong Kong, Korea and Singapore and African countries such as South Nigeria, Africa, and Uganda (Belal, 2000). Furthermore, most of the corporate environmental reporting has been primarily focused on conventional print media, especially corporate annual reports (Lodhia, 2005).

There was no study on environmental reporting practices in the corporate annual reports before 1970s, although there were copious studies on environmental accounting practices in different corporations. In the 1970s, the first environmental accounting were introduced by Norway which solely adopted by other countries (Shil & Iqbal, 2005). Many countries such as UK, Canada, Japan, and USA etc countries actively conducted study on environmental accounting information and various significant measures related to environmental protection have been taken (Zhang et al, 2009). From 1970 to 1975, Firms' environmental performances in four industries were analyzed by Shane and Spicer (1983). They identified that comparatively larger companies disclose more environmental related information in their annual reports. In the period of 1982 to 1991 (Neu et al, 1998) investigated the environmental related information disclosures in the annual reports of Canadian public companies operating in the mineral extraction, oil and gas, forestry, and chemical industries. They mainly focused their analyses on following: the influence of external pressures regarding environmental disclosures in annual reports; the association between actual performance and environmental disclosure; and the features of environmental disclosure vis-à-vis other 'social' disclosure.

In the early 1990's, a review of Environmental Accounting was conducted by World Bank providing a list of those countries had complied Environmental Accounting , the technique that had been used to construct Environmental Accounting, and the extent of coverage (Peskin and Lutz, 1990). During 1992-1994, Moneva and Liena (2000) found that the environmental information disclose in the annual reports published by companies is sensitive for the environment in Spain, and determine the evolution of these practices. Moneva and Liena (2000), on the basis of stakeholder theory, also found out that although there has been an increase in both quantitative and financial reporting, as well as in the number of companies that are reporting, the environmental reporting of these sample companies has a fundamentally narrative character. In period of 1992 and 1993, the environmental reporting practices made by 51 United States manufacturing firms were focused by Hughes et al (2001). They used content analysis to analyze the annual reports and found that disclosure performance varies between firms that they rated as good, mixed or poor. Companies can improve their business reporting by voluntarily disclosing more available proper and appropriate information in which the investment community and shareholders have a keen interest that reported by The American Financial and Accounting Standards Board (2001). They stated that these matters include identifying factors important to the financial success of the company, delineating management's plans and strategies for managing those factors in the past and future, and specifying measurements used by management to assess its effectiveness in implementing those plans and strategies for corporate governance and corporate social responsibility. While Dye (2001) argued that the theory of

voluntary disclosure in the annual reports is a special case of game theory with the following central premise: any entity contemplating making a disclosure will disclose information related to the environment that is favourable to the entity, and will not disclose information related to the environment unfavourable to the entity. Now a day's the use of Environmental Accounting is increasing significantly in the developed and developing countries and enormous companies are putting their concern regarding Environmental Accounting and they are disclosing more and more environmental information in their annual reports for creating consciousness regarding environment stated by Shil & Iqbal (2005).

III.

6 Objectives of the Study a) Main Objective

The main objective of the study is to evaluate the environmental disclosure practices of the listed textile companies in Bangladesh.

7 b) Specific Objectives

The specific objectives of the study are as follows: a. To know about environmental reporting practices of selected listed textile companies in Bangladesh. b. To know the volume of environmental information reported in annual reports of the selected listed textile companies in Bangladesh.

IV.

8 Methodology of the Study

This section contains the research methodology of the study. This section describes sample selection procedures, selection of period, sources of data, calculation of environmental reporting index and technique used for content analysis.

9 a) Sample Selection

The main objective of the study is to evaluate the environmental disclosure practices of the listed textile companies in Bangladesh. So, textile sector has been selected purposively as a sample from the available sectors which are listed in both Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) to conform to the objective of the study. There are 31 listed textile companies in both DSE and CSE, 29 out of 31 listed textile companies have been selected because unavailable information of 2 companies (Paramount Textile Ltd, and Saiham Cotton Mills Ltd). List of the 29 selected sample companies provided in Appendix-1:

10 b) Selection of period

The study was conducted in 2013. To make study a contemporary and up to date, the data should be of latest and current year. Therefore, 29 annual reports of the 29 sample companies were collected because the annual report of 2012 was the latest data in 2013.

11 c) Data Sources

The present study was conducted on the basis of secondary data. The secondary data were collected from annual reports of the selected sample companies, research papers, etc. Maximum annual reports were collected from the websites of the respective companies and remaining annual reports, which were not possible to collect from the websites, were collected from both DSE and CSE. Research papers were also collected from websites.

12 d) Content Analysis

A manual content analysis approach was followed in analyzing the annual reports to measure the volume of environmental information disclosure. A data set consisting of 50 items of environmental information (Appendix-2) was developed through literature review. These 50 items were classified into five classes as environmental policy items (5), environmental pollution items (20), environmental energy items (10), environmental financial items (7) and environmental other items (8). The data set of 50 items were collected from the study of Shirley, et al, (2009), Paudyal (1999)

13 e) Calculation of Reporting Index

For determining disclosure volume both weighted disclosure index and un-weighted disclosure index can be used. Researchers such as Wallace et al. (1994), Paudyal et al (1994), Ahmed and Nicholls (1994), Paudyal (1991 and 1992), Karim (1995), Paudyal (2000 and, and Ullah (2013) adopted a dichotomous procedure in which an item scores '1' if disclosed and '0' if not disclosed. Past experience shows that the use of weighted and un-weighted scores for the items disclosed in the corporate annual reports and calculation can make little or no difference to the findings (Coombs and Tayib, 1998). Thus, the study used this un-weighted disclosure index methodology. So, the un-weighted disclosure method measures the total disclosure (TD) score of a selected company (suggested

by Cooke, 1992) Where, $d = 1$ if item d_i is disclosed $0 =$ if the item is not disclosed $n =$ number of items However, the main theme of the un-weighted disclosure index is that all items of the disclosed information in the index are considered equally crucial to the average users.

14 f) Techniques used for data analysis

There techniques used for analyzing data include average, standard deviation, co-efficient of variation, and percentage etc. SPSS software version 19 was used to analyze the data.

15 Analysis of the Findings a) Patterns of Environmental Disclosure

Textile companies in Bangladesh disclosed environmental information in annual report in textual form and they did not use any picture, graph or chart in this regard. As the volume of disclosure is considered to be poor, therefore, the use of word and sentence is also limited. The table below shows that on an average 53.3 words and 2.59 sentences were used by the sample textile companies during the study period for environmental disclosure where standard deviation were 111.65 and 4.66 respectively. Maximum words used 398 and maximum sentences used 16 and minimum words and sentences were 0.

16 Source: Analyzed by the Authors

As maximum 20 sample companies out of 29 companies disclosed no information regarding environmental issues, the mean, standard deviation and minimum words and sentences differ if we consider the companies which disclosed environment related aspects in their annual report. Following table shows that mean disclosure increased significantly means that overall disclosure of the textile sector is poor but the textile companies which disclosed environmental information in their annual reports disclosed considerable information. show that maximum more than two-third (69%) of the sample companies used no words or sentences in disclosing environmental aspects in the annual report. On the other hand, 13.8% of the sample companies used less than 100 words and 1-5 sentences whereas 6.8% of the companies used 101-200 and 301-400 words and only 10.3% of the companies used 11-15 sentences in this regard. Minimum disclosure is 0 under all the class and maximum of the maximum disclosure is 5.00 found under environment-product & process and minimum of the maximum disclosure is 3.00 found in three classes.

17 Source : Analyzed by the Authors

But if we consider only the 9 sample textile companies that disclosed environmental information their annual report, the disclosure performance indicated comparatively better picture as stated in the following table no. 6. These textile companies on an average disclosed 8.33 items where maximum 3.11 items disclosed under environment-product & process and minimum 1.67 under environment-other items. The highest standard deviation 1.32 is observed in case of environment-other items and lowest standard deviation 0.88 in case of environment-policy items. Source: Analyzed by the Authors c) Total Environmental Disclosure Level Level of total environmental disclosure of the textile companies in Bangladesh shows a very poor level of disclosure as none of the sample companies disclosed more than 32% of the expected items. The following table and graph depict that the highest 69% of the sample firm disclosed no information in environmental areas and only 13.8% of the textile companies report only 1%-10% information and 20%-30% environmental issues were addressed by only 10.3% of the sample companies. Among the sample textile companies, Anlima yarn Deyng Ltd. secured rank 1 as it disclosed maximum 32% (16 items) in their annual report in 2012. Square Textile, Alltex Industries Ltd. and The Dacca Dyeing & Manufacturing Co. Ltd. achieved 2nd, 3rd and 4th rank respectively. Among the 9 textile companies that disclosed environmental information in their annual report, Apex Spinning & Knitting Mills Limited secured the last and 9th position as it report the lowest information and the remaining 20 companies disclosed no information regarding environmental issues.

18 Recommendations of the Study

The following points are recommended to the relevant authorities regarding disclosure of environmental issues of the textile industries in Bangladesh: a) Government and other regulatory authorities should take necessary steps in compelling and motivating all textile companies in Bangladesh in addressing environmental issues in their annual report. VIII.

19 Policy Implications

The major practical policy implications of this study may be stated as below:

a) The owners, directors, management and accountants of the textile companies in Bangladesh are expected to have directives and inspirations from this paper to disclose environmental aspects in annual report. b) The

researchers in environmental disclosure may conveniently exploit the matters addressed in this study for more comprehensive studies in environmental disclosure in most environmentally vulnerable country like Bangladesh.

c) The Government, regulatory bodies and organizations established for environmental protections are expected to realize the real position of pollutions and protections initiated by the textile companies and to formulate guidelines and laws regarding pollution, protection and disclosure of environmental issues.

IX.

20 Direction to Further Study

Present study addressed only environmental disclosure in the annual reports of the textile companies in Bangladesh. There are huge scopes of conducting more studies in the same direction in the following areas: Relationship between environmental disclosure and financial performance of the listed companies in Bangladesh; Importance of environmental disclosure in an environmentally vulnerable country like Bangladesh; Role of environmental disclosure in creating environmental awareness among the corporate stakeholders in Bangladesh; Environmental disclosure practices in Bangladesh: Prospects and Challenges and Green Accounting: An analysis from Islamic perspective.

21 X.

22 Limitations and Conclusion

Present study is a noble effort in addressing the environmental disclosure practices in textile industries in Bangladesh and observed that only a few textile companies disclosed a considerable amount of information regarding environmental aspects but maximum textile companies did not disclose any or disclosing very negligible information regarding environmental issues. In using and interpreting the results of the study, the limitations are also to be considered. The major limitations of the study include: the study used secondary data only; it is based on purposively listed textile companies in Bangladesh, and annual reports of one year were used for the study. The study expects that the textile companies would motivate in disclosing more environmental information and would conscious the people regarding environmental protection in environmentally most vulnerable countries like Bangladesh. Undertaking environmental impact studies to monitor the company's impact on the environment

23 Global



Figure 1:

1

	Word	Sentence
N	29	29
Mean	53.34	2.59
Std. Deviation	111.65	4.66
Minimum	0.00	0.00
Maximum	398.00	16.00

Figure 2: Table 1 :

2

Word	Sentence
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Figure 3: Table 2 :

3

Word	Sentence
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Figure 4: Table 3 :

5

	Envt_Policy	Envt_Product	Envt_Finance	Envt_Energy	Envt_Other	Total_Disclo
N	29			29	29	29
Mean	0.48			0.97	0.24	0.38
Std. Deviation	0.87			1.61	0.74	0.82
Minimum	.00			.00	.00	.00
Maximum	3.00			5.00	3.00	3.00

Figure 5: Table 5 :

N	Mean	Std. Deviation	Minimum	Maximum	Envt_Policy	Envt_Product	Envt_Finance	Envt_Energy	Envt_Other	Total_Disclo
9	9	9	9	9	1.56	3.11	0.78	1.22	1.67	8.33
0.88	1.27	1.20	1.09	1.32	4.69	.00	2.00	.00	.00	.00
3.00	3.00	4.00	16.00							

Source: Analyzed by the Authors

Table No.7: shows that among the sample companies only Apex Spinning & Knitting Mills Limited disclosed

Figure 6: Table 6 :

7

S/N	Company Name	Envt: Policy	Envt: Product	Envt: Finance	Envt: Energy	Envt: other	Total Disclosure
			- process				
1	Anlima yarn Deying Ltd.	40%	15%	28.57%	20%	37.50%	24%
2	Square Textile	40%	25%	42.86%	20%	50.00%	32%
3	Alltex Industries Ltd.	.00%	10%	0.00%	0%	12.50%	6%
4	The Dacca Dyeing & Manufacturing Co. Ltd.	40%	20%	0.00%	30%	25.00%	22%
5	Malek Spinning Mills Ltd.	20%	10%	0.00%	10%	25.00%	12%
6	Metro Spinning	20%	10%	0.00%	0.0%	25.00%	10%
7	Prime Textile	40%	15%	0.00%	0.0%	0.00%	10%
8	Saiham Textile	20%	10%	0.00%	10%	0.00%	8%
9	Apex Spinning & Knitting Mills Limited	60%	25%	28.57%	20%	12.50%	26%

Figure 7: Table 7 :

8

			Source: Developed by Authors
			d) Raking of the Textile Companies
Range of Total Disclosure	Frequency	Percent	Cumulative Percent
0%	20	69.0	69.0
1%-10%	4	13.8	82.8
10%-20%	1	3.4	86.2
20%-30%	3	10.3	96.5
30%-40%	1	3.4	100.0
Total	29	100.0	
Source : Analyzed by the Authors			

Figure 8: Table 8 :

9

Graph-1: Total Environmental Disclosure (in %)	
20%-30%, 10.3%	10%-20%, 3.4%
30%-40%, 3.4%	
1%-10%, 13.8%	0%, 69%

[Note: D]

Figure 9: Table 9 :

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- [Peskin and Lutz ()] *A survey of resource and environmental accounting in industrialized countries*, H Peskin , E Lutz . 1990. Washington, D.C. (Environment Working Paper)
- [Ullah ()] *Accounting and Reporting Practices of Islamic Banks in Bangladesh*, M H Ullah . 2013. university of Chittagong, Bangladesh. (Phil Thesis)
- [Alam (2009)] G M Alam . *International Conference on Mechanical Engineering*, (Dhaka, Bangladesh) 2009. 2009. ICME 2009) 26-28 December 2009.
- [Cooke ()] 'An Assessment of Voluntary Disclosure in the Annual Reports of Japanese Corporations'. T E Cooke . *The International Journal of Accounting* 1991. 26 p. .
- [Dye ()] 'an evaluation of 'essays on disclosure' and the disclosure literature in accounting'. R Dye . *Account. Econ* 2001. 32 p. .
- [Kokubu et al. ()] *An Examination of Corporate Disclosure of Environmental Report Publication and its Quality in Japanese Companies*, A Kokubu , Y Noda , T Onishi , A Shinabe , Nigashida . 2002. Japan. Kobe University
- [Hughes et al. ()] 'Corporate environmental disclosure: are they useful in determining environmental performance?'. Susan B Hughes , Anderson Allison , Golden Sarah . *Journal of Accounting and Public policy* 2001. 20 p. .
- [Dutta and Bose ()] 'Corporate Environmental Reporting on the Internet in Bangladesh: An Exploratory Study'. P Dutta , S Bose . *International Review of Business Research Papers* 2008. 4 (3) p. .
- [Akhtaruddin ()] 'Corporate Mandatory Disclosure Practices in Bangladesh'. M Akhtaruddin . *International Journal of Accounting* 2005. 40 p. .
- [Lodhia ()] 'Corporate perceptions of webbased environmental communication-An exploratory study into companies in the Australian minerals industry'. S Lodhia . *Journal of Accounting and Organizational Change* 2006. 2 (1) p. .
- [Hossain and Islam ()] 'corporate social and environmental disclosure in developing countries: evidence from Bangladesh'. M Hossain , Andrew Islam , J . *Proceedings of the Asian Pacific Conference on International Accounting Issues*, (the Asian Pacific Conference on International Accounting Issues) 2006. Hawaii. University of Wollongong, Research Online, Faculty of Commerce -Papers Faculty of Commerce
- [Coombs and Tayib ()] *developing a Disclosure Index of Local Authority Published Accounts: A Comparative Study of Local Authority Financial Reports between the UK and Malaysia, Paper presented at the Asian Pacific Interdisciplinary Research in Accounting Conference*, H M Coombs , M Tayib . 1998. Osaka, Japan.
- [Shil and Iqbal ()] *Environmental Disclosure-A Bangladesh Perspective*, N C Shil , M Iqbal . <http://mpraub.uni-muenchen.de/7707/MPRAPaperNo.7707> 2005.
- [Jose and Fernando ()] 'Environmental disclosures in the annual reports of large companies in Spain'. Moneva Jose , M , Liena Fernando . *European Accounting Review* 2000. 9 (1) p. .
- [Sahay ()] 'Environmental Reporting By Indian Corporations'. A Sahay . *Corporate Social Responsibility and Environmental Management* 2004. 11 p. .
- [Belal ()] 'Environmental Reporting in Developing Countries: Empirical Evidence from Bangladesh'. A R Belal . *Eco-Management and Auditing* 2000. 7 (3) p. .
- [Hossain ()] *Financial Reporting Practices of Listed Pharmaceuticals Companies in Bangladesh*, M S Hossain . 2010. Bangladesh. PhD Dissertation, National University
- [Hossain ()] Hossain . *Financial Management (in Bengali)*, 1995. Angel Publications: Dhaka.
- [Lodhia ()] 'Legitimacy Motives for World Wide Web (WWW) Environmental Reporting: An Exploratory Study into Present Practices in the Australian Minerals Industry'. S Lodhia . *Journal of Accounting and Finance* 2005. 4 p. 115.
- [Neu and Warsame ()] *Managing Public impression: environmental disclosure in annual reports, Accounting organization and society*, D Neu , H Warsame , PedwellK . 1998. 23 p. .
- [Shane and Spicer ()] 'Market response to environmental information produced outside the firm'. P B Shane , H H Spicer . *The Accounting Review* 1983. 58 (3) p. .
- [Karim ()] *Provision of Corporate Financial Information in Bangladesh*, A K M W Karim . 1995. UK. The University of Leeds (PhD Thesis)
- [Islam and Deegan ()] *Social Responsibility Disclosure Practices: Evidence from Bangladesh*, M A Islam , C Deegan . 2010. (Published by Certified Accountants Educational Trust for the Association of Chartered Certified Accountants)
- [Hossain ()] *The Disclosure of Information in the Annual Reports of Financial Companies in Developing Countries: the Case of Bangladesh*, M Hossain . 2001. UK. The University of Manchester (M .Phil thesis)

- 292 [Ahmed and Nicholls ()] ‘the Impact of Non-financial Company Characteristics on Mandatory Compliance in
 293 Developing Countries: The Case of Bangladesh, the’. K Ahmed , D Nicholls . *International Journal of*
 294 *Accounting* 1994. 29 (1) p. .
- 295 [Cooke ()] ‘The Impact of Size, Stock Market Listing and Industry Type on Disclosure in the Annual Reports
 296 of Japanese Listed Corporations’. T E Cooke . *Accounting and Business Research* 1992. 22 (87) p. .
- 297 [Zhang ()] ‘The Influence of Financial Factors on Environmental Information Disclosure in China Chemical
 298 Industry’. J Zhang . *International Journal of Global Environmental* 2009. 2009. 9 (3) p. .
- 299 [Wallace et al. ()] ‘The relationship between the comprehensiveness of mandatory disclosure in the corporate
 300 annual reports and firm characteristics in Spain’. R S O Wallace , K Naser , A Mora . *Accounting and*
 301 *Business Research* 1994. 25 (7) p. .