



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH  
Volume 12 Issue 14 Version 1.0 Year 2012  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# Environmental Accounting & Reporting Practices: Significance and Issues: A Case from Bangladeshi Companies

By Afzal Ahmad

*International Islamic University Chittagong, Dhaka Campus*

**Abstract** - The present study entitling “Environmental Accounting & Reporting Practices: Significance and Issues: A Case from Bangladeshi Companies” is based on both the primary and secondary data. The primary data were collected from the total number of 40 Chief Accountants and Senior Accountants, taking one from each company. The secondary data were collected from the Annual Reports-2010 of the companies. The main findings of the study are: i) the respondents have felt the strong need for EA (Environmental Accounting) and ER (Environmental Reporting) in their Annual Reports, ii) the respondents have also been aware for EA and ER practices, iii) as regards of nature of environmental disclosure, it is observed that only qualitative disclosures in positive sense have been provided in the Annual Reports either in Chairman or Managing Director statement, Directors’ reports and a separate section “Environmental Compliance”, iv) Environmental disclosures in the form of expenditure in energy, waste management, safety related measure and environment protection presented in their Annual Reports were not remarkable in the sample companies excepting expenditure in energy, v) the respondents have identified some major problems involved in EAR( Environmental Accounting and Reporting) practices as shown table -5 and also have suggested some measures as presented in table -6. From the above discussions, it is clear that EAR practices in the selected companies have been far from satisfactory and hence poor in real sense of the term. Therefore, in order to improve the EAR practices in the selected companies, the proper authority need to implement the suggestions put forward by the respondents without any further delay.

**Keywords** : *Environmental Accounting, Environmental Reporting, Qualitative Disclosures, Listed Companies, Annual Reports.*

**GJMBR-A Classification**: *FOR Code: 150102, 150106 JEL Code: M42, M41*



*Strictly as per the compliance and regulations of:*



# Environmental Accounting & Reporting Practices: Significance and Issues: A Case from Bangladeshi Companies

Afzal Ahmad

**Abstract** - The present study entitling "Environmental Accounting & Reporting Practices: Significance and Issues: A Case from Bangladeshi Companies" is based on both the primary and secondary data. The primary data were collected from the total number of 40 Chief Accountants and Senior Accountants, taking one from each company. The secondary data were collected from the Annual Reports-2010 of the companies. The main findings of the study are: i) the respondents have felt the strong need for EA (Environmental Accounting) and ER (Environmental Reporting) in their Annual Reports, ii) the respondents have also been aware for EA and ER practices, iii) as regards of nature of environmental disclosure, it is observed that only qualitative disclosures in positive sense have been provided in the Annual Reports either in Chairman or Managing Director statement, Directors' reports and a separate section "Environmental Compliance", iv) Environmental disclosures in the form of expenditure in energy, waste management, safety related measure and environment protection presented in their Annual Reports were not remarkable in the sample companies excepting expenditure in energy, v) the respondents have identified some major problems involved in EAR( Environmental Accounting and Reporting) practices as shown table -5 and also have suggested some measures as presented in table -6.

From the above discussions, it is clear that EAR practices in the selected companies have been far from satisfactory and hence poor in real sense of the term. Therefore, in order to improve the EAR practices in the selected companies, the proper authority need to implement the suggestions put forward by the respondents without any further delay.

**Keywords:** *Environmental Accounting, Environmental Reporting, Qualitative Disclosures, Listed Companies, Annual Reports.*

## I. STATEMENT OF THE PROBLEM

It is to be mentioned here that very few studies have been carried out in the context of developing countries. In Hong Kong, a study carried out by Ho et al. (1994) found that out of 182 companies only nine companies (representing only 4.9%) disclosed environmental information in their annual reports for the year 1991. A recent Korean study by Choi (1998) shows that out of 770 listed companies 64 companies (8.3%)

made environmental disclosures in their audited semiannual financial statements for the year 1997. The average amount of disclosure per company was 7.5 lines. Tsang (1998) made a longitudinal study of social and environmental reporting in Singapore over a ten year period from 1986 to 1995. He covered 33 listed companies and found that only 17 (52%) companies made social and environmental disclosures during the late 1980s and then a stable pattern since 1993. The reason for this may be attributed to the voluntary nature of the disclosures. Once the companies attained a certain level of disclosure, they were not motivated to go further.

In a study of 22 large multi-national corporations in Nigeria, Disu and Gray 1998 noted that less than a quarter of companies made disclosures in the environmental, equal opportunities and consumer areas. The data years for this study were 1994 and 1995. In another study of only four companies in Uganda, Kisenyi and Gray (1998) observed that none of them made any environmental disclosure. They conclude that social and environmental disclosure in Uganda is scarce, low grade and of little importance. In a study of 115 South African companies Savage 1994, reports that approximately 63% companies made environmental disclosures. The length of disclosure measured by the number of page was 0.5.

From the South Asian context, the study made by Singh and Ahuja (1983) is now a very outdated one. The data used for the study is now 25years old. Moreover, it considered public sector unit. It is felt that more recent studies are needed examining the EAR practices of both the public sector unit. It is felt that more recent studies are needed examining the EAR practices of both the public as well as private sector companies to know the current practices of South Asian companies.

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

*Author : Lecturer in Accounting, International Islamic University Chittagong, Dhaka Campus.  
E-mail : afzaliuc@gmail.com*

is necessary on an urgent basis before Bangladesh faces an environmental catastrophe.

It is said that Bangladesh has paid huge costs for its economic achievements. The time has come to think about the environmental damage done by the economic activities that have been carried out by the corporate entities in Bangladesh. Had there been appropriate regulatory measures, pressure groups and environmental awareness in the peoples, Occidental's Magurchhara disaster would have attracted serious consideration.

Since the 1990s the Government of Bangladesh (GoB) has started to pay attention to the environmental management of the country. In the wake of increased public protests at various places in Bangladesh, environmental degradation due to increased industrial activities, pressure on a global scale to check environmental pollution and pressures from the donor agencies to improve the environmental condition, the GoB passed the Bangladesh Environmental Protection Act, 1995 (the Act hereafter). Under this Act, companies may be asked to disclose environmental information as and when required. Moreover, the Act requires environmental clearance before the establishment of a new industry. Other strategic responses of the GoB to the environmental protection include formulation of the National Environment Policy and the National Environmental Management Action Plan (NEMAP). At present, the corporate laws e.g. Companies Act-1994, SEC Rules-1987, Income Tax Ordinance-1984 of Bangladesh do not require any significant environmental disclosures.

It will be observed in the literature review that very few studies as so far been made on EAR( Environmental Accounting and Reporting) practices. But this issue of EAR is very vital from the view point of all the users of the financial statement both internal and external. Such EAR can obviously uphold the green image of these companies. Due to these situations the author has been interested to conduct a research on such vital issue of the organizations.

## II. OBJECTIVES

The broad objective of the study is to critically evaluate the EAR practices in the selected companies. However, the specific objectives of this study are:

1. To identify the need for environmental accounting and reporting practices.
2. To assess the awareness of the selected accountants as to the environmental accounting and reporting in the selected firms.
3. To examine the position of environmental information in the Annual Reports of the sample organizations during the year-2010.
4. To identify the problems involved in environment

accounting and reporting practices in the sample organization.

5. To suggest some measure as to overcome the problems thereby improving environment accounting and reporting practices in the samples

## III. LITERATURE REVIEW

EMA or environmental management accounting grew up from corporate environmental accounting and branched off along the lines of management accounting. Environmental accounting, on the other hand, continued to grow along the lines of financial accounting and dealt with the institutionalizing environmental concerns (Christmann, 2000; Fussel & Georg, 2000) ,disclosure practices (Lena, Moneva, & Hernandez, 2007;Robkob & Ussahawanitchakit, 2009;Singh & Joshi, 2009), financial performance (Gadenne, Kennedy, & McKeiver, 2009; Moneva & Ortas, 2010; ), assurance procedures (Dixon, Mousa, & Woodhead, 2004; Özbirecikli, 2007), etc. One of the early literatures on the subject was the primer issued by USEPA (1995), wherein environmental accounting was used as a common term to advance the cause of environmental responsibility through accounting. We can see the usage of the term environmental cost accounting (ECA) for the purpose of identifying and allocating environmental costs (p.30, *ibid*). The distinction between both the branches (EMA and EA) to align them along the hereditary lines (management and financial accounting) became more pronounced after EMA was formalized through guidance documents released by UNDSO (2001). This document provided the ground for delinking environmental conscious efforts through accounting along the lines of cost accounting and its usage in decision making. It is well known that formal accounting standard to handle ecological sensitive information still remains at voluntary disclosure level in spite of valiant support from scholars and researchers to institutionalize standards of ecological accounting (Schaltegger, 1997; Dzikowski, 2007). By the time EMA guidance note was issued by IFAC (2005), the definition was crystallized and its separation from environmental (financial) accounting was complete (p.16, *ibid*).

Given the fact that statutory accounting and reporting is covered by the generally acceptable accounting principles and reporting norms of the respective countries and wherein these accounting standards have not yet attempted to internalize costs and expenses outside the boundary of financial transaction (Sarmiento, Durão, & Duarte, 2005), leaving these "contingent" at best, we could see management accounting as more accessible and harmless experimental area that could meet the demands of decision-making and in turn support its legacy to satisfy the internal needs of management. We have used

thesethree articles – primer on environmental accounting issued by USEPA (1995), workbook on EMA issued by UNDSO (2001), and guidance note issued on EMA by IFAC (2005) – as nodal references against which the developments of EMA methodologies are traced. While USEPA (1995) was first practical guide, produced regionally to help organizations with environmental sensitive accounting, UNDSO (2001) was first collaborated efforts under the aegis of UN Division of Sustainable Development for organizational implementation of EMA. We could see refer to the waste accounting methodology that was being proposed with reporting format. IFAC (2005) developed first collaborated document that was accepted as standard text on this subject by academicians and practitioner bodies. IFAC took care to run the draft through its member constitutes, before issuance of final guidance note. These documents provided collective wisdom of time on EMA and provided widely acceptable reference material. We could to see promulgation of methodologies like wastage accounting, material flow cost accounting (MFCA), environmental performance indicators (EPI), along with life cycle methods in these documents.

The study entitled “Environmental Reporting in Developing Countries: Empirical Evidence from Bangladesh” conducted by Belal (2000) is worth mentioning here. This study 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. Another study entitled as “Environmental Accounting and Reporting in Fossil Fuel Sector: A study on Bangladesh Oil, Gas and Mineral Corporation (Petrobangla) conducted by Bose (2006) is notable. This study indicated that Petrobangla takes many initiatives to provide environment – friendly energy in the economy. “Corporate Environmental Reporting Practices in Bangladesh – A Study of Some Selected Companies” made by “Rahman and Muttakin” (2005) disclose that EAR are done voluntarily by few number of listed companies in Bangladesh. The level of disclosure was also poor and limited to descriptive information without their quantification. The study has also identified some problems involved in EAR and also put forward some suggestions to remove the same. Another study entitled “Environmental Disclosure – A Bangladesh Perspective” conducted by Shil and Iqbal, (2005) is also remarkable. The study has reported that EAR practices have not been a widely concept in the related companies so far. The study has also pointed out that environmental disclosure still at initial stage in Bangladesh.

The above discussions show that there is a dearth of EAR literature in the context of developing countries in general and South Asian countries in particular. Against this background, it is argued that an

empirical study of EAR practices in Bangladesh would bridge the gap in the EAR literature. It is believed that this would make a significant contribution to the EAR literature from the South Asian context.

#### IV. RESEARCH METHODOLOGY

The study is essentially based on Bangladesh only. The reasons for selection of Bangladesh are firstly the authors’ access to the Bangladeshi annual reports; secondly it helps to shed light on EAR in the developing countries in general and South Asian countries in particular.

A total number of 40 corporate annual reports of 40 companies have been obtained by contacting the company sources. The data year is 2010. All the selected companies are the listed companies of DSE. The sample selection is influenced by the objectives of the study and is constrained by the availability of the reports. The sample design is shown in Table 1.

The research methods involved an initial scrutiny of recent annual reports to observe the incidence of EAR. The companies making environmental disclosures were rigorously examined and analyzed. For this purpose, all sections of the annual report were carefully examined to note the presence of any environmental disclosures. Given the time and resource constraints, the nature of the study tends to be mainly exploratory and descriptive.

Although there are a number of ways in which EAR may be made, like many other studies (see, for example, Adams et al., 1995; Gray et al., 1995a,b; Guthrie and Parker, 1990; Roberts, 1990; Singh and Ahuja, 1983), this study will only take account of the disclosures made in the annual reports because this is the most common and popular document produced by the companies regularly.

Table 1: Sample Design

Classification of Companies	Total
Listed Pharmaceuticals	05
Listed Tannery Industries	05
Listed Cement	05
Listed Ceramics	05
Listed Engineering	05
Listed Food & Beverage	05
Listed Textiles	05
Listed Fuel & Power	05
Total	40

The present study also has considered primary data in order to assess the awareness of the respondents as to the environmental accounting and reporting practices. The primary data relating to the problems involved in EAR and suggestion of some measures as to the overcome the problems were also collected. To this end, a total number of 40 Chief

Accountants, taking one (01) from each selected companies were interviewed by direct method with the help of a structured questionnaire. Both the primary and secondary data collected for study purposes were processed manually to present the findings of the study.

## V. FINDINGS AND ANALYSIS

### a) Need for EA and Reporting

The EAR can uphold the green image of companies. They can make their annual reports more informative by providing environmental information. This reporting is important for the following reasons (Belal, 1997).

1. It would aid the discharge of the organization's accountability and increase its environmental transparency.
2. It helps examining of the concept of environment and determining the company's relationship with the society in general and the environmental pressure groups in particular. This helps an organization in seeking to strategically manage a new and emerging issue with its stakeholders.
3. Companies may be successful in attracting funds from 'environmentalist' individuals and groups.
4. Companies producing environment-friendly products may take competitive marketing advantage.
5. Companies may show their commitments towards innovation and change by making environmental disclosures.
6. Environmental reporting may be used to combat potentially negative public options.

In order to make environmental awareness, World Environment Day is observed on June 5 every year. It is to be noted here that Government of Bangladesh (GOB) has already banned the manufacture of polythene bag to make pollution free environment, since 2003. Considering the above backdrop, the present study has been undertaken.

The major purpose of an environmental accounting system is its capability to assist in the understanding and management of potential tradeoffs between conventional economic development objectives and environmental goals as a tool of policy formulation. The theory of environmental management that has developed over the past three decades views the environment as a source of economic wealth whose value reflects the services provided to society by the environment. If these services were traded in conventional markets, they would presumably command a positive price, reflecting what society would be willing to pay for them, as well as their scarcity. With this theory in mind, and linking it with the conventional economic accounts, one approach is to define an additional economic sector, i.e., 'Nature', and to account for the non-marketed goods and services generated by this sector in a way that is similar to the treatment of

marketed goods and services generated by conventional sectors (Peskin, 2000).

Accountancy has traditionally measured financial resources, but must now find ways to monitor the use and value of environmental resources both in terms of the raw materials consumed, the damage inflicted upon the environment by commercial activity and the waste disposal service which the environment provides. The lack of accurate environmental measurement within the traditional accounting model means that environmental goods and services are often undervalued, which contributes to their misuse and explanation. With mounting natural calamities, the need for incorporating environmental costs (expenditure) in the financial statements of both multinational corporations and domestic enterprises and to introduce the concept of environmental accountability and have environmental costs appear in Board of Directors reports, financial statements and the auditors reports has been greatly felt. In the absence of comprehensive accounting standards in the area of environmental protection measures, it was not surprising that International Standards Accounting Review: 1989 found that both the quality and quantity of disclosure was quite limited. Generally, when information appeared, it was found in the board of directors' report rather than in the financial statements or the notes.

Environmental reporting is an important aspect of a company's information system for external communication. Many companies realize the value of voluntary reporting on company business environmental performance, in addition to financial results. Various stakeholders show an increasing interest in such information. An effective environmental report can help assure stakeholders of the company's strategy for continued financial success without affecting environment. Environmental accounting and hence reporting is thus a means of stakeholder communication.

In order to know the respondents' views regarding the need for EAR a total number of 40 Chief Accountants and Senior Accountants have been surveyed. Their responses are tabulated below:

Table 2

Environmental issues	opinions					WAS
	Highly essential	Essential	Neutral	Not essential	Not at all essential	
Need for EA	30 (75%)	5 (12.5%)	0	5 (12.5%)	0	4.5
Need for ER	32 (80%)	8 (20%)	0	0	0	4.8

Source: Field survey

It is revealed from the above table that 75% of the total respondents opined in favor of highly essential of environmental accounting; only 12.5% of the

respondents opined in favor of need only for environmental accounting and the remaining 12.5% were not in favor of the need of environmental accounting. As regards the ER, 80% of the respondents were in favor of highly essential and the rest 20% were in favor of essential only. The WAS for need for EA has been calculated on 4.5 in the 5 Point Likert Scale. Again WAS for need for ER has been computed at 4.8 in the 5 Point Likert Scale. All these figures signify the strong need for EA and ER in the Financial Statement and Reporting practices of the selected companies.

*b) Awareness of respondents regarding EA and ER:*

After assessing respondents' views regarding the need for EAR, it is essential to measure the awareness of the respondents regarding EA and ER. To know the awareness of the respondents as regards EA and ER in their organization is of utmost important to examine how much gap exists between the need and awareness. The selected respondents were requested to give their opinion as regards awareness. The following table shows their responses in 5 point Likert Scale:

*Table 3*

Environmental issues	opinions					WAS
	Highly Aware	Aware	Neutral	Not Aware	Not at all Aware	
Need for EA	24(60%)	12(30%)	0	4(10%)	0	4.4
Need for ER	30(75%)	6(15%)	0	4(10%)	0	4.5

*Source: Field survey*

It is observed from the above table that 60% of the total respondents opined in favor of highly aware of environmental accounting; only 30% of the respondents opined in favor of aware only for environmental accounting and the remaining 10% were not aware of environmental accounting. As regards ER, 75% of the respondents were in favor of highly aware, 15% were

*Table 4*

Sector Wise Selected Industries	Total No.	Expenditure in Energy	Waste Management	Tree Plantation	Environmental Protection	Future Strategy	Safety Related Measure
Pharmaceuticals	05 (100%)	5 (100%)	5 (100%)	5 (100%)	5 (100%)	5 (100%)	5 (100%)
Tannery	05 (100%)	5 (100%)	2 (40%)	02 (40%)	02 (40%)	1 (20%)	1 (20%)
Cement	05 (100%)	5 (100%)	3 (60%)	04 (80%)	02 (40%)	2 (40%)	2 (40%)
Ceramics	05 (100%)	5 (100%)	2 (40%)	03 (60%)	02 (40%)	1 (20%)	1 (20%)
Engineering	05 (100%)	5 (100%)	2 (40%)	03 (60%)	02 (40%)	1 (20%)	1 (20%)
Food & Beverage	05 (100%)	5 (100%)	2 (40%)	02 (40%)	02 (40%)	1 (20%)	1 (20%)
Textiles	05 (100%)	5 (100%)	2 (40%)	03 (60%)	02 (40%)	1 (20%)	1 (20%)
Fuel & Power	05 (100%)	5 (100%)	3 (60%)	04 (80%)	02 (40%)	2 (40%)	2 (40%)

*Source: Annual Reports-2010*

It is seen from the above table that disclosure of expenditure on energy uses is the only mandatory

aware only and the rest 10% were not aware of environmental reporting. The WAS for need for awareness of EA has been calculated on 4.40 in the 5 Point Likert Scale. Again WAS for need for awareness of ER has been computed at 4.55 in the 5 Point Likert Scale. All these figures signify the strong awareness of the accountants for EA and ER in the Financial Statement and Reporting practices of the selected companies.

*c) Position of environmental information in the Annual Reports:*

*i. Nature of Environmental Disclosures:*

On our careful observation of the Annual Reports of the selected companies for the financial year-2010 reveals the following nature of environmental disclosure in their respective Annual Reports:

1. Only qualitative disclosure of the environmental issues in the nature of descriptive information without their quantification.
2. Presenting positive environmental information ignoring negative information.
3. Some companies have showed environmental information either in the chairman/ Managing Directors' statement or in directors' report. Again some other companies have provided environmental information under the caption "Environmental Compliances" separately in their annual reports.
4. Participation of all national program of "Environmental Pollution Control" arranged by some of the selected companies.

*ii. Environmental Disclosure:*

One of the significant objectives of the study was to examine the position of environmental information in Annual Reports of the sample organizations. The previous section 5.3.1 has shown the nature of the environmental disclosures, whereas the present section 5.3.2 shows the picture of environmental disclosures.

environmental requirement in the annual report of the corporate firms in Bangladesh. Information on tree

plantation have been disclosed in Annual Reports of 100% Pharmaceuticals industries, 80% of Cement industries and Fuel & power industries, 60% of Ceramics and Engineering and 40% of Textiles sectors, Food & Beverage industries and Tannery industries.

As regards Environmental Protection, the table shows that 100% Pharmaceuticals industries and 40% Fuel & Power industries, Textiles industries, Cement industries Tannery industries, Food & Beverage industries, Ceramic industries and Engineering have mentioned about environmental protection in their Annual Reports.

About waste management 100% Pharmaceuticals, 60% of Cement and Fuel & Power industries; 40% Food & Beverage industries, Textiles

industries, Engineering, Ceramics and Tannery industries have disclosed information in their Annual Reports.

In the above table it is clearly seen that except 100% Pharmaceutical industries all the industries disclosed few information regarding Future Strategy and Safety Related Measure in their Annual Reports.

*d) Problems involved in EA & ER Practices:*

One of the important objectives of the present study has been to identify the major problems involved in EARP in the selected companies. To this end our respondents were requested to mention the major problems of EARP. The following table shows the specific problems identified by the respondents:

Table 5

Specific problems:		Frequency	Percentage (%)
<b>A:</b>	<b>Legal problems:</b>		
1.	Lack of provision regarding EAR in the Companies Act-1994.	40	100%
2.	Lack of provision in the National Environmental Management Action Plan regarding EAR.	30	75%
3.	Lack of provision in the SEC Act regarding EAR	24	60%
4.	Lack of provision in Income Tax Ordinance -1984 regarding EAR.	32	80%
5.	Lack of professional guidelines regarding EAR.	20	50%
<b>B</b>	<b>Organizational problems:</b>		
6.	Lack of policies and management support regarding EAR practices.	40	100%
7.	Shortage of qualified and trained staff in Accounts Department.	32	80%
8.	Conflict with business motivation with EAR objectives	16	40%
<b>C.</b>	<b>Individual Level problems:</b>		
9.	Lack of knowledge and training of the Accounts Department staff on EAR.	32	80%
10.	Lack of favorable attitude of the Accounts Department staff regarding EAR.	22	55%

It is revealed from the above table that the problems: "Lack of provision regarding EAR in the Companies Act-1994" and "Lack of policies and management support regarding EAR practices" were identified as the top most problems of EARP which have been identified by 100% respondents. The next important problems are: "Lack of provision in Income Tax Ordinance -1984 regarding EAR", "Shortage of qualified and trained staff in Accounts Department" and "Lack of knowledge and training of the Accounts Department staff on EAR" which were identified by 75% respondents. The next important problems are: "Lack of provision in the SEC rules regarding EAR" as identified 60% respondents; "Lack of favorable attitude of the Accounts Department staff regarding EAR." as

identified by 55% respondents; "Lack of professional guidelines regarding EAR" as identified by 50% respondents and last problem namely "Conflict with business motivation with EAR objectives" has been identified by 40% respondents. Therefore, it can be said that all the selected companies have been facing the above mentioned problems of EAR practices in their respective organizations.

*e) Suggestions to overcome the problems:*

The selected respondents were also requested to suggest some measures as to overcome the above mentioned problems of EAR practices in their organization. Their suggestions are tabulated below:

Table 6 : showing the suggestions of the respondents to overcome the problems:

Specific Suggestions:		Frequency	Percentage (%)
<b>A:</b>	<b>As to overcome Legal problems:</b>		
1.	Inclusion of provision regarding EAR in the Companies Act-1994.	40	100%
2.	Inclusion of provision in the National Environmental Management Action Plan regarding EAR.	40	100%
3.	Making provision in the SEC Rules regarding EAR	32	80%
4.	Making provision in Income Tax Ordinance -1984 regarding EAR.	32	80%
5.	Existence of professional guidelines regarding EAR.	30	75%
<b>B</b>	<b>As to overcome Organizational problems:</b>		
6.	Provision should be made regarding EAR in the organizational policies and management support.	32	80%
7.	Availability of qualified and trained staff in Accounts Department.	30	75%
8.	Removal of conflict of EAR objectives with business motivation.	20	50%
<b>C.</b>	<b>As to overcome individual problems:</b>		
9.	Continuous job training should be given to the Accounts Department staff regarding EAR.	40	100%
10.	Attitude of the Accounts Department staff regarding EAR should be made positive.	20	50%

The above table reveals that 100% of the respondents have put forward the following suggestions as to overcome the problems of EAR practices:

1.	Inclusion of provision regarding EAR in the Companies Act-1994.
2.	Inclusion of provision in the National Environmental Management Action Plan regarding EAR.
9.	Continuous job training should be given to the Accounts Department staff regarding EAR.

Again the following suggestions have been offered by 80% respondents

3.	Making provision in the SEC Act regarding EAR
4.	Making provision in Income Tax Ordinance -1984 regarding EAR.
6.	Provision should be made regarding EAR in the organizational policies and management support.

Again the following two suggestions are made by 75% respondents

5.	Existence of professional guidelines regarding EAR.
7.	Availability of qualified and trained staff in Accounts Department.

Lastly, the following suggestions have been given by 50% respondents

8.	Removal of conflict of EAR objectives with business motivations.
10.	Attitude of the Accounts Department staff regarding EAR should be made positive.

From the above discussions it can be said that all the above suggestions put forward by the respondents demand special attention of the appropriate authority in order to improve the EAR practices in the selected companies.

## VI. RECOMMENDATION & CONCLUSION

This study has examined the EAR practices in Bangladesh. It is encouraging to note that a developing country such as Bangladeshis making efforts to experiment with this new area of corporate reporting. In conclusion, it may be said that the efforts made by the Bangladeshi companies to make environmental

disclosures are noteworthy and deserve appreciation, but it is observed that in most cases the quantity and quality of disclosures were less satisfactory and poor. The following are the recommendations based on the findings of the study:

1. This study indicated that the Companies have already given much effort in the field of environmental protection. However, the current accounting system does not reflect such efforts for its stakeholders. So, Companies should take the initiative showing such activities in their accounts.
2. Environmental expenditures incurred by companies should be classified into capital expenditures [e.g.,



- Purchasing a new Recycling Machine, Tree plantation, Soil remediation] and operating expenditures [e.g., annual operating and maintenance cost of the Recycling Machine, annual operating and maintenance cost of the Tree plantation].
3. Regulatory bodies should develop a standard to guide the practices of Environmental Accounting and Reporting.
4. Research and studies should be encouraged in the field of Environmental Accounting and Reporting.
5. Companies should maintain the provision for environmental liability.
6. Companies should show data on environmental expenditure, environmental costs charged to income in the notes to the accounts in their annual reports.
7. Companies should show fines and penalties paid by the company, environmental liabilities of the company, environmental provisions, and environmental costs capitalized in the notes to the accounts in their annual reports.

## VII. DIRECTIONS TOWARDS FURTHER STUDY

Additional research may be directed into areas such as the following: (i) a comprehensive study is necessary, covering a number of years to draw valid conclusions about the underlying trends and techniques of EAR practices in Bangladesh; (ii) it is believed that a comparative study of EAR practices in South Asian countries (including Bangladesh, India, Pakistan and Sri Lanka) will shed more light on EAR in this region; (iii) a study identifying the users of EAR and examining their perceptions about EAR in Bangladesh may be considered worth-while and needs urgent attention of future researchers and (iv) the role, if any, played by the professional bodies in the development of EAR in Bangladesh should be elucidated.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. **Belal, A. R. (2000).** Environmental Reporting in Developing Countries: Empirical Evidence from Bangladesh. *Eco-Management and Auditing*.
2. Belal, A.R. (1997) Green Reporting Practices in Bangladesh, *The Bangladesh Accountant*, January-March
3. **Bose, S. (2006)** Environmental Accounting and Reporting in Fossil Fuel Sector: A study on Bangladesh Oil, Gas and Mineral Corporation (Petrobangla). *The Cost & Management*
4. Choi JS. 1998. An evaluation of the voluntary corporate environmental disclosures a Korean Evidence. *Social and Environmental Accounting* 18(1): 2-7.
5. **Christmann, P. (2000).** Effects of "Best Practices" of environmental management on cost advantage: The

- role of complementary assets. *The Academy of Management Journal*, 43(4), 663-680.
6. Deegan, C. & Rankin, M., (1999). The Environmental Reporting Expectation Gap: Australian Evidence. *British Accounting Review*, 31: 313-346.
7. Disu A, Gray RH. 1998. An exploration of social reporting and MNCs in Nigeria. *Social and Environmental Accounting* 18(2): 13-15.
8. **Dixon, R., Mousa, G. A., & Woodhead, A. D. (2004).** The necessary characteristics of environmental auditors: a review of the contribution of the financial auditing profession. *Accounting Forum*, 28(2), 119-138.
9. **Dzinkowski, R. (2007).** Saving the Environment. *Strategic Finance*, 89(1), 50-53
10. FASB, (1978). Statement of Financial Accounting Concepts No.1. 1978. Reporting by Business Enterprises. Financial Accounting Standards Board.
11. **Gadenne, D. L., Kennedy, J., & McKeiver, C. (2009).** An empirical study of environmental awareness and practices in SMEs. *Journal of Business Ethics*, 84, 45-63. doi:10.1007/s10551-008-9672-9
12. Gibson, R. & J. Guthrie, J., (1995). "Recent Environmental Disclosures in Annual Reports of Australian public and private sector Organizations. *Accounting Forum* 19(2/3): 111-41.
13. Gray, R., D.L.Owen & Adams (1996). *Accounting and Accountability*. Europe, Prentice Hall.
14. Ho SWM, Ng PPH, NG AYM. 1994. A study of environmental reporting in Hong Kong. *The Hong Kong Accountant* 5(1): 62-65.
15. IFAC, (1998), Financial and Management Accountants Committee Report, Environmental Management in Organisations, The Role of Management Accounting, Issued by the International Federation of Accountants.
16. Kisenyi V, Gray RH. 1998. Social disclosure in Uganda. *Social and Environmental Accounting* 18(2): 16-18.
17. **Llena, F., Moneva, J. M., & Hernandez, B. (2007).** Environmental disclosures and compulsory accounting standards: The case of Spanish annual reports. *Business Strategy and the Environment*, 16, 50-63. doi:10.1002/bse.466
18. **Moneva, J. M., & Ortas, E. (2010).** Corporate environmental and financial performance: a multivariate approach. *Industrial Management & Data Systems*, 110(2), 193-210. doi:10.1108/02635571011020304
19. Peskin H M (2000), "Environmental Accounting: The Theoretical Foundations of ENRAP", Conference on Resource Accounting and Policy, February 3-4, Manila, Philippines.
20. **Özbirecikli. M. (2007).** A Review on How CPAs Should Be Involved in Environmental Auditing and Reporting for the Core Aim of It. *Problems and Perspectives in Management*, 5(2), 113-126.

21. **Rahman and Muttakin, (2005)**, "Corporate Environmental Reporting Practices in Bangladesh – A Study of Some Selected Companies. The Cost & Management, July- August.
22. Rajapakse, B. (2001), Environmental Reporting Expectation Gap: Evidence from Private Sector Organisation in Sri Lanka, IWE Journal, 3, p.99-117.
23. **Robkob, P., & Ussahawanitchakit, P. (2009)**. Antecedents and consequences of voluntary disclosure of environmental accounting: An empirical study of food and beverage firms in Thailand. Review of Business Research, 9(3), 1-30.
24. **Sarmiento, M., Durão, D., & Duarte, M. (2005)**. Energy, 30(8), 1247-1257. doi:10.1016/j.energy.2004.02.006
25. Savage AA. 1994. Corporate social disclosure practices in South Africa: a research note. *Social and Environmental Accounting* 14(1): 2-4.
26. **Schaltegger, S. (1997)**. Information Costs, Quality of Information and Stakeholder Involvement – The Necessity of International Standards of Ecological Accounting. *Eco- Management and Audit*, 4, 87-97.
27. Shil and Iqbal, (2005). Environmental Disclosure – A Bangladesh Perspective. The Cost & Management, July- August.
28. Sing DR, Ahuja JM. 1983. Corporate social reporting in India. *International Journal of Accounting* 18(2): 151-169.
29. **28. Singh, G., & Joshi, M. (2009)**. Environment management and disclosure practices of Indian companies. *International Journal of Business Research*, 9(2), 116-128.
30. Tsang EWK. 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.