

PROSPECTS OF ENVIRONMENTAL ACCOUNTING PRACTICES OF SELECTED MANUFACTURING ENTERPRISES IN BANGLADESH

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Received: 08 Jan 2019

Accepted: 08 Feb 2019

Published: 28 Feb 2019

ABSTRACT

Environment is a burning issue in today's business world. Environmental accounting is a branch of accounting. A lot of studies have been made on this issue but no one claims its appropriate success. This paper is on Prospect of Environmental Accounting Practices of 16 selected enterprises in Bangladesh during the period 2018. The main objective of the study is to highlight the prospects of environmental accounting practices in selected manufacturing enterprises. The study is based on primary data. Primary data were collected through questionnaire. Questionnaires were prepared on the light of the study objectives of sample enterprises. Collected data were processed manually and with help of Computer software. As regards the prospect of environmental accounting, the study identifies a number of potential prospects like disclose monetary value, environment friendly product, competitive advantages in the market, integrated environmental consideration and non-monetary benefit to the stakeholder etc. The average mean score of Prospects is 2.54 in the scale of 3. The study also tries to forward some recommendations to overcome the challenges. There is also need of introduction of stock exchange listing requirements as to environmental information. These changes would definitely ensure introduction and use of EA in enterprises and provide an impetus for accountants to become involved in environmental accounting mechanisms within organizations. These are in line with recommendation made by Lodhia, 1999.

KEYWORDS: *Environment, Environmental Accounting, Prospect, Manufacturing Enterprises*

INTRODUCTION

Prelude

Accounting is called language of Business. Business requires resources to manufacture products or render services; they operate in an environment from which they draw their resources and workforces, and that environment and community may be affected by their activities. Hence, there is a need to evaluate the procedure followed by the selected enterprises as to how they quantify the environmental costs and benefits and report the same to the stakeholders. At the same time, the organization facing pressures from different stakeholders to cope with the environmental issues (Medley 1997). Some companies are now using environmental issues to strengthen their market position and access to new markets. Environment is no longer a cost of doing business rather it is a catalyst for constant innovation, new market opportunity and wealth creation (Wally and Whitehead, 1994) It has been also revealed that addressing environmental issues would cut costs, improve efficiency, company's image and reduce insurance premium (Holt, 1998). But, the fact is that the traditional accounting is not emphasizing the environmental costs. Moreover, most of the manufacturing organization is not aware of

the company's environment. Government of Bangladesh has taken necessary steps to keep sound environment of the organizations. According to "Bangladesh Environmental Protection Act 1995, Effluent Treatment Plant establishment for waste water management is a mandatory legal requirement. Under schedule-xi, part-ii of the Companies Act, 1994 and part-ii of Securities and Exchange Commission Rules 1987, it is mandatory to maintain separate records of the amount spent on the use of energy." However, no comprehensive study has yet been done on EA in the context of Bangladesh highlighting the practice of environmental accounting and its adequacy. Most of the studies are found related to environmental disclosures practice. Hence, there is a need to evaluate the procedure followed by the selected companies as to how they quantify the environmental costs and benefits and report the same to the stakeholders. Environmental accounting system in border perspective includes both national and business accounting, and deals with both financial and non-financial information (Schaltegger, 1997:87). EA information into business balance sheet to help an organization's decision making (Tusiad, 2005,:18). EA is a wide term which can be used in various contexts such as (IFAC 2005): The evaluation and disclosure of environment-related financial information for financial accounting and reporting purposes.

Environmental accounting is a tangible tool in the application of sustainable development. Environmental accounting called "green accounting" is also relevant to social responsibility of the enterprises. In the EA, the most important is identification of EA elements, measurement of costs thereof and reporting the same for evaluation. In fact an assessment of the relative importance of environment related costs and cost drivers of different processes and product lines can also help an organization to determine whether or not the cost allocation bases being used appropriate for those costs (Sulaiman & Ahmed, 2006).

LITERATURE REVIEW

The available literature review published at home and abroad related to prospects of environmental accounting practices. It will make an attempt to high light the findings of these literature in relevant aspects and will identify research gap that exist in this field. Environmental Accounting is increasingly seen by corporate managers and environmental advocate a like as a necessary complement to improved environmental decision making within the private sector. Boyed (1998), Moreover, Lodhia (1999) in his paper examined the aspects of voluntary Environmental Accounting. The results indicate the Environmental Accounting in the Fiji Sugar corporations focuses on legitimizing the environmentally sensitive nature of the company's operations rather than being an attempt to extend stewardship to the stakeholders that may be affected by the company's operations. However, Kokubu and Nashioka (2001) in their paper have reviewed some governmental initiatives, including the Ministry of Japan (MOE's) projects and previous studies, to examine and point out the environmental accounting practices of companies listed on the First Section of the Tokyo Stock Exchange. The paper pointed out that Environmental accounting in Japanese companies revealed to be complicated features, since standardization was progressing in the midst of much diversity. It is noted that, James & Ashamu (2012) this paper mainly stressed on Environmental Accounting Information. It states that Conventional management accounting practices do not provide adequate information for Environmental management purposes in a world. The study shows that Nigeria National Petroleum Corporation managers are aware of environmental Accounting practices. It is observed that, Gholami et al. (2013) the authors are of the view that Environmental Accounting can help companies large & small, industrial, manufacturing and service sectors and in large or small, based on a systematic basis according to requirement in the development of methods based on activities such as water costs, activity based management, total quality management and process reengineering to be used. It is also observed, Al-Nimer (2015) in his study aims to identify the extent of awareness

on environmental responsibilities in the Jordanian pharmaceutical industries, identifying how pharmaceutical industries in Jordan apply the Environmental Accounting policy in their factories. The findings revealed that Jordanian pharmaceutical industries utilize high technology in accounting departments, 60% of them utilized environmental information system in the company. Shill and Iqbal (2005) in their study states that Environmental Accounting emerges as a tool to prove this commitment, where costs from business communities' point of view and effects from society's point of view are balanced. In this paper, authors have first tried to define Environmental Accounting with its scope and then went on to review of the practices followed by these companies from the general-purposes financial statements. In fact, Bose (2006) asserted in an article that Environmental Accounting and Reporting is the emerging concept in Bangladesh, although many countries in the world, either developed or developing, are practicing Environmental Accounting and Reporting in their fossil fuel sector.

Dutta and Bose (2008) in their research paper, investigate the utilization of corporate websites for communicating corporate environmental information by the listed companies of Bangladesh. The study shows that web-based corporate environmental reporting in Bangladesh is still in its infancy as the level of environmental disclosures on corporate websites is very low. This paper can be considered as addition to new knowledge in EA. Importantly, Islam & Das (2013) in the context of EA the authors evaluated the prospects of Green banking in Bangladesh. The concept of green banking is relatively new in Bangladesh and yet to get momentum, but in the developing countries it is passing through a mature stage. Similarly, Hossain (2016) in a study about disclosure of Environmental information found that only 9.97 Pharmaceuticals and Chemicals Companies disclose more information in the annual report. Pharmaceuticals and Chemicals Companies of Bangladesh are using more environmental information in day to day. Finally, Masud et al. (2016) the authors made study on EA in Banking sector in Bangladesh. It was an attempt to understand the practical situation of the concept and practices of the Environmental Accounting by Bangladeshi banking companies. Therefore, based on the above literature review we find that most of the studies were made on the disclosure practices of environmental information in the annual reports. There is a very scanty of research about the future Prospects in the environmental accounting practices in developing economy like Bangladesh.

Objectives of the Study

The main objective of the study is to evaluate prospect of environmental accounting practices in selected manufacturing enterprises in Bangladesh. To achieve the main objective, the specific objectives are as follows:

- To highlight the prospects of environmental accounting practices in selected manufacturing enterprises;
- To provide policy recommendations for environmental accounting in manufacturing enterprises of Bangladesh.

RESEARCH METHODOLOGY

This study has selected polluted eight manufacturing sectors and sixteen enterprises for smooth conduct of the work. The present study was conducted on the basis of primary data. The primary data were collected through questionnaire, observation and directly face to face conversation with executives of the enterprises. Mainly, formal interview has been conducted to gather primary data and opinions of respondents as to perceptions relevant to different aspects of EA. Moreover, the author visited each sample enterprises more than twice for data collection and observation.

The questionnaire had two facets viz., open ended question relevant to general information, and seven point Likert bi-polar scales relevant to perceptions of the respondents towards various aspects of EA. Five respondents were selected from each sample enterprise comprising top level managers, accountants and concerned high level officers who are involved in decision making. Respondents were supposed to be well informed about the companies present status of environment related activities as well as future policy. Here, it is to be mentioned that, Accountant was a common respondent of each sample enterprises. However, not all the 80 respondents did respond in proper way. As such, in final evaluation, actual respondents came to 61. Pharmaceuticals & chemicals is 14.75% (9), Textiles & Clothing 13.11%(8), Papers & Printing 11.48%,(7) Leather & Footwear 13.11% (8), Steel Industry 13.11%(8), Foods Allied (7) 11.48%, Energy 13.11%(8), Cement 9.84%(6).Data were summarized, coded and tabulated. Frequency distribution, mean, and standard deviation were used to analyse the data. Data was coded and analyses using SPSS. Summary of the information in relevant case has been shown in tables where necessary through ranking.

Scope of the Study

Environmental Accounting is a new branch as well as a concept of accounting. It embraces corporate level, national and international level, qualitative and quantitative about environment. Further, “a broad view of environmental accounting and the environmental management systems includes application of techniques and procedures to support management decision making, performance measurement, recognition and reporting of liabilities and contingencies, capital market reactions to accounting disclosures and taxes (Bebbington, 1997).” A few studies have been conducted in Bangladesh, specifically on this issue of Prospect of EA. For these reasons, the research question of this study center records to prospect of environmental accounting practices in Bangladesh.

Prospects of Environmental Accounting Practices of Manufacturing Enterprises in Bangladesh

An environment issue is a burning issue in the present day context due to its damage caused by natural and human activities. Its safeguard and prevention is thus a serious concern to all- society and business. Environmental accounting and Environmental Management Accounting have become a research topic globally as well in Bangladesh. This is gaining recognition too. In such a context, the present research was undertaken where in study of perceptions of respondent to EA and EMA was also undertaken as an important part of this study.

As to study the perceptions of respondents of sample enterprises, prospect are assumed to mean the position that would offer better application. To this end, fourteen (14) statements relevant to recognition of Prospects in the form of monetary value, environment friendly product, hazards, organization costs, etc. were presented to respondents to give their opinion. The responses were taken on Likerts 7 point bi-polar scale and evaluated thereof.

Against this backdrop, now an attempt is made below to evaluate the perceptions of the sample respondents as to prospects of EA in Bangladesh relevant to above mentioned variables factors and other relevant matters.

Perceptions of Respondents as to Prospects of Environmental Accounting

Need of the Manufacturing Organizations to Disclose Monetary Value of Environment

At the outset, as to potential prospects of EA in Bangladesh, the respondents were requested to give their perceptions as to the necessity of disclosing monetary value of environment. In this context, the average score of respondents in 7 point bi-polar scale revealed at positive 2.49 in the Scale of 3 revealing some high degree of necessity of

disclosing the impact. It can be mentioned that positive score of 3 would indicate highest necessity and 2 moderate necessities. The score lies between 3 and 2. So, significant high necessity is revealed from respondent's perception. In this regard, following table 3 shows the detail of responses. According to full-disclosure principles, every organization must disclose monetary value at the end of reporting period for the stakeholders. The table shows that 60.7% (37) respondents express opinion high degree of positiveness, 29.5% (18) respondents express moderately high, 8.2% (5) respondents somewhat high and 1.6% (1) respondents express no reply on manufacturing organization need to disclose the monetary value of their impact on environment.

Production of Environment Friendly Product

Environment friendly products surely improve and safeguard environment. To this end, respondents were requested to give opinion their view point on this. Here, average score based on respondent's perception worked out at 2.49 which reveal that respondents consider such types of production as significantly important. In this regard, table shows responses in detail. Here, none of respondents shows any negativeness revealing that every enterprise should produce environment friendly product. 62.3% (38) respondents shows high degree of positiveness 27.9% (17) respondents moderately high, 6.6% (4) respondents somewhat high, and only 3.3% (2) respondents no reply on environment friendly product.

Reporting of Environmental Hazards

Employees need to provide adequate compensation for environmental hazard, and this should also be adequately reported. Respondents gave their perception to this question and here average score worked out at 2.47 in the scale of 3. This indicates that respondents consider such reporting as essential. It is evident from the table that 65.6% respondents opine high degree of positiveness, 24.6 % (15) respondents moderately, 4.9% (3) respondents somewhat high. i.e. 95.1% shows their positive response on the statement.

Pollution Should be Kept at Minimum Level

Environmental pollution is any discharge of material or energy into the air, water, sound and land cause acute earth ecological problem. Pollution should be kept at minimum level is very essential. The respondents requested to the opinion on pollution should be kept at minimum level. The average score computed at 2.60 in the scale of 3 indicates most of the respondents consider pollution should be prevented at the minimum level. The data, 72.1% (44) respondents comment high degree of positiveness, 19.7% (12) moderately high, 4.9% (3) respondents somewhat high and 3.3% (2) show no reply.

Competitive Advantages in the Market

Manufacturing organisation needs to have competitive advantages in the market by using environmental accounting. The respondents requested an opinion on this statement of using environmental accounting enterprises to gain competitive advantages in the market. The average score computed at 2.45 in the scale of 3. The 57.4% (35) respondents reveal the high degree of positive, 31.1% (19) respondents reveal moderately high and 11.5% (7) somewhat high. None of the respondents discloses any contrary opinion.

Environmental Friendly Organization Should Get Tax Rebate

Tax is levy that is collected by tax authority on behalf of the government. Environment-friendly organisation gets a tax rebate for keeping sound environment is very essential. The respondents were requested to express an opinion on the statement 'Environment-friendly institutions should get a tax rebate for maintaining the sound environment'. The average score is computed 2.55 in the scale of 3. The statement lies between high and moderately high degree of positiveness. The 65% (40) respondents express high degree of positiveness, 26.2% (16) respondents express moderately high, 6.6% (4) respondents somewhat high and 1.6% (1) respondents express no reply on the statements.

Integrated Environmental Consideration

Integrated Environmental considerations in Bangladesh are essential for any manufacturing organisation. The respondents gave opinion on maintaining integrated environmental concern in Bangladesh. The average score pointed out 2.24 in the scale of 3. The 59% (36) respondents shows high degree of positiveness, 24.6% (15) respondents shows moderately high, 4.9% (3) respondents shows somewhat high, 6.6% (4) respondents shows no reply, 3.3% (2) respondents shows very low degree of negativness and 1.6% (1) respondents shows moderately low degree of negativness on organizations are maintaining integrated environmental consideration in Bangladesh.

Environmental Related Investment as to Reduce Environmental Pollution

Most of the manufacturing organisations try to invest reduce environmental degradation of the society. The respondents were requested to an opinion on this statement. The average score computed 2.73 in the scale of 3. The score indicates high prospect of positive. The majority respondents 75.4% (46) reveal the high degree of positiveness, 23% (14) respondents reveal moderately high and 1 respondent 1.6% reveal somewhat high on an organization in Bangladesh need to invest more in environmental related infrastructure, program and adoption of appropriate technology to reduce environmental pollution.

Environment Friendly Working Condition

The environment-friendly working condition is very essential for any manufacturing organisations. The respondents were requested to the opinion on this statement. The average scores 2.77 in the scale of 3 shows more necessary for manufacturing organisations environment-friendly working condition. The data show 82% (50) respondents give the high degree of positiveness, 13.1% (8) respondents moderately high, 3 respondents 4.9% somewhat high and none of the respondents give any negative answer on an organization in Bangladesh need strengthen capacity for implementation and enforcement of environment-friendly working condition.

Environmental Accounting Data & Information

Environmental accounting data & information is very essential for environmental plant and policy formulation. The respondents requested to provide opinion on this statement. The average score calculated 2.47 indicate between high prospect and reasonable prospect for the environment. The respondents have given advice on 63.9% (39) respondents shows high degree of positiveness, 27.9% (17) respondents indicate moderately high, 3 respondents 4.9% somewhat high and 1.6 % respondents shows no reply and very low degree of negativness on environmental accounting contributes environmental plant and policy decision for generating data and information.

Non- Monetary Benefit to the Stakeholder

Manufacturing organisations should provide not only monetary benefit, but also offer non-monetary benefit to the stakeholders. The respondents have given the opinion on this statement. The average score pointed out 2.55 in the scale of 3. The 72.1% respondents show the high degree of positiveness, 14.8% moderately high, 9.8% (6) respondents somewhat high, 3.3% (2) no reply on the organisation should provide non-monetary benefit to the stakeholder for their impact on the environment.

The Impact of Environment on Enterprises Productivity and Profitability

The initiative should be taken to measure the impact of environment on enterprises productivity, and profitability is very essential for manufacturing. Every organisation should be considered to measure the effects of environment on enterprise productivity and profitability. The respondents were requested to the opinion on this statement. The average score computed is 2.55 in the scale of 3. The data 65.6% (40) respondents indicate high degree of positiveness, 26.2% (16) respondents moderately high, 6.6% (4) respondents indicate somewhat high and no reply 1.6% on the impact of environment on enterprise productivity and profitability.

Adequate Disclosure of Environmental Related Information

Sustainability of the enterprises is essential for the manufacturing organisation. The respondents were requested to an opinion on the adequate disclosure of Environmental related information that helps develop future viability of the industry. The average mean scores computed 2.52 in the scale of 3. Most of the manufacturing enterprise shows data on environmental exposure, especially for sustainability development. The 72.1% (44) respondents disclose high degree of positiveness, 16.4% respondents moderately high, 4 respondents 6.6% somewhat high, 1.6% (1) respondents no reply and 3.3% (2) respondents very low degree of negativeness.

Environmental Social Policies for Customer Health

The customer is the crucial element for the manufacturing organisations. The respondents were requested to the opinion on the statement. The average score computed 2.52 in the scale of 3 indicate the definite prospect of environmental accounting. The maximum 68.9% (42) opined respondent's high degree of positiveness, 19.7% (12) respondents moderately high, 8.2% somewhat high. i.e. almost 97% respondents show positive opinion on this statement.

Table 1: Opinions of Respondents as to Prospect of Environmental Accounting

Statements	3	2	1	0	-3	-2	-1	Total
i. Disclose the monetary value (f) (fx) Percentage (%)	37 111 60.7%	18 36 29.5%	5 5 8.2%	1 0 1.6%				$\sum f=61$ $\sum fx=152$ $\bar{x}=2.49$ 100%
ii. Necessity of producing environmental friendly product (f) (fx) Percentage (%)	38 114 62.3%	17 34 27.9%	4 4 6.6%	2 0 3.3%				$\sum f=61$ $\sum fx=152$ $\bar{x}=2.49$ (100%)
iii. Responding of Environmental hazard(f) (fx) Percentage (%)	40 120 65.6%	15 30 24.6%	3 3 4.9%	2 0 3.3%		1 -2 1.6%		$\sum f=61$ $\sum fx=151$ $\bar{x}=2.47$ (100%)
iv. Pollution should be kept at minimum level (f) (fx) Percentage (%)	44 132 72.1%	12 24 19.7%	3 3 4.9%	2 0 3.3%				$\sum f=61$ $\sum fx=159$ $\bar{x}=2.60$ (100%)
v. Competitive advantages in the market (f) (fx) Percentage (%)	35 105 57.4%	19 38 31.1%	7 7 11.5%					$\sum f=61$ $\sum fx=150$ $\bar{x}=2.45$ (100%)
vi. Environment friendly organizations should gets tax rebate (f) (fx) Percentage (%)	40 120 65.6%	16 32 26.2%	4 4 6.6%					$\sum f=61$ $\sum fx=156$ $\bar{x}=2.55$ (100%)
vii. Integrated Environmental consideration. f) (fx) Percentage (%)	36 108 59%	15 30 24.6%	3 3 4.9%	4 0 6.6%	2 -2 3.3%	1 -2 1.6%		$\sum f=61$ $\sum fx=137$ $\bar{x}=2.24$ (100%)
viii. Environmental related investment as to reduce environmental pollution (f) (fx) Percentage (%)	46 138 75.4%	14 28 23%	1 1 1.6%					$\sum f=61$ $\sum fx=167$ $\bar{x}=2.73$ (100%)
ix. Environmental friendly working condition f) (fx) Percentage (%)	50 150 82%	8 16 13.1%	3 3 9.8%					$\sum f=61$ $\sum fx=169$ $\bar{x}=2.77$ (100%)
x. Environmental accounting data and information f) (fx) Percentage (%)	39 117 63.9%	17 34 27.9%	3 3 4.9%	1 0 1.6%	1 -1 1.6%			$\sum f=61$ $\sum fx=151$ $\bar{x}=2.47$ (100%)
xi. Non-monetary benefit to the Stakeholder f) (fx) Percentage (%)	44 132 72.1%	9 18 14.8%	6 6 9.8%	2 0 3.3%				$\sum f=61$ $\sum fx=156$ $\bar{x}=2.55$ (100%)

xii.The impact of environment on enterprises productivity and profitability. f) (fx) Percentage (%)	40 120 65.6%	16 32 26.2%	4 4 6.6%	1 0 1.6%				$\sum f=61$ $\sum fx=156$ $\bar{x} = 2.55$ (100%)
xiii.Adequate disclosure of environment related f) information. (fx) Percentage (%)	44 132 72.1%	10 20 16.4%	4 4 6.6%	1 0 1.6%	2 -2 3.3%			$\sum f=61$ $\sum fx=154$ $\bar{x} = 2.52$ (100%)
xiv.Environmental social policiesfor customer health.f) (fx) Percentage (%)	42 126 68.9%	12 24 19.7%	5 5 8.2%	1 0 1.6%	1 -1 1.6%			$\sum f=61$ $\sum fx=154$ $\bar{x} = 2.52$ (100%)
Overall Total f) (fx) Percentage (%)	575 1725 67%	198 396 23%	55 55 6%	18 0 2%	6 -6 .007 %	2 -4 .002 %		$\sum f=854$ $\sum fx=2166$ $\bar{x} = 2.54$ %=100%

Source: Field Study and Literature Survey

Statistical Data Analysis Showing Perception on Environmental Accounting Prospect

After detail evaluation of perceptions of respondents about prospects of Environmental Accounting now an attempt is made bellow to show the average position of such responses and their status with reference to descriptive statistics:

Table 2: Descriptive Statistics on Perceptions of Respondents as to Prospects of E.A

Statements	N	Minimum	Maximum	Mean	Std. Deviation
i. Manufacturing organizations need to disclose the monetary value of their impact on environment	61	.00	3.00	2.4918	.72164
ii. Every enterprise should produce environment friendly product	61	.00	3.00	2.4918	.76644
iii. Compensations given to the employees for work relevant to environment hazards should be reported properly	61	-2.00	3.00	2.4754	.94175
iv. Air/water/sound/land pollution should be kept at minimum level.	61	.00	3.00	2.6066	.73663
v. For using environmental accounting enterprises supposed to competitive advantages in the market	61	1.00	3.00	2.4590	.69699
vi. Environment friendly organizations should get tax rebate for keeping sound environment	61	.00	3.00	2.5574	.69581
vii. Organizations are maintaining integrated environmental consideration in Bangladesh.	61	-2.00	3.00	2.2459	1.19242
viii. Organization in Bangladesh need to invest more in environmental related infrastructure, program and adoption of appropriate technology so as to reduce environmental pollution	61	1.00	3.00	2.7377	.47964

ix.Organization in Bangladesh need strengthen capacity for implementation and enforcement of environment friendly working condition.	61	1.00	3.00	2.7705	.52894
x.Environmental accounting contributes environmental plant and policy decision for generating data and information	61	-3.00	3.00	2.4754	.97650
xi.Organization should provide non-monetary benefit to the stakeholder for their impact on environment.	61	.00	3.00	2.5574	.80673
xii.Initiative should be taken to measure the impact of environment on enterprise productivity and profitability	61	.00	3.00	2.5574	.69581
xiii.Adequate disclosure of environmental related information helps develop future sustainability of the enterprise.	61	-1.00	3.00	2.5246	.94175
xiv.Organization should maintain social policies especially for customer health.	61	-1.00	3.00	2.5246	.84866

(Source: Survey and analysis through SPSS)

The above table shows the relevant information on different perception of prospect statements. The maximum mean score is 2.7705 on the statement “Organization in Bangladesh need strengthen capacity for implementation and enforcement of environment friendly working condition (ix), by Organizations in Bangladesh need to invest more in environmental related infrastructure, program and adoption of appropriate technology so as to reduce environmental pollution (viii)’ mean score is 2.7377. Air/water/sound/land pollution should be kept at minimum level (iv) mean score 2.6066, Organization should provide non-monetary benefit to the stakeholder for their impact on environment (xi) score is 2.5574, for using environmental accounting enterprises supposed to gain competitive advantages in the market showing mean score is 2.4590, and the minimum perception reveal the organizations are maintaining integrated environmental consideration in Bangladesh (vii) mean score is 2.2459.

Ranking of the Statements Relevant to Prospect of Environmental Accounting as Per Perceptions of Respondents

Table 3: Ranking of the Factors of Prospect of Environmental Accounting Practice

Rank	Statements	Percent
1	Organization in Bangladesh need strengthen capacity for implementation and enforcement of environment friendly working condition	82%
2	Organization in Bangladesh need to invest more in environmental related infrastructure, program and adoption of appropriate technology so as to reduce environmental pollution	75.4%
3	Air/water/sound/land pollution should be kept at minimum level	72.1%
3	Organizations should provide non-monetary benefit to the stakeholder for their impact on environment	72.1%
3	Adequate disclosure of environmental related information helps develop future sustainability of the enterprise.	72.1%
4	Organization should maintains social policies especially for customer health	68.9%
5	Environment friendly organizations should get tax rebate for keeping sound environment	65.6%
5	Compensations given to the employees work relevant to environment hazards should be reported properly	65.6%
5	Initiative should be taken to measure the impact of environment on enterprise productivity and profitability	65.6%
6	Environmental accounting contributes environmental plant and policy decision for generating data and information	63.9%
7	Every enterprise should produce environment friendly product	60.7%
7	Manufacturing organizations need to disclose the monetary value of their impact on environment	60.7%
8	Organizations are maintaining integrated environmental consideration in Bangladesh.	59%

Source: Table- 1

The above table shows the different perception of respondents in terms percentages. There are 14 statements to Prospect related. The highest perception percentage is 82% on organizations in Bangladesh need strengthen capacity for implementation and enforcement of environment friendly working condition(ix), Organizations in Bangladesh need to invest more in environmental related infrastructure, program and adoption of appropriate technology so as to reduce environmental pollution is 75.4% (viii), the three statements show the same percentage these are Air/water/sound/land pollution should be kept at minimum level(iv), Organizations should provide non-monetary benefit to the stakeholder for their impact on environment (xi), Adequate disclosure of environmental related information helps develop future sustainability of the enterprise 72.1% (xiii). The Table also showed the lower position of the statements on maintaining integrated environmental consideration in Bangladesh (vii) is 59%.

SUMMARY OF THE FINDINGS

The majority enterprises are not provide enough information related to environmental matters. Where in, there is little requirement to furnish information relevant to environment matters. The Researcher observed that, 82% respondents have opined that organization in Bangladesh need strengthen capacity for implementation and enforcement of environment friendly working condition. Moreover, Input relevant to EA is not easily available because of extra cost need to be incurred. Cost- benefit yet to recognized and evaluated do not properly consider. However, Enterprises in Bangladesh yet to perceive it well that Environmental Accounting must be analyzed along with other aspects of accounting. Because costs and benefits related to the environment itself depend upon the results of the financial accounting, management accounting, cost accounting, tax accounting and national accounting. There is a clear need to understand that Environmental Accounting is an attempt to legitimize sensitive aspects of the company's manufacturing operations rather than being an accountability device to broaden stewardship to the stakeholders. At last, a review of financial statements of sample enterprises it is revealed that most of the manufacturing companies disclose only qualitative and descriptive information without any attempts at quantifications.

Implications of the Study

The study expresses that, the vast majority of the respondents consider introduction and implementation of Environmental Accounting and Environmental Management Accounting is necessary. The environmental factors, organizational capacity, provision for maintaining separate sets of accounts staff, information management structure and attitude of management are not favorable to requirements though necessity and prospect are well recognized. In such circumstances, what is urgently required is the establishment of legal framework, government initiative and instructions urgently required. At the same time, proper guidance from accounting professional bodies is also called for enterprise initiative than can be expected to follow.

RECOMMENDATIONS

In Bangladesh perspective, most of the organizations do not follow environmental rules that given by Ministry of forest guidelines. But, government take implement Environmental accounting practices through ICMAB and ICAB. The most of the manufacturing organization keep records and presentation in separately. Organization can take individual environmental accounting cell for the stakeholders. Chairmen of the organization, Board of the directors, Notes to the financial statements should disclose the environmental information. Government should be

provided tax facility for environmental friendly product, air, water, sound, land pollution kept at minimum level.

CONCLUSIONS

Prospects of Environmental Accounting need to be managed appropriately and adequately. An attempt has been made to identify relevant potential Prospects of EA as well EMA in the context of Bangladesh situation. Perceptions of selected respondents from most polluted manufacturing enterprises have analyzed which demonstrate highly prospects in future. In the same way, some important prospects have been identified which may draw the attention of the future policy planning for appropriate action. The average mean score about prospect is shown 2.53 in the scale of 3.

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Appendix:1

List of Samples Enterprise

Table 4

Industries	Enterprises
Pharmaceuticals & chemicals	1. Aristo pharma Ltd.
	2. GSK Ltd.
Textiles & Clothing	3. Regency Garments Mills Ltd.
	4. KDS textile Ltd.
Papers & Printing	5. Karnafuli Paper Mills Ltd.
	6. Hakkani Pulp & packaging Ltd.
Leather & Footwear	7. Apex Co. Limited
	8. Bata Shoe Company Limited
Steel Industry	9. KSRM
	10. RSRM
Foods Allied	11. BATBC
	12. Kishowan Food Ltd.
Energy	13. Jumona oil Ltd.
	14. Rupsha Oil Ltd.
Cement	15. Premier Cement
	16. Royal Cement Ltd.

Appendix: 2**Questionnaire****Confidential**

Title: Prospects of Environmental Accounting Practices of Selected Manufacturing Enterprises in Bangladesh

Part – A: General Information

- Name and address of the enterprise:
- Types of Industry:
- Year of establishment:
- Products:- i. ii. iii.
- No of employee/workers:
- Name of the respondent:
- Designation:
- Last academic degree:
- Age:
- Do you have environmental clearance? Yes/ No

Part – B: Specific Information**Factors Governing Prospects of Environmental Accounting in Different Manufacturing Organizations**

Here, +3 High degree of positiveness, +2 moderately, +1 Somewhat High, 0 no reply, -3 High degree of negativeness, -2 moderately low, -1 Somewhat low.

Table 5

Statements for Comments	3	2	1	0	-1	-2	-3
Manufacturing organizations need to disclose the monetary value of their impact on environment.							
Every enterprise should produce environment friendly product.							
Compensations given to the employees for work relevant to environment hazards should be reported properly.							
Air/Water/Sound/land pollution should be kept at minimum level.							
For using Environmental accounting enterprises supposed to competitive advantages in the market.							
Environment friendly organizations should get tax rebate for keeping sound environment.							
Organizations are maintaining integrated environmental consideration in Bangladesh.							
Organization in Bangladesh need to invest more in environmental related infrastructure, program and adoption of appropriate technology so as to reduce environmental pollution.							
Organization in Bangladesh need strengthen capacity for implementation and enforcement of environment friendly working condition.							
Environmental accounting contributes Environmental plant and policy decision for generating data and information.							
Organization should provide non-monetary benefit to the stakeholders for their impact on environment.							

Table 5 Contd.,

Initiative should be taken to measure the impact of environment on enterprise productivity and profitability.							
Adequate disclosure of environmental related information helps develop future sustainability of the enterprise.							
Organization should maintain social policies especially for customer health.							

