

## Environmental Accounting and Reporting with Special Reference to India

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**Abstract:** *In recent years, environmental pollution becomes so acute and the stakeholders' awareness to the issue becomes so serious that environmental accounting has become a strong branch of accounting. Still, attention towards the style and recognition of environmental accounting is not a generalized one. Legal authorities, standard setting bodies and other regulators cannot come to a consensus regarding the conceptual framework of environmental accounting and its disclosure. Thus, such disclosure is not mandatory rather voluntary that has no specific style or format. With the passage of time, more guidelines are coming in customized format that may lead us to reach a common format for recognizing environment related data and disclosure thereof through financial statements. Still, such disclosure is guided by the social responsibility and commitment on the part of the entities that work as strong agents for polluting the environment. In this paper, the theoretical foundation of environmental accounting and reporting is discussed with special reference to India. More emphasis is given on environmental accounting and awareness for that as this is supposed to be the need of today.*

**Keywords:** *Environmental Accounting, Environmental Accounting and Reporting, Green Accounts.*

### Introduction

Earth's environment is a rich heritage handed over to us by previous generations. The present civilization has involved us in varied activities. Many of these activities generated waste with potential constituents. The ultimate disposal of the waste leads to environmental pollution. In many parts of the world, the magnitude of pollution of environment has already reached at an alarming level. During fifties through sixties of the 19<sup>th</sup> Century, peoples all over the world become more concerned about the quality of their environment. Well-known environmental tragedies, like the cause of mercury poisoning in Mina mate (Japan), severe smoke pollution episode in London and the massive oil spill caused by TERRY CANYON accident reinforced in people's mind the sense that the quality of air, water and a wide range of other natural resources was being seriously degraded. The intensity of danger from chemicals can be gauged

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from the extent of havoc caused by the accident in a pesticide factory at Bhopal (India) in December 1984. The episode killed over 3,000 people, blinded several thousand and affected over 150,000 people. The awareness of the environmental and man's ability to cause damage started from the fifties of the 19<sup>th</sup> Century. This concern had been repeatedly expressed in a series of international summits and consensus right from the sixties. The starting point that comprised an organized thought proves on a large scale is of course the celebrated publication of The Club of Rome entitled "Limits to Growth" that initiated a worldwide debate of economic growth at the expense of natural environment. Between 1968 and 1972, two international conferences met to assess the problems of the global environment and more importantly, to suggest corrective action. The World Conference held in Stockholm on global environment in 1972 (June), where the heads of the States all over the world came together for the first time, was the pivotal event in the growth of the global environment movement. It was the first occasion on which the political, social and economic problems of the global environment were discussed at an inter-governmental forum with a view to take corrective action. It aimed to "create a basis for comprehensive consideration with the United Nations of the problems of the human environment" and to focus the attention of governments and public opinion to various countries on the importance of problem. It ultimately gave a birth to a special UN Agency titled "UN Environmental Program" (UNEP). In the mid-eighties, on the basis of changing situation and becoming the environmental issues a world-wide phenomenon in the developed and developing countries, "World Commission on Environment and Development (WCED)", known as 'BRUNTLAND COMMISSION', headed by Norway's Prime Minister, Mrs. Gro Harlem Bruntland, was established by the UN. The Commission published a report called "Our Common future", in 1987, with the proposed concept of "Sustainable Development". The concept received worldwide acceptance and led to the convening of the UN Conference on "Earth and Development" (UNCED) in Rio de Janeiro, Brazil, known as "EARTH SUMMIT". In this conference, heads of different state signed four agreed document including the "Agenda – 21". The Agenda-21 contains a checklist of do's and don'ts to protect the environment throughout the next century. Particularly, the role of corporate entities in respect of overall management of the environment has been duly recognized in the conference.

In recent years, the adverse environmental effect of economic development has become a matter of great public concern all over the world. Gradually, environment is becoming a much more urgent economic, social and political problem.

Accountants, as the basic custodian and light bearers of economic development, can no longer shut their eyes to the effect of environmental issues on business management, accounting, auditing and disclosure system. Protection of environment and the potential involvement of accountants is becoming a common subject of discussion among the accountants all over the world. Now-a-days, accountant are expected to take a proactive role in the environmental protection process. With the advent of liberalization, removal of trade barrier makes it logical that the costs of environmental degradation due to industrial activities should be internalized in corporate accounts to the extent possible. That's why environmental accounting and reporting thereof is of paramount important today. The paper focuses on the theoretical foundation of environmental accounting and reporting with special emphasis on accounting aspect with awareness and Indian scenario thereof.

## **Environmental Accounting: A Conceptual Analysis**

Environmental Accounting is an emerging and dynamic field. It is a fruitful attempt to identify and bring to the light the resources exhausted and cost rendered reciprocally to the environment by the business houses. Simply, environmental accounting is about making environmental related costs more transparent with corporate accounting systems and reports. In other words, Environmental Accounting is a system that attempts to make the best possible quantitative assessment (in terms of either monetary or physical units) of the costs and benefits to an enterprise due to the environmental preservation activities that it undertakes.

Broadly, environmental accounting involves the identification, measurement and allocation of environmental costs, the integration of these costs into business, identifying environmental liabilities, if any, and finally communicating these information to the company's stakeholders as a part of general purpose financial statements. Gray, Bebbington and Walter (1993) have defined environmental accounting in the following terms: "it can be taken as covering all areas of accounting that may be affected by the business response to environmental issues, including new areas of econ-accounting" Major functions of Environmental Accounting are: (i) recognizing and seeking to mitigate the negative environmental effects of conventional accounting practices; (ii) separately identifying environmentally related costs and revenue within the conventional accounting systems; (iii) taking active steps to set up initiatives in order to ameliorate existing environmental effects of conventional accounting practice; (iv) devising new forms of financial and non-financial accounting system, information systems and control systems to encourage more environmentally benign management decisions; (v) developing new forms of performance measurement, reporting and appraisal for both internal and external purposes; (vi) identifying , examining and seeking to rectify areas in which conventional (financial) criteria and environmental criteria are in conflict; (vii) experimenting with ways in which sustainability may be assessed and incorporated into organizational orthodoxy.

### **Objectives of Environmental Accounting**

Environmental Accounting is required to fulfill a lot of demands from different stakeholders. However, for academic reason, the following basic objectives can be identified on the logical ground:

1. Environmental accounting would aid the discharge of the organization's accountability and increase its environmental transparency;
2. It helps negotiation of the concept of environment and determines the company's relationship with the society in general and the environmental pressure group in particular. This helps an organization seeking to strategically manage a new and emerging issue with its Stakeholders;
3. Because of the ethical investment movement, ethical investors require the companies to be environmentally friendly. Therefore, by upholding friendly image, companies may be successful in attracting fund from 'green' individuals and groups;
4. Environmental accounting consumerism movement launched by the environmental lobby groups encourages the consumers to purchase the environmentally friendly products, i.e., green products. Companies, thus producing green products may take competitive marketing advantage by disclosing the same;

5. By making environmental disclosures, companies may show their commitments towards introduction and change and thus appear to be responsive to new factors;
6. Companies engaged in environmentally unfriendly industries arose strong public emotion. There is a strong environmental lobby against these industries. Green reporting may be used to combat potentially negative public opinions;
7. By cultivating the enlighten approach of environmental accounting, companies can increase their image of being enlightened to the outside world and this, can be regarded as enlightened companies.

### **Benefits of Environmental Accounting**

The benefits of undertaking an environmental accounting initiative is that the identification and greater awareness of environment related costs often provides the opportunity to find ways to reduce or avoid these costs, whilst also improving environmental performance. More elaborately, environmental accounting is an effect tool for placing environmental issues firmly on top management's agenda, providing useful data to inform environmental and financial managers' decision-making, and concretely demonstrating environmental commitment to stakeholders. The Environmental Protection Agency (EPA) adds the following benefits:

1. Many environmental problem can be significantly reduced or eliminated as a result of effective decisions;
2. Environmental cost (and potential savings) may be obscured in overheads or otherwise overlooked;
3. Environmental costs can be offset by generating revenues through sale of waste or by-products or recycling them;
4. Understanding of environmental costs can promote more accurate costing and pricing of products;
5. Competitive advantage with customers can result from processes, products and services which can be demonstrated to be environmentally friendly; and
6. Accounting for environmental costs and performance can support a company's development and operation of an overall environmental management systems (e.g., ISO 14001).

### **Environmental Accounting and Reporting: As a Legislative Issue**

Environmental accounting involves the identification, measurement and allocation of environmental costs, and the integration of these costs into business and encompasses the way of communicating such information to the companies' stakeholders. In this sense, it is a comprehensive approach to ensure good corporate governance that includes transparency in its societal activities. Environmental Reporting can be defined as an umbrella term that describes the various means by which companies disclose information on their environmental activities.

The following are the specific issues (problems) regarding the environmental accounting:

- Identification of Environmental Costs (Expenses);
- Capitalization of Costs;
- Identification of Environmental Liabilities; and
- Measurement of Liabilities.

At present, no accounting standard has been issued for accounting treatment of these specific problems. Some guidelines regarding these issues have been issued by many organizations such as International Chamber of Commerce, The Japanese Industry Association, The Chemical Manufacturers Association, FASB's Emerging Issues Task force, Canadian Institute of Chartered Accountants, Inter-Governmental Working Group of Experts on International Standards of Accounting and Reporting etc. As regards environmental reporting, different organizations have also issued guidelines. The organizations are Federation des Experto Compatables Europeans (FEE), Financial Accounting Standards Board (FASB), Inter-Governmental Working Group of International Standards on Accounting and Reporting (ISAR), Institute of Chartered Accountants of England and Wales, Accounting Advisory Forum (AAF) etc. But these guidelines are only advisory in nature and not mandatory.

An increasing number of countries impose requirements on companies to report on their environmental performance. Denmark was the first country to adopt legislation on public environmental reporting. In this country, the companies are required to prepare a so-called "Green Account". In the Netherlands, new legislation on mandatory environmental reporting has been adopted. Both Danish and Dutch regulations require reporting to the authorities and to the public. In Norway, the new Accounting Act requires that all companies include environmental information in the annual report from 1999 onwards. In Sweden, similar legislation has been adopted for mandatory environmental disclosure in annual financial reports. In U.S.A., the companies are required to submit data on emissions of specified toxic chemicals to the Environmental Protection Agency under the Toxic Release Inventory (TRI). In addition, the Securities and Exchange Commission (SEC) requires disclosures on legislative compliance, judicial proceedings and liabilities in relation to the environment in Form K-10. In Canada, the Securities Commission requires public companies to report the current and future financial or operational effects on environmental protection requirements in an Annual Information Form. Australian companies are now expected to give information on performance with regard to the environmental regulations that apply to them. In addition, a National Pollutant Inventory (NPI) is being created which requires industrial companies to report emission and inventories for specified chemicals. In the European Union, based on Article 15 of the Integrated Pollution Prevention and Control (IPPC) Directive, Member State will be required to register emission data from large companies and report this data to the Commission.

### **Corporate Environmental Accounting: Guidelines**

The following are the specific issues (problems) with regards to the environmental accounting;

1. Identification of Environmental Costs (Expenses);
2. Capitalization of Costs;
3. Identification of Environmental Liabilities; and
4. Measurement of Liabilities.

As regards environmental costs (expenses), there is no standardized definition and is left to the discretion of the corporations to decide which expenditures or costs would be included under the environmental expenses or costs. Moreover, there is no specific or concrete guideline from the "accounting regulators" in this regard. However, some industry guidelines are available, such as:

1. International Chamber of Commerce's (ICC's) "Business Charter for Sustainable Development";
2. The Japanese Industry Association, "KEIDANREN's Global Environmental Charter"; and
3. The Chemical Manufacturer's Association's "Responsible CARE Program".

These guidelines are followed by more and more enterprises. According to these guidelines, operating expenses have defined as expenses associated with environmental measures to primarily include production-related costs and product research and development expenses that are solely incurred for environmental protection as distinct form product improvement.

In the absence of government or industry guidelines, enterprises may design own mechanism for the same. The Survey of the International Standards of Accounting and Reporting (ISAR) revealed that where there was no formal instruction from regulatory authorities though companies had divided the total environmental expenditures into six categories, which are:

1. Capital investment;
2. Operating costs;
3. Research and Development Costs;
4. Environment Administration and Planning;
5. Expenses for remediation measures; and
6. Recovery expenses.

The second problem for the accountants is how to treat the environmental outlays i.e., whether to capitalize or charge them to expense and how to attribute those to accounting periods. The issue of whether environmental costs should be capitalized or expensed is one of the most controversial subjects for accountants as well as for financial analysts. In principle, under the conventional accounting, the difference between an expense and an asset is:

"An Asset is a resource collected by the enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise" (IASC, 1995: 54, IAS F 49); and "Expenses are the decreases in economic benefits during the accounting period in the form of outflows or depletion of assets or occurrence of liabilities that result in decreases in equity, other than those relating to distributions to equity participants". (IASC 1995: 60, IAS F-70).

So, simply, an expense is a cost that has led to a benefit and has now expired, whereas costs that have been incurred and can lead to future benefits are classified as assets. However, in practice, it is not easy to determine what the increased or decreased (economic) benefits of pollution prevention and emission reduction measures might be. Environmental investments have been defined by the Canadian Institute of Chartered Accountants (CICA, 1993) as those undertaken to:

- Prevent or mitigate environmental damage or conserve resources;
- Clean up past environmental damage.

Canadian Institute of Chartered Accountants identified two approaches to the question of when to capitalize environmental costs (CICA, 1993):

- (i) The Increased Future Benefits (IFB) Approach: The disbursement has to result in an increase in expected future economic benefits from the assets;
- (ii) The Additional Cost of Future Benefits (ACOFB) Approach: Environmental cost can be capitalized if they are considered to be a cost of the expected future benefits from the assets, regardless of whether there is any increase in economic benefits.

Statements are prepared in order to report the financial performance of a company and should not be distorted with issues that are not material in financial terms. From a strict economic perspective, capitalization of costs should be allowed if the costs can contribute to additional future economic benefits beyond the originally assessed standard of performance (IFB Approach).

From an environmental point of view, capitalization in the accounts should be favored if pollution prevention creates future environmental benefits. Furthermore, capitalization facilitates amortization over a number of years and therefore, enhances long-term thinking. The ACOFB approach may be favored if the rapid emergence of new environmental issues is considered to be enforceable and likely to cause unexpected future liabilities. In this case prudent economic management would require those costs of environmental protection that impede possible future economic problems to be considered as assets.

The International Accounting Standards Committee (IASC) has chosen the IFB approach (IASC 1995; IAS 16), whereas the Federation des Experts Comptables Européens (FEE) and Emerging Issue Task Force (EITF) of the Financial Accounting Standard Board (FASB) have adopted the ACOFB approach. In the short-run, such contradictory positions do little to enhance development of a 'global financial architecture' and the emergence of a truly global standard-setter with a global market place. In the long-run, the FEE has decided to put its weight behind the acceptance of IASC standards:

In the long-run IASs are the only option, if one does not want to have a separate set of European standards, and will help to achieve accounting harmonization in Europe for listed companies and may in addition bring convergence in national standards (FEE, 1999).

IAS 16, paragraph 14, allows the capitalization of environmentally related costs for property, plant and equipment if an increase of future economic benefits from other assets is expected and if the costs are recoverable.

International Accounting Standards Committee changed the perspective that it expressed in its earlier exposure draft. The most important change is the omission of paragraph 24 of Exposure Draft E43, which would have made explicitly clear that environmental clean-up costs and fines should be expensed if they do not result in an improvement in the originally assessed standards of safety or efficiency of the assets.

The FEE recommends that costs incurred to prevent future environmental impacts should be capitalized (treated as an asset, providing expected future economic benefits) whereas clean-up costs for past environmental damage should be expenses. Also the EITF of the FASB has a consensus view that treatment costs of environmental contamination should, in general, be expensed. Nevertheless, capitalization is possible, if one of the following three criteria is met:

- The cost extends the life, increase the capacity or improve the safety or efficiency of property owned by the company;
- The costs mitigate or prevent environmental contamination that has not to occur and that otherwise may result from future operations of activities. In addition, the costs improve the property compared with its condition when constructed or acquired, if later;
- The costs are incurred in preparing for a sale of property that is currently held for sale.

So, the International Accounting Standards Committee, the Financial Accounting Standards Board EITF and the FEE all recommended expensing fines, fees and costs of past environmental impacts. Capitalization is allowed if a future economic benefit is expected to result from present expense. Costs of voluntary activities to comply with the requests of critical stakeholders in the company may not qualify for capitalization under IAS 16. The EITF and the FEE allow a capitalization of costs that result in the improvement of the safety or efficiency of the company property, even if no future benefits are expected and no legal requirements exist. However, the EITF and the FEE do not require capitalization of the costs so that the decision whether to capitalize or to expense is left to management. Arthur Anderson & Co. has criticized this FASB EITF statement because it allows a free choice on whether to capitalize or to expense (FASB EITF, 1990: 21, discussion issue 90 – 8). This results in a lack of consistency in conventional financial reporting. Depending on the industry or its financial position, some companies may decide to expense whereas others may capitalize environmental expenditure on voluntary pollution prevention. Management of other companies might seek to change the treatment at their own discretion. Although the method chosen has substantive implications, consistency in the treatment of environmental outlays is of critical importance to external stakeholders. Consistency reduces uncertainties about the contents of financial statements and adds quality to the disclosed information.

Although consistency is provided by use of international accounting standards, the divergent views of different accounting standards bodies serve to confuse stakeholders seeking comparable reported information overtime and between companies. One possible way forward is to abandon the historical cost basis of conventional financial reporting. This may appear to be a radical step to take but, if assets were reported at market values instead of at accumulated cost, it has been suggested that clear guidance would be provided for stakeholders.

Expenditure on pollution clean up would be treated as an expense and, if such expenditure led to an increase in the market value of an asset, the incremental gain in the market value would be reported as a gain. If it produced a decline in the market value of an asset, a loss would be shown.

The next problematic issues are the identification, recognition, and measurement of liabilities. An environmental liability is an obligation to pay future expenditure to remedy environmental damage that has occurred because of past events or transactions or compensate a third party that has suffered from damage.

A contingent environmental liability is an obligation to remedy environmental damage dependent on the occurrence or non-occurrence of one or more uncertain future events, or to compensate

a third party that would suffer from such damage. So far, no specific standard has been issued purely for the identification or recognition of environmental liabilities. Some authors argue that general accounting standards are already sufficient to accommodate environmental liabilities if they are applied correctly (Hawkshaw, 1991). The most important accounting standards specifying it and when to recognize (all) liabilities are IAS F 91 and FAS 5.

“A liability is recognized in the balance sheet when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably” (IASC 1995: 65 [IAS F 91]).

“An estimated loss from a loss contingency..... shall be accrued by a charge to income if both the following conditions are met:

- (a) Information available prior to assurance of the financial statements indicates that it is probable that an asset had been impaired or a liability incurred at the date of financial statements. It is implicit in this condition that it must be probable that one or more future events will occur confirming the fact of the loss; and (b) the amount of loss can be reasonably estimated” (FASB FAS 5, Section 8).

As a rule, environmental liabilities should be recognized in financial statement if they are material and if the liabilities or the events leading to the liabilities are probable and can be reliably measured (or reasonably estimated). A liability must be measured or reliably estimated in order to qualify for recognition in the main body of a financial statement. The key factors which can be considered at the time of estimating the environmental liabilities are:

- Current laws and regulations;
- The extent of regulatory involvement;
- Prior legal, economic, political and scientific experience;
- The complexity of the problem, existing technologies and available technological experience.

As regards the environmental liability, ED-78, FRS-15, “Disclosure of Contingencies” (Para-5.2) states that if the liability can not be measured reliably it is a contingent liability which should be disclosed as a note to the financial statement. Regarding the provision for environmental liabilities due to contaminated landfills, the Canadian Association for Accounting Standards has issued a special guideline in its “CANADIAN HANDBOOK” (1993) (Section 3060) as:

“When reasonably determinable provisions should be made for future removal and site restoration costs, net of expected recoveries, in a rational and systematic manner by charge to income; and the accumulated provisions (should) be recorded as a liability”.

United Nation’s Conference on Trade and Development (UNCTAD), an inter-governmental body and the Principal organ of the United Nation’s General Assembly in the field of trade and development, plays a positive and pioneering role in the matter of environmental accounting. As its part, Inter-Governmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) was formed in 1982 and till now, fifteen sessions of this

Working Group have been held. Specially, at the thirteenth and fourteenth sessions, ISAR considered the feasibility of developing a possible “conceptual framework” for environmental accounting with the underlying assumption that the ultimate goal for both Governments and corporate entities is “sustainable development”. This Working Group in its fifteenth session held in GENEVA on 11–13<sup>th</sup> February 1998 defined only certain terms used in Environmental Accounting (i.e., Environment, Asset, Liability, Contingent Liability, Environmental Costs, Environmental Assets, Environmental Liability etc.).<sup>1</sup>

In the West, different Accounting Statutory Bodies also recommended some GAAP-based solutions to relevant environmental accounting issues. These are:

**Table 1: GAAP based solutions for some environmental accounting related issue (The Cost and Management (Bangladesh), May – June, 1998)**

Environmental Accounting Issues	Proposed Solutions
Definition of environmental costs and expenses	Environmental costs that do not lead to future expected benefits.
Environmental costs recognition and measurement issues	Materiality, measurability and certainty.
Capital or revenue allocation problem	Capitalize if it is intended to prevent or reduce future environmental damage or to conserve resources
Capitalization of environmental costs incurred subsequent to the acquisition of a capital asset	Capitalize either (i) if the costs results in an increase in expected future economic benefits or (ii) if the costs are considered to be a cost of expected future benefits from the assets.
Accounting for future environmental expenditure	Where an entity has a legal obligation to incur future costs, the costs involved represent an environmental liability.
Accounting for the impairment	Reduce the carrying amount of the assets rather than introduce a liability.
Environmental accounting policy disclosures	All significant accounting policies relating to financial statements items to be disclosed.

### Environmental Awareness in India

Following the end of the British Rule, India plunged into serious troubles of communal riots. So, India was not in a position to pay proper attention to matter relating to environment. The Five Year Plans were implemented with a view to the economic development of the country. The Second Five Year Plan designed for industrial development paid no attention to the harmful consequences of nature that would have to face with the growth of industry. Hence, the plans remained unconcerned about protecting nature.

The public awareness towards environmental issues like environmental pollution, environmental preservation and environmental development (i.e., protecting the nature) has grown tremendously at the beginning of the seventies when a law for the protection of the environment was passed. In India, the then Prime Minister Smt. Indira Gandhi during her participation in the United Nation’s Conference on human environment in Stockholm, 1972 expressed her views that rich countries may look upon development at the cause of environment destruction, but to India it is one of the primary means of improving the environment of living, of providing food, water, sanitation and shelter for making the deserts green and mountains habitable. During her tenure of service to the country as the Prime Minister, the Water (Prevention and Control of Pollution) Act, 1974 came into effect to prevent watercourses both surface and underground from pollution. Subsequently, the Water (Prevention and Control of Pollution) Cess Act, 1977 was passed. Again, in 1981, during her Prime Ministership, another Act was enacted to prevent air from pollution, which came to be known as Air (Prevention and Control of Pollution) Act, 1981. The Bhopal disaster was an eye-opener to the Government, resulting

in the enactment of a more comprehensive and well-knitted Act known as Environment (Protection) Act, 1986. In 1991, the Public Liability Insurance Act 1991 was also enacted. Moreover, from time to time various rule(s) have been notified to regulate environmental hazardous material, which are:

1. The Water (Prevention and Control of Pollution) Rules, 1975;
2. The Water (Prevention and Control) Cess Rules, 1978;
3. The Environment (Protection) Rules, 1986;
4. The Manufacturer, Storage and Import of Hazardous Chemical Rules, 1989;
5. The Hazardous Waste (Management and Handling) Rules, 1989;
6. The Public Utility Insurance Rules, 1991;
7. The Environmental Impact Assessment Notification, 1994;
8. The Environmental Impact Assessment (Public Hearing) Notification, 1997;
9. The Bio-Medical Waste (Management and Handling) Rules, 1998;
10. Noise Pollution (Regulation and Control) Rules, 2000.

### **Corporate Environmental Reporting in India**

In the context of requiring environmental related information from business on a periodic basis the first public announcement was made by the Central Government in 1991. The Ministry of Environment and Forests has proposed that

“Every company shall, in the Report of its Board of Directors, disclose briefly the particulars of steps taken or proposed to be taken towards adoption of clean technologies for prevention of pollution, waste minimization, waste re-cycling and utilization, pollution control measures, investment on environmental protection and impact of these measures on waste reduction, water and other resource conservation”. The Companies Bill, 1997, Section 173 had proposed that every company should disclose through its Board of Directors’ Report the measures taken for the protection of environment.

A Gazette Notification on Environmental Audit has been issued by the Ministry of Environment and Forests on 03.03.1992 (amended vide Notification GSR 386 (E) dated. 22.04.1993)<sup>2</sup>. The notification requires submission of an Environment Statement to the Pollution Control Board (PCB). This notification is applicable to any person carrying on an industry, operation or process requiring consent to operate by under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974, under Section 211 of the Air (Prevention and Control of Pollution) Act, 1981 or both, or authorization under the Hazardous Waste (Management and Handling) Rules, 1987, issued under the Environment (Protection) Act, 1986. In the environment statement, the concerned industry is required to provide information on:

1. Water and Raw Material consumption;
2. Pollution generated;

3. Nature of hazardous waste and solid waste and disposal practice; and
4. Impact of pollution control measures on conservation of natural resources.

But, it is a matter of strange that such information are still not being required by the Government to be publicly disclosed through annual report. Consequently, till date, any disclosures on environmental matter in the annual report of Indian companies are voluntary in nature.

### Conclusion

In India, level of environmental related disclosures in the corporate annual reports, both financial and non-financial is not an encouraging level. Neither the company law nor the accounting standards/guidelines issued by the Institute of Chartered Accountants of India prescribes disclosing norms for the environment related matter in the corporate financial statements. On the whole, the status of voluntary environmental disclosure in the annual reports of the Indian companies is not good. It can be rather termed as poor. The main reasons for this poor disclosure of environmental information may be its voluntary in nature. Secondly, it may be due to the lack of awareness and /or commitment on the part of the company management about the social responsibility of the company. Thirdly, the poor environmental performance of the company may also bound them to non-disclosure or less disclosure. And finally, the poor enforcement of the environment protection acts is also partly responsible for freeing the companies from disclosure of such information.

So, it can be concluded that the absence of standardized environmental accounting practices and disclosure techniques at both the national and international levels as well as legal enforcement spur the advocated of environmental accounting practices to consider other alternatives from a global perspective.□

### References

- Abdur, M. Muttakin and M. Badrul (2005), "Corporate Environmental Reporting Practices in Bangladesh - A Study of some selected companies," *The Cost & Management*, 33(4):13 –21.
- Banerjee, B. (2002), *Regulations of Corporate Accounting in India*, (Calcutta: The World Press Calcutta Private Limited).
- Banerjee, B. ( 2005), "Corporate Environmental Accounting & Reporting Practices in India," *Indian Accounting Review*, December: 25 – 46.
- Canadian Institute of Chartered Accountants (1993), *Environmental Costs and Liabilities: Accounting and Financial Reporting Issues*, (Toronto: CICA).
- Cunningham, S. and D. Gadenne (2003), "Do corporations perceive Mandatory Publication of Pollution Information For Key Stakeholders As a Legitimacy Threat?" *Journal of Environmental Assessment Policy & Management*, 5(4): 523 – 549.
- Deloitte Touche (1996), "Environmental Reporting in Annual Reporting," Deloitte Touche Tohmatsu International, (Copenhagen: Danish Environmental Ministry 1995 Green Reporting Danish Environmental Ministry).
- FEE (1999), *FEE Discussion Paper Towards a Generally Accepted Framework for Environmental Reporting*. (Bruxelles: The Fédération des Experts Comptables Européens).
- Gray, R. H., J. Bebbington and D. Walter (1993), *Accounting for the Environment*, (London: Paul Chapman Publishing).
- Gray, R. H. and J. Bebbington (2001), *Accounting for the Environment*, (London: Sage Publications).
- Gupta, S. K. and A. Mehra (2002), *Contemporary Issues in Accounting*, (Ludhiana: Kalyani Publishers).

- Harte, G and D. Owen (1991), "Environmental Disclosure in the Annual Reports of British Companies: Research Note," *Accounting, Auditing & Accountability Journal*, 4(3): 51-61.
- Hawkshaw, A. (1991), 'Status Quo Vadis', *CA Magazine*, March.
- Iman, S. (1999), "Environmental Reporting in Bangladesh," *Social and Environmental Accounting*, 19(2): 12-14.
- International Accounting Standards Committee (IASC) (1995), *Framework of the International Accounting Standards* (London: IASC).
- Jawaharlal (2003), *Corporate Financial Reporting Theory and Practice*, (New Delhi:Taxmann Allied Service Pvt. Ltd.).
- Jeffrey, G. (1992), "CICA to study 'green' accounting policies, environmental audit," *The Accountant*, Issue No. 5857, 11(3).
- Jones, K. (2000), *Commission of the European Communities, D.G. Environment – Study on Environment Reporting by Companies*, Centre for Environmental Informatics, University of Sunderland, March.
- KPMG (1993), *KPMG International Survey of Environmental Reporting*, (Thorne: KPMG Peat Marwick).
- Paul, K. C. and B. Pal (2001), "Corporate Environmental Reporting in India," *Indian Accounting Review*, December: 27 – 45.
- Pramanik, A. K. (2002), *Environmental Accounting and Reporting (eds.)*, (New Delhi: Deep & Deep publications Pvt. Ltd.).
- Pramanik, A. K (2004), "Corporate Environmental Accounting and Reporting : Global Scenario," *XXVI All India Accounting Conference and International Seminar*, Indian Accounting Association, December: 2004.
- Price Waterhouse (1993), *Environmental Situation in Danish Companies*, (Copenhagen: Price Waterhouse).
- Rikhardsson, P. M. (1999), "Statutory Environmental Reporting in Denmark: Status and Challenges" in M. Bennett and P. James (eds.), *Sustainable Measures: Evaluation and Reporting of Environmental and Social Performance*, Sheffield, U.K., Greenleaf publishing.
- Sefcik, S. E., N. S. Soderstrom and C.H. Stinson (1997), "Accounting through green coloured galses: Teaching environmental accounting," *Issues in Accounting Education* , 12 (1).
- Shil, N. C. and M. Iqbal (2005), "Environmental Disclosure - a Bangladesh Perspective," *The Cost & Management*, 33(4).
- Tilt, C. A. (1994), "The influence of External Pressure Groups on Corporate Social Disclosure," *Accounting , Auditing & Accountability Journal*, 7(4).
- United Nations (1991), *Environmental Accounting for Sustainable Development: Note by the Secretariat*, Geneva, *UN Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting*.
- United Nations (1992), *Environmental Accounting: Current Issues, Abstracts and Bibliography*, New York, United Nations.
- Williams, M. S. (1998), *Contemporary Environmental Accounting: Issues, Concepts and Practices*, (U.K: Greenleaf Publishing Limited).
- William, M. S. (1999), "Voluntary environmental and social accounting disclosure practices in the Asia-Pacific region: An international empirical test of political economy theory," *The International Journal of Accounting*, 34 (2): 209–239.

## **Endnotes**

1. Recommendation/Position paper of Inter-Governmental Working Group of Experts on ISAR and the relevant paper at the 15<sup>th</sup> Session of ISAR held in Geneva.
2. India: Environment Statement, as part of Environment Audit, Government of India, 1993.