



A Study of Environmental Accounting for Business in Indian Perspectives

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Abstract:

Environmental accounting is an inclusive field of accounting. There is growing awareness and concern on the impact of human activity on the ecosystem. The economic activities of corporate entities in different countries are causing concerns for planners, managers and environmentally conscious people. Now-a-days the environmental issues have become a top most priority. There is growing pressure for business to consider environmental effect on their operations. As a result accounting for environmental matters has been rapidly emerging as an important dimension of corporate accounting. It has become a global issue with pressing needs also to harmonize accounting for environmental costs and liabilities. The global community considers it necessary to determine the best practice in accounting for environment. The developing countries like India are facing the twin problem of protecting the environment and promoting economic development. Environmental accounting is on an expansion path. With increasing social focus on the environment, accounting fills an expectation role, to measure environmental performance. The status of environmental awareness provides a dynamic for business reporting its environmental performance. Examining the integration of environmental policy with business policy is the focus of this research study.

Keywords: *Environmental Accounting, Human Activity, Social Focus, Environmental Performance, Environmental Policy*

1. Introduction

In recent years we all have witnessed environmental degradation at global level in shape of rising pollution levels, soil erosion, deforestation, etc. this is spoiling normal health of human beings, reducing the corporate productivity levels, reducing the availability of amenities, etc. The developing nations like India are facing the twin problems of first protecting its environment and simultaneously increasing its economic development. A trade off between the two becomes necessary. A complete analysis become necessary of benefits realized and costs accruing with respect to environmental exploitation taking place on account of economic development. This will help in predetermining the permissible limits for economic development. Hence a study on environmental accounting becomes necessary to determine benefits and cost of actions undertaken to protect the environment.

In a business organization it is considered to be prudent to make best use of all available resources, whether they are men, money, materials, machines or methods. The business entity is a part of social community and it is judged by its actions as a responsible member of the society. Its objectives in present day are not just profit making but value maximization in terms of shareholders wealth maximization without disturbing the environmental and social fabrics, on which it has to stand committed in order to maintain its standing in the society.

In general, environment refers to the surroundings of an object. Environmental accounting is an important tool for understanding the role played by the natural environment in the economy. Environmental accounts provide data which highlight both the contribution of natural resources to

economic well-being and the costs imposed by pollution or resource degradation. Due to ignorance of environment Problems such as Global warming rapid changes in climate, glacier Meltdown, soil erosion, land degradation, deforestation, and loss of biodiversity and pollution of all kinds such as water, air, marine, noise. Light etc are commonly experiences in the present century for which both developed of developing nation may be held responsible. So in the 21st century we have an urgent need of protecting our environment, because the environment is responsible for the survival of human beings. A native American provost states that, "Only when the last tree is cut, only when the last river is polluted only when the last fish is caught only then they will realize that you cannot eat money," the economic development without environmental considerations can cause various irreversible environmental damages, which in turn endangers the life of present as well as future generations.

We know that there are limited resources available for the use of all species on the earth and the enormous damage is cadged to the environmental due to the activities of the business enterprises. In fact the industrial and business activities are directly or indirectly responsible for birth to the remarkable incidence of the Bhopal chemical leak (1984). Tsunami in India (2004). The issue of environmental responsibility and the sustainable industrial development has given birth to a new branch of accounting i.e. Environmental Accounting. It is relatively a recent entrant in the domains of accounting. "Environmental Accounting is Process of identification measurement and communication of information on the environmentally responsible performance of a business entity to permit economic decisions." It is essential for an organization to implement the concept of sustainable development as it facilitates to take into account ecological activities of an organization in economic measurement.

2. Introduction To Environmental Accounting

Environmental accounting first adopted by Norway in the 1970s. Environmental accounting is a recent phenomenon in the modern jurisprudence. At present, the world community is very much concerned about the state of the environmental accounting and auditing systems as it bears sustainability on the mother earth for our generations. It is one of the important tools for understanding on the role played by the natural environment in the economy it provides adequate data which is highlighted both in the contribution of natural resources to economic well-being as well as the costs imposed by pollution or resource degradation. It can play a critical role as on be a part of the many international environmental organizations such as IUCN, WWF, PADELIA, WRI etc.; as they have been taking many initiatives for ensuring the environmental accounting for our competent survivals. The global state actors have already taken some greening accounting initiatives under the forum of the United Nations Division for Sustainable Development, the United Nations Statistical Division, and the United Nations Conference on Environment and development known as Earth Summit in Rio de Janeiro, Johannesburg Conference 2002 etc. This study will provide an overview of the environmental accounting education environmental accounting is related to environmental information and environmental eco-auditing systems. It has been developing this idea throughout the world.

During the last decade, there has been a growing awareness on the disclosure of environmental performance. With this growing awareness of environmental issues internationally, there is also an accelerating trend for organization, especially those have a direct and substantial influence on the environment like manufacturing, power generation, mining etc, to provide information regarding the environment implications of their operations. This incorporation of environmental issues into the corporate annual report can be labelled as Environmental reporting. It includes voluntary and involuntary disclosure of its activities on the environment. Accounting and disclosure of environmental aspects have been emerging as an important dimension of reporting practices. Mastrandonas and Strife (1992) find that stakeholders demand disclosure of company environmental information because of the magnitude of liabilities and cost associated with environmental issues.

They say that corporate should consider using environmental annual reports to communicate with their stakeholder and that will foster their partnership.

In different countries companies have different practices of making environmental reporting in their annual report. In the west, corporate entities are giving due attention to this stakeholder demand for environmental impacts and providing information regarding their operation which affect environment directly or indirectly. There are roughly two approaches of disclosure one is descriptive, that is followed by all enterprises and another is quantitative approach which includes their technical initiative and expenses they done on environment and how they are degrading the environment. Quantitative approach is rarely followed in India but some countries in Western Europe.

In India we do not have any formal guidelines provided by government or industry so in absence of this, enterprises design their own mechanism and follow certain practices for disclosure. This study aims to examine and try to comment upon the environmental disclosure practices followed by Indian Companies manufacturing. It categorize into five categories in form of five steps towards environmental disclosure and reporting.

3. Necessity of Environmental Accounting

The quantitative management of environmental conservation activities is an effective way of achieving and maintaining sound business management. In other words, in carrying out environmental conservation activities, a company or other organizations can accurately identify and measure investments and costs related to environmental conservation activities, and can prepare and analyze this data. By having better insight into the potential benefit of these investments and costs, the company can not only improve the efficiency of its activities, but environmental accounting also plays a very important role in supporting rational decision-making. In addition, companies and other organizations are required to have accountability to stakeholders, such as consumers, business partners, investors, employees, local residents, and administration, when utilizing environmental resources, i.e. public goods, for their business activities. Disclosure of environmental accounting information is a key process in performing accountability. Consequently, environmental accounting helps companies and other organizations boost their public trust and confidence and are associated with receiving a fair assessment.

4. Conceptual Framework

Environmental accounting is a term with a variety of meanings. In many contexts, environmental accounting is taken to mean the identification and reporting of environment-specific costs, such as liability costs or waste disposal costs. For the purposes of this analysis, a much more general definition is used. "Environmental accounting" is more than accounting for environmental benefits and costs. It is accounting for any costs and benefits that arise from changes to a firm's products or processes, where the change also involves a change in environmental impacts. As will be shown, improved accounting for non-environmental costs and benefits -- input prices, consumer demand, etc. can lead to changes in decision-making that have environmental consequences. Thus, we will de-emphasize any clear demarcation between "environmental" accounting and accounting generally.

Environmental accounting information need not be the product of accountants, nor need it be used by accountants. Instead, it is any information with either explicit or implicit financial content that is used as an input to a firm's decision-making. Product designers, financial analysts, and facility managers are equally likely to be the users of environmental accounting data. Almost any type of information collected and analyzed by firms will qualify. Examples include input prices, technical and scientific studies that relate production processes to physical outputs, and legal, marketing, and financial analyses.

5. Scope for Environmental Accounting

Environmental Accounting has a very wider scope in present time. It has applications everywhere. At corporate level, national and international level. At the corporate front, it needed to work as a tool to measure the economic efficiency of environmental conservation activities and the environmental efficiency of the business activities of the company as a whole.

From Internal point of view investment made by the corporate sector for minimization of losses to environment. It includes investment made into the environment saving equipment/devices. This type of accounting is easy as money measurement is possible. From external point of view all types of loss indirectly due to business operation/activities. It mainly includes: (A) Degradation and destruction like soil erosion, loss of bio diversity, air pollution, water pollution, voice pollution, problem of solid waste, coastal & marine pollution. (B) Depletion of non-renewable natural resources i.e. loss emerged due to over exploitation of non-renewable natural resources like minerals, water, gas, etc.(C) Deforestation and Land uses.

6. Literature Review

There are some important published and unpublished works on these issues. Some of the relevant works and literatures on the environmental accounting have been discussed here as follow.

Gautam and Bora (Pramanik A.K, pp 320-333) studied 25 organizations from Assam and found that 13 of them did not have any concern for environmental information disclosure .9 Companies disclosed descriptive type information, covering space from one fourth of a page to one page only. 2 Organizations presented this information pictorially along with description. Only one company gave some financial information on environment in social accounts attached to the annual report. It was concluded that environment al information disclosure by majority of the companies in Assam was confined only to the making of generalized statements with reference to protection of environment, pollution control, conservation of energy, and raw material. The felt that quality of disclosure was so poor that users could not use it in decision-making.

Kumar P (Environmental Accounting; an Indian Panorama) examined the Indian Scenario towards environmental disclosures by taking a random sample of 6 giants of Indian corporate sector. As regards the accounting and reporting aspects of environmental protection, sample companies made policy statements in their annual reports. Such information was given in the Chairman's report or Director Report in the form of statements. Particulars on Conservation of energy were given by all the selected companies; but no information was given on the expenses incurred, targets set and achieved in respect of natural resources. The study concluded that the environmental reporting in India was limited to little more than a sentence or two each in the annual report.

Dr. V K Gupta (Environmental Accounting and Reporting-An Analysis of Indian Corporate Sector) examined the understanding the of the nature and extent of environmental reporting and accounting practices followed by Indian Corporate and to determine the factors or attributes that drives the companies to adopt these practices . The paper also describes the theoretical considerations relating to environmental accounting. The study found that a very few companies in India are voluntarily disclosing the environmental issues in their Annual reports. The attributes such as high polluting industries, size of the company, High Debt to equity ratios and environment performance have positive impact on the environment disclosure .The reason behind the poor disclosure in environmental issues in India was found to be a lack of environmental legislations compelling the companies in disclosing the same in companies' annual reports.

7. Objectives of the Study

The broad objective of the study is to critically evaluate in Indian corporate sector. However, the specific objectives of this study are:

1. To identify the need for environmental accounting.
2. To assess the awareness for the accountants as to the environmental accounting.
3. To examine the position of environmental information in the Annual Reports
4. To identify the problems involved in environment accounting and reporting practices in Indian corporate sector
5. To suggest some measure as to overcome the problems thereby improving environmental situation.

8. Need of Environmental Accounting at Corporate Level

It helps to know whether corporation has been discharging its responsibilities towards environment or not. Basically, a company has to fulfil following environmental responsibilities.

1. Meeting regulatory requirements or exceeding that expectation
2. Cleaning up pollution that already exists and properly disposing of the hazardous material.
3. Disclosing to the investors both potential & current, the amount and nature of the preventative
4. Measures taken by the management
5. Operating in a way that those environmental damages do not occur.
6. Promoting a company having wide environmental attitude
7. Control over operational & material efficiency gains driven by the competitive global market.
8. Control over increases in costs for raw materials, waste management and potential liability

9. Limitations of Environmental Accounting

Environmental Accounting suffers from various serious limitations as follows:

1. There is no standard accounting method.
2. Comparison between two firms or countries is not possible if method of accounting is different which is quite obvious.
3. Input for EA is not easily available because costs and benefits relevant to the environment are not easily measurable.
4. Many business and the Government organizations even large and well managed ones don't adequately track the use of energy and material or the cost of inefficient materials use, waste management and related issue. Many organizations, therefore, significantly underestimate the cost of poor environment performance to their organization.
5. It mainly considers the cost internal to the company and excludes cost to society.
6. EA is a long-term process. Therefore, to draw a conclusion with help of it is not easy.
7. EA cannot work independently. It should be integrated with the financial accounting, which is not easy.
8. EA 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, national accounting, etc.
9. The user of information contained in the EA needs adequate knowledge of the process of EA as well as rules and regulations prevailing in that country either directly or indirectly related to environmental aspects.

10. Challenges in Adopting Environmental Accounting

The concept of environmental accounting has its share of challenges unlike conventional accounting:

1. Absence of standard accounting method
2. Difficulty in benchmarking between two firms due to non uniformity in accounting
3. Difficulty in measuring input cost
4. Measurements by corporate is mainly restricted to internal costs and excludes societal cost
5. Benefits measurements are long term process
6. Integrating environmental accounting with financial accounting

7. Environmental accounting would require adequate knowledge of the national rules and regulations related to environmental aspects.

11. Conclusion

Environmental Accounting can be expected to become the norms rather than choice of the future. As environmental issues have received much concern, more and more companies realize the importance of environment-related financial issues, especially environmental accounting. Many countries like US and Japan have made significant progress in this field, while China is facing difficulty in the development of environmental accounting. It would aid the discharge of the organization's accountability and increase its environmental transparency. 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. Companies producing environment-friendly products may take competitive marketing advantage. Companies may show their commitments towards innovation and change by making environmental disclosures. 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. Environmental accounting and hence reporting is thus a means of stakeholder communication. And lastly, the paper emphasizes the necessity for Indian Corporate sector to move ahead in this area and provides some advice for an environmental accounting application for Indian companies.

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