

## Environmental Accounting – An Analysis of Its Prevalence

**C.A. Shailesh Dattatraya Borkar**

Assistant Professor in Accountancy, Burhani College of Commerce & Arts, Nesbit Road, Mazgaon, Mumbai – 10, Maharashtra, India

### Abstract

The purity of the air that we breathe and the water that we consume is the final test of our existence. And no matter how much we disown responsibility for the defilement of our environment, we shall pay for this misdeed together. The environment that we are concerned with refers to the natural environment which includes all living beings and non-living things occurring naturally on Earth or some region thereof. Our major concern is to ensure that not just we but the ensuing generations are not deprived of the benefits of a pure and rich environment, a claim we cannot make today. Sustainability is the key to preventing or reducing the effect of environmental issues. There is now clear scientific evidence that humanity is living unsustainably and that an unprecedented collective effort is needed to return human use of natural resources to within sustainable limits. For humans to live sustainably, the Earth's resources must be used at a rate at which they can be renewed. This is where Green Technology comes in. Green Technology is a continuously evolving group of methods, materials, techniques and products that puts a check on the harmful effects on natural resources. The adoption of Green Technology as a way of life would therefore make it imperative to make efforts toward enhancing energy efficiency, recycling of waste, addressing safety and health concerns, use of renewable resources, and more.

**KEYWORDS:** Sustainability, collective effort, recycling.

**Introduction :** The immediate matter of concern is that the carbon dioxide equivalent of greenhouse gases (GHG) in the atmosphere has already exceeded 390 parts per million which is considered a danger signal. The amount of greenhouse gases in the atmosphere has already crossed the limit that can potentially cause dangerous climatic upheaval. We are already at risk...It's not next year or next decade, it's right now that we are at risk. It is, therefore, imperative that environmental degradation be dealt with at all levels – individual, corporate and governmental. In fact, what with environmental degradation taking its toll at individual and national levels and the World Health Organisation taking cognizance of every possible environment – related offence, a budding concept that has become the order of the day is **Environmentalism**. And to measure the success of efforts made to check environmental degradation and to upgrade environmental consciousness, it is imperative that we have a system of measurement and reporting. This is done through **Environmental Accounting**. Modern accounting is not only concerned with record keeping and reporting of information to the investors but it aims at fulfilling the information needs of a wide range of internal and external stakeholders. It is now considered as a service activity. Since late eighties, due to growing public concern about the alarming impact of industrial activities on nature, companies are under pressure from both the Government and the society to reduce adverse impacts of their activities on the environment. The performance of an Organization is now being judged not only on the basis of its financial results, but also with regards to its contribution **to protect**

**and improve** the environment. Environmental issues have become an important variable in the models used by the investors and creditors to determine the risk associated with their investment. In the evolving scenario, the need for accounting and reporting on the environment has been largely felt. As a result, accounting of environmental issues and their disclosure in the annual reports or by other medium has become an important part of corporate accounting and reporting systems. The Main Objective of the Study is to examine The Environmental Accounting and Reporting (EAR) Practices Followed by Corporate Sectors in India, to ascertain the extent of mandatory and voluntary disclosure of environment information in the annual report and to assess the need for a specific regulatory framework (including accounting guidelines, principles and standards) in the area of Environmental Accounting and Reporting.

Environmental accounting is defined as the identification, compilation, estimation and analysis of environmental cost information for better decision-making within the organisation. It can be defined as the generation, analysis, and use of financial and non-financial information in order to optimize corporate, environmental and economic performance, achieving a sustainable business. The ultimate objective of environmental accounting is to clearly indicate the environmental cost of each process, separating the non-environmental costs from the environmental costs. Environmental Accounting is a field that is emerging and developing. Its goal is the identification, measurement and communication of the costs from an entity's actual or potential impact on the environment. To include environmental information in the accounting system of a company is one way to start to include sustainable development in everyday business decisions.

A very important function of environmental accounting is to bring environmental costs to the managers; therefore, motivating them to identify ways to reduce and avoid economic costs related to the environment and at the same time reduce the environmental impact of the organizational activities. Environmental Accounting helps in knowing whether the organisation has been discharging its responsibilities towards environment or not. An organisation has to fulfill the following environmental responsibilities -

- Meeting regulatory requirements or exceeding the expectations.
- Cleaning up pollution that already exists and properly disposing of hazardous material.
- Disclosing to the investors, both potential & current, the amount and nature of the preventive measures taken by the management.
- Operating in a way that environmental damage does not occur.
- Promoting a company having wide environmental attitude.
- Control over operational & material efficiency gains driven by the competitive global market.
- Control over increases in costs of raw materials, waste management and potential liability.

The scope of Environmental Accounting is very wide. It includes corporate, national & international levels. The following aspects are included in Environmental Accounting -

1. From the internal point of view, it takes stock of the investment made by the corporate sector for minimization of losses to environment. It includes investment made for adopting environment saving equipment/ devices. This type of accounting is easy as money measurement is possible.

2. From the external point of view all types of losses are indirectly due to business operation/activities. It mainly includes:
  - a. Degradation and destruction like soil erosion, loss of bio diversity, air pollution, water pollution, noise pollution, problem of solid waste, coastal & marine pollution.
  - b. Depletion of non-renewable natural resources due to over exploitation of minerals, water, gas, etc.
  - c. Deforestation and soil erosion.

This type of accounting is not easy, as losses to environment cannot be measured exactly in monetary value. Further, it is very hard to decide that how much loss occurred to the environment due to a particular industry.

**Research Methodology :** Given the largely unsubstantiated nature of data on environmental trespasses, the costs involved, the restrictions imposed, the steps taken towards redemption and precise accounting and reporting done at all, this study relies largely on secondary data available and verified primarily with local units wherever possible.

**Literature Review :** The following eminent studies were reviewed –

1. **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. Nine companies disclosed descriptive type information, covering space from one fourth of a page to one page only.
2. **Kumar P (Environmental Accounting; An Indian Panorama)** examined the Indian Scenario towards environmental disclosures by taking a random sample of 6 giants from the Indian corporate sector. As regards the accounting and reporting aspects of environmental protection, the sample companies made policy statements in their annual reports. 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.
3. **Shah (et al. Pramanik A.K,pp140-144)** analyzed reporting on environmental protection activities by public limited companies in India. The study was based on 50 annual reports published by various large and medium size companies in different industries, mainly those with affected environment. The companies disclosing on environmental aspects mainly focused on pollution control measures, conservation of energy, effluent treatment, safety arrangements, achievements and awards and activities like forestation and community health services. Hardly any company reported on failure regarding environmental protection or damage caused by the company to the environment and society. Thus most of the companies avoided negative reporting. The study concluded that companies had taken reporting on environmental activities more as a statutory obligation and less as a social responsibility.

**Limitations of Environmental Accounting -**

1. There is no standard accounting method for ramifications of environmental excesses.

2. Comparison between two firms or countries is not possible if method of accounting is different which is quite obvious.
3. Input for environmental accounting is not easily available because costs and benefits relevant to the environment are not easily measurable.
4. Many business and Government organizations, even large and well managed ones, do not adequately track the use of energy and material or the cost of inefficient materials use, waste management and related issues. Many organizations, therefore, significantly underestimate the cost of poor environment performance.
5. It mainly considers the cost internal to the company and excludes cost to society.
6. Environmental accounting is a long-term process. Therefore, drawing short term conclusions is a fallacy.
7. Environmental accounting cannot work independently. It should be integrated with the financial accounting, which again is a complicated process.
8. Environmental accounting must be analyzed along with other aspects of accounting. Because costs and benefits related to the environment themselves depend on the results of the financial accounting, management accounting, cost accounting, tax accounting, national accounting, etc.
9. The user of information contained in the environmental accounting needs adequate knowledge of the process of environmental accounting as well as rules and regulations prevailing in that country either directly or indirectly related to environmental aspects.

**Findings:** From the above analysis the findings can be summarized follows -

1. Most polluting industries disclose significantly more information on environment related issues than less polluting industries.
2. Extent of environmental reporting in various industries is different.
3. Companies having foreign association disclose more information on environmental issues than domestic companies.
4. Environmental information disclosure is positively related to the size of the companies.
5. An increase in the profitability influences the reporting on environment positively.
6. High debt to equity ratio leads to increased reporting on environmental issues.
7. The environmental performance of the company also influences positively the extent of reporting.

**Recommendations:**

The findings suggest that the main reason for non-disclosure of environmental information by Indian companies is its voluntary nature. It is strongly recommended that environmental reporting should be made mandatory in India. Companies in India should be asked to submit detailed environmental information to the government regarding emission of specific toxic chemicals, pollutants, effluents, damage to the environment and community health. Environmental compliance laws must be effectively promulgated. Companies should calculate and report specific ratios indicating their environmental performance. These ratios, being relative measures, may be used for comparing the performance of the companies on environment related issues. Professional accounting bodies at national levels should develop a separate conceptual framework on

environmental accounting and reporting, specifying the objectives, general assumptions, qualitative characteristics and guidelines for companies.

**Conclusion:** The findings of the study reveal that companies are well aware of the fact that environmental consciousness will be a major issue of concern for business and industry in the times to come. They are fully convinced of the need for environmental information sharing. Despite this awareness, there is an absence of external environmental accounting. Companies in India do not have a proper environmental accounting system to determine the environment related costs, benefits, assets and liabilities. Indian companies fail to provide adequate disclosure on environment related issues. Without any strict accounting pronouncements from the Institute of Chartered Accountants of India and disclosure norms by the regulatory authorities, companies generally provide only statutorily required, qualitative and positive information on environment. It can be concluded that there is a low level of environmental accounting and reporting activity in India. The accounting profession and companies are yet to address these issues fully and satisfactorily.

**Limitations of the Study:** The study suffers from the following limitations - Organizations of small or medium size have been excluded from the scope of analysis. Some aspects of environmental accounting like social costs and benefits and their valuation have not been investigated because of the non-availability of the information on these issues. The present work has analyzed environmental information disclosure in annual reports of companies only.

**References:**

1. Accounting for the environment: An analysis of issues Senge, Stephen V Ohio CPA Journal; Feb 1993; 52, 1; ABI/INFORM Global pg. 33
2. Accounting for the environment: The role of strategic management accounting Smith, Richard; Lambell, Jill
3. Accounting Principles Board (APB),Statement No.4,Basic concepts & Accounting principles underlying Financial statements of Business Enterprises,ACPA1970,Para 40
4. Banerjee, B. (2002), Regulations of Corporate Accounting in India, Calcutta, the World Press Calcutta Private Limited.
5. Business & Economic Review; Apr-Jun 2006; 52, 3; ABI/INFORM Global pg. 21
6. Canadian Institute of Chartered Accountants (1993), Environmental Costs and Liabilities: Accounting and Financial Reporting Issues, Toronto.
7. Dr. Mukesh Chauhan Concept of Environmental Accounting and Practice in India The Chartered Accountant November 2005
8. Eco - Management and Auditing; Mar 2000; 7, 1; ABI/INFORM Global pg. 21