

## Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges

**\*Dr. Madhusudan Agarwal**

### Abstract

The accounting and reporting practices in relation to environmental matters have gained significant importance in recent years. As the world undergoes rapid industrialization, the ecological balance is being seriously threatened. Industrialization, while essential for economic development, has led to unplanned industrial growth and the resulting discharge of waste, contributing to environmental pollution. In response to growing concerns about environmental degradation and resource depletion, corporate sectors, especially in countries like India, are increasingly focusing on environmentally-friendly outcomes. It has become imperative to account for and track the environmental impact and natural resources within the country. This global awareness and acceptance of environmental issues have given rise to the field of "Green Accounting" or "Environmental Accounting." However, incorporating environmental considerations into financial statements poses challenges for accountants, as conventional accounting primarily deals with non-living entities. In light of these challenges, this study aims to analyze the rationale behind environmental accounting and its impact on the economy and society as a whole, while also highlighting the limitations of traditional accounting systems. Specifically, this research paper explores the concept of environmental accounting, its practices, and reporting in India. It sheds light on the increasing environmental awareness in developing nations like India and discusses the challenges associated with implementing environmental accounting.

**Keywords:** Environmental Degradation, Environmental Accounting, Social Responsibility, Environmental Reporting.

### INTRODUCTION

Environmental accounting serves as a crucial tool for assessing the role of business enterprises in the economy and their impact on the environment and society. It provides data that highlights both the positive contributions of businesses to economic well-being and the costs associated with pollution and resource degradation. Just like citizens, businesses have a responsibility to utilize their resources, both human and material, to their fullest potential. The performance of an enterprise is not solely

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**Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

*Dr. Madhusudan Agarwal*

judged based on its economic performance but also on its actions towards the environment and society. However, in the case of the Indian corporate sector, it has been observed that it has not performed as a responsible citizen, despite various laws enacted to promote social responsibility and the development of the environment and economy.

In recent years, there has been growing concern about environmental degradation resulting from increased industrial activities. Environmental degradation and pollution have adverse effects on human health, economic productivity, and overall quality of life. Energy conservation and efficient resource utilization have become imperative for multinational companies to remain competitive. Western developed countries have recognized the importance of measuring energy consumption in their manufacturing and service sectors, and the International Accounting Standards Board (IASB) has acknowledged this under the concept of Green Accounting.

Developing countries like India face the challenge of balancing environmental protection with economic development. A trade-off between the two is necessary, requiring a careful assessment of the costs and benefits of environmental damages. The limited availability of resources for all species on Earth and the significant environmental damage caused by business activities emphasize the need for environmental accounting. Incidents like the Bhopal Chemical Leak, Chernobyl disaster, and natural disasters highlight the role of industrial and business activities in environmental incidents.

Environmental accounting is a relatively new branch of accounting that aims to incorporate environmental costs into financial reporting. It seeks to bridge the gap between traditional economic goals and environmental goals, providing vital information for policy analysis. However, it is important to note that green accounting is considered a step towards strong sustainability, and efforts should be made to ultimately achieve a strong sustainability model.

#### **OBJECTIVES OF THE STUDY**

A. To understand the process of corporate environmental accounting and reporting. B. To examine the accounting and reporting practices of corporations regarding green accounting. C. To identify the main obstacles hindering the effective development of these practices.

#### **REVIEW OF LITERATURE**

In recent decades, companies have increasingly recognized the benefits of environmental reporting, leading to a significant rise in the number of companies reporting in various ways. Early adopters of environmental reporting realized that it is more than just a reporting tool but a governance and strategic issue (Roome, 1992; Parker, 1997; Parker, 2000a). Companies are required to comply with country-specific international reporting standards and regulations, regardless of the reporting medium used. It is important to assess the extent to which standard setting enhances the credibility of reporting, as demonstrated in major surveys.

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#### **Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

*Dr. Madhusudan Agarwal*

Environmental accounting and reporting are vital components of business strategy. They involve incorporating environmental aspects into the overall business strategy, generating the necessary performance reports, and recognizing the diverse skills required to measure, compile, and analyze the relevant data (Qureshi et al., 2012). The research focuses on the generation of reports and their standards for various business and regulatory purposes. The study identifies the major obstacles to environmental accounting and reporting and concludes that sustainable development requires a well-defined environmental policy and proper accounting procedures. It is challenging to develop accounting practices in this regard without creating awareness among the general population about environmental damage and safety (Qureshi et al., 2012).

A project on green accounting methodology for India and its states by Gundimeda et al. (2005) advocates for green accounting in India, presenting a framework for national and state accounts that reflect genuine net additions to wealth. The methodology and models proposed aim to incorporate natural capital and human capital externalities in India's national accounts by measuring the depletion of natural resources as depreciation and considering the future costs of pollution. The study suggests that green accounting is desirable, feasible, realistic, and practicable in India, utilizing existing primary data collected by various government sources. The study also highlights the lack of focused sustainability analysis and information provided to policymakers at the national and state levels in India, leading to a deficiency in a sustainability framework for public debate, government planning, budget allocation, and economic measurement.

Chauhan (2005) discusses various forms of environmental accounting, their scope, limitations, and the legal framework in the Indian context. The study concludes that it is essential for corporations to establish a firm environmental policy, take pollution control measures, comply with relevant rules and regulations, and provide adequate details of environmental aspects in their annual statements. Sustainable development in the country necessitates a well-defined environmental policy and appropriate accounting procedures.

Overall, the literature review highlights the growing importance of environmental reporting, the need for standardization and credibility, the potential benefits of green accounting in India, the lack of sustainability analysis in policymaking, and the necessity of corporate environmental policies and proper accounting practices for sustainable development.

#### **NEED FOR STUDY**

The study is necessary due to the increasing global environmental crisis and the growing recognition of sustainable development. Societies, including India, are realizing the importance of ecological requirements for economic progress. Accounting has evolved from merely describing financial performance to being recognized as a vital societal service. The ecological impact of corporate sectors on the environment has become more apparent, and it is crucial to consider the environmental and

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#### **Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

*Dr. Madhusudan Agarwal*

social effects of business activities alongside financial and production outcomes. As natural resources hold immense value, there is an urgent need to account for these resources, leading to the emergence of "Environmental Accounting" as a new field.

While organizations may have an Environmental Management Accounting system in place for internal management of environmental and economic performance, it may not be formally documented or reported as it is not mandatory. Industries should allocate funds for environmental protection and maintaining ecological balance. Business organizations are increasingly expected to account for the use of substances that may harm the environment. Green accounting is still in its early stages in India, but Indian corporations are starting to adopt separate environmental policies, such as implementing pollution control measures, adhering to regulations, and providing adequate details of environmental aspects in their annual statements.

#### **STAGES OF ENVIRONMENTAL ACCOUNTING:**

The study proposes a model consisting of six stages for environmental accounting, aimed at measuring the overall environmental performance of organizations and facilitating environmental accounting and reporting.

1. **Identification:** Organizations first identify the environmental reporting parameters relevant to their operations. These parameters include areas such as environmental policy, health safety and environment, energy conservation, corporate sustainability initiatives, waste management, water management, renewable energy sources, environmental information systems, disclosure practices, targets, indicators, and cost and benefits associated with the environment.
2. **Description:** In this stage, organizations define and describe the operational meaning of each identified parameter that will be used to measure their environmental performance in the long run.
3. **Specification:** The organization sets specific environmental targets to be achieved in both the short and long term. This involves formulating environmental policies and goals for the organization.
4. **Development:** Organizations develop environmental performance indicators that align with their goals and targets. This includes frameworks for environmental policy, health and safety standards, energy conservation practices, waste management programs, water management policies, and more.
5. **Measurement:** Organizations measure their actual environmental performance using predetermined performance indicators. Measurement can be qualitative or quantitative,

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#### **Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

*Dr. Madhusudan Agarwal*

depending on the specific indicator. For example, the effectiveness of the environmental policy framework may be assessed qualitatively, while waste management programs can be measured quantitatively.

6. Report Generation: In the final stage, organizations integrate their environmental performance results with their financial performance to generate comprehensive reports. This allows for the assessment of the environmental impact on financial outcomes.

Overall, this model provides a structured approach to environmental accounting, enabling organizations to systematically evaluate and report their environmental performance in conjunction with their financial performance.

### **LEGAL FRAMEWORK FOR ENVIRONMENTAL ACCOUNTING IN INDIA**

An India, although industrial licensing has been abolished, obtaining environmental clearance from various government authorities has become a crucial requirement. The country has established a Ministry of Environment to coordinate environmental protection and anti-pollution efforts among states and various ministries. There are several laws directly and indirectly related to environmental protection in India:

1. Directly related to Environmental Protection: a) Water (Prevention and Control of Pollution) Act, 1974. b) Water (Prevention and Control of Pollution) Cess Act, 1977. c) The Air (Prevention and Control of Pollution) Act, 1981. d) Forest (Conservation) Act, 1980. e) The Environment (Protection) Act, 1986.
2. Indirectly related to Environmental Protection: a) Constitutional Provision (Article 51A). b) The Factories Act, 1948. c) Hazardous Waste (Management & Handling) Rules, 1989. d) Public Liability Insurance Act, 1991. e) Motor Vehicle Act, 1991. f) Indian Fisheries Act, 1987. g) Merchant of Shipping Act, 1958. h) Indian Port Act. i) Indian Penal Code. j) The National Environment Tribunal Act, 1995.

It is worth noting that all new projects in India require environmental clearance from both the Union Ministry of Environment and Forests and the corresponding State Government department of environment. Guidelines have been issued, and it is mandatory for projects to obtain environmental and anti-pollution clearance before they are established. The Central Pollution Control Board (CPCB) has been established to oversee these matters. In cases where violations of water or air pollution standards are identified, show cause notices are issued to industrial units, and regular inspections are conducted to ensure compliance.

### **ENVIRONMENTAL ACCOUNTING PRACTICES IN INDIA**

Environmental Green accounting is still in its early stages in India. The government first emphasized

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#### **Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

*Dr. Madhusudan Agarwal*

the need for environmental disclosures from business units in 1991, following the economic reforms that liberalized the country's policies. The Ministry of Environment and Forests proposed that companies should disclose information in their Board of Directors' reports about their adoption of clean technologies, pollution prevention, waste minimization, recycling, pollution control measures, investment in environmental protection, and the impact of these measures on waste reduction and resource conservation.

In 2011, the Securities and Exchange Board of India mandated listed companies to report on their Environmental, Social, and Governance (ESG) initiatives, in line with the principles outlined in the 'National Voluntary Guidelines on Social, Environmental, and Economic Responsibilities of Business.' The Companies Act of 2013 also emphasizes corporate social responsibility and makes it mandatory for certain profitable enterprises to allocate funds for social welfare activities. Companies meeting specific criteria are required to adopt a CSR policy and provide additional disclosures regarding energy conservation and environmental protection.

The Union Ministry of Environment and Forests has issued various instructions for the preparation of environmental statements. Environmental clearance from the Ministry and the respective State Government's Department of Environment is mandatory for all new projects. Environmental and anti-pollution clearances must be obtained before setting up such projects, following the guidelines provided. Companies typically disclose information related to pollution control devices, energy conservation measures, resource utilization optimization, wastewater treatment, waste decomposition, and efforts to improve product and service quality in their accounts.

A gazette notification on environmental audit was issued by the Ministry of Environment and Forests in 1992, with subsequent amendments in 1993. This notification requires the submission of an environment statement to the Central Pollution Control Board by individuals or entities carrying out industrial operations or processes that require consent to operate under relevant pollution control acts or authorization under hazardous waste management rules. The environment statement should include information on water and raw material consumption, pollution generation, the impact of pollution control measures on natural resource conservation, hazardous and solid waste generation and disposal practices, environmental protection measures, and efforts to promote the benefits of environmental accounting and reporting among the corporate sector.

Overall, environmental accounting practices in India are still evolving, with the government introducing regulations and guidelines to encourage environmental disclosures and responsible corporate behavior in relation to the environment.

#### **CHALLENGES IN ENVIRONMENTAL ACCOUNTING AND REPORTING**

Environmental accounting and reporting face several challenges. One major challenge is the need for

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#### **Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

*Dr. Madhusudan Agarwal*

a proper framework that provides guidelines on environmental costs, liabilities, assets, and the capitalization of such elements. Assessing the costs and benefits of environmental damages is crucial to determine the tolerance limit for environmental degradation and the required level of development.

Corporate reporting practices show a growing trend of companies disclosing environmental information in their annual reports to inform shareholders and the public. However, most of this information is non-financial and merely describes the company's efforts without providing details on the financial impact. There is also a wide variation in reporting styles and themes chosen by companies, leading to a lack of comparability and verifiability.

To address these issues, it is important to integrate environmental information with financial accounting information to enhance reliability. Monetary measurement of environmental costs and benefits is necessary for integration, but not all costs and benefits can be suitably measured in monetary terms, especially at a micro level. Internal costs related to investments for minimizing environmental losses can be monetarily measured, but costs of externalities such as pollution, resource depletion, and environmental assets like afforestation and biodiversity conservation are challenging to measure in monetary terms.

Furthermore, determining the exact environmental impact caused by a specific business unit is difficult, which poses obstacles to fully integrating environmental accounting within the existing Generally Accepted Accounting Principles (GAAP) framework. However, it is possible to disclose the internal costs and benefits of environmental measures undertaken by a business unit and their material effects on reported profit by providing information on recognition methods.

#### **CONCLUSION:**

Environmental Accounting plays a crucial role in understanding the relationship between the natural environment and economic development. It provides valuable data on the contribution of natural resources to economic well-being and highlights the costs associated with environmental pollution and resource degradation. However, in India, environmental accounting and reporting practices are still in their early stages.

Although Indian corporates generally comply with environmental regulations, there is a lack of clear policies at the national, state, and company levels to ensure consistent compliance with environmental norms. To achieve sustainable development, businesses and households need to establish concrete environmental policies, implement effective pollution control measures, adhere to relevant rules and regulations, and provide comprehensive details of environmental aspects in their annual reports.

To promote sustainable development and environmental stewardship, it is crucial to develop and

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#### **Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

*Dr. Madhusudan Agarwal*

implement robust environmental policies, ensure their proper implementation, and establish appropriate accounting procedures to track and report environmental performance accurately. By integrating environmental considerations into accounting practices, India can effectively balance economic development with environmental protection.

**\*Associate Professor  
Department of ABST  
Government Commerce College, Kota**

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#### **Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

*Dr. Madhusudan Agarwal*



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**Analysis of Environmental Accounting Reporting Practices in India: Concerns and Challenges**

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