Environmental Reporting and Legal Regulations in India

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Abstract

Environmental reporting is increasingly recognized as an essential element of corporate sustainability and accountability. This paper analyse the legal and regulatory framework governing environmental reporting in India. The study examines key environmental regulations in India, including the Environment (Protection) Act, 1986, the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, and the Companies Act, 2013. In addition, it analyses important regulatory initiatives such as the Securities and Exchange Board of India's (SEBI) mandate on Business Responsibility and Sustainability Reporting (BRSR), as well as the roles of institutions like the Central Pollution Control Board (CPCB) and the National Green Tribunal (NGT). The study further discusses both mandatory and voluntary environmental disclosures, highlighting the evolving legal framework guiding corporate environmental responsibility in India.

Keywords: Environmental Reporting, Legal Framework, SEBI, BRSR, Environmental Law, Corporate Disclosure, India

1. Introduction

The growing urgency of global environmental challenges such as climate change, biodiversity loss, and resource depletion has significantly reshaped the expectations placed upon corporate entities. Businesses are no longer viewed solely as economic agents, but also as environmental stewards responsible for minimizing ecological harm and contributing to sustainable development. In this context, environmental reporting has emerged as a crucial tool for enhancing transparency, enabling accountability, and guiding decision-making among stakeholders.

Environmental reporting refers to the systematic disclosure of an organization's environmental performance, policies, and impacts. It includes qualitative and quantitative information on areas such as emissions, energy consumption, waste management, compliance with environmental laws, and sustainability initiatives. These disclosures serve multiple purposes like inform investors, regulators, and the public; improve corporate reputation; and contribute to regulatory compliance and risk management. Globally, the rise of sustainability frameworks such as the Global Reporting Initiative (GRI), the Carbon Disclosure Project (CDP), and integrated reporting standards has further institutionalized environmental disclosure practices.

In India, environmental reporting has undergone a gradual but significant transformation, shifting from voluntary disclosures to more structured and regulatory-driven practices. This evolution has been shaped by various environmental laws such as the Environment (Protection) Act, 1986, the Water (Prevention and Control of Pollution) Act, 1974, and the Air

(Prevention and Control of Pollution) Act, 1981. Additionally, corporate regulations under the Companies Act, 2013, and reporting mandates by the Securities and Exchange Board of India (SEBI) notably the Business Responsibility and Sustainability Reporting (BRSR) framework have brought sustainability issues into the formal reporting domain. The study aims to analyse the legal and regulatory framework governing environmental reporting in India.

The remainder of this paper is structured as follows: Section 2 presents a comprehensive review of the relevant literature. Section 3 outlines the legal and regulatory framework governing environmental reporting in India. Section 4 discusses case studies of Indian firms. Sections 5 and 6 highlight mandatory and voluntary environmental disclosures, respectively. Finally, Section 7 concludes the paper.

2. Review of Literature

Early studies primarily focused on the voluntary nature of environmental disclosures and their correlation with firm-specific factors. Gray et al. (1995) laid a foundational framework for corporate social and environmental reporting, arguing that disclosure practices are influenced more by legitimacy-seeking behaviour than regulatory compliance. Deegan (2002) emphasized the role of legitimacy theory in explaining voluntary disclosure, while Cormier and Gordon (2001) found that firms use environmental reporting to manage stakeholder perceptions, particularly in environmentally sensitive industries.

From an Indian perspective, Bhatia and Tuli (2017) examined the extent of environmental disclosures among Indian firms and noted a significant variance across sectors, with better reporting observed in large and export-oriented companies. Similarly, Pramanik et al. (2007) argued that environmental reporting in India remains largely symbolic due to the absence of enforcement mechanisms and mandatory guidelines. In contrast, Reddy and Reddy (2021) found that the introduction of SEBI's Business Responsibility Reporting (BRR) led to modest improvements in environmental transparency.

Comparative studies have also revealed geographic and regulatory differences. Hossain et al. (2016), in a study on South Asian countries, found India lagging behind Sri Lanka in standardized sustainability disclosures due to weaker institutional enforcement. Clarkson et al. (2008) established that mandatory regulation significantly improves the quality and quantity of environmental reporting, which is further validated in emerging markets by Hahn and Kühnen (2013).

Several studies have addressed the determinants of environmental disclosures. Brammer and Pavelin (2008) identified firm size, industry type, and media visibility as major drivers in the UK context, while Kansal et al. (2014) confirmed similar results in Indian companies, particularly in the manufacturing sector. Rahman et al. (2015) explored the role of board characteristics and ownership patterns, concluding that firms with independent boards and foreign ownership exhibit better reporting quality.

On the regulatory front, Jose and Lee (2007) highlighted the influence of legal obligations in shaping disclosure practices across the Asia-Pacific region. In India, Patel and Ray (2019) evaluated the impact of Companies Act, 2013 and observed increased attention towards environmental issues in directors' reports. Saluja and Garg (2020) noted that post-SEBI BRSR framework, there has been a gradual shift from symbolic to substantive disclosures.

Sustainability and financial performance linkage is also well-explored. Lopez et al. (2007) found a positive relationship between environmental disclosure and firm profitability in European firms, while Sarkar and Searcy (2016) examined Indian firms and found that proactive environmental strategies contribute to improved operational efficiency. However, Aggarwal and Sinha (2020) caution that such outcomes are conditional on firm-level governance structures and industry pressures.

Finally, Mahadeo et al. (2011) and Chatterjee and Mir (2008) emphasize the role of sociopolitical and cultural factors in shaping disclosure norms. Their work suggests that regulatory push alone may not ensure improved environmental reporting unless it is supported by institutional incentives and stakeholder demand.

3. Legal and Regulatory Framework Governing Environmental Reporting in India

Environmental accounting in India is influenced by various regulatory authorities and guidelines that aim to promote sustainable practices, implement environmental laws, monitor compliance, address environmental challenges and ensure environmental accountability. The key regulatory bodies and frameworks governing environmental accounting in India include:

(i) Central Pollution Control Board (CPCB)

It is a statutory organization under the MoEFCC, CPCB monitors and controls pollution levels across the country. It prescribes standards for emissions, waste management, and pollution control. It mandates companies to report data on emissions, effluents, and waste generation. It develops standards and guidelines for pollution control. Monitors compliance at the national level.

(ii) Ministry of Environment, Forest and Climate Change (MoEFCC)

The Ministry of Environment, Forest and Climate Change (MoEFCC) is the apex body for formulating and implementing policies related to environmental protection, forest conservation, and climate change.

(iii) National Green Tribunal (NGT)

With the establishment of the National Green Tribunal in 2010, India is one of only three other countries in the world to have an exclusive judicial body to hear environmental cases. This is potentially a significant step in providing greater access to environmental justice. A specialized judicial body established under the National Green Tribunal Act, 2010, for resolving environmental disputes, including environmental damage, pollution, and compliance with environmental laws.

(iv) Securities and Exchange Board of India (SEBI)

One of the most significant regulatory developments in recent years has been the introduction of the Business Responsibility and Sustainability Reporting (BRSR) framework by SEBI, replacing the earlier Business Responsibility Report (BRR). BRSR has been made mandatory for the top 1000 listed companies by market capitalization, effective from FY 2022–23. It requires detailed disclosures across three pillars: Environment, Social, and Governance (ESG).

Under the Environmental Pillar, companies are required to report on:

- Energy and water consumption
- Greenhouse gas (GHG) emissions
- Waste generation and disposal

- Compliance with environmental laws
- Use of renewable energy
- Risk management related to climate change

The BRSR framework aligns closely with global standards such as the GRI and TCFD (Task Force on Climate-related Financial Disclosures), enhancing the comparability and comprehensiveness of Indian firms' environmental reporting.

(v) Institute of Chartered Accountants of India (ICAI)

The Institute of Chartered Accountants of India (ICAI), established under the Chartered Accountants Act, 1949, is the apex regulatory body for the accounting profession in India. In recent years, ICAI has taken a proactive role in promoting environmental accounting, sustainability reporting, and ESG disclosures. Through its Sustainability Reporting Standards Board (SRSB), the ICAI has issued guidance notes, concept papers, and training programs to support the adoption of frameworks such as Integrated Reporting, BRSR, and climate-related financial disclosures.

(vi) Reserve Bank of India (RBI)

In recent years, the RBI has taken significant steps to promote green finance and integrate ESG considerations into the financial sector. It has issued guidelines urging banks and financial institutions to incorporate climate-related risks into credit appraisal and risk management practices. In 2022, the RBI released a Discussion Paper on Climate Risk and Sustainable Finance, emphasising the importance of climate stress testing and ESG disclosures in the banking sector. The RBI also supports the development of green bonds and facilitates India's transition to a low-carbon economy.

(vii) Ministry of Corporate Affairs (MCA)

The Ministry of Corporate Affairs (MCA) serves as the nodal authority for regulating corporate governance, compliance, and disclosure in India. In recent years, it has actively worked to embed sustainability and environmental accountability within the corporate regulatory framework. A key initiative was the launch of the National Voluntary Guidelines (NVGs) in 2011, which were later revised as the National Guidelines on Responsible Business Conduct (NGRBCs) in 2019.

4. Case Studies and Legal Enforcement in Practice

This section explores select case studies and legal judgments to demonstrate how Indian companies respond to environmental regulations and how the judiciary and regulatory bodies influence disclosure and compliance.

(i) NTPC Ltd. and Voluntary Environmental Reporting

As a leading public sector enterprise in the energy sector, NTPC Ltd. has proactively adopted sustainability reporting based on GRI Standards and integrates its environmental disclosures within its annual and sustainability reports. It discloses key performance indicators on emissions, water use, waste management, and biodiversity.

(ii) Infosys Ltd.: BRSR and ESG Compliance

Infosys, a major Indian IT services firm, has consistently published detailed sustainability and ESG reports. Under the SEBI mandated BRSR framework, Infosys reports on its energy consumption, carbon footprint, water conservation, and waste recycling practices. The company has also committed to achieving net zero emissions by 2040. Infosys serves as a

model for how regulatory compliance with BRSR can be integrated with long-term sustainability goals and stakeholder engagement.

(iii) Reliance Industries: Legal Compliance

Reliance Industries has faced multiple controversies related to environmental clearances and compliance with environmental norms, particularly in the petrochemical and refining sectors. While the company regularly publishes sustainability reports, questions have been raised about the substance versus form of such disclosures. This case highlights the tension between legal compliance and genuine transparency, underscoring the need for independent assurance and stricter enforcement mechanisms in environmental reporting.

(iv) Indian Oil Corporation (IOC): Compliance-led Reporting

IOC, a major public sector refining and marketing company, has aligned its sustainability disclosures with the National Voluntary Guidelines (NVGs) and BRSR. The company publishes comprehensive data on emissions, fuel quality improvements, and environmental initiatives across its supply chain. IOC's example demonstrates how state-owned enterprises are adapting to regulatory expectations through structured environmental disclosures, often going beyond the minimum legal requirements.

(v) Wipro Ltd.: Stakeholder-Centric Environmental Reporting

Wipro's sustainability reporting is notable for its focus on stakeholder engagement, life-cycle analysis, and climate-related risk disclosure. The company aligns its environmental reporting with global frameworks like TCFD, GRI, and SASB, providing both narrative and data-driven insights.

5. Mandatory Environmental Reporting

Numerous laws and regulations in the country govern the disclosure of environmental information by companies in their annual reports. Out of these, there are specific regulations that require the mandatory disclosure of certain aspects in their annual reports.

i. Disclosure under Companies Act, 2013

The Companies Act, 2013, governs the overall regulation of companies in the country, and the Act contains numerous provisions that deal with the disclosure and reporting of various items that have an impact on the environment or sustainability. Recently, Section 166(2) of the Companies Act, 2013, mandated that directors of companies must act in an environmentally responsible manner. The Companies Act contains numerous provisions that address corporate social responsibility. As per schedule VII, companies must incorporate all activities related to the environment in their Corporate Social Responsibility Policy.

ii. Business Responsibility Reports, 2012

The Securities and Exchange Board of India (SEBI) makes it compulsory for the top 1000 companies (based on market capitalization) in India to prepare and submit Business Responsibility Reports, describing the measures taken by the company to benefit society, the environment, and the economy. This report is to be prepared by the principles outlined in the National Voluntary Guidelines on Social, Environmental, and Economic Responsibilities of Business, as framed by the Ministry of Corporate Affairs (MCA). Initially, only the top 100 companies are required to submit such a report. However, there is no restriction on other companies from preparing their reports. They can also prepare the report, but there is no obligation on them.

iii. SEBI Committee on Corporate Governance, 2003

It mandates that all listed companies submit a quarterly compliance report, including a corporate governance report, to the SEBI within 15 days of the end of each financial quarter. Although no specific environmental information is mentioned in this report, the SEBI Committee on Corporate Governance's discussion suggests that a broader set of stakeholders should be considered, taking into account societal concerns about labour and the environment.

iv. The Environment (Protection) Act of 1986

The Environment (Protection) Act of 1986 requires all relevant organisations to submit an environmental audit report in the prescribed format to the State Pollution Control Board (SPCB). Such a report must disclose the details regarding consumption of materials and water, level of emissions generated by the concern, discharge of effluents, generation of solid waste, pollution control measures adopted by the concern, efforts put by the concern on conservation of natural resources and investment made by the concern for the benefit of the environment.

v. Corporate Responsibility for Environmental Protection (CREP), 2003

It is an initiative taken by the Central Pollution Control Board of India. The objective is to ensure that, as far as pollution control measures are concerned, companies must not restrict themselves to regulatory norms; rather, they must go beyond that. This Guidance note on Non-Financial Disclosures, 2011.

6. Voluntary Environmental Reporting

Disclosure of environmental information in corporate reports is largely voluntary. Keeping these considerations in mind, numerous organizations worldwide have issued environmental reporting guidelines. Although these guidelines are not mandatory, a large number of companies follow them in disclosing their environmental information. These guidelines are summarized below:

i. ISO 14000

ISO 14001 is an internationally recognized standard developed by the International Organization for Standardization (ISO) that outlines the criteria for an effective environmental management system (EMS). It deals with how the company manages environmental activities inside and outside the organization. The standard requires an analysis of the entire product life cycle. It focuses on raising awareness of the processes and procedures that can impact the environment.

Some of the standards in the ISO 14000 series are

- ISO 14001 specification of environmental management system
- ISO 14004 guideline standard
- ISO 14010 through ISO 14015 environmental auditing
- ISO 14020 through ISO 14024 environmental labelling
- ISO 14031 through ISO 14032 environmental performance evaluation
- ISO 14040 through ISO 14043 life cycle assessment

ii. Global Reporting Initiatives GRI

Global Reporting Initiatives (GRI) refers to a set of standards for sustainability reporting that enable organizations to communicate their environmental, social, and governance (ESG) performance. The GRI Standards are designed to provide transparency and accountability, enabling organizations to report on their impacts and contributions toward sustainable development. The Global Reporting Initiative (GRI) offers a comprehensive set of indicators to guide organizations in their sustainability reporting efforts. Figure 1.1 depicts the categorization of GRI indicators.

iii. National company voluntary guideline 2011

The National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business (NVGs), 2011, were introduced by the Ministry of Corporate Affairs (MCA), Government of India, to encourage responsible business conduct among Indian companies. There are nine core principles; however, the 6th Principle focuses explicitly on the responsibility of businesses toward the environment, which involves using natural resources efficiently, minimizing waste and emissions, and promoting environmental awareness and sustainable practices throughout the value chain.

Global Reporting Initiatives (GRI) Topic Specific Standards Standards GRI 400: Social GRI 103: GRI 200: Economic GRI 102: General GRI 101: Foundation Management Disclosure GRI 201: Economic Performance GRI 302: Energy GRI 401: Employment Approach GRI 301: Materials GRI 402: Labour Relations GRI 202: Market Presence GRI 403: Occupational Health GRI 303: Water and Effluents GRI 203: Indirect Economic Impacts and Safety GRI 404: Training and GRI 304: Biodiversity GRI 204: Procurement Practices Education GRI 405: Diversity and Equal GRI 205: Anti-corruption GRI 305: Emissions opportunity GRI 206: Anti-competitive behavior GRI 306: waste GRI 406: Non-discrimination GRI 307: Environmental GRI 407: Freedom of GRI 207: Tax Compliances Association GRI 308: Supplier GRI 408: Child Labor Environmental Assessment GRI 409: Forced Labor GRI 410: Security practice GRI 411: Right of Indigenous People GRI 412: Human Right Assessmen GRI 413: Local Communities GRI 414: Supplier Social GRI 415: Public Policy GRI 416: Customer Health and Safety GRI 417: Marketing and Labeling GRI 418: Customer Privacy GRI 419: Socioeconomic

Figure 1.1: Categorization of GRI indicators

Source: Consolidated set of GRI Sustainability Reporting Standards, 2020

7. Conclusion

India's legal and constitutional framework has laid a strong foundation for environmental responsibility, both at the individual and corporate levels. While regulatory developments

such as the Environment Protection Act, Companies Act, and SEBI's ESG directives have significantly advanced environmental accountability, the actual implementation rests with corporations. With increasing public awareness and global pressure, Indian industries especially large and profitable firms must take the lead in integrating environmental compliance into their core operations. Strengthening environmental accounting and disclosure practices is not only a legal necessity but also a step toward sustainable development.

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