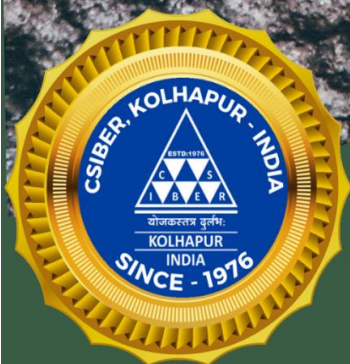


CSIBER INTERNATIONAL JOURNAL OF ENVIRONMENT (CIJE)

Vol. 1, Issue No. 1, March 2024



Published By :

CSIBER Press, Central Library Building,
CSIBER Campus, University Road,
Kolhapur, (MS), INDIA, 416004

Find the Journal online at

<https://www.siberindia.edu.in/journals>

E-mail : editorcije@siberindia.edu.in



Published By:
CSIBER Press, Central Library Building
Chhatrapati Shahu Institute of Business Education & Research (CSIBER)
University Road, Kolhapur – 416004, Maharashtra, India

Chief Patron

Late Dr. A. D. Shinde

Patrons

Dr. R. A. Shinde

President & Managing Trustee,
CSIBER Trust, Kolhapur, India

CA. H. R. Shinde

Secretary, CSIBER Trust, Kolhapur, India

Editor

Er. D. S. Mali

malids@siberindia.edu.in

Dean of School of Environmental Science & Management, CSIBER, Kolhapur, India

Editorial Board Members

Prof. T. Mangaleswaran

vc@vac.ac.lk

Vice Chancellor, University of Vavuniya, Sri Lanka

Dr. Mohamoud Yusuf Muse

president@uoh.edu.so

President, University of Hargeisa, Somali Land, Africa

Prof. Dr. Nay Mar Soe

drnaymar.chem.chem@gmail.com

HOD Chemistry, Yangon University of Education, Myanmar

Dr. Amitabye Luximon-Ramma

aramma@utm.ac.mu

Senior Lecturer & HOD, University of Technology, Mauritius

Dr. K. Arjunan

ksarjunan@vau.ac.lk

Senior Lecturer, University of Vavuniya, Sri Lanka

Dr. P. Malathy

spmalathy@vau.ac.lk

Senior Lecturer, University of Vavuniya, Sri Lanka

Dr. Pawas Suren, India

pawassuren@xiss.ac.in

Asst. Professor, XISS, Ranchi, India

Dr. Preeya Vijayalakshmee Ramasamy Coolen

vr.coolen@utm.ac.mu

Senior Lecturer, University of Technology, Mauritius

Superintendent

Mrs. Maithili Santosh & Prof. Sneha Nagaonkar

CSIBER, Kolhapur, India.

Contact No: +91-231-2535706 / 07

Website: www.siberindia.edu.in

Email: editorcije@siberindia.edu.in

Editorial Note

CSIBER International Journal of Environment (CIJE) offers a venue where relevant interdisciplinary research, practice and case studies are recognized and evaluated. Increasingly, environmental sciences and management integrate many different scientific and professional disciplines. Thus the journal seeks to set a rigorous, credible standard for specifically interdisciplinary environmental research. CIJE is a multidisciplinary journal, publishing research on the pollution taking place in the world due to anthropogenic activities. CIJE welcomes submissions that explore environmental changes and their cause across the following disciplines like atmosphere and climate, biogeochemical dynamics, ecosystem restoration, environmental science, environmental economics & management, environmental informatics, remote sensing, environmental policy & governance, environmental systems engineering, freshwater science, interdisciplinary climate studies, land use dynamics, social-ecological urban systems, soil processes, toxicology, pollution and the environment, water and wastewater management, etc.

We invite authors to contribute original high-quality research on recent advancements and practices in Environment Management. We encourage theoretical, experimental (in the field or in the lab), and empirical contributions. The journal will continue to promote knowledge and publish outstanding quality of research so that everyone can benefit from it.

Er. D. S. Mali

Editor, CIJE



CSIBER International Journal of Environment – CIJE

A Bi-Annual Double-Blind Peer Reviewed (Refereed/Juried)
Open Access International e-Journal - Included in the International Serial Directories

CSIBER International Journal of Environment (CIJE)

CONTENTS

<p>Design And Analysis Of Zero Energy Buildings Mr. Gaurav Desai Assistant Professor, Department of Civil Engineering, Dr. D. Y. Patil Pratishthan's College of Engineering, Salokhenagar, Kolhapur, India</p>	1-10
<p>Bioplastic: A Sustainable Alternative For Single Use Plastic Food Packaging & Study Of Hotels Attitude Towards This Packing Mr. Muthumari Ganesh Muthukumar Student, Department of Environment Management, Chhatrapati Shahu Institute of Business Education and Research, Kolhapur, Maharashtra, India</p>	11-21
<p>Need Of Pipe Composting In Rapid Urbanization For Clean, Green Environment Prof. Amey Diwan , Prof. Subhash Yadav & Dr. Vinayak Diwan Department of Civil Engineering, Dr. D. Y. Patil Pratishthan's College of Engineering, Salokhe Nagar Kolhapur, Maharashtra, India HOD Department of Civil Engineering, New Polytechnic, Kolhapur, Maharashtra, India Retd. Head of Dept. of Civil Engineering, New Polytechnic, Kolhapur.</p>	22-28
<p>Impacts of Festivals on Environment, Smart Cities, and Tourism in Maharashtra, India Saurabh Dattatray Vichare & Sudhanshu Sambhaji Yadav Student Department of Environment Management, Chhatrapati Shahu Institute of Business Education and Research, Kolhapur, Maharashtra, India</p>	29-42
<p>Review Of Plastic Waste Generation In Sangli-Miraj-Kupwad Municipal Corporation Area, Its Recycling Process And Its Benefits On Different Aspects Of Environment Ms. Chaitrali Thombare Student, Department of Environmental Management, CSIBER, Kolhapur, Maharashtra, India</p>	43-53
<p>Analysis Of Sustainability Reporting In International Market Based On Global Reporting Initiative (GRI) Standards And Its Linkage With Business Responsibility And Sustainability Reporting (BRSR) Mr. Anand Gholap Student Department of Environmental Management, CSIBER, Kolhapur, Maharashtra, India</p>	54-76

Evaluation of Nutrient Content of Vermicompost and its Applications <i>Santosh Suryavanshi, Pranav Desai, Vikas Dabade</i> Students, Department of Environment Management, Chhatrapati Shahu Institute of Business Education and Research, Kolhapur, Maharashtra, India	77-85
Microplastics: A Global Threat to the Environment <i>Rajnandinee Avinash Patil & Y. Y. Patil</i> School of Nanoscience and Biotechnology, Shivaji University, Kolhapur, Maharashtra, India	86-102
Comparative study on Effects of Chemical Fertiliser, Vermicompost and Farm Yard Manure on Tomato Plant Growth and Soil Fertility. <i>Pooja S. Sarolkar</i> Asst. Prof. Dept. of Env't. Sc., CNCVCW, CSIBER Trustee, Kolhapur, India	103-109

Analysis of Sustainability Reporting in the International Market Based on Global Reporting Initiative (GRI) Standards and its Linkage with Business Responsibility and Sustainability Reporting (BRSR).

Anand Niranjana Gholap

Student Department of Environmental Management, CSIBER, Kolhapur, Maharashtra, India
agholap33@gmail.com

Abstract

The practice of sustainability reporting (SR) has emerged as a critical mechanism for transparency and accountability in business worldwide, as there is an increasing urgency to address Environmental, Social, and Governance (ESG) concerns. This research paper explores the landscape of SR in India and international businesses, focusing on the Global Reporting Initiative (GRI) and Business Responsibility and Sustainability Reporting (BRSR) at its core. Many other standards of SR are also studied giving an overview of the current trends in SR. An extensive examination of sustainability reports from six diverse companies spanning various industries is done. This analysis is centered on assessing how these companies fulfill their ESG obligations according to GRI standards. The observations of the analysis are compiled into a table that provides a clear overview of how companies in different sectors communicate their ESG-related information through their sustainability reports. This tabulated data offers valuable insights into the distinctive approaches and practices adopted by these companies when disclosing commitments and performance. The linkage of BRSR with the GRI standards is also studied in detail and Mapped in the research. So that the companies can report their sustainability scenarios in an integrated manner based on GRI and BRSR standards together.

Keywords: Sustainability Reporting, Business Responsibility and Sustainability Report, Global Reporting Initiative, Linkage of BRSR and GRI, Integrated Reporting.

Introduction

Sustainability Reporting (SR)

In General, sustainability reporting deals with information concerning environmental, social, economic, and governance issues in the broader sense. These are the criteria gathered under the acronym of ESG. The introduction of this non-financial information in published reports is seen as a forward step in corporate communication and is considered an effective way to increase transparency and corporate engagement. Sustainability reports play a crucial role in enhancing consumer trust and bolstering corporate reputations. They achieve this by showcasing a company's commitment to social responsibility initiatives and by providing transparent insights into how it manages various risks. The primary purpose of these reports is

to ensure that stakeholders have comprehensive access to essential non-financial information, which significantly impacts the overall performance of the company. Various terms, such as non-financial reporting, extra-financial reporting, social reporting, CSR reporting, and socio-environmental reporting, are used interchangeably to describe the concept of SR. In recent years, SR has gained significant attention and has evolved into a more professional practice. However, the framework governing such reporting is continually changing, placing increasing demands on companies regarding the format, content, and processes involved in SR. While the growing emphasis on SR offers numerous advantages for companies, investors, consumers, and all stakeholders, it also presents several challenges. To be meaningful and valuable, sustainability disclosures must not only be accurate and trustworthy but also subject to verification and comparison. Sustainability reporting frameworks, sometimes called ESG frameworks or ESG reporting frameworks, are essentially roadmaps for organizations. They offer a structured way to identify, evaluate, and communicate sustainability-related concerns that pertain to their business operations. These guidelines enable companies to measure their performance against industry peers and global standards, making it easier to share their sustainability achievements and progress with key stakeholders such as investors, regulatory bodies, customers, and employees. Some of the most important frameworks are as follows –

- GRI
- BRSR
- SASB
- TCFD

Global Reporting Initiative (GRI)

The Global Reporting Initiative (GRI) serves as an international, impartial standards body dedicated to assisting businesses, governmental bodies, and various organizations in comprehending and articulating their impacts regarding critical issues such as climate change, human rights, and corruption. GRI offers the most universally recognized sustainability reporting standards globally. Their framework for sustainability reporting plays a pivotal role in enabling companies to identify, collect, and present this information in a manner that is both lucid and comparable. Initially introduced in the year 2000, GRI's framework for sustainability reporting has evolved to become the most extensively employed approach by multinational corporations, governments, small and medium-sized enterprises, non-governmental organizations (NGOs), and industry associations across more than 90 nations. The most recent of GRI's reporting frameworks are the GRI Standards, GRI 2021 update to replace the previous standards beginning on January 1, 2023. In contrast to the earlier reporting frameworks, the GRI Standards have a modular structure, making them easier to update and adapt.

Business Responsibility and Sustainability Reporting (BRSR) The Securities and Exchange Board of India (SEBI) introduced the Business Responsibility Report (BRR) in 2012, marking a significant step in ESG regulatory disclosure in India. BRR was the initial framework for ESG reporting and was mandatory for the top 100 listed companies based on market capitalization. Over time, the scope of BRR expanded, and by 2019, it became mandatory for the top 1000 listed companies. However, in 2020, SEBI replaced BRR with the BRSR framework, which represented an evolution and broadening of the earlier reporting requirements. As of May 2021, SEBI made it compulsory for the top 1,000 listed entities by market capitalization to include BRSR as part of their Annual Report submitted to SEBI, starting from the financial year 2022-23. This transition reflects the growing emphasis on comprehensive sustainability reporting practices in India's regulatory landscape.

Sustainability Accounting Standards Board (SASB)

SASB, a nonprofit organization, was founded to create a standardized structure for businesses to report on sustainability matters. To achieve this, SASB has crafted industry-specific standards that offer guidance to companies when disclosing sustainability information. This information is of paramount importance to investors because it can potentially influence a company's financial performance significantly. The SASB Materiality Map is a visual representation that breaks down 26 general sustainability issues across 77 different industries. It effectively illustrates which of these concerns hold relevance within each specific industry. In contrast to traditional financial reporting, which relies on historical financial data, SASB reporting provides a more comprehensive and forward-looking perspective, shedding light on critical non-financial aspects that can impact a company's long-term sustainability and performance.

Task Force on Climate-related Financial Disclosures (TCFD)

Founded in December 2015 under the umbrella of the Financial Stability Board (FSB), TCFD has a clear mission: to improve the caliber and uniformity of financial reporting related to climate impacts. Its primary aim is to empower both businesses and investors with the information they need to make well-informed choices in an environment profoundly influenced by climate change. TCFD occupies a critical position where climate action and financial transparency converge. Its purpose is to advance business practices that prioritize sustainability and resilience. This is particularly relevant in an era where climate-related challenges carry substantial financial implications, be they risks or opportunities.

Need for Sustainability Reporting

SR helps immensely to keep an overview of what to focus on in terms of sustainability as there are a lot of things to monitor and report preparing the SR can be sometimes overwhelming and exhausting for the companies. SR Ensures the regulation compliance to be followed by the

companies every year. It also makes the reporting organization more attractive to customers and their stakeholders. Maintaining an SR gives employees a foundation to build employee pride and loyalty and results in becoming more attractive to investors. Due to the increase in awareness based on the ESG front companies are making it a priority to add SR to the company's agenda. This eventually increases transparency, credibility, and accountability and hence can finally help in achieving sustainability

Literature Review

The increasing importance placed on sustainability reporting (SR) brings about numerous benefits for various stakeholders, including companies, investors, and consumers. However, it also introduces a set of challenges. For sustainability disclosures to truly serve their purpose and provide value, they must meet certain criteria. They should not only be accurate and reliable but also open to independent verification and meaningful comparison with other reports or benchmarks. On account of this fact. It is attempted to summarize some of the research studies undertaken in some other related study.

A brief review of the past studies related to Sustainability reporting, BRSR, GRI, and all the related terminologies related to SR.

Rajni Bhalla, et al. (2014) in their article “**Corporate Sustainability Reporting: A Study of Economic Sustainability Aspect by Selected Indian Corporations**”, say that Corporate sustainability reporting is getting very popular these days but still in India it is just at the nascent stage. However research proves that its importance is growing year after year. As far as the Indian scenario is concerned there is only a limited number of companies that are showing their sustainability plans and performance to the various stakeholders. Indian corporations are following GRI guidelines to prepare sustainability reports. The present paper is an attempt to analyze the growth of sustainability reporting in India and the information which is used to be disclosed by the corporations with the help of such reports from the economic aspect of sustainability reporting. While reporting the economic aspect in the sustainability reports the organizations used to disclose the various policies and strategies which they have formulated or planning to formulate for the efficient and responsible use of the available resources of the organization which will not result in any environmental damage to the society. Companies are also presenting their sustainability performance to the various users with the help of websites and also through published reports which makes it available to the common public as well.

Anurodh Godha, et al. (2015) in their article “**Sustainability Reporting Trend in Indian Companies as per GRI Framework: A Comparative Study**”, says that Sustainability reporting enables the creation of long-term value for organizations. It is forward-looking and includes quantitative and qualitative reporting measures. It is a key platform for communicating

the organization's economic, social, environmental, and governance performance, reflecting positive and negative impacts. It can be undertaken by all types, sizes, and sectors of organizations. Through the GRI Sustainability Reporting Framework, the GRI works to increase the transparency and exchange of sustainability-related information. Their study conceptually reviews sustainability reporting and its benefits for the entities. He revealed that the development of the corporate governance standard is maturing in India. Amendments in laws and changes in the regulatory mechanism are creating pressure on entities to respond to and communicate their sustainability concerns. With globalization, Indian companies are increasingly realizing that they have much to lose by not following sustainability reporting. Many respected companies already get their sustainability reports audited by a third party to ensure.

Ritika Mahajan, et al. (2022) in their article “**Sustainability Reporting in India: A Critical Assessment of Business Responsibility Reports of the Top 100 Companies**”, says that This study provides insights into BR reporting in India based on an analysis of BR reports of the top 100 companies and an expert survey. Despite the mandate, it was observed that some leading companies still did not publish a BRR. The number of disclosures increased yearly 3 maximum transparency was observed in social disclosures. There is far more scope for disclosing supply chain and environmental impact data. The future reporting format must consider mechanisms for improving stakeholder engagement and materiality analysis disclosures, along with frameworks to establish accountability.

Rupam Majumder, et al. (2023) in their article “**Legal Framework for Corporate Sustainability Reporting in India**”, say that a Sustainability document gives data approximately economic, environmental, governance, and social overall performance. The present study offers sustainability reporting steerage and has pioneered and evolved a comprehensive ‘sustainability reporting framework’ which needs to be taken into consideration for use by Indian corporates. Furthermore, there's a debate over whether or not sustainability documents ought to be a part of economic statements, annual documents, or disclosed separately based on the requisite information published by different Indian corporate bodies. Sustainability responsibilities are drastically being embedded into the missions and strategies of world and country-wide companies as attention to sustainability troubles is escalating. In addition, the study has proposed an integration of sustainability and decisional paradigms in the frameworks to complete the sustainability responsibilities. These paradigms show off the important attitude of sustainability which wishes to be considered for a right sustainability implementation project. The identification of this attitude will assist the practitioners in understanding the holistic photo of sustainability implementation.

Methodology

The study is mostly descriptive so the analysis and data gathered are in the form of Secondary research. The reports of different companies are downloaded from the official website of the respective companies which are made available to everyone. The GRI standards are also available on their official website, Also the format in which the BRSR report is expected is available on the official SEBI website.

GRI Domain

In the GRI Framework all the disclosures based on Environmental, Social, Economic, and Governance are studied taking into consideration the sustainability reports of Reliance Industries Limited, TATA Motors Limited, Toyota, ITC, IndusInd Bank, and Shell. All these reports have been thoroughly read and a table has been formulated. The table contains all the disclosures individually and whether the six companies have reported or not reported this disclosure. All the categories of the disclosures like General Disclosures, Material topics, Economical Disclosures, Environmental Disclosures, and Social Disclosures are quantified and presented in a table, which gives an idea of which company discloses more information on what front in their SR.

GRI and BRSR linkage domain

Both the standards were studied in depth, the format of BRSR available at SEBI's website was analyzed thoroughly and the actual requirement of the BRSR standard and its counterpart was studied which gave a result of the mapping of the BRSR notation with the GRI standards this is summarized in a table. This table serves as a concise reference guide, offering a clear overview of the alignment between the two sets of standards. Due to the constraint of the paper only Section A and Principle 6 of Section C are mapped in this research paper. This will give an overall idea of how both standards can be used in collaboration with each other efficiently.

Result and Discussion

GRI

SR for six different companies, each belonging to various sectors such as Manufacturing, Automobiles, FMCG (Fast-Moving Consumer Goods), Banking, and Oil and gas were obtained. These reports were downloaded from the respective company's official websites. The analysis focuses on compliance with the latest GRI standards of 2021. All the GRI standards are meticulously examined and categorized into a detailed table (Table No. I). This table encompasses a comprehensive range of disclosures, organized into five main categories: General Disclosures (30), Material Topic Disclosures (3), Economical Disclosures (17), Environmental Disclosures (31), and Social Disclosures (36). For each disclosure, we indicate

whether the respective company reported it ("R") or did not report it ("NR"). The six companies in the study are represented by unique codes:

- Reliance Industries Limited
- TATA Motors Limited
- Toyota
- ITC
- IndusInd Bank
- Shell

The analysis delves into the sustainability reporting practices of these companies within the context of GRI's 2021 standards, offering insights into their disclosure efforts across various sectors

Table 1: GRI Analysis of Six Companies

GRI Indicator No.	Disclosure Details	1	2	3	4	5	6
GRI 2	General Disclosure						
2-1	Organizational details	R	R	R	R	R	R
2-2	Entities included in the organization’s sustainability reporting	R	R	R	R	R	R
2-3	Reporting period, frequency, and contact point	R	R	R	R	R	R
2-4	Restatements of information	R	R	R	R	R	R
2-5	External assurance	R	R	R	R	R	R
2-6	Activities, value chain, and other business relationships	R	R	R	R	R	R
2-7	Employees	R	R	R	R	R	R
2-8	Workers who are not employees	R	R	R	R	R	R
2-9	Governance structure and composition	R	R	R	R	R	R
2-10	Nomination and selection of the highest governance body	R	R	R	R	R	R
2-11	Chair of the highest governance body	R	R	R	R	R	R
2-12	Role of the highest governance body in overseeing the management of impacts	R	R	R	R	R	R

2-13	Delegation of responsibility for managing impacts	R	R	R	R	R	R
2-14	Role of the highest governance body in sustainability reporting	R	R	R	R	R	R
2-15	Conflicts of interest	R	R	R	R	R	R
2-16	Communication of critical concerns	R	R	R	R	R	R
2-17	The collective knowledge of the highest governance body	R	R	R	R	R	R
2-18	Evaluation of the performance of the highest governance body	R	R	R	R	R	R
2-19	Remuneration policies	R	R	R	R	R	R
2-20	The process to determine the remuneration	R	R	R	R	R	R
2-21	Annual total compensation ratio	R	R	R	R	R	R
2-22	Statement on Sustainable Development Strategy	R	R	R	R	R	R
2-23	Policy commitments	R	R	R	R	R	R
2-24	Embedding policy commitments	R	R	R	R	R	R
2-25	Processes to remediate negative impacts	R	R	R	R	R	R
2-26	Mechanisms for seeking advice and raising concerns	R	R	R	R	R	R
2-27	Compliance with laws and regulations	R	R	R	R	R	R
2-28	Membership associations	R	R	R	R	R	R
2-29	Approach to Stakeholder Engagement	R	R	R	R	R	R
2-30	Collective bargaining agreements	R	R	R	R	R	R
GRI 3	Material Topics						
3-1	The process to determine material topics	R	R	R	R	R	R
3-2	List of material topics	R	R	R	R	R	R
3-3	Management of material topics	R	R	R	R	R	R
GRI 200	Economical						
201-1	Direct economic value generated and distributed	R	R	R	R	R	R
201-2	Financial implications and other risks and opportunities due to climate change	R	R	R	R	R	R

201-3	Defined benefit plan obligations and other retirement plans	R	R	R	R	R	NR
201-4	Financial assistance received from the government	R	R	NR	R	R	R
202-1	Ratios of standard entry-level wage by gender compared to local minimum wage	NR	NR	NR	R	NR	NR
202-2	The proportion of senior management hired from the local community	NR	NR	NR	R	R	R
203-1	Infrastructure investments and services supported	R	NR	R	R	R	R
203-2	Significant indirect economic impacts	R	NR	R	R	R	R
204-1	Proportion of spending on local suppliers	R	R	R	R	R	R
205-1	Operations assessed for risks related to corruption	R	R	R	R	R	R
205-2	Communication and training about anti-corruption policies and procedures	R	R	R	R	R	R
205-3	Confirmed incidents of corruption and actions taken	R	R	R	R	R	R
206-1	Legal actions for anti-competitive behavior, antitrust, and monopoly practices	NR	R	NR	R	R	R
207-1	Approach to tax	NR	NR	R	R	R	R
207-2	Tax governance, control, and risk management	NR	NR	R	R	R	R
207-3	Stakeholder engagement and management of concerns related to tax	NR	NR	R	R	R	R
207-4	Country-by-country reporting	NR	NR	NR	R	R	R
GRI 300	Environmental						
301-1	Materials used by weight or volume	R	R	R	R	NR	NR
301-2	Recycled input materials used	R	R	R	R	NR	NR
301-3	Reclaimed products and their packaging materials	R	R	R	R	NR	NR
302-1	Energy consumption within the organization	R	R	R	R	R	R
302-2	Energy consumption outside of the organization	R	R	NR	R	R	R

302-3	Energy intensity	R	R	R	R	R	R
302-4	Reduction of energy consumption	R	R	R	R	R	R
302-5	Reductions in energy requirements of products and services	R	R	R	R	R	R
303-1	Interactions with water as a shared resource	R	R	R	R	R	R
303-2	Management of water discharge-related impacts	R	R	R	R	R	R
303-3	Water withdrawal	R	R	R	R	R	R
303-4	Water discharge	NR	NR	R	R	R	R
303-5	Water Consumption	NR	NR	R	R	R	R
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	R	R	NR	R	R	R
304-2	Significant impacts of activities, products, and services on biodiversity	R	R	NR	R	R	R
304-3	Habitats protected or restored	R	R	NR	R	R	R
304-4	IUCN Red List species and National Conservation List species with habitats in areas affected by operations	R	R	NR	R	R	R
305-1	Direct (Scope 1) GHG emissions	R	R	R	R	R	R
305-2	Energy indirect (Scope 2) GHG emissions	R	R	R	R	R	R
305-3	Other indirect (Scope 3) GHG emissions	R	R	R	R	R	R
305-4	GHG emissions intensity	R	R	R	R	R	R
305-5	Reduction of GHG emissions	R	R	R	R	R	R
305-6	Emissions of ozone-depleting substances (ODS)	R	R	R	R	R	NR
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	R	R	R	R	R	R
306-1	Waste generation and significant waste-related impacts	R	R	NR	R	R	R
306-2	Management of significant waste-related impacts	R	R	R	R	R	R
306-3	Waste generated	R	R	R	R	R	R
306-4	Waste diverted from disposal	R	R	R	R	R	R
306-5	Waste directed to disposal	R	R	NR	R	R	R

308-1	New suppliers that were screened using environmental criteria	NR	R	R	R	R	NR
308-2	Negative environmental impacts in the supply chain and actions taken	NR	R	R	R	R	NR
GRI 400	Social						
401-1	New employee hires and employee turnover	R	R	R	R	R	R
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	R	R	NR	R	R	R
401-3	Parental leave	R	R	R	R	R	R
402-1	Minimum notice periods regarding operational changes	NR	NR	NR	R	R	R
403-1	Occupational health and safety management system	R	R	R	R	R	R
403-2	Hazard identification, risk assessment, and incident investigation	R	R	R	R	R	R
403-3	Occupational health services	R	R	R	R	R	R
403-4	Worker participation, consultation, and communication on occupational health and safety	R	R	R	R	R	R
403-5	Worker training on occupational health and safety	NR	NR	R	R	R	R
403-6	Promotion of worker health	NR	NR	R	R	R	R
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	NR	NR	R	R	R	R
403-8	Workers covered by an occupational health and safety management system	NR	NR	R	R	R	R
403-9	Work-related injuries	NR	NR	R	R	R	R
403-10	Work-related ill health	NR	NR	R	R	R	R
404-1	Average hours of training per year per employee	R	R	R	R	R	R

404-2	Programs for upgrading employee skills and transition assistance programs	R	R	R	R	R	R
404-3	Percentage of employees receiving regular performance and career development reviews	R	R	R	R	R	NR
405-1	Diversity of governance bodies and employees	R	NR	R	R	R	R
405-2	The ratio of basic salary and remuneration of women to men	R	NR	R	R	R	R
406-1	Incidents of discrimination and corrective actions taken	R	NR	NR	NR	NR	R
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	NR	NR	NR	R	R	R
408-1	Operations and suppliers at significant risk for incidents of child labor	R	R	NR	R	R	NR
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	R	R	R	R	R	R
410-1	Security personnel trained in human rights policies or procedures	NR	NR	NR	R	R	R
411-1	Incidents of violations involving the rights of indigenous peoples	NR	NR	NR	NR	NR	R
413-1	Operations with local community engagement, impact assessments, and development programs	R	NR	R	R	R	R
413-2	Operations with significant actual and potential negative impacts on local communities	R	R	R	R	R	R
414-1	New suppliers that were screened using social criteria	NR	NR	R	R	R	R
414-2	Negative social impacts in the supply chain and actions taken	NR	NR	R	R	R	R
415-1	Political contributions	NR	NR	NR	R	R	R
416-1	Assessment of the health and safety impacts of product and service categories	R	R	R	R	R	R
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	R	R	R	R	R	NR

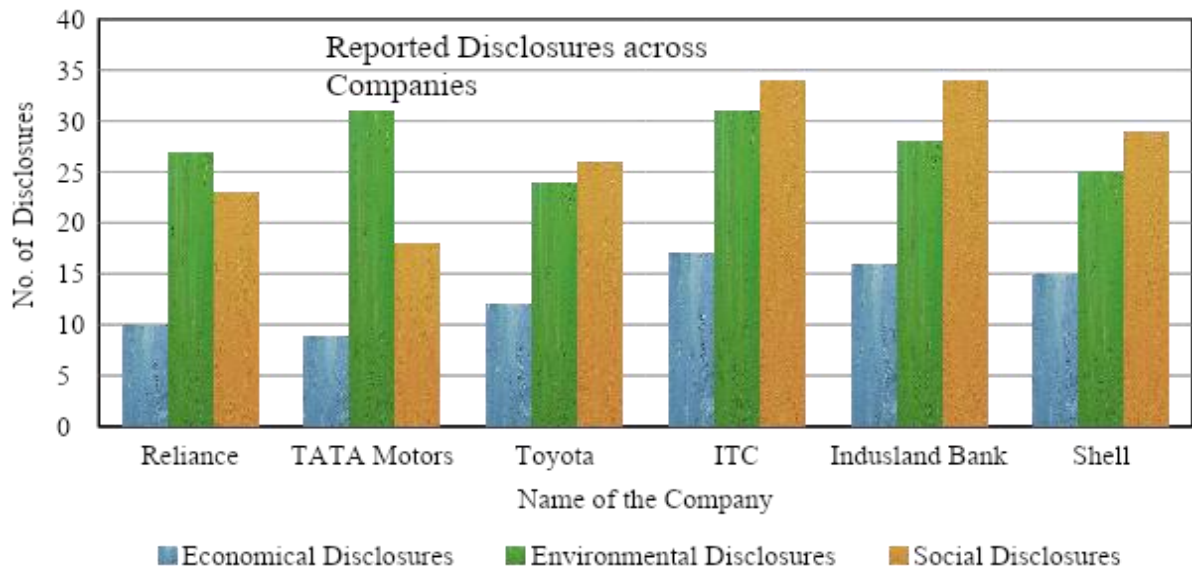
417-1	Requirements for product and service information and labeling	R	R	R	R	R	NR
417-2	Incidents of non-compliance concerning product and service information and labeling	R	R	NR	R	R	NR
417-3	Incidents of non-compliance concerning marketing communications	R	R	NR	R	R	NR
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	R	NR	R	R	R	NR

Table 2: Analysis of Reported Disclosures

Type of Disclosure	Disclosures	Reliance Industries Limited	TATA Motors Limited	Toyota	ITC	IndusInd Bank	Shell
Mandatory	General Disclosures	30	30	30	30	30	30
Mandatory	Material Topics	3	3	3	3	3	3
Performance Based	Economical Disclosures	10	9	12	17	16	15
Performance Based	Environmental Disclosures	27	31	24	31	28	25
Performance Based	Social Disclosures	23	18	26	34	34	29
	Total	93/117	91/117	95/117	115/117	111/117	102/117

The following table (II) summarises the quantified nature of the disclosures reported by the company individually. The disclosures are divided into two types of disclosures i.e. Mandatory and Performance-based. Mandatory disclosures are compulsory for the companies to disclose hence we can see in the table that all six companies have reported all 33 mandatory disclosures. The performance disclosures are based on the economic (17), Environmental (31), and Social performances (36) of the company. Due to this reason, we can see the difference in reporting based on the different sectors and how they vary from each other

Figure 1: Bar Graph of 3 performance indicators of all companies

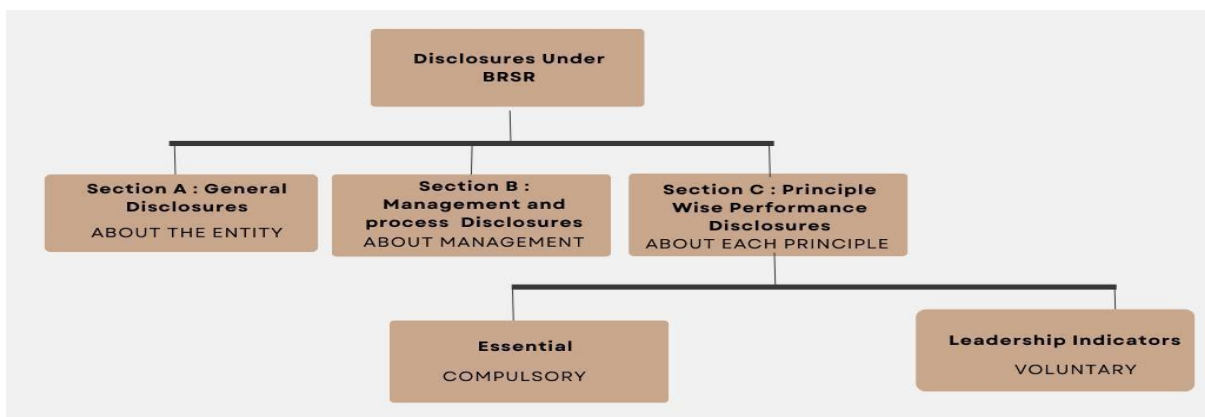


The graph in Figure 1 illustrates the disclosures reported by all six companies for all the performance-based disclosures which are Economical, Environmental, and Social Disclosures. This can give a clear idea of how a company discloses based on various sectors and on which front.

- ITC and Indus land have reportedly reported majorly on the social front.
- TATA has reported very low on the economic front.
- TATA and ITC have reported the best on the Environmental front.
- ITC has reported excellently in Economical front.

BRSR linkage with GRI

There are 3 sections in the BRSR report which are as shown in the below flow chart of BRSR. Section A consists of all the general disclosures, Section B consists of all the



management and process disclosures and Section C consists of principle-wise performance disclosures which then include essential and leadership indicators of all the nine principles.

Figure 2: BRSR Flow chart

The essential indicators are mandatory, while the leadership indicators are voluntary. The flow of sections in BRSR can be seen in the following image of Figure 2 giving an overview of all the three sections

The 9 principles according to the official format provided by SEBI’s BRSR are as follows-

Table 3: BRSR 9 Principles

Principle No.	Description
1	Businesses should conduct and govern themselves with integrity, and in a manner that is ethical, transparent, and accountable
2	Businesses should provide goods and services in a manner that is sustainable and safe
3	Businesses should respect and promote the well-being of all employees, including those in their value chains
4	Businesses should respect the interests of and be responsive to all its stakeholders
5	Businesses should respect and promote human rights
6	Businesses should respect and make efforts to protect and restore the environment
7	Businesses, when engaging in influencing public and regulatory policy, should do so in a manner that is responsible and transparent
8	Businesses should promote inclusive growth and equitable development
9	Businesses should engage with and provide value to their consumers in a responsible manner

Both the standards were studied thoroughly and the mapping of BRSR requirements was done with GRI. The BRSR Notations are based on the format of the BRSR report representing the number of requirements due to the constraints of paper only Section A and Principle 6: Businesses should respect and make efforts to protect and restore the environment of Section C are shown in Table no. 4

Table 4: Mapping of BRSR with GRI

BRSR Notation	Description of BRSR requirement	Linkage to GRI Standards and Disclosures
	Section A: General Disclosures	
	I. Details of Listed Entity	
A1	Corporate Identity Number (CIN) of the Listed Entity	No direct linkage

A2	Name of the Listed Entity	GRI 2: 2-1-a
A3	Year of incorporation	No direct linkage
A4	Registered office address	No direct linkage
A5	Corporate address	GRI 2: 2-1-c
A6	E-mail	GRI 2: 2-3-d
A7	Telephone	GRI 2: 2-3-d
A8	Website	No direct linkage
A9	The financial year for which reporting is being done	GRI 2: 2-3-a, 2-3-b
A10	Name of the Stock Exchange(s) where shares are listed	No direct linkage
A11	Paid-up Capital	No direct linkage
A12	Name and contact details (telephone, email address) of the person who may be contacted in case of any queries on the BRSR report	GRI 2: 2-3-d
A13	Reporting boundary - Are the disclosures under this report made on a standalone basis (i.e. only for the entity) or on a consolidated basis (i.e. for the entity and all the entities that form a part of its consolidated financial statements, taken together).	GRI 2: 2-2-a, 2-2-c
	II. Products / Services	
A14	Details of business activities (accounting for 90% of the turnover)	GRI 2: 2-6-b-i
A15	Products/Services sold by the entity (accounting for 90% of the entity's Turnover)	GRI 2: 2-6-b-i
	III. Operations	
A16	Number of locations where plants and/or operations/offices of the entity are situated	GRI 2: 2-6-b-i
A17a	Markets served by the entity: a. Number of locations	GRI 2: 2-6-b-i
A17b	Markets served by the entity: b. What is the contribution of exports as a percentage of the total turnover of the entity?	No direct linkage
A17c	Markets served by the entity: c. A brief on types of customers	GRI 2: 2-6-b-iii
	IV. Employees	
A18a	Details as at the end of the Financial Year: a. Employees and workers (including differently abled): - Gender-wise - Permanency of the job	GRI 2: 2-7-a, 2-7-b-i-ii, 2-8-a
A18b	Details as at the end of the Financial Year: b. Differently abled Employees and workers	GRI 405: 405-1-b-iii

A19	Participation/Inclusion/Representation of Women	GRI 405: 405-1-a-I, 405-1-b-i
A20	Turnover rate for permanent employees and workers	GRI 401: 401-1-b
	V. Holding, Subsidiary, and Associate Companies (Including joint ventures)	
A21	A] Name of the holding/subsidiary / associate companies / joint ventures (A)	GRI 2: 2-2-a, 2-2-b
	B] Indicate whether holding/subsidiary/ associate/ joint venture	No direct linkage
	C] % of shares held by the listed entity	No direct linkage
	D] Does the entity indicated at A, participate in the Business Responsibility initiatives of the listed entity? (Yes/No)	No direct linkage
	VI. CSR Details	
A22	(i) Whether CSR is applicable as per section 135 of the Companies Act, 2013: (Yes/No) (ii) Turnover (in Rs.) (iii) Net worth (in Rs.)	GRI 201: 201-1-a-i-ii
	VII. Transparency and Disclosure Compliances	
A23	Complaints/Grievances on any of the principles (Principles 1 to 9) under the National Guidelines on Responsible Business Conduct	GRI 2: 2-25-e
A24	Overview of the entity's material responsible business conduct issues	GRI 3: 3-1-a-i-ii, 3-1-b
	A] Material issue identified	GRI 3: 3-2-a
	B] Indicate whether risk or opportunity	GRI 3: 3-3-a
	C] Rationale for identifying the risk/opportunity	GRI 3: 3-3-a
	D] In case of risk, approach to adapt or mitigate	GRI 3: 3-3-d-i-ii
	E] Financial implications of the risk or opportunity (indicate positive or negative implications)	No direct linkage
	Section C	
	PRINCIPLE 6: Businesses should respect and make efforts to protect and restore the environment	
	Essential Indicators	
P6-E1	Details of total energy consumption (in Joules or multiples) and energy intensity, in the following format: Total electricity consumption (A) Total fuel consumption (B) Energy consumption through other sources (C) Total energy consumption (A+B+C)	GRI 302: 302-1-a, 302-1-b, 302-1-c-I, 302-1-e

	Energy intensity per rupee of turnover Energy intensity (optional) – the relevant metric may be selected by the entity	GRI 302: 302-3-a, 302-1-b
P6-E2	Does the entity have any sites/facilities identified as designated consumers (DCs) under the Performance, Achieve, and Trade (PAT) Scheme of the Government of India? (Y/N) If yes, disclose whether targets set under the PAT scheme have been achieved. In case targets have not been achieved, provide the remedial action taken, if any.	Can be covered by - GRI 3: 3-3
P6-E3	Provide details of the following disclosures related to water, in the following format: Water withdrawal by source (in kilolitres) (i) Surface water (ii) Groundwater (iii) Third-party water (iv) Seawater / desalinated water (v) Others Total volume of water withdrawal (in kilolitres) (i + ii + iii + iv + v)	GRI 303: 303-3-a-i-v, 303-5-a
	Total volume of water consumption (in kilolitres)	GRI 303: 303-5-a
	Water intensity per rupee of turnover (Water consumed / turnover) Water intensity (optional) – the relevant metric may be selected by the entity	No direct linkage
P6-E4	Has the entity implemented a mechanism for Zero Liquid Discharge? If yes, provide details of its coverage and implementation.	Can be covered by - GRI 303: 303-1-a, 303-2-a
P6-E5	Please provide details of air emissions (other than GHG emissions) by the entity.	GRI 305: 305-7-a-i-vii
P6-E6	Provide details of greenhouse gas emissions (Scope 1 and Scope 2 emissions) & their intensity.	GRI 305: 305-1-a, 305-1-b, 305-2-a, 305-2-b, 305-2-c
	Total Scope 1 and Scope 2 emissions per rupee of turnover Total Scope 1 and Scope 2 emission intensity (optional) – the relevant metric may be selected by the entity	GRI 305: 305-4-a, 305-4-b, 305-4-c
P6-E7	Does the entity have any project related to reducing Green House Gas emissions? If Yes, then provide details	GRI 305: 305-5-a, 305-5-b, 305-5-c, 305-5-d
P6-E8	Provide details related to waste management by the entity	GRI 306: 306-3-a, 306-4-a, 306-4-b-i-iii, 306-4-c-i-iii

	For each category of waste generated, total waste recovered through recycling, re-using or other recovery operations (in metric tonnes) (I) Recycled (ii) Re-used (iii) Other recovery operations Total	GRI 306: 306-5-a, 306-5-b-i-iii, 306-5-c-i-iv
P6-E9	Briefly describe the waste management practices adopted in your establishments. Describe the strategy adopted by your company to reduce the usage of hazardous and toxic chemicals in your products and processes and the practices adopted to manage such wastes.	GRI 306: 306-2-a
P6-E10	If the entity has operations/offices in/around ecologically sensitive areas (such as national parks, wildlife sanctuaries, biosphere reserves, wetlands, biodiversity hotspots, forests, coastal regulation zones, etc.) where environmental approvals/clearances are required	GRI 304: 304-1-a-i-v
P6-E11	Details of environmental impact assessments of projects undertaken by the entity based on applicable laws, in the current financial year:	GRI 413: 413-1-a-ii
	Details of environmental impact assessments of projects undertaken by the entity based on applicable laws, in the current financial year:	GRI 303: 303-1-a No direct linkage
P6-E12	Is the entity compliant with the applicable environmental law/ regulations/ guidelines in India; such as the Water (Prevention and Control of Pollution) Act, Air (Prevention and Control of Pollution) Act, Environment Protection Act, and rules thereunder (Y/N). If not, provide details of all such noncompliance, in the following format: a. Specify the law /regulation /guidelines which was not complied with b. Provide details of the noncompliance c. Any fines /penalties/action taken by regulatory agencies such as pollution control boards or by courts d. Corrective action taken, if any	GRI 2: 2-27a-i-ii, 2-27-b-i-ii
	Leadership Indicators	
P6-L1	Provide a break-up of the total energy consumed (in Joules or multiples) from renewable and non-renewable sources.	GRI 302: 302-1-a, 302-1-b, 302-1-c-I, 302-1-e

P6-L2	Water discharge by destination and level of treatment (in kilolitres)	GRI 303: 303-4-a-i-iv
P6-L3	Water withdrawal, consumption, and discharge in areas of water stress (in kilolitres):	GRI 303: 303-3-b-i-iv, 303-4-a-i-ii
P6-L4	Please provide details of total Scope 3 emissions & their intensity.	GRI 305: 305-3-a, 305-3-b
	Total Scope 3 emissions per rupee of turnover Total Scope 3 emission intensity (optional) – The relevant metric may be selected by the entity	GRI 305: 305-4-a, 305-4-b, 305-4-c
P6-L5	Concerning the ecologically sensitive areas reported in Question 10 of Essential Indicators above, provide details of the significant direct & indirect impact of the entity on biodiversity in such areas along with prevention and remediation activities.	GRI 304: 304-2-a-i-vi, 304-2-b-i-iv, 304-3-a
P6-L6	If the entity has undertaken any specific initiatives or used innovative technology or solutions to improve resource efficiency or reduce impact due to emissions/effluent discharge/waste generated, please provide details of the same as well as the outcome of such initiatives,	GRI 3: to be used together with GRI 301, GRI 302, GRI 303, GRI 304, GRI 305, GRI 306: 3-3
P6-L7	Does the entity have a business continuity and disaster management plan? Give details in 100 words/ web link.	No direct linkage
P6-L8	Disclose any significant adverse impact to the environment, arising from the value chain of the entity. What mitigation or adaptation measures have been taken by the entity in this regard.	GRI 308: 308-2-c, 308-2-d
P6-L9	Percentage of value chain partners (by value of business done with such partners) that were assessed for environmental impacts.	GRI 308: 308-1-a, 308-2-a

Conclusion

Upon a comprehensive evaluation of the sustainability disclosures made by the companies evaluated, it becomes apparent that they have successfully addressed all mandatory and material aspects. This signifies a foundational commitment to transparency and accountability in their sustainability practices. However, while they have made commendable progress, there remains an opportunity for further enhancement, notably for Reliance, Tata Motors, and Toyota. These three companies have reported a comparatively lower number of disclosures when compared to some of their peers. An intriguing observation is the impressive commitment to reporting exhibited by ITC as they have reported a whopping amount of 115 disclosures out of 117, particularly noteworthy given its position as an FMCG company. This suggests a strong dedication to sustainability principles and a proactive stance in disclosing relevant information

to stakeholders. An essential takeaway from this assessment is the significance of meticulous attention to detail. Achieving comprehensive disclosures often hinges on scrutinizing and addressing the finer points that may initially go unnoticed. Companies can optimize their reporting by leaving no stone unturned, ensuring that every aspect of their sustainability performance is effectively communicated. Furthermore, the establishment of linkages within different facets of reporting is pivotal. Integrating sustainability reporting into the broader corporate reporting framework can lead to a more cohesive and holistic portrayal of a company's performance. This integration not only streamlines the reporting process but also facilitates a deeper understanding of the interplay between sustainability efforts and overall corporate strategies.

Reference:

Anna Jessop, Nicole Wilson, Michal Bardecki, and Cory Searcy. (2019). “Corporate Environmental Disclosure in India: An Analysis of Multinational and Domestic Agrochemical Corporations”. MDPI. 11, pp. 4843.

Bhalla, R., & Bansal, C. S. K. (2014). Corporate sustainability reporting: a study of economic sustainability aspect by selected Indian corporations. *International Journal of Current Research and Academic Review*, 2(5), pp. 37–46.

Biswas, M. (2016). Corporate Sustainability Reporting in India – A Disclosure. *International Journal of Management and Humanities (IJMH)*, 2(5), pp. 1–8.

Business responsibility and sustainability report official format from SEBI.

Chaudhri, V., & Wang, J. (2007). Communicating corporate social responsibility on the internet: A case study of the top 100 information technology companies in India. *Management Communication Quarterly*, 21(2), pp. 232–247.

GRI Standards Consolidated 2021 version.

Godha, A., & Jain, P. (2015). Sustainability reporting trend in Indian companies as per GRI framework: A comparative study. *South Asian Journal of Business and Management Cases*, 4(1), pp. 62–73.

Hans B. Christensen & Luzi Hail & Christian Leuz. (2021). “Mandatory CSR and sustainability reporting: economic analysis and literature review”. *Review of Accounting Studies* (2021) 26: pp. 1176–1248.

Herremans, I., Pyasi, N., & Lu, J. (2011). The journey toward sustainability reporting: How accountable are the tourism industries? *Tourism Recreation Research*, 36(3), pp. 247-257.

Jose, P. D., & Saraf, S. (2013). Corporate Sustainability Initiatives Reporting: A Study of India's Most Valuable Companies. *SSRN Electronic Journal*, (September).

Kumar, K., & Prakash, A. (2019). Examination of sustainability reporting practices in the Indian banking sector. *Asian Journal of Sustainability and Social Responsibility*, 4(2), pp. 2–16.

Kumar, K. (2020). Emerging phenomenon of corporate sustainability reporting: Evidence from top 100 NSE listed companies in India. *Journal of Public Affairs*, e2368, pp. 1–14.

Kumar, V., Gunasekaran, A., Singh, K., Papadopoulos, T., & Dubey, R. (2015). Cross sector comparison of sustainability reports of Indian companies: A stakeholder perspective. *Sustainable Production and Consumption*, 4(1), pp. 62-71.

Linking the GRI Standards and the SEBI BRSR Framework 2022.

Mathivanan, P., & Kasilingam, R. (2020). Regulations on sustainability reporting as a global force in shaping business enterprises: evidence from India. *International Journal of Intelligent Enterprise*, 7(1-3), pp. 188-202.

Mitra, P. K., Agrawal, V., & Ghosh, A. (2015). Exploring the factors for effective sustainability reporting: A survey of the Indian chemical industry. *Asian Social Science*, 11(3), pp. 197-211.

Motwani, S. S., & Pandya, H. B. (2016). Evaluating the impact of sustainability reporting on financial performance of selected Indian companies. *International Journal of Research in IT and Management*, 6(2), pp. 14-23.

Mrs. Priyanka Nayak and Dr. Narayan Kayarkatte. (2021). “Recognising sustainability through the corporate reports – a review of development of disclosures in India”. *Int. J. Adv. Res.* 9(07), pp. 416-429.

Patra, S. (2016). Sustainability Reporting: A Trust towards Accountability. *Amity Journal of Corporate Governance*, 1(1), pp. 34–38.

Salgaonkar, V. (2019). Sustainability reporting under Global Reporting Initiative – Performance of the Companies in India. *Research Review International Journal of Multidisciplinary*, 4(4), pp. 1307–1311.

Tamvada, M. (2020). Corporate social responsibility and accountability: a new theoretical foundation for regulating CSR. *International Journal of Corporate Social Responsibility*, 5, pp. 1-14.