A Study on the Corporate Sustainability Reporting Practices in the Indian Context

A thesis submitted to the University of Hyderabad in partial fulfillment of the award of the degree of

DOCTOR OF PHILOSOPHY
IN
MANAGEMENT

By

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Under the Supervision of
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INSTITUTION OF EMINENCE
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June – 2022

DECLARATION

I, **Rajendra Mahanandia**, hereby declare that this thesis entitled, **"**A Study on the Corporate Sustainability Reporting Practices in the Indian Context" submitted by me under the guidance and supervision of **Prof. V. Sita** is a bonafide research work. I also declare that it has not been submitted previously in part or in full to this University or any other University or Institution for the award of any degree or diploma.

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CERTIFICATE

This is to certify that the thesis entitled **“**A Study on the Corporate Sustainability Reporting Practices in the Indian Context “submitted by **RAJENDRA MAHANANDIA** bearing registration number **16MBPH05** in partial fulfillment of the requirements for the award of Doctor of Philosophy in the **School of Management Studies, University of Hyderabad** is a bonafide work carried out by him under my supervision and guidance. The thesis has not been submitted previously in part or in full to this or any other University or Institution for the award of any degree or diploma.

Publications

1. Rajendra Mahanandia & Dr. V. Sita (2018) Global Reporting Initiative and Corporate Sustainability Practices in Indian Context Included in the book entitled Sustainable HRM, ISBN-978-93-5311-922-5.
2. Dr. V. Sita & Rajendra Mahanandia Empowering Women through Entrepreneurship – A Case Study of Successful Women Entrepreneurs in India. Yojana, October, 2018 (UGC CARE)

3. Chillakuri, B., & Mahanandia, R. (2018). Generation Z entering the workforce: The need for sustainable strategies in maximizing their talent. Human Resource Management International Digest.
4. Mahanandia, R., & Chillakuri, B. (2018). Living and Working Conditions of Tribal Labour: A Study of Koraput District, Odisha. International Journal of Business Ethics in Developing Economies, 7(1), 41.

Conferences/ Seminars

1. Paper presented in two days International Conference on Global Reporting Initiative and Corporate Sustainability Practices in Indian Context. Nov. 1– 2, 2018. School of Management Studies, UoH, Hyderabad and ICFAI- IBS, Hyderabad.

2. Participated in the International Conference on "Corporate Social Responsibility" 1st – 2nd February, 2018. Institute of Public Enterprise (Centre for Corporate Social Responsibility) Hyderabad.

3. Participated in two days International Conference on Global Reporting Initiative and Corporate Sustainability Practices in Indian Context. Nov. 1– 2, 2018. School of Management Studies, UoH, Hyderabad and ICFAI- IBS, Hyderabad.

Further, the student has passed the following courses towards the fulfillment of coursework requirements for Ph.D.:

Sl. No.	Course Code	Course Name	Credits	Pass/Fail
1	**BA-801**	Statistics for Business Analytics	**3**	**Pass**
2	**Core Course**	Research Methodology	**3**	**Pass**
3	**EG-825**	Academic Writing	**3**	**Pass**
4	**MB-532**	Performance Management and Counseling	**3**	**Pass**

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शोध-प्रबन्ध का शीर्षक

Title of the Thesis: A Study on the Corporate Sustainability Reporting Practices in the Indian Context

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Acknowledgements

I express my profound gratitude to my research supervisor respected, Prof. Sita Vanka, School of Management Studies, University of Hyderabad, who guided me throughout my research work. Without her encouragement, guidance and thoughtful insights, the research would have not come thus far. It is my privilege and I feel lucky to have Prof. V. Sita as my research supervisor, who not only guided my research but mentored me all these years. A great academician, scholar and consultant and yet very simple, is a great source of inspiration for many of the researchers in India and abroad. Commitment, dedication and timeliness makes her distinct, who cares for quality in every aspect. I am indeed privileged to be her scholar. She has constantly motivated me and guided me in the right direction. It was through her that I was able to learn and grow. My heartfelt thanks to her for making me dedicated to research with her thought-provoking discussions, probing research areas, and questions. I am extremely grateful to her for believing in me and selecting me to guide in my research work. Also, I am sincerely thankful to her for the effort and sacrifice she has put into my research work I wish to express my deep sense of gratitude and I am greatly indebted for all the suggestions, guidance and constant support.

I thank and express my gratitude to respected Prof. Mary Jessica, Dean, School of Management Studies, for her support during my research work. I am thankful to my Doctoral Committee members Prof. B. Raja Shekar, Prof. Chetan Srivastava and Dr. Sapna Singh for their valuable inputs and guidance throughout the research work.

I also thank and express my sincere gratitude to Dr. Punam Singh, Dr, Ranjit Kumar Dehury, Dr, Pramod Kumar Mishra, Dr. P. Murugan, and all faculties for their valuable

guidance, inputs, feedback, helpful discussions, support, and encouragement during all the stages of my research work.

I thank the school office- Mr. T.Srinivas Rao, Mr. Naganna, Mrs Parimala Devi, Mr. Parusuram and Mr. Chandra Mohan for their support whenever required. I am very much grateful to the members of the Indira Gandhi Memorial Library, University of Hyderabad and sincerely thanks to all the Library staff. I extend my sincere gratitude and thanks to University Grand Commission (UGC) Rajiv Gandhi National Fellowship (RGNF) the Ministry of Social Justice & Empowerment and Ministry of Tribal Affairs for the financial assistance to carry out my research work.

My family members have always been a great source of inspiration and motivation for me. I owe my deepest gratitude to my parents, Subash Mahanandia and Santosh Mani Mahanandia whose many sacrifices and blessings have helped achieve my academic endeavors. I also thank my sister Basonti Benya, Baijayanti Khora, Sukanti Mahanandia and my brother in-law Pabitra Khora, Munna Benya, for their continuous support in my education. My Nephew Prabhat Khora and Niece Mili and Ali. Thanks are also due to Kuni nani Bhalu Nana, Amit ,Babula and all my family members. I also thank my friend Dhurba Kuma Biwas for all the support and encouragement. I would also like to thank Salma Mani Tudu, who supported me a lot both financially, morally and encouraged me during my Ph.D. journey. I also want to thank Dr. K Prabhakar Rao for his motivation and inspiration throughout my doctoral journey.

I thank my senior scholars, Dr. Bharath Kumar Chillakuri, Dr. Srinivas Josyula, Dr. Ajay Shankar Gupta, Dr. Kavita Meena, Dr. KV Balasubramaniam, Dr. K. Madhavi, Dr. Kanki Hazarika my fellow research scholars Dr. Swati Singh, Dashimti, Joy Kumar and

Naganjani for their continued support. I also thank Dr. Tirupati, Dr. Samba Shiva Rao, Rulia, Soumiya, and Shriyans and especially Vijay, Irphan, Rafi, Sashidhar and Vinay who helped me whenever I approached him from the School of Management Studies for their insights into the data analysis of my study. I thank Almighty God for blessing me with this life, institution, and all the people around me in this Ph.D. journey.

Rajendra Mahananda

ACRONYMS AND ABBREVIATIONS

Sl.No.	Acronym	Abbreviation
1	U.S.	United States
2	UN	United Nations
3	GRI	Global Reporting Initiative
4	CSR	Corporate Social Responsibility
5	MDG	Millennium Development Goals
6	SDG	Sustainable Development Goals
7	NVGs	National Voluntary Guidelines
8	BRR	Business Responsibility Report
9	TBL	Triple Bottom Line
10	ROA	Return on Asset
11	KPMG	Klynveld Peat Marwick Goerdeler
12	IT	Information Technology
13	SEBI	Securities and Exchange Board of India
14	BSE	Bombay Stock Exchange
15	NSE	National Stock Exchange
16	LODR	Listing Obligations and Disclosure Requirements
17	FY	Financial Year
18	ESG	Environment Social and Governance
19	NGRBC	National Guidelines on Responsible Business Conduct
20	BRSR	Business Responsibility and Sustainability Reporting
21	NVG	National Voluntary Guidelines
22	MIT	Massachusetts Institute of Technology
23	CEO	Chief executive officer
24	ET	Economic Times
25	NIFTY	National Stock Exchange Fifty
26	WECD	World Commission On Environment And Development
27	ECO	Economic
28	ENV	Environmental
29	CMIE	Center for Monitoring Indian Economy
30	RIS	Relative Index Score
31	AS	Actual Score
32	TMS	Total Maximum Score
33	OLS	Ordinary Least Squares
34	VIF	Variance Inflation Factor
35	GLS	Generalized Least Squares
36	LSDM	Least Square Dummy Variable
37	FE	Fixed Effects
38	RE	Random Effects
39	ANOVA	Analysis of the Variance
40	OBS	Observation
41	RS	Rupees
42	INR	Indian Rupee

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Introduction

Organizations traditionally existed for wealth creation. Consequently, profit was their motive and they primarily existed for maximizing their wealth (Friedman, 1970). The success of the organization was thus measured through its economic expansion. Further, the organizations operated in the local market, were hierarchical in terms of structure and centralisation in terms of decision making (Mullins, 2007). Delayed decision making, little or no room for innovation were the characteristic features because of their limited operations.

The last two decades evidenced a paradigm shift in the organizational operations because of various factors- competition, performance orientation, to name a few- which made organizations give up the traditional ways of operation and embrace sustainability for survival and growth. This chapter introduces the concept of sustainability which demonstrates the three dimensions of sustainability along with the idea of corporate sustainability reporting in the global and Indian contexts. The evolution of sustainability, the shift from millennium development goals to sustainability development goals along with sustainability and its linkages to corporate sustainability reporting are also included the chapter.

1.1 Organizational Scenario in India

India embarked on the New Economic Reform in the 1991, with the policy of Liberalization, Privatization and Globalization. This led to the MNCs starting operations in India, thus posing stiff competition to the organizations in India. This gave the customer more choice in the product line through the customisation of the product for the customer by the organizations (Mendelson & Parlakturk 2008). Competitive advantage of firms thus was the resulting factor, which made the organizations move towards sustainable competitive advantage. Organizations had to rethink their strategies and plan long-term strategies to sustain their business rather than profit.

1.2 Sustainability- The Concept

The concept of sustainability can be dated back to the Indus Valley civilization, and it is an imprecise term that has progressed in the context of the environment and population growth. This has significantly affected environmental degradation; carbon emission, bio-diversity etc. Initially, sustainability focused on environmental issues, but later it was more concerned with the economic and social impact (Kramar, 2014).

The term ‘sustainability’ is most commonly associated with ecology and refers to the idea of being resilient. It is also about endurance of systems and processes. Later, the concept was adapted to a variety of sectors, and it is now more widely used in business phenomena in the corporate sector. Sustainability is a prominent topic in both the business and academic worlds, and it is especially important to the business sector. It aims to address the organization's long-term viability and competitiveness (Porter &

Kramer, 2006). As a result, sustainability is not just about "reducing carbon emissions, giving health and other benefits to employees, or contributing to society; it is a guiding concept for organizations and society."

1.3 Definition

The word sustainability is derived from a Latin word "sus-tenere", which means to hold, maintain or strengthen. Sustainability is often used synonymously for long term, durable, sound and systematic. The term "sustainability" is composed of two words: "sustain" and "ability." Sustain refers to the quality of being able to cause or allow something whereas ability relates to the quality of being able to perform (Cambridge, 1995). Sustainable development is the best way to describe the term sustainability. According to Filho (2000) it is that development is the process of becoming more developed over time. As a consequence, sustainable development is the capacity to grow, develop, and maintain using the available resources without compromising the future prospects.

1.4 Sustainability – The Evolution

The origin of the term sustainability dates back to 400 B.C. where, Aristotle discussed about the concept of household, It was distinguished by the capacity to production and reproduction necessary for survival (Muller-Christ, 2001; Nagle 2006). Sustainability is very popular in the early 1700's in Europe especially in Germany, when they realized the scarcity of the wood. Wood was primarily used for the construction those days and thus have witnessed lot of deforestation. Germans soon realized the scarcity of wood and started reforestation keeping in mind the future generations, which they called as

Nacchaltigkeit or Sustainability. From Europe, the concept moved to North America, where it was applied in various industries (Hulsmann, 2003).

Until 19th century, sustainability was more looked as a balance between the consumption and the reproduction. In 1970's, sustainability was more looked from an ecological and environmental concept (Meadows, et al., 1972). Since 1980's, the concept picked up the pace and it was more looked as a strategy especially for the business organizations (Barney, 1991; Grant, 1991; Porter, 1980). Later the concept was seen from a societal context, focusing on the future generations (WCED, 1987). After the Brundtland commission, Sustainability has gained much more significance and the Commission defined what Sustainable Development is meant for the larger society.

The commission campaigned rigorously for the need to balance the ecological, economic and social dimensions of the society, simultaneously with the application of the triple bottom line. Sustainability was seen more as a corporate concept, thereby organizations trying to strike a balance between the three pillars – Economic, Ecological and Societal pillars (Elkington 1997). In the early 1990's, the concept of sustainability was seen more a corporate concept and slowly the concept has taken a new shape in the business fraternity, where sustainability was seen more from an ethical and moral standpoint of view, thus giving birth to Corporate Social Responsibility (Boudreau & Ramstad 2005; Kira, 2003).

1.5 Sustainable development

Sustainable development has been one of the most important issues discussed across platforms and forums across the globe. Platforms and forums including The United Nations Conference on the Human Environment (1972), the World Conservation Strategy (1980), the World Commission on Environment and Development (1983), the First Rio Earth Summit (1992), Earth Summit +5 (1997), the United Nations Millennium Declaration (2000), the World Summit on Sustainable Development (2002), the United Nations Economic and Social Council (2002), and the Inter-governmental Panel on Climate Change (2007) have debated and discussed sustainable development at length to come up with possible way out to effective promotion and implementation of the idea.

Scholars, on the other hand, have attempted to define Sustainable Development multiple times over the previous two decades, with various emerging formulations. However, WCED (Brundtland Commission, 1987) Sustainable development is defined as "*development which meets the needs of current generations without compromising the ability of future generations to meet their own needs*". The definition highlights three essential pillars: economic progress, social equity, and environmental conservation. Organizations that were traditional in nature have realized that it is not profits alone, that sustains the organization, but rather concentrate on the economic, ecological and social spheres of the organization - *People, Plane and Profit.*

People refers to the business practices and policies that affect employees, such as standard healthy working conditions, employee safety, and employee security. Planet refers to environmental practices that cause little or no harm to the environment, whereas profit refers to the economic value that an organization adds that it creates. Sustainable development incorporates environmental, economic, and societal challenges to the point where it has become a goal for the vast majority of organizations. The Triple Bottom Line (TBL) is a term used to describe the strategy for balancing social, economic, and environmental factors (Elkington, 1994), which was started in the year 1997, and is often used as synonymous to sustainability as Elkington named his consultancy as SustainAbility, (Elkington, 1997).

1.6 Triple Bottom Line

In response to greater awareness of social, environmental and economic challenges, companies are progressively seeking to become better corporate citizens as well as stakeholder concern. Managers understand that long-term economic growth can only be achieved if it is socially and environmentally sustainable. A triple bottom line or "a balance economic growth, social responsibility and environmental conservation can contribute to a competitive advantage".

Economic growth, environmental protection, and social responsibility are all part of the triple bottom line Elkington, (1998). Companies can examine their impact on the environment, society, and the economy more broadly by looking at processes and goods, and find the intersection between reducing sustainability impacts and increasing long-term business performance. The contemporary business world is attempting to establish and sustain a level of corporate responsibility—behaving responsibly as global citizens while yet generating a profit. Corporate responsibility is the overarching theme of the triple bottom line, encompassing all parts of it and supporting businesses in guiding policy and procedure in day-to-day operations.

To effectively manage operations and capital investments that support company goals and satisfy multiple stakeholders, it is important to assess the societal, economic, and environmental implications of organizational practices. Reducing these externalities, in many circumstances, boosts long-term corporate profitability by increasing manufacturing yields and improving product quality. The aim is to assure long-term profitability by reducing negative business impacts and increasing the positive impact of its worldwide operations: enhanced health, employment, economic prosperity, and social equity. The corporate sector is becoming increasingly interested in developing and implementing effective, proactive sustainability plans, which include significantly enhanced stakeholder participation.

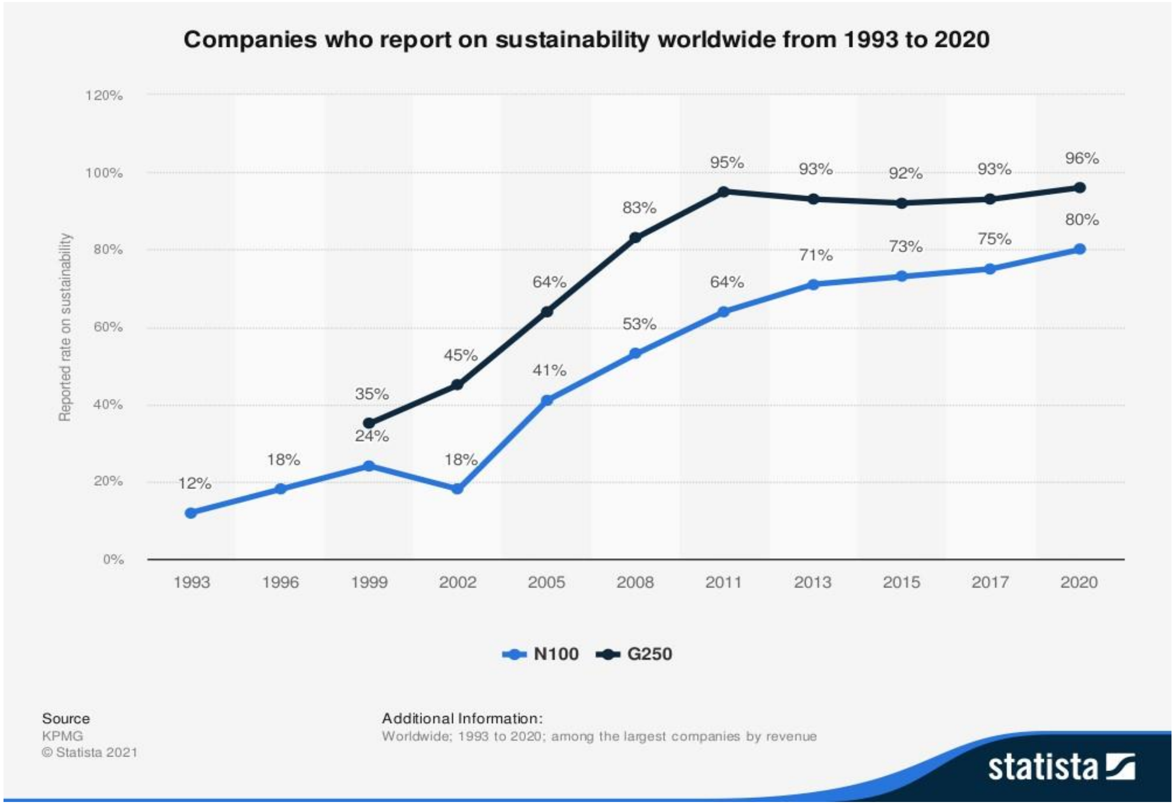
A proactive sustainability plan can have a significant financial benefit. (Berman et al., 1999). Companies can enhance triple bottom line and achieve higher returns by addressing non-financial aspects of their businesses and it is indicative of and incorporate into daily corporate activities in order to achieve the organizational long-term success. Moreover, it is only considered as an endeavor to give positive public relations, but does not create long-term value creation. The aim is to identify the present and future business impact of product, process, services, and activities including sustainability business decisions into both internally and externally in the business.

In fact, the focus of academic literature was on integrating sustainability into corporate operations in order to achieve improvements in social, economic, and environmental performance at the same time (Epstein et al., 2017).Thus organizations started on the sustainability reporting disclosures across the world. In some countries it was mandated but in many countries it was voluntary.

1.7 Sustainability- The Global Scenario

Sustainability reporting is an integral part of any system, under the control of the government. The US has made it mandatory to follow the guidelines of SDR, keeping in mind the gravity of environmental pollution. There has been an alignment of sustainable reporting with financial reporting in some organizations. Countries like Turkey, Brazil and South Africa also have legislation that directs organizations to disclose. Among the nations, Indonesia became the first country to issue SDR guidelines. Singapore made it compulsory for all organizations to follow the protocols to publish the SDR. Some nations like China have made sustainable reporting mandatory and issued guidelines in 2009. The Securities and Exchange Commission has guidelines for reporting sustainable activities of the organization. Singapore Exchange (SGX) all the firm’s listed on their exchange made it mandatory to publish the sustainability reports (SGX, 2014). In China, the Shanghai Stock Exchange and Shenzhen Stock Exchange (CSR Asia, 2012) made sustainability reporting mandatory and have issued guidelines for sustainability reporting in 2009. Japan came up with a noble reason to enforce the guidelines for sustainability reporting. However, the Hong Kong Stock Exchange issued the guidelines in 2012 to make it voluntary. Countries like South Korea, Malaysia, Philippines, and Vietnam consider sustainability reporting voluntary. However, as time progresses, reporting might prove critical and organizations would be forced to make reporting mandatory in the coming days. A country like Taiwan, which does not have any guidelines, but the organizations, must publish their CSR reports according to corporate governance best practice principles (CSR Asia, 2012). The figure -1 provides an idea of sustainability reports provided worldwide.

Figure -1: Worldwide Sustainability reports published from 1993 to 2020



80 per cent of the N100 firms have provided information on sustainability on a global scale, and nearly 90 per cent of the Fortune 250 firms that rank highest in terms of sales have provided information on sustainability on a global scale. In the future years, it is anticipated that the number of global corporations reporting on their sustainability efforts would increase to 100 (KPMG report, 2020).

Corporate responsibility survey by KPMG (2013) states that 78% of the companies, which report their sustainability performance, follow the GRI framework. Unlike Europe and the U.S., sustainability reporting is not mandatory in India. However, some of the large companies report sustainability issues with the help of the GRI framework.

1.8 Sustainability- The Indian Scenario

India has the world's oldest and most renowned civilizations, with a rich cultural heritage. Despite this, the country remains a country plagued by extreme poverty, slow infrastructure development, and several sustainability issues and one of the world's susceptible countries to climate change. The dominant age of coal, oil, plastic, metal and resource philandering began with the entry of western civilization and varied processes over the globe. Despite the Vedic teaching, the people are taught to respect the land we live on, to live a pleasant and wealthy life, without damaging natural resources.

Sustainability in India is an emerging theme at the current time. However, some of the large companies report sustainability issues with the help of the GRI framework. Indian IT giants like Infosys, Wipro, and TCS report sustainable performance. The growing interest of the prominent firms have discussed about the sustainability and CSR. The main reason is the Companies Act (2013), which mandates that 2% of the net profits have to be spent on CSR activities. It applies to companies whose net profit is more than five crores. The Act also calls for a representation of the CSR committee on the board of directors. These organizations either carry the CSR activities by themselves or appoint a trust to take care of the CSR activities.

As a developing economic power, India realized the effects of sustainability reporting and CSR activities. The Companies Act. (2013), Section 135, it has been observed that organizations in India have taken CSR more seriously. The organizations design the CSR activities to help society at large and help create goodwill and reputation among the general public (Sustainability Reporting, 2012).

In terms of academics, India is not far away from the world. Several organizations promote sustainability and environmental protection in practice. Centre of Excellence for Sustainable Development CII-ITC, IGCS Indo-German Centre for Sustainability, Indian Environmental Society, Institute of Corporate Sustainability Management, Indian Institute of Sustainable Enterprise, Indian Institute of Ecology and Environment, Centre for Environmental Education provide certificate courses and training on sustainability.

After the growing importance and significance of sustainability reporting a few countries cater to promote PG programs on short courses like Business Sustainability, Sustainable Development Practice (TERI), MBA in Sustainability (Xavier),Environment& Sustainable Development (BHU), Environmental Education (IIT Delhi),Sustainable Management (IIM Lucknow), Ecology, Environment and Sustainable Development(TISS), Natural Resources and Sustainable Development (Amity), Sustainable Architecture (Bharati Vidyapeeth) are a few examples. These universities offer sustainable development courses as an indicator of a growing awareness among the public on sustainable related activities in India. These universities provide sustainability as an interdisciplinary course and are mostly linked to science, business and healthcare. In terms of reporting, the companies across the world follow the GRI guidelines, which are considered universal.

1.9 Sustainability Reporting - Global Reporting Initiative (GRI)

Global Reporting Initiative (GRI) is non-profit and independent international organization which is world most acceptable standards for sustainability reporting. It was founded in 1997, Headquartered in Amsterdam, Netherlands, this NGO with a diverse set of partners, help the companies achieve sustainable development by increasing transparency and accountability around the world. Also, it helps to provide global common language to communicate with their business impact and responsibility. The GRI Standards, which are available as a free public service, are the most widely utilized sustainability reporting standards in the world. The GRI Standards have been developing since 1997 to represent the best practices used globally for reporting on economic, environmental, and social consequences. Along with developing the GRI Standards, and also promotes their adoption and implementation by a variety of business actors, civil society organizations, and politicians (www.globalreporting.org).

In the year 2000, the first GRI Guidelines version was launched. In mid-2002, the GRI second version (G2) has emerged. Subsequently, the G3 version came in 2006, with details of its instructions, standards of sustainability reporting. The GRI guidelines have become more popular across the sectors and standard guidelines for sustainability reporting. The next version, G3.1 launched in 2011; after three years, the latest version, G4, was launched. The GRI framework's latest version consisted 91 items. Among them, nine items were from economic indicators, thirty four items related to environmental indicators and forty eight items from social indicators.

The GRI is a widely acclaimed approach for reporting on sustainability with particular reference to these three aspects; economic, environmental and social problems of organizations report from the (KPMG, 2008, 2013; Carrots & Sticks 2013). This framework and standard will help the organization's decision-making for sustainability activity (Guenther et al., 2006).

Sustainability reporting has started in India from 2011 onwards, and only one company has published the report following the GRI guidelines. In 2011 the reporting number increased to 46 companies with 15 different sectors having published the reports. Simultaneously, the sustainability reporting standard has been embraced by a number of big players companies with multiple sectors adopted the GRI framework. As per 2018, a total of 293 companies have disclosed their reports (www.globalreporting.org).

GRI aims to support the dissemination of knowledge and improvement of the quality of sustainability reporting. In addition, GRI has begun to establish itself as more of a world-wide established standard-setter/benchmark for sustainability reporting. The GRI comprehensive guidelines are encouraging the organization to report their activities.

1.10 Overview and Benefits of the Standard

The GRI standards incorporate the fundamental concepts and disclosure from the G4 Guidelines. The G4 implementation manual has been updated with an enhanced structure and format for enterprises to follow. The Global Sustainability Standards Board (GSSB) enforces the standard and the first universally approved sustainability reporting system. The members represent a wide range of expertise and multi-stakeholder perspectives on sustainability reporting, having been founded as a self-contained entity within the auspices of GRI. This is a revolutionary modular set-up and an independent standard body. The advantages of GRI are its more flexible and future-proof structure, ensuring that the GRI standard stays current and relevant. Increased eligibility for referencing in policy efforts allows for more integration into government and market regulations worldwide. They are considered a universal standard language for non-financial data, as well as a standardized structure and set of disclosures to meet all sustainability reporting obligations, from comprehensive to issue-specific disclosures - Economic, Environment and Social impact. The phrase 'impact' describes how the economy, the environment, and society interact. The GRI is a widely accepted benchmark for the quality of sustainability reporting. The GRI guidelines permit businesses to report their sustainability performance in the same manner as their financial performance (www.globalreporting.org).

1.11 Business Responsibility and Sustainability Reporting

According to The Hindu 5th May 2021, for top NSE/BSE 1000 listed firms, based on market capitalization filling of BR&SR would be mandatory effective from the FY 2022-23, which will replace the existing Business Responsibility Reports (BRR). Climate change adaptation, mitigation, and the transition to sustainable economic inclusive growth have become critical issues in recent years. Investors and other stakeholders are increasingly looking for environmentally, socially responsible, and sustainable businesses. As a result, companies must now report on sustainability-related aspects in addition to financial and operational performance.

"SEBI Circular no.CIR/CFD/CMD/10/2015 dated November04,2015." has designed a structure for Business Responsibility Reports (BRRs) that companies must submit to comply with regulations governing the reporting of Environmental, Social, and Governance (ESG) factors by listed firms. As of FY 2021–2022, these regulations will apply to all companies. In addition to the previous guidelines, SEBI has introduced a new reporting format, business responsibility, and sustainability reporting, which will cover the ESG parameters. (Amending regulation 34 (2) (f) of the LODR Regulation vide Gazette notification no.SEBI/LAD-NRO/GN/2021/22 dated May 5th, 2021).

A guidance note is included with the BRSR to help companies interpret the scope of the disclosure. The mandates listed companies to report on their performance against each of nine principles, along with key and leading indicators which are described in National Guidelines on Responsible Business Conduct (NGRBC).

There must be a mandatory reporting requirement for essential indicators. In contrast, leadership indicators must be voluntarily disclosed, and the listed firms should include the leadership indicators in their reports.

The BRSR is structured to design quantities standard disclosures on ESG factors to allow for comparing sectors, time, and firms. By looking at the disclosure, investors can also make better investment decisions. The BRSR guidelines will not only help the businesses but also engage the meaningful relationship with their stakeholders and encourage them to go beyond financial and include environmental and social factors.

1.12 The Indian Guidelines - National Voluntary Guidelines (NVGs)

Around the world, the "corporate sector is grappling with a new role- meeting the current generation's needs without sacrificing the ability of the next generation". In response, the Voluntary Guidelines on Corporate Social Responsibility were released by the Ministry of Corporate Affairs in 2009. The guidelines aim is to bring business responsibilities into the mainstream. Keeping in view stakeholders' feedback and comments, it gets revised and adds a more comprehensive set of guidelines consistent with the business's economic, social, and environmental responsibility. The standards take into consideration lessons learned from various national and international best practices, frameworks, and norms that provide a unique 'Indian' perspective; however, it enables businesses to balance and operate with various specific requirements. These guidelines will emphasize companies' responsibility and assist India in achieving an ambitious objective of inclusive and long-term development goals.

There are nine (9) principles as part of the National Voluntary Guidelines (NVGs). They are:

1.12.1 Principle-1: Ethics, transparency, and accountability should operate in businesses.

The principle mandates that moral and ethical behavior should be conducted in all businesses, which is very important for responsible businesses. Their decisions and activities, including the necessary guidelines, should be visible to relevant stakeholders. Firms should create good governance structures, policies, and procedures to promote the acceptance of the idea throughout their value chain and to ensure ethical behavior at all levels. Firms should create good governance structures, policies and procedure to promote the acceptance of the idea throughout their value chain to ensure ethical behavior at all levels.

1.12.2 Principle 2: Throughout the life cycle, businesses should deliver safe products and services and contribute to long-term sustainability.

The principle states that for businesses to be productive and profitable, they must enhance their employees' and customers' quality of life. It also recognizes that the design, manufacturing, distribution, use, and disposal of products affect people and the planet. Therefore, ethical businesses should consider these considerations while designing new products and services.

1.12.3 Principle 3: All employees' well-being

This principle covers company policies and practices relating to workers' dignity and well-being. This idea applies to all workers who contribute to a business's success, whether inside or outside the company. This includes sub-contractors and people who work from home. Businesses should ensure that all employees improve their skills and competence by offering equal and non - discriminatory access to appropriate learning opportunities. They should use intelligent human resource initiatives to improve employee morale and career growth. It should set up rules and policies to ensure that no one is harassed at work and that workers feel safe and comfortable doing their jobs.

1.12.4 Principle 4: Businesses should respect all stakeholders' interests, especially poor, vulnerable, or marginalized groups.

The principle acknowledges that companies have a responsibility to think and act in a manner that extends beyond the interests of their shareholders to take into account the interests of all of their stakeholders. Firms identify and understand stakeholders' problems define the objective and scope of engagement, commit to engaging with them and acknowledge and accept responsibility. Moreover, the firms are more transparent regarding the impact of their policies, decisions, products, services, and other relevant operations on the stakeholders.

1.12.5 Principle 5: Human rights should be respected and promoted by businesses.

The principle highlights that human rights are the codification and agreement that others should be treated with dignity and respect. This comprehensive view of human rights provides a practical and legal foundation for business leaders aiming to manage risks, explore business opportunities, and compete responsibly. In India, the Constitution, national laws and regulations, and the International Bill of Human Rights protect individuals' human rights, and businesses should be aware of it. They must understand that human rights are inalienable, universal, and interrelated.

1.12.6 Principle 6: Businesses should respect the environment concerning protecting it and work to restore it.

According to the principle, environmental responsibility is necessary for long-term economic progress and societal well-being. It also highlights the interconnection of environmental challenges at the national and international levels, underlining the significance for corporations to address global warming, environmental preservation, and climate change systematically and comprehensively.

The principle enables firms to accept and understand the responsibility for the direct and indirect environmental consequences of their operations, products, and services and to work to improve such implications. In addition, the principle encourages businesses to take steps to improve those implications.

1.12.7 Principle 7: Businesses should act in a responsible manner when it comes to influencing public and regulatory policy.

This principle suggests that a company functions inside the mandatory legislative and regulatory framework that the government sets up. This framework directs the company's growth while providing some beneficial constraints and boundaries.

When companies engage in policy advocacy, they have a responsibility to ensure that the positions they take on various public policy issues are consistent with the Principles and Core Elements indicated in these Guidelines.

1.12.8 Principle 8: It is important for businesses to encourage growth that is both inclusive and equitable.

The principle acknowledges the difficulties associated with India's social and economic growth and builds on the development plan defined in the policies and priorities of the Indian government. Its emphasis on the significance of the energy and initiative of enterprises encourages such businesses to innovate and contribute to the general progress of the nation, particularly for those who are disadvantaged and vulnerable.

1.12.9 Principle 9: Businesses have a responsibility to participate in ethical interactions with the clients and consumers they serve and to provide them with value.

The main aim of the firms to deliver goods and services to its clients and create a value for both; no company entity can exist or survive in the absence of its customers. Customers' freedom of choice is important to select the product that uses the goods and services.

1.13 Approaches to Sustainability

Multiple stakeholders are pressuring businesses to adopt sustainable business practices. The larger organizations are understood to be owned by a group of shareholders rather than a single person. A study of Shareholder vs. Stakeholder approaches to sustainability was conducted by the MIT. The ethical challenge that frequently arises for management is who should be the organization's priority - shareholders or stakeholders? Four foundational tenets to guide business strategy are offered by MIT. They are:

1. Should they optimize and expand shareholder value since shareholders are the ones that take risks and spend money in the company, and without them, companies would cease to exist.
2. Should organizations try to serve the interests of their stakeholders in the same way?
3. Should they maximize and increase the shareholder value as they are the people, who takes risk and invest money in the organization and thus, without shareholders, organizations cease to exist.
4. Similarly, should the organizations strive to serve the interests of the stakeholders? This ethical problem persists for organizations today, since conflicting interests exist between shareholders and stakeholders, (MIT Sloan Management Review, Accessed on 16/01/2016).

1.13.1 The Shareholder Approach

The shareholder approach is based on the assumption that an organization's primary goal is to make a profit (Friedman, 1970). Traditional businesses were founded to make a profit, and it was believed that organizations that did not make money were existence to fail. As a result, they believed that businesses could only survive in the long run if they made a profit. According to (Friedman, 1970), if an organization doesn't make profits, there is something wrong with the organization" Employees are hired just to help the company expand, hence the only activity they should be doing is increasing profits.

Since, it is the shareholders of the business, who invest money in the business; it is the responsibility of the employees to safeguard the interests of the shareholders, which again is nothing but mere profit. Profitability and internal stability are very essential for the organization (Landrum & Edwards, 2009). Serving society or doing something other than developing the business and creating profits is not considered in the shareholder approach.

Shareholder decisions in pursuit of profit maximization can often lead to unethical and unlawful behavior, resulting in the failure of companies like Enron, Arthur Anderson, and Global Crossing (Shim, 2014). On the other hand, proponents of the shareholder theory claim that the theory is frequently misunderstood and that the shareholder theory supports charity by donating funds to society when it is in the organization's best interests.

1.13.2 The Stakeholder Approach

The stakeholder theory is the opposite of the shareholder view, which argues that a corporation owes responsibility to its stakeholders, who include employees, customers, suppliers, government agencies, financial partners, and the surrounding community among others. Stakeholders are individuals who have a direct or indirect interest in the organization, as well as everyone who is affected by the organization's actions**"** **(**Freeman, 1984; Donaldson & Preston, 1995)**.** The term "stakeholder approach" is commonly used in the literature on corporate social responsibility (Freeman, 1984). They think that organizations can only survive in the lung-run if they can establish a long-term relationship with all of their stakeholders. One of the central assumptions of this theory is that the shareholders are not the only owners of the company; anyone who is affected directly or indirectly is also a shareholder, and thus the company is not allowed to engage in unethical behavior because the society and the community are also stakeholders.

One of the key assumptions of this theory is that the shareholders are not the only owners of the organization, but any one, who are affected directly or indirectly are also the owners and hence, the organizations are not allowed to indulge in unethical activities as the society and the community around are part of the stakeholders. Stakeholders have an impact on how an organization operates, and so the organization's ability to survive in the long run is determined by the interrelationships among all stakeholders. Anything that is harmful to the stakeholders' interests is prevented.

Organizational success cannot be judged solely in financial terms; instead, a holistic and comprehensive stakeholder assessment is necessary. As a result, an integrated system that measures the organization's performance becomes important Balance Scorecard (Kaplan & Norton, 1992), Triple bottom line (Elkington, 1994, 1997), Environment and social reports (Bennett & James, 1999) are examples of the types of tools that are utilized by businesses to gather information that may be utilized to assist with decision-making. The Global Reporting Initiative Framework (GRI) sets reporting guidelines and enables organizations to measure sustainable actions in a standardized manner.

With the existence of legislations in each country, organizations are bound to consider the impact that they are making on the society. This is one of the main reasons for organizations explicitly letting know the society and the general public of the impact that they create. It could have a positive or negative effect. In the majority of countries, making the reports public is a voluntary act (KPMG, 2011, 2013). Organizations, on the other hand, continue to publish because it helps firms in becoming more transparent and accountable to their stakeholders.

At the same time, it is important for the organizations to look at what the stakeholders are interested to know about the organization thereby, ensuring that they do not publish only the positive aspects but a holistic perspective of the actions of the organizations covering economic, environmental and societal dimensions. Simultaneously, it is crucial for organizations to consider what stakeholders want to know about companies, ensuring that they do not only disclose positive aspects of their business, but a holistic view of their actions that includes economic, environmental, and societal dimensions. The concept of sustainability has its roots grounded in the stakeholder theory, which calls for a balanced approach among the people, profit and planet (Elkington, 1994) as it allows conceptualizing organizational performance beyond the economic dimension (Ehnert, 2015). The shareholder theory emphasizes the firm's financial value, whereas the stakeholder theory highlights the organization's economic, social, and environmental values. While the shareholder theory focuses on short-term goals like as increasing profits and lowering costs, the stakeholder approach cares more about how things will go in the long run success of the company and consequently invests in processes, tools, and people.

1.13.3 Sustainability - An Interdisciplinary Approach

In the early 20th century, sustainability was primarily viewed as an environmental concern. However, there was a revolutionary change in an interdisciplinary approach. It took forward in the year 2000 when the revolution theme started "Time for Global Action for People and Planet." The United Nations Millennium Summit in 2000, which gathered 189 UN members, aimed to fulfill eight worldwide development goals focusing on developing nations, as well as 18 targets with 48 indicators over the period 2000 to 2015.

The Millennium Development Goals (MDGs) represent a historic and effective strategy of universal mobilization to achieve a set of important socioeconomic agendas around the world. Developing countries have made significant progress toward achieving the MDGs. However, the rate of advancement varied greatly between Targets countries and regions (www.research.un.org/en/docs/dev/2000-2015).

There were eight-millennium development goals under taken by the United Nations with 189 UN members. They are – "Extreme Poverty and Hunger, Universal Primary Education, Gender Equality, Child Mortality, Maternal Health, HIV/AIDS, Malaria, and Other Infectious Diseases, Environmental Sustainability, Global Partnership for Development". The Millennium Development Goals (MDGs) ended in 2016 giving way to sustainable Development goals.

The approach of sustainable development helps to create international collaboration with other nations. It builds a sense of direction to attain long-term sustainable progress, observed in the last 15 years. The statistics demonstrate the impact of the Millennium Development Goals on member countries around the world. Despite the fact that development efforts have changed dramatically, the goals and targets haven't changed much, therefore the Sustainable Development Goals haven't changed much.

It was the official commencement of the 2030 Agenda for Sustainable Development Goals, which is both visionary and transformative. At the United Nations Summit, the world's most powerful leaders approved messages on an eco-centric vision. The SDGs call for action from everyone in the country, rich and poor alike, to keep the country's chances of protecting and cultivating environmental consciousness alive. They must address the country's poverty and unemployment challenges as well as environmental concerns. They recognize that alleviating poverty necessitates policies that promote economic growth while also addressing a number of social concerns, including job opportunities, health, education, social protection, and environmental issues. The UN conference openly declared that SDGs are essential goals for the contemporary world in the global summit. Even the Rio-20 summit which was held in Brazil in 2012 emphasized climate change and the different measures to tackle global warming. The SDGs remain the only environmental protection measures to check the healthy living of humans and impoverished conditions of mother earth. It urges all nations, governments, policy-makers, politicians to join hands with SDGs to attain a sustainable society. SDG is a universally recognized protocol to control environmental pollution based on MDGs. The Sustainable Development Goals (SDGs) which are universal apply to all countries with 17 goals and 196 targets with 230 global indicators.

1.13.4 Sustainability- The Management Perspective

Sustainable development aims are designed to benefit people both now and in the near future. Similarly, a person has to balance consumption and production of commodities. Although the three Ps people planet and profit are equally vital for sustainable development, the role of the people is far more significant in finding a balance between the three Ps. So, the knowledge of sustainable development for humanity is highly essential. (Filho,2000) points out that understanding the concept of sustainability becomes critical since one's attitude toward sustainability is dependent on one's understanding and acceptance of the same. The pillars of sustainability also called three (PPP) that improve economic, ecological, and societal development are environmental integrity, social equality, and economic performance (Bansal, 2005). Environmental integrity refers to the preservation of the environment and the avoidance of over-exploitation of natural resources. “Economic performance is critical for organizations to survive in the long run, but economic prosperity alone is insufficient for SDGs” (Dyllick & Hockerts 2002). Social equity refers to the avail, and social equity refers to the availability of resources and opportunities, some of which are “healthcare, education, political freedom and quality of life” (Bansal, 2005).

According to Muller Christ & Remer (1999), "The notion of sustainability expanded the triple bottom line method by defining sustainability as a balance between source consumption and resource production”. “The term corporates social responsibility and sustainability that are interchangeable when it comes to meeting the direct and indirect demands of a company's stakeholders without compromising the firm's ability to take care of future stakeholders” (Dyllick & Hockerts, 2002). Sustainability is defined by Boudreau & Ramstad (2005) as an ethical and moral ideal, which they refer to as Social Responsibility. Because CSR was not compulsory in the 1990s, company owners saw it as a moral and ethical viewpoint.

1.14 Dimensions of Sustainability Reporting

Several definitions of sustainability have been proposed; among them, the three higher-level components are environment, economic and societal performance (Ehnert et al., 2015; Pagell & Gobeli, 2009). This research will use some of the most widely referenced definitions of sustainability found in corporate sustainability reporting literature. To be truly sustainable, a company must, at the very least, while making a profit for a long time; there is no harm to the natural environment or human system. Environmental management constricts surplus-supply chains, whereas a wide-ranging understanding of

TBL (triple bottom line) comprises of “people, planet and the profit of the business culture, environment and strategy which are all about the example of sustainability” (Kleindorfer et al., 2005). While a sustainable environment focuses on natural resource management, social sustainability is concerned with social issues such as enhancing people's talents and skills. Relationships among employees create an excellent working culture to balance the social value (Sarkis et al., 2010). According to (Hassini et al., 2012) revealed that the company have a long-term objective of preserving the economy, the environment, and society's well-being.

A few reasons for corporate sustainability reporting (Van Marrewijk, 2003) include “environmental and social issues in business practices to contacts the stakeholders. To operationalize sustainability the TBL concept developed by Elkington (1997). From the microeconomic perspective, sustainability evaluates and balances business entrepreneurship's economic, environmental, and social concerns. According to Pagell & Gobeli (2009), sustainability requires firms to do well on traditional and financial measurements of social and environmental indicators. The idea of triple-bottom-line is a comprehensive assessment of a company's total performance-based on integrating these performances (Elkington, 1997).

1.14.1 Economic Sustainability

In earlier times, humans faced a significant challenge- balancing environmental degradation and achieving sustainable economic growth (Sadriddinov et al., 2020). According to Azapagic et al. (2004), “economic sustainability refers to an organization's economic impact on external and internal stakeholders and economic systems at the local, national, and global levels”. A company must perform effectively at the micro level to be economically viable by reducing expenses and increasing earnings and shareholder returns (Closs et al., 2011).

Consequently, the dimension of economic sustainability does not just relate to profit. It also entails generating adequate cash flows to sustain liquidity and providing shareholders with a consistent, above-average return (Dyllick & Hockerts, 2002). The mining and minerals business has some of the most challenging long-term sustainability issues in the industry. The industry must respond to these problems by engaging its many diverse stakeholders and addressing them to operate its social license (Azapagic et al., 2004). Economic sustainability should focus on the triple bottom line framework and money flow, including earnings and shareholders' returns, stock market performance and financial regions. Sustainable practices can provide a variety of solutions to the problem of humanity's environmental footprint. It is either "reduce waste, restrict carbon emissions, utilize solar energy, or reject wasteful short-term activities in favor of the planet's long-term well-being" or reduces natural resource depletion.

In accordance with its aim of sustainability to “promoting prosperity while protecting the climate," the United Nations has established 17 Sustainable Development Goals (SDGs) and expected to be met by 2030, therefore learning about them and figuring out how to put them into action is the call of the decade. In economist prospective, it is found that knowing about SGDs has helped to have a better grasp and comprehend concepts like the Green GDP, which can show how some green projects may be employed as a long-term investment in organizations that adopt environmentally conscious business practices.

Most importantly, combining economics with sustainability research allows, and find new approaches to support long-term economic growth. Protecting the environment has rapidly become one of the world's most important issues, so we must all find ways to invest in and support action in sustainability and climate change (www.topuniversities.com online access 25/05/2022).

1.14.2 Social Sustainability

Social sustainability considers how corporations affect people and society. As a minor measurable component of the three pillars sustainability model (Triple bottom line). The TBL is an accounting agenda that is divided into three parts, such as social, environmental, and financial. Many firms have used the TBL framework to examine the companies' sustainability activities/performance. Problems are only some of the issues that need to be addressed "Human rights, fair Labour practices, living conditions, health, safety, wellness, diversity, equity, work-life balance, empowerment, community involvement, philanthropy, volunteerism, and other social sustainability performance" (www.adecesg.com/resources/faq/what-is-social-sustainability).

CSR codifies the social dimension of sustainability (Sodhi, 2015). The term "social sustainability" denotes a company's social responsibilities, which involve such issues like "poverty reduction, disease prevention, protection of health facilities and providing quality education overall well-being of society's" (Sarkis et al., 2010; Closs et al., 2011). If the organization uses sustainable management solutions, managers and employees must know and follow corporate sustainability rules and processes (Haugh & Talwar, 2010).

CSR also refers to the organizations' assets of humans and business measures that are fair and beneficial to those touched by the organization, either directly or indirectly. To focus on environmental concerns, manufacturing sectors have lately begun to use green ideas in their supply chain management (Govindan et al., 2014). To be socially sustainable, businesses must provide equal opportunities, promote high occupational health and safety standards, promote diversity, and provide training and development programs for employees (Branco & Rorigues, 2006). Social sustainability aims to increase the optimistic influence of a company's operations on internal and external communities. The impact of stakeholders' pressure on environmental practice adoption has been studied in the literature (Sarkis et al., 2010). As for communities and society as a whole, the influence of conserving and land environmental management policies on overall environmental performance and human resource practices on quality performance are the only benefits of sustainability practices (Pullman et al., 2009).

1.14.3 Environmental Sustainability

For the last 200 years, the industrial revolution gave untold riches and prosperity to the world. However, it has resulted in unanticipated environmental damage. For this reason, the world has experienced several environmental issues like ozone layer depletion, global warming, desertification, deforestation, diminishing biodiversity, industrial accidents, hazardous waste disposal and acid rains etc. (Pryde & Mcauley, 1991; Smil, 1994).

Since "the present industrial and organizational practices are found to be ecologically sustainable in the next 40 years, the world population will increase between 5.5 billion to 11 billion in 2030"(Ehrlich & Ehrlich, 1991). This concept has developed over the years; its explanation stands out among all to describe “Environmental sustainability is defined as the ability to mitigate long-term risks connected with resource depletion, energy price volatility, product liabilities, emissions, and waste management difficulties" (Shrivastava 1995).

Similarly, Moldan et al. (2012) study describes “environmental sustainability as maintaining nature's services at an organizational level, as natural resource consumption and reproduction with no emissions beyond the capacity of the natural ecosystem's ability to absorb as well as incorporate these sources. Further, Shrivastava (1995) observed that the natural resources are limited; it is proposed that businesses change, restructure, and rearrange their activities to reduce their negative environmental impact. It also addresses crucial topics such as "waste reduction, conserve natural resources, and reduced hazardous substance usage." (Gimenez et al., 2012 & Pullman et al., 2009). Another study has revealed companies' strategies and planning procedures and their implementation in their daily activity. “The practice of environmental sustainability activities managed by the employed and its environmental responsibility is called advanced environmental sustainability” (Tate et al., 2013). For risks and uncertainty issues, several environmental sustainability benchmarks exist. Relevant environmental indicators are required to monitor how successfully these goals are accomplished (Dong & Hauschild, 2017).

1.15 Corporate Sustainability Reporting Practices

Since the end of the 1990s, CSR practices have become an important aspect among large firms across the world. Now, it becomes an increasingly developmental topic and an essential factor for the businesses and academic arena (Amin & Chaudhry, 2016). Companies are incorporating their business practices with sustainability activities. This is because of rising concern of “global warming, climate change, environment degradation, resource depletion, and human rights have stimulated in socially responsible business practices” (Sheldon & Park, 2011). Eventually, businesses are required to address all of these concerns (Adams & Frost, 2008), to re-establish the durability and equilibrium of the earth and to meet the demands of internal and external stakeholders (e.g., employees, suppliers and capital providers). Firms are voluntarily disclosing their sustainability report (Ebinger et al., 2006; Dyllick & Hockerts 2002) which has increased customer awareness and education, pressurizing the businesses to report sustainable activities. Organizations need to be more transparent and accountable to the stock exchanges, markets, government, society, and investors, which can more accurately evaluate economic, social, and environmental performance using non-financial data to provide a more complete picture of firm performance (Bouten et al., 2011; Roca & Searcy, 2012). As a consequence, the top management may improve their sustainability practices while also improving the company's image (Elijido Ten, 2011). In addition to having more impact on profitability measures, managers can also have more influence over social and environmental performance indicators.

Organizations are aware of the need for sustainability that has demonstrated a willingness to share information on social, economic, and environmental performance. It maintains the equilibrium, e.g. People, Planet and Profit. Furthermore, “stakeholders’ accountability demands have pushed firms across the world to recognize the significance of sustainability concerns”. (Boiral, 2013; Dodds & Kuehnel, 2010). Businesses are increasingly pressurized to be more transparent about their corporate behavior (Kolk, 2008; Pollach et al., 2009). Prior studies have shown that consumers and the media enunciate the demand and the civil society of the organizations, which often consider themselves "watchdog" on corporate behavior (Kolk, 2004a). Studies evidence shows that many developed countries struggle to keep corporate activity under control (Crotty, 2009).

1.15.1 Corporate Sustainability Reporting- India

Corporate sustainability reporting has become a more important topic in industry and academia. The organization is establishing sustainable business practices with regard to the environment, employee welfare, and future generations in response to a new paradigm. For existing stakeholders, firms are also expected to increase profitability, fund innovation, and expand market share. These practices are being adopted globally, and many firms are implementing them as well. Now, that the reporting became a mandatory field, every company needs to report. The Government of India has enforced it to report corporate social responsibility through the Company Act, 2013 under section 135 of scheduled VII. According to this Act, “every company with a net worth of Rs.500 crore or revenue of Rs.1000 crore or net profit of Rs.5 crore must spend at least 2% of its net profit for the immediate proceedings years" (The Company Act, 2013). It has been observed that in the previous three financial years on corporate social responsibility, these guidelines started as on 1st April, 2014. Despite this, the company's CSR activities should not be taken as general business. However, as per the Act, “the company has to spend or perform their activities described in scheduled VII of the Company Act, there is no such structure of sustainability reporting framework in India that can be followed with these requirements” (Garg, 2017). The present study will carry out the GRI Index framework which is tracking all over the globe and examine the extent to which the Indian company reporting practices are incorporating with different sectors and the best approaches that are given key importance in view of the performance of economic, environment, and social aspect.

During the 1960s and 1970s, sustainability reporting and social reporting created a new awareness about the outgrowth of development. It searched for means to enlarge business mutation of the concept of corporate reporting interests and responsibilities. The convergence of these views is based on recognizing that these views have the following functions: First, to assist management in incorporating a wide range of social factors into the decision-making process. Second, to provide methodologically reliable information on the social impacts of company activities and third, to permit the monitoring, evaluation methods, wherever necessary, control the corporate social behavior by stakeholders (Meinolf et.al, 1986). This concept was traced back to Europe. Eventually, it spread slightly into the United States, seeing its role in society as anything more than profit maximization.

The first sustainability reports were published in the late 1980s in chemical industries because they harmed the society and the environment. Moreover, the tobacco industry adopted this policy to disclose the sustainability of activities. First Earth Day was observed on 22nd April of 1970, every year it is celebrated as Earth Day across the globe.

. It first considered the acute environmental crises and the sustainability reporting movement started in the US. Many organizations have begun to give information on their environmental, social, or sustainability policies. In 1989, separate environmental reports were published, and their implications have grown significantly (Kolk, 2003). In the early 1990s, the idea became more popular, and sustainability was viewed mainly as a corporate concept. Gradually, the idea took on a new shape in the business fraternity, where sustainability was considered more from an ethical and moral viewpoint, giving rise to Corporate Social Responsibility (Kira, M. 2003; Boudreau & Ramstad, 2005).

The movement that started to raise a voice to protect the earth has somehow taken an ugly turn and posed a battle between companies and the government. The critical argument they hold is that voluntary action is insufficient to protect the environment and that good education and consumer awareness are required to force businesses to become more environmentally conscious. While "legislation and education are vital, they may not be able to fix the problem completely or quickly" (Prahalad & Rangaswami, 2009). However, in the long run, this approach of sustainability looks at appropriate measures to check environmental crisis.

1.16 Summary

This chapter introduced the concept of sustainability, the triple bottom line which demonstrates the three dimensions of sustainability along with the concept of corporate sustainability reporting. The global and Indian perspective of sustainability and corporate sustainability reporting is also discussed. The evolutions of sustainability, the shift from millennial development goal to sustainability development goals along with sustainability and its linkages to corporate sustainability reporting are also included in the chapter.

Chapter-2

Literature Review

This chapter presents the literature related to sustainability reporting. The variables chosen for the study, the literature on different dimension of sustainability reporting is presented variable-wise for clarity. The theoretical framework is also included in this chapter.

2.1 Sustainability reporting - Global

A number of studies were conducted at the global level on sustainable practices. A study on the automobile industry analyzed the implantation in the select companies to understand how corporate sustainability practices were implemented and revealed that companies reported environmental sustainability because of regulatory demands (Sukitsch, Engert, & Baumgartner, 2015). Studies also investigated the existence of mandatory disclosure empirically. They examined the impact of the sustainability attributes of the company on the level of mandatory disclosure of listed firms on Zimbabwe Stock Exchange. The attributes included the size and age of the companies, ownership structure, and profitability. The results revealed that these attributes positively affected mandatory disclosure (Owusu-Ansah, 1998).

A study conducted in the Iron and Steel Industry in China revealed that CSR communication is critical in resolving social and environmental issues and effectively engaging with stakeholders, for instance, investors and the general public (Lock & Seele, 2015). It is also found that reporting has grown over the years, and the international reporting standards and external audits have resulted in professionalising the activity

(Dhaliwal, Li, Tsang, and Yang, 2011; Kolk & Perego,2010; Simnett, Vanstraelen & Wai Fong,2009). The reports of consulting companies confirm the growth of sustainability reporting over the years based on many of these companies' usage of the GRI framework (KPMG, 2008, 2013; Carrots and Sticks, 2013). Over 80 percent of firms publish their sustainability reports to showcase that they are responsible for their actions for a better and sustainable future (KPMG, 2008). Several studies have examined their use in improving corporate leaders' accountability (Deegan, 2002; Adams, 2004; Unerman et al., 2007; Gilbert & Rasche, 2007; Owen et al., 2000).

Sustainability is seen as a holistic approach to balancing economic, social, and environmental challenges, and it has turned into a corporate strategy that benefits present and future generations (Elkington, 1994; Dyllick & Hockerts, 2002). It is found that companies with higher profits are more keen to go for sustainability reporting. In comparison, lower profit companies are not that open to do sustainability reporting owing to less funds (Preston &O'Bannon, 1997, Campbell, 2007). Scholars have argued that there is a positive relationship between sustainability reporting and the performance of the company. Studies also suggest that clear evidence supports the argument that satisfying the needs of stakeholders raises firm performance. By affecting several aspects, including strong relationships with stakeholders boosting employee motivation and loyalty, promoting the firm's reputation, distinguishing the firm's products, enhancing its legitimacy, and reducing its transaction costs (Castaldo et al., 2009). The study revealed that an ethical work climate leads to a better future and more trust in the company. It will build a stronger attachment from the employee, positive attitude to the work, lesser absenteeism, lower turnover rate, and high productivity (Sims & Keon, 1997).

Similarly, another study (Riordan, Gatewood, & Bill, 1997) found that a positive CSR reputation also indirectly contributes to employees' work satisfaction, ensuring higher profits while gaining more acceptability from the internal and external public. By contrast, sustainability reporting practices produced more competitive advantages for the companies (Lee et al., 2013). Studies on the Oil and Gas Industry in Russia revealed that the older and more established companies provided more transparency economic and environmental data (Mahmood & Orazalin, 2017). Recent studies by Al Hawaz & Buallay et al. (2022) on global banking sectors found that the increasing female participation on boards has positively impacted the ESG disclosure and also had the highest level of environment and social disclosure in banking sectors.

2.2 Benefits of sustainability reporting practices

Sustainability reporting creates impact through transparency. Multiple markets trends and increased regulatory with legal scrutiny warrants that sustainability reporting has to be more transparent and accurate. Also, it is essential to ensure that NGOs, consumers, regulators and investors are aware of the sustainability assessment and risk management.

It is also argued that more and more number of financial instruments and business partners are in favour of a clear assessment and articulation of company's sustainability performance. A sustainability report is released by an organization that includes economic, environmental and social concerns and non- financial performance information. It is an essential step in employing a plan to assist an organization in setting goals, measuring performance, and managing sustainability-related impacts and risks.

Further, it generates value for its stakeholders while maintaining a healthy relationship with stakeholders. That is very important for any firm to achieve its long-tern goals (Lopez et al., 2007; Cortez & Cudia, 2011). Paying attention to three major sustainability characteristics can lead to a long-term competitive advantage: “economic development, social wellbeing, and environmental conservation” (Gladwin et al., 1995). Additionally, corporations frequently encourage the use of sustainability reporting to improve their corporate reputation while addressing stakeholders’ reluctant approach to read more about the firm (Morsing 2003). Some studies however were critical on reporting.

According to them, sustainability reporting has not matured during 2001–2010, and the rhetoric highlights with impression management rather than accountability and sustainable performance used in the CEO statements (Barkemeyer, Comyns, Figge & Napolitano 2014). This was countered by other studies which suggested that sustainability reporting is more reliable with image management with stakeholder and environmental effects of business activities (Milne, Tregidga, & Walton 2009; Milne and Pattern 2002; Buhr 2007; Milne & Gray 2013). Sustainability reporting contains organization's information both negative as well as positive effects on the environment, society, and economy at large. Organizations aim to understand better how sustainability concerns affect their business, and effective sustainability reporting ensures better scope and opportunities for companies.

2.3 Sustainability reporting -India

Sustainability reporting in India has started recently (Garg, 2017). Firms are trying to disclose their social information to the stakeholders in the competitive market environment (Ghosh et.al, 2015), but much of it is still in a nascent stage. Ghosh (2017) also carried out a study on number of companies from 2009 to 2014 and examined their CSR reporting practices. It was found that social reporting is more, but in terms of economic and environmental, few companies published a sustainability report separately. Kumar & Kidwai, (2018) in a study found that out of 100 ET (2014) companies, only eight companies have disclosed their social activities in the CSR disclosure.

Indian companies have started communicating sustainability through their websites and special reports to communicate better and effectively with their stakeholders and external publics (Chatterjee & Mir, 2008). However, incomplete information in reports is a fundamental mistake that one can notice in the reports of Indian companies (Sen et al., 2011). It has been reported that the extent and content of sustainability reporting differ across companies, sectors, also the country, which further means that companies' sustainability efforts may also vary (Christensen at el., 2021).

Kumar (2014) argues that there are no significant difference between Indian and global fortune companies when it comes to reporting sustainability practices. Sahay (2004) avers that unsystematic and inadequate are the feature of environmental reporting in India. Further, the study states that non-financial reporting in India is limited to public relations activity and does not provide any relevant information to stakeholders. Sustainability reporting offers companies the opportunity to understand their impacts in a better way – both positively and negatively – on society and the environment. Its long-term business benefits are widely documented (Online access 8th Oct, 2018, Conrad Manila, Pasay City, Philippines).

Kumar et al. (2021) carried out a study of sustainability reporting practices in the Indian context, in which they analysed the reporting practices of top 75 NSE companies and

Fifty NIFTY companies. They analysed reporting practices on environmental, social and governance dimensions through the content analysis of reports. Data was collected from 2014–2015 to 2018–2019. They argued that sustainability reporting was a relatively new phenomenon in the Indian context and most of the organizations reported qualitative information. They, however, noted that the extent and quality of sustainability reporting improved significantly over the years (2015- 2019). Results revealed a significant difference in the way firms from different sectors reported and disclosed the information. Firms from the metal, I.T., mining, and energy sectors disclosed the information more prolifically than other sectors. Firms from these sectors published standalone sustainability reports and followed GRI guidelines even before the SEBI 2015 regulation of mandatory disclosure. They also found a significant difference in the level of reporting by public and private firms, with public sector companies providing more information on all dimensions. The governance dimension was the most reported dimension in the Indian context. There was a significant improvement in the reporting on all dimensions. The adoption of the GRI guidelines was positively linked to the quality and quantity of sustainability reporting.

In the Indian context, Kumar & Prakash (2019) examined the sustainability reporting practices of banks. They analyzed the corporate social responsibility report, sustainability report, business responsibility report and annual report (F.Y. 2015–16 & 2016–17). They argue that banks in India were slow to adopt sustainability reporting practices and low in addressing the environmental reporting questions.

Similarly, Laskar & Maji (2016) noted that the primary aim of any sustainability report is to enhance the transparency for stakeholders and public in general, it is vital that organizations report the information objectively. Although needed, it is seen that organizations often report subjective information following different guidelines Safari, M., & Areeb, A. (2020). In their study, they observed that the level of disclosure was 88% as per the GRI guidelines by Indian companies. The quality of disclosure was also around 80%, which they reported as satisfactory.

Goel & Misra (2017) studied the sustainability reporting practices. They found that in their sample, less than 25% of the companies followed GRI guidelines. While most of the companies reported on environment protection, they found that the quality and coverage of reporting was poor. It was also observed that most of the companies reported their social initiatives, which mainly included community outreach to impart educational, health and vocational support.

The refinery sector was found to be the leading sector in terms of reporting, followed by Information Technology (I.T.) sector that reported on all three dimensions. Jain & Winner (2016) studied the sustainability reporting practices of the top 200 Indian state-owned and private companies. They stated that the top 100 companies reported more comprehensively than the bottom 100 companies. They also found that the reporting style, reporting quality and accessibility of information was better in the top 100 companies compared with the bottom 100 companies. This suggested a greater transparency in the communication of top companies and indicated that climate reporting has evolved in the Indian context. This showed a deviation from earlier observations, where scholars reported that sustainability reporting in India was underdeveloped (Jain & DeMoya, 2013).

Agrawal & Singh, (2019) carried out a comprehensive study and analysed the CSR practices of Indian firms. They studied the quantity and quality of CSR in Indian context. They also explored the difference in the sustainability reporting practices of businesses based on sectors, reporting dimensions, ownership structure, size of the firm and firm profitability. They revealed that a beginning has been made in Indian companies to report the CSR practices.

2.4 Studies on the Variables

2.4.1 Firm Size and Corporate sustainability reporting practices

According to Freeman, (1984) sustainability reporting was developed for large firms but it is also suitable for small firms (Jenkins 2006). This argument is similar to studies (Gangi & D'Angelo 2016) which argued that a firm will communicate information to its stakeholders to retain their operating license. Large firms have more public pressure and for the justification to the stakeholder, they use broader CSR reporting information (Udayasankar, 2008).

Previous research on sustainability reporting suggests that various organizational factors have impacted the scope and nature of reporting. Studies have indicated that important drivers include firm size, company age, and financial returns (Kolk, 2003; Ehnert at al., 2015; Parsa & Kouhy, 2008). A review by Ehnert et al., (2015) states that among numerous factors, a few specific variables like firm size, firm age, and profitability. Moreover, the industry sector has generated most consistent associations in determining. These are the essential factors that drive sustainability reporting.

Firm size matters a lot as it influences the reporting practices because large corporations are more visible to the public; they are more likely to undertake sustainability reporting. Hence, disclosing more information to satisfy stakeholder scrutiny, including heavy rules and high media attention, is necessary (Dissanayake et al., 2016; Mahmood & Orazalin, 2017; Kuzey & Uyar, 2017). Previous studies found a positive relationship between firm size and the level of corporate sustainability reporting (Zeng et al. 2018; Hackston & Milne 1996; Pattern, 2002) and argued that larger firm are visible and exposed because of the large size and public image. Therefore, larger firms are willing to disclose their non-financial information e.g., social, economic and environmental information to their enormous stakeholders. On the other hand, Dyllick & Hockerts (2002) argued corporate sustainability as, "meeting the needs of a firm's direct and indirect stakeholders, without compromising its ability to meet the needs of future stakeholders as well. To achieve this goal, companies need to maintain their economic, social and environmental capital base (Dyllick & Hockerts, 2002)."

Moreover, larger firms are more likely to publish social and environmental information than smaller firms to avoid any negative measures from regulations, and to reduce the risk (Burgwal & Vieira, 2014). A qualitative study on the UK's industrial sectors found that bigger firms are more prompt in promoting their sustainability nature of activities and the quality of their disclosure (Brammer & Pavelin, 2008).

A study explained the inter-relationship between firm size and its social, economic and environmental disclosure. Initially, it is necessary to make sense of the cost of producing information based on these three-dimensions. It was later found that the cost of reporting is high while a small company might not be able to do so because of the high cost (da

Silva Monteiro & Aibar-Guzman, 2010). Bigger firms affordability helps them to report information. Secondly, a large firm pays high agency cost not to report on their environmental activities because their shareholders are widespread (Christ & Burritt 2013).

As a result, revealing more information lowers the potential cost of the agency. Finally, existing research suggests that because of competitive cost advantage, larger companies tend to include more environmental information in their sustainability reports than smaller companies (Kolk, 2003). Scholars on the association between the size of the firm and sustainability reporting have examined that larger firms face greater stakeholder scrutiny, prompting them to disclose more information to avoid losses. Larger corporations are expected to report more sustainability data Sumiani et al. (2007). A study from major Malaysian organizations indicated that company size influences sustainability reporting due to stakeholder expectations for information on larger companies. The firms also do it because they also face stronger external constraints.

Similarly, many studies have been conducted on the sustainability reporting of environmental activities by large firms (Hackston &Milne, 1996; Guthrie & Parker, 1990; Tilt, 2001) and focused on the issue of size and how it should be measured. On the issue of sustainability reporting, there are discussions focused on total asset, market capitalization and profitability of organization to promote effective reporting practices. This also leads to political visibility of the company while reducing the potential regulatory measures and the stakeholder pressure (Deegan, 2002).

2.4.2 Firm age and sustainability reporting practices

Firm age is a crucial factor in determining the sustainability reporting disclosures. Older firms usually have better sustainability reporting practices because of their substantial reporting experience. However, prior studies suggest conflicting results (Dissanayake et al., 2016; Mahmood & Orazalin, 2017). According to Mahmood & Orazalin (2017) older firms are established and report more on sustainability reporting information. Similarly, another study found a positive relationship between the age of the firm and sustainability information in the case of U.S. firms (Delaney & Huselid, 1996). However, other studies suggest that a negative association between the age of the firm and sustainability reporting practices (Rettab et al., 2009). Legitimacy theory states that older firms are likely to disclose more sustainability reporting practices. Older companies are more inclined to participate in sustainability practices to influence public image and rationalize their existence. Older businesses are more likely to be larger, and therefore may be more eager to share knowledge to ensure their existence. Older companies might be more aware of current industry developments and are better at implementing new regulations to keep their business on the track (Aerts et al., 2006; Cochran & Wood, 1984).

2.4.3 Profitability and sustainability reporting practices

Firm profitability and sustainability reporting practices are another key issue in sustainability literature. The literature indicates a positive relation between the firm profitability and corporate sustainability reporting practices. Agency theory and Signaling theory drive the essence of this positive relationship.

According to the Agency theory, managers of profitable organizations are obligated to give more voluntary information in order to justify the compensation package (Barako & Tower 2007). The stakeholder theory contributes to improvements in corporate disclosure policies, implementation of CSR practices, and risk management strategies. This further aids in managing the conflicting interests of various stakeholders (Freeman.1984; Donaldson& Postoson, 1995).

According to signaling theory, profitable firms disclose the sustainability reporting information in a more regular and sincere way to create a positive impression. Another study conducted on Portuguese companies found a positive relation between profitability and sustainability reporting (Branco et al., 2014). A study conducted by Clarkson et al. (2011) and Neu et al. (1998) also concluded that there is a positive relation between the profitability and sustainability reporting disclosure. Similarly, a Turkish company study found that profitability firms provide more transparency and reliable sustainability information (Aksu & Kosedag, 2006). These positive associations between profitability and sustainability reporting information are significant in other empirical studies (Ruhnke & Gabriel, 2013; Kansal et al., 2014; Dilling, 2010; Owusu-Ansah, 1998). Clarkson et al. (2011) found that profitability and the level of sustainability reporting disclosure were found to be positively significant. When the profitability increases the managerial group are motivated to disclose more information in order to generate a good reputation among the shareholders, investors and consumers (Ullmann, 1985). In fact, companies are more likely to make voluntary disclosures if they have reaped some financial benefits. This is because publishing sustainability reporting information comes with a cost, which companies will only undertake if there is enough profit left over after meeting their shareholders' obligations (Brammer & Pavelin 2006).

On other hand, many other studies found these two variables insignificant (Patten 1991; Aibar Guzman 2010). Similarly, a research conducted by Dissanayake et al. (2016) revealed that there is no association between profitability and sustainability reporting. Atan et al. (2018) studied 54 Malaysian companies and found that there is no significant relationship between the environment, social and governance on firm profitability. Buallay (2022) conducted a study on sustainability reporting on agriculture industry performance and found out that there is no relationship between ESG and firm performance. Similarly, another study by Duque-Grisales, E., & Aguilera-Caracuel, J. (2021) found that the ESG and profitability of the company is negatively significant. Another study Landi, G. & Sciarelli, M. (2021) found a negative statistically significant impact in term of market performance.

2.5 Theoretical framework and sustainability reporting

There are a number of theories that apply to CSR. They are given below.

2.5.1 Legitimacy theory: It is developed based on the concept of organizational legitimacy. Organizational legitimacy is a condition where the value system of the larger society is similar to that of a firm (Deegan, C. 2014). In short, organizational legitimacy is achieved when organizational values match the values of the larger society (environment) in which it operates. If there is incongruence, it is viewed as a legitimacy gap. Organizations, hence, follow norms to minimize and manage any legitimacy gap; this process is called legitimation (Lindblom, 1994).

Lgitimacy theory implies that businesses use environmental and social responsibility reporting to legitimize their operations (Deegan & Blomquist, 2006), and therefore reporting information plays an essential role in stakeholders. Reporting information is a significant component that an organization can employ in maintaining, managing, or even manipulating the stakeholders to gain the stakeholders' approval, support thereby establishing legitimacy to operate (Gray, R., Owen, D., & Adams, C.,1996). In the context of Irish law, voluntary corporate social disclosure has been undertaken purposefully for legitimacy reasons (O'Dwyer, 2002). However, studies argue that positive sustainability information for legitimating purposes is probably disclosed to grab media attention (Deegan et al., 2002). However, companies reporting information to society and real value directed towards legitimacy because it only improves further social benefits and demands. Despite this, several studies found that frequently disclosed sustainability data, paving for other theoretical explanations (Bedenik, & Barisic, 2019).

Recently, a study by the Johannesburg Stock Exchange on social, economic, and environmental issues examined the entity's disclosure strategy to retain its legitimacy, lower the cost of capital, reduce asymmetric information, and ensure investors that these elements are being implemented efficiently (Van Zijl et al.,2017). The primary theme of the theory is fulfilling the social contract and its objective of being a socially responsible company (Zyznarska-Dworczak ,2018). Despite on-going criticism from a range of academics, legitimacy theory appears to attract scholars in the field of social and environmental disclosure arena (Michelon, G et al., 2019).

Scholars note that legitimation is enabled by disclosing information (Pellegrino & Lodhia, 2012). Legitimation can be seen as a social contract that leads to a notion of adhering to the norms of the larger broader societal values. Firms from specific sectors often disclose more information, specific information with greater transparency, as their operations and particular events lead to a more significant legitimacy gap (Christensen, et al., 2021). For instance, activities of firms in environmentally sensitive industries are viewed with greater scrutiny; firms hence must adequately furnish environmental performance information to manage the stakeholder pressure.

Lodhia (2005) argued that organizations attempt to maintain, repair, or gain legitimacy through sustainability disclosures. Organizations with different objectives followed these three strategies. When organizations manage the existing level of legitimacy, they are said to disclose and maintain their legitimacy. When organizations attempt to gain legitimacy, they disclose more information, follow new guidelines voluntarily, and ensure greater transparency in the disclosure's quantity and quality. In several cases, organizations are faced with stakeholder pressure due to societal or environmental incidents; they attempt to regain their lost legitimacy. They have tried addressing the legitimacy gap by disclosing adequate information.

Furthermore, it is notable that the legitimacy strategies of a firm can be substantive or symbolic in nature. When organizations engage in real activities to improve environmental, social, and governance performance and inform stakeholders about it through disclosures, it is substantive. However, organizations may also attempt to bridge the legitimacy gap by managing symbolic perceptions. Both these strategies are important for the legitimation of organizations.

Legitimacy theory acts as a premise that validates an organization’s attempt to adhere to the broader social norms to gain legitimacy and recognition for their objectives. It also confirms an organization's efforts to fulfil its social contract. It explains the reasons behind voluntary disclosures by organizations, the willingness of the firms to adopt international guidelines, and consistent effort to improve the quality and quantity of disclosure. Legitimacy theory, thus, is a prominent theoretical lens that helps understand the corporate sustainability practices of organizations (Deegan, 2019).

2.5.2 Stakeholder Theory: It is an important theoretical frameworks used in sustainability management. Stakeholder theory keeps stakeholders at the center of corporate sustainability practices. Stakeholders are individuals who affect and are affected by business activity (Freeman et al., 2010). It is, however, noteworthy that the unit of analysis for sustainable practices is not stakeholders, but the relations between stakeholders and firms. While there are several versions of stakeholder theory, integrative stakeholder theory (Freeman et al., 2010) is one of the prominent frameworks used in the sustainability literature that emphasizes the importance of managing stakeholder relationships. A core element of stakeholder theory is to generate mutual interest among different stakeholders and thus create value for all stakeholders.

There has been a growing realization that sustainability reporting must be given more attention (Michelon, et al., 2019). The 'what and how' of sustainability disclosure is developed based on the analysis of stakeholder expectations that affect and/or are influenced by the company (Mitchell at el.,1997). They constructed a taxonomy of stakeholders, assertions about their relevance to firm managers, and research and management implications by combining these qualities, with reporting aimed primarily at stakeholders who are influential or in outstanding positions. Internal organizations must be more forceful with cutting-edge methods considering these developments and challenges. The importance of stakeholders in the disclosure of social responsibility activities by companies was covered by the studies. According to a study, stakeholder relative power, good economic performance, and a favorable strategic attitude toward social responsibility were all positively related to transparency (Roberts, 1997; Neu et al., 1997).

Longitudinal studies were also conducted in different countries. In a 10-year study of 33 Canadian public companies, researchers discovered that organizations were more likely to increase disclosure in relation to dominant economic stakeholders and regulations of the government than in response to a weaker section of the stakeholders or when faced with multiple stakeholders demands from important environmentalists.

Stakeholder theory depends on the premise of disclosing the societal and environmental information by corporates to all stakeholders. It builds on the notion that ethics and business are not separate but inter-linked and that an organization should contribute to sustainable development by linking societal and environmental performance to its core business activity (Horisch et al., 2014). Stakeholder theory emphasizes the long-term view such that the organizations take the needs of the future into account while conducting current and immediate trade activities. This approach is also a cornerstone notion of business sustainability.

Both primary stakeholders (e.g., customers, suppliers, and investors) and secondary stakeholders (e.g., civil groups, media) (Clarkson, 1995), influence sustainability practices of corporates differently (Goettsche et al., 2016). While primary stakeholders can exert direct pressure on organizations for disclosures, secondary stakeholders influence the overall perception of the organization’s sustainability practices and disclosures among the public. Therefore, organizations must adequately manage their relationships with the stakeholders and disclose sustainability information.

2.5.3 Institutional theory: Scholars have adopted the theoretical lens of institutional theory to understand corporate sustainability and reporting practices. According to the fundamentals of institutional theory (Meyer & Rowan ,1977; DiMaggio & Powell, 1983), organizations of a certain sector, industry, and/or region often mimic other organizations' activities; this is done to enhance their validity and survival.

Primarily, there are three kinds of isomorphism’s discussed in the literature- coercive isomorphism, mimetic isomorphism, and normative isomorphism (Grob & Benn, 2014). Forced isomorphism is the result of formal and informal pressure exerted on organizations by other entities or organizations to follow certain actions or activities. It may include governmental regulations, administrative, legislative pressures, pressure from customers, etc. Organizations under such pressure are coerced to behave certainly. In the case of sustainability reporting as well, when organizations face mandatory guidelines to disclose information, they are forced to disclose. Mimetic isomorphism occurs when an organization follows another organization, essentially modelling its activities (Campbell, 2007). The modelled organization is/may be unaware of modelling. This happens when an organization attempts to follow a set benchmark of another organization. In the case of sustainability reporting, a few organizations often go beyond the mandatory guidelines and disclose information more transparently. Obviously, they set a benchmark and they are rewarded for it.

Other organizations then mimic such organizations to enhance their legitimacy with the larger society. For instance, although following the GRI guidelines is not mandatory in India, many conglomerates (e.g., Tata) started following it and disclosed information as per the guidelines in their reports. Other organizations later followed this trend and adopted GRI guidelines in subsequent years. Normative isomorphism occurs when organizations are faced with normative pressure from professional and educational networks (Preuss, 2005). For instance, educational and professional institutions spread awareness of sustainability reporting, advocating its importance for society at large. Organizations are then expected to furnish and disclose sustainability information to establish that their core business activity aligns with sustainable development. Educational and professional institutions question and appraise organizations' ethical and moral responsibilities beyond their core business activity that exerts an informal pressure on organizations. In the case of sustainability reporting, it may act as a mental model rather than a formal regulation. Organizations may attempt to disclose more information or enhance the transparency in their disclosures (Platje 2008). Institutional theory, thus, is a prominent theoretical lens that explains why and how organizations indulge in sustainability reporting practices. It also explains the reasons behind organizations following the other organizations and adoption of voluntary guidelines. Institutional theory along with legitimacy theory and stakeholder theory provide a comprehensive explanation of sustainability reporting practices.

2.6 Research Gap

The changes taking place in the area and the corporate response across the world and India, makes this area an exciting field of enquiry. Further, studies that are available on the subject, are scattered and conducted in different geographies and sectors. Studies in India too are evident but they have been conducted to achieve different objectives using different variables and methodology. Moreover, large Indian companies have started reporting their sustainability practices only of late as a sequel to their opening up operations in different countries. In addition, companies following GRI-G4 guidelines are only those companies that had international operations. Further, SEBI, in India, has issued guidelines in the name of NVG only in 2015. Hence, reporting is still voluntary, with little scholarly attention limiting literature on the subject and requiring studies for further investigation. Studies also corroborate these ideas.

Dissanayake et al. (2016) empirically examined the sustainability reporting of top 100 public listed companies in Sri Lanka for year 2011-2012. The study results found that the major variables including firm age, firm size and industry groups are used for studies. Studies thus are confined to a single country. Studies thus are needed in different contexts, more longitudinal and empirical in nature, for a critical analysis of the economic, social and environmental disclosures.

Similarly, Ehnert et al., (2015) considered and reflected on the CSR of world's largest companies to evaluate the HR aspects. The study suggested panel data to be used for reporting over time. The argument was that industry competitive effects could influence companies' reporting behaviour, longitudinal study with firm size; firm age in different sectors could be the variables for further studies. Literature suggests that studies could look to compare the CSR practices, while evaluating different sectors and countries, to examine the impact of corporate attributes on sustainability reporting (Bhatia & Tuli, 2015) They also suggested panel data for further research. Branco et al. (2014) in the context of Portugal's economic crisis, they examined the factors that affect the sustainability reports has suggested for future studies with longitudinal data, requiring investigation which is longitudinal in nature. The literature thus is presented in a tabular format in table- 1

Table- 1- Tabular format showing the literature used in the study

Sl. No	**Author(s)**	**Theories / Framework**	**Methodology**	**Major Findings**
1	Oware & Awunyo-Vitor (2021)	Stakeholder theory and Institutional theory	Study used panel regression on the relationship between CEO characteristics, sustainability reporting format, and environmental disclosure of listed companies in India	- Environmental disclosure and the reporting structure for sustainability have a positive relationship. - CEO age and association were not linked with environmental disclosure.
2	Kumar et al. (2021)	Multi-theory approach - agency theory,	Analysis of reporting 75 top listed (NIFTY100) nonbanking	**-**Firms belonging to Environmental sensitive sector disclose the most. - Company size, age of

		stakeholder theory and legitimacy theory	companies on environment, social and governance disclosure dimensions. Data collected - 2014-2015 to 2018-2019, Content analysis and Panel data analysis	the firm, ownership type linked positively to the extent of reporting. - Profitability and financial leverage linked negatively with the extent of reporting. - Firms that followed GRI guidelines disclosed more information.
3	Aggarwal & Singh (2019)	Stakeholder theory and Legitimacy theory	Top 60 Indian companies' sustainability reports, in-depth content analysis	Sustainability reporting quality is far lower than sustainability reporting quantity. Significant difference in reporting in terms of sectors, dimensions, and firm size
4	Kumar & Prakash (2019)	N.A.	Study of sustainability reporting practices of banks in India	- Slow adoption of sustainability reporting practices and guidelines by the banks.

			-Content analysis	- Sustainability issues linked closely with bank's core business activity e.g. financial literacy, financial inclusions are carried out and reported the most. - Environmental dimensions remain underreported.
5	Patel & Rayner (2015)	Cultural theory, Stakeholder theory	Transactionally and culturally analyzed the corporate sustainability practices of six Indian companies to understand why few adopt voluntary guidelines and others not.	Consequently, each organization prioritizes different stakeholders and reacts differently to voluntary CSR reporting guidelines.
6	Jain & Winner (2015)	N.A.	Study of sustainability reporting trend of	While the quality of disclosure is yet to be improved, the overall

			the 200 large state-owned and private companies in India.	sustainability reporting climate in India showed a sign of reform.
7	Laskar & Maji (2016)	N.A.	Sustainability reports of listed companies from 2008-09 to 2013-14 with content analysis	Quantity and quality of reporting is satisfactory. The extent of reporting remained the same over the years
8	Goel & Misra (2017)	Stakeholder theory and Legitimacy theory.	A study of 120 BSE listed companies across eight sectors through a self-constructed index.	Sectoral differences in reporting. Refineries and power industries are following most of the GRI norms
9	Orazalin & Mahmood, (2018)	Legitimacy theory, Agency theory, and Signaling theory.	54 of Russia's largest publicly traded oil and gas corporations' sustainability reporting practices from 2012-2016	Sustainability reporting, the type of auditor, and the company's age are the main factors that affect sustainability information in the Russian context.
10	Mahmood &	Stakeholder	The top 30	The extent and quality of

	Orazalin,(2017)	theory and Resource dependency theory.	Kazakhstan exploration and production firms have made 114 observations from mining, oil, and gas industries; a study examines the relationship between the board's characteristics and sustainability reporting.	sustainability information is mostly determined by the board's characteristics, board size, and gender diversity.
11	Dissanayake et al., (2016)	Stakeholder and legitimacy theory	Empirically examine the sustainability reporting of Sri Lanka's top 100 publicly traded companies for FY 2011–2012.	Firm age, firm size and industry group are the major variable results indicate the market capitalization and number of employees are highly significant, indicating a size effect also. The banking and finance sector partially supported.

12	Duque-Grisales &Aguilera Caracue (2021)		The research was carried out between 2011 and 2015 in Brazil, Chile, Colombia, Mexico, and Peru.	The results show that ESG scores have a negative relationship with firm profitability.
13	Aouadi & Marsat (2018)	N.A.	Worldwide data 2002-2011	The relationship between the firm's profitability and its environment, social, and governance practices are highly significant
14	Velte (2017)	Stakeholder Theory	Empirical analysis from Germany for the period of 2010-2014	Environment and social sustainability practices positively significant on firm profitability
15	Deng & Cheng (2019)	N.A.	An Empirical study from China 2011-2019	The ESG indices of a company and its performance have a positive association.

2.7 Summary

This chapter presented the literature and elaborated on various dimensions along with a description of the theories that apply to the CSR literature. An attempt has been made to identify the gaps to highlight the need for this study. The literature at the end has been presented in a tabular format for coherence and clarity.

Chapter-3

Research Methodology

The study is an attempt to analyze the corporate sustainability practices in India. An overview of the methodology is presented in this chapter. It is divided into two parts- the first section deals with the concept of Corporate Sustainability Reporting (CSR) and the operational definition of independent and dependent variables of the study including the dummy variables. The research questions, objectives, hypotheses, scope of the study, research design and sampling design sampling selection, followed by the data collection and scoring procedure are presented in the next section. The second section describes the data analysis and chapterization including summary of the study.

3.1 The Corporate Sustainability Reporting Practice - The Concept

Corporate sustainability reporting (CSR) is a mechanism which demonstrates the sustainability practices followed by the companies in the social, economic and environmental dimension. These practices acknowledge that long-term economic growth is not possible unless it is socially and environmentally sustainable. According to WECD (1987) "Sustainability means meeting current needs without compromising future generation's ability to meet their own needs". Brocket & Rezaee (2012) added a new dimensions when he said "including effects that company operations have on the lives of the communities in which they operate, includes economic, environmental, and social issues"

The corporate sustainability practices helps managers assess and manage their sustainability. However, these practices serve as the foundation for evaluating sustainability practices and as a tool for implementing corporate sustainability and assessing corporate impacts. Individual, organizational, and societal outcomes are thus translated from the three pillars of sustainability (Elkington, 1994) - People, Planet and Profit. By emphasizing the importance of integrating sustainability into core business practice and long-term sustainability, an organization or community must be financially secure, as indicated by profitability, minimize or eliminate its negative environmental impact, and act according to societal expectations (Deegan, 1999). The operational definition of the variables chosen for the study is described in the following lines.

3.2 Operational definition of profitability

The profit level in relation to an organization's activity volume is referred to as profitability, although the level of profitability may not essentially indicate the efficiency of management, profitability is an index of both performance and efficiency. According to Ilaboya et al. (2016), "Profit and "profitability" are two terms that are often used interchangeably. Profit is a relative concept that measures the profit level with the volume of activities. In contrast, profit is an absolute value that describes the difference between revenue and costs. Even if there are distinctions, in theory, profit is synonymous with income, earnings, margin, and returns.

3.2.1 Operational definition of firm age

According to the definition of firm age, it is the "period of the firm's existence that explicitly refers to its date of formation as a legal entity." The total number of years since the company's listing establishes the firm's existence is a more acceptable measure of the firm's age (Shumway (2001).

3.2.2 Operational definition of firm size

Examining firm size as a single variable, as opposed to a variety of firm characteristics,

Firm size is one variable that can be studied in-depth instead of general company characteristics. It is a crucial variable in company performance research and policy analysis. Previous research has examined the relationship between firm size and these variables using arbitrary size categories. (Orser et al., 2000; Lee & Cowling, 2014; Lee & Cowling, 2015). Value-added, sales, and personnel count are only a few metrics that can be used to characterize the size of a company. Within the context of this analysis, 'size' is understood to refer to the firm's overall return on assets. Because of their more excellent track records of reliability and durability across time and industries, these assets were selected. (Delmar, 1997; Davidson et al., 2006; Coad & Holzl, 2012).

3.3 The operational definition for the dependent variables

3.3.1 Economic Sustainability

According to the GRI Sustainability Standards, economic sustainability refers to an “organization's effect on its stakeholders' economic conditions as well as economic systems at the local, national, and global levels. It does not concentrate on a company's financial situation” (GRI Standard, 2016).

Economic activity's impact on the environment and setting long-term sustainability goals are both essential components of a sustainable economy. These business practices come in a wide range of forms. It is guided by various decision-making principles, all of which aim to accomplish economic growth with less of an impact on the environment than is common during times of rapid expansion. Sustainable development requires the creation of functioning systems that utilize natural capital or resources at a rate that does not deplete them so that future generations can enjoy their advantages.

3.3.2 Environmental Sustainability

The GRI Standards describe environmental sustainability as "an organization's effects on both the living and non-living natural systems, such as land, air, water, and ecosystems" (GRI Standard,2016). Companies intend to use this Standard, a part of the GRI Sustainability Reporting Standards (GRI Standards), to report on their impacts on the economy, the environment, and society. Organizations all over the world are beginning to address sustainability and environmental concerns. The future-oriented nature of environmental sustainability makes it so effective at preserving the world's ecosystems and promoting human health for now and future.

3.3.3 Social Sustainability

As described by the GRI Standards, the social component of sustainability refers "to an organization's effect which operate on the social systems" (GRI Standard, 2016). Social sustainability is to recognize and manage a business's positive and negative effects on people. Key stakeholder relationships and participation are crucial for a company's success. It is essential for businesses to proactively manage the effects they have on their employees, value chain workers, consumers, and communities.

3.4 Dummy Variable

A dummy variable was created for all economic, environmental, and social indicators. If the company reports its practices, 1 is assigned and 0 is assigned otherwise. The score of each dimension is calculated later. The dummy variable will play each entity's intercept and makes it is different from each entity.

3.5 Research questions

Literature evidences limited empirical studies in some contexts. Studies are confined to the chosen variables and chosen sectors limiting it to an examination of one year or a few years in duration. Research evidences firm age as a critical factor, but studies had conflicting results, requiring further investigation. This is true of firm profitability and firm size in the sustainability literature. Further, studies focusing on sectoral issues and sustainability reporting were also limited pointing to the need for a better understanding of the sectoral dimension. The scanty literature and the conflicting results of these studies throw interesting research questions. They are-

1. What are the factors that drive companies to report sustainability practices in the social, economic and environmental dimensions?
2. Is profitability alone the determinant in reporting sustainability practices?
3. Do the firm’s size and firm’s age have an impact on sustainability reporting practices?
4. Do corporate sustainability reporting practices differ across sectors?

3.6 Objectives

Broadly, an attempt is made to examine the corporate sustainability reporting practices in India. More specifically, the objectives are

1. To analyze corporate sustainability reporting practices in social, economic and environmental dimensions in India.

2. To examine the impact of firm size and firm age on sustainability reporting practices.
3. To analyze the year-wise corporate sustainability reporting practices in India.
4. To analyze the corporate sustainability reporting practices across sectors in India.

3.7 Research Hypothesis

Based on the research objectives, the following hypotheses were arrived at. They are

- Hypothesis#1 There is a positive relationship between firm size and corporate sustainability reporting on economic dimensions.
- Hypothesis#2 There is a positive relationship between firm size and corporate sustainability reporting on environmental dimensions.
- Hypothesis#3 There is a positive relationship between firm size and corporate sustainability reporting on social dimensions.
- Hypothesis#4 There is a positive relationship between profitability and corporate sustainability reporting on economic dimensions.
- Hypothesis#5 There is a positive relationship between profitability and corporate sustainability reporting on environmental dimensions.
- Hypothesis#6 There is a positive relationship between profitability and corporate sustainability reporting on social dimensions.
- Hypothesis#7 There is a positive relationship between firm age and corporate sustainability reporting on economic dimensions.
- Hypothesis#8 There is a positive relationship between firm age and corporate sustainability reporting on environmental dimensions.

- Hypothesis#9 There is a positive relationship between firm age and corporate sustainability reporting on social dimensions.
- Hypothesis#10 There is a difference in the corporate sustainability reporting practices of primary, secondary, and tertiary companies on the economic dimensions.
- Hypothesis#11 There is a difference in the corporate sustainability reporting practices of primary, secondary, and tertiary companies on the environmental dimensions.
- Hypothesis#12 There is a difference in the corporate sustainability reporting practices of primary, secondary, and tertiary companies on the social dimensions.

3.8 Scope of the Study

Sustainability reporting in Indian industry is rapidly growing, with focus on all the areas and across all disciplines. This study is limited to India's diverse industries, including domestic and international businesses. The sustainability reporting practices followed by the GRI- G4 standards 2016 Guidelines framework was followed. Practices reflecting the three dimensions of CSR- economic, environmental and social- which included 91 performance indicators were used in the study.

3.9 Research Design

The study followed the descriptive study design. Data was collected from the disclosures made by the companies on their websites and GRI databases.

3.10 Sampling

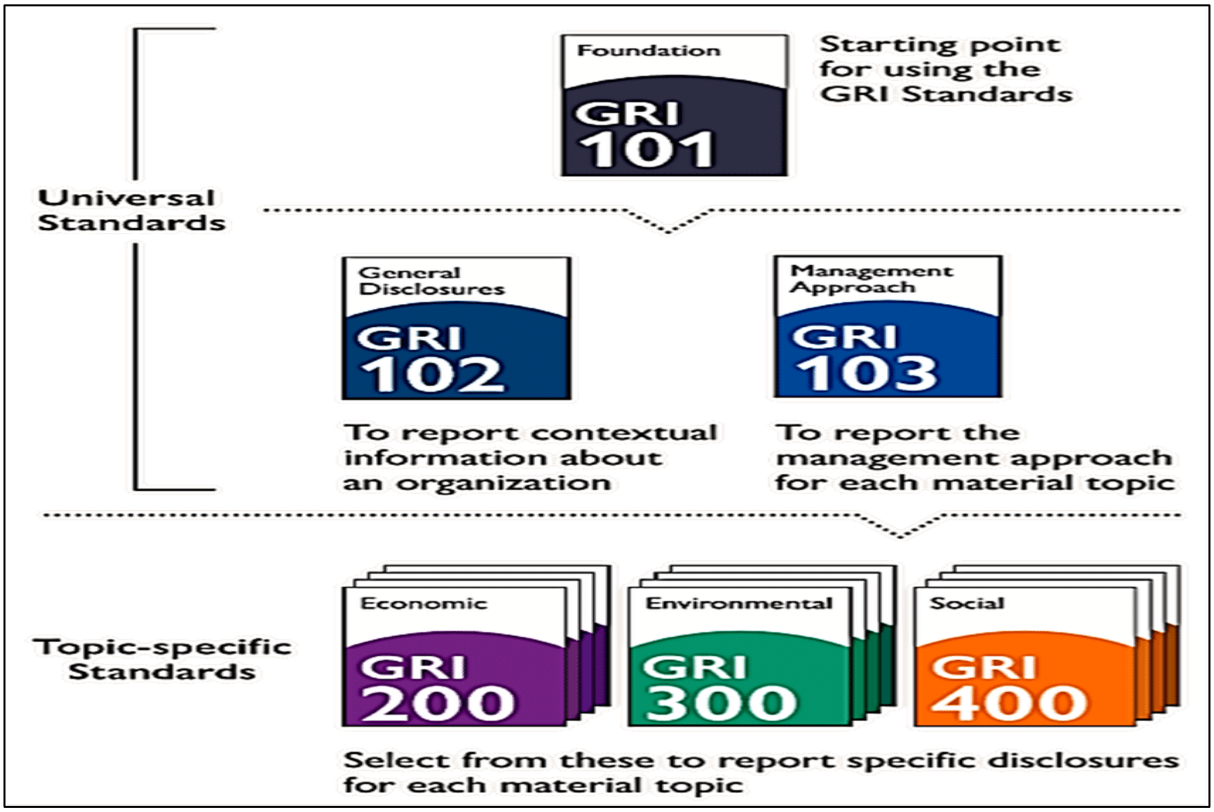
The sample was chosen from the top 250 National Stock Exchange (NSE) listed companies based on market capitalization. The sustainability report of five years of each of the company was chosen from different sectors in India. The sample was chosen based on the GRI index criteria followed by the companies. The sample selection criteria included those companies that followed the GRI index with G4 guidelines and disclosed the sustainability reporting. Thus, companies not following the GRI index were excluded from the study. The reason behind taking NSE listed is that all companies are registered, grow their business locally and globally, and follow G4 guidelines (Ruhnke & Gabriel, 2013). For some of the companies, publication frequency of sustainability reports is not uniform (Quick, 2008). This study, thus considered sustainability reports integrated with financial reporting and annual reports. At the same time, corporation-specific data like firm size, profitability (ROA), age, and industrial classification are also collected from the CMIE (Center for Monitoring the Indian Economy) website's PROWESS database.

3.11 Data Segregation (Sampling unit and Sampling Framework)

Among the top 250 NSE-listed companies, 168 companies do not have either stand-alone or GRI adherence or web-based sustainability reports. Hence, 82 companies have satisfied the criteria for data collection, and the rest are excluded from the study. Literature also evidences studies using data sample from NSE, BSE and global index for their studies (Laskar & Maji 2016; Goel, 2019; Peters and Romi, 2015, Garg, 2017, Gray, Kouhy, and Lavers, 1995). The framework is presented in Table No. 1

3.12 The Framework - GRI

Table No. 2 Global Reporting Initiative (GRI)



Source: www.globalreporting.org

Founded in the USA in 1997 by the UNEP with focus on Environment, It is easily adaptable to businesses of any size , sectors and in any part of the world. Social, economic, and governance issues were added to the GRI framework so that it would encompass all aspects of sustainability reporting. The year, 2000 witnessed the launch of the 1st version. In the 2002, the 2nd generation guidelines were issued and the G3 standards came into existence in 2006. While the G4 was launched in 2013, and the 91 item framework - 9 items for economic, 34 for the environment, and 48 items for social indicators -was launched in 2016. Thus the GRI- a globally accepted framework- became popular and reports on three pillars (KPMG, 2013). Thus the items taken for the study are given in appnedeces-1.

Based on the GRI framework as described by the G4 standards, a sustainability reporting disclosure index was developed for this research. Performance indicators are the only metric used. The GRI framework's disclosure index includes these 91 factors, which are subdivided into economic, environmental, and social dimensions. The Human rights, product responsibility, and social security indicators among social indicators, are also included. Further, sector wise segregation was done and is presented in Table - 3.

Table - 3 - Sample selection by sector

Sectors	No. of observation	Percentage
Primary Sector	40	13.4 %
Secondary Sector	260	72 %
Tertiary Sector	110	14.6%
Total	410	100%

3.13 Independent variable Measurement

This section describes how the independent variable was measured for the study. The sample consisted of NSE-listed enterprises, with company size turnover (logged total asset), profitability, return on assets (ROA) after taxes divided by total assets, and firm age as independent variables. The number of years since the company's inception, taken from the PROWESS database to determine financial capability, the free cash flow to total assets ratio was used. The ratio of net earning to total assets is used to compute the return on assets. The number of years since the company's establishment is its age. In order to determine the size of a company, we used the natural logarithm of its total assets. The industry type dummy variable has a value of one or zero depending on whether the companies fell under primary, secondary and tertiary.

3.14 Sampling Measurement

Earlier research used a dichotomous approach to quantify the individual characteristics of sustainability reporting, with a related item receiving a value if disclosed as one and zero otherwise (Parsa & Kauya,2008 & Allegrini & Greco, 2013; Ehnert,2015; Mahmood & Oryzalin, 2017). Disclosed information on economic, environmental, and social performance metrics was graded according to the GRI reporting standards and guidelines.

The first category focuses on economic sustainability and investigates how an organization affects the economic conditions and economic systems of all stakeholders at the local, national, and international levels. The other indicators include anti-corruption and anti-competitive behavior, procurement practices, and indirect economic effects.

Under economic dimension, there are 9 indicators which are sub-categorized into economic performance under the market presence cover, the indirect effects on the economy, and procurement procedures; The remaining indicators are "anti-corruption" and "anti-competitive behavior”.

The second disclosure category illustrates how a reporting company handles environmental challenges. Environmental indicators measure how the company affects both living and nonliving ecosystem components. “Materials, water, energy, biodiversity, effluent emissions and waste, products and services, compliance, transportation, overall, supplier environmental evaluation, and environmental grievance procedures” are among the 34 indicators divided into 12 sub-categories.

The third set of disclosures focus on the social elements of sustainability and assesses how firms’ actions affect the social indicators in which it works. In the social performance category, there are 48 indicators divided into four sub-categories: “work practices and decent work, society, human rights, and product responsibility”. The study used a binary scale to assess the sustainability performance's economic, environmental, and social elements. Each economic, environmental, and social category is given a value of one or zero based on the company's sustainability disclosures.

The total scores for each sustainability reporting dimension was calculated by adding all of the items that were answered. The individual firm score is then calculated using the total number of elements in the areas of the economy, environment, and social category. The specific area of focus in terms of variable measurement is presented in Table - 4.

Table -4 - Variable Measurement

Variable	**Acronym**	**Variable Measurement**
Economic RIS	ECO	If the information on any of the nine items relating to economic indicators is disclosed, then that item's value is set to one; otherwise, it has a value of zero. The Relative Index Score determines the total score for each firm (RIS).
Environmental RIS	ENV	If the information on any of the 34 items relating to environmental indicators is disclosed, then that item's value is set to one; if it is not disclosed, the value is set to zero. The overall scores and the Relative Index Score were calculated (RIS).
Social RIS	Social	Each of the 48 social indicator items is assigned a value of one; otherwise, it is assigned a value of zero. The Relative Index Score was determined by adding together all of the scores (RIS)
Independent variable		

Firm size	Size	Logged total assets
Profitability ROA	ROA	Return on asset (ROA)
Firm age	Age	The duration in years since the company's inception.
Primary Sector	Primary	Dummy variables 0 or 1
Secondary Sector	Secondary and Tertiary	Secondary and Tertiary are taken as base. The dummy variable taken a value of 1 and Zero otherwise. The companies falling under secondary 1 and zero otherwise. The same dummy for tertiary sectors if the company falls under tertiary 1 and zero otherwise.

3.15 Methods of Score and Coding Procedure

GRI indexes all 91 items divided into three parts; Economic-9, Social-48 and Environment-34 indicators. Among the GRI disclosures, a specific coding and scoring procedure is followed. Each item in a corporation is assigned a relative index score (RIS) based on the ratio of the actual number score (AS) to the maximum possible score. In the end, companies that declared everything that needed to be disclosed were given the total maximum score (TMS).

This study applied a research index method in corporate sustainability reporting sectors (Parsa & Kouhy, 2008), which measures GRI adherence and GRI indicators. (Owusu-Ansah, 1998) Literature used corporate reporting and the attribution of mandatory disclosure. There are a number of benefits to using this method, rank-order companies according to their disclosure score. Since index scores can be seen as a variable, the study suggests that indexing makes it possible to undertake suitable statistical analysis using either parametric or non-parametric methods. (Wallace & Cooke, 1990). Firms that special sustainability reports based on the criteria set forth by the GRI must utilize an index table to cross-reference the contents of the information presented against the specific GRI reporting requirements.

The Global Reporting Initiative (GRI) index table is helpful for various purposes. The usage of GRI Index tables resulted in a complete data collection for this investigation for various reasons. First, while companies construct their own sustainability reports, the GRI specifies the information content companies must disclose for each indicator. While firms are responsible for creating sustainability reports, the Global Reporting Initiative (GRI) has standardized the information that must be included for each indicator. Second, there is a growing trend towards external verification, even if the GRI does not mandate it (Pleon, 2005). Thirdly, and most critically, the GRI provides established and exact reporting standards, so disclosure to any GRI sub-category is less likely to be subject to individual business interpretation, leading to better face validity.

The Global Reporting Initiative (GRI) distinguishes between two types of indicators: "Core" and "others," which can be supplementary. As a result, the importance is placed on both indicators, and each indicator was given the same amount of weight (Parsa &

Kouhy, 2008). The scoring procedure applied was on a dichotomous basis, if items are disclosed, it was assigned 'one' (either full or partially disclosed), ‘Zero’ for non-disclosure. With the help of the relative index scoring (RIS) method, we determined a company's disclosure score by dividing its actual score by the maximum possible score. The relative index score for each company is calculated by dividing the total possible score by the number of items declared. Prior studies followed the same procedure (Ehnert, 2016). The number of companies that did not disclose the indicators and not reported GRI-based information was counted as non-disclosure.

Moreover, the relative significance of a piece of information varies with time and is affected by market conditions (Dhaliwal, 1980). Previous research relied on fundamental measures such as the number of words, sentences, and pages in CSR reports, but these methods may not indicate significant variations between substances (Chen & Bouvain, 2009). Recent research has adopted international indicators like the GRI guidelines (GRI, 2016) to solve the above problems.. Each company's relative index score (RIS) is the ratio of the actual number of items disclosed (AS) to the total maximum score that might be awarded if all applicable items were declared (TMS). Disclosure scores were calculated by following equation.

RIS =AS: TMS

For instance, a firm was given a score of 0.76 (i.e., where AS = 8, TMS = 12, and RIS = 10/13 = 0.76) for disclosing 10 out of 13 information items related to its economic metrics.

For example, a company that had disclosed 10 out of 13 information items on its economic indicators, it was given a score of 0.76 (i.e., where AS = 8, TMS = 12 and RIS = 10/13 = 0.76).

Sustainability reports, annual reports from companies, and integrated reports were the main sources of information for this study.

This study used sustainability reports, corporate annual reports and integrated reports as source for getting information. As the main source of information for a number of reasons. First of all, firms are more likely to show important information that may not be shown in different ways. They are expected to show what the company thinks is essential. In other hand, annual reports are only one source to disclose their positive information which companies is being release.

They are more likely to show the most important issues that may not have been shown in other ways. They are expected to show what the company thinks is important. In other words, annual reports act as filters that only let through the most important or positive information that companies release. According to the previous research evidence, firms' positive disclosure of social and environmental information in their annual reports can compensate for the significant effects on environmental liabilities (Milne & Patten, 2002).

3.16 Data Analysis

This study analyzes the voluntary sustainability reporting in NSE 250 listed companies based on their market capitalization, G4 guidelines, and following GRI standards (2016) used. In contrast, the sustainability reporting disclosure of economic, environmental and social has a long research tradition (Gray, Kouhy, & Lavers, 1995). Studies used the pooled OLS regression robust technique to see the relationship of independent and dependent variables. This data used a combination of both time series and cross-sectional data to define the terminology. Pooled data of the firms are changing, and it has several number of firms and subsequent years of the data. When there is pooled data primarily cross-sectional in one database, it means the same entity with subsequent years and profitability. Panel data is a type of pooled data. It is believed that every entity has its own characteristics and also considers heterogeneity.

There are two types of panel data - Balanced Panel Data and Unbalanced Panel data. Balanced Panel data consists of all the entities and years having full data. Unbalanced Panel Data does not have full-year data; for example; company A has two years of data, and company B has three-year data and company C has one-year data. Panel data was followed for this example because it can balance both the common and individual behavior of the groups. Also, there is heterogeneity in the data, and each entity has its own characteristics. It has more information and variability than time-series data and cross-sectional data. Also, panel data can find and measure statistical effects that only happen over time, which cross-sectional data cannot do. When we are ignoring one factor, another factor cannot be analyzed. Lastly, it helps reduce the estimation errors when groups are added together to make a single time series.

3.17 Diagnostic Test

There are several diagnostic tests for panel data models. The first one is the Normality diagnostic test. For this, the Jarque Bera Test is used to see the data normality. The second test is the multicollinearity diagnostic test and the Variance Inflation Factor (VIF) test to check the multicollinearity among the variables. If the VIF value is less than 10%, there is no multicollinearity, so the data is normal. The value is presented in Table -5.

Table - 5 - Variance Inflation Factor (VIF) Test

Variables	VIF value
Firm Size	1.426
Profitability	1.141
Firm Age	1.125
Primary	2.942
Secondary	2.74
Mean VIF	1.875

3.18 Theoretical Model for Panel Data

A pooled OLS model was used in the study. The pooled model believes that there are no unique characteristics among cross-sections (firms or countries); every country has their own characteristics, so we cannot compare among the countries. This is the nature of the elimination in the pooled OLS model. The second assumption is that there are universal effects across time. It also believes that all firms are behaving in the same time period; there are no universal or systematic effects across time. For the data analysis, the present study used robust regression analysis to analyze the panel data of corporate sustainability reporting practices. The following model was used for analyzing the economic, environmental and social practices in Indian firms. The model is

Y_{it}=β_0+ $\beta 1X_{1it}$+ $\beta 2X_{2it}$+$\beta 3X_{3it}$+ $\beta 4X_{4it}$+ $\beta 5X_{5it}$+ $€_{it}$

Y=Sustainability relative index score RIS

X_1= Firm Size (Logged asset)

X_2= Profitability (ROA)

X_3=Firm age

X_4=Primary Sector

X_5=Secondary Sector

β=slope of the independent variable, while β_0 is constant, the value of Y when all values of X are 0 and €=$€_I$ (0-N), i represents the entities and t represent the time series.

The sustainability reporting index score relates to the sustainability reporting practices and the company's economic, environmental, social, and composite performance metrics at the time t; the type of sustainability reporting disclosure (sustainability reports, Integrated reports and annual reports), the return on assets is ROA, X1 Size is the firm's size; X3 is the firm's age. The specific error terms are the primary, secondary and tertiary dummy variables, and the unobservable individual firm effects. A Hausman specification test is used to see if there are any fixed effects (FE) in the GLS regression (generalized least squares) model. There are three types of fixed effect model tests; a) Within the fixed effect model, b) First difference model, and c) Least square dummy variable (LSDM). However, due to the collinearity issue, both models are not supported. The difference between the fixed effect and random effects coefficients is not considerable (the main variable Industry type1 and Industry type 2 were omitted because of collinearity issue).

Thus the study used the OLS regression model, which is more appropriate for longitudinal data analysis.

3.19 Chapterization Scheme

Chapter 1 explains the organizational scenario, the concept, definition and the evolution of sustainability reporting practices at the national and global level. It also covers the shift from millennium development goals to sustainability development goals, Triple Bottom Line (TBL) along with sustainability at the global and Indian scenario. The chapter also covered the Global Reporting Initiative, its Standards, National Voluntary Guidelines and Business Responsibility Report (BRR).

Chapter 2 reviewed the literature on the sustainability reporting practices. The first section included studies on sustainability, sustainability reporting, and theory related to sustainability. Three prominent theories were discussed - stakeholder, institutional, and legitimacy- perspective in the chapter.

Chapter 3 presented the research methodology. The concept, operational definition, dummy variable followed by the research questions, objectives, hypotheses, research design and sampling were discussed. The next section covered the data segregation framework, and items taken for both independent and dependent variable measurement. The last sections discussed the data collection process, methods, data analysis procedure along with the theoretical model.

Chapter 4 explained the data analysis and results. Hypothesis testing, the year and dimension-wise analysis, followed by the sectoral analysis was also included in the chapter.

Chapter 5 highlighted the findings, conclusion and future implications along with the limitation of the study.

3.20 Summary

This chapter presented the concept of CSR and the operational definitions of the variables selected for the study. The gaps observed in literature were identified paving the way for the research questions in the study, based on which the objectives of the study were highlighted. The scope of the study, hypotheses, and the research design along with the sample selection was also included. The data analysis plan along with measures used for the variable was also presented. The next chapter would highlight the results and it interpretation**.**

Chapter -4

Data Analysis and Interpretation

The study attempted to examine the corporate sustainability reporting practices in India. The impact of firm size and firm age on sustainability reporting practices along with the year-wise reporting by the sampled companies is also included. The Corporate Sustainability Reporting practice across sectors has also been analyzed. Relevant hypothesis have been arrived at, to analyze corporate sustainability reporting practices and examining the impact of company size and firm age on the reporting practices. This chapter presents the data analysis and interpretation after treating the data collected with relevant statistical tests.

Descriptive statistics have been presented in order to demonstrate the mean/percentage of the variables selected in the study. The Pearson correlation test was also done to examine the correlation between the variables in the study. An objective wise analysis is presented in this chapter. An OLS regression analysis to test the hypothesis and analyze the practices in the economic, social and environmental dimensions was conducted. Thus, this test was used because the data was longitudinal in nature and also analyzed the panel data of corporate sustainability reporting practices. The Normality Diagnostic test was conducted using the Jaque Bera Test to observe the data normality. This was followed by the multicollinearity diagnostic test and variance influence factor test (VIF) to check the multicollinearity among the variables. If the VIF value is a 10% it shows that there is no multicollinearity and hence, the data is said to be normal. The same test was used to examine the impact of firm size, firm profitability and firm age on CSR practices. The year-wise CSR practices were analyzed and presented in the form of a graph. The corporate sustainability reporting practices across the sectors were analyzed using ANOVA test and presented in a chart**.**

4.1 Data analysis

4.1.1 Descriptive Statistics

An attempt is made to analyze the mean and standard deviation for the variables under study.

Table- 6 Descriptive Statistics

Variables	**No. of Observation**	**Mean/Percentage**	**Std. Dev.**	**Min**	**Max**
Firm Size	410	92413	1.594	956.01	2361526.98
Profitability	410	12.877%	14.127%	-13.6%	97.75%
Firm Age	410	44.305	23.702	3	118
Primary	410	13.4 %	-	-	-
Secondary	410	72 %	-	-	-
Tertiary	410	14.6%	-	-	-

Economic Dimension	289	59.5%	-	-	-
Environmental Dimension	294	61.8 %	-	-	-
Social Dimension	295	56.9%	-	-	-

As can be seen from the table, the number of observations is 410. The GRI G4 standard has 91 items, and the data has been collected for five years (2016-20). The means score for the firm size is INR 92413 million, while the minimum firm size is in INR 956.01 million and maximum is in INR. 2361526.98 in million. The mean profitability is 12.877%. The average age of the firm was 44.305, where the minimum age of the firm was 3 years, and the maximum was 118 years. Among the sectors, 13.4% of the sampled companies belong to the primary sector, while the majority of the firms fall under the secondary sector (72%). The tertiary sector accounted for 14.6% of the firms. In India, the sustainability disclosure is voluntary, and the results indicate that a majority of the companies in the secondary sector were engaged in corporate sustainability reporting. Dimension wise, the firm reported on the environmental dimension at 61.08% followed by the economic dimension at 59.5%. However, reporting was least in the social dimension, with 56.9% reporting by the firms.

Table - 7 Pearson Correlation Test

Variables	(1) Firm size	(2) RoA	(3) Firm age	(4) Primary	(5) Secondary	(6) Tertiary	(7) ECO	(8) ENV	(9) Social
(1) Firm size	1.000								
(2) Firm profitibility	-0.358***	1.000							
	(0.000)								
(3) Firm age	0.059	0.033	1.000						
	(0.231)	(0.504)							
(4) Primary	-0.295***	0.063	0.261***	1.000					
	(0.000)	(0.202)	(0.000)						
(5) Secondary	-0.111**	0.087*	-0.206***	-0.684***	1.000				
	(0.025)	(0.079)	(0.000)	(0.000)					
(6) Tertiary	0.514***	-0.173***	-0.152***	-0.684***	-0.065	1.000			
	(0.000)	(0.000)	(0.002)	(0.000)	(0.189)				
(7)Economic Dimension	-0.031	0.038	-0.126*	-0.056	0.033	0.043	1.000		

			*						
	(0.532)	(0.447)	(0.011)	(0.261)	(0.509)	(0.380)			
(8)Environmental Dimension	-0.044	0.104**	-0.009	-0.002	-0.010	0.012	0.496***	1.000	
	(0.379)	(0.036)	(0.858)	(0.974)	(0.842)	(0.807)	(0.000)		
(9) Social Dimension	-0.049	0.062	-0.022	0.033	-0.040	-0.006	0.529***	0.912***	1.000
	(0.323)	(0.209)	(0.659)	(0.503)	(0.424)	(0.906)	(0.000)	(0.000)	
*** *p<0.01, ** p<0.05, * p<0.1*									

4.1.2 Pearson correlation test

The Pearson correlation test was conducted to observe the correlation between the independent and dependent variables. Literature suggests that multicollinearity issues can encounter in the independent variable correlation coefficient value (Pallant, 2007) Therefore, this analysis can be done to examine the association between the variables. As can be seen from (table no.7), firm size is positively correlated with firm age and tertiary sector. Firm profitability is negatively correlated with firm size and secondary sector. Firm age is partially correlated with primary and tertiary sectors. The primary sector is positively correlated with the social dimension and negatively with the environmental and economic dimension. Dimension-wise, all the three variables are highly correlated with one another.

4.1.3 Objective - wise results

4.1.3.1 Objective- 1 - To analzse the corporate sustainability reporting practices in social, economic and environmental dimensions in India.

4.1.3.2 Objective -2- To examine the impact of firm size and firm age on sustainability reporting practices.

The OLS regression model for hypothesis testing was done to test the hypothesis framed so as to achieve the two objectives framed for the study. In all, twelve hypotheses have been developed to investigate corporate sustainability reporting practices in Indian companies.

Table-8- OLS Regression Model- Firm Size and Economic Dimension

H1; There is a positive relationship between firm size and corporate sustainability reporting on economic dimension.

Economic RIS	**Coeff.**	**Std. Err.**	**p-value**	**Sig**
Firm Size	-.018	.013	.156	Not Accepted
Profitability	.003	.001	.02	**
Firm age	-.001	.001	.452	
Primary	.042	.062	.497	
Secondary	-.105	.051	.042	**
Constant	.842	.161	0	***
R-squared	0.057	Number of obs.	289	

Level of Significance *** p<.01, ** p<.05, * p<.1

The above table clearly shows that the hypothesis was not accepted. The estimated coefficient value of -.018 and the corresponding p-value is 0.156, Show no significant association exists between a company's size and its reporting on economic sustainability. Profitability with the p-value of 0.02 is associated with the economic dimension, which shows that profitable companies are engaged in corporate sustainability report practices on economic dimension. Similarly, the secondary sectors with a p-value of 0.042 reflect that these industries are engaged in the economic dimension. Firm age and primary sector are negatively associated with CSR practices in the economic dimension.

Table-9- OLS Regression Model – Firm Size and Environmental Dimension

H2; There is a positive relationship between firm size and corporate sustainability reporting on environmental dimension.

Environment RIS	Coef.	St. Err.	p-value	Sign
Firm size	.002	.012	.846	Not accepted
Profitability	.002	.001	.025	**
Firm age	0	.001	.563	
Primary	.172	.061	.006	***
Secondary	.107	.045	.019	**
Constant	.455	.142	.002	***
R-squared	0.049	Number of obs.	294	
*Level of Significance *** p<.01, ** p<.05, * p<.1*				

The relationship between the firm size and corporate sustainability reporting practices on the environmental dimension is not accepted. Moreover, the firm size p-value of 0.846 shows that whether the firm size is large or small, it does not impact the reporting practices. Profitability with a p-value of 0.025 explains that the firms report on the environmental dimension irrespective of whether they are profitable or not. Statistical results also show a high significance in the primary sector p-value 0.006 followed by the secondary sector p-value of 0.019 pointing to the fact that these industries adopted environmental practices.

Table-10- OLS Regression Model – Firm Size and Social Dimension

H3; There is a positive relationship between firm size and corporate sustainability reporting on social dimensions.

Social RIS	**Coef.**	**St.Err.**	**P-Value**	**Sign.**
Firm Size	.013	.013	.288	Not accepted
Profitability	.002	.001	.008	***
Firm Age	0	.001	.854	
Primary	-.008	.066	.909	
Secondary	.006	.045	.892	
Constant	.405	.148	.006	***
R-squared	0.019			
Number of obs	295			
Level of Significance *** p<.01, ** p<.05, * p<.1				

The results show that firm size with a p-value of 0.288 demonstrates that the hypothesis is not accepted. Prior literature reveals that when the firm's size is big, social performance is higher (Ehnert, 2016). A study by Parsa and Kouhy, (2008) reveals that reporting on social aspects is more when the firm size is large, but the present study shows that the firm’s size and the social reporting practices are not associated. This may be attributed to the difference in the entities in the different contexts and the country's varied reporting practices. Further, different industries have unique characteristics, and sizes vary. Moreover, the established large multinational firms have better and more extensive reports on social dimensions since they have multiple target groups for their reporting. However, the large, medium, and small firms vary impacting the reporting practices. The big-size firms may have exhaustive and better reporting practices and are used for benchmarking. In comparison, the medium and small-sized companies try to give their best reporting practices like the large sector firms by adopting sustainability-specific indicators that could be the benchmarks for other entities. It is thus assumed that the adaption and design of the report may vary from firm to firm; therefore, it was decided to analyze the different types of reporting entities in different industries. However, the findings suggest that there is no association between firm size and social dimension.

Table-11-OLS Regression Model – Firm Profitability and Economic Dimension

H4; There is a positive relationship between profitability and corporate sustainability reporting on economic dimension.

Economic RIS	Coef.	St.Err.	P-value	Sig
Profitability	.003	.001	.025	** Accepted
Firm Size	.002	.012	.846	
Firm Age	0	.001	.563	
Primary	.172	.061	.006	***
Secondary	.107	.045	.019	**
Constant	.019	.142	.002	***
R-squared	0.049			
Number of obs	294			
Level of Significance *** p<.01, ** p<.05, * p<.1				

The above table shows that the coefficient value of 0.003 and the corresponding p-value of 0.025 show a significant relationship between profitability and CSR on the economic dimension. The positive association between the primary sector p-value 0.006 and the secondary sector 0.019 with corporate sustainability reporting practices on the economic dimension is significant. A positive association between profitability and economic sustainability performance. There is a 95 per cent chance that when a firm has more profits, its sustainability reporting practices are also more. The previous study found that the profitability may not vary even when firms disclose sustainability reports (Dissanayaka et al., 2016). The level of disclosing the sustainability reporting practices is more when the entities have sound profitability. A sector-wise analysis shows that the secondary and territory sectors are significant. However, the study can conclude that even though the companies are profitable, they focus on the economic dimension of sustainability reporting in both sectors.

Table-12- OLS Regression Model – Firm Profitability and Social Dimension

H5; There is a positive relationship between profitability and corporate sustainability reporting on social dimension.

Social RIS	Coef.	St.Err.	P-value	Sig
Profitability	.002	.001	.008	*** Accepted
Firm Size	.013	.013	.288	
Firm Age	0	.001	.854	
Primary	-.008	.066	.909	
Secondary	.006	.045	.892	
Constant	.405	.148	.006	***
R-squared	0.014			
Number of obs	295			
Level of Significance *** p<.01, ** p<.05, * p<.1				

It is evident from the table that the coefficient value is 0.002, and the corresponding p-value is 0.008, which shows a significant relationship between profitability and sustainability reporting practices. Firm age and firm size negatively impact the company's social performance. The sector-wise analyzes of the reporting practices are categorized into primary, secondary, and tertiary sectors. After addressing these concerns, the study is extended to test the relationship for sector-wise differences. However, in sector-wise, there is no relationship between the reporting practices on the social dimension.

Table-13-OLS Regression Model – Firm Profitability and Environmental Dimension

H6; There is a positive relationship between firm profitability and corporate sustainability reporting on environmental dimension.

Environment RIS	**Coef.**	**St.Err.**	**P-value**	**Sig**
Profitability	.003	.001	.025	** Accepted
Firm Size	.002	.012	.846	
Firm Age	0	.001	.563	
Primary	.172	.061	.006	***
Secondary	.107	.045	.019	**
Constant	.019	.142	.002	***
R-squared	0.049			
Number of obs.	294			
Level of Significance *** p<.01, ** p<.05, * p<.1				

The results show that the coefficient value is 0.003 and the corresponding p-value is 0.025, indicating a significant relationship between profitability and corporate sustainability reporting on the environmental dimension. A significant positive association between primary and secondary and with the probability value of 0.006 and .019 respectively with profitability in the environmental performance are also demonstrated. Similarly, firm size and firm age with a p-value of 0.846 and 0.563 are negatively associated with profitability in the environmental dimension.

Table-14- OLS Regression Model – Firm Age and Economic Dimension

H7; There is a positive relationship between firm age and corporate sustainability reporting on economic dimension.

Economic RIS	Coef.	St.Err	P-value	Sig
Firm Age	-.001	-.001	.452	Not accepted
Firm Size	-.018	.013	.156	
Profitability	.003	.001	.02	**
Primary	.042	.062	.497	
Secondary	-.105	.051	.051	**
Constant	.842	.161	0	***
R-squared	0.057			
Number of obs	289			
Level of Significance *** p<.01, ** p<.05, * p<.1				

The coefficient value -.001 and the corresponding p-value is 0.452, shows that there is no significant relationship between firm age and corporate sustainability reporting on the economic dimension. In the secondary sector, the p-value of .051 also shows a significant relationship between firm age and economic performance. Thus, it can be inferred that firm age has no bearing on the reporting practices.

Table-15- OLS Regression Model – Firm Age and Environmental Dimension

H8; There is a positive relationship between firm Age and corporate sustainability reporting on environmental dimension.

Environment RIS	**Coef.**	**St.Err.**	**p-value**	**Sig**
Firm Age	0	.001	.563	Not Accepted
Firm Size	.002	.012	.846	
Profitability	.002	.001	.025	**
Primary	.172	.061	.006	***
Secondary	.107	.045	.019	**
Constant	.455	.142	.002	***
R-squared	0.049			
Number of obs	294			
Level of Significance *** p<.01, ** p<.05, * p<.1				

From the results, it can be said that the coefficient value is 0, and the corresponding p-value is 0.563, which shows that there was no relationship between firm age and corporate sustainability reporting on the environmental dimension. The variable firm age is negatively correlated to economic, environmental and social sustainability. The finding suggests that more established and older companies have better reporting behavior. Because of their experience, their application-level discloses more economic, social, and environmental information (Mahmood & Orazalin, 2017). Nevertheless, in this study, the firm age and the disclosure level are insignificant. Therefore, the hypothesis is not significant (Parsa & Kuaya,2008, Enhert,2015). According to legitimacy theory, older organizations with greater reporting experience have more substantial reporting practices (Mahmood & Orazalin, 2017). Older firms with extensive reporting practices publish more sustainability information to improve brand image and reputation. However, the results of the studies are conflicting. The current study results also do not support the legitimacy theory as in the case of other studies (Chakroun et al., 2017) thus, requiring further investigation.

Table-16- OLS Regression Model – Firm Age and Social Dimension

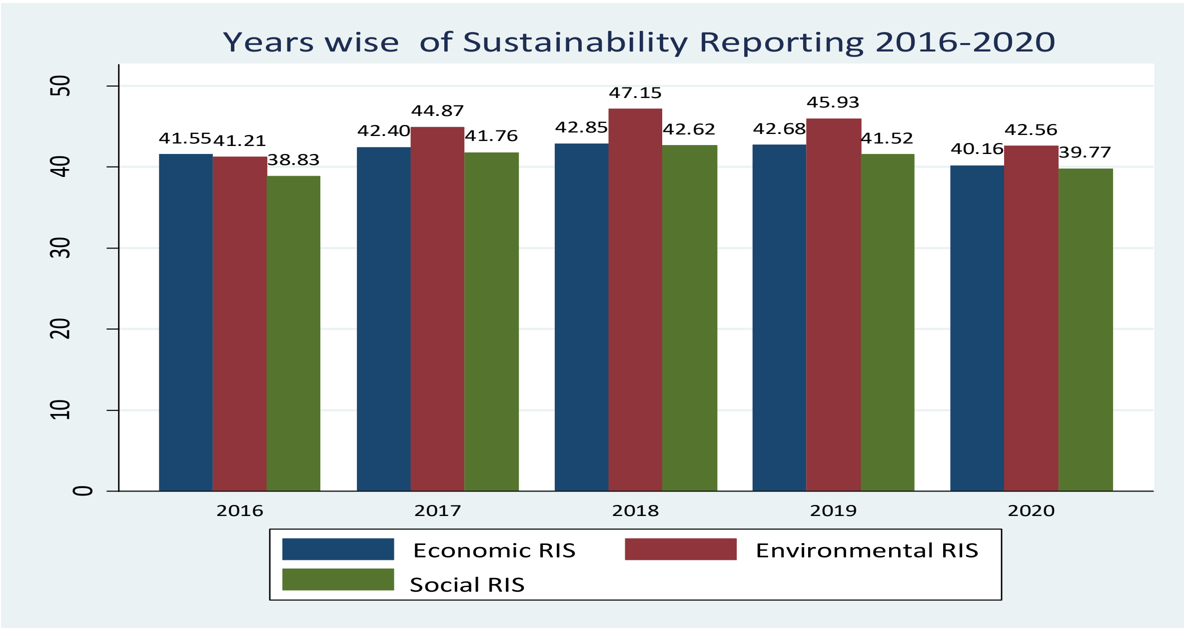
H9; There is a positive relationship between firm age and corporate sustainability reporting on social dimension

Social RIS	Coef.	St.Err.	P-value	Sig
Firm Age	0	.001	.854	Not accepted
Firm Size	.013	.013	.288	
Profitability	.002	.001	.008	***
Primary	-.008	.066	-.138	
Secondary	.006	.045	.892	
Constant	.405	.148	.006	***
R-squared	0.024			
Number of obs	295			
Level of Significance *** p<.01, ** p<.05, * p<.1				

The results, establish that the coefficient value of 0, and the corresponding p-value is 0.854, show no relationship between firm age and social sustainability reporting. The results also show the negative association between primary and secondary with firm age on social performance. However, profitability with coefficient value is 0.002 and the p-value is 0.008 demonstrates a significant relationship with firm age on social performance. However, the industries, irrespective of the sectors, do not have any association with firm age on social performance. Hence, the company is older or new; it does not matter for the current trend of the reporting practices. Secondly, the company faces legitimacy and regulatory pressure and attempts to disclose the sustainability information even though it is a new company and continues to be under scrutiny. Therefore, the results do not support the legitimacy theory.

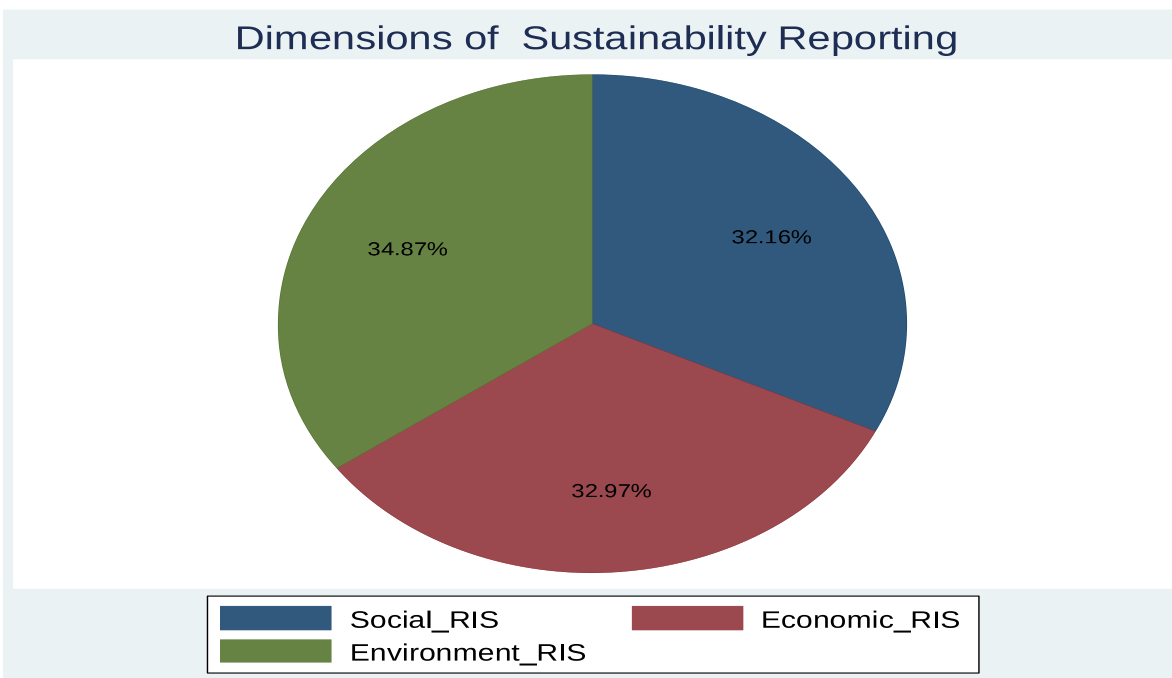
4.1.3.3 Objective 3 - To analyze the year- wise corporate sustainability reporting practices in India

Figure-2 Year-wise reporting of Sustainability Reporting Practices.



The graph shows information about the change in the sustainability reporting practices in the three different dimensions between 2016 to 2020. The year-wise sustainability practices highlight reporting on the environmental dimension in all the years from 2016- to 2020. The economic dimension followed next (2016-2019), with reporting showing a decrease in 2020. The reporting on the economic dimension consistently increased in the 2016-18 with 41.55%, 42.40% and 42.85% respectively. Environmental disclosure of sustainability reporting increased from 41.21%, 44.87% and 47.15% over a period of three years between 2016-18 and declined subsequently over the next two years. The social sustainability disclosure practices over the years showed a pattern where increased from 38.83% in 2016 to 2018 (42.62%), which decreased over the years in 2019 and 2020. *Dimension-wise*, the environmental dimensions 34.87% followed by economic 32.97% and social 32.16% dimensions were reported by the companies. (Figure- 3)

Figure - 3 - Dimensions of Sustainability Reporting



4.1.3.4 Objective 4 -To analyze the corporate sustainability reporting practices across sectors in India.

ANOVA test

This section covers the ANOVA test that was performed to test the hypothesis and the variance among the three sectors dimension-wise.

Table - 17 – CSR across sectors on economic dimension

H10; There is a positive relationship between primary, secondary, and tertiary corporate sustainability reporting practices on the *economic dimension.*

Industry Type	Summary of Economic Dimensions				
	Mean		Std. Dev.		Frequency
Primary	.5853819		.29287126		259
Secondary	.75104081		.35175248		10
Tertiary	.5818077		.20005732		20
Total	.59487919		.29291398		289
Analysis of Variance					
Source	SS	DF	MS	F	Prob. F
Between groups	.440717008	2	.220358504	2.60	0.0763
Within groups	24.2692794	286	.08485762		
Total	24.7099965	288	.085798599		

Bartlett's test for equal variances: chi2(2) =5.4452 Prob>chi2 =0.066

From the results, it can be seen that the F ratio is 2.60, and the p-value (probability>F) is 0.076, which highlights differences in primary, secondary, and tertiary companies on the economic dimension. The estimated p-value of economic sustainability among the sectors is statistically significant. This finding suggests that companies that report sustainability practices in India share valuable sustainability information. Firstly, firms are likely to provide more importance to the sustainability information on economic aspects because providing specific information builds reasonable confidence and transparency to the stakeholders. Secondly, the manager may pay more attention to sustainability reporting practices. In other words, in India, sustainability reporting is voluntary. Almost 95% of the companies have disclosed the non-financial information to stakeholders (KPMG-2020). Moreover, the stakeholder demands the non-financial information of the firm Kolk (2003 and 2004). The substantial sustainability reporting information may be an effort by businesses to build favorable information among stakeholders Clarkson et al. (2011). From the theoretical perspective, the signaling theory suggests that issuing a sustainability reporting will provide more social, economic and environmental information (Mahoney et al., 2013).

Table-18–- CSR across sectors on social dimension

H11;There is a positive relationship between corporate sustainability reporting practices of primary, secondary, and tertiary on *social* dimension.

Industry Type	Summary of Social Dimensions				
	Mean		Std. Dev.		Frequency
Primary	.56482242		.28704518		259
Secondary	.65715045		.242108		21
Tertiary	.5079847		.20791493		15
Total	.56850487		.28126833		295
Analysis of Variance					
Source	SS	DF	MS	F	Prob. F
Between groups	.223471317	2	.111735659	1.42	0.2443
Within groups	23.035419	291	.078888421		
Total	23.2588903	294	.079111872		
Bartlett's test for equal variances: chi2(2) =3.0791 Prob>chi2 =0.214					

From the results, it is clear that the F ratio is 1.42 and the p-value (probability > F) is 0.2443, shows a difference in the corporate sustainability reporting practices of primary, secondary, and tertiary companies on the social dimension. The estimated p-value is 0.2443, and the equal variances of chi-square value is 3.0791 and Probability Chi^2 0.214, is very high. Therefore, the hypothesis is not accepted. In other words, the association indicates that the voluntary sustainability reporting in the social dimension has no variance among sectors. The findings are not supported but the companies are issuing the sustainability reporting for maintaining the equilibrium. However, this study found that firms are least worried about the social dimension of sustainability. The reason is that every company has a corporate social responsibility, which may be the cause for not focusing on social aspects. This association suggests that standalone reporting leads to an increase in the quality of sustainability and broader dissemination of that information.

Table-19-– CSR across sectors on Environmental dimension

H12; There is a positive relationship between corporate sustainability reporting practices of primary, secondary, and tertiary on *environmental dimension.*

Industry Type	Summary of Environmental Dimensions				
	Mean		Std. Dev.		Frequency
Primary	.63281654		.25506489		258
Secondary	.56825397		.29673711		21
Tertiary	.44222222		.2068151		15
Total	.61848073		.25898074		294
Analysis of Variance					
Source	SS	DF	MS	F	Prob. F
Between groups	.57200617	2	.286003085	4.36	0.0136
Within groups	19.0798041	291	.065566337		
Total	19.6518103	293	.067071025		
Bartlett's test for equal variances: chi2(2) = 2.0413 Prob>chi2 = 0.360					

From the H12 results, it can be seen that the F ratio is 4.36, and the p-value (probability > F) is 0.0136, show no difference in the CSR practices of primary, secondary, and tertiary companies on the environmental dimension. The probability Chi2 values 0.0136 shows the positive relation between the primary, secondary and tertiary sectors. The companies are engaging with the environmental practices because of the legitimacy aspects. Almost all the companies have their environmental practices because of the regulatory norms.

4.2 Summary

An attempt was made in the study to examine the CSR practices in Indian firms. This chapter analyzed the data collected and treating them with different statistical tests. An objective-wise analysis has been presented for clarity in data interpretation. While the first two objectives were tested using the OLS regression model, the third objective was met with the year-wise analysis and presented in descriptive way using graphs. The fourth objective used an ANOVA test to examine the variance among the sectors dimension-wise. The discussion was presented for each of the analysis done.

Chapter-5

Conclusions and Recommendations

5.1 Introduction

Corporate sustainability reporting practices have become an important aspect among large firms across the world since the end of the 1990's. Now, it is an increasingly developmental topic and an essential factor for the business and academic arena (Amin & Chaudhary, 2016). Companies in the contemporary era are trying to incorporate their business practices with sustainability activities. This is because of the rising concern for "global warming, climate change, environment degradation, resource depletion, and human rights have stimulated in socially responsible business practices" (Sheldon & Park, 2011). Eventually, firms are required to address all of these issues (Adams & Frost, 2008), to re-establish the durability and equilibrium of the earth and to meet the demands of internal and external stakeholders (e.g., employees, suppliers and capital providers). Firms are voluntarily disclosing their sustainability report (Ebinger et al., 2006; Dyllick & Hockerts 2002) which was increased because of customer awareness and education, pressurizing the businesses to report sustainable activities. Further, organizations need to be more transparent and accountable to the stock exchanges, markets, government, society, and investors, which can better measure how well the economy, society, and environment are doing in important areas with non-financial information, that support a broader picture of organization performance (Bouten et al., 2011; Roca & Searcy, 2012). As a consequence, the top management is forced to improve their sustainability practices while also improving the company's image (Elijido Ten, 2011). As a result, the managers are required to exercise a more significant influence on social and environmental performance metrics in addition to the measures of profitability they already control. There has been a growing realization across the world that sustainability reporting must be given more attention (Michelon, et al., 2019) Hence, companies across the world started publishing their sustainability related information. The adoption of the GRI guidelines was positively linked to the quality and quantity of sustainability reporting (Kumar, 2021) and that has been taken to be the standard reporting procedure including India.

5.2 Corporate Sustainability Reporting

Organizations today, thus, are aware of the need for sustainability, where they have demonstrated a willingness to share information on social, economic, and environmental performance. Furthermore, stakeholders' accountability demands have pushed firms across the world to recognize the significance of sustainability concerns. (Boiral, 2013; Dodds & Kuehnel, 2010). Businesses are increasingly pressurized to be more transparent about their corporate behavior (Kolk, 2008; Pollach et al., 2009). Studies have shown that consumers and the media enunciate the demand and the civil society of the organizations often consider themselves "watchdog" on corporate behavior (Kolk, 2004a). This is true in all the countries across the world.

The first sustainability reports were published in the late 1980s in chemical industries because they harmed society and the environment. Moreover, the tobacco industry adopted this policy to disclose the sustainability activities in the world. It first considered the acute environmental crises, which pushed the sustainability reporting movement in the US. Since then, many organizations have begun to give information on their environmental, social, or sustainability policies. In 1989, separate environmental reports were published, and their implications have grown significantly (Kolk, 2003). In the early 1990s, the idea became more popular, and sustainability was viewed mainly as a corporate concept. Gradually, the idea took on a new shape in the business fraternity, where sustainability was considered more from an ethical and moral viewpoint, giving rise to Corporate Social Responsibility (Kira, 2003; Boudreau & Ramstad, 2005).

The movement that started to raise a voice to protect the earth has somehow taken an ugly turn and posed a battle between companies and the government. The critical argument they hold is that voluntary action is insufficient to protect the environment and that good education and consumer awareness are required to force businesses to become more environmentally conscious. While legislation and education are vital, they may not be able to fix the problem completely or quickly (Prahalad & Rangaswami, 2009). However, in the long run, this approach of sustainability looked at appropriate measures to check environmental crises.

5.3 Corporate Sustainability Reporting - India

Over the last decade, corporate sustainability reporting has become an increasingly important topic in Indian business and academics. The companies after the new economic reform in 1991 are forced to embrace a new paradigm and are developing long-term business practices with respect to the environment, employee welfare, and future generations. Firms are also expected to improve profitability, fund innovation, and grow market share for current stakeholders. These practices are being adopted by the companies, and many firms are implementing them as well. Reporting has become a mandatory field for every company after SEBI has issued a mandate to the companies to disclose their economic, social and environmental activities along with their annual reports. The BRSR is expected to be submitted by the companies based on market capitalization from the FY- 2022-23 onwards. A number of changes are proposed by the countries across the world, for various reasons, to disclose their activities in the recent past. It is true in the Indian context as well.

5.4 The Study

The changes and the corporate response across the world and India, makes this area an exciting field of enquiry. Further, studies that are available on the subject are scattered and conducted in different geographies and sectors. Studies in India too are evident but they have been conducted to achieve different objectives using different variables and methodology. Moreover, large Indian companies have started reporting their sustainability practices only of late as a sequel to their opening up operations in different countries. In addition, companies following GRI-G4 guidelines are only those companies that had international operations. Further, SEBI, in India, has issued guidelines in the name of NVG only in 2016. Hence, reporting is still voluntary, with little scholarly attention limiting literature on the subject and requiring studies for further investigation.

This study is an attempt in this direction and seeks to examine the corporate sustainability practices (CSR) in the Indian context. An attempt is made to study the impact of firm age, firm size and profitability on the CSR practices in India. The sectoral difference in the disclosures was also analyzed. The study was conducted by selecting the companies from the top 250 NSE listed companies in India, which followed the GRI – G4 standard, based on market capitalization during 2016-2020. Only 82 companies satisfied the criteria, as the other companies did not have either stand alone or any reporting mechanism on the websites for disclosures. Thus the sample for the study is 82 companies. Relevant hypothesis have been framed to achieve the objectives. The OLS regression model was followed to achieve the hypothesis relating to the impact of firm age, firm size and profitability on the CSR. ANOVA was used to test the sectoral differences in the disclosure of the firms. An analysis was also made to analyze the year-wise disclosures between 2016-2020 along with descriptive statistics on the variables of the study. The conclusions reached are given in the following lines.

5.5 Conclusion

An attempt is made to present the objective-wise conclusions arrived at, in the study. The descriptive statistics are presented first followed by the objective wise conclusions.

5.5.1 Descriptive Statistics

An attempt was made to analyze the mean and standard deviation for the variables under study. As can be seen from the study, the number of observations is 410. The GRI G4 standard has 91 items, and the data has been collected for five years (2016-20). The means score for the firm size is INR. 92413 million, while the minimum firm size is INR 956.01 in million and maximum is INR. 2361526.98 in million with a standard deviation of INR. 380923.3099 in lakh and profitability is 12.877% and the standard deviation is 14.127 % the minimum return of assets is -13.06% and the maximum return of assets is 97.76%. The average age of the firm was 44.305, where the minimum age of the firm was 3 years, and the maximum was 118 years. Among the sectors, 13.4% of the sampled companies fell under the primary sector. While the majority of the firms are secondary sector industries (72%). The tertiary sector accounted for 14.6% of the firms. In India, the sustainability disclosure is voluntary, and the results indicate that a majority of the companies in the secondary sector are engaged in corporate sustainability reporting.

Dimension wise, firms reported on the environmental dimension at 61.08% followed by the economic dimension at 59.5%. However, reporting was least in the social dimension, with 56.9% reporting by the firms. Studies confirmed that out of 100 ET companies in 2014, only eight companies have disclosed their social activities in the CSR disclosure. (Kumar & Kidwai, 2018) The companies in the Indian context made a beginning with their disclosures, only off late. The Government regulation and the SEBI announcements from time to time to keep parity with the international standards might improve the reporting practices in India in the future.

5.5.2 Pearson Correlation

The Pearson correlation test was conducted to observe the correlation between the independent and dependent variables. Literature suggests that multicollinearity issues can be encountered in the independent variables correlation coefficient value (Pallent, 2007). Therefore, this analysis is done to examine the association between the variables. The results suggest that dimension-wise, all the three variables are highly correlated with one another.

5.5.3 Objective- wise Conclusion

The OLS regression model for hypothesis testing was done to test the hypothesis framed to examine the CSR practices and the impact of firm age and firm size on the CSR practices of Indian firms. In all, twelve hypotheses have been framed to examine the impact of the selected variables on the corporate sustainability reporting practices.

5.5.3.1. Firm size and CSR practices

The impacts of firm size on the CSR practices in all the three dimensions have not been accepted. Dimension wise, the results show no significant relationship between firm size and CSR on the *economic dimension*. Profitability is associated with the economic dimension, which shows that profitable companies are engaged in corporate sustainability report practices. Moreover, the results also show that whether the firm size is large or small, it does not impact the reporting practices. Sector-wise the primary sector followed by the secondary sector has reported their practices, pointing to the fact that these industries adopted good *environmental* practices. However, results were interesting in the *social dimension*. Prior literature reveals that when the firm's size is big, social performance is higher (Ehnert, 2015). A study by Parsa and Kouhy, (2008) reveals that reporting on social aspects is more when the firm size is large, but the present study shows that the firm's size and the social reporting practices are not associated. This may be attributed to the difference in the entities in the different contexts and the country's varied reporting practices.

Further, different industries have unique characteristics, and sizes vary. Moreover, the established large multinational firms have better and more extensive reports on social dimensions since they have multiple target groups for their reporting. However, the large, medium, and small firms vary impacting the reporting practices. The big-size firms may have exhaustive and better reporting practices and are used for benchmarking. In comparison, the medium and small-sized companies try to give their best reporting practices like the large sector firms by adopting sustainability-specific indicators that could be the benchmarks for other entities. It is thus assumed that the adaption and design of the report may vary from firm to firm; therefore, it was decided to analyze the different types of reporting practices in different industries. It is heartening to note that firms irrespective of size reported their practices and hence it is recommended that they should be encouraged to make it a good practice.

Theoretically, the Stakeholder theory states that the larger organizations are more visible to the public and reveal more information to satisfy the stakeholder's requirements, including government regulations and media visibility (Dissanayake et al., 2016; Ehnert et al., 2015). Previous research on the relationship between firm size and SR was also based on the legitimacy theory, which states that larger companies are subjected to higher stakeholder scrutiny to disclose more information and to avoid losses due to illegitimacy (Anbumozhi & Liu, 2009) and as a result of the perceived higher visibility of such environmental issues (Eccles & Serafeim, 2013). Several other reasons could also be attributed to the relationship between firm size and the reporting practices (Sumiani et al., 2007). Watts & Zimmerman (1990) assume that transaction and information expenses are included in agency costs. Sustainability reporting disclosure is a tool for firms to communicate with stakeholders and management. Therefore, information asymmetries are reduced because many risks are disclosed in sustainability reports. As a result, lowering agency costs may improve financial performance.

5.5.3.2 Firm profitability and CSR practices

The results show that there is a significant relationship between profitability and corporate sustainability on the *economic* dimension. There is a positive relationship between profitability and economic sustainability performance. There is a 95 per cent chance that when a firm has more profits, its sustainability reporting practices are also more. Evidence reveals that the profitability may not vary even when firms disclose sustainability reports (Dissanayaka et al., 2016). The level of disclosing the sustainability reporting practices is more when the entities have sound profitability. Earlier studies also shown that profitable companies are more trustworthy and transparent with their information (Aksu & Kosedag, 2006). The positive association found in the study is supported by other empirical studies (Liu Anbumozhi, 2009; Kansal et al., 2014).

A sector-wise analysis shows that the secondary and territory sectors appear significant in the economic dimension. A significant relationship between profitability and corporate sustainability reporting was observed in *social performance* sector-wise, there is no relationship between the reporting practices on the social dimension. Profitable companies, primary or secondary sector industries, can afford to attract quality human resources and hence do not hesitate to credit their employees for their profitability. The results show that there is a strong association between profitability and reporting on corporate sustainability on the *environmental dimension*. Industry started reporting the environmental practices to start with, which was later extended to the economic and social dimension, which needs to be encouraged not just for regulatory compliance but as a matter of following best practices. Theoretically, The agency theory states that managers of profitable companies have a reason to share more information voluntarily to justify their performance for the compensation package (Barako, 2007). The Signaling theory suggests that profitable companies are more likely to disclose information about sustainability reporting with stakeholders in order to make a good impression (Alsaeed, 2006).

5.5.3.3 Firm Age and CSR Practices

Firm age is negatively correlated to the CSR in the economic, social, and environmental sustainability. The statistical results have shown that firm age and SR practices do not show any significant results, which collaborates with the prior research in demonstrating conflicting results (Rettab et al., 2009; Dissanayake et al., 2016). Prior research indicates that more experienced and well-established businesses have better reporting practices. Due to their experience, they tend to publish more transparent economic, social, and environmental data. The study results are in line with the other studies too where the firm age and the disclosure level are not significant (Parsa & Kuaya, 2008, Enhert, 2015). Hence, the company is older or new; it does not matter for the current trend of the reporting practices. Secondly, the company faces regulatory pressure and attempts to disclose the sustainability information even though it is an old or new company and continues to be under scrutiny. From the legitimacy theory point of view, studies show that older and more established organizations have better reporting practices due to their significant reporting experience (Mahmood & Orazalin, 2017). These results can be explained by the fact that more established organizations disclose more sustainability information with comprehensive reporting practices to improve their brand image and reputation in the market. However, the results of the studies are conflicting thus, requiring further investigation in the Indian context. Theoretically, legitimacy theory states that firm age is an important factor influencing SR practices. (Rettab et al., 2009; Liu & Anbumozhi, 2009).

5.5.3.4 Year-wise reporting of CSR practices

The sustainability reporting practices in the three different dimensions between the study periods -2016 to 2020- has been studied. The year-wise sustainability practices highlight reporting on the *environmental* dimension in all the years from 2016-to 2020. The *economic* dimension followed next (2016-2019), with a decrease in reporting in 2020, but consistently increased between 2016-18. The social sustainability disclosure practices over the years showed a pattern which increased between 2016 to 2018 and decreased over the years in 2019 and 2020. *Dimension-wise*, the environmental dimensions followed by economic and social dimensions were reported by the companies. This pattern may be attributed to the fact that companies reported environmental disclosures right from the beginning. As they evolved, profitability led to disclosing economic practices followed by the social dimension, when strategic HRM assumed importance in the early 21st century.

5.5.3.5 Sectoral differences in the CSR practices

The results show a difference in the corporate sustainability reporting practices of primary, secondary, and tertiary companies on the economic and social dimension. Previous research showed that sustainability reporting in the energy, pharmaceutical, utility and mining industries are particularly prominent, due to the high environmental economic and social impacts prevalent in these industries (Dilling, 2010; Kolk, 2003). Hence, businesses operating in these sectors typically engage in sustainability reporting in order to satisfy the demands of sector-specific stakeholders and legitimacy pressure (Jenkins &Yakovleva, 2006). It has been known for a long time that businesses that successfully manage their social and environmental responsibilities have a greater chance of maintaining their economic viability. Shareholders have the right to expect their firms to offer sustainable growth because they are the effective owners of the company. However, other stakeholders can also impact such growth, and an overemphasis on economic performance could result in the neglect of the broader stakeholder interests, which may negatively impact economic performance (Doane & Gillivray, 2001)

5.6. Recommendations

- It is heartening to note that firms in India *irrespective of size* reported their practices and hence it is recommended that they should be encouraged to make it a good practice. Prior studies are also are in line with the study results which show a growing realization that sustainability reporting must be given more attention (Michelon, et al., 2019).
- The Study results indicated a significant relationship between *profitability and corporate sustainability reporting* practices in India. Industries started reporting the environmental practices to start with, which was later extended to the economic and social dimension, which needs to be encouraged not just for regulatory compliance but as a matter of following best practices.
- The study results are in line with the other studies, where the *firm age and the disclosure level* are not significant. (Parsa & Kuaya, 2008, Enhert, 2015). Hence, the company is older or new, it does not matter for the current trend of the reporting practices, which needs to be encouraged.
- *Dimension-wise*, the environmental dimensions followed by economic and social dimensions were reported by the companies. This pattern may be attributed to the fact that companies reported environmental disclosures right from the beginning. As they evolved, profitability led to disclosing economic practices followed by the social dimension, when strategic HRM assumed importance in the early 21st century. The pandemic in the recent past has left its gullible mark on the disclosures as well, which should improve over time, as businesses bounce back into their earlier glory.

- As far as the sustainability reporting in Indian firms is concerned, some companies have started sharing their sustainability reports with the public through separate websites and annual reports (Chatterjee & Mir, 2008). However, most developing countries and the Indian context share insufficient information in their reports (Sen et al., 2011). It has been reported that the content and extent of reporting differs across firms, sectors, and also countries. Consequently, companies' sustainability reporting may also vary (Christensen et al., 2021) thus, allowing companies to follow a format first to start with (Business Responsibility Sustainability Reporting in FY 22-23) and then branch out to world standards like the GRI-G4 standards.

5.7 Contribution

The idea of sustainable development has been proven with a lot of attention with the publication of the report "Our Common Future". According to many surveys, sustainability reporting is now regarded as a mainstream business practice because such activities not only boost overall firm performance but also contribute to long-term sustainability. The study findings also support that sustainability reporting practices lead to improved visibility for company emphasizing the necessity of sustainability reporting. Only a few companies in India, however, publish such a report regularly. As a result, the findings of the study may motivate businesses to design and adopt sustainability initiatives. As stated in the "Brundtland Report," such a strategy will not only aid in the development of competitive advantage and improve firm performance but will also assist in achieving the overall goals of sustainable development. The results of the study will be helpful for investors, sustainability reporting analysts, policymakers, and managers.

There is a significant increase in demand for business executives to design effective sustainability strategies in the contemporary era. The study will assist businesses in recognizing that corporate sustainability reporting practices are a key source of competitive advantage. Integrating sustainable activities into a company's business strategy can help the companies improve their overall performance. In addition, the study has contributed to the

- Literature on the subject by bringing together critical variables in CSR following the GRI-G4 standards and tested for its applicability in the Indian context.
- Highlight the importance of reporting dimension-wise, following universal standards by the companies, along with the compliance to the Indian guidelines. Studies help in knowing the direction of reporting.
- Helpful to the managers, policy makers, analysts to design strategies leading to sustainable development. Investors can better assess critical areas of economic, social, and environmental performance with non-financial information, which supports a broader picture of performance. As a result, top management can improve their sustainability practices while also improves the company's image. Managers can also exert more influence over social and environmental performance indicators, just as they do over profitability measures.

5.8 Limitations and Implications for further research

The scope of this study is limited to 82 firms in a 5 -year duration reporting from the NSE listed companies operating in India. Although the top 250 companies were targeted, only 82 companies satisfied the criteria, due to the lack of complete data on sustainability information as reported by the companies. Therefore, further research analyzing larger samples can be undertaken to broaden the results. Since the GRI-G4 standards are a universal standard, cross country comparisons may also add credence to the literature. This study relied on the information disclosed by the company. The information shared was taken to be the honest information given out in the public domain. The study covered data over a period of five years and was restricted to Indian firms which followed GRI – G4 standard guidelines. Future studies can include companies which followed non-GRI reporting and also in other contexts for a comparison. This study used the quantitative approach. Further studies can use a qualitative and mixed method approach.

5.9 Summary

An attempt was made to examine the CSR practices in a chosen sample of 82 companies in the Indian context. The impact of the firm age, size and profitability on the CSR practices was also studied. The sectoral differences and the year-wise reporting was also included. This chapter presented the conclusion and recommendations of the study. An attempt was made to present the broad conclusions and discussion based on the objectives of the study. The contribution along with the implications for further research was also included.

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Appendix- I

List of GRI-G4 standards core items

GRI-100	**Universal Standards**	**GRI-400**	**Social**
GRI-101	Foundation 2016	GRI-401	Employment
GRI-102	General Disclosures 2016	GRI-402	Labour/Management Relations
GRI-103	Management Approach 2016	GRI-403	Occupational Health and Safety
GRI-200	**Economic**	GRI-404	Training and Education
GRI-201	Economic Performance	GRI-405	Diversity and Equal Opportunity
GRI-202	Market Presence	GRI-406	Non-discrimination
GRI-203	Indirect Economic Impacts	GRI-407	Freedom of Association and Collective Bargaining
GRI-204	Procurement Practices	GRI-408	Child Labour
GRI-205	Anti-corruption	GRI-409	Forced or Compulsory Labour
GRI-206	Anti-competitive Behaviour	GRI-410	Security Practices
GRI-300	**Environment**	GRI-411	Rights of Indigenous Peoples
GRI-301	Materials	GRI-412	Human Rights Assessment
GRI-302	Energy	GRI-413	Local Communities
GRI-303	Water	GRI-414	Supplier Social Assessment
GRI-304	Biodiversity	GRI-415	Public Policy
GRI-305	Emissions	GRI-416	Customer Health Safety
GRI-306	Effluents and Waste	GRI-417	Marketing and Labelling
GRI-307	Environmental Compliance	GRI-418	Customer Privacy

GRI-308	Supplier Environmental Assessment	GRI-419	Socioeconomic Compliance

Source; www.globalreporting.org/standards/media/2594/gri-standard-glossary-2020.pdf

Appendix-II

List of companies, listed on the National Stock Exchange of India

Sl. No.	List of companies
1	Grasim Industries Ltd.
2	I T C Ltd.
3	Marico Ltd.
4	N M D C Ltd.
5	Oil & Natural Gas Corpn. Ltd.
6	Oil India Ltd.
7	Petronet L N G Ltd.
8	Tata Consumer Products Ltd.

9	U P L Ltd.
10	3M India Ltd.
11	A C C Ltd.
12	Aarti Industries Ltd.
13	Ambuja Cements Ltd.
14	Asian Paints Ltd.
15	Bharat Heavy Electricals Ltd.
16	Bharat Petroleum Corpn. Ltd.
17	Bosch Ltd.
18	Colgate-Palmolive (India) Ltd.
19	D L F Ltd.
20	Dr. Reddy'S Laboratories Ltd.
21	Eicher Motors Ltd.
22	G A I L (India) Ltd.
23	Glenmark Pharmaceuticals Ltd.
24	Godrej Consumer Products Ltd.
25	Godrej Industries Ltd.
26	Havells India Ltd.
27	Hero Motocorp Ltd.
28	Hexaware Technologies Ltd.
29	Hindalco Industries Ltd.
30	Hindustan Petroleum Corpn. Ltd.
31	Hindustan Zinc Ltd.
32	Indian Oil Corpn. Ltd.
33	J K Cement Ltd.
34	J S W Energy Ltd.
35	J S W Steel Ltd.
36	Jindal Steel & Power Ltd.
37	Kansai Nerolac Paints Ltd.
38	Larsen & Toubro Infotech Ltd.

39	Larsen & Toubro Ltd.
40	Mahindra & Mahindra Ltd.
41	Mindtree Ltd.
42	N T P C Ltd.
43	Natco Pharma Ltd.
44	Page Industries Ltd.
45	Pidilite Industries Ltd.
46	Power Grid Corpn. Of India Ltd.
47	Reliance Industries Ltd.
48	S R F Ltd.
49	Shree Cement Ltd.
50	Siemens Ltd.
51	Steel Authority Of India Ltd.
52	T V S Motor Co. Ltd.
53	Tata Chemicals Ltd.
54	Tata Power Co. Ltd.
55	Ultratech Cement Ltd.
56	Vedanta Ltd.
57	Voltas Ltd.
58	Whirlpool of India Ltd.
59	Adani Enterprises Ltd.
60	Adani Ports & Special Economic Zone Ltd.
61	Adani Transmission Ltd.
62	Aditya Birla Capital Ltd.
63	Aditya Birla Fashion & Retail Ltd.
64	Ashok Leyland Ltd.
65	Axis Bank Ltd.
66	Bharti Airtel Ltd.
67	Coal India Ltd.
68	Godrej Properties Ltd.

69	H D F C Bank Ltd.
70	Indian Hotels Co. Ltd.
71	Indusind Bank Ltd.
72	Infosys Ltd.
73	L & T Finance Holdings Ltd.
74	Mahindra & Mahindra Financial Services Ltd.
75	Maruti Suzuki India Ltd.
76	State Bank Of India
77	Tata Communications Ltd.
78	Tata Consultancy Services Ltd.
79	Tata Motors Ltd.
80	Tech Mahindra Ltd.
81	Wipro Ltd.
82	Yes Bank Ltd.

Source; https://www.nseindia.com/

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1 Global Reporting Initiative and Corporate Sustainability: An Analysis of the Practices in the Indian Context

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INTRODUCTION

Sustainability is the buzzword that is increasingly appearing in the vision, mission, goals and objectives of the organisation. Companies in the given uncertain era, have no choice, but to make their operations sustainable. Hence, the focus of these organisations of late, includes the economic measures, protecting the environment and the social justice.

SUSTAINABILITY REPORTING

Sustainability reporting is one such measure that helps organisations report and manages change in maintaining the equilibrium. With the increased customer awareness and education, there is mounting pressure on the organisations to report on the sustainable activities of the organisation. The government, stock exchanges, markets, investors and society are also necessitating the organisations to be more transparent. Concurrently, organisations are mindful of the Sustainable Reporting and have shown a willingness to report the economic, sociological and ecological performance. The key idea which lies behind the concept of sustainability development is that there is a trade-off between continuous economic growth and the sustainability of environment (Welford, 1993). Corporate sustainability is an approach used by managers to create long-term shareholder value by taking opportunities and managing risks resulting from economic, environmental and social development (DJSI, 2011).The stakeholder demand for transparency and accountability has pushed many companies to corporate sustainability on their corporate agendas and report externally on their corporate sustainability activities (Nielsen&Thomsen, 2007).

Global Reporting Initiative (GRI) is the internationally agreed disclosure for the quality of sustainability report. The GRI guidelines enable the organisations to report their sustainability performance similar to the financial reporting.

THE GLOBAL SCENARIO

Sustainability Reporting has been made mandatory in the U.S. The U.S. Securities and Exchange Commission issued guidelines for the reporting sustainable activities of the organisation. Over 80 percent of companies worldwide now publish sustainability reports (KPMG, 2008) and considerable research has been devoted to examining theirincreasing use, the reasons for their development, and their relevance to improving theaccountability of corporate leaders (Deegan, 2002; Unerman, et al., 2007; Adams, 2004; Gilbert & Rasche, 2007; Owen, et al., 2000). Some of the organisations align their sustainability reporting with the financial reporting, thus making the reports more transparent. Countries like Turkey, Brazil and South Africa also have legislation that direct organisations to disclose their sus-

ISSN : 0971-8729

యోజన

సంపుటి : 46 సంచిక : 12 అభివృద్ధి మాసపత్రిక అక్టోబర్, 2018 ₹ 22

మహిళా సాధికారత

అంతటా నీవేనమ్మా, అన్నిటా నీవేనమ్మా....
మనేకా సంజయ్ గాంధీ

నిరంతర రక్షణే మహిళల సశక్తీకరణ
ప్రీతి సుదాన్

ఆర్థిక ఆలంబనే మహిళా సాధికారత
లేఖా చక్రవర్తి, పియూష్ గాంధీ

ప్రత్యేక వ్యాసం :

ముస్లిం మహిళలు - సాధికారత
సయ్యదా హమీద్

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వ్యాపారాభివృద్ధితో మహిళా సాధికారిత
ఎన్.వి. మాధురి

వ్యవస్థాపన ద్వారా మహిళా సాధికారత

- ప్రొఫెసర్ సీత వంక

- రాజేంద్ర మహానందియా

గత రెండు దశాబ్దాలుగా వ్యాపార, పారిశ్రామిక వ్యవస్థాపనలో మహిళలు పెద్ద సంఖ్యలో పాల్గొంటున్నారు. వ్యాపార విస్తరణ ద్వారా తమ చుట్టుపక్కలవారికీ, సమాజానికేగాక జాతీయ, ప్రపంచ ఆర్థిక వ్యవస్థల అభివృద్ధికి కూడా వారు అందజేసిన సహకారం ఎనలేనిది. వ్యాపారంలో నాయకత్వ పాత్రవహించడానికి వారు వైవిధ్యభరితమైన మార్గాలు అనుసరించడమేగాక, నిర్వహణలో ఆటుపోట్లను అధిగమించేందుకు సవాళ్ళను ఎదుర్కొనేందుకు, తమ వ్యాపార ప్రత్యేకతను చాటుకునేందుకు కూడా వారు చాలా శ్రమిస్తున్నారు.

ఏ దేశంలోనైనా వేగవంతమైన, సమతుల్య మరియు నిలకడైన ఆర్థికవృద్ధి రేటును సాధించమే ప్రాథమిక లక్ష్యంగా ఉంటుంది. అందువల్ల ప్రభుత్వం ఇందుకోసం అవసరమైన సమర్థవంతమైన వ్యూహాలను రూపొందించి అన్నివర్గాలవారికి వాటిపై తగిన ఆసక్తి కల్పించడం, వివిధ వర్గాల మధ్య సమన్వయం సాధించడం అభివృద్ధిలో భాగస్వామ్యం కల్పించేందుకు కృషి చేయవలసి ఉంటుంది. ఇందుకోసం నిర్మాణాత్మకమైన మార్పు జరగాల్సిఉంటుంది. ఎందుకంటే గతంలో మాదిరిగానే ప్రభుత్వరంగాన్ని విస్తరించి ఉపాధి కల్పించడం వల్ల ఎలాంటి ఉపయోగం ఉండకపోగా ఆశించిన ప్రయోజనాలను పొందడం కూడా సాధ్యం కాదు. పైగా దీనివల్ల లభించే నికరఫలితం ఏమిటంటే నిరుద్యోగం పెరిగిపోవడమే. అందువల్లనే ప్రపంచవ్యాప్తంగా ప్రభుత్వరంగంలో ఉపాధికల్పన అవకాశాలు క్రమంగా తగ్గిపోతున్నాయి. నిరుద్యోగసమస్యను ఎదుర్కొనేందుకు ప్రభుత్వోద్యోగాల కల్పన బదులు స్వయంఉపాధి, వ్యవస్థాపన వంటి ప్రత్యామ్నాయ భావనలు ప్రపంచవ్యాప్తంగా ఊపందుకుంటున్నాయి. ఉపాధికల్పనకు, ఆర్థికాభివృద్ధికి అవసరమైన వ్యవస్థాపక శక్తిని ప్రోత్సహించే పర్యావరణాన్ని ఏర్పరచడమే కీలక ధ్యేయంగా ఉండేవిధంగా విధానాల రూపకల్పనపై ప్రభుత్వం దృష్టిసారించవలసి ఉంటుంది.

భారత దేశపు దృష్టాంతం

అభివృద్ధి చెందుతున్న భారతదేశం కూడా ఆర్థికాభివృద్ధి పథంలో ఇలాంటి పలు సవాళ్ళను ఎదుర్కొన్నది. ఈ సమస్యలను తగ్గించడానికి భారతదేశ అభివృద్ధి ప్రణాళికలో ఉద్యోగ అవకాశాలు సృష్టించడంపైనే ప్రధానంగా దృష్టి సారించడంతో ఒత్తిడి పెరిగింది. మన పంచవర్ష ప్రణాళికలలో, ముఖ్యంగా ఆరు, పది పంచవర్ష ప్రణాళికల్లో, ఉపాధికల్పన కార్యక్రమాలకు అధికప్రాధాన్యత లభించింది. ఆవిధంగా అభివృద్ధి ప్రణాళికల రూపకల్పనలో ఉపాధి కల్పన వ్యూహం కీలకమైన అంశంగా మారింది. ప్రపంచీకరణ ప్రభావంవల్ల ఉపాధి అవకాశాలలో అసమానతలను పెరిగిపోతున్నాయి. కొత్త ఉద్యోగాలు పొందాలంటే ఆధునిక సాంకేతిక పరిజ్ఞానం, నూతన ఉద్యోగ నిర్వహణలో నైపుణ్యం, శక్తిసామర్థ్యాలు సంతరించుకోవడం ఎంతో అవసరమౌతోంది. భారతదేశం వంటి అభివృద్ధి చెందుతున్న దేశంలో ఆర్థిక అసమానతలు తగ్గించడానికి వ్యక్తిగత ఉపాధి కల్పించడం కంటే వ్యవస్థాపకతను ప్రోత్సహించడం ద్వారా హెచ్చుమందికి ఉపాధి కల్పించడం అధిక ప్రాధాన్యత సంతరించుకున్నది.

ప్రొఫెసర్, స్కూల్ ఆఫ్ మేనేజ్‌మెంట్ స్టడీస్, హైదరాబాద్ కేంద్రీయ విశ్వవిద్యాలయం. E-mail : vankasita@gmail.com

పరిశోధన విద్యార్థి, స్కూల్ ఆఫ్ మేనేజ్‌మెంట్ స్టడీస్, హైదరాబాద్ కేంద్రీయ విశ్వవిద్యాలయం.

Viewpoint

Generation Z entering the workforce: the need for sustainable strategies in maximizing their talent

Bharat Chillakuri and Rajendra Mahanandia

Bharat Chillakuri is a Client Account Manager at Deloitte LLP, (Offices of the USA), USA.
Rajendra Mahanandia is Doctoral Research Fellow at the School of Management Studies, University of Hyderabad, Hyderabad, India.

Millennials and their work style have been the most sought-after research topic for HR leaders. Although it has been three decades since the millennials entered the workplace, understanding them still remained dubious. While the research continues to go deep into the millennials, the HR leaders are faced with another cohort group known as *Generation Z.* An attempt is being made to build strategies for developing Generation Z, which can be compelling propositions that continue to generate a pipeline of future talent.

Generation Z consists of people who are born after 1995 (Lanier, 2017). A study by the American Psychological Association (2017) states that 77 per cent of this cohort group are college-going students, who are just entering the workforce. Research indicates that the majority of Generation Z are children of millennials, and hence, they possess the qualities of millennials like being loyal, thoughtful, responsible, and determined. However, they differ from the millennial generation as this cohort group is considered to be more entrepreneurial, and strive for their own identity. Having said that, Generation Z throws challenges to other cohort groups, as they behave differently from earlier generations, thus bringing potential changes in the organizational landscape. The generational differences in the workplace cannot be overlooked but only has to be welcomed, and hence, an attempt is being made to understand Generation Z characteristics, and a growing need for HR to reinvent the workplace to accommodate this cohort group.

Early starters

The higher education system has gone through a paradigm shift with the advancement of technology challenging the traditional system of learning. With technology making inroads into the academic world, students have access to all the information they need. Further, Generation Z is active on social networking sites like Facebook, Twitter, and Instagram, etc., which help them to gain various facets of knowledge with a sense of responsibility. As students, they are encouraged to debate and participate in discussions providing them with an opportunity to present their point of view (Cameron and Pagnattaro, 2017). They continue to exhibit these traits as they enter the corporate world, thereby questioning the conventional way of doing things. Thus, it is essential for HR leaders to conduct new hire orientation sessions addressing basic questions and helping them to embrace organizational values and ethics. Face-to-face communication, in-person discussions, and constant communication over email will

Volume 7 Issue 1 June 2018

ISSN: 2278-3172

International Journal of Business Ethics in Developing Economies

A Peer Reviewed Journal of Publishing India Group

(UGC Approval No.: 47725)

Indexed: EBSCO, Proquest, i-scholar database; Impact Factor: 4.220

International Journal of Business Ethics in Developing Economies
7 (1) 2018, 41-54
http://publishingindia.com/ijbede/

Living and Working Conditions of Tribal Labour: A Study of Koraput District, Odisha

Rajendra Mahanandia*, Bharat Chillakuri**

Abstract *India is a developing country and considered to be world's fastest-growing economy. Though India has witnessed tremendous progress since Independence, the country is still working on providing the basic infrastructure in the rural areas. Geographically, it is the seventh largest country in the world. Based on the gross domestic product, it is also 7th largest. The country is poised to become the third largest by 2030. Concurrently, 70% of the population living in rural areas is below the poverty line of which tribals living in the villages form the greatest pie. This paper is an attempt to study the living and working conditions of tribal labour with a focus on Koraput district, Odisha. A research study is undertaken to study the working and living conditions of tribal labour like drinking water and shelter. Further, an attempt is made to capture their source of income and expenditure pattern. Based on the first-hand information, the study provides findings and suggestions for the better improvement of lives of tribal labour.*

Keywords *Tribal, Labour, Working Conditions, Odisha*

INTRODUCTION

As a community compared with the mainstream society, the tribal labour of Koraput district is more dynamic with regards to the rate of changes in their working and living conditions. Because of the prevailing extreme poverty, illiteracy, and inaccessibility to the schemes and services of the government, their development is slow since Independence. With the seamless efforts of the government and some NGOs, a slight improvement in the working living conditions of tribal labours is seen. The history of Koraput district dates back to 3rd century B.C.. It originally belonged to the valiant and dreaded ATVIKA people, who fought the Kalinga War to restore the empire's glory. The medieval period was marked by the frequent change of rulers of several dynasties such as the Satavahanas, Ikshvakas, Nalas, Gangas king, and kings of Suryavansa. Most of the kingdoms belonged to central and southern states; however, it passed into the hands of Mughal Emperors with time. In 1965, Robert Clive obtained the Dewani of Bengal, Bihar, and Odisha from the various Mughal Emperor. However, later Koraput was made part of Vizianagaram district under the Madras presidency. The undivided Koraput was formed into a district under the province of Odisha on 1st April 1936, when the latter attained independent statehood. The district was one of the largest districts of the county. Now, it has been bifurcated into four districts named Koraput, Rayagada, Nabarangapur, and Malkangiri from 1st October 1992 onwards.

LITERATURE REVIEW

Socio-economic changes of tribal labour in the district of Koraput is linked with the development of the villages in the district. An important demographic feature of Koraput is that the growth of tribal population has increased at the report 3.57% in the district; whereas, it increased at 2.52% rate in the state as a whole during the decades 1961-1981. The percentage of tribal population of the state is gradually increasing. In 1981, the percentage rose to 23.12%, which was only 17.57% in 1951. Tribal society is male dominated where the sex ratio is 954 and 985 for the different major tribes of the district. In case of the non-tribal also, the theory is same with 980 female per thousand males. The tribal literate and growth in literacy is also not significant. Productive education is a vital link in the process of development, but the education level among the tribals is far below the average compared to non-tribal population. Work participation rate of the tribals is high in comparison to non-tribal population. Unemployment, therefore, is minimum. The tradition-bound activities are predominant. These are seasonal in nature and where the norms of work discipline is absent collected by Debanjani Baxipatro M.Phil. 2008 BU. Beteille (1992) argued that when anthropologists speak of tribes, they mean communities of people who have remained outside of the state and civilization, whether out of choice or necessity, which was the reason of calling them 'non-civilized,' but not uncivilized. In India, they all stood more or less outside

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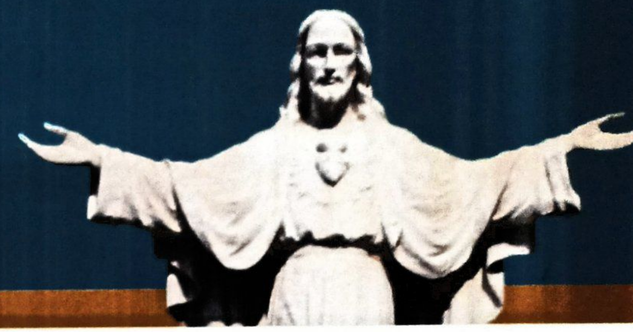

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by Rajendra Mahanandia

Submission date: 29-Jun-2022 05:07PM (UTC+0530)
Submission ID: 1864568724
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