

## **Corporate Sustainability Goal Setting of Indian Companies: An analysis of NIFTY 250 Companies**

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To embrace CSR in its entirety, businesses must understand it as a multilayered concept with four interrelated and often overlapping dimensions, namely, economic, legal, ethical, and philanthropic. Publishing of sustainability information and data into the mainstream report brings it to the attention of investors and shareholders and allows a wider, more sustainable conception of value to foster. As ESG and sustainability gain paramount importance globally, Indian enterprises are increasingly recognizing the importance of corporate sustainability goal setting, complying and revising those goals and their contribution to global SDGs, as a potential to drive positive impact, enhance transparency and foster value creation.

The aim of this study is to investigate the degree to which businesses include environmental and social goals in their sustainability reports. This paper examines the status of sustainability targets set by Indian companies. Specifically, the trends of environment-related and social goals are analyzed by comparing the period of setting each goal over the five years from 2019 to 2023. The report also analyzes the status of Indian companies' commitment to the Sustainable Development Goals (SDGs) and their responses to each of the 17 goals from 2020 to 2023. The analysis shows that companies do set their sustainability targets for specific years, such as 2030, but the frequency of target revision is not as frequent as in ordinary medium-term management plans. While the setting of long-term targets was influenced by industry in terms of environment-related targets, there were few industry-specific characteristics in terms of social-related targets. The construction industry companies showed a high rate of disclosure and a long period for setting both environment and social-related targets. Since the United Nations approved the SDGs in 2015, Indian companies have been trying to more proactively reflect the SDGs in their business management, and the number of companies disclosing their commitment to the SDGs has been increasing. However, the priority has been placed on activities related to manufacturing and consumer responsibility, which are close to their core business, and on activities related to global warming. Through these studies, this paper attempts to contribute to the existing research on the status of setting sustainability goals by presenting evidence, especially in relation to corporate plans.

**Keywords-** *Corporate sustainability, Management planning, Numerical targets, Sustainable development goals*

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## **Introduction**

To embrace CSR in its entirety, businesses must understand it as a multilayered concept with four interrelated and often overlapping dimensions, namely, economic, legal, ethical, and philanthropic. The ‘Social Performance Model’ introduced by Carroll in 1979, suggests that the responsibility of business encompasses not only basic and necessary responsibilities such as economic and legal, but also ethical which goes beyond the regular activities and philanthropic acts which are, although voluntary, are desired by the society. ‘Stakeholder Theory’ which is much relevant today, propounded by Edward Freeman in the 1980s is an alternative approach to CSR. The theory premises that a corporation is in a network of relationships and hence corporate strategies should be designed so as to satisfy the demands of all stakeholders which includes shareholders, employees, customers, suppliers, competitors, government and even the wider community (Freeman, 1994).

In addition to firm’s CSR activities, the global backdrop of sustainable development, as governed by the Sustainable Development Goals (SDGs) of the United Nations, has further impacted how firms perceive their role in society in addition to the national CSR duties. The SDGs created in 2015 as an international call to action to eradicate poverty, safeguard the environment, and guarantee that everyone lives in peace and prosperity by the year 2030 (UNDP, 2015), give a thorough framework to direct efforts toward global development.

Businesses also adhere to these CSR practices because of several benefits that accrue to them in the long run. Like improving the reputation of the firm, build trust, brand image and acceptability among people. All these benefits further result in competitive advantages and improvement in profit margins in the long- term.

In recent years, there has been an active movement to encourage companies to set more substantial sustainability management goals. In particular, the Science Based Target (SBT) encourages companies to set targets based on scientific evidence in

order to achieve the 2°C target set in the Paris Agreement in 2015. The Sustainable Development Goals (SDGs), also adopted by the United Nations in 2015, set development goals for the year 2030, aiming for the ideal state of human, global, and social prosperity. The SDG Compass also includes an outside-in approach to goal-setting based on external consensus as a way to link these goals to corporate sustainability activities.

All of the companies adopt an approach of setting corporate sustainability goals based on the standards required by society as a whole and the planet as a whole (Biermann and Kim, 2020). The goal is to move from organization-centered goal setting to goals based on ecological resilience (Bjørn, Lloyd, & Matthews, 2021), providing a framework for implementing goal setting that prioritizes scientific evidence and social consensus rather than internal organizational logic. However, these goal-setting approaches have not caught on with many companies, especially those that often refer to these frameworks as concepts but have not reached the stage of actually setting numerical goals (Bjørn, Lloyd, & Matthews, 2021).

Thus, the issue of goal setting in sustainability management has become an important research topic both academically and practically. However, compared to technical and engineering research on goal setting that emphasizes scientific evidence, there has not been much research on sustainability goal setting in the field of business administration. Traditionally, the issue of goal setting in business administration has been positioned as a tool of management control system (MCS) or a process of strategy formulation. As special issues on MCS for sustainability and the environment have been compiled frequently in recent years (Ali et al. 2022; Alakkas et al. 2023), it is expected to become an important research topic in the field of management studies in the future.

The presence of CSR committees positively influences the contribution of business to SDG's (Daniel-Vasconcellos et al., 2022 and Sekarlangit & Wardhari, 2021). It

is quite evident that just financial information about the company is not adequate to assess the business and predict its future competitiveness along with the risk, non-financial information is the key issue (Guitart & Palomo, 2021). So, the importance of aligning corporate sustainability strategy with the overall business strategy cannot be undermined (Petrescu et al., 2020) as financial indicators alone are not sufficient to predict the evolution of business competitiveness and anticipate risks, although in many cases even listed companies do not prepare sustainability reports (Farooq et al., 2021).

In response, this study will identify the status of sustainability goal-setting by Indian firms. Specifically, the trends of environmental and social goals are analyzed over the five years from 2019 to 2023. The study also examines the status of SDGs compliance over the four years from 2020 to 2023 and analyzes the relationship between the status of compliance and goal setting.

The remainder of the study is organized as follows. Section 1 throws light on some of the important studies related to sustainability, especially in Indian context. Section 2 talks about the objectives of the study. Section 3 is research methodology. Section 4 discusses the results and findings, section 5 is conclusion followed by limitations and implications for future research.

## **Literature Review**

The concept of Corporate Social Responsibility is not new. But, in recent decades it has evolved itself from just a philanthropic activity to a strategic commitment on the part of an organization.

The United Nations Industrial Development Organization described CSR as a —management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. Organizations spending on CSR initiatives are trying to give back to the society, while at the same time making profits.

CSR now reflects the social expectations of firms, and is a crucial component of the corporate strategy all over the world (Carroll & Shabana, 2010). India being an emerging economy is an attractive destination for foreign capital, and thereby it gives rise to the importance of assessing the degree and extent of ESG performance in India. Most of the dominating research in CSR focused on developed economies, Adegbite et al. (2019) in UK; Bruna et al. (2022) in Europe; Gao et al. (2023) in China. With the aim of filling this gap in the existing body of literature, the present study is an attempt to add to the existing literature on emerging economies. CSR in India has a unique environment. Businesses in India have a long history of giving back to the neighborhoods in which they operate, in addition to their primary interest in maximizing profits (Muthuri, Moon, & Idemudia, 2012). Some of India's most significant reporting provisions take a broader role and incorporate environmental and social sustainability goals. For CSR in India, year 2013 acted as a turning point, where Companies act was changed to introduce section 135. Purpose of this section is to ask companies to establish a CSR committee of the board, develop CSR policies and spend 2% of profits in immediately preceding three financial years on CSR programs. In addition to this the global backdrop of sustainable development, as governed by the Sustainable Development Goals (SDGs) of the United Nations, has further impacted how firms perceive their role in society in addition to the national CSR duties.

The SDGs and the worldwide commitment to them had an impact on India's contemporary concept of CSR, which led to the development of a distinctive CSR environment. Previous Studies show how Indian firms contribute to sustainable development.

Premlata and Agarwal A. (2013), studied the CSR initiatives of selected Indian companies and found that most of them are trying to improve their environmental and social performances by adopting various measures, the prominent ones being a code of conduct related to CSR initiatives, social audit, and environmental

certification. The study also found that the key challenge in CSR implementation is collaboration and coordination between the Government and corporate sector and suggested ways to achieve them. A detailed study on the challenges of CSR in India was done by Kumar N. (2014). The study found that there was a need to spread awareness among the general public and the corporates should adopt a comprehensive approach toward CSR for effective results. Shyam R. (2016), analysed the challenges faced by the Indian corporates in the field of CSR interventions and found challenges like transparency, visibility, and lack of community interest to be the focus areas.

Saxena (2016) studied various issues and challenges associated with CSR. The history of CSR in India before 1900 and after 1900 till the present was reviewed by the author. Currently, Indian companies work on the stakeholder model of CSR. The stakeholder model came into existence during the 1900s and is still continuing. It works on a triple bottom line i.e., people, planet and profit. Today, demands of customers, investors, Government, and labour unions are considered to be key drivers of CSR. Issues like transparency, narrow perspective, lack of consensus, lack of infrastructure, and visibility are considered to be the main challenges to CSR. Creating awareness among the general public is the need of the hour for an effective CSR implementation by various corporate houses.

Studies done by Maji & Lohia, 2023; Ahmad et al., 2021; Sassen et al., 2016; Chelawat and Trivedi, 2016 investigated the impact of ESG performance on profitability in Indian emerging markets and concluded that ESG performance positively influences corporate profitability. A study done by Kalia and Aggarwal (2022) assessed the impact of ESG performance on FP and reported that ESG performance has a positive impact on FP in advanced economies but an adverse influence on emerging economies. Likewise, Jyoti and Khanna (2021), Wasiuzzaman et al. (2022), and Agarwal et al. (2023) documented the negative impact of ESG performance on FP

Prieto-Carrón et al. (2016) aimed at incorporating new insights into the CSR study. They talked about the impacts of CSR initiatives, the relationship between business and poverty, issues of power & participation in CSR, and governance-related dimensions of CSR. They are of the view that currently only one side view of CSR is being studied, and various sensitive questions related to CSR are ignored.

The study had in fact suggested that both pros and cons of CSR initiatives have to be taken into account, especially in developing countries, so more collaborative studies on CSR need to be done to develop better impact assessment methodologies. SDG's provide a clear roadmap for company's sustainability, serve as a benchmark for assessing company's progress towards sustainability and accordingly set and revise their internal targets. According to a study published by the Global Compact and Accenture (2018), 87% of business leaders believe that the SDGs offer an opportunity to rethink their approach to sustainable value creation and 89% say that a commitment to sustainability translates into real impact in their sector. This further highlights the need for integrating 2030 agenda into corporate strategy. (García Navarro & Granda Revilla, 2020). Still there have been researches which highlight the fact that commitment of many organizations to the 2030 agenda is just superficial, suggesting a process of "SDG-washing" (Heras-Saizarbitoria et al., 2022).

In 2020, Biermann and Kim (2020) presented an acceptable limit for environmental restoration by the Earth's ecosystems in their concept of PB, and these ideas have had a significant impact on the SDGs. The relationship between corporate performance and PB has been clarified by Antonini and Larrinaga (2017) and others, and these ideas have been adopted in reports by the Global Reporting Initiative and the World Business Council for Sustainable Development, and are influencing the efforts of companies.

While these technological developments are undoubtedly important findings in linking the environment and the economy, many studies have shown that

technologically superior indicators are not always adopted by companies (e.g., Matejko & Sommer, 2021), and the discussion in the management domain need to be joined with the following. One of these is the discussion of setting sustainability goals.

The argument has recently been applied to the field of sustainability. Dragomir, Dumitru, & Perevoznic (2023) positioned the goal-setting function as one of the tools that make up MCS and developed an argument for sustainability goal-setting based on previous studies in the field.

In addition, *Business, Strategy and the Environment* has published a series of articles on setting sustainability goals and is becoming established as a field. Almici (2023) analyzes the integration of sustainability information into compensation design. He found that 33% of companies reflected sustainability goals in their compensation systems, that these were mainly companies in industries with a high environmental impact, that these goals were mainly short-term goals, and that social goals were more reflected in the design than environmental goals. Bjørn, Lloyd, and Matthews, (2021) analyze whether sustainability goal setting is organization-centric or environmentally acceptable (resilience-centric). Most companies in their analysis of companies remained organization-centered in their goal setting, and only a few companies were observed to exhibit a qualitative process.

However, all of the studies are based on descriptive statistical analysis, and since this is a field in its budding stage both practically and academically, the description of the current state of corporate practice is considered to be an important contribution at this stage. Under these circumstances, this study analyzes the status of sustainability goals set by Indian companies in relation to their long-term goals and their responses to the SDGs.

## **Objectives of the Study**

1. To analyze the target setting period for environment related and social related items of select Indian companies.
2. To analyze the revision status of environmental and social goals of the companies, along with their compliance with SDG's.
3. To examine the variation of target setting period and revision status between manufacturing and non-manufacturing firms.

## **Research Methods**

As per the objectives of the study, secondary data has been used to analyze the period for setting sustainability goals for Indian companies. The information is taken from CSR- related reports, as well as the annual reports of the companies from 2019 till 2023.

The study analyzes the sustainable practices of large and mid-cap companies, so the companies listed in NIFTY Large Midcap 250 index are chosen for the purpose of this study. This index reflects the performance of a portfolio of 100 large cap and 150 midcap companies listed on NSE. Aggregate weights of large cap and mid cap stocks is 50% each, thereby giving a good representation of the companies with good market capitalization. The sample population is selected, considering the fact, that if successful companies do not fulfill CSR requirements, then smaller companies cannot be expected to be CSR compliant. Moreover, big companies are more under regulatory scrutiny, so they have greater motivation to observe statutory compliance (Smith, 2013). From the population of 250 companies, a sample of specific companies is taken based on random sampling. This gives every company an equal chance of being selected thus giving a better chance of representation to each company. Random number generator in excel is used to do this.

The target setting period for environment related and social related items are examined and the longest target year for each of the listed environmental related and social related items are extracted. The survey period is five years from 2019 to 2023.

The "year in which the report was issued - 1 " is subtracted from the "year for which the target was set", gives the period for which the company's target was set for that year. For example, if a report issued in FY2022 sets a greenhouse gas control target for FY2030, sets 9 years as target period for setting the company's 2022 environmental/social target.  $[2030-(2022-1)= 9 \text{ years}]$  .

Descriptive statistics is used to provide basic information about the variables in the data set as well as to highlight the potential relationships between variables

For further analysis, the sample is further broken down into manufacturing and non-manufacturing firms. Stratified sampling is used and accordingly samples drawn from each sub group. Since they are independent groups so Wilcoxon rank sum test is used to compare the statistical difference between the two groups.

More detailed analysis is done by classifying the firms into 11 categories: electricity and gas, materials, machinery, food, transportation equipment, pharmaceuticals, telecommunications, other manufacturing, finance, services, and construction, to analyze trends in goal setting.

## **Findings and Discussion**

### **Target Setting Period**

In this section, the changes in the period over which NIFTY LargeMidcap 250 Index firms set sustainability targets will be analyzed. First, the status and period of setting environmental targets are analyzed, and then the status and period of setting social targets, followed by an analysis of the trends in sustainability target setting by dividing the sample into manufacturing and non-manufacturing firms.

As of 2019, 121 companies (48.4% of all NIFTY Large Midcap 250 Index companies) had set numerical targets for environmental items, and in the following three years, the number increased 1.46 times, with 176 companies disclosing their targets. Compared to social targets, it is relatively easier to manage activities with

numerical targets and to be familiar with the use of such targets, which is why companies have been proactive in setting targets.

In contrast, as for social targets, 43 companies, or 17.2% of the NIFTY Large Midcap 250 Index companies, had set numerical targets for social-related items as of 2019, and these targets increased 3.42 times over the following three years, with 147 companies disclosing their targets. However, in recent years, an increasing number of companies have set and disclosed numerical targets for social goals as well as environmental goals, and the number of companies disclosing numerical targets for social goals has increased to a level similar to that for environment-related goals. In the following sections, the status of target setting in more detail for both environmental and social targets will be analyzed.

### **Period for Setting Environmental Targets**

As shown in Table 1, the number of Indian companies setting numerical environmental targets has increased by 45.4% between 2019 and 2022, but the average period for setting targets has been declining consistently. The number of companies that have set 2025 targets has remained almost unchanged. Further in terms of variation it is witnessed that the environmental targets show a declining variation indicating that the firms have been more consistent in their timeline for setting environmental goals.

Table 2 compares the revision status of environmental targets of Indian companies. The top four rows compare the increase or decrease in the target setting period compared to the previous year's target, and the bottom two rows compare the increase or decrease from 2019, the first year of the tabulation. The shaded cells indicate the number of firms that did not change their target setting during the period, while the cells to the right of these cells include firms that extended their target setting period. Table 2 shows that, on average, 15.8% of companies that have disclosed their goals for two or more years in a row have extended their

environmental goals each year, and more than half of the companies that have set goals for the past five years in a row have extended their goals.

**Table 1: Environmental Target Setting Periods for Indian Companies**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	121 (48.4%)	14.08	13.13	12	0	37	0.52	-1.49	67 (55.3%)
2020	141 (56.4%)	11.75	11.93	4	0	38	0.98	-0.62	67 (47.6%)
2021	154 (61.6%)	11.02	11.35	4	0	39	1.28	0.12	65 (42.3%)
2022	176 (70.4%)	8.95	10.15	5	0	35	1.83	2.02	66 (37.5%)
2023	54 (21.6%)	8.82	9.83	6	1	36	2.16	3.21	20 (37.1%)

**Table 2: Revision of Environmental Targets of Indian Companies**

2019 - 2020	No. of revisions	-1	1	3	4	9	13	29	30								N=103
	No. of companies	92	3	1	2	2	1	1	1								
2020 - 2021	No. of revisions	-1	1	4	9	12	13	14	24	29							N=114
	No. of companies	90	2	2	1	1	1	2	2	3							
2021 - 2022	No. of revisions	-1	1	3	4	9	19	29	31								N=130
	No. of companies	112	3	1	2	5	2	4	1								
	No. of revisions	-1	1	1	2	4	29	31									N=41

2022 - 2023	No. of companies	34	1	1	1	1	2	1							
2019 - 2023	No. of revisions	4	1	1	6	11	21	26	27	28					N=32
	No. of companies	14	1	3	4	2	1	5	1	1					
2019 - 2022	No. of revisions	3	2	1	1	2	5	7	11	12	22	27	28	29	N=100
	No. of companies	56	1	3	1	7	1	14	3	2	2	8	1	1	

### Period for Setting Social Goals

Regarding the status of setting social targets for Indian companies, as shown in Table 3, the number of companies setting numerical targets increased by 3.42 times between 2019 and 2022. Although the percentage of companies that have set targets is smaller than in Table 1, the trend toward setting quantitative targets for social items has been increasing over the past few years, although the average target-setting period has increased or decreased.

Looking at Table 4, a tendency for companies to extend their social goals can be read. As in Table 2, the top four rows compare the increase or decrease in the target setting period with the previous year, and the bottom two rows compare the increase or decrease from 2019, the first year of tabulation, respectively. The shaded cells indicate the number of firms whose target setting did not change during the period, while the cells to the right of these cells indicate the period of the revised target. Table 4 shows that, on average, 16.1% of the companies that have disclosed their targets for two consecutive years have extended their social targets each year. Compared to Table 2, however, in most cases, the extension period is less than 10 years, and these extensions do not appear to be far outside the normal revision cycle.

**Table 3: Status of Indian Companies' Social Goal Setting Periods**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	43 (17.2%)	4.13	5.69	2	0	32	3.41	12.70	18 (41.8%)
2020	70 (28.0%)	3.91	3.76	3	0	33	4.44	26.95	40 (57.1%)
2021	122 (48.8%)	4.44	2.50	4	1	19	2.99	12.21	70 (57.4%)
2022	147 (58.8%)	5.14	3.03	5	1	20	2.44	8.73	79 (53.7%)
2023	43 (17.2%)	4.87	3.43	6	1	21	2.46	9.93	27 (62.7%)

### Impact of Manufacturing and Non-manufacturing Industries on the Duration of Environmental and Social Goals

The status of setting environmental and social targets is analyzed by dividing the sample into manufacturing (N=151) and non-manufacturing (N=99) industries based on the major categories of the NIFTY industry classification. First, regarding environmental targets, a comparison of Tables 5 and 6 shows that a larger percentage of manufacturing firms disclosed numerical targets than non-manufacturing firms, indicating that they are proactively setting environment-related numerical targets. However, non-manufacturing firms tended to set longer target periods than manufacturing firms, and Wilcoxon rank sum tests indicated that manufacturing firms set significantly shorter target periods than non-manufacturing firms in 2023 ( $p < 0.05$ ), 2022 ( $p < 0.01$ ), and 2021 ( $p < 0.01$ ). The results indicated that.

**Table 4: Revision of Social Goals of Indian Companies**

2019-2020	No. of revisions				-1	1	1	2	4	7							N=33
	No. of companies				27	1	1	1	2	1							
2020-2021	No. of revisions				-1	1	1	2	3	4							N=55
	No. of companies				45	1	4	2	1	2							

2021-2022	No. of revisions				-1	1	9	29									N=97
	No. of companies				92	2	2	1									
2022-2023	No. of revisions				-1	3	1	6	9								N=36
	No. of companies				29	3	2	1	1								
2019-2023	No. of revisions				-4	3	2	1	0	6	26						N=9
	No. of companies				2	1	1	2	1	1	1						
2019-2022	No. of revisions				-3	1	0	1	2	3	5	6	7	27			N=33
	No. of companies				16	2	3	2	4	1	1	1	2	1			

The rightmost column shows the number of companies that have set 2025 targets and the percentage of companies that have set 2025 targets among those that have set numerical targets. Nearly half of the companies in the manufacturing industry set their environmental targets for the target period for the year 2025, which is a good time frame.

Next, regarding social goals, a less pronounced trend could not be read when comparing Tables 7 and 8. Although the number of firms setting numerical targets for social items increased for both manufacturing and non-manufacturing firms, there was no significant difference between the two. Based on the Wilcoxon rank-sum test for the period for which goals were set (results omitted), there was no significant difference between the manufacturing and non-manufacturing firms for each year. Similarly, there was no significant difference in the percentage of firms setting 2025 targets. As in the case of environmental targets, nearly half of both manufacturing and non-manufacturing firms had set a target for the year 2025, which is a good time frame.

**Table 5: Status of Environmental Targets set by Indian Companies (Manufacturing, N=151)**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	80 (52.9%)	4.13	5.69	2	0	32	3.41	12.70	49 (61.2%)
2020	92 (61.0%)	3.91	3.76	3	0	33	4.44	26.95	49 (53.2%)
2021	108 (71.5%)	4.44	2.50	4	1	19	2.99	12.21	53 (49.0%)
2022	120 (79.4%)	5.14	3.03	5	1	20	2.44	8.73	55 (45.8%)
2023	40 (26.4%)	4.87	3.43	6	1	21	2.46	9.93	17 (42.5%)

**Table 6: Status of Environmental Targets set by Indian Companies (Non-manufacturing, N=99)**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	41 (41.4%)	4.13	5.69	2	0	32	3.41	12.70	18 (43.9%)
2020	49 (49.4%)	3.91	3.76	3	0	33	4.44	26.95	18 (36.7%)
2021	46 (46.4%)	4.44	2.50	4	1	19	2.99	12.21	12 (26.1%)
2022	57 (57.6%)	5.14	3.03	5	1	20	2.44	8.73	12 (21.0%)
2023	13 (13.1%)	4.87	3.43	6	1	21	2.46	9.93	3 (23.1%)

**Table 7: Status of Social Goals set by Indian companies (Manufacturing, N=151)**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	28 (18.5%)	4.13	5.69	2	0	32	3.41	12.70	10 (35.7%)

2020	41 (27.1%)	3.91	3.76	3	0	33	4.44	26.95	19 (46.3%)
2021	76 (50.3%)	4.44	2.50	4	1	19	2.99	12.21	42 (55.2%)
2022	97 (64.3%)	5.14	3.03	5	1	20	2.44	8.73	53 (54.7%)
2023	29 (19.3%)	4.87	3.43	6	1	21	2.46	9.93	18 (62.1%)

**Table 8: Status of Social Goals set by Indian companies (Non-manufacturing, N=99)**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	15 (15.1%)	4.13	5.69	2	0	32	3.41	12.70	8 (53.3%)
2020	29 (29.2%)	3.91	3.76	3	0	33	4.44	26.95	21 (72.4%)
2021	47 (47.4%)	4.44	2.50	4	1	19	2.99	12.21	28 (59.5%)
2022	50 (50.6%)	5.14	3.03	5	1	20	2.44	8.73	27 (54.0%)
2023	14 (14.1%)	4.87	3.43	6	1	21	2.46	9.93	9 (64.3%)

### Industry Type for the Period of Setting Environmental and Social Goals

Next, the classification of industries as manufacturing and non-manufacturing firms in (3) are analyzed in more detail, and industries are classified into 11 categories: electricity and gas, materials, machinery, food, transportation equipment, pharmaceuticals, telecommunications, other manufacturing, finance, services, and construction, to analyze trends in goal setting. Table 9 shows descriptive statistics on the status of setting environmental targets for these 11 industries. Companies in the construction industry tended to set the longest-term goals, averaging 25.80 years, which is about twice as long as the average goal period of companies in the food industry, which is the next longest. At the same time, the disclosure ratio was 66.7%, the second highest after transportation equipment, indicating that they tend to actively set long-term targets.

Similar to construction and food, companies in transportation equipment, finance, machinery, and services tended to set longer-term goals. The disclosure rate was high in the construction, transportation equipment, and machinery industries, but low in the food, finance, and services industries. Thus, the length of time required to set targets and the level of willingness to disclose were not uniform across industries.

Table 10 shows descriptive statistics on the status of setting social targets for these 11 industries. Companies in the construction industry tended to set the longest-term goals, with an average of 7.24 years. At the same time, the disclosure rate was 46.7%, the highest after Electricity & Gas and Transportation Equipment, indicating that they actively disclose information. However, while there were some differences in the disclosure rates for social targets among the other industries, there were no significant differences in the target periods.

**Table 9: Environmental Targets set by Industry in 2019-2023 (N=1, 155)**

	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis
Electricity & Gas	13 (52.0%)	8.23	4.8	11	0	14	-0.38	-1.6
Raw materials	123 (54.7%)	6.46	8.76	3	-1	35	2.21	3.73
Machinery	162 (66.1%)	9.26	10.49	5	-1	35	1.45	0.79
Food	24 (36.9%)	13.00	14.46	4	-1	35	0.55	-1.64
Transportation equipment	34 (68.0%)	12.18	14.33	4	-1	34	0.69	-1.51
Pharmaceuticals	25 (55.6%)	4.36	3.25	4	1	13	1.61	1.59
Telecommunications	34 (52.3%)	5.38	6.16	4	-1	32	2.46	7.63

Other Manufacturing	15 (50.0%)	6.67	5.74	5	0	13	0.01	-2.01
Financial Services	41 (39.0%)	12.15	12.17	5	0	35	0.87	-0.81
Service	80 (35.6%)	9.89	11.48	4	0	35	1.26	-0.06
Construction	30 (66.7%)	25.80	12.6	32	4	38	-0.9	-1.03

**Table 10: Social Goals set by Industry in 2019-2023 (N=1, 155)**

	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis
Electricity & Gas	13 (52.0%)	2.54	1.05	2	1	4	0.11	-1.39
Raw materials	84 (37.3%)	2.94	2.26	3	0	12	1.78	4.49
Machinery	83 (33.9%)	3.46	4.21	2	-1	20	2.54	6.27
Food	19 (29.2%)	4.05	2.88	4	0	11	0.57	-0.47
Transportation equipment	24 (48.0%)	4.92	4.06	3	1	14	1.21	-0.21
Pharmaceuticals	13 (28.9%)	2.38	1.12	2	0	4	-0.39	-0.55
Telecommunications	21 (32.3%)	2.62	2.71	2	-1	9	0.94	-0.13
Other Manufacturing	9 (30.0%)	2.89	1.45	3	0	5	-0.48	-0.66
Financial Services	38 (36.2%)	2.58	1.29	3	0	5	-0.1	-0.81
Service	58 (25.8%)	2.97	2.45	3	0	13	2.12	6.03
Construction	21 (46.7%)	7.24	8.35	5	1	32	2.26	3.86

### Status of Target Setting by Companies Responding to the SDGs

SDG's being articulated as a strategic tool for company's decision making, necessitates the need to align them with corporate strategy. In response to this the

commitment of Indian companies to the SDG's is analyzed. The number of companies issuing CSR-related reports has been on the increase for nearly 20 years. Among them, the number of SDG-compliant companies has been increasing steadily since 2020, and in 2022, one out of every four companies disclosing CSR reports mentioned the SDGs in their reports (Table 11).

### *Status of Indian Companies' Commitment to the SDGs*

Table 12 shows the percentage of companies mentioning the SDGs that are committed to each of the 17 targets, based on 2022 disclosure data.

Looking at the characteristics of the 17 goals, "Goal 12: Responsible consumption and production " was mentioned most frequently (99 companies) as an individual goal because it is the most clearly linked to corporate business activities. This was followed by "Goal 13: Take concrete measures to address climate change" (91 companies), which was mentioned frequently as an SDG goal, indicating that climate change is of particular interest to companies among social issues. In addition, "Goal 8: Work for job satisfaction and economic growth" (89 companies), "Goal 3: Health and well-being for all" (87 companies), and "Goal 5: Achieve gender equality" (80 companies), which relate to working conditions and human rights both within the company and through the supply chain, were also addressed.

### *Impact of Commitments to the SDGs on the Timeframe for Setting Environmental and Social Goals*

Finally, the sample is divided into SDG-compliant and non-SDG-compliant firms and the status of setting environmental and social goals for each group is compared. Here, a subsample of firms that were SDG compliant in 2022 (62 firms, or 24.9%) and firms that were not SDG compliant (188 firms, or 75.1%) is set up. First, a comparison of the percentage of companies that have set numerical targets for environmental goals (Tables 13 and 14) shows that the average percentage of companies that are SDG-compliant is about 20% higher than that of companies that are not SDG-compliant, as compared to 2019. Although there is no statistically

significant difference in the Wilcoxon rank-sum test of the target-setting period (results omitted), SDG-compliant companies tend to set targets for a longer period. Next, a comparison of the percentage of companies that have set numerical targets for social goals (Tables 15 and 16) shows that the average percentage of companies that have responded to the SDGs is about 35% higher than that of companies that have not responded to the SDGs since 2019. The difference is particularly large from 2022 onwards, suggesting that socially oriented companies are also aligning with the global platform of SDG's. Although the Wilcoxon rank-sum test of the timeframe for setting goals showed no statistically significant difference (results omitted), SDG-compliant companies tended to set goals for shorter timeframes.

**Table 11: Status of Indian companies' Response to the SDGs**

Year of report disclosure	2020	2021	2022	2023
Number of companies that respond to SDGs	7	61	169	31

**Table 12: Status of Companies' Response to the 17 SDGs**

Goal 1: End poverty	21.1%
Goal 2: Zero hunger	23.0%
Goal 3: Health and well-being for all	54.0%
Goal 4: Quality Education for everyone	39.8%
Goal 5: Achieve Gender equality	49.7%
Goal 6: Bring safe water and toilets to everyone	37.9%
Goal 7: Energy to Everyone and clean	44.7%
goal 8: Job satisfaction and economic growth	55.3%
Goal 9: Build a foundation for Industry and technological innovation	52.2%
Goal 10: Eliminate Inequality between people and countries	31.1%
Goal 11: Creating a city where people can continue to live	45.3%
Goal 12: Responsibility to create Responsibility to use	61.5%
Goal 13: Concrete measures to address climate change	56.5%

Goal 14: Protect the richness of the ocean	30.4%
Goal 15: Protect the richness of the land	43.5%
Goal 16: Bring Peace and Justice to All	33.5%
Goal 17: Achieve Your Goals in Partnership	36.0%

**Table 13: Status of environmental targets set by Indian companies (SDGs-compliant companies, N=62)**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	37 (59.7%)	10.39	10.16	7	2	37	1.82	1.99	20 (54.0%)
2020	39 (62.9%)	9.57	9.94	6	1	36	1.79	2	19 (48.8%)
2021	47 (75.9%)	12.21	12.47	5	2	40	1.19	-0.35	24 (51.0%)
2022	53 (85.4%)	13.46	13.65	4	1	39	0.79	-1.26	24 (45.2%)
2023	17 (27.5%)	18.2	15.33	13	1	38	0.06	-2.02	6 (35.2%)

**Table 14: Status of Environmental targets set by Indian companies (non-SDGs-compliant companies, N=188)**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	85 (45.2%)	9.57	9.74	7	2	37	2.28	3.69	47 (55.2%)
2020	102 (54.3%)	10.1	10.28	6	1	36	1.81	1.91	47 (46.1%)
2021	107 (56.9%)	11.94	10.9	5	1	35	1.3	0.28	42 (39.2%)
2022	123 (65.5%)	12.45	11.15	9	1	34	1.06	-0.29	42 (34.2%)

2023	37 (19.6%)	13.67	11.99	13	2	33	0.72	-1.1	13 (35.2%)
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**Table 15: Status of Social Goals set by Indian Companies (SDGs-compliant companies, N=62)**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	14 (22.5%)	6.33	1.72	7	3	8	-1.06	-0.48	8 (57.1%)
2020	18 (29.0%)	5.94	1.84	6	2	11	0.56	2.03	11(61.1%)
2021	36 (58.0%)	5.09	1.57	5	2	10	1.36	3.67	24 (66.7%)
2022	47 (75.9%)	4.71	2.63	4	2	14	2.27	5.11	29 (61.7%)
2023	16 (25.9%)	3.43	1.55	3	1	8	1.61	2.84	12 (75.0%)

**Table 16: Status of social goals set by Indian companies (non-SDGs-compliant companies, N=188)**

Fiscal year	No. of companies	Average	S.D.	Median	Minimum value	Maximum value	Skewness	Kurtosis	2025 Target companies
2019	31 (16.5%)	5.67	3.97	5	2	22	2.45	7.83	10 (32.3%)
2020	51 (27.2%)	6.21	3.35	6	2	21	2.34	7.13	28 (54.9%)
2021	86 (45.7%)	5.58	2.81	5	2	20	2.82	9.9	46 (53.5%)
2022	100 (53.1%)	5	4.2	4	1	34	4.39	24.37	50 (50.0%)
2023	27 (14.3%)	6.08	6.87	3	2	33	2.63	6.89	14 (56.0%)

In this paper, the status of goal-setting by Indian companies in terms of the circumstances under which they set sustainability goals, for environment-related and social-related items, respectively were analyzed. First, the existence of numerical targets was looked for in CSR reports, and among these, the items that set the

longest-term targets were extracted, and the length of these targets over the period from 2019 to 2023 was compared. The following trends in the setting of sustainability targets by Indian companies were revealed.

First, the number of companies setting numerical targets for environmental related goals has been increasing, showing their commitment towards improved and consensus-based methodology of target setting like SBT's. Starting from year 2019 about half of the companies that had set environmental goals had activity targets with year 2025 as the deadline. As we move on to next years, majority of companies are setting shorter term targets. In a way, that's a positive sign because SBT's advocate short term goal setting as a better way to reduce/combat environmental concerns. Most of the companies continued to plan their sustainability activities for a breakthrough year such as 2025.

During the period from 2019 to 2023, about half of the companies revised their goal-setting periods. Although the number of companies revising their long-term goals is not very frequent, as only about 10-20% of companies revise their long-term goals each year. With carbon taxes more and more on the horizon and companies needing to either pay them or invest to avoid them, companies reporting to CDP are trying to make some form of adjustment to their environmental goals. Most companies that revised their targets seem to implement improved methodologies, especially adopting SBTI's, which resulted in adjusted baselines.

Next, regarding the status of target setting for social-related items, in 2019, less than 20% of the companies registered in the NIFTY Large Midcap 250 Index had set numerical targets, but over the next three years, the number more than tripled, and the number of companies setting numerical targets for social-related items also suddenly increased. Similar to the situation with the setting of targets for environment-related items, the majority of these companies set activity targets targeting 2025, but the pace of revision over the period from 2019 to 2023 was

slower than that for environment-related targets. Many companies still set only short-term targets, and only a few set very long-term targets. As a result, there was not much change in the distribution of target-setting periods between 2019 and 2023. In response to these environment- and social-related targets, some industry-specific characteristics were also observed. First, manufacturing companies were more likely than non-manufacturing companies to disclose numerical environmental targets for environment-related items, but non-manufacturing companies were significantly longer than manufacturing companies in setting long-term targets for environment-related items. By industry, companies in the construction category in particular tended to set the longest-term goals and were more proactive in disclosing numerical targets.

On the other hand, there were no significant differences between manufacturing and non-manufacturing companies in terms of the percentage of companies disclosing numerical targets and the length of time for which long-term targets have been set. As in the case of environment-related targets, companies in the construction category tended to disclose numerical targets more aggressively and set longer-term targets than companies in other industries, but there were no significant differences among other industries.

In addition to clarifying the status of Indian companies' commitments to the SDGs, this paper also analyzes whether these commitments have an impact on the status of companies' setting of long-term goals. As of 2022, 161 of the companies listed on the National Stock Exchange had indicated their commitment to the SDGs. In addition, when the status of commitment to each of the 17 goals as of 2022 was examined, many companies showed commitment to Goals 8, 12, and 13, which are highly relevant to the company's core business. However, the study did not find a relationship between the status of these commitments and the status of corporate sustainability goals.

## Conclusions

Thus, through this study, it was shown that, first, First, the number of companies setting numerical targets for environmental related goals has been increasing, showing their commitment towards improved and consensus-based methodology of target setting like SBT's. Compared to medium-term management plans, which are usually related to business activities, sustainability-related targets are often set for a convenient fiscal year, and the survey results suggest that the targets are not revised regularly. Therefore, although a certain degree of consideration is given to these goals as activity targets, their substantiality as management controls remains open to question.

During the period from 2019 to 2023, about half of the companies revised their goal-setting periods. Although the number of companies revising their long-term goals is not very frequent, as only about 10-20% of companies revise their long-term goals each year. With carbon taxes more and more on the horizon and companies needing to either pay them or invest to avoid them, companies reporting to CDP are trying to make some form of adjustment to their environmental goals. Most companies that revised their targets seem to implement improved methodologies, especially adopting SBTI's, which resulted in adjusted baselines.

Second, for social-related items, companies indicated that they are developing medium-term sustainable management centered on 2025 targets. Compared to environment-related items, items related to human rights and labor environment are often less suited to quantitative management, and as of 2019, only a limited number of companies had set numerical targets. In terms of future projections and ideal social visions, it was also indicated that activity targets were set over a relatively short period for social aspects that are relatively difficult to envision.

Fourth, the impact of industry on the setting of sustainability goals and compliance with SDG's was presented. Companies in the construction, transportation

equipment, and machinery industries have long target periods and have high disclosure rates, while companies in the finance, food, and service industries have low disclosure rates. It is often suggested in sustainability research that industry-specific differences influence corporate practices. These are often noted to influence the willingness of companies to disclose information through the process of legitimization. Previous studies have verified that the business contribution to the achievement of the 2030 agenda is partial, and sometimes as a legal requirement (DasGupta et al., 2022) or as a self-regulatory mechanism (Gerged & Almonaster, 2021). So the type of industry in which the firm operates (Lee & Hess, 2022), very much influences their initiatives to one or other SDG's (Matteucci, 2020), but not entirely. On an average Goal 12 and 13 pertaining to 'responsible production and consumption' and 'biodiversity engagement' has been mentioned most frequently. Results are in confirmation with the previous studies done by Adler et al., (2017) and Bohnett et al., (2022), where the SDG that has been analyzed the most with the business strategy is SDG 13.

Incorporating corporate sustainability goals into corporate strategy and their regular revision provides competitive advantage and creates sustainable and shared value for the organization, thereby building reputation and brand value of the organization.

This study analyzed the status of setting sustainability goals in two main categories: environmental and social. As a background to the practice of setting such goals, more consensus-oriented and science-oriented approaches to setting sustainability goals are required, such as the outside-in approach shown in the SBT and SDG Compass, while engineering analysis and technology development in the Journal of Cleaner Production are also being promoted. For prospects, it is necessary to develop an analysis of the determinants of goal setting.

## **Limitations and Future Research Implications**

The study uses only descriptive statistics to summarize the characteristics of the data set. Inferential statistics would provide better conclusions and help to make

predictions about the sample. Given the present study is based on a sample of 250 companies, it would be valuable to conduct future research using a larger sample to better reflect the scenario of sustainability goal setting and also compliance with SDG's.

The work can be further extended by analyzing the effect of environmental, social and governance factors on the financial performance of the companies. Considering the fact that some studies do suggest that social or environmental commitment of the company are merely tools to improve their image, it would be worthwhile to study the extent to which the socially responsible actions of firms actually contribute to achievement of one or more SDG's. Insights from this study can be used by companies to implement measures to address environmental and social issues.

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