

ACHIEVING SUSTAINABLE DEVELOPMENT GOALS IN HEALTHCARE INFRASTRUCTURE: A STUDY OF SELECTED NIFTY-50 COMPANIES

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ABSTRACT

We are dedicated to achieving sustainable development across three dimensions—economic, social, and environmental fields—through a balanced and integrated approach, with the goal of bringing radical change in the world, specifically in these three areas. As part of the 2030 Agenda of United Nations, our country aims to advance in social and economic development and is committed to achieving the seventeen Sustainable Development Goals (SDGs). This paper focuses on the role of Indian corporate entities in the accomplishment of these SDGs, particularly in relation to healthcare infrastructure. We have examined the contribution of the top ten Nifty-50 companies, analysing their corporate social responsibility efforts in supporting SDGs. A theoretical comparison of the contribution of these selected companies towards good health and wellbeing of the society has been carried out through descriptive analysis involving statistical measures -relative proportions and rank correlation. Hypothesis testing namely test for binomial proportions and t-statistic are further employed on the existing data set for inferential insights. Additionally, the study identifies the lack of awareness in the implementation of corporate SDG plans and suggests necessary action plans for improving budget planning and expenditures on healthcare development projects.

Keywords: SDG, Health Care Infrastructure, SDG3, Indian Corporates, Developmental Sectors.

Introduction

In 2015, all United Nations Member States adopted the Sustainable Development Goals (SDGs) as a universal call of action to end global poverty and address gender inequality that has persisted in developing nations for decades. The SDGs aim to empower women, maintain ecological balance, and protect the environment, with the goal of ensuring peace, justice, and prosperity for all by 2030. Governments of developing countries are committed to achieving sustainable development through a balanced and integrated approach that encompasses economic, social, and environmental dimensions. As part of the United Nations' 2030 Agenda, our country is also dedicated to advancing social and economic development in alignment with the seventeen SDGs. Corporate entities play a crucial role in this effort, particularly in relation to the seven SDGs outlined in the 2030 Agenda. In India, Section 135 of the Companies Act mandates enlisted companies for contribution to social responsibilities that would help support the achievement of these goals. This paper examines the role of Indian corporate entities in reaching the SDGs, with a particular focus on healthcare infrastructure. We shall analyse the contributions of the top ten Nifty-50 companies, assessing their efforts in maintaining corporate social responsibility and their impact on promoting good health and wellbeing (SDG-3). The paper provides both a theoretical overview of the sustainable development activities of Indian corporations and an empirical study of the contribution of the selected Nifty-50 companies to the achievement of the SDGs through their CSR initiatives.

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Review of Past Studies

With the SDGs set to be implemented from 2015 to 2030, we are now in 2022, marking nearly the halfway point of this timeline. It is crucial to evaluate and analyse the performance of countries regarding their progress on the SDGs. Over the years, various studies have adopted different methodologies to monitor SDG implementation. Some research has focused on assessing progress at the country level, examining relative performance across nations. Key literature relevant to this context has been considered in the recent study. **Bashant K. Pradhan et al. (2023)** conducted an in-depth study on the challenges and opportunities for achieving SDGs in the state of Odisha. Their paper evaluated SDG progress in Odisha and provided a framework for national-level sustainable goal attainment. They performed an econometric analysis to examine the correlation between Public Sector Undertaking (PSU) spending on CSR and the Multidimensional Poverty Index (MPI), revealing that PSU investments in SDGs significantly contribute to reducing MPI in the country. **Srachi Kaker et al. (2022)** researched community development programs aimed at achieving SDGs, focusing on various initiatives undertaken by private companies in India. Their analysis indicated that most of these initiatives target education, healthcare, and rural development. **Misra L. (2021)** authored a review paper on SDGs, highlighting the seventeen sustainability goals and CSR compliance under Section 135 of the Companies Act, 2013. His work aims to provide an overview of CSR activities aligned with the SDGs and includes a theoretical review of the mandatory CSR practices of 40 selected Indian companies. **Giri Babu Dandabthula et al. (2021)** explored the SDG Agenda 2030 in relation to life on land, evaluating the potential link between Indian forestry and the SDGs. They gathered data from government websites and forest survey reports, revealing that Indian forestry significantly contributes to the socio-economic and environmental sustainability of the nation. **Khalim Mohd. Ahmed et al. (2020)** conducted a case study on SDGs and developing countries, focusing on India. They performed a primary survey to assess the concerns of developing nations regarding SDG attainment and discussed key issues raised by these countries, including India, in relation to the United Nations' goals. Their study included expert opinions on SDG execution and prospects, as well as an investigation into effective implementation strategies. **Jha & Rangarajan (2020)** evaluated the performance of the Indian corporate sector in contributing to sustainable development. They proposed components of a global agenda within a sustainable development framework to identify gaps in the corporate sector's efforts. Using T-statistics for hypothesis testing, their study revealed significant gaps in the status of sustainable corporate investments. **Yash Pujara et al. (2019)** focused on integrated solid waste management systems within the Indian context. Given the serious issue of open waste dumping in metro cities, their research examined this challenge considering the environmentally sustainable goals for 2030. The article concluded that improved solid waste management practices could significantly reduce landfilling in India. **Anushree Poddar et al. (2019)** investigated the relationship between CSR activities of Indian corporates from 2014 to 2016 in alignment with SDGs. They identified critical neglected areas in sustainable goals related to corporate investments, highlighting the need for greater attention to sustainable production and consumption, marine life, and life on land. They recommended reviewing CSR investment systems in northeastern states during their study period. **Prabhakar Christopher David (2018)** conducted extensive research on the challenges facing India in achieving SDGs related to life on earth. His descriptive paper explored the major obstacles encountered and proposed measures to overcome these challenges. **Armah B. et al. (2015)** performed a case study on ITC's CSR initiatives, emphasizing value creation through sustainable practices in the IT sector. Their findings highlighted the necessity of e-choupal projects to provide farmers with relevant information and better pricing than the market. **Sharma A. et al. (2012)** conducted a research study utilizing primary data from structured questionnaires. Their findings indicated that the Information Technology and Automotive sectors lead in CSR spending, while additional efforts are needed in the consumer durables sector.

Research Gap

The past literature and research reveals a complex interplay of factors influencing sustainable development goals. Previous studies have highlighted the importance of SDGs on social, economic and environmental advancement of the nation and demonstrating its impact on various issues on CSR. Despite significant advancements, gaps remain in understanding the well-funded and unfunded or poorly funded SDGs. Even no research had been conducted on the SDG investment policy of corporates about health care. Recent research has begun to address these gaps, emphasizing the need for a more nuanced approach with a special attention to corporate spending of top ten Nifty -50 companies in the advancement of SDGs.

Objectives of the Study

This paper has developed with the following objectives:

- To provide an overview of the contributions made by Indian corporate entities towards achieving various SDGs in India.
- To analyse the role of the top 10 Nifty-50 Indian companies in advancing SDG-3, specifically related to healthcare and well-being.
- To assess the impact of the total spending on SDGs by the top 10 Nifty-50 Indian companies in fulfilling the sustainable healthcare goal (SDG-3) strategically or not.

Research Methodology

The nature of research here is empirical and exploratory which is devoted for analysing the contributions of Indian corporates in achieving SDG goals through CSR spending. For this purpose, secondary data is collected from National CSR Portal (csr.gov.in). Top ten Nifty -50 companies are selected from Nifty Index gram (www.niftyindices.com). The financial data from the year 2014-15 to 2021-22 is collected and different rank-based analysis has made on Corporate SDG spending. The statistical tool-Spearman Rank Correlation Test and Hypothesis testing namely Test for Binomial Proportions and T-statistic are further employed on the existing data set for inferential insights to know the correlation between Total SDG spending and Spending on Healthcare by the selected Nifty-50 companies in India. A theoretical analysis is also done to find out the lack of awareness of the sample Nifty-50 companies in the implementation of SDG plans.

Data Analysis and Findings

Table 1: Total SDG Spending by the Indian Corporate Entities in last 8 financial Years (Multiple Development Activity-Wise) and Ranks

SI No	Development Activities	SDGs	Total Spending (INR.CR)	Ranks
1	Armed Forces, Veterans, War Widows/ Dependants	SDG-16	366.35	25
2	Clean Ganga Fund	SDG-6	180.16	28
3	Gender Equality	SDG-5	508.92	21
4	Health Care	SDG-3	33353	2
5	Justice, Human right	SDG-16	3636.3	10
6	Agro Forestry	SDG-8	375.54	24
7	Other Central Government Funds	SDG-17	4914.8	8
8	Poverty, Eradicating Hunger etc	SDG-1	8609.8	5
9	Sanitation	SDG-6	3506.5	11
10	Senior Citizens Welfare	SDG-8	333.53	26
11	Setting Up Homes And Hostels For Women	SDG-10	421.66	23
12	Setting Up Orphanage	SDG-1	177.48	29
13	Special Education	SDG-4	1255.4	16
14	Technology Incubators	SDG-9	230.21	27
15	Animal Welfare	SDG-15	792.78	20
16	Vocational Skills	SDG-8	5278.7	7
17	Education	SDG-4	43486	1
18	Environmental Sustainability	SDG-13	10256	4
19	Livelihood Enhancement Projects	SDG-2	5803.5	6
20	Prime Minister'S National Relief Fund	SDG-17	4839.3	9
21	Conservation Of Natural Resources	SDG-12	1141.7	18
22	Rural Development Projects	SDG-8	14151	3
23	Safe Drinking Water	SDG-6	1532.4	15
24	Slum Area Development	SDG-1	447.13	22
25	Art And Culture	SDG-16	2838.6	12
26	Socio-Economic Inequalities	SDG-1	1118.4	19
27	Swachh Bharat Kosh	SDG-6	1240.8	17
28	Training To Promote Sports	SDG-3	1829.5	13
29	Women Empowerment	SDG-5	1572.4	14

Source: www.csr.gov.in

Table- 1 reveals that Indian corporates have conducted multiple development activities for the sustainable development in achieving of specified seventeen SDGs. The overall study on SDGs has revealed that total corporate spending is Educational activities is in **Rank-1** as followed by Health care positioned in **Rank-2** whereas investment in Rural Development has got **Rank-3** in last eight financial years. Other than these three development activities, Environmental Sustainability, Poverty and Malnutrition, Livelihood Enhancement, Vocational Skill development, Justice and Human rights, Contribution to Central government fund etc have also found in priority focus in their sustainable investment issues.

Table 2: Total SDG Spending by the Indian Corporates in last 8 Financial Years [INR CR] and Ranks

Year	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Total Investment	10065	14517	14542	17098	20217	24965	26210	26579
Rank	8	7	6	5	4	3	2	1
Healthcare Investment	1847.7	2569.4	2503.9	2776.9	3617.1	4905.7	7325.8	7806
Rank	8	6	7	5	4	3	2	1

Source: www.csr.gov.in

A Year wise study as shown in Table-2 shows that there was an increasing trend in corporate sustainable investments in last eight financial years. Similar increasing trend can be seen in Health care investment as well. In the year of COVID pandemic (2020-21), the overall Sustainable Corporate Investment has increased by **4.98%** as compared with last pre pandemic year where as Sustainable Investments in Health care has rapidly increased by **49.33%** in COVID year 2020-21 in comparison with last pre-pandemic year.

Table 3A: SDG Wise Spending by Indian Corporates in last 8 Financial Years and Ranks (Overall Scenario in India)

Sustainable Development Goals	Goal Indicators	Total SDG Spending (INR.CR)	Percentage of SDG spending	Rank (Based on %)
1	No Poverty	10352.82	6.71	5
2	Zero Hunger	5803.53	3.76	9
3	Healthcare	35182.48	22.81	2
4	Education	43486.03	28.2	1
5	Gender Equality	2081.34	1.34	10
6	Clean Water and Sanitation	6459.76	4.18	8
7	Affordable and Clean Energy	0	0.00	15
8	Decent Work and Economic Growth	20138.95	13.06	3
9	Industry, Innovation and Infrastructure	230.21	0.14	14
10	Reduced Inequalities	421.66	0.27	13
11	Sustainable cities and Communities	0	0.00	15
12	Responsible Consumption and Production	1141.65	0.74	11
13	Climate Action	11511.86	7.46	4
14	Life below Water	0	0.00	15
15	Life on Land	792.78	0.51	12
16	Peace, Justice and Strong Institutions	6841.29	4.43	7
17	Partnerships for the Goals	9754.06	6.32	6
	Total Spending	154198		

Source: Author's compilation

Based on the Table 3A, we have classified the SDGs in four categories for providing a snapshot on the SDGs with high, medium and low corporate focus as shown in following Table 3B:

Category -I SDGs (Highly focused SDGs)		Category-II SDGs (Moderately Focused SDGs)		Category-III SDGs (Low Focused SDGs)		Category-IVSDGs (No Corporate Attention -Zero Spending)	
SDG	Ranks	SDG	Rank	SDG	Rank	SDG	Rank
Quality Education	1	Partnership For the Goals	6	Responsible Consumption And Production	11	Affordable And Clean Energy	15

Heath	2	Peace, Justice	7	Life on Land	12	Sustainable Cities and Communities	15
Economic Growth	3	Clean Water, sanitation	8	Reduced Inequalities	13	Life below water	15
Climate Action	4	Zero Hunger	9	Industry Innovation, Infrastructure	14		
No Poverty	5	Gender equality	10				

Table 3A shows the proportion of investments made by Indian corporates in the attainment of 17 SDGs adopted by UN member countries in 2015. A Rank assessment is done based on proportion of total SDG spending in these multiple sustainable goals. Considering Table 3A and 3B, **SDG -4** (Quality Education-Rank 1) is found as top focused area as followed **SDG -3** (Heath care and wellbeing-Rank-2) and **SDG-8** (Decent work and Economic Growth). Surprisingly we have observed that some of the SDGs namely, SDG-7 (Affordable and Clean Energy), SDG-11 (Sustainable cities and Communities) and SDG-14 (Life below the water) have been found totally ignored in making corporate sustainable investments.

Table 4: Total SDGs Spending and Heath Care Spending (SDG-3) by Top Ten Nifty-50 Companies in last 8 Financial Years (INR.CRORES)

Sl no	Name of the Companies	Total SDG Spending	Heath Care Spending (Total)	Proportion of SDG spending on Health care
1	Asian Paints Ltd	320.18	37.22	11.62%
2	Britania Industries Ltd	141.35	141.35	100%
3	Cipla Ltd	174.41	123	70.52%
4	Eicher Motors Ltd	183.48	87.44	47.65%
5	Nestle India Ltd	164.96	94.03	57.00%
6	Grasim Industries Limited	267.99	67	24.96%
7	Hero Motocap Limited	551.64	44.36	8.04%
8	Hindalco Industries Limited	175.15	49.57	28.30%
9	Hindustan Unilever Limited	826.94	8.43	1.02%
10	ITC Limited	1998.36	579.5	28.99%

Table 5: Comparison between Ranks based on Total SDG spending and Proportion of SDG Spending on Health care (SDG-3) by Top ten Nifty-50 Companies in last 8 Financial Years

Sl no	Name of the Companies	Rank based on Total SDG Spending	Rank based on Proportion of SDG Spending on Heath care
1	Asian Paints Ltd	4	8
2	Britania Industries Ltd	10	1
3	Cipla Ltd	8	2
4	Eicher Motors Ltd	6	4
5	Nestle India Ltd	9	3
6	Grasim Industries Limited	5	7
7	Hero Motocap Limited	3	9
8	Hindalco Industries Limited	7	6
9	Hindustan Unilever Limited	2	10
10	ITC Limited	1	5

Tables -4 & 5 depict that though Britania Industries limited has the least contribution towards achieving SDGs (indicated by Rank -10), it has devoted its entire SDG spending (INR 141.35 crores) solely on Heath care development of our nation, making it the highest ranked company (Rank-1) in terms of proportional spending. A complete reverse scenario can be observed in case of HUL as shown in serial no -9 i.e., the table reflects the sheer negligence of HUL towards heath care development despite spending a considerable huge amount on SDGs. It is evident from the empirical data that there is severe disparity between the total SDG spending made by the companies and the portion of it donated towards Good health and Wellbeing (SDG-3), thus reflecting the lack of awareness of the top Nifty-50 companies

towards the cause of national health. This observation is validated by computing the **Spearman Rank Correlation Coefficient** which comes out as **-0.7818** for the given data—i.e. Based on the data of top ten Nifty-50 companies, it seems that there is strong disagreement between the ranks on SDG spending and the Proportion of it dedicated to Healthcare (SDG-3).

Hypothesis Testing

Let (X,Y) denote respectively the Total SDGs Spending(in INR crores) and Total Healthcare Spending (in INR crores) for a randomly selected Nifty-50 company. Let rho denotes the correlation coefficient between X and Y, assuming normality of (X,Y)

Hypothesis: To test $H_0: \rho = 0$ (There is no correlation between X and Y) v/s

$H_1: \rho \neq 0$ (There is correlation between X and Y)

A sample of 10 companies had been drawn. Let r denotes the sample correlation coefficient between X and Y. An appropriate Test Statistic under H_0 is given by:

$$T = r * \frac{\sqrt{n-2}}{\sqrt{1-r^2}} \text{ Computation: } n=10, r=0.82, T_{\text{obs}} = 4.1591, t_{0.05, n-2} = 2.3$$

Thus, H_0 is rejected at 0.05 % level of significance. In the light of the given data, it appears that there exists a correlation between Total SDGs Spending and Total Health care Spending by Nifty-50 companies.

Table 6: Effect of Total SDG spending p.a. on healthcare spending p.a.

Name of Selected Companies	Mean of SDG spending	Health care Spending	Can Healthcare spending reach the Mean
Asian Paints Ltd	135.4567	37.22	No
Britania Industries Ltd	61.38333	141.35	Yes
Cipla Ltd	76.88833	123	Yes
Eicher Motors Ltd	85.10167	87.44	Yes
Nestle India Ltd	72.41333	94.03	Yes
Grasim Industries Limited	120.7233	66.893	No
Hero Motocap Limited	232.7833	44.36	No
Hindalco Industries Limited	76.985	49.57	No
Hindustan Unilever Limited	347.71	8.43	No
ITC Limited	827.5983	579.5	No

As SDG spending in healthcare raked in Category -I SDG, it is expected that the Nifty-50 Indian corporates shall contribute at least an amount equal to mean of Total SDG spending per annum for the development of healthcare.

Let p denotes the proportion of companies who have contributed at least the mean of SDG spending per annum for the development of healthcare. Let X denotes the number of companies out of 10 selected Nifty-50 companies who have contributed at least the mean of SDG spending per annum for the development of healthcare. X follows Binomial ($n=10, p$) to test

$H_0: p=0.5$ versus $H_1: p<0.5$

We compute the probability $P [X \leq x | H_0]$ where x is the observed value of X.

In the given data, 4 out of 10 chosen Nifty companies have satisfied the mean level of Total SDG spending per annum contributed to healthcare, i.e. =4. The aforementioned probability comes out to be 0.37. Since this is greater than 0.05 (the chosen level of significance) we accept H_0 which implies in the light of the given data at least 50% of the total number Nifty-50 companies. at least 25 Nifty companies contributed to mean of Total SDG spending per annum for the development of healthcare.

Summary and Conclusion

Sustainable Development Goals (SDGs) are interconnected rather than isolated objectives, necessitating careful monitoring and coordination. To achieve sustainable outcomes, investments in SDGs must be balanced and strategically managed. Our study highlights that current spending on SDGs is uneven. While education, health, and rural development are prioritized in corporate investments due to their foundational role in socio-economic development, some critical areas remain ill funded zero funded. For example, environmental concerns such as the Clean Ganga project, safe drinking water, and social issues like senior citizen welfare and special education have not received sufficient corporate investment.

Interestingly, certain SDGs, such as SDG-7 (Affordable and Clean Energy), SDG-11 (Sustainable Cities and Communities), and SDG-14 (Life Below Water), are notably neglected in corporate sustainability investments. Our empirical study indicates that there is strong disagreement between the ranks on SDG spending and the Proportion of it dedicated to Healthcare (SDG-3) by the selected Nifty -50 companies despite a correlation between total SDG spending and total investment in SDG-3 (Healthcare and wellbeing). The cause lies in the variation of budget allocation for SDG-3 and actual spending on it. Interestingly, during the COVID-19 pandemic years, there has been a notable emphasis on public healthcare by Indian corporates and Nifty-50 companies despite there was severe disparity in Total SDG spending and Proportion of it donated by them to healthcare in last eight financial years.

Though SDG-3 has thus captured a place in Category-I highly corporate focused SDGs, but our question lies on the investment policy and strategy of the corporates with respect to SDG-3. This focuses on ensuring healthy lives and well-being and supported by 45 health indicators established by the Ministry of Health and Welfare (MHW). Effective corporate investment in SDG-3 is expected to align with these indicators. However, current investments do not reflect this alignment, as recent health bulletins from the MHW reveal troubling conditions in various health indicators in India particularly in child and female health across many Indian states. Our research calls for a strategic approach to corporate investment in healthcare, emphasizing alignment with health indicators to promote sustainability in addressing child and female health issues that would also help in attaining the sustainable gender quality goals (SDG-5). Hence this research demands to follow a strategic healthcare investment policy to be undertaken by the Indian corporates to achieve comprehensive and sustainable health outcomes in real sense.

References

1. Anushree Poddar, Sapna Narula, *A study of corporate social responsibility practices of the top Bombay Stock Exchange 500 companies in India and their alignment with the Sustainable Development Goals*, Wiley, Volume-26, Issue-6, <https://doi.org/10.1002/csr.1741>
2. Bashant. K. Pradhan, Sangeeta Yadav, Jaydeep Ghosh, Anjali Prashad, *Achieving the Sustainable Development Goals (SDGs) in the Indian State of Odisha: Challenges and Opportunities*, ELSEVIER, *World Development Sustainability*, Volume -5, December 2023
3. Giri Babu Dandabthula, Sudhakar Reddy Chintala, Sonali Ghosh, *Exploring the nexus between Indian forestry and the Sustainable Development Goals*, KeAi, *Regional Sustainability*, Volume-2, Issue-4 pp308-323 <https://doi.org/10.1016/j.regsus.2022.01.002>
4. Khalim.Mohd. Ahmed, Sharma Seema, Dubey Amalendu Kumar, *Concerns of developing countries and the sustainable development goals: Case for India*, *International Journal of Sustainable Development and World Ecology* <https://www.tandfonline.com/eprint/VISKID5GYUEI3KTX6EG7/full?target=10.1080/13504509.2020.1795744>
5. Misra. Loknath, *Corporate Social Responsibility and Sustainable Development goals: A Study of Indian Companies*, *Journal of Public Affairs* Volume 21 Issue-1 Page - e2147 <https://doi.org/10.1002/pa.2147>
6. Milind Kumar Jha and Rangarajan, *Sustainable development*, Willey online library volume 28, issue 5 pp1019 <https://doi.org/10.1002/sd>.
7. M. Prabhakar Christopher David, *Sustainable Development Goals (SDGs)-Challenges for Indian* *Journal of Public Health and Development*, Volume -9, Number 3, March 2018
8. Srachi kicker, Prof Sanjoy Mishra, *Community Development Programs to Achieve Social Sustainability*, IJARCMS, ISSN-2581-7930, Volume-5 No-4(II) pp 43-49
9. Sharma.A, Kiran.R\ *Corporate Social Responsibility Initiatives of Major companies in India with focus to health, education and environment*, *African Journal of Basic and Applied Science* ,4(3) pp 95-105
10. Sarman, Islam, J.U.Rahman, *Sustainability, Social Responsibility and Value co-creation: A Case Study Based Approach* ,*Procedia-Social and Behavioural Sciences*, 189,page-314-319,doi:101016/j.sbspro.2015.03.227
11. Yash Pujara ^a, Pankaj Pathak ^{a b}, Archana Sharma ^{a b}, Janki Govani ^a *Review on Indian Municipal Solid Waste Management practices for reduction of environmental impacts to achieve sustainable development goals*, *Journal of Environmental Management*, Volume 248.

