

**‘A COMPARATIVE STUDY ON SOCIAL AND ENVIRONMENTAL ACTIVITIES
BEFORE AND AFTER COVID-19’,
WITH SPECIAL REFERENCE TO
BHARAT ELECTRONICS LIMITED, BANGALORE-13.**

**Mrs. Sunitha MA
Associate Professor
BEL First Grade College
Bangalore-13
Phone No. 9449150568**

**Mrs. Sahana V Shenoy
Associate Professor
BEL First Grade College
Bangalore-13
Phone No. 9449268671
Email id:shenoysahana126@gmail.com**

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ATLAS SKILLTECH UNIVERSITY
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University of York and University of Westminster**

Abstract

Environmental, Social and Governance, or ESG, has developed into a vital framework that helps companies to navigate complex economic environment today. It promotes sustainable growth and has a positive effect on both society and shareholders alike. The present study is based on commitment for social and environmental activities by BEL, Bangalore and it is observed that there is a paradigm shift in utilization of fund from Education and Rural Development before COVID to Health Care activity after COVID Pandemic. The different statistical techniques such as The Averages and Annual Growth Rates are calculated to analyse the contribution of CSR fund towards different social and activities. Student's t-test was applied to compare the spending for different years.

Key words: ESG, BEL, COVID Pandemic, CSR fund.

Introduction

A framework system known as ESG includes environmental, social and governance aspects into account. It is impossible to overestimate the significance of ESG in today's corporate environment given the situation of the economy. Due to expanding consumer preferences, regulatory demand, and increased awareness of environmental and social issues, there is a increased emphasis on sustainability, ethical practices and corporate responsibility. In order to improve operational efficiency, draw the attention of investors and boost their reputation organizations are also incorporating ESG principles into their strategies. When taking into account companies from the BRICS countries, a company's financial profile is linked to better ESG performance (Alexandre Gracia, et al. 2010).

Originally founded as a Defence Electronics Company in 1954, Bharat Electronics Limited is a public sector organization that has developed expertise in a variety of technologies and produced highly skilled, technically proficient, enabling state-of-the-art research and development of many subsystems and products. BEL has 9 units across India with 25 SBU's. It is a Navaratna Public Sector Undertaking which produces defence and non-defence products. The objective of the Company is to contribute towards inclusive growth, sustained and equitable development in society through capacity-building measures, empowerment of the marginalised and underprivileged sections/communities. Focussed interventions are undertaken in the sectors of Healthcare, Education, Rural Development, Environmental Sustainability & Vocational Skill Development¹. However the priority given for different activities have been changed after COVID-19.

Literature Review

J Atkins and et al (2023) understood that public finance is one of the approaches for sustainable development, like in the case of the vigorous monetary and fiscal policies are implemented in the Eurozone which are in line with the demand.

Nils Engelhardt and et al.(2021)in their paper demonstrated that, Engaging in CSR significantly pays off in terms of stock performance and a good quality CSR is making firm's more resilient when market uncertainty is high.

¹<https://bel-india.in>

V Diaz and et al.,(2021)The paper provides evidence that the social and environmental pillars could serve as the impetus for ESG investing to be fully acknowledged as an effective investment strategy for overcoming current economic crisis.

Dr K Savita and et al.(2020)in their research paper titled ‘A comparative study of CSR by Government and other than Government companies’ studied about the consistency in spending of top 5 Government and Non-Government companies. They found and concluded that Non -Government companies are contributing more to the CSR activities than Government companies.

Carol A. Tilt (2016) in his research paper titled ‘Corporate Social Responsibility research: the importance of context’ concluded that different political, social, cultural and economic environments impact on the both the development of, and reporting of, CSR activities and consequently Impact on the values of these activities to benefit society and the natural environment.

I Tarmuji and et al.(2016)studied impact of ESG on Economic performance and concluded that, Stakeholders recognise that ESG responsibilities are integral to its performance and long term sustainability. Research shows that responsible management of ESG issues creates a business spirit and environment that builds both company’s integrity within society and the trust of its stakeholder.

Research gap

Although a great deal of research has been done regarding ESG, its effects, and application across many industries, a very few studies discussed about the impact of COVID-19 on ESG activities of an organisation. The present study emphasises on impact of COVID-19 on Environmental and social activities of BEL. So the comparison was made between the contribution of fund three years before COVID-19 and three years after COVID-19.

Objectives

1. To understand the societal concern of BEL as a public sector undertaking.
2. To Study the shift towards social concern of BEL before and after pandemic.
3. To study the allocation of CSR fund of BEL to different sectors of social activities.

Research Methodology

The study is based on secondary data collected from Annual reports of BEL for a period of seven years from 2016-17 to 2022-23.The Company website and National CSR portal is used for the research study. The percentages of spending to the total budget for different years, Mean, Standard Deviation and Coefficient of Variation were computed for understanding and comparing CSR spending. The Averages and Annual Growth Rates are calculated to analyse the contribution of CSR fund towards different social activities. Student’s t-test was applied to compare the spending for different years.

H₀: There is no significant difference between amount utilised for Environmental and Social activities before and after COVID-19.

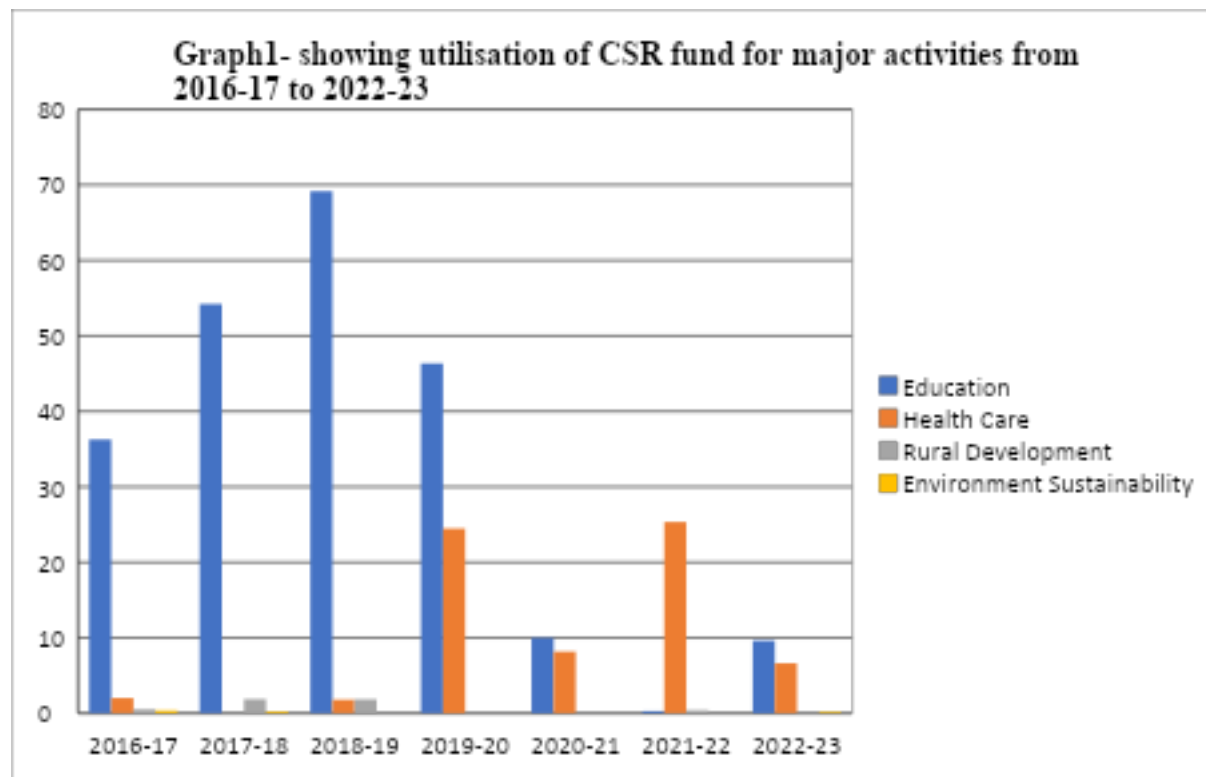
H₁: There is significant difference between amount utilised for Environmental and Social activities before and after COVID-19.

Data Analysis and Interpretation

**Table 1 : Table showing amount utilised for major CSR activities of Bharat Electronics Ltd.
(in %ages)**

Year \activities	Educatio n	Health Care	Rural Development	Environment Sustainability
2016-17	36.29	2.03	0.53	0.38
2017-18	54.23	0	1.88	0.25
2018-19	69.2	1.81	1.86	0
2019-20	46.31	24.48	0	0
2020-21	9.99	8.18	0	0
2021-22	0.3	25.35	0.41	0
2022-23	9.64	6.63	0	0.2

The above table shows utilisation of funds for major CSR activities. The Fund utilised for education sector in the year 2016-17 is 36.29% and it has increased up to 2018-19 (69.20%). Since 2019-20 the amount spent has decreased from 46.31% to 9.64% in the year 2022-23. The amount spent towards Health Care activities in the year 2016-17 is 2.03% and up to 2018-19 it was 1.81%, however in 2019-20 it was 24.48% and was increasing consistently till 2022-23. The contribution towards Rural Development activities was stable from 2016-17 to 2022-23. The Environment Sustainability was also consistently maintained over the years, 2016-17 to 2022-23



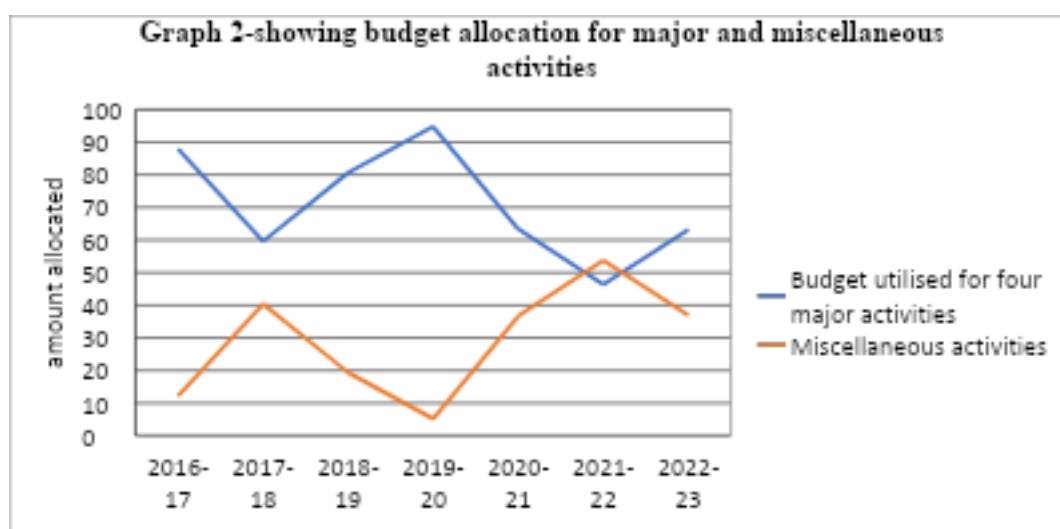
From the above Graph it was inferred that the major contribution up to 2018-19 was towards Education Sector. But from 2019-20 onwards the priority was given to Health Care Sector, as a consequence of COVID- Pandemic.

Table 2- Table showing budget allocation for major and miscellaneous activities. (in %ages)

Year\activities	Budget allocated for four major activities*	Miscellaneous Activities
2016-17	87.87	12.13
2017-18	59.62	40.38
2018-19	80.61	19.39
2019-20	94.77	5.23
2020-21	63.34	36.66
2021-22	46.29	53.71
2022-23	63.13	36.87

*includes Education, Health Care, Rural Development and Environmental Sustainability.

The Budget allocation for major activities in 2016-17 was 87.87% and increased up to 2019-20. From 2020-21 onward the budget allocation was stable.



The allocation of Budget in 2019-20 was almost 95% of CSR Fund. It can be inferred as the effect of COVID Pandemic was one of the major reasons.

Table 3- Table showing CSR funds spent and unspent from 2016-17 to 2022-23

(In %ages)

Year	Amount Spent	Amount Unspent
2016-17	39.02	61.08
2017-18	41.14	58.86
2018-19	64.59	35.41
2019-20	72.31	27.69
2020-21	48.61	51.39
2021-22	57.66	42.34

2022-23	46.39	53.61
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In the Year 2016-17 the amount spent from total CSR Fund was 39.02%, and shows a gradual increase up to 2019-20. Later, it maintained stability in spending. The amount unspent includes certain projects which are on-going and spread over number of years.

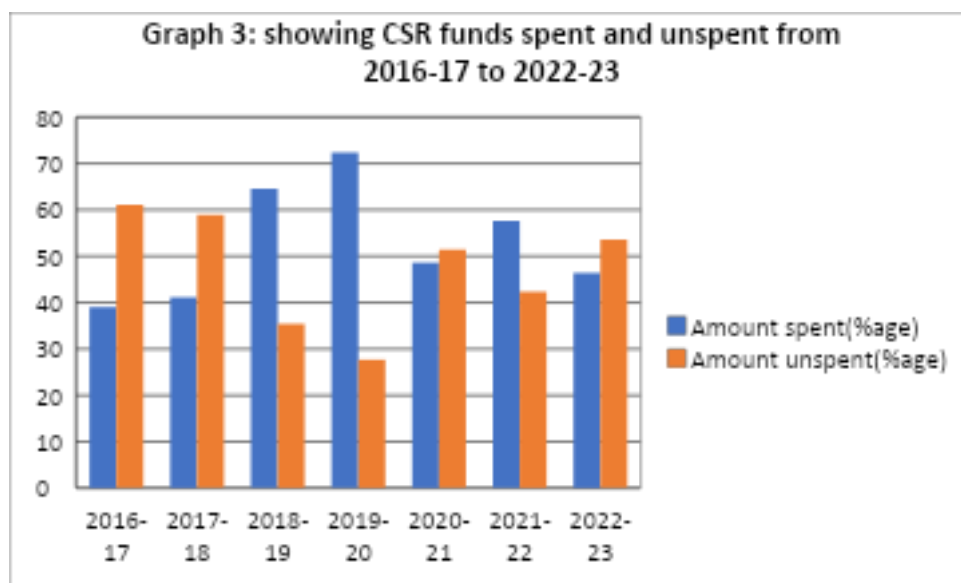
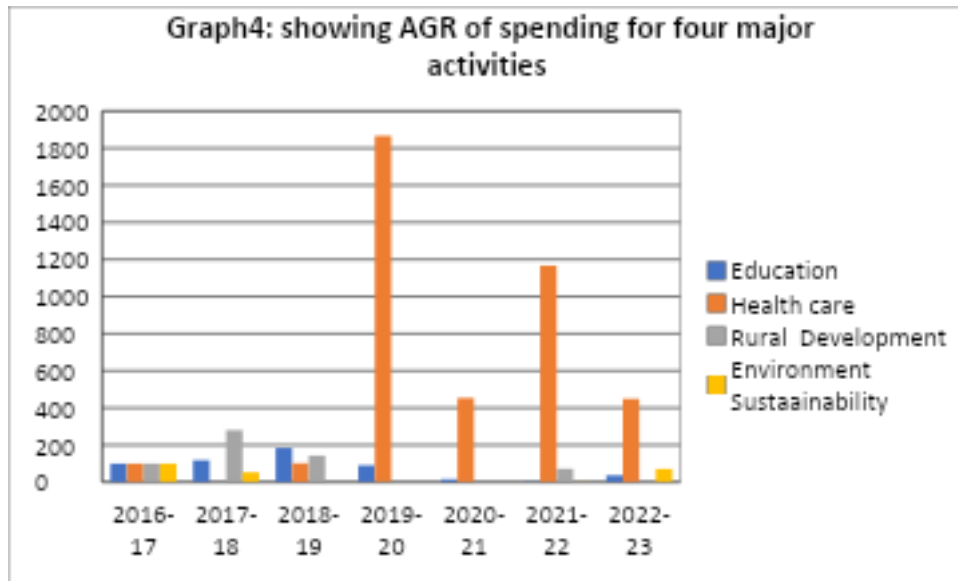


Table 4: Table showing Annual Growth Rate for utilisation of CSR fund. (in %ages)

Activities\Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Education	100	118.18	184.52	90.63	15.68	2.46	36.54
Health care	100	0	101.64	1866.72	453.67	1167.18	449.02
Rural Development	100	280.07	143.13	0	0	71.93	0
Environment Sustainability	100	53.16	0	0	0	1	71.01

The Annual Growth Rate was calculated for major activities. The Education Sector is showing increasing trend and highest in 2018-19. The Health Care Sector, from 2019-20 onwards drastic increase is seen. Rural Development is showing fluctuating trend from 2016-17 to 2022-23. The activities relating to Environmental Sustainability was also showing fluctuating trend.



The AGR towards Health Care Sector from 2019-20 has increased, and it increased in terms of 200 times over the years, which was also linked to COVID Pandemic.

ANOVA : Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
36.29	6	189.67	31.61166667	814.2367767
2.03	6	66.45	11.075	124.02091
0.53	6	4.15	0.691666667	0.858336667
0.38	6	0.45	0.075	0.01375

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>Df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	3902.33	4	1300.778156	5.540355305	0.00619	3.09839
Within Groups	4695.64	9	234.7824433		2	1
Total	8597.98	3				

(Source: MS Excel)

Because the p value is less than 0.05, the null hypothesis should be rejected. Therefore it can be understood that there is significant difference in amount utilized over the years.

Conclusion

From the above study it can be concluded that-

- BEL has allocated CSR funds towards four major activities and miscellaneous activities.

- Majority of fund allocation towards different activities before COVID was towards Education and Rural Development. However due to need of the situation, the major amount was spent on health care sector since 2019-20 and onwards.
- Certain projects are on-going and continuous one. Hence amount found as unspent.
- The social concern of BEL can be witnessed from the above analysis.
- As BEL is a profit bearing defence sector, CSR allocation was increased gradually due to increase in profit.

Suggestions

- The amount spent on Rural Development and Environmental Sustainability is meagre and it needs to be improved.
- In spite of amount allocated in the budget, it is found that % age of amount spent is comparatively less. Hence, the unutilised amount for developmental activities needs to be utilised.
- It is found from the study that, many projects are still ongoing. Hence, it is to be continued and completed in the future.
- The growth rate towards Rural Development and Environmental Sustainability to be improvised in the future.

Limitations

- The study was confined to only one Public Sector Undertaking.
- The study was limited to previous 7 years.
- The study was made only to four major activities of BEL and miscellaneous activities were not considered.
- Because the study is based on publicly available financial data, it is subject to all the restrictions that come with condensed financial statements.

References

Carol A, "Corporate Social Responsibility research: the importance of context", *International Journal of Corporate Social Responsibility* volume 1, Article number: 2 (2016)pg no.1 to 9.

Dr. Savita Kand et al., "A comparative study of CSR by Government and other than Government companies", *International Journal of Research*, volume9(1), Jan – June 2020, ISSN 2231-6124, pg no. 111-114.

Indarawati Tarmuji, Ruhanita Maelah and Nor Habibah Tarmuji, "Impact of ESG on Economic Performance" Evidence from ESG score", *International Journal of trade, Economics and Finance*, Vol.7, No.3, June 2016, pg.no. 67-74.

Nils Engelhardt and et al., "ESG Rating and stock performance during the COVID-19 Crisis", *Sustainability* 2021, 13, 7133. <https://doi.org/10.3390/su13137133>, pg. no. 1-15.

Kee-Hang Bae and et al., "Does CSR matter in times of crisis? Evidence from COVID-19 pandemic", *Journal of Corporate Finance*, Volume 67, April 2021,

Prof.R G Eccles and et al., "Exploring Social Origins in the construction of ESG Measures" SSRN-id3212685.pdf,pg no. 1-36(2020)

J Atkins and et al., "Exploring the effectiveness of Sustainability measurement: Which ESG Metrics Will Survive COVID-19", *Journal of Business Ethics*, volume185, pg.no.629-646(2023)

<https://www.sciencedirect.com/science/article/pii/S0929119920303205?via%3Dihub>

<https://bel-india.in>

<https://bel-india.in/Documentviews.aspx?fileName=List%20of%20CSR%20Projects%20for%202022-23-29-May.pdf>

<https://trendlyne.com/fundamentals/documents-annual-reports/175/BEL/bharat-electronics-ltd>