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Corporate Social Responsibility in the Health Sector: Addressing Disparities and Enhancing Impact in North Eastern India

Authors:

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Abstract:

This study analyses the impact of CSR in the health sector of India's North Eastern Region (NER) between 2014–15 and 2021–22, using a mixed-method approach. Quantitative analysis of Ministry of Corporate Affairs data and qualitative case studies reveal stark disparities between NER and the rest of India. While NER received only ₹752.66 crores compared to ₹24,534.26 crores elsewhere, its per capita CSR health spending was higher, indicating efficient fund use. Intra-regional variations are significant, with Assam alone receiving 82.5% of NER's health CSR funds, raising concerns about equity in distribution. CSR allocations are positively linked to industrial activity, but constraints such as limited corporate presence, geographical barriers, weak local partnerships, and information gaps restrict progress. Nonetheless, opportunities exist in preventive healthcare, technology adoption, and public-private partnerships. A longitudinal review of SDG 3 shows upward trends, particularly in Mizoram. The paper recommends targeted allocation, regional CSR hubs, standardized impact frameworks, and strategic interventions for equitable health outcomes.

Keywords:

Corporate Social Responsibility, Health, SDG3, North East India

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Introduction

Corporate Social Responsibility (CSR) has emerged as a significant driver of social development in India, particularly since the Companies Act 2013 mandated CSR spending for certain companies (Dharmapala & Khanna, 2016; Bergman & Rajwani, 2019). The health sector has been a major beneficiary of CSR initiatives across the country (Yadav, 2020; Droppert & Bennett, 2015). However, the distribution of CSR funds and activities has been uneven, with some regions receiving significantly less attention than others. The North Eastern Region (NER) of India, comprising eight states—Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura—has historically lagged in terms of health infrastructure and outcomes (Lyngdoh, 2015; Dutta et al., 2022). Therefore, this paper critically analyzes the contribution of CSR toward the health sector in NER, highlights existing gaps, and proposes strategies for enhancing CSR impact within this region. CSR has also become an important element in shaping sustainable development across sectors globally (Droppert & Bennett, 2015). In NER, characterized by its distinct geography, culture, and socio-economic profile, CSR has created a notable impact in the health sector (Dutta et al., 2022; Borah et al., 2024). The region's unique challenges—poor healthcare facilities, high disease burden, and uneven distribution of services—require innovative and localized solutions (Lyngdoh, 2015).

In the face of these challenges, CSR initiatives have played a transformative role in improving healthcare delivery and outcomes. They have not only addressed basic health needs but also contributed to infrastructure development, education, and preventive healthcare capacities (Yadav, 2020). Projects have supported the construction of primary health centres, rural hospitals, and diagnostic labs, bridging gaps in access to care (Borah et al., 2024). Additionally, CSR programs have partnered with communities to deliver health education and awareness, focusing on issues such as maternal and child health, nutrition, and hygiene. Preventive initiatives such as vaccination drives, health check-ups, and disease control programs have further strengthened resilience against malaria, tuberculosis, and pneumonia (Dutta et al., 2022). CSR initiatives in NER have demonstrated responsiveness to local health concerns, including mental health and environmental health issues, through context-specific interventions (Raman, 2024). These efforts highlight CSR's flexibility and potential to drive meaningful change. Overall, CSR has emerged as a crucial contributor to health sector development in Northeast India, complementing government efforts and addressing persistent service gaps. Continued corporate engagement through CSR will remain vital for sustainable health development and for meeting the region's evolving healthcare needs (Dharmapala & Khanna, 2016; Bergman & Rajwani, 2019).

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Importance of CSR in NER

The North East Region of India is, without doubt, the most geographically distinctive and culturally diverse region in the world. Such regions are thus afflicted by several socio-economic challenges that CSR initiatives have risen to meet and promote sustainable development. This essay discusses why CSR would become so important in such regions as the NER, focusing on its effectiveness in dealing with key issues, promoting fair and just development, and having a positive impact on the communities of the region. Development disparity with the rest of India has been one of the biggest hurdles for the NER. It may be one of the most effective means to bridge this gap in infrastructure, education, health, and livelihood opportunities-CSR investments. It can guarantee better quality of life for vulnerable communities as well as greater overall well-being through CSR by providing critical services and resources. Moreover, CSR can contribute to the sustainable development of the NER by promoting environmental conservation, sustainable agriculture and renewable energy. Rich biodiversity and natural resources in the region need careful management to support their long-term sustainability. CSR activities can aid in protecting resources, promote sustainable practices, and mitigate effects resulting from climate change. Empowerment of Women and Marginalized Communities: Another area in which CSR can meaningfully intervene and contribute is that of empowering women and the marginalized. CSR can turn out to be an important channel for education, vocational training and livelihood generation so as to help overcome obstacles to economic participation and thereby enable women and marginalized groups to achieve financial independence. The process contributes to gender equality and social inclusion. CSR can also be an important tool for strengthening community involvement and building social capital. For example, it increases ownership and responsibility among the residents by involving them with local communities and other organizations through CSR initiatives. This, in turn, will automatically result in increased participation in the community, better governance, and a more robust social framework. The success of CSR initiatives in the NER still depends upon various factors including the commitment of corporations, alignment of CSR initiatives with local needs, and capable governance mechanisms. Thus, CSR initiatives should be visible, accountable, and fact-based, aligned with the specific needs and priorities of this region to maximise their positive impact. CSR is a robust means to discuss the problems of the North East Region of India. Investment in infrastructure, education, healthcare, and sustainable development through CSR can create a better quality of life among marginalized communities, promote equitable development within the region, and function as a positive impact tool. As the NER unfolds, CSR initiatives would then become of utmost importance towards bringing a brighter future, an inclusive, and a more prosperous region for all.

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Objectives

To understand the contribution of Corporate Social Responsibility (CSR) to health and sanitation, with a specific focus on the North Eastern region of India.

- **To Evaluate the Theoretical Impact of CSR on Health Outcomes**: Assess how CSR frameworks, such as stakeholder theory and shared value creation, underpin the effectiveness of corporate initiatives in improving health outcomes in various contexts, including Northeast India.
- **To Identify and Analyse Key Health Challenges in NER**: Examine the prevalent health issues in NER, such as malnutrition, communicable diseases, maternal and child health concerns, and access to healthcare facilities, and understand how these challenges influence the region's health outcomes.
- **To Assess the Scope and Impact of CSR Initiatives in NER**: Investigate existing CSR activities related to health in NER, including infrastructure development, health education, disease prevention, and targeted interventions. Evaluate the effectiveness of these initiatives in addressing the specific health challenges faced by the region.
- **To Identify Gaps and Opportunities for Enhancing CSR Effectiveness**: Identify areas where CSR initiatives could be improved or expanded to better address the health needs of NER, and propose recommendations for optimizing the impact of CSR efforts in the region.

Literature Review

This interface of Corporate Social Responsibility (CSR) and health outcomes has received much theoretical and empirical attention recently. Grounded theoretical antecedents, such as stakeholder theory and shared value creation, provide some direction on exactly how CSR initiatives can be positively related to health outcomes. Stakeholder theory proposed by Freeman in 1984 holds the belief that corporations have obligations greater than generating mere profits; rather, corporations have a direct responsibility toward the health of their community. Similarly, the conceptual model of Porter and Kramer (2011) states that shared value creation involves solving problems for both business and society, including health issues. Empirical studies do support these theories, suggesting that CSR activities promote improved health infrastructure, as well as easy access to health services (Brammer et al., 2007), such as improvement in health education and prevention of diseases (Moon, 2014).

Challenges in the Northeast India (NER) health sector are unique because they were forged through the region's geographical isolation, diverse population and socio-economic conditions. The most pertinent health issues are that many suffer from malnutrition, specifically among children and pregnant women; associated with the scarcity of access to nutritious food and health services, more pregnant

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women have higher indices of malnutrition (Ghosh et al., 2015). More so, NER also faces a heavy burden of infectious diseases such as malaria, tuberculosis, and hepatitis that are affected by climate and seasonality factors (Das et al., 2018). The risk in maternal and child health remains high with high cases of maternal and infant mortality mostly affected by poor antenatal care and poor access to skilled delivery attendants (Singh et al., 2016). For this reason, the spread out nature of the area often restricts access to hospital facilities accompanied by suboptimal transportation and doctors and paramedics availability in this area (Chakraborty & Rai, 2020).

CSR activities in NER have taken place to respond to various health challenges presented by this region. Development and upgrade of health infrastructure, including the construction of primary health centers and rural hospitals, have been some of the frontline CSR programs. These health infrastructure developments strive to avail service access for people living in underserved areas (Nair et al., 2021). Another common area of target for corporate-sponsored health education and awareness campaigns is nutrition, hygiene, and disease prevention, sometimes through partnerships with local NGOs and health organizations to ensure culturally acceptable messages (Ghosh & Mandal, 2019). CSR-led initiatives have also helped support vaccine drives, camps for health screenings, and public health communications in efforts to prevent communicable diseases often prevalent at the time (Patel et al., 2022). Other initiatives are specifically focused on certain, such as improving maternal and child health service delivery through interventions that prevented nutrition malformation (Mukherjee et al., 2020).

In conclusion, the literature does indicate that CSR really does hold tremendous promise in achieving healthy outcomes: all the theoretical frameworks and existing empirical evidence support this assertion. The initiatives in Northeast India have greatly alleviated quite serious health problems prevailing there by way of infrastructural upgradation, extension of health education, and awareness generation on diseases. However, subsequent research and review must continue to better evaluate the effectiveness of such initiatives while adapting the context to the dynamic needs of the region.

Methodology

This study employs a mixed-methods approach, combining quantitative analysis of CSR spending data from the Ministry of Corporate Affairs with qualitative case studies of specific CSR health projects in NER. Data sources include:

- CSR expenditure data from the National CSR Data Portal
- Annual reports of major companies operating in NER
- Government health statistics and reports
- Academic literature and news articles on CSR and health in NER
- Respective companies' annual reports.

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The study period covers Financial Years 2014-15 to 2020-21, corresponding to the period since the CSR mandate came into effect.

Data Analysis on CSR Investment in India from 2014-15 – 2021-22

Overview of CSR spending from 2014 to 2021

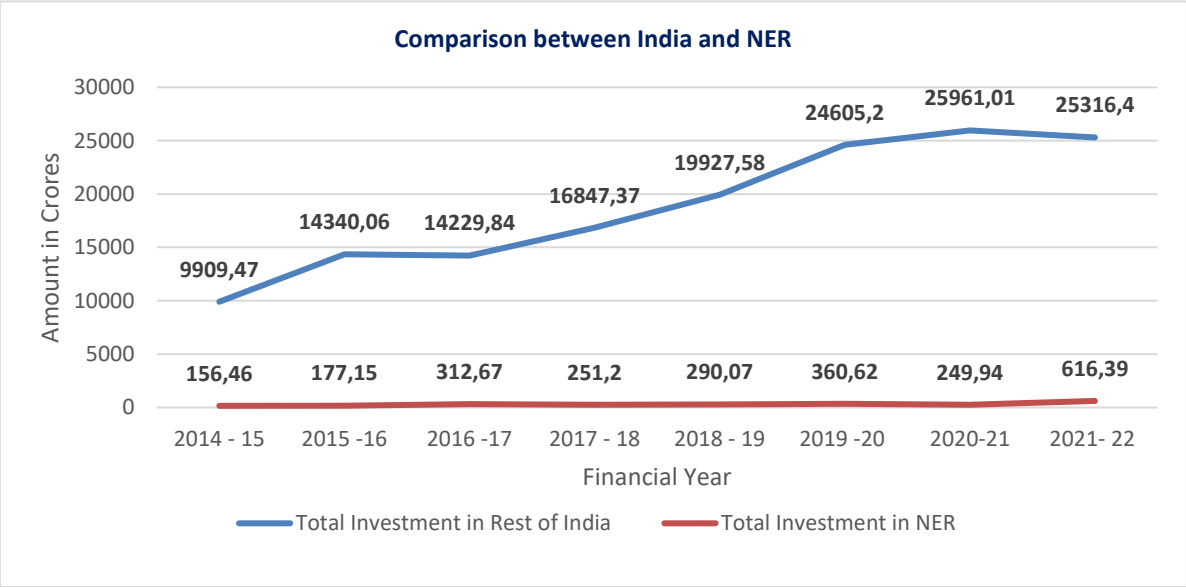

Figure 1: Comparison of CSR investment from 2014 - 15 to 2021 -22

Figure 1- The graph compares total investments in the Rest of India versus the North Eastern Region from 2014-15 to 2021-22. It clearly states that there exists a sharp difference in investments between the Rest of India and NER over the years. Investments were much higher in the Rest of India compared to NER throughout the period. The trend of Rest of India is showing very positive growth, starting with 9,909.47 crores in 2014-15 up to a peak of 25,961.01 crores in 2020-21, after which it declined marginally to 25,316.4 crores in 2021-22. As contrasted with this, NER investments remain much lower and range between 156.46 and 616.39 crores. Investments both in regions show time-bound growth, and the gap keeps widening, which gives indications of a highly skewed balance of economic development between these parts of India.

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Sector with Highest CSR investment in India from 2014 to 2022.

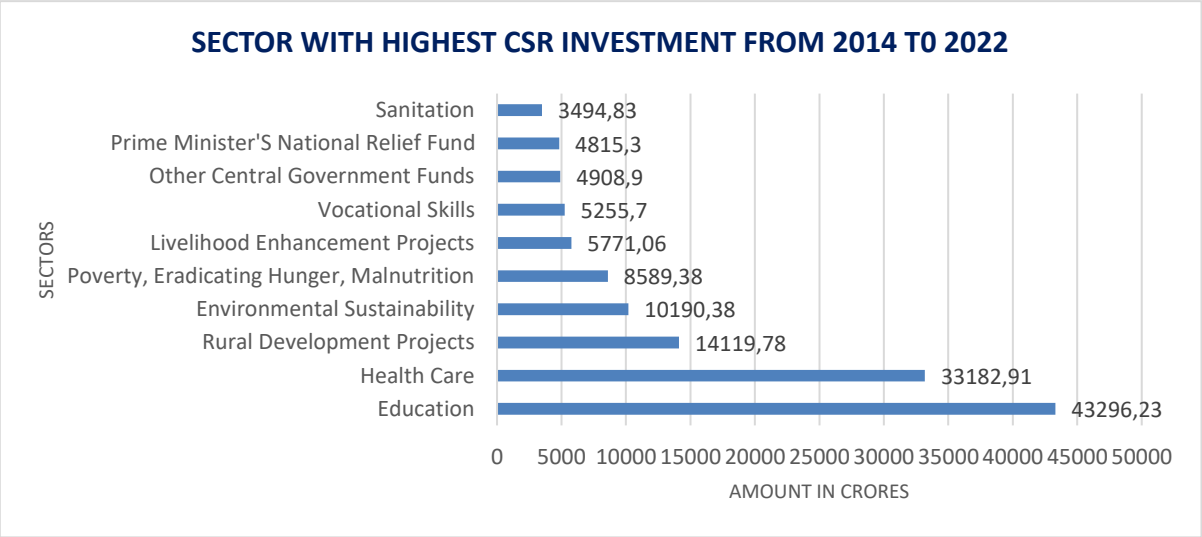

Figure 2: Sectors with highest CSR investment from 2014- 15 to 2021-22 in India

Figure 2: The graph shows the break up of investments across all sectors in India from 2013 to 2022. The largest sector of investment, according to the figures, was education-inclusive initiatives for the differently abled and livelihood programs with 845.25 crores. Coming next are the health-related initiatives that include those against hunger, poverty, malnutrition, and improvement of sanitation.

with 549.66 crores. Allocation to rural development was 138.72 crores, environmental and animal welfare programs 111.66 crores, the sector of gender equality, women empowerment, old age homes, and reducing inequalities getting the least allocation at 55.16 crores. The graphs are really making a commentary in revealing that among priorities for the country, it is education and health which attracts the maximum focus while social welfare and environmental considerations seem to form relatively lesser priorities in terms of allocations in this period.

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Sector with lowest CSR investment in India from 2014 to 2022.

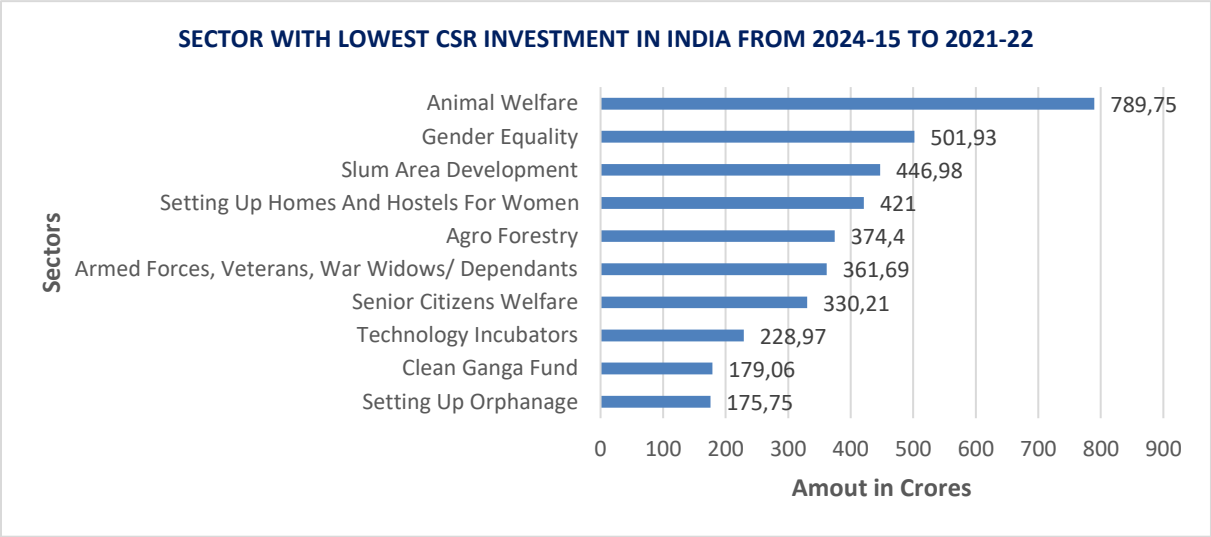

Figure 3: Sector with lowest CSR investment in India from 2014-15 to 2021-22

Figure 3: The bar graph highlights the CSR investments in India in various sectors from 2014-15 to 2021-22. It has been observed that the sector of Animal Welfare invests a major amount of 789.75 crores, followed by Gender Equality and an amount of 501.93 crores. On the other hand, Setting Up Orphanage received the lowest amount of 175.75 crores. Investment in sectors such as Clean Ganga Fund and Technology Incubators is fairly uneven. Those sectors along with the Setting Up Orphanage attracted investments less than 200 crores. Armed Forces, Veterans, War Widows/Dependants and Senior Citizens Welfare sectors, however, drew between 300 and 400 crores worth of investments.

Data Analysis on CSR Investment in NER Region of India from 2014-15 – 2021-22

Total CSR Investment in the States of NER from 2013 to 2022

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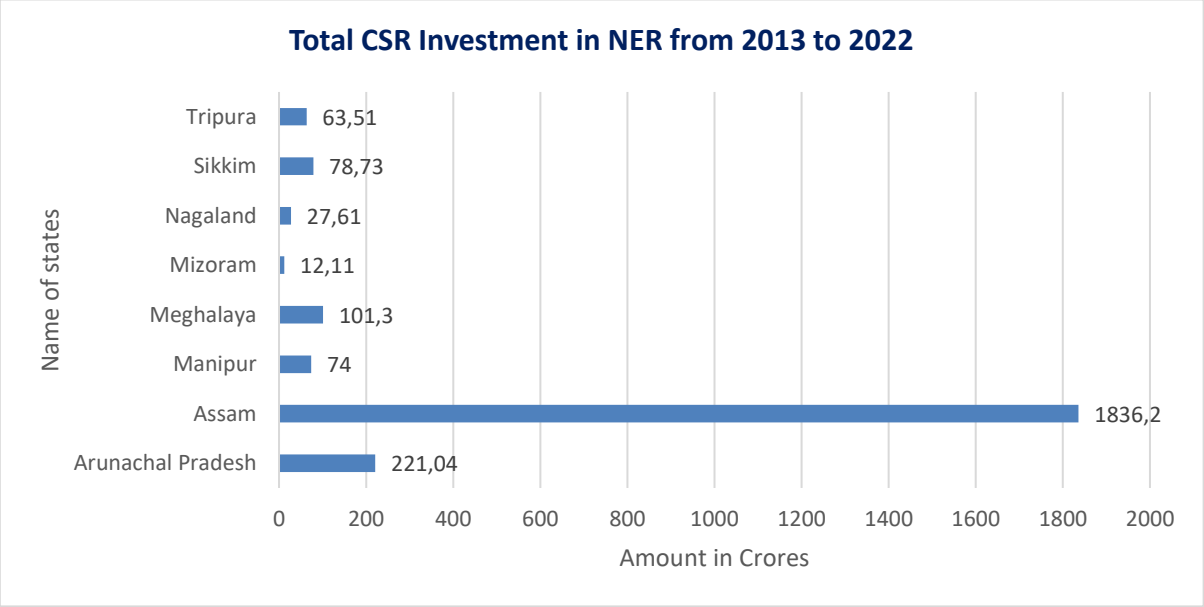

Figure 4: Comparison of CSR Investment among the states of NER

Figure 4: Investment graph in NER, likely North Eastern Region, from 2013-2022 across eight states: The highest investment is done in Assam at 1836.2 crores which makes all the other states run far behind. The other state is Arunachal Pradesh with an investment sum of 221.04 crores. Investment in Meghalaya, Sikkim, Manipur, and Tripura were moderate and varied between 63.51 and 101.3 crores. Nagaland and Mizoram witnessed the lowest investments, 27.61 and 12.11 crores, respectively. There is a large investment distribution disparity and this exhibit that Assam received the sum of over 8 times of the next highest state. Thus, it can be inferred that all the development efforts or economic activities were cantered in Assam and other NER states, especially Nagaland and Mizoram were considerably under-funded during the period.

Sectors with the highest CSR Investment in NER Region of India from 2013 to 2022

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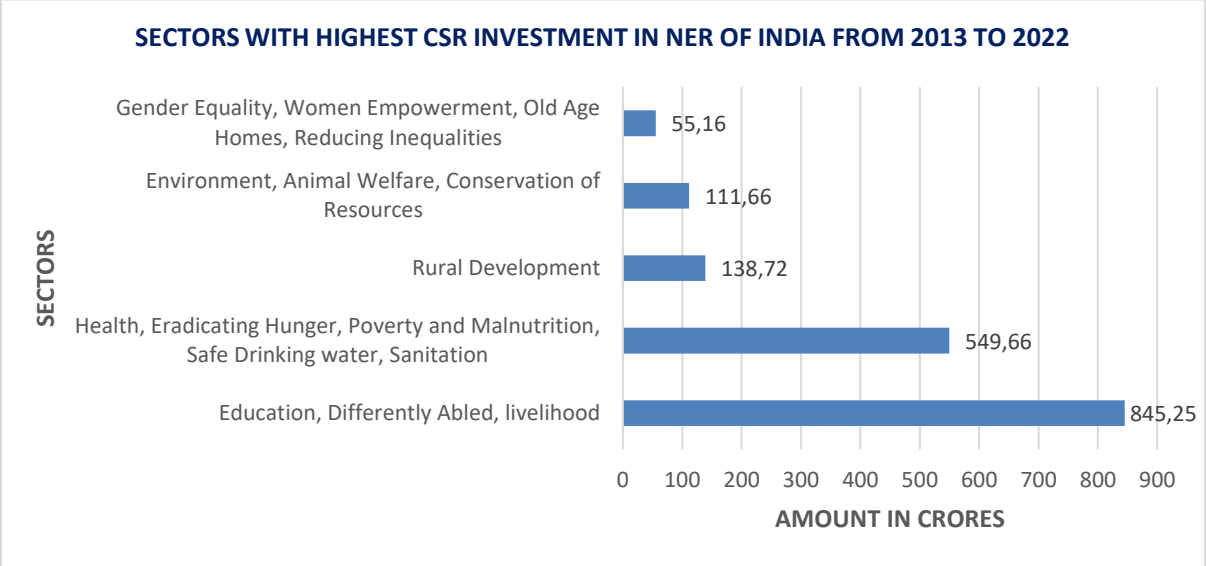

Figure 5: Sectors with highest CSR investment in NER of India

Figure 5: The bar graph shows the investment for sectors of 2013 to 2022. Among five sectors named, the one Education, Differently Abled, and Livelihood received the highest investment at 845.25 crores. Similarly, Health, Eradicating Hunger, Poverty, and Malnutrition, Safe Drinking Water, Sanitation received the second highest investment at 549.66 crores. Graph also shows the areas that belong to fields such as Gender Equality, Women Empowerment, Old Age Homes, Reducing Inequalities and Environment, Animal Welfare, Conservation of Resources with lower investment of below 200 crores. The investment in Rural Development stands at 138.72 crores which reflects the moderate level of investment.

Sectors with the lowest CSR Investment in NER Region of India from 2013 to 2022

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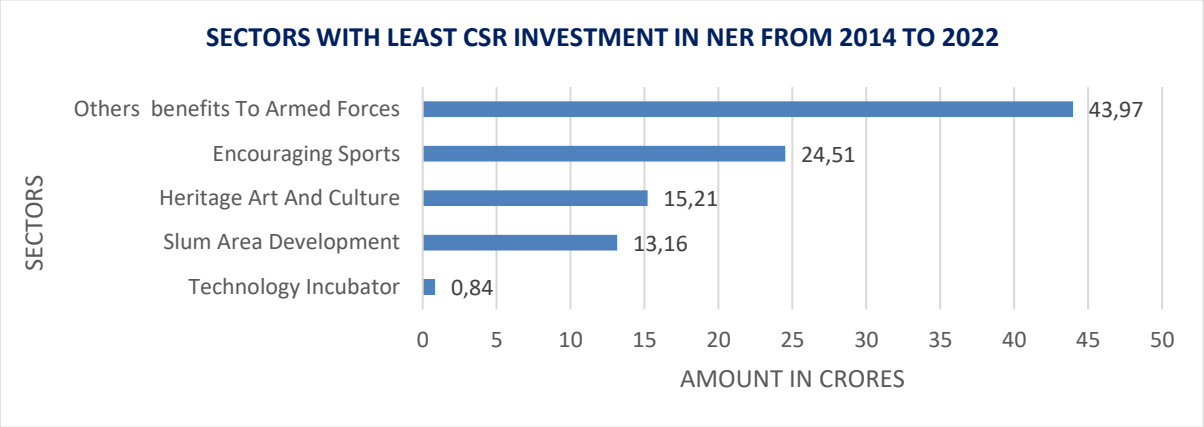

Figure 6: Sector with lowest CSR investment in NER of India

Figure 6: The bar graph illustrates the allocation of Corporate Social Responsibility (CSR) investments in the North East Region (NER) of India from 2013 to 2022. Among the five sectors listed, Others benefits To Armed Forces received the highest investment at 43.97 crores, followed by Encouraging Sports at 24.51 crores. The graph also highlights the relatively low investment in sectors such as Heritage Art and Culture, Slum Area Development, and Technology Incubator. These sectors received investments below 20 crores, with Technology Incubator receiving the lowest investment at 0.84 crores.

CSR Spending on Health in NER: An Overview

Fiscal Year	CSR Spent (NER)	CSR Spent (Rest of India)
2014-15	34.73	1913.61
2015-16	25.49	3432.9
2016-17	53.4	2656.68
2017-18	84.16	2895.85
2018-19	126.91	3575.79
2019-20	145.9	4237.47
2020-21	282.07	5821.96
Total	**752.66**	**24534.26**

Table 1: CSR investment in NER vs Rest of India from 2014-15 to 2021-22

Table 1: The above table illustrates the CSR investments in the North East Region of India and the rest of India from 2014-15 to 2020-21. Overall, CSR spending in the NER has increased manifold to a total expenditure of 752.66 crores. Yet this amount is meager compared to the overall CSR spend in rest of India, which has been at 24,534.26 crores in the same period. An analysis by year implies that even though CSR spending in NER has gradually grown over the years; it has always constituted a small

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percentage share of the national total. This thereby indicates there is a considerable gap in CSR investment between the NER and the other regions of India.

State	Total CSR Spent (INR Cr.)	Percentage %
Assam	453.66	82.5
Arunachal Pradesh	13.96	2.5
Manipur	11.7	2.1
Meghalaya	16.99	3.1
Mizoram	1.14	0.2
Nagaland	5.39	1.0
Tripura	32.22	5.9
Sikkim	14.6	2.7
Total	**549.66**	**100.0**

Table 2: NER State-wise CSR Health Spending (FY 2014-15 to FY 2021-22

Table 2: The table represents the state-wise disbursement of CSR investments in healthcare across the North East Region (NER) of India for the period 2014-15 to 2021-22. Assam leads the pack with CSR health spending touching 82.5% of the total NER investment. Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, and Sikkim share the rest with relatively much smaller percentages. High variation The numbers reflect a significant variation in the proportion of health expenditure through CSR in the NER states, which suggests that a disproportionate share has gone to Assam. It means that CSR funding has not been channelled equitably across states in this region while responding to the distinct health care needs of these states.

Region	Total CSR Spent (NER)	Population (Millions)	Per Capita Spending
NER	449.72	45	99.94
Rest of India	58,828.28	1345	437.38

Table 3: Per Capita CSR Health Spending: NER vs Rest of India

Table 3: Comparing Corporate Social Responsibility (CSR) Spending: North East Region (NER) of India versus the Rest of India This table compares the CSR spending in the North East Region of India and the rest of India. Though the total CSR spending in the NER was at 449.72 crores, it is still far from the total spending in the rest of India, which reached 58,828.28 crores but if seen on a per capita basis then it surpasses the rest of India. The per capita CSR expenditure in NER is 99.94 crores, with 45 million people; it is 437.38 crores in the rest of India. This analysis reveals that its smaller proportion in total

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national CSR spending translates into allocations per person considerably higher than those in the other regions, indicating greater efficiency in the use of CSR funds within the region.

Region	FY 2014-15 (INR Cr.)	FY 2020-21 (INR Cr.)	CAGR
NER	34.73	68.01	11.85%
Rest of India	1912.27	5590.99	19.57%

Table 4: Growth Analysis

Table 4:- The table below presents an analysis of an increase in CSR spending between the North East Region (NER) of India, compared to the rest of the country, from 2014-15 to 2021-22. The table brings to the limelight the Compound Annual Growth Rate (CAGR), which shows CSR spending in NER during this period has grown at 11.85% while, in contrast, CSR spending in other states of India has had a growth rate of 19.57%. This implies that even though CSR spending growth for the two is moving in tandem, the rest of India has been growing more rapidly, suggesting an even wider expansion and implementation of CSR throughout these areas.

Year	High Industrial States	Medium Industrial States	Low Industrial States
FY 2015-16	58.61%	108.33%	38.13%
FY 2016-17	-6.44%	-57.57%	72.85%
FY 2017-18	1.41%	49.46%	28.27%
FY 2018-19	8.04%	32.03%	50.61%
FY 2019-20	30.41%	21.01%	58.94%
FY 2020-21	13.39%	59.81%	28.13%

Table 5: Year-on-Year Growth Rate of CSR Health Spending by Industrial Groups in States

Table 5: The analysis reveals a focused concentration of CSR spending on health in the top 5 states with significant industrial activity, namely, Maharashtra, Gujarat, Delhi, Karnataka, and Tamil Nadu. Together they account for about 70% of total CSR spending on health, thus establishing a very high correlation between industrial activity and CSR investments.

The high industrial activity states have presented a continuously growing growth in CSR spends, except in one year, that is, FY 2016-17. This indicates the more stable and continued CSR activities in such regions. Medium and low industrial activity states-which include Andhra Pradesh, Rajasthan, West

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Bengal, Uttar Pradesh, Odisha, Nagaland, Mizoram, Lakshadweep, Andaman And Nicobar, and others- have registered growth rates that are very volatile from year to year. This could mean that CSR policies are not standardized or the company spends more reactively on whatever is demanded or on hand. Per capita spending on health-related CSR is remarkably higher in the states having high industrial activity- close to three times as high as of those having medium industrial activity and over 13 times as high as that of the low industrial activity states. This brings forth significant disparity in health-related benefits of CSR available to various residents of different states. Low industrial activity states - although with absolute spending at the lowest levels amongst all states - have recorded impressive growth rates in several years, with some states recording as high as 20%. Could this reflect a greater attention paid to these areas over recent years, but from a very low base?.The COVID-19 pandemic appears to have spurred a significant increase in health-related CSR spending by all three groups. Here, the growth was maximum by the Medium Industrial Activity group at 59.81% in FY 2020-21. This appears to reflect a more dramatic response to the pandemic in these states.

Performance of NER States in SDG 3 – Good Health and Well-Being

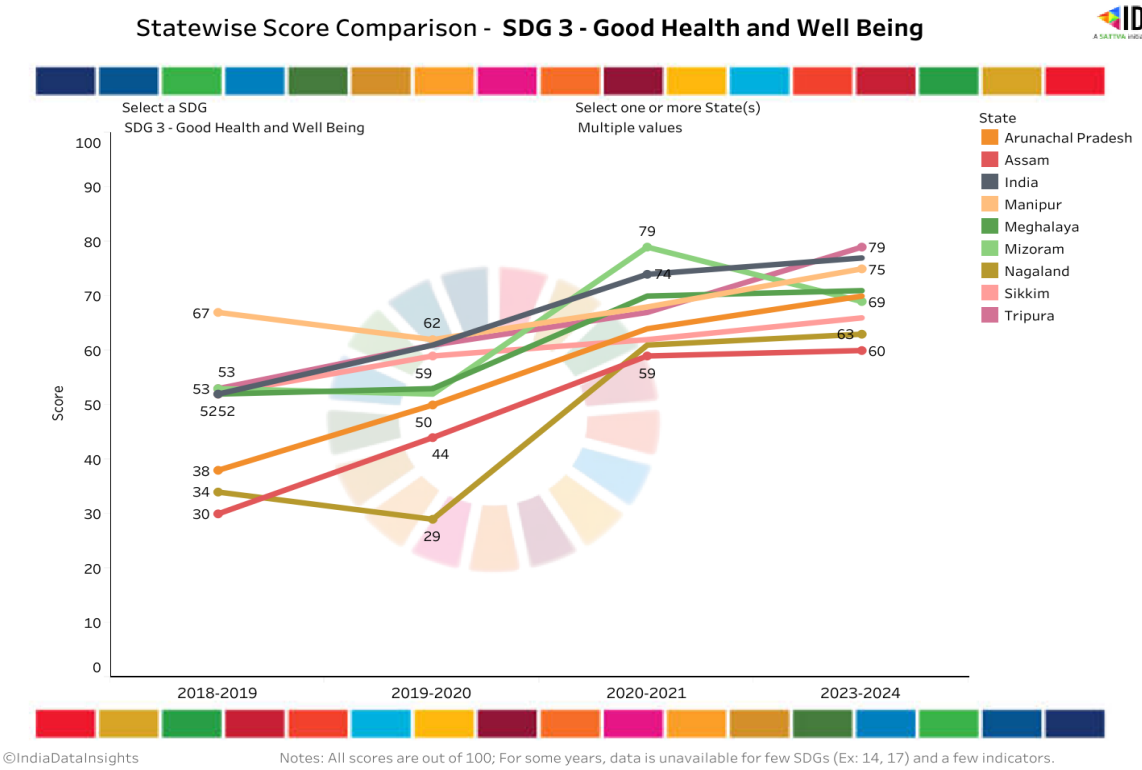

Figure 7: Performance of NER States in SDG -3

Figure 7: This graph displays the trends of the Indian states regarding SDG 3, or Good Health and Well Being, during the period from 2018-2019 to 2023-2024. Overall, the trend in most states is good. Indeed,

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there is an increasing upward trend because health and well-being indicators are rising every year. Consistency from Mizoram scored the highest at 79 in the 2020-2021 period and consistently remained in that rank up to the last reviewed period, 2023-2024. On the other hand, Nagaland started at the lowest rank of 34 in 2018-2019 but showed consistent improvement over the years. Assam also showed the most rise as it began at 30 but climbed up to 60 during the reviewed period.

The data shows general convergence by 2023-2024, where most of the states lie between 60 and 79. It indicates that disparities in health and well-being are narrowing in these states. Overall, India's score on this report--which should be its national average--has improved from 52 in 2018-2019 to 75 in 2023-2024, which signifies marked progress at the national level. Interestingly, many states reported an overall marked improvement in scores for 2020-2021, possibly a result of more stringent measures addressed to the pandemic of COVID-19. Of the states that scored temporary dips in their scores in 2019-2020, two were Sikkim and Tripura. Others scored at a slightly higher notch but remained in the red or are still not yet out of the red in subsequent years.

In terms of comparative performance, it is worth noting that Arunachal Pradesh had the least improvement, from 67 in 2018-2019 to 69 in 2023-2024. By the end of the period, Mizoram and Sikkim both ended at 79 and India as a whole at 75, placed top. The graph shows some years and indicators do not have data, which may affect the completeness of this analysis. However, the general trend clearly shows a positive trajectory in health and well-being indicators across these Indian states, significant improvements in initially low-scoring states, and general narrowing of disparities over time.

Key CSR Initiatives in NER's Health Sector

Despite the overall low CSR spending in NER, several noteworthy health initiatives have been implemented by both public and private sector companies. Some prominent examples include:

- **Oil India Limited's Project 'Arogya**: Oil India Limited (OIL), a public sector undertaking, has been implementing Project 'Arogya' in its operational areas in Assam and Arunachal Pradesh. The project focuses on: Mobile health camps in remote areas, Specialized health camps (e.g., eye care, dental care), Health awareness programs and Support to local healthcare institutions. According to OIL's annual report, the project has benefited over 100,000 people in these two states since its inception in 2012 (Oil India Limited, 2021)
- **Numaligarh Refinery Limited's Healthcare Initiatives**: Numaligarh Refinery Limited (NRL), another public sector company, has undertaken several healthcare initiatives in Assam, including Construction and operation of a 30-bed hospital in Golaghat district, Mobile medical units serving remote areas and Support to cancer treatment facilities. NRL

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reports that its mobile medical units alone have served over 50,000 patients annually in recent years (Numaligarh Refinery Limited, 2020).

- **Tata Trusts' Cancer Care Program**: While not exclusively a CSR initiative, Tata Trusts' comprehensive cancer care program in Assam is a significant private sector contribution to healthcare in NER. The program includes Establishment of new cancer care facilities, Upgradation of existing government healthcare institutions, Training of healthcare professionals and Cancer awareness and screening camps. The program aims to reduce cancer-related mortality in the region by 50% over ten years (Tata Trusts, 2019).
- **Other Notable Initiatives**: Several other companies have contributed to healthcare in NER through their CSR programs, including ONGC's support to hospitals and health camps in Assam and Tripura, NHPC's mobile health units in Arunachal Pradesh and Manipur, Cement companies like Dalmia Bharat and Star Cement supporting local healthcare facilities in Meghalaya and Assam.

Impact Analysis

While most CSR initiatives have made a positive contribution to the North Eastern Region's health sector, measuring their overall impact is well-nigh impossible due to lack of data availability and a standardized impact measurement framework. However, there are several indications from various sources and reports that, at least to some extent, CSR has accounted for enhanced access and healthcare outcomes within the region. Regular CSR-backed mobile health camps and units have also taken the basic healthcare services to places that otherwise were unapproachable, erstwhile inaccessible, and farthest from the reach of ordinary common healthcare facilities. Mobile healthcare units have also increased reach so that real healthcare can reach communities deprived of access to proper and sophisticated health care infrastructures. This infrastructure enhancement funded by CSR has not only constructed or upgraded health care facilities in rural areas but also upgraded the medical infrastructure of the region, offering more physical spaces for healthcare delivery, as thought to be crucial for regions which have less. CSR initiatives have also been on the growth in specialties; so much more towards the specialization of particular health issues like cancer, eye care, and other special treatments. All these have improved the availability of various treatments previously unavailable or scarce in NER. CSR-supported health awareness programs have developed healthier health-seeking attitudes of the local populace. The efforts aimed at educating the community in preventive care, sanitation, and nutrition create a culture of proactive health seeking. Although such contributions have proved helpful, the overall positive impact of CSR on NER's health sector remains limited in comparison to the region's large investments against its sizeable healthcare needs. The CSR contribution is helpful, but now it needs scaling up in the health sector to address broader problems faced by it in the region.

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Findings

- Differences in CSR Expenditure: Whereas NER had ₹752.66 crores of health CSR for the entire study period, it was more at ₹24,534.26 crores for other parts of India(Article - Copy). This, in fact, has been indicative imbalance of the investment of CSR health across regions. Despite lower absolute spending, NER had a higher per capita CSR health spending (₹99.94) compared to the rest of India (₹437.38). This suggests efficient fund utilization in NER despite its overall underfunding.
- Concentration of Funds in Assam: A bulk amount of 82.5% of NER's CSR health-related funds was distributed to Assam, while the remaining seven states accounted for relatively tiny portions. Again, the question is whether equity in distribution applies, as decisions on CSR provisioning seem skewed more towards areas of greater industrial activity. Mizoram and Nagaland were the least investing states in terms of health; this led to a high intra-regional disparity in NER.
- Challenges towards Effective CSR Implementation in NER: The study identifies some challenges constraining the effectiveness of CSR in NER. The low industrial levels in NER mean that very few companies exist within this region. There are, therefore, limited CSR resources. The very remote and inaccessible nature of NER disallows the implementation and observation of CSR activities effectively. There are few organizations and NGOs which can effectively implement CSR work at the local level. It does not know what the company is actually needed in terms of health by that area. So, CSR efforts may not address the most relevant health issues.
- Health Sector Improvements through CSR: CSR complemented the construction of new health care infrastructure, upgrading primary health centres, and hospitals in the rural areas leading to increased access for health care services. Funding CSR education and awareness toward this effectively enhanced health literacy on maternal, child health, nutrition, hygiene, and the prevention of diseases. CSR also brought specialized health care services, such as cancer care and eye care, which ensured more treatment options for NER.
- Opportunities for Increasing CSR Impact: Preventive Healthcare, CSR initiatives in improving nutrition, sanitation, and health education can have a long-lasting impact on the health of this region. Technology can be used to bridge geographical challenges through access to healthcare services by using telemedicine and other digital health solutions. Capacity Building initiatives, The CSR can invest in building capacity that would address the shortage of skilled professionals in the region. CSR can synergize with government

health programs in scaling up healthcare interventions, thus making it far more sustainable and impactful.

- The SDG 3 of Sustainable Development Goals is impacted through CSR: The study also examines the performance of NER states vis-à-vis SDG 3 (Good Health and Well-being) over the years 2018-19 to 2023-24. Mizoram continues to remain the consistent performer among the top while Assam has improved significantly. In absolute terms, most health and well-being indicators across NER states have improved and reduced disparities between states.

Recommendations

In order to strengthen the effectiveness of Corporate Social Responsibility (CSR) in Northeast India (NER) for better health outcomes, several key recommendations are forwarded. First, targeted CSR allocation should be developed, and the government can introduce incentives or guidelines to entice companies to specifically allocate a portion of their CSR funds to the health sector of NER. This targeted approach will ensure that the resources flow where they are most needed. A regional CSR hub set up in NER may also help in coordination by facilitating a common platform for information sharing, partner identification, and project management among the companies keen to develop health-related initiatives. It goes to the importance of long-term partnerships between the corporations and local health-care institutions/NGOs; such partnerships can make health interventions more enduring and impactful. The fourth aspect is a standardized framework for measuring impact, ensuring that there will be more homogenous reporting of outcomes from health-focused CSR initiatives, providing insights into where things work well and where there are needs for adjustment or further improvement.

Besides, there is an imperative need to foster the adoption of technology in CSR ventures to capitalize on digital health technologies that would allow the crossing of geographical boundaries and hence ensure broader reach to health facilities. It would focus on skill upgradation by bridging the skill gaps of healthcare workers in the region and strengthening their training programs and medical education as initiated under the CSR endeavours. Finally, a collaborative approach between CSR, government agencies, and international development organizations would be crucial for large-scale burgeoning of health issues in NER. These recommendations would thus align the CSR efforts much more strategically in attaining the much greater pressing health need of Northeast India with much deeper and sustainable impact.

Conclusion

Corporate Social Responsibility has greatly contributed to the health sector of North East India mainly through interventions of public sector companies and some private sector leaders. However, this impact

is relatively low because the overall spending in this region remains relatively low and is coupled with various implementation challenges. With the implementation of CSR by NER health, it has the potential to play a much greater role than it did earlier. Companies attempt to get more strategic, collaborative, and technology-driven. In this way, they can elevate the effectiveness of CSR as well as significantly contribute towards better health outcomes in this historically underserved region. Future research should focus on developing robust impact assessment methodologies for health-focused CSR initiatives in the NER and exploring innovative models of public-private partnerships in the health sector.

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