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CONFERENCE PAPER

CORPORATE SOCIAL RESPONSIBILITY (CSR) IN PUBLIC SECTOR ENTERPRISES : A STUDY OF NALCO

Chhita Ranjan Satapathy, Minati Das and Smarajeet Singh

1. NIIS Institution of Business Administration

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Abstract

Corporate Social Responsibility (CSR) has emerged as a crucial component of sustainable business strategies for Public Sector Enterprises (PSEs) in India, moving beyond philanthropy toward a "social license to operate." This study investigates the CSR initiatives of the National Aluminium Company Limited (NALCO), a Navratna CPSE under the Ministry of Mines, focusing on its periphery development, health, education, and environmental initiatives in Odisha. NALCO stands out by adopting a comprehensive approach, directing its CSR initiatives through the NALCO Foundation, with a dedicated focus on the marginalized sections, tribal communities, and displaced families in Damanjodi and Angul. Key initiatives include operating Mobile Health Units (MHUs), promoting education through the "NALCO Ki Ladli" scheme and infrastructure support, and implementing large scale skill development programs, such as tailoring and motor winding, to enhance employability. Environmental stewardship is prominent, with NALCO planting over seven million trees and adopting solar energy initiatives in peripheral villages. The study finds that NALCO effectively utilizes 2% of its net profit to fund social developmental projects, significantly increasing the living standards of communities within its 25-kilometer operational radius. The research highlights that NALCO's CSR activities create a positive impact on both its community relationships and the employee job attitude, fostering a mutually beneficial partnership.

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Introduction:-

The Corporate Social Responsibility (CSR) policy in India, under Section 135 of the Companies Act 2013, mandates that companies with a net worth of ₹500 crore+, turnover of ₹1000 crore+, or net profit of ₹5 crore+ must spend at least 2% of their average net profits from the previous three years on CSR activities. The board must oversee projects listed in Schedule VII, focusing on education, poverty, health, and environment, with a strong preference for local areas.

Corresponding Author:- Chhita Ranjan Satapathy

Address:- NIIS Institution of Business Administration

Key Aspects of the Indian CSR Policy:

- **Applicability:** Applies to Indian companies, holding/subsidiary companies, and foreign companies with branches in India that meet the financial thresholds.
- **Mandatory Spending:** Companies must spend at least 2% of their average net profit from the preceding three years.
- **Governance:** Companies must constitute a CSR Committee of the Board, which formulates the policy, recommends expenditure, and monitors activities.
- **Schedule VII Activities:** Approved activities include eradicating hunger, promoting education, gender equality, environmental sustainability, and contributing to funds like the PM National Relief Fund or Swachh Bharat Kosh.
- **Unspent Amount:** If the 2% target is not met, the board must disclose the reasons and transfer the unspent amount to a special account or specified fund (e.g., Clean Ganga Fund) within stipulated timelines.
- **Reporting:** Companies must include a detailed CSR report in their annual board report.
 - **Disaster Management:** Relief and rehabilitation measures.

The Ministry of Corporate Affairs (MCA) oversees these regulations, aiming to ensure that companies channel their resources towards social and economic development.

Sector-wise CSR expenditure trends in India (FY15-FY2024)

Based on reports from the Ministry of Corporate Affairs and CSRBOX, total Corporate Social Responsibility (CSR) expenditure in India has grown significantly since the mandate in 2014, surpassing ₹30,000 crore annually in recent years. The table below presents a sector-wise break-up of CSR expenditure from FY 2014-15 to FY 2023-24 (approximate figures based on available data, values in ₹ Crore).

Sector-wise CSR Expenditure Trends in India (FY15–FY24)

Sector / Head	FY15-16	FY17-18	FY19-20	FY21-22	FY23-24 (Est.)
Education	~2,500	~3,500	~4,500	6,557	~11,000+
Healthcare	~1,800	~2,500	~3,000	7,806	~7,000+
Rural Development	~1,200	~1,600	~1,800	1,832	~2,000+
Environment	~600	~900	~1,200	2,432	~2,500+
Livelihood/Skills	~800	~1,000	~1,300	854	~1,500+
Hunger/Poverty	~500	~800	~1,100	1,894	~1,200+
Other Sectors	~1,000	~1,200	~1,500	~5,000	~6,000+
Total Expenditure	~8,500	~11,500	~14,400	~26,378	~34,909

Note: Data for FY24 is based on preliminary reports (ICOR 2025). "Other Sectors" includes Art & Culture, Sanitation, Technology Incubators, Disaster Management, and Women Empowerment.

Key Highlights of the Last Decade (2014-2024)

- **Total Spend:** Over ₹2.2 lakh crore has been spent on CSR initiatives between FY15 and FY24.
- **Top Sectors:** Education and Healthcare consistently receive over 50% of total CSR funds.
- **Growth Trends:** Annual spending has more than tripled from around ₹10,000 crore in 2014-15 to nearly ₹35,000 crore by 2023-24.
- **Pandemic Shift:** A sharp rise in health-related spending occurred between 2020-2022, with a high peak in healthcare spending in FY21.
- **Regional Concentration:** Maharashtra, Gujarat, and Karnataka are the top recipient states.
- **Recent Trends (FY24):** Environmental sustainability projects saw a sharp increase (54% growth), while rural development spending declined in some regions.

Based on the projected CSR spending and recent trends in India for the fiscal year 2024-2025, the total CSR expenditure by listed companies is projected to be around ₹38,000 crore, reflecting continued growth in corporate philanthropy. The expenditure is primarily driven by legal mandates under Schedule VII of the Companies Act, 2013, with education and healthcare remaining the top-funded sectors.

Projected CSR Expenditure Breakdown for FY 2024-25

The following table outlines the estimated sector-wise allocation based on data from CSRBox's ICOR 2025 report and 2024 projections.

CSR Activity Head (Schedule VII)	Key Initiatives	Estimated % Share
Education, Livelihood & Skill Development	Digital learning, infrastructure, vocational training	~44%
Healthcare, Sanitation & WASH	Hospitals, health camps, nutrition, clean water access	~29%
Environment & Sustainability	Afforestation, water conservation, renewable energy	~10%
Rural Development	Infrastructure, sustainable agriculture, drinking water	~7%
Women Empowerment & Senior Care	Skill centers, daycare facilities, welfare of vulnerable	~5%
Disaster Management & Relief Funds	PM CARES, disaster relief, rehabilitation	~3%
Sports & Heritage	Sports facilities, monument restoration, local arts	~2%
Administrative Overheads/Impact Study	Project management & assessment (capped at 5%)	-

Key Trends and Observations (2024-2025)

- **Top Focus Areas:** Education and Healthcare together dominate, accounting for over 70% of total funding.
- **In-House Execution:** Companies are moving toward internal execution of projects for better control, reducing reliance on implementing agencies.
- **Government Partnerships:** 56% of companies prefer collaborating with government bodies to scale up projects, particularly in education (72%) and livelihood (64%).
- **Geographical Concentration:** Spending is heavily concentrated in industrialized states like Maharashtra, Gujarat, and Tamil Nadu.

- **Excess Spend Set-off:** Companies are permitted to set off excess CSR spending in a particular year against obligations for up to three succeeding financial years.

Disclaimer: The data above consists of projections and early sectoral allocation trends for FY 2024-25, based on current CSR reporting cycles. Actual expenditure figures are finalized upon the submission of CSR-2 forms to the Ministry of Corporate Affairs.

CSR Activities by public sector companies in India for last 5 years

Public sector undertakings (PSUs) in India have significantly scaled their Corporate Social Responsibility (CSR) activities over the last five years, with total spending by Central Public Sector Enterprises (CPSEs) reaching a record high of **₹6,437 crore** in FY 2024-25. This marks a 31% increase from the previous year, even as overall CPSE profits declined, reflecting a shift toward long-term social investment over simple compliance.

Top PSU CSR Spenders (Last 5 Years)

Oil and energy giants consistently lead the public sector in CSR contributions. Below are the top contributors and their approximate annual spending:

PSU Name	FY 2024-25 Spend (Approx.)	Primary Focus Areas
ONGC	₹929.08 Crore	Healthcare, Infrastructure, Education
Indian Oil (IOC)	₹538.04 Crore	TB Elimination, Cancer Care, Sanitation
NTPC Ltd	₹362.94 Crore	Community Health, Vocational Training
Power Grid (PGCIL)	₹360.19 Crore	Rural Infra, PM Cares, Skill Development
Coal India (CIL)	₹572 Crore (FY24)	Sustainable Livelihoods, Rural Transformation

Key Thematic Activities (2020–2025)

PSU CSR activities are governed by Schedule VII of the Companies Act, focusing on national developmental goals:

- **Healthcare & Sanitation (48% of PSU Spend):**
 - **Pandemic Relief:** PSUs played a critical role in COVID-19 relief, contributing heavily to the PM CARES Fund and building massive temporary hospital infrastructures.
 - **Specialised Care:** **Indian Oil** IOCL has contributed over ₹216 crore toward cancer care till 2025 and is a major partner in the national TB Elimination Program, screening over 10 lakh people.
- **Education & Skill Development (25% of PSU Spend):**
 - **Digital Literacy:** Companies like **ONGC** and **Power Grid** focus on digital classrooms and vocational training for unemployed youth in "Aspirational Districts".
 - **Scholarships:** Meritorious students from marginalised backgrounds receive support through programs like ONGC's national scholarships.
- **Environmental Sustainability:**
 - **Green Initiatives:** Massive afforestation and mangrove restoration projects by **ONGC** aimed at carbon footprint reduction.
 - **Renewable Energy:** Installation of solar-powered drinking water systems and streetlights in rural areas.

- **Rural Development & Infrastructure:**

- **Localized Impact:** PSUs typically concentrate their efforts in the "periphery" of their operations—mines, steel plants, and refineries—to build community goodwill and secure a "social license to operate".
- **Water Stewardship:** Indian Oil and GAIL have focused on safe drinking water and the protection of water resources in drought-prone regions.

Emerging Trends (2024–2026)

- **Aspirational Districts:** Following NITI Aayog's directives, PSUs now prioritize the 112 most backward districts. Indian Oil, for example, spent ₹61.19 crore across 53 such districts in FY 2024-25.
- **Concentrated Spending:** Social spending is increasingly dominated by the largest firms; the top 10 PSUs contributed nearly 60% of all public sector CSR expenditure in the latest fiscal year.
- **Outcome-Based Auditing:** There is a growing shift toward mandatory impact assessments for projects with outlays over ₹1 crore to ensure transparency and actual life-change rather than just spending.

Objectives:-

1. To focus on CSR activities undertaken by NALCO in last 10 years
2. To comment on the trend of CSR expenditure for the above period.
3. To highlight the geographical coverage by NALCO in terms of CSR activities.
4. To focus on the contribution of NALCO to the country in terms of CSR activities.
5. To test the significance of correlation between Annual turnover and CSR cost.

Methodology:-

The research is entirely based on the secondary sources of data collection, i.e, company website, annual reports, online databases, other websites etc. data have been analyzed using statistical tools viz., tables, diagrams, t-test, etc as required CSR in NALCO

Brief Profile of NALCO

National Aluminium Company Limited (NALCO), a Navratna CPSE under India's Ministry of Mines, is a premier integrated bauxite-alumina-aluminium-power complex incorporated in 1981. Headquartered in Bhubaneswar, it operates world-class, low-cost mining and refining units in Odisha, holding 51.28% government equity. NALCO is a leading manufacturer and exporter, producing alumina, aluminium ingots, and power, with a strong focus on sustainability.

Key Profile Aspects:

- **Incorporation & Status:** Founded on January 7, 1981; designated as a 'Navratna' CPSE.
- **Location:** Headquartered in Bhubaneswar, Odisha.
- **Integrated Operations (Odisha):**
 - **Bauxite Mines:** Panchpatmali, Koraput district.
 - **Alumina Refinery:** Damanjodi, Koraput district.
 - **Aluminium Smelter & Power Plant:** Angul.
- **Key Products:** Alumina, Aluminium ingots, wire rods, billets, and strips.
- **Financial Highlights (FY 2024-25):** Recorded a record net profit of ₹5,325 crore and revenue of ₹16,788 crore.
- **Green Initiatives:** Operates 198 MW of wind power plants and substantial solar power projects.
- **Market Presence:** Listed on BSE and NSE since the 1990s and is a registered entity with the London Metal Exchange (LME).

NALCO is renowned for being one of the lowest-cost producers of alumina and bauxite in the world. CSR activities undertaken by NALCO in last 10 yearsNational Aluminium Company Limited (NALCO), a Navratna CPSE under the Ministry of Mines, has undertaken extensive Corporate Social Responsibility (CSR) activities over the last 10 years, primarily focusing on rural development, education, health, and environmental sustainability in its operational areas, particularly in Odisha.

Key CSR initiatives and achievements over the last decade (roughly 2015-2025) include

1. Education and Skill Development

- **"Nalco-Ki-Ladli" Scheme:** A flagship program launched to promote education of meritorious girl children from BPL and economically weaker families, spanning across Angul and Koraput districts.
- **Supporting Tribal Education:** NALCO sponsors over 650 students from peripheral villages for residential education at institutions like Kalinga Institute of Social Sciences (KISS), Bhubaneswar, and Koraput Development Foundation.
- **School Infrastructure:** Extensive construction and renovation of classrooms, including projects for Prakalpa UP School in Girang village.
- **Vocational Training:** Skill India initiatives to improve employability, including training local youth and women in tailoring and other livelihood skills.

2. Healthcare and Sanitation

- **Mobile Health Units:** Providing free medical services and medicines to rural inhabitants near plant locations.
- **Specialized Health Camps:** Organizing health camps for tribal and rural communities in Damanjodi and Angul sectors.
- **COVID-19 Response:** Funded a dedicated 200-bedded COVID-19 hospital at Nabarangpur, Odisha.
- **Sanitation (Swachh Bharat):** NALCO constructed 433 toilets under the Swachh Vidyalaya Abhiyan, exceeding the 354 target.

3. Rural Infrastructure and Development

- **Drinking Water Projects:** Installing tube wells and large-scale piped water supply projects in peripheral villages (e.g., Village Girang).
- **Roads and Connectivity:** Construction and renovation of bituminous and concrete roads in peripheral villages.
- **Solar Electrification:** Implementing solar-powered lighting systems in villages and public spaces.
- **Rehabilitation:** Comprehensive rehabilitation of families displaced by projects, including housing and livelihood support.

4. Environmental Sustainability and Cultural Heritage

- **Massive Plantation:** Planted over 7 million trees and engaged in avenue plantation along NH from Bhubaneswar to Cuttack.
- **Beautification of Public Places:** Developed parks in Odisha, including Mahatma Gandhi Park, Biju Patnaik Park in Bhubaneswar, and parks in Puri and Jajpur.
- **Biodiversity Enhancement:** Commissioned a butterfly park at its Panchpatmali Bauxite Mines.
- **Puri Iconic City:** Participated in the development of Puri as an iconic city.

5. Key Highlights of Recent Years (2020-2024)

- **Sustained Spending:** Consistently spent at least 2% of their average net profit of the preceding three years on CSR.
- **SD Report 2022-23:** Expended INR 39.54 Crore on CSR, exceeding the mandated obligation.
- **Support to Aspirational Districts:** Augmented developmental activities in Koraput and Dhenkanal districts as per NITI Aayog guidelines.

4G Mobile Towers: Installation of mobile towers in remote areas like Swabhimani Anchal.

These initiatives are carried out primarily through the Nalco Foundation, a trust set up exclusively for CSR activities, often in association with local NGOs.

Over the last decade, NALCO (National Aluminium Company Limited) has consistently invested in social and environmental welfare through its CSR arm, the NALCO Foundation. Its activities are primarily focused in the peripheral areas of its operations in Angul and Koraput (Damanjodi), Odisha, following a mandatory spend of 2% of its average net profits

Summary of Major Projects (2015–2025)

Category	Key Projects / Achievements
Flagship Scheme	Nalco-Ki-Ladli (Scholarships for girl children)
Healthcare	MHUs, free medical camps, and COVID-19 specialized hospital
Infrastructure	Concrete roads, piped water projects, and solar street lights
Education	Sponsorship for tribal students at KISS; building classrooms
Environment	1.3+ lakh saplings in FY 2022-23 alone; <u>Net Zero</u> commitment

Flagship CSR projects**Iconic City Puri-**

To develop Puri as an iconic place several projects have been taken up. Some of the notable projects are illumination of Jagannath temple, operation of battery operated vehicles for cost and easy mobility of pilgrims from Jagannatha Ballava parking place to temple and back, thematic wall paintings of VIP road, Beautification of Important Squares, Development and beautification of Gandhi park, installation of video screens for information of general public, renovation of museum Inside the temple, providing clean drinking water to pilgrims, multi-level car parking at Yatrika, putting up signage and hoardings at the entrance to Puri, development of heritage corridor, etc...

ODF Village- In response to the clarion call given by the Hon'ble Prime Minister on 15th August, 2014, NALCO has been actively engaged in Swachh Bharat Abhiyaan activities across the country in various installations/locations and in the vicinity thereof., NALCO has undertaken projects to make its peripheral villages Open Defecation Free- 6 at Damanjodi and 5 at Angul by providing Individual House Hold Latrines (IHHL) to 1774 hhs with water facility. More villages will be made ODF in the coming years. Sensitization towards the proper use of toilets and adopting hygienic practices will be undertaken. Swachha Bharat Mission- NALCO has actively enrolled itself in Nationwide cleanliness campaign "Swachh Bharat and Swachh Vidyalaya Abhiyan" by undertaking several activities at the company's corporate office, operating units and residential townships. Overall 479 toilets have been constructed in 227 schools of Odisha and Andhra Pradesh, for better sanitation and health condition at school level. In 2017-18, 74 schools at Damanjodi and 54 schools at Angul are provided with water supply. GREEN ENERGY INITIATIVES-

NALCO is promoting use of green energy. Several villages in the periphery are being provided with solar lights. Both its offices at Bhubaneswar are lighted by roof top solar projects. NALCO has taken up a project to run 25 battery operated vehicles at Puri. This will make Puri grand road free from polluting vehicles. Also within a year in the 2nd phase another 25 vehicles will operate.

INTEGRATED HEALTH MANAGEMENT SYSTEM-

Staff shortages, continuing cost inflation and service demand have intensified the call for more effective and efficient use of scarce resources through integrated service delivery models. Integrated health systems are widely considered to provide superior performance in terms of quality and safety as a result of effective communication and standardized protocols. Despite the growing enthusiasm for integration, information related to implementing and evaluating integration-related initiatives is dispersed and not easily accessible.

The project will help providing health care benefits to NALCO project affected people immensely. Project will be an aggregate Health care support service to the people. Around 39 peripheral villages at Angul and approximately 162 villages/hamlets at Damanjodi will be benefited from the Program. Under this Well Being Clinics will be established and managed by professionals. They will provide the basic medical facilities including clinical tests. Ambulance Services will be provided to critically ill patients. A call centre will coordinate all such services. Also

assistance to all peripheral villagers will be extended for utilizing different health support extended by State of Odisha.

SKILL DEVELOPMENT PROGRAMME-

Skill enhancement trainings which can generate employability is being provided regularly. Some of the trainings are beautician course, food and nutrition, tailoring, motor winding, pump maintenance, etc. NALCO is also assisting the trainee in getting employment. NALCO is actively considering for setting up of a skill development centre. AT Utkal University a skill development incubation centre is under construction.

EYE HOSPITAL-

The company in association with LV Prasad Eye Institute (LVPEI) is setting up a modern eye hospital at Angul with an initial investment of 15 Cr. The hospital would cater to the economically disadvantaged groups of neighboring villages.

RESIDENTIAL SCHOOL EDUCATION

NALCO has sponsored 812 children from remotest, Maoist infested and tribal populated areas of Koraput district for residential education in KISS (Kalinga Institute of Social Science), Adarsh Vidyalaya, Kakiriguma and Bikash Vidyalaya, Koraput. Under this project, the Cost of schooling, their travel, study material, uniform, hostel charges of each sponsored students are paid to the schools in 2 installments. For better results, academic performance of every student is being monitored regularly. Going a step further, NALCO interacts with parents and students for feedbacks/suggestions for improvement annually.

MOBILE HEALTH SERVICES FOR PERIPHERAL VILLAGES-

In association with Wockhardt Foundation of Mumbai, NALCO is operating 4 MHUs in Damanjodi sector to make basic health care reach at the door step of inhabitants of 163 inaccessible periphery villages and adjacent hamlets. In association with Help Age, NALCO is operating 1 MHU in Potage sector for the sake of healthcare of denizens residing in 39 periphery villages. Similarly 4 MHUs and OPD Centers are continuously providing health care facility in 45 periphery villages of Angul. Free medical check-up, medicines, referrals in case of emergency is provided by these MHUs.

Year	Amount(In Rs. Crore)
2015-16	26.24
2016-17	25.10
2017-18	29.01
2018-19	30.35
2019-20	29.56
2020-21	35.00
2021-22	31.62
2022-23	39.54
2023-24	50.54
2024-25	61.30

Nalco CSR and Foundation Expenditure

Based on NALCO's Annual Reports and CSR expenditure records, the company primarily invests its CSR funds in Odisha, targeting areas around its operational units such as Angul, Damanjodi, and Bhubaneswar, with a significant emphasis on health, education, and rural infrastructure. Looking at the above Diagram, the trend looks very encouraging as the csr expenditure for the Year2024-25 is very close to 2.3 times the figure of 2015-16.

Highlights of CSR expenditure of NALCO for last 10 Years

Note: The 2024-25 data is based on provisional or partial reporting from sustainability reports.

Financial Year	Focus Area(s)	Key Areas/Districts	Approximate Expenditure
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2024-25	Health, Education, Peripheral Dev.	Peripheral Villages, Bhubaneswar	INR 61.30 Crore
2022-23	Health & Nutrition, Sanitation	Odisha, Pan India	INR 39.54 Crore
2021-22	Education, Rural Infrastructure	Odisha	INR 36.91 Crore
2020-21	Health, Drinking Water, Education	Odisha	INR 35.00 Crore
2019-20	Health (Mobile Health Units)	Angul, Damanjodi	~INR 30-40 Crore*
2018-19	Education & Rural Dev.	Koraput, Angul	~INR 25-35 Crore*
2017-18	Education, Skill Development	Odisha	~INR 25-30 Crore*
2016-17	Sanitation (Swachh Vidyalaya)	Odisha, Andhra Pradesh	~INR 20-30 Crore*
2015-16	Health (Mobile Health Units)	Odisha	2716.65 Lakh

Note: Data from 2016-2020 is based on annual report highlights, with specific year-by-year area-wise breakdowns fragmented across reports. Total spending was consistently reported above 2% mandate.

Major Area-Wise/Sectorial Breakdown (2015-2025)

- **Health & Nutrition (High Focus):** Operation of Medical Health Units (MHUs) in periphery villages of S&P Complex (Angul) and Damanjodi, and Comprehensive Health Improvements in Aspirational Districts like Malkangiri.
- **Education:** "NALCO ki Ladli" scheme in Angul/Damanjodi, supporting peripheral schools, and constructing school buildings.
- **Rural Development/Infrastructure:** Construction of roads in peripheral villages (1st phase: ~INR 15.83 Cr, 2nd phase: ~INR 24.33 Cr) and community halls.
- **Environmental Sustainability:** Plantation of millions of trees, green-belt development at Panchpatmali Bauxite Mines (INR 15.45 Cr in 2024-25), and development of parks in Bhubaneswar (e.g., Gandhi Park, Biju Patnaik Park).
- **Sanitation:** Construction of 473+ toilets in Odisha and Andhra Pradesh.

Key Observations:

- **Area Focus:** The majority of CSR funds (over 90%) are spent in Odisha (Angul, Damanjodi, Puri, Khurda).
- **Malkangiri Initiative:** Significant investment in health improvement programmes in Malkangiri district.
- **Special Projects:** Support for Shree Jagannath Temple Administration, Puri for medical equipment.

Disclaimer:

The above figures are compiled from the provided search results and may not reflect the comprehensive, audited final figures for every year. Specific area-wise expense breakdowns for all years between 2015-2025 are consolidated in individual annual reports. Based on NALCO's annual reports and CSR expenditure reports from 2015 to 2025, the majority of CSR spending is concentrated in Odisha (specifically Angul, Koraput, and Bhubaneswar/Puri districts) where its operational units are located, with smaller expenditures for national or other state-level initiatives. The table below outlines CSR expenditures by key geographical areas and financial years, based on available data.

NALCO Geographical Area-wise CSR Expenditure (2015-2025)

Expenditure in INR Lakhs (Unless otherwise noted)

Financial Year	Odisha (Angul/Damanjodi)	Odisha (Bhubaneswar/Puri/Others)	Other States	Total Spent (INR Cr)
2024-25	High (MHUs, Roads)	High (Temple, Health)	Moderate (Bihar)	61.30
2023-24	High (Periphery)	Moderate (Puri Dev)	Low	Not Available
2022-23	High (Tribal/Health)	High (Puri Dev)	Low	39.54
2021-22	High (Education/Health)	Moderate	Low	36.91
2020-21	High (Covid Relief)	Moderate	Low	Not Available
2019-20	High (Periphery)	Moderate	Low	Not Available
2018-19	High (Mobile Health)	High (Parks/Beautify)	Low	Not Available
2017-18	High (Swachh Bharat)	Moderate	Low	Not Available
2016-17	High (Skill Dev)	Moderate	Low	Not Available
2015-16	High (Local/Periphery)	Low	Low	27.16

Key Geographical Focus Areas:

- **Odisha – Damanjodi / Koraput:** Primary focus on Bauxite Mines periphery, tribal education ("Indradhanush"), and healthcare.
- **Odisha - Angul:** Primary focus on Smelter and Power Plant periphery, rural development, and skill training.
- **Odisha - Bhubaneswar/Puri:** Focus on beautification, urban infrastructure, and "Puri as an Iconic City" projects.
- **Other Areas:** Selective projects including support for medical facilities in other states, such as Bihar.

Note: For the financial year 2024-25, NALCO reported a total expenditure of ₹61.3 crore, mostly on peripheral development in Odisha. Detailed geographical breakdowns are typically released in the CSR section of the annual reports, which are audited periodically.

Hypothesis testing: A hypothesis testing is designed to look in to the correlation exists if any between the annual turnover and CSR cost of NALCO. A strong logic behind testing the hypothesis is that regular CSR expenditure with genuine intention can build the brand image and brand equity in the mind of the customer contributing positively to the growth of the annual turnover. In our experiment, we have taken 10 years of data from 2016-17 to 2024-25 of both CSR cost and turnover. Studying the correlation ship by pairing them to find the strength of their association and finally a significance test of the correlation has been made to test the validity and reliability of the association applying t test. It is found that CSR increase from 26.24 core to 61.30 core in a span of 10 years. And there is a strong and positive relationship (though not perfectly linear) between CSR cost and turnover of NALCO. The post COVID behavior of turnover is slightly discouraging (dropped around 38%). But recovery was made in the financial year 2021-22, in which turnover and CSR cost steadily increases again. Even the correlation is 0.93 which indicates a very strong correlation between CSR cost and annual turnover.

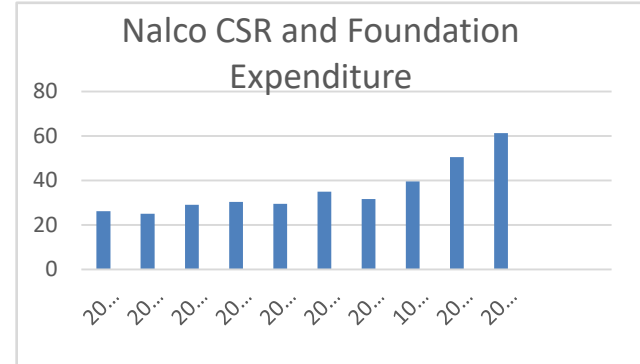
To test the hypothesis

H0-represents the null hypothesis-no significant correlation

H1- represents alternative hypothesis- a significant correlation.

Applying t-test it is found that at 5% level of significance the critical value of t is 2.306, while the calculated value is 7.17 which is greater than the critical value of t. hence the null hypothesis is rejected and we can conclude that the correlation between turnover and CSR expenditure is statistically significant at 5% level.

Particulars	Result of experiment
Correlation(r)	0.93
Calculated value of 't'	7.17
Table value of 't'	2.306
Significant	yes
Level	5%

**Findings :-**

1. A total CSR expenditure in India by different organization is increasing significantly in last 10 years.
2. Education and health care are consistently receive over 50% CSR cost .
3. A sharp rise in health related spending occurred in between 2020-22 with a high peak in 2021.
4. In financial year 2023-24 environmental sustainable projects witnessed a sharp increase of 54%growth.
5. In 2024-25 education and health care together accounts for mover 70% of total funding.
6. public sector undertaking in India has significantly scaled their CSR activities over the last 5 years, with a total spending of Rs- 6,437 crore in financial year 2024-25
7. Oil and energy giants consistently lead the public sector in CSR contribution.
8. CSR activities of NALCO is primarily targeted toward rural development, education, health and sustainability particularly in Odisha.
9. The initiatives are carried out primarily through NALCO Foundation specially created foe CSR activities.
10. It covers Angul ,Damanjodi (Koraput), Bhubaneswar in Odisha in respect of education , girl child empowerment , infrastructure development , drinking water, health care , environmental sustainability etc
11. NALCO has activity enrolled in nationwide cleanliness campaign -SWATCHA BHARAT.
12. It promotes use of green energy.
13. The CSR expenditure of NALCO its showing an increasing trend over a period of ten years starting from 2015-16 to 2024-25.
14. The CSR expenditure of NALCO in the year 2015-16 (26.24 crore) has increased approximately 2.3 times in the financial year 2024-25.
15. Apart from its operational area in Odisha NALCO has also made its presence felt in other state like Bihar in terms of CSR activity

A strong correlation is found between annual turnover and CSR cost in NALCO indicating a good image by complying its statutory requirement in terms of CSR expenditures.

Suggestion and Conclusion :-

Every Organization may be in private and public sector should meet its statutory compliance in terms of CSR expenditure. NALCO can be taken as a benchmarking organization, a good specimen to be followed by other companies in terms of CSR activates. The temporary fall in CSR cost in 1920 may be due to rampage of covid which again reverted back in post pandemic period. NALCO CSR activates has shifted from simple philanthropy to sustainable development and community empowerment. The company has successfully integrated social responsibility with business operations, earning accolades for commitment to local communities, education and environmental protection.

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