

# Analytical Study of PSUs' Environmental and Philanthropic CSR, Benefits to Local Beneficiaries in Odisha

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## Abstract:

*CSR of PSUs in Odisha is studied to find out the benefits of CSR to the local people. The environmental and philanthropic CSR are taken under the study by a mixed research method. Five selected PSUs are taken as the samples and found that the environmental CSR of PSUs' is insignificant and not providing benefits to the local people. But the philanthropic CSR is highly impressive and benefiting to the local people. Henceforth, it is suggested to the executives of the PSUs that they should focus on practice of the environmental CSR to provide ultimate benefits to the local people and the planet. Finally, the executives should follow the NTPC's CSR as the unique model for implementing the CSR and for providing benefits to the local beneficiaries. The CSR of NTPC, Kaniha is the role model CSR initiative for other PSUs in Odisha.*

**Keywords:** Selected PSUs, Environmental CSR, Philanthropic CSR, Benefits, Local beneficiaries

## 1. Introduction

(Carroll, 2016) has defined the corporate social responsibility as in the four parts that the corporate should have responsibility of economical, legal, ethical and discretionary. (Becchetti, 2011) has given many definitions of CSR, necessarily the coin sides are shown as positive impact and adverse impact of CSR on corporate growth. Because the CSR demonstrates adverse impact on the financial performance (Nguyen et al., 2022). In India context, corporate also go to the discretionary (philanthropic) in term of the (Kosh et al., 2020), activities relating to schedule VII, Section- 135 of companies act 2013, 2014, 2016, notification year 2020. During pandemic COVID19, Year 2020 (Jumde & du Plessis, 2022), the USA corporate has helped a lot to the people really in need (Manuel & Herron, 2020). The environment and social realms is given more importance (Sinha & Li, 2022) in this period. CSR work engagement is really mediating the CSR communication, employees' satisfaction and corporate reputation (Jiang et al., 2022). In India, the CSR expenditure by private companies is significantly more than public limited companies or corporations (Dash et al., 2021). The subject to tax benefits, CSR participation is increasing (Chakravarty & Bose, 2021). Corporates in Assam, India have taken CSR activities to achieve the sustainable goal through investing in education, health, employment, infrastructure, rural development and environment (Dutta, 2020). (Pratap & Kothari, 2020) have mentioned the CSR practice of PSUs in India, contributing to social welfare, poverty eradication, education to poor children and health. (Thanetsunthorn, 2022) denoted that the trust building should be intact in between CSR expenditure and benefits to beneficiaries in real sense. In some cases, the CSR demonstrates adverse impact on the financial performance (Nguyen et al., 2022). The actual gap between the CSR accountability of Indian companies and CSR benefits among the beneficiaries is shown by (Pratap & Kothari, 2020). (Dhaneshwar & Pandey, 2015) have tried to show the CSR initiatives and actual practice differences. Corporate also do CSR through NGOs in the field of water supply, healthcare, education and sanitation (Chakravarty & Bose, 2021). Presently the Corporate is intended to do CSR, especially for achieving the environmental sustainability across the globe (Joy A. Debski, 2022). CSR is also used as the tool for the growth of India in terms of political , economic and social factors (Ranka, 2022). (Pandey, 2016) has reported in his report about the geographical areas, where the CSR of NTPC is contributed at West Bengal, Jharkhand, Bihar, Odisha, Chhattisgarh and Uttar Pradesh etc. This is a point of concern by Nigerian petroleum company to act on environmental CSR for the environmental sustainability (Joy A. Debski, 2022). Social responsibility is above the financial performance (Gupta, 2022), which is controversial in Macao (Guan et al., 2022). (Carroll, A.B, 1991; 2009) has developed the philanthropic CSR such as (1) corporate should fulfill the philanthropic and charitable expectation of the society. For example, employee is always in-need of money during his daughter's marriage, which time, the corporate may help to the person, although, it is not mandatory, but optional one. (2) The financial assistance to be given to the performing and fine arts, (3) Managers' and employees' active participation in local community activities. (4) help to local educational institutions, (5) assist to those projects which will increase the "quality of life". After all the employees and managers of the company will do the CSR activities in the society. For that, the model of engagement is

supported by (Mirvis, 2012), where the corporate supports CSR in three different ways, engaging the employees by relational ways, transactional ways and development ways to create value in business as well as in the society.

## **2. Literature Review**

### **2.1 CSR of Selected PSUs in Odisha**

#### **2.1.1 NALCO (National Aluminum Company):**

(*CSR Expenditure Report*, 2022) has reported about the CSR of NALCO, Odisha, that the PSUs is focused in the CSR activities like solution to open defecation free program, 116 school development at Varanasi, employability in peripheral villages of Angul and Khurda by national skill development corporation (NSDC), solar solution in peripheral villages, development of park at Puri and also electric vehicle facility at Puri Jagannath Temple, Puri. In the shape of core CSR activities, the NALCO aims to promote healthcare, sanitation, drinking water, education, education, livelihood enhancement projects, protection of national heritage, environmental sustainability, rural sports, rural development and development of community center. (Sahoo & Naik, 2016) had done the assessment of impact of CSR of NALCO on a peripheral village and found the positive change in lifestyle of project affected people.

#### **2.1.2 SAIL (Steel Authority of India Limited):**

Acharya, Jyotirmayee and Patnaik, S.N. (2018) had tried to explore the CSR initiatives of SAIL, Rourkela Steel Plant (RSP), Rourkela, Odisha. SAIL, RSP has tried to achieve the sustainable community development through CSR spend on promotion of social capital, women empowerment, livelihood promotion, peripheral development, healthcare and environmental conservation. In the same direction, (Mohanty & Rath, 2019) have not found any significant variance between the employees' attitude towards CSR and CSR practices as said by (Sahu, 2014). (Sahu, 2014) had also given explorative evidence of contribution of SAIL, RSP in the concern field of peripheral development, homely water facility, Education, Sports, Medical and Health Care facility, Environment, Women upliftment, roads, family welfare, Model Steel Villages, Corporate Level Programs, quarter facility, community centers, parks and schools etc. In the same year, (Das & Ara, 2014) given many statistical evidence about the impact of Greenfield project on growth and prosperity of SAIL, RSP, Rourkela, Odisha.

#### **2.1.3 MCL (Mahanadi Coal Field Limited):**

According to (Kozłowska-Woszczycka & Pactwa, 2022), the CSR disclosure is essential in case of the industries belongs to mines. The CSR policy of Mahanadi Coal Field Limited (MCL) reflects that the 80% of the CSR budget amount is spent within the areas coming under 25 Km from the project place and the rest 20 % amount is to be spent in rest of the Odisha (Report et al., 2018). The CSR spent is made for hunger eradication, promoting education, promotion of gender equality, women empowerment, environmental sustainability, protection of national heritage, art and culture, promotion of rural sports and rural development projects. MCL is not doing any kind of

CSR investment on slum area development, innovation and incubation, contribution to PM relief fund, benefits to armed forced veterans, war widows and their dependents.

#### **2.1.4 HAL (Hindustan Aeronautical Limited):**

(NTPC, 2019) states the CSR activities of Hindustan Aeronautical Limited (HAL) such as infrastructure development, education, drinking water, river rejuvenation, environment, healthcare, sanitation, renewal energy, wind power plant, sports, and skill development etc. (*CORPORATE SOCIAL RESPONSIBILITY POLICY*, 2017) has made a policy for HAL to promote rural development projects, slum development, disaster management and health care to achieve sustainable development goal (SDG) additionally.

#### **2.1.5 NTPC (National Thermal Power Corporation):**

(Garada, 2015) has mentioned that NTPC is creating coal field environment, fly ash and dust pollution, leading to the health problem of the peripheral people. The field observation and focused group-based study states that the villagers are critically prone to hazardous health problem. The researcher has found (i) space infrastructure is reduced, (ii) dwelling health amenities are increased- especially drinking water supply, (iii) fuel consumption- cow dung is nil, leads to deprive in ecology system towards animals. Although NTPC claims that it uses technological infrastructure to handle environmental issues, but is found that the 66.67 per cent of the affected households aware that NTPC has been monitoring & treating the waste water effluent from the main plants wherein only 25.23 per cent of them knew that how it is actually monitored and treated. Concerning to people, 100 per cent, only 67.57 per cent of households were aware of NTPC's management system of land pollution and air pollution respectively. On the other hand, only 45.05 per cent and 30.63 per cent of them knew the detail of how the land pollution and air pollution are actually monitored and managed by the NTPC respectively. Although the CSR activities of NTPC is mentioned well in the report (NTPC, 2019) as NTPC is serving the people in the main stream of Education, Employment, enhancing Milk production, ecological balancing, promoting animal welfare and promoting rural art and culture, festivals and benefiting war widows. (Tanaya Tarai, 2017) also agreed upon the NTPC's contribution towards the education, health and income generation programs.

The above literatures have given general angle to the study of CSR of PSUs in Odisha but fails to measure the categorical study of environmental CSR and philanthropic CSR of PSUs. However, the main study aims to measure the same.

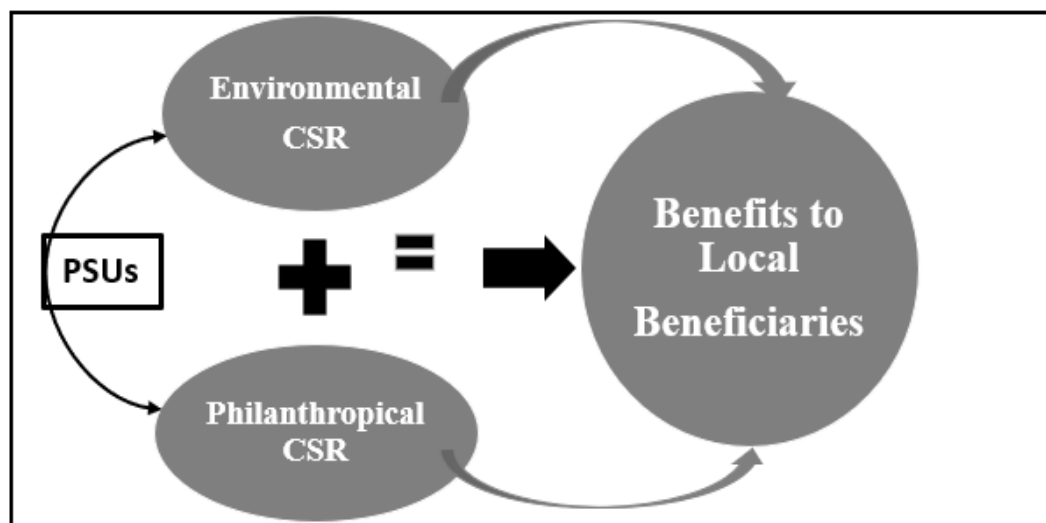
### **3. Theoretical Enquiry:**

#### **3.1. CSR of PSUs**

(Brin & Nehme, 2019) have studied Carroll's CSR model (Ethical, Legal, Economical and Philanthropic CSR) for use it in further research. They have shown the outcome in two different level as (i) Internal level and (ii) External level. The internal level of CSR contains the ethical CSR, Legal CSR and Economical CSR, whereas the External level deals with peripheral concern i.e., philanthropic CSR. In this research the environmental CSR is separated from other

philanthropic CSR. (SAFWAT, 2015) has studied the definite relationship between the CSR and sustainable development, corporate social development and corporate philanthropy. The subjective study of (Joy A. Debski, 2022) is showing the environmental concern of petroleum industries in their CSR initiatives. Based on the literature review, NALCO has done a great CSR in order to elevate social infrastructure and also environmental one. SAIL, RSP has concern about the environmental CSR (Mohanty & Rath, 2019) but little bit lower act on philanthropic CSR (Sahu, 2014) whereas the MCL is doing more philanthropic (Report et al., 2018) but less environmental (Pandey, 2016). (Garada, 2015) has positive CSR activities towards philanthropic CSR as well as environmental CSR (NTPC, 2019). The model prepared by (Virakul & Russ-Eft, 2020), based on the CSR, Corporate Governance (CG) and Sustainability with the purpose to address the global challenges. Whether the local challenges are to be solved, environmental issues are taken cared by the PSUs in Odisha, is a big question herein. The expectation of the people from the company, beyond the company's financial interest is one of the philanthropic expectation (Manuel & Herron, 2020), the corporate should serve to their society. It is seen that the financial performance interest is the basic CSR model of corporate as conditioned by (Walter, 2014), where the most of industries are concern about the business ethics, human issues and brand image and very less industries are concerning about the environmental issues. The triple bottom line is used and innovation is added to the environmental constraints in the society (Mendes et al., 2021). In the memory of William C. Frederick, (Carroll, 2018) has told that CSR and business ethics has become the integral part of academia also and suggested to the young researchers to do research in this matters. Supporting the above literatures, again it is found that the environmental issues are given importance and (Puppim de Oliveira & Jabbour, 2017) have developed a conceptual framework for analyzing the corporate governance and environmental management. Again the environmental topic has become the mainstream of CSR. (Diéguez-Soto et al., 2021) has mentioned the philanthropic CSR in (-X) and (-Y) axis, representing that dark side of CSR in the model "FIBER dimensions determining approaches to corporate social responsibility". Rethinking the matters the author (Chaklader & Gautam, 2013), the private- public partnership model is introduced in India in the early stage of the CSR implementation. In the study of Norwegian Oil Industry, the association has emphasized the role of the manager on the CSR constructions. (Abdelhalim & Eldin, 2019) has introduced a CSR assessment model, where the core CSR model is deeply studied by independent variables (Philanthropic CSR, CSR focusing on sustainable development, CSR by product) and dependent variables (sustainable development). Similarly, (Singal, 2021) has developed his research model where he measured the CSR activities (community and environment) by the outcomes of the CSR spend. From many literatures, it is found that the corporate focuses on the environmental issues for building their reputation and brand image (Khojastehpour & Johns, 2014), where the altruistic is missing. (Halme et al., 2020) have used process of outcome measurement model to address the model fit for measuring the CSR and shown the environmental and non-performance towards social issues. (Holtbrügge & Oberhauser, 2019) has given a strategic prediction of philanthropic CSR in his CSR orientation model. (Kanji & Agrawal, 2016) had compared few CSR models beautifully, such as pyramid model, intersecting

circle, concentric model, 3C-SR model, liberal model, stakeholders' model, ethical model, statist model, out of which, 3C-SR model has purely concentration on discretionary (philanthropic) CSR, intended to cater the Commitment, Connection and Consistency equally as the holistic one with the social commitment is really high or moderate. (Wang & Pala, 2021) state a conceptual model to communicate the philanthropic CSR versus ethical and legal CSR to employees through an empirical evidence in Turkey. (Liket & Maas, 2016) has developed a mediator effect model where the independent variables (social orientation, company size, profit) influence the corporate social performance and dependent variable (strategic philanthropic). (Dhanesh, 2015) has used a dialectical analysis of CSR communication, stating the meaning and boundaries of CSR in India. The CSR model of (Walter, 2014) states that the CSR is a corporate mindset of ethical foundation (Manuel & Herron, 2020). (Gon & Mititelu, 2016) has developed a CSR model to serve the rural people by providing low interest loan to farmers and easier loan in rural, aiming to penetrate the public sector banks in rural India. Referring to the study of above CSR models, the importance of environmental CSR and philanthropic CSR are considered in the main research and the research model is prepared, based on the field observation of CSR activities of PSUs in Odisha. Finally, a theory is developed in *Figure 1* to study (1) the benefits of environmental CSR to the local beneficiary and (2) the benefits of Philanthropic CSR to the local beneficiaries, (3) benefits of both environmental and philanthropic CSR to the local beneficiaries.



**Figure 1 Environmental CSR and Philanthropic CSR, Benefits to Beneficiaries**

Source: Niranjan Mohanty

### 3.2 Environmental CSR of PSUs

(*CSR Expenditure Report, 2022*) has reported about the CSR of NALCO, Odisha, that the PSUs is focused in the CSR activities like solution to open defecation free program and environmental sustainability. (Sahu, 2014) had stated the environmental activities of SAIL, RSP. SAIL, RSP has

concern about the environmental CSR (Mohanty & Rath, 2019) but little bit lower act on philanthropic CSR (Sahu, 2014). (*NTPC-CTBPART1.Pdf*, 2016), NTPC, Kaniha, Odisha has done afforestation, biodiversity conservation, road side plantation and flora bio diversity in the peripheral villages etc. The CSR policy of Mahanadi Coal Field Limited (MCL) and (Report et al., 2018) shows the environmental sustainability activities of CSR of MCL. (Units et al., n.d.) states the environmental CSR activities of Hindustan Aeronautical Limited (HAL) such as river rejuvenation and environment sustainability. (Garada, 2015) has mentioned that NTPC is creating coal field environment, fly ash and dust pollution, leading to the health problem of the peripheral people by using technological infrastructure to handle environmental issues.

### 3.3 Philanthropic CSR of PSUs

(*CSR Expenditure Report*, 2022), CSR of NALCO, Odisha, states that the PSUs is benefiting in the CSR activities like solution to open defecation free program, 116 school development at Varanasi, employability in peripheral villages of Angul and Khurda by national skill development corporation (NSDC), solar solution in peripheral villages, development of park at Puri and also electric vehicle facility at Puri Jagannath Temple, Puri. Acharya, Jyotirmayee and Patnaik, S.N. (2018) had tried to explore the CSR initiatives of SAIL, Rourkela Steel Plant (RSP), Rourkela, Odisha. (*CSR Expenditure Report*, 2022), NALCO shows the CSR expenditure details as open defecation free program (Rs.40.58 lakhs), modernization of 116 schools at Varanasi (Rs.126.23 lakhs), peripheral employment program by NSDL (Rs.46.50 lakhs, 46.76 lakhs), urban plantation program (Rs. 9.91 lakhs), solar solution (Rs. 24.53 lakhs, Rs. 27.50 lakhs), development of park at puri (Rs. 37.67 lakhs). operation of battery-operated vehicles (Rs. 53.93). (Sahoo & Naik, 2016) denoted that NALCO's CSR activities are mainly focused on the maintenance of peripheral village road, electricity facility, transport facility, supporting 2 intermediate schools, free medical checkup, employment skill to peripheral villagers for the peripheral socio-economic development. (Pandey, 2016) has studied the CSR of power sector PSUs and oil sector PSUs and rarely studied the MCL as related to the thermal power sector. (Report et al., 2018) have also reported that the CSR contribution of MCL in case of benefits to armed forced veterans, war widows and their dependents is Rs. 0.00, contribution to PM's National relief fund is Rs. 0.00, contribution towards technology incubation center is Rs. 0.00, and slum area development is Rs. 0.00. Further (Units et al., n.d.) report states the CSR activities of HAL in philanthropic way through Skill Development Training in Professional Employment Oriented Courses like Making Dolls, Agarbatti, Phenyl, Coir Products, Leaf Plates, Electrical Wiring & Repairing, Auto Mobile Repairing, Mushroom Cultivation, Sericulture, AC Servicing, Embroidery, Arts & Painting, Driving, Plumbing with an aim of women empowerment. Although NTPC claims the ultimate solution towards the environmental issues of the 66.67 per cent affected households through its' management system of land pollution and air pollution but only 45.05 per cent and 30.63 per cent of them knew the detail of how the land pollution and air pollution are actually monitored and managed by the NTPC respectively. Although the CSR activities of NTPC is mentioned well in the report (NTPC, 2019)

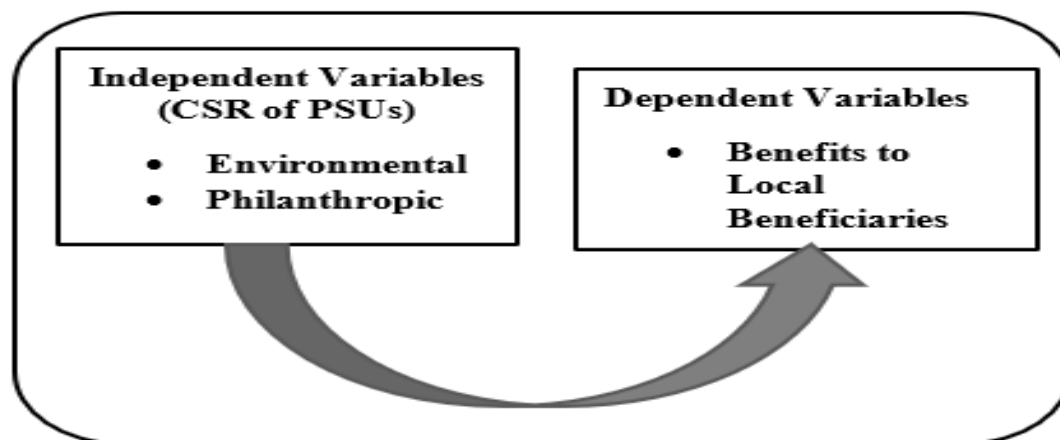
as NTPC is serving the people in the main stream of Education, Employment, enhancing Milk production, ecological balancing, promoting animal welfare.

### 3.4 Benefits of PSUs' CSR to Local Beneficiaries

(Pratap & Kothari, 2020) have mentioned the CSR practice of PSUs in India, contributing to social welfare, poverty eradication, education to poor children and health. (Sahoo & Naik, 2016) had done the assessment of impact of CSR of NALCO on a peripheral village and found the positive change in lifestyle of project affected people. NALCO has provided the road infrastructure, electricity, drinking water, schools, free medical camp and employment training in the said Gotamara village of Angul district, Odisha, India. The insignificance CSR (Report et al., 2018) is mentioned by (Singal, 2021) is more significant. (*CORPORATE SOCIAL RESPONSIBILITY POLICY*, 2017) has made a policy for HAL to promote rural development projects, slum development, disaster management and health care to achieve sustainable development goal (SDG) additionally. In early stage, (Garada, 2015) has mentioned as (i) space infrastructure is reduced, (ii) dwelling health amenities are increased- especially drinking water supply, (iii) fuel consumption- cow dung is nil, leads to deprive in ecology system towards animals. Then the milk production in report (NTPC, 2019) is insignificant to the (Garada, 2015) has mentioned as (i) space infrastructure is reduced, (ii) dwelling health amenities are increased- especially drinking water supply, (iii) fuel consumption- cow dung is nil.

## 4. Methods and Analysis

The rating score 5 as higher side to 1 as lower side is given to Environmental CSR, Philanthropic CSR and Benefits to beneficiaries. Mixed method is used to do analytical study of CSR of selected PSUs in Odisha. 5 selected PSUs (SAIL, NALCO, MCL, HAL, NTPC) from Odisha are taken as the samples for the study. In this research, the Ethical CSR, Legal CSR and Economical CSR are not taken into consideration and CSR of PSUs' given benefits to peripheral beneficiaries is shown in *Figure 2*.



**Figure 2. Independent Variable and Dependable Variables**

Source: Niranjana Mohanty



#### 4.1 Objectives and Hypotheses of the study:

##### Objectives

Objective 1: To study the benefits of environmental CSR to the Local beneficiaries.

Objective 2: To study the benefits of philanthropic CSR to the Local beneficiaries.

Objective 3: To study the benefits of PSUs' CSR to local beneficiaries.

##### Hypotheses:

H1: Environmental CSR has insignificant benefits to Local beneficiaries.

H2: Philanthropic CSR has significant benefits to Local beneficiaries.

H3: CSR of PSUs has insignificant benefits to Local beneficiaries.

#### 4.2 Analysis I: Company Analysis:

The secondary data are driven from the literatures and aligned well with annual report of PSUs in Odisha. The CSR spend and various field of their investment are taken into consider to ascertain the matters and to reach to a decisive point. The personal observation in the field and peripheral, the numerical values are putted in the tabular form. The company-wise analysis is done and the data are carried forward to the respective tables.

##### 4.2.1 Analysis of CSR of NALCO

(*CSR Expenditure Report, 2022*) shows the CSR expenditure details as open defecation free program (Rs.40.58 lakhs), modernization of 116 schools at Varanasi (Rs.126.23 lakhs), peripheral employment program by NSDL (Rs.46.50 lakhs, 46.76 lakhs), urban plantation program (Rs. 9.91 lakhs), solar solution (Rs. 24.53 lakhs, Rs. 27.50 lakhs), development of park at puri (Rs. 37.67 lakhs). operation of battery-operated vehicles (Rs. 53.93). (Sahoo & Naik, 2016) denoted that NALCO's CSR activities are mainly focused on the maintenance of peripheral village road, electricity facility, transport facility, supporting 2 intermediate schools, free medical checkup, employment skill to peripheral villagers for the peripheral socio-economic development.

##### 4.2.2 Analysis of CSR of SAIL

(Das & Ara, 2014) had used qualitative research methodology to explore contribution of the Greenfield projects in the region, society and endlessly to the Nation. They have given many statistical evidence about the impact of Greenfield project on growth and prosperity of SAIL, RSP, Rourkela, Odisha. (Sahu, 2014) had also given explorative evidence of contribution of SAIL, RSP in the concern field of peripheral development, homely water facility, Education, Sports, Medical and Health Care facility, Environment, Women upliftment, roads, family welfare, Model Steel Villages, Corporate Level Programs, quarter facility, community centers, parks and schools etc. (Brin & Nehme, 2019) has done critical analysis the theories of the A.B. Carroll Pyramid for CSR, Triple Bottom Line Theory and Stakeholders Theory. They left the third one to address the further research. They have suggested to use the descriptive statistics to justify the use of Edward Freeman's Stakeholder Theory. (Endrikat et al., 2021) have used meta-analytic model to identify the mediating relationship of CSR committee and moderators with the detailed dimension of CSR such as social, environmental or aggregate. (Mohanty & Rath, 2019) have not found any significant variance between the employees' attitude towards CSR and CSR practices with the tabulated value

of 1. 729 (df=19) at 5% level of significance in terms of community development and others as said by (Sahu, 2014).

#### **4.2.3 Analysis of CSR of MCL**

(Pandey, 2016) has studied the CSR of power sector PSUs and oil sector PSUs and rarely studied the MCL as related to the thermal power sector. (Report et al., 2018) have also reported that the CSR contribution of MCL in case of benefits to armed forced veterans, war widows and their dependents is Rs. 0.00, contribution to PM's National relief fund is Rs. 0.00, contribution towards technology incubation center is Rs. 0.00, and slum area development is Rs. 0.00.

#### **4.2.4 Analysis of CSR of HAL**

Furthermore, the CSR activities of HAL in philanthropic way through Skill Development Training in Professional Employment Oriented Courses like Making Dolls, Agarbatti, Phenyl, Coir Products, Leaf Plates, Electrical Wiring & Repairing, Auto Mobile Repairing, Mushroom Cultivation, Sericulture, AC Servicing, Embroidery, Arts & Painting, Driving, Plumbing with an aim of women empowerment.

#### **4.2.5 Analysis of CSR of NTPC**

Although NTPC claims the ultimate solution towards the environmental issues of the 66.67 per cent affected households through its' management system of land pollution and air pollution but only 45.05 per cent and 30.63 per cent of them knew the detail of how the land pollution and air pollution are actually monitored and managed by the NTPC respectively. Although the CSR activities of NTPC is mentioned well in the report (NTPC, 2019) as NTPC is serving the people in the main stream of Education, Employment, enhancing Milk production, ecological balancing, promoting animal welfare. In early stage, (Garada, 2015) has mentioned as (i) space infrastructure is reduced, (ii) dwelling health amenities are increased- especially drinking water supply, (iii) fuel consumption- cow dung is nil, leads to deprive in ecology system towards animals. Then the milk production in report (NTPC, 2019) is insignificant to the (Garada, 2015) has mentioned as (i) space infrastructure is reduced, (ii) dwelling health amenities are increased- especially drinking water supply, (iii) fuel consumption- cow dung is nil. If this is significant, then, NTPC must have done CSR in reform way to save the planet, people and also animal. Satisfactorily (*NTPC-CTBPART1.Pdf*, 2016), NTPC, Kaniha, Odisha has done afforestation, biodiversity conservation, road side plantation and flora bio diversity etc.

### **4.3 Analysis II- CSR of PSUs and Benefits to Local Beneficiaries**

Based on the data found from (4.2 Analysis I: Company Analysis), the empirical analysis is tabulated in Table 1, Table 2, Table 3, Table 4 and Table 5. The Likert scale rating ranging (5- Most Likelihood and 1-Least Likelihood) is given as per the secondary data to the fields in *Table 1 and Table 2*. The average result is considered as the performance in each field. The *Table 2* shows CSR of PSUs (ECSR- Environmental CSR and PCSR- Philanthropic CSR) as rendered by the PSUs. Values are given for CSR and Benefits in Table 2 as per the performance data found from literatures.

**Table 1: Environmental CSR, Philanthropic CSR and Benefits to Local beneficiaries**

| PSUs           | Environmental CSR | Philanthropic CSR | Benefits to Local Beneficiaries | Average Rating |
|----------------|-------------------|-------------------|---------------------------------|----------------|
| NALCO          | 3                 | 3                 | 3                               | 3              |
| SAIL           | 4                 | 4                 | 3                               | 3.66           |
| MCL            | 2                 | 3                 | 2                               | 2.33           |
| HAL            | 2                 | 3                 | 3                               | 2.66           |
| NTPC           | 4                 | 4                 | 4                               | 4              |
| Average Rating | 3                 | 3.4               | 3                               |                |

**Table 2 PSUs, CSR and Benefits**

| PSUs        | CSR | BENEFITS |
|-------------|-----|----------|
| ECSR- NALCO | 3   | 3        |
| ECSR- SAIL  | 4   | 3        |
| ECSR- MCL   | 2   | 2        |
| ECSR- HAL   | 2   | 4        |
| ECSR- NTPC  | 4   | 4        |
| PCSR- NALCO | 3   | 3        |
| PCSR- SAIL  | 4   | 3        |
| PCSR- MCL   | 3   | 3        |
| PCSR- HAL   | 3   | 4        |
| PCSR- NTPC  | 4   | 4        |

#### 4. 4 Hypotheses Testing

1. *H1*: Environmental CSR has insignificant benefits to Local beneficiaries

$H_0$  - Environmental CSR has insignificant benefits to Local beneficiaries

$H_1$  - Environmental CSR has significant benefits to Local beneficiaries

**Table 3 Environmental CSR (ENVCSR) and benefits to Local beneficiaries (BENEFITS)**

Coefficients<sup>a</sup>

| Model        | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|--------------|-----------------------------|------------|---------------------------|-------|------|
|              | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant) | 1.500                       | .904       |                           | 1.660 | .196 |
| ENVCSR       | .500                        | .289       | .707                      | 1.732 | .182 |

a. Dependent Variable: BENEFITS

The significance value 0.196 (Table 3) is more than  $P$  value 0.05, which accepts the  $H_0$  and states that Environmental CSR has insignificant benefits to Local beneficiaries. Here the result is as same as found in review of literatures. The environmental CSR of PSUs is not providing substantial benefits to the local beneficiaries of the concern PSUs.

**2. H2: Philanthropical CSR has significant benefits to peripheral beneficiaries**

$H_0$  - Philanthropical CSR has significant benefits to peripheral beneficiaries

$H_1$  - Philanthropical CSR has insignificant benefits to peripheral beneficiaries

**Table 4 Philanthropic CSR and Benefits to Local Beneficiaries**

**Coefficients<sup>a</sup>**

| Model        | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|--------------|-----------------------------|------------|---------------------------|-------|------|
|              | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant) | .167                        | 1.956      |                           | .085  | .937 |
| PHYCSR       | .833                        | .569       | .645                      | 1.464 | .239 |

a. Dependent Variable: BENEFITS

The result of Table 4 shows  $P$  is very less than significance value 0.937 and accepts the hypothesis ( $H_0$  - Philanthropical CSR has significant benefits to peripheral beneficiaries). The result of Table 4 satisfies the results which are found from the literature review. The PSUs are serving the society in a discretionary manner significantly in their respective areas.

**3. H3: CSR of PSUs has insignificant benefits to peripheral beneficiaries.**

$H_0$  - CSR of PSUs has insignificant benefits to peripheral beneficiaries.

$H_1$  - CSR of PSUs has significant benefits to peripheral beneficiaries.

**Table 5 CSR of PSUs and Benefits to beneficiaries.**

**Coefficients<sup>a</sup>**

| Model        | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|--------------|-----------------------------|------------|---------------------------|-------|------|
|              | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant) | 2.500                       | .951       |                           | 2.629 | .030 |
| CSR of PSUs  | .250                        | .289       | .292                      | .864  | .413 |

a. Dependent Variable: Benefits to Local Beneficiaries

The result of Table 5 shows that significance value 0.030 is less than  $P$  value 0.05. Here the  $H_0$  is rejected and  $H_1$  is accepted (CSR of PSUs has significant benefits to peripheral beneficiaries).

## 5. Results and Discussions

The findings from three hypotheses testing states that (1) Environmental CSR has insignificant benefits to peripheral beneficiaries (2) Philanthropic CSR has significant benefits to peripheral beneficiaries and (3) CSR of PSUs has significant benefits to peripheral beneficiaries. PSUs in Odisha fails to attain the Environmental CSR, but performing well in Philanthropic CSR (health, hygiene, home, education, women empowerment, creating employment and building social development) to help the local people. Although the PSUs in Odisha are performing well in case of legal, ethical and economical, the more effort should be given in environmental CSR to save the people and planet. The humanitarian activities of PSUs are showing good, but the proper audit process to be adopted to avoid the corruption on the CSR spending versus the benefits to the actual beneficiaries, not in the pen and paper but in actual phenomenon.

## 6. Findings, Suggestions and Conclusions

NALCO focuses on socio economic development of local peripheral people and in the same time did modernization of 116 schools at Varanasi (Rs.126.23 lakhs). The question arises, why the same money has not been invested in some selected schools in Odisha and its periphery or local area. SAIL, RSP acts on peripheral development by providing all the facilities for living and also for community development. The environmental CSR is somehow suppressed by executives of SAIL. The CSR practice of MCL is still questionable. Neither it satisfies environmental CSR or Philanthropic CSR in the local area. The skill development training is the main focus area of CSR, the HAL, where the company aims to produce skill in the local people for providing jobs to them. HALs' environmental CSR is insignificant whereas the Philanthropic CSR is awakened. Now, the CSR of NTPC is so significant to both environmental and philanthropic CSR. The finding states that the CSR of PSUs is providing benefits to local people and continuing since along. Better living standard, basic needs to live and bottom-line job creation are done by PSUs in Odisha. Although, the philanthropic CSR is done in the local areas, but the environmental sustainability is not prioritized by the PSUs in Odisha. So that it is suggested that the PSUs must continue environmental CSR such as (1) regular plantation program, (2) filling of holes in the mines and make the plantation, (3) secure the sand in the river, (4) prohibit the riverbank constructions, (5) diversion and filter the industrial wastes into river, (6) dump the fly ash and coal ash for alternative ecological use. The environmental CSR is neglected since a long time in Odisha, irrespective of some wonderful initiatives are taken by NTPC, Kaniha to balance the ecology. The CSR of NTPC, Kaniha is the role model CSR initiative for other PSUs in Odisha.

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