

Corporate Social Responsibility: A Case Study of Makum Coalfields in Upper Assam, India

Munmi Borgohain¹

¹Research Scholar, Dept. Of Geography, Gauhati University, Assam, India

Abstract: Corporate social responsibility (CSR) as a concept has been changing in its definition, meaning and practice. Since 1950s CSR has always been in debate or discussion. It is also considered as Triple Bottom line of people, planet and profit. The paper attempts to study the CSR of Makum Coalfields which include which includes Baragolai, Ledo, Tikak, Tipong coalfields. The Makum coalfields had practiced different CSR projects such as rehabilitation of landless, construction and repairing of different infrastructure in schools, Namghars, road, free health camps, social empowerment, sports and cultural aspects, etc. Water supply arrangement to various peripheral villages of Makum coalfields. In this paper, study has been made by taking some sample villages near the Makum coalfields by following random sampling method. Through various secondary and primary data, the concept of CSR practiced in the study area had tried to reflect the real scenario of the present conditions of the coal mining areas.

Keywords: Infrastructure, Corporate social Responsibility, Social empowerment.

Introduction:

The issue of Corporate social responsibility (CSR) has been discussed since the 1950. CSR tries to solve social problems of an area. Now a days in many companies and industrial areas various projects and management policies are performed under CSR. For a better society and a clean environment, the companies contribute voluntarily. CSR has a concept called Triple Bottom Line which means the corporation has to take care of certain components, i.e. people, planet and profit for the well-being of the society (Kundu, 2013). These three components, people, planet and profit are interrelated with each other. Without environment people cannot survive and also environment always give human beings to utilize end products for livelihood.

In a company, cooperation among people, planet i.e. the environment and profit are very necessary, then only a company can progress. In an industrial area people of that area have to cooperate for development of that area, which means the society has to fully support the industrial achievements and drawbacks. If a company of an industrial area cooperates with the environment then the environment also gives chance to the industrial area to get benefit from them. According to the triple bottom line concept the environment is not to harm through industrial pollution, weapons, etc. thus when an industrial area follows and supports the first two bottom line the people (society) and planet (environment) then profit would automatically follow. Following

this triple bottom line concept, the Makum coalfields of Upper Assam had practiced and followed various projects, schemes, free camps which we have discussed in this paper.

Objectives:

This paper aims:

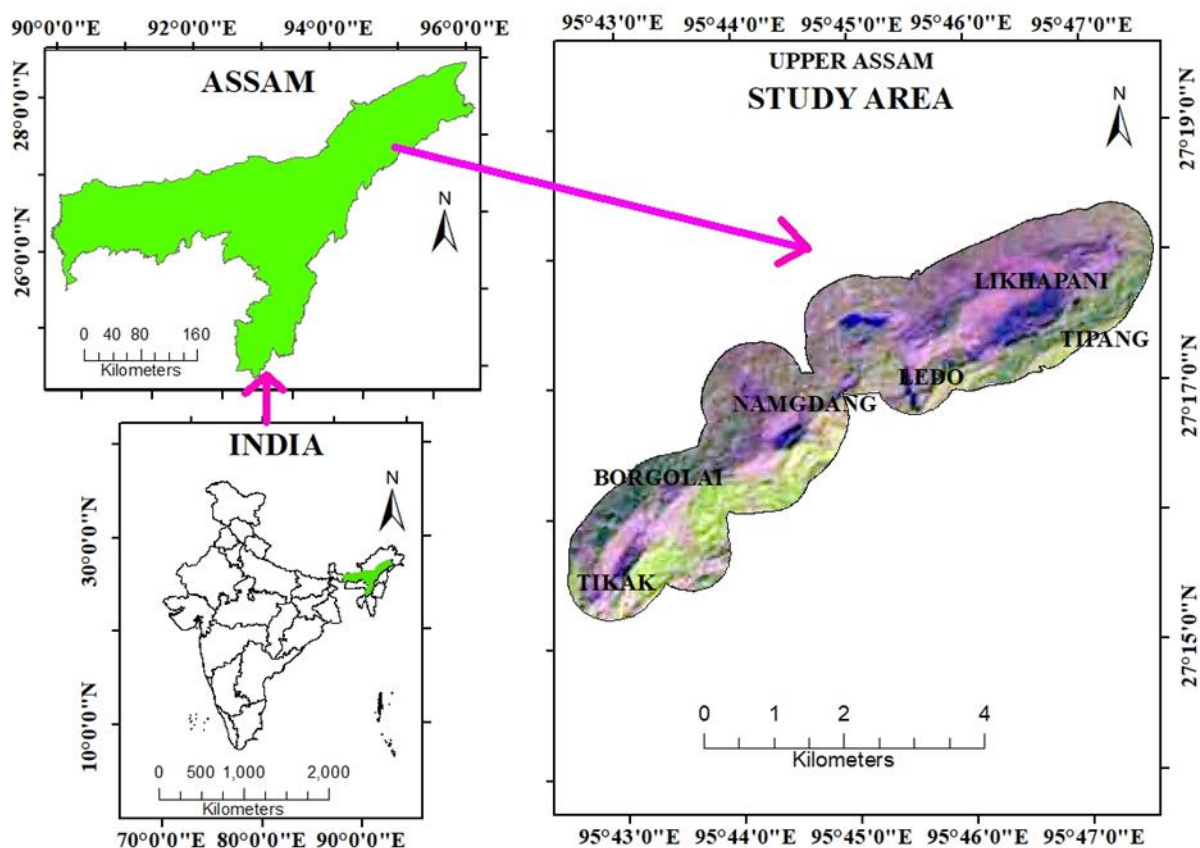
- 1) To study about the society of coal mining areas in Makum coalfields and how that society being uplifted by the CSR (Corporate Social Responsibility) as its works on triple bottom line i.e. people, planet and profit. Here in this paper a study has been made evidence on the real-life platform;
- 2) To examine, how different projects and planning had been able to bring development among the people in the mining areas and profit for both people and the area.

Methodology:

While carrying out this research paper both primary and secondary sources are applied. Among the secondary sources' different census handbook, journals, thesis, official documents have been used. For preparation of map study area toposheet were used. Maps are prepared with the help of GIS (Geo- informatic System). Tables and diagrams are prepared with the help of primary sources. While collecting data random sampling as well as sampling has been used. A sample of 100 households were taken from each sample villages and mining areas. The sample villages are Lalpahar sumi village from Tipong colliery, Ledo gaon from Ledo colliery, Malugaon in Tikak colliery. For preparation of maps GIS software and toposheet are used.

Study area:

Map Of the study area



Source- Prepared by the researcher

The study area is the Makum coalfields of Upper Assam, they are Tikak, Ledo OCP, Tipong, Baragolai, Tirap, Namdang, Lekhapani in Tinsukia district, Dilli colliery, Joypore colliery in Dibrugarh district and Naginimara and Borjan in Sivasagar district. In Upper Assam only in these three districts we find coal reserves. Among these coal mines in some areas both legal and illegal excavation of coal are processed but, in this study, we have focused only in the legal and existing coal mines. The Makum Coalfield lies between latitudes 27° 15' to 27° 25' N and longitudes 95° 40' to 95 ° 55' E (Misra, 1992). Tectonically the mining areas of Upper Assam falls under the tertiary coal mining areas. These types of coal deposits are from Oligocene period of the Tertiary era, which is about 15 to 60 million years old. Among the three physiographic divisions, Upper Assam falls in the upper reaches of the Brahmaputra valley. Through this Brahmaputra valley various tributaries of Brahmaputra flows through different districts of Upper Assam. The largest tributary of Brahmaputra flowing through Upper Assam is Dihing river. Among the tributaries of Brahmaputra, Disang river is another tributary which course near the Dilli- Jeypore rainforest. In the study area there are some tributaries flowing nearby the coal mining areas they are Ledopani river, Tipong river flowing through Tipong valley, Tikak river flowing

besides Lekhapani OCP, Namdang river flowing besides Tikak OCP and Baragolai colliery. The Dilli and Jeypore collieries are divided by Dilli river, Naginimora coal mine is situated by the bank of the river Dikhu river. During this study knew that near the coal mining areas of Upper Assam various rivers and streams flow either through the mining areas or beside the coal mines.

The climatic condition, vegetation, soil structure of the study area can be determined by noticing the water level of the study area and also the existing water body near the coal mines. The climate of the study area experiences tropical monsoon climate, warm and humid with summer maximum 39°C, winter minimum 9 °C along with annual average rainfall 2500 mm. during winter the maximum temperature remains between 21°C to 27° C and minimum temperature goes down between 15°C to 17°C (Das, 2018). Due to this weather condition in the study area alluvial type of soil is found which is very fertile in nature. That is why in most of the main cultivation in Upper Assam areas is rice. This area gives a huge amount of rice production and many evergreen forests also exist in these areas. The Upper Assam is very rich in Flora and Fauna.

This study tries to highlight on the socio-economic background of Upper Assam. While carrying out the study on the socio-economic background of the study area, different sectors of socio-economy were studied such as population structure, literacy rate, religious composition, industries, workers involved in those industries, etc. Thus, while studying the population distribution of Upper Assam a comparative study was made between the year 2001 and 2011, which in 2001 was 6793324 and it increased to 7673639 according to the Census of India. People in this area are in practise of mix-culture due to which People from different religion and caste and creed without any discrimination live in this area. People earn their livelihood through various means such as agriculture, cultivations, cattle rearing, business, employee in different industrial sector mainly coal and oil industries (which is very predominant). This area is rich in mineral resources so most of the people earn their livelihood depending on those natural resources, but along with the passing decade the resources are gradually decreasing along with the increasing population. So, since few passing years various projects and programs under CSR of different factories and industries are carried on by keeping in view about the conservation of resources. Based on these criteria this paper had made a study on the CSR of the coal mines as in Upper Assam large number of coal mines exist in comparison to other parts of Assam. Coal mines, oil refineries were first started in the Upper Assam part of Assam since the British period. The people here are mostly literate in comparison to other parts of Assam according to the census of India of the year 2011, is 76.81 which had

shown gradual increase since 2001, its literacy rate was 69.02. While studying the economy of the surveyed area the coal mines under Makum coalfields were proved to be run by Coal India Limited company. In the present context of Industrial rules, firms/industries should have Corporate Social Responsibility. So here a detail study has been made about the responsibility taken by the company termed as Corporate Social Responsibility (CSR). The CSR had always worked for the wellbeing of the society by performing free health camps, training centres for handicaps, training centres for widowed women to earn their livelihood by performing different skills, etc.

Analysis:

In order to fulfil the objectives of this paper this study had to undergo various aspects such as geographical background of the study area, its socio-economic background, climatic condition, natural drainage, geological structure of the study area, etc. but here in this paper main emphasis is laid on the Corporate social responsibility (CSR) of the study area. The Makum coalfields which covers Tikak, Tipong, Tirap, Ledo. Baragolai, Lekhapani, Jeypore, Dilli, Naginimara, Borjan are run by the Coal India Limited (CIL) company. This company in every mining areas performs various responsibilities in certain areas such as medical, electricity, drinking water, schools, sports, amusement areas, communication etc, in order to balance the destruction caused after the excavation of the coal from the mines. Destruction may be of various types such as sewage drainage polluting the water sources, deforestation, landslide, people are forced to migrate due to expansion during the process of excavation of coal. To solve these types of problems CSR, perform certain responsibilities. During the survey in the Makum coalfields it has been noticed that along with passage of time the CSR Programs and projects have been identified.

Table no.- 1 Corporate Social Responsibility (CSR) activity in 2011-2012

Sl.no.	Name of the work and place for year 2011-12
1	Construction of Link road to Hamukjan village, Ledo.
2	Repairing the School buildings at Malugaon at Tikak.
3	Repairing the road to the church at Malugaon-III at Tikak.
4	Construction of link road to Rang Ring at Tikak.

5	Provision of water supply at Hamukjan.
6	Construction of Tikak development committee building.
7	Link Road to deep well area of Hamukjan, Ledo.
8	Provision for drinking water supply pipe line in China Basti, Tikak.
9	Reconstruction of Tikak Namghar Building.
10	Reconstruction of roofing in Kendriya ranga manch at Tikak.

Source- North Eastern Coalfields, Margherita (WWW.neccoal.co.in)

In the above table during one year since 2011-2012, the corporate social responsibility carried out various of programs and projects creating awareness in different coal mining areas of Makum coalfields. But as this paper demands the study are limited only to coal mining areas of Makum coalfields.

Table no.- 2 Corporate Social Responsibility (CSR) activity in 2013-2014

Sl.no.	Name of the work and place for year 2013-14
1	Construction of the boundary wall surrounding the public hall at Sreemanta Sankardev Thermal Namghar at Ledo.
2	Construction of compound wall and link road to the Office of Assam Sahitya Sabha at Hamukjan.
3	Water supply arrangement and construction of road at Hamukjan Village, Tikak.
4	Construction of latrine and urinal and fencing around the community hall at Malugaon-III at Tikak Colliery.
5	Construction of community hall at China Basti, Tikak settlement area.
6	Completion of the balance portion of the open auditorium at Tikak Colliery.
7	Development of road to Rang-ring village at Tikak Colliery.

8	Construction of community centre at Tikak Colliery.
9	Water supply arrangement at Signal Basti at Tikak.
10	Construction of the road and pucca drain from Tikak Field Office to BCL Office at Tikak
11	Construction of classroom at SankardevVidyapith High School at Ledo
12	Construction of culvert at Parigaon at Hamukjan at Tikak Colliery.

Source- North Eastern Coalfields, Margherita (WWW.neccoal.co.in)

Table no. 3- Corporate Social Responsibility (CSR) activity in 2014-2015

Sl.no.	Name of the work and place for year 2014-15
1	Construction of training centre for weaker sections (Women and Children) at Tikak China Basti.

Source- North Eastern Coalfields, Margherita (WWW.neccoal.co.in)

Table no. 4- Corporate Social Responsibility (CSR) activity in 2015-2016

Sl.no.	Name of the work and place for year 2015-16
1	Total Electrification provided to Malu Goan-2 of TikakPahar

Source- North Eastern Coalfields, Margherita (WWW.neccoal.co.in)

For this study two sample villages were taken namely Lalpahar pathar gaon from Tipong colliery, Tipong coal grant. Personnel interview have been carried on among those surveyed 50 households. A systematic random sampling method was applied for an unbiased survey. Among the total population of each sample villages with the help of systematic random sampling method 100 households has been surveyed which is as follows:

Systematic random sampling formula for interval (i) =N/n

Whereas g, N= size of the population

n= size of the sample

In the first sample village, Lalpahar pathar gaon among the total households is 182 according to District census handbook, Tinsukia 2011. For survey purpose 50 households from each village was interviewed personally with a certain interval. The interval is calculated below: -

$$\text{Here } N = 182, n = 50$$

$$i = 182/50 = 3.64$$

Here approximately 4 is taken as interval.

So, in Lalpahar pathar gaon approximately 4 intervals of houses were surveyed among the 182 total households. During the study in this sample the CIL company had carried out various CSR activities which are defined in detail in the table no. 5.

Table no. 5- Corporate Social Responsibility (CSR) activity in Lalpahar pathar gaon

Sl.no.	Name of the work and place for year 2010- 2018
1	Construction of community hall cum guest house (Lalpahar pathar gaon)
2	Health camp in Lalpahar L.P school
3	Provision of water supply to each house through pipeline
4	Women empowerment skill development activities.
5	Children health check-up camps.
6	Employment opportunity to well educated person.
7	Construction of new church and provision of education in church for economically backward family.

Source- primary survey

During the survey through personal interview some CSR program and projects has been identified which is listed in the table no. 5. In this sample village due to high elevation the area suffers a lot from scarcity of water supply for daily use, which was made possible by the CIL company. Most the family in this sample area earn their livelihood either through cultivation or agriculture or cattle rearing, thus while undergoing a survey by the company sort this problem by employing some candidates in the coal mines as eligible according to their education status. Along with these children of that area were taken care of and free education in church was allotted for economically backward children. Keeping in view that children are the future of an area so free

health camp for children were carried on periodically. Along with the children free health camp were also carried out for all age people. In order to develop that area economically various training for skill development activities camping were set periodically every year which had brought development in that area in comparison to previous passing years.

Another sample village Tipong coal grant is a small coal mining area which was alive till underground mining coal extraction was in process. Once underground coal extraction ended that area coal mine is left barren. This area is also a hilly area due to which supply of water problem also arose here. But as the official workshops are still alive in this area so CIL company also keeps an eye in the development of this area. The supply of water to each family was sort out by the company under CSR activity plan. Supply of water is made twice in a day at a particular time to every family through pipelines. Even though the coal mine is not alive in this area but still the CIL company instead of removing the employees from the unwanted post of that coal mine had replaced those employees in different sectors. After the extraction of coal from the mines the land area was left barren and unused but through some CSR plan those land was replanted by the process of afforestation within a specific period of time. A primary and a Hindi medium school was set up by the company for the development of the area. Hindi medium school was set up by keeping in view that most of the employees immigrated during the British period, so since then their children and grandchildren are inhabiting in this area and those employees are flexible only with hindi language, that's why Hindi medium school was also set up in this area. These data were collected through personal interview in 50 households among total 267 households to District census handbook, Tinsukia 2011. For unbiased survey a statistical method, systematic random sampling method was applied.

$$\text{Here } N = 267, n = 50$$

$$i = 267/50 = 5.34$$

Here approximately 5 is taken as interval

With an interval of 5 among 267 households 50 households were surveyed. In table no. 6 CSR activities since 2010 data has been collected and listed in the table.

Table no. 6- Corporate Social Responsibility (CSR) activity in Tipong coal grant

Sl.no.	Name of the work and place for year 2010- 2018
1	ENT health camp in Tipong L.P School.
2	Provision of water supply during two period of time in a day.
3	Replacement of employees
4	Construction of L.P school and Hindi medium school.
5	Practised afforestation process in left over barren land after excavation
6	Periodical health camps

Source- primary survey

Conclusion:

After completing the study, a conclusion can be made that since CSR plans were made compulsory in all industrial sector, CSR activities were given importance which further led to development in those industrial areas. While performing personal interview in sample areas quiet a good amount of valuable data gathered to fulfil the objectives of the study. In comparison to early periods at present the coal mining areas are developed in all sectors, such as literacy rate is increasing gradually along with the passing time, society are well aware of different scopes to develop their skills, specially women are found to be literate, evil society activities are seeming to disappear. The environment is taken care of keeping in view of fear to get extinct. Several plans and programs are carried out for a specific period of time to recover the disaster made after the extraction of coal in mining areas. Overall the study gave a fruitful acknowledgement about the CSR responsibilities carried out by the companies if industries for the development of an area, which is a very positive sign of development of an area. CSR of NEC (CIL) company continues to carry out several plans in future as acknowledge during the study.

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