

Impact of Mineral-Based Industries on Tribal Communities: A Case Study of the Sundargarh District of Odisha

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ABSTRACT

Many development projects set up by the Government of Independent India in the past to improve the economic condition people in backward mineral rich regions, went against the interest of poor tribal and ecosystem people. It has been revealed from various research studies that exploitation of mineral resources and promotion of mineral-based industries in tribal areas ruined their sustainable means of subsistence. They did not get any opportunity to switch over from their traditional land and forest-based living to modern industries and mechanized mines, as they did not have minimum level of modern education to acquire modern skills. This has resulted in massive displacement of tribal people from their hearth and home. About 40 per cent of them have been displaced from all over the country by the development projects like river dam, irrigation projects, mines, industries, etc., although they constitute only about 8.6% per cent of the total population of India. In the light of this, I being a tribal student and victim of mineral-based industrial development plans to do my doctoral level research on mineral-based industries and their impact on tribals. The area of my study is northern plateau region of Odisha comprising three mineral rich tribal districts namely, Sundargarh, Keonjhar and Mayurbhanj districts.

In my research I will cover major industries and mines found operational in these three districts. I will seek to find out the magnitude of tribal displacement because of these industries and mining projects. Sustainability aspect of tribal wage-based employment and the impact of industries on their culture, value system, social and physical environment and above on their standard of living shall be duly analysed by using scientific sampling

method, participatory observation and FGDs. For this design a structured interview schedule and open-ended questions for FGDs after doing pilot study in my study area.

Keywords: Impact, Industries, Tribal, Case study, Sundargarh

1. INTRODUCTION

The northern plateau region of Odisha covering three undivided districts of Sundargarh, Mayurbhanj, Keonjhar and a part of Anugul and Jharsuguda districts is famous for its huge deposit of mineral resources. At the same time these five districts of the state are home to large number of tribal populations of the state including many particularly vulnerable tribal groups (PVTGs). Out of 62 scheduled tribe communities of Odisha about two-third of them live in these three districts. Owing to huge deposit of mineral resources like iron ore, manganese, bauxite, coal, etc. this region of Odisha is found to be undergoing massive changes. Many developments project set by the government of independent India in the past to improve the economic condition people in backward mineral rich region, went against the interest of poor tribal and ecosystem people. It has been revealed from various research studies that exploitation of mineral-based industries in tribal areas ruined their sustainable means of subsistence.

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of living shall be duly analysed by using scientific sampling method, participatory observation and FGDs. for the purpose.

2. REVIEW OF LITERATURE

Meher Rajkishor (2004), “Stealing the Environment social and ecological effects of Industrialization in Rourkela” the book This study has focused on Rourkela, which offers a unique opportunity to examine the relationships between industrialization, patterns of urbanisation, and environmental degradation. Rourkela was built to support the Rourkela Steel Plant and its ancillary industrial units. However, the pragmatic approach used in this study emphasises that, given the modern man's altered nature, rejecting modernity is not a viable option. In other words, traditional knowledge systems alone are insufficient to address the issues associated with a growing population. poverty, hunger and disease.

Patra Himanshu Sekhar (2014), “Status of Adivasis/Indigenous peoples Mining Series-5” Odisha, with almost a quarter of its population being Adivasis and about half of its geographical area forests where large sections of Adivasis inhabit, is also a mineral rich state in the country. Over the past two decades, the State has been witnessing to unbridled plunder of its rich natural resources in the quest of mining led growth.

Ghosh Biswajit (2012)” Interrogating Current Development Discourses in India the discussion of "development as a discourse" in this book can be useful for comparing and contrasting potential outcomes of development from various, contextual, and synoptic perspectives Over time and space, the meaning of development can change.

Meher Rajkishor (2004), “Globalization, Displacement and the Livelihood Issues of Tribal and Agriculture Dependent Poor People” Mining and other industries that are consuming the ecosystem's resources from these tribal people and underprivileged peasants are unable to give them a better and more sustainable way of life.

3.OBJECTIVES OF THE STUDY

1. To find out the impact of industrialization on tribal life and livelihood from the point of view of sustainable and holistic development.
2. To analyses the displacement effects of mineral industries on the ecological set up of the northern plateau region and on tribal society, culture, value, systems, economy and political life.

3. To find an alternative development model for inclusive and holistic development of tribal in the context of development mainstreaming.

4. METHODOLOGY

The area of my study is northern plateau region of Odisha comprising three mineral rich tribal districts namely, Sundargarh, Keonjhar and Mayurbhanj districts. Sustainability aspect of tribal wage-based employment and the impact of industries on their culture, value system, social and physical environment and above on their standard of living shall be duly analysed by using scientific sampling method, PRA participatory observation and FGDs. The researcher has using by scientific sampling method for the purpose, to design a structured interview schedule and open-ended questions for FGD. The researcher has also used Secondary data for my research study area. the present study will be conducted in Sundargarh district of Odisha. It will be Cover 8 blocks namely. Koida. Kurta. Nuagaon. Lahuni para. Hemgir. Rajagangapur. Kuanmuda. Gurundia.

5.LOCATION AND GEOGRAPHICAL AREA

Sundargarh is a district in the northern part of the state of Odisha, bordered by the districts of Kendujhar and Singhbhum in Jharkhand to the east, Ranchi in Jharkhand's north, the west and north-west, Raigarh in Chhattisgarh, and Jharsuguda, Sambalpur, and Angul in the south-east. Land use/ land cover According to Sundargarh's land use and land cover, forests predominate over the district's landscape. Forests make up about 51% of the total area of land used for human activity and land cover. The next section of land is used for agriculture, with a net sown area of 29% of the total.

Figure: Administrative map of Sundargarh district.1.The district of sundargarh land use and Cover.

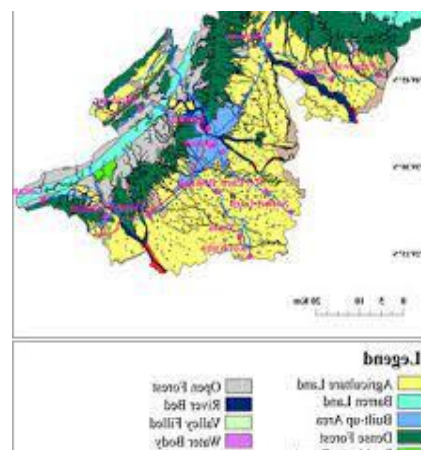


Table: 1 Location and geographical area

The land use class /land cover	Area(h)	Total area (%)
cover of tree	496000	51.1
Miscellaneous trees and grove	25,000	2.6
In the net	284,000	29.2
stable pasture	26,000	2.7
Vegetable-less wasteland	16,000	1.6
used for purposes other than agriculture	29,000	3.0
Current fallow	29000	3.0
Barren and uncultivable land	66.000	6.8

6. MINING ACTIVITIES AND MINING -AFFECTED AREAS

One of Odisha's main mining regions and one of the nations with the richest deposits of iron is Sundargarh. Along with the district, there are large coal and manganese reserves. About 23.63 million tonnes of iron ore were produced in the Sundargarh district during 2016 and 2017. Apart from a number of lesser businesses, the primary iron ore mining corporations in the district include Jindal steel and power limited, Odisha mining company limited, Ranga mines limited, and runta sons private limited.

7. MINING AFFECTED AREAS

The eight blocks that make Rural areas are located up the Sundargarh district's mining-affected areas. called Koide, Kurta, Gurundia, Hemgiri, kuarmunda, Nuagaon, ranjagangapur, and luhunipara. The Rajangapur, Nuangaon, and Kuanmunda blocks are where the iron and manganese mines are situated. Mining-affected areas in the Sundargarh district, table. demographic information The Sundargarh district has over 21 lakh residents, with roughly 50.68% men and 49.32% women, as per the 2011 Indian census.

8. THE DEMOGRAPHIC DISTRIBUTION

Indicates that the district is largely rural, with about 65% of the population residing there. The socioeconomic caste census from 2011 indicates that the rural areas are also economically distressed, with the highest-earning head of households in about 90% of households making less than Rs. 5,000 per month. There are 216 people per square kilometre overall.

Table: 2 mining affected areas.

Blocks	Panchayat count overall	Affected panchayats
Koida	12	7
Kurta	16	6
Nuagaon	20	5
Lahunipara	17	4
Hemgir	19	4
Rajagangapur	12	3
Kuanmunda	20	3
Gurundia	13	1

Table:3 Overall demographic profiles for the district of Sundargarh.

the entire district's populace	Male (%) Female (%) Urban (%) Rural (%) SC/ST (%)
2093437	50.68 49.32 35.25 64.74 9.16 50.75
gender ratio	979(Rural-989; urban -34.77%)
populace per square kilometre	216

Growth of population. Over a decade (2001-2011)	14.35
Total household	4,79,109(Rural65, 22%, urban -34,77%)
Population below the poverty line (BPL) % population BPL) % living in poverty	65.2
households with a head of household who makes less than Rs. 5,000 per month in rural areas	89.9

9.STATUS OF LITERACY AND LEVEL OF EDUCATION

Sundargarh district has a literacy rate of 73.34 percent, which is somewhat higher than the national average of 72.9 percent. Koide has the lowest literacy rate of 75.3 percent among the mining-affected communities, with a male literacy rate of 81 percent superior to female literacy rates of 65.48 and 70.9 percent SC and roughly 65 percent for ST inhabitants. It is roughly 60% in other mining-affected blocks as well. Even if the population's literacy rate is high, the education level needed to land a respectable job, for instance, among those in the 20 to 39 age range, while 77 percent of the population is literate, only about 14 percent has completed a higher education, and just over 12 percent has received a diploma, which is the most employable age (See table level of education in sundargarh district.

Table:4. district of Sundargarh's rate of illiteracy

Category total	Total literacy (%)	Sc Literates	St literates
	73.34	65.08	
		70.92	
Male	81.01	79.75	73.98
Female	65.48	62.03	56.39

Table: 5 Education level in the Sundargarh.

Age group	18-19	20-39	40-59
Lliterate	12.77	22.66	41.34
Literates	87.22	77.33	58.63

Literates without education level	2.47	3.52	4.37
Below	6.48	8.47	14.41
Primary	20.02	20.17	14.74
Middle	21.86	20.87	15.67
Matric/ secondary	19.23	17.66	19.56
High secondary	26.11	14.07	6.44
Graduate and above	-	12.15	12.25

Table:6 distributions of the working and unemployed population in the district of Sundargarh.

In the district of Sundargarh, the percentage of people who are employed makes up about 41.7% of the total population, while the non-working population makes up about 58.3%. About 61.3% of the total working population are main workers, while only 38.7% of all workers fall into this category. As a result, a sizeable fraction of the population experience income instability when taking into account the percentage of marginal employees and the non-working population. When those deemed to be of working age are those between the ages of 15 and 59, the percentage of the population that is not employed decreases by roughly 15.34% according to the 2011 census.

Category	Total workers (%) of total population	Main workers (%)	Marginal workers (%)	Non - workers (%)	Nonworkers 15-59 years (%)
Total	41.71	25.56	16.15	58.29	42.95
Male	55.10	40.59	14.51	44.90	28.89
Female	27.95	10.11	17.84	72.05	51.96

When it comes to the percentage of people in Odisha who live below the poverty line, Sundargarh is one of the worst affected districts (BPL) The percentage of people who fall into this category is close to 40%, which is significantly higher than the stage average of 32.5%. In the rural areas of the Sundargarh district, 89.8% of households with the highest earner make less than Rs 5000 per month, which is a shockingly low-income distribution. Therefore, providing people with a secure and decent means of subsistence, especially tribal people and other marginalised groups living in rural areas, is crucial.

Table: 7 Income Distribution in Rural Areas of Sundargarh District.

Earnings	Percentage of households with heads earning the highest incomes
monthly earnings of less than Rs 5,000	89.81
earning between Rs. 5000 and 10,000 each month.	5.34
monthly earnings in excess of Rs. 10,000	4.79
with a salary job	7.62

Table: 8 main sources of income for households in Sundargarh district's rural areas.

sources of income primarily	Preparation on of dependent households (%)
Cultivation	30.43
manual or casual work	53.11
Domestic work, either full- or part time	2.10
Own account business that is not in agriculture	0.75
Begging, alms-giving, and support for charities.	0.33
rag-picking and foraging.	0.21
Additional (unknown) sources.	13.01

10.CONCLUSION

Recently, the entire international community has been expressing alarm about the current development paradigm, which demonstrates all signs of being unsustainable over the long term. Climate change, frequent crop failures, food shortages, ecological chaos, and severe environmental pollution are manifestations of these, and they portend doom for human survival on Earth. Wherever new development projects in the form of dams, industries, irrigation, or mining have been proposed to hasten the pace of economic development, India and many developing countries have recently witnessed massive protests by the ecosystem people in the form of ecological and displacement movements.

Ecologists and environmentalists are raising a ruckus and foreseeing impending calamity. To combat economic illiteracy and human suffering, it is crucial for developing nations like India and the least industrialised but resource-rich state of Odisha to utilise natural resources, notably minerals. In light of this, the study will attempt to investigate a consensus development model in which the state and market economy may complement each other to promote the overall development of all demographic groups.

11. References

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