Socio-Economic Conditions of Mining Labourers in India: Sociological Dimension

Basavaraja. T¹ and Dr. Veerendra Kumar. N²

Research Scholar, Department of Sociology, Vijayanagara Sri Krishnadevaraya University, Ballari.
¹Assistant Professor, Department of Sociology, Vijayanagara Sri Krishnadevaraya University, Ballari.

ABSTRACT:

Introduction: Mining may well have been the second of humankind’s earliest endeavors granted that agriculture was the first. The two industries ranked together as the primary or basic industries of early civilization. Little has changed in the importance of these industries since the beginning of civilization. If we consider fishing and lumbering as part of agriculture and oil and gas production as part of mining, then agriculture and mining continue to supply all the basic resources used by modern civilization. Objectives: This paper aims at 1. To determine the morbidity pattern among labourers engaged actively in mining activities. 2. To know major reasons behind the prevalence of health issues, 3. The frequency and occurrences of health harms. 4. Understanding the socio-economic conditions of mining labourers. Methods: The information has been collected based on the reviews done of various scientific studies conducted in major mining states of India. Recommendation: Since mining work is hazardous to workers health, there are recommendations are given in the paper. This study indicate that need for regular health check-ups, health education, personal protective devices and engineering control for better health and productivity of the miners. Conclusion: There must be needed to proper implementation of Mining Labourers Acts for safeguarding the rights of workers and wellbeing of them. It should be made mandatory to provide safety devices to workers by the company. The mining company and govt.’s at most duty to implement family welfare measures of workers. Eradicating the problems of mining labourers in grass-root level is impossible but minimization is possible.

Key words: Mining, labour, hazardous, morbidity, civilization, health.

Introduction:

India, as a nation has been famous for accepting and nurturing diversity in all phases of its history. The result has been the existence of entrepreneurs since Indus valley civilization. The Indian sub-continent, because of its gigantic size and varied geological structure, is replete with rich deposits of industrially important minerals. The term “minerals” encompasses a wide variety of substances taken from the earth. They are generally divided into four groups: metals, such as aluminum, copper, iron etc.; industrial minerals, such as silica, limestone, dolomite, magnesite etc.; construction materials such as sand, gravel and grit etc.; and energy minerals (fuel minerals) such as coal, lignite, oil and natural gas. India is endowed with significant mineral resources. India produces 89 minerals out of which 4 are fuel minerals, are 11 metallic, 52 are non-metallic and 22 are minor minerals (together with building and other materials) (Vagholikar and Moghe, 2003). India is among the top ten mineral producing nations in the world and its economy depends on the value of minerals produced (Ghosh, 2003). It is the world’s largest producer of mica blocks and mica splitting. With the recent spurt in world demand for chromite, India has stepped up its

Soon after independence, India witnessed a spurt in the growth of heavy industries that needed a large amount of mining of minerals. Thus, the mining operations in India began on a large scale in 1950s (Valdiya, 1988). The aggregate mineral production in 1999-2000 was about 550 million tonnes contributed by over 3,100 mines (reported mines) producing coal, lignite, limestone, iron ore, bauxite, copper, lead, zinc etc. The aggregate value of the mineral production in 1999-2000 was more than Rs. 452.3 billion. The value of mineral production during 1999-2000 was estimated at Rs.452.3 billion to which contribution from public sector was Rs.378.4 billion (84%). In the total value of mineral production, fuel minerals accounted for Rs.372.3 billion (82%), metallic minerals for Rs.34.2 billion (8%), nonmetallic minerals for Rs.18.3 billion (4%) and minor minerals for Rs.27.6 billion (6%). Around 9,244 mining leases are spread over 21 States occupying about 0.7 million hectares which is 0.21% of the total geographic area of the country. Out of 9,244 mining leases, 639 (7%) leases were in the public sector and the remaining balance in the private sector. The following ten states together account for 93% of the total leases granted: Gujarat (15%), Rajasthan (14.5%), Andhra Pradesh (14%), Madhya Pradesh (13.5%), Karnataka (11%), Tamil Nadu (7%), Orissa (6.5%), Bihar (4.7%), Goa (4.3%) and Maharashtra (2.4%) (TERI, 2001; Vagholikar and Moghe, 2003). More than eighty four per cent (84%) of the mineral production comes from open cast mines and therefore, one must add the quantity of overburden to that of the mineral production in order to assess the total amount of annual excavation in India’s mining sector. Small-scale mining is more prevalent in India. The minor mineral sector (19 minerals in all) does not usually get that much attention as regards its environmental impacts because of the often small lease sizes and smaller scale of operation (TERI, 2001). It is important to note that of the non-fuel minerals, ‘stone, sand and gravel’, all falling within the minor minerals in India, are produced most widely and in the largest quantities worldwide. But this sector has the largest number of leases spread across the country and has significant environmental impacts (Vagholikar and Moghe, 2003).

Review of Literature:

Absar Ahmad(2015) “Socio-economic and health status of sandstone miners: a case study of Sorya village, Karauli, Rajasthan” his study is carried out with aims to assess socio-economic and health status of the miners in Sorya Village of Karauli Mining has always been among the most hazardous of occupations and rapidly increasing demand for metal and minerals to meet the demand for growing infrastructure has greatly increased the importance of mining. The quarrying and crushing are carried out in many parts of India and majority of stone mines are unorganized. District of Rajasthan, India. Average ages of miner were 41 and average household sizes of the miners were six. Around 80 % miners addicted to substance abuse and spend average Rs. 17 daily. Average monthly incomes of them were Rs. 3200 and 39 % has miners are in debt of more than 1 lakh. One of the reasons of debt was father died in debt and carried forward to the children. Seventy-seven percent of miners belong to lower caste and rest of them belongs to other backward class. Average BMI of miners was 19.7 kg/m2 and 38% miner were malnourished (BMI <18.5 kg/m2). Health problem reported by most of them were TB, silicosis, chest pain, back pain, Cough and Musculoskeletal disorder. Some of miners reported about low vision and hearing loss too.
Himansu Sekhar Patra et al. (2015) *Socio-Economic Profile and Quality of Life of villages in and around mining area of Keonjhar District, Orissa, India.* Though mining activity in odisha has played an important role in industrial growth of state, but it has led to affecting the environment and social life of the community located nearby. The effort taken by mining companies in minimizing the adverse impacts on the environment and society is in-adequate and not matching the need of hour. The current research paper has attempted to give a picture on the impact of mining activity on the socioeconomic condition of the local inhabitants living around the iron ore mines of Keonjhar district in Odisha. The study area is habituated by Paudi bhuyan and Juanga, two primitive tribal group of Eastern India. A sum of 300 households comprising 1204 individuals was selected and interviewed through the help of a pretexted structured questionnaire. The Quality of Life (QOL) has been indexed in a 0-10 point scale based on some important value function like occupation, caste and prevailing economic and social condition. Data on socioeconomic conditions as well on several indicator parameters like housing, source of water, sanitary facility, type of food intake, prevalence of common disease, education level, medical facilities, communication facilities, occupation, fuel and energy used, assets owned, own transportation, per capita income, recreational facilities and mal-nourishment. The overall quality of life index based on the value functions ranged from very poor to average with overall average score of 39.38. The major findings shows that the socio-economic and overall quality of life of inhabitants, is far from satisfactory as the natives are very poor having poor educational status, sanitary and housing facilities, less possession of asset and vehicle, and low per capita income. There is an urgent need to launch income generation, educational and health awareness program as well as to make them aware and help them. Therefore, in future both mines as well as government authority should give emphasis on improving the economic status of the people thus enhancing the quality of life.

Dr. Kumud Dubey (2017) *Socio Economic Impact Study of Mining and Mining Policies on the Livelihoods of Local Population in the Vindhyan Region of Uttar Pradesh,* this study is sponsored by NITI Aayog, New Delhi, entitled as “Socio-economic Impact Study of Mining and Mining Policies on Livelihoods of Local Populations in the Vindhyan Region, Uttar Pradesh” was conducted at Centre for Social Forestry and Eco-Rehabilitation, Allahabad. The Socio-economic study was conducted in mining areas of Allahabad, Mirzapur and Sonabhadra districts of Vindhyan region, UP. in the nearby of mining areas in order to study the existing resources of the area, social-economic structure of the community, employment patterns, income generation activities, dependency on forests, mining, impacts of mining, impact of mining closure on livelihood, preference of land use of mined out areas and species preferred for restoration by the local people along with information on other related environmental and socioeconomic aspects etc. The study has been performed in mining areas by using Participatory Rural Appraisal (PRA) tools and by Questionnaire based Surveys.

Nabanita Das (2015) “Socio-economic Impact of Coal Mining on Rural Communities: A Study of the IB Valley Coalfield in Odisha” this is ph.d theses studied Natural resources are an integral part of all human civilization. Again, natural resources that can either be renewable or non-renewable, affords adequate atmosphere towards economic development. Coal as a form of non-renewable natural resource is obtainable through excavation. But in the process, it is often regarded as a socially and environmentally stubborn substance. In India, the process of globalization has encouraged the industrial giants to mine the natural resources which have witnessed a virtuous symbol of economic activity since then. By introducing this resourceextraction industry, the unindustrialised realms are earning substantial section of foreign exchange and at the same time subsidising obviously to the growth of gross domestic product. At the onset, the new mining projects necessitated massive acres of land to execute their operation and started convincing the mass by providing a better income earning environment as well as the infrastructural developments like well-connected roads, electricity, health care facilities etc. But the fruit of development cannot be fortified by overlooking the source and means of living of the project affected communities.
Dharma Raj* and Bhanu Pratap Singh (2018) Demographic and Socio-Economic Profile of Labourers in Construction Industry of Varanasi City (India). Unorganised labour sector covers more than 90 per cent of the total work strength of India. Among these unorganized workers more than half of the construction workers belong to the informal sector. The present study aim to assess the demographic and socio-economic profile of the workers engaged in construction work in Varanasi City, India. A primary survey conducted during the period of June-September, 2016, individual level primary data has been collected from the targeted population using multi-stage convenience sampling method. It was found that more than half of the workers were from the age group of 20 − 35 and most of them belong to local SC or OBC category. The average household size of labourers was found to be 6.92 per cent, which was more than the national average. More than 86 per cent of the workers in the city do not have a permanent house to live in. It was estimated as monthly income (indirectly based on expenditure and saving) of the labourer group is only Rs. 10278/- (less than 160$). This paper recommends that there is an urgent need to pay attention on government policies to improve the overall socio-economic and working conditions of the construction workers.

JONES OPOKU-WARE (2010) The Social and Environmental Impacts of Mining Activities on Indigenous Communities - The case of Newmont Gold (Gh) Limited (Kenyasi) in Ghana. The study explores and assesses mining and its impacts on communities within which mining activities takes place. The focus has been on a mining community in Ghana called Kenyasi where mining is vigorously carried out by an American mining giant, Newmont Mining Corporation. The study investigates the real and latent impacts of mining activities on the community in the light of the numerous promises and prospects that mining is said to provide for communities. Mining for many decades served as an important component of countries’ revenue source especially for developing countries that have been endowed with the mineral wealth. If properly managed, countries can grow their economies with proceeds from mining activities in the form of royalties and foreign exchange earnings for the export of mineral related products. Such benefits from the mining sector have in most cases been used as justification and a social license for exploration and exploitation of minerals in most communities.

Shaswati Mukherjee (2016), the Social and Economic Conditions of The Unorganised Coal Mine Workers In India. The unorganized labour is overwhelming in terms of its number range and therefore they are omnipresent throughout India. The study reveals that the workplace is scattered and fragmented. There is no formal employer – employee relationship. The unorganized workers in urban areas are basically migrant workers from rural areas. The unorganized labourers in the mines are usually subject to indebtedness and bondage as their meager income cannot meet with their livelihood needs. Since they are unorganised, they are subject to exploitation significantly in their work place. Their socio-economic conditions are extremely deplorable. As most of them were landless labourers, there was no other option left for them. Their main aim is to have two meals a day for them and their families.

Study Area:

The area of study is confined to the mining activity major districts in India. Mines are located in major belts like Karnataka, Goa, Rajasthan, Orissa, Meghalaya, and Telangana, etc. Since several decades these places witnessed more for mining activities and largely adverse affected on Labourers of surrounding villages. Therefore this study is focused on socio-economic conditions of mining labourers of India.
Objectives of the Study:

1. To determine the morbidity pattern among labourers engaged actively in mining activities.
2. To know major reasons behind the prevalence of health issues.
3. The frequency and occurrences of health harms.
4. Understanding the socio-economic conditions of mining labourers.

Hypotheses:

1. Appreciation of mining effects on the health by residents is related to their number of years working in mining.
2. Mining labourers socio-economic conditions is low-level.

Need of the Study:

The present study examines the impact of mining on the socio-economic condition of workers. All mining is dangerous, and it is difficult for miners to earn a livelihood while also protecting their socio-economic condition. But there are ways to make mining safer. Often the only way to get the mining industry to use less harmful methods is through community pressure. Mining conditions are very different depending on the location, type, and size of the mining operation. By understanding mining’s threats to health and long-term well-being and by taking precautions to reduce harm in all mines, miners and other people in mining communities can better protect their health and improve their lives.

Research Methodology:

The information has been collected based on the reviews done of various scientific studies conducted in major mining states of India. It is based on secondary data.

Mineral in India:

The Indian sub-continent, because of its gigantic size and varied geological structure, is replete with rich deposits of industrially important minerals. The term “minerals” encompasses a wide variety of substances taken from the earth. They are generally divided into four groups: metals, such as aluminium, copper, iron etc.; industrial minerals, such as silica, limestone.

Mineral Resources:

- India is endowed with significant valuable mineral resources.
- India produces 89 minerals out of which 4 are fuel minerals, 11 metallic, 52 nonmetallic and 22 minor minerals.
- The metallic production is accounted for by iron-ore, copper-ore, chromite and/or zinc concentrates, gold, manganese ore, bauxite, lead concentrates.
- Amongst the non-metallic minerals, more than 90 percent of the aggregate value is shared by limestone, magnesite, dolomite, barytes, kaolin, gypsum, apatite & phosphorite, steatite and fluorite.
India’s Contribution to World Mineral Production:

- India is the world’s largest producer of mica blocks and mica splittings.
- With the recent spurt in world demand for Chromite, India has stepped up its production to reach the second rank among the chromite producers of the world.
- India ranks, 3rd in production of coal & lignite
- 2nd in barytes, 4th in iron ore.
- 5th in bauxite and crude steel
- 7th in manganese ore and
- 8th in aluminum

Mining labourers and Socio-Economic Dimension:

Mining: Mining is the extraction of valuable minerals or other geological materials from the earth, from an ore body, vein or seam. The term also includes the removal of soil. Materials recovered by mining include base metals, precious metals, iron, uranium, coal, diamonds, limestone, oil shale, rock salt and potash. Mining in a wider sense comprises extraction of any non-renewable resource (e.g., petroleum, natural gas, soil or even water) (Langer, 1988). Mining of stone and metal has been done since pre-historic times. Modern and organized mining processes involve prospecting for ore bodies, analysis of the profit potential of a proposed mine, extraction of the desired materials and finally reclamation of the land to prepare it for other uses once the mine is closed (Langer, 1988).

India is a country with rich natural heritage. It bears the weightage of naturally welldesigned hub that preserves its natural environment in such a way that it has the ability to invite the commercial activities to exploit the same. In the era of globalization, in order to uphold the country in the wave of development, varieties of commercial activities including mining has emerged. Though the impact of mining is large-scale, still It cannot be overlooked the loss in the sphere of social structure as it also bears the changes in large scale. We cannot ignore the fact that change in one aspect provokes the change on other aspects too. When mining is taking place in large scale it not only shades impact on environment, livelihood or health, but also the structural aspects are implementing insignificant changes’

Mining is a major economic activity in many developing countries including India. Mining operations, whether small or large-scale, are inherently disruptive to the environment, producing enormous quantities of waste that can have deleterious impacts for decades. The environmental deterioration caused by mining occurs mainly as a result of inappropriate and wasteful working practices and rehabilitation measures. Mining has a number of common stages or activities, each of which has potentially-adverse impacts on the natural environment, society and cultural heritage, the health and safety of mine workers, and communities based in close proximity to mining operations. Land mining in nearby area of forest was mainly focused for the study.
SOCIAL DIMENSIONS:

- The total proved coal reserves in the country are about 101.83 billion tonne, which is about 10% of the Global proved reserves.
- As per the Integrated Energy Policy, with the present rate of production these reserves would last for over 80 years.
- In the country coal is the primary energy source and it meets about 55% of primary commercial energy needs.
- The total employment in the coal sector is about 550,000 and hence the total dependents are about 5,500,000.
- For each person employed there are about ten dependents, which include five members of the families of the employee and another five supporting these families and the mining activities.
- Studies on quality of life of mining laboureres complexes have revealed that these areas are not socially and economically developed even though the levels of economic activities have increased manifolds.
- Out of eleven complexes studied only two had overall fair quality of life and the remaining nine had overall poor quality of life. None of the complexes had overall good quality of life.
- The mining complexes in the country in general are seen to be having four distinct types of settlements, which develop in accordance with the level of economic assistance they receive from the mining companies.
- Total mines 473 Underground mines 283 Opencast mines 155 Mixed mines 35 Coal beneficiation plants 19 Employees 412,350 Total dependents 4,123,500 Production in 2008-09 about 400 MT

Impacts on Society:

- Changes in population
- Dilution of ethnic culture and changes in societal complexion
- Displacement of people
- Losses of livelihood
- Decrease in sex ratio
- Increase in the cost of living
- Development of civic facilities
- Changes in income pattern
- Urbanization
- Education and medical facilities
- Infrastructure facilities
- Aspirations of the society

Socio-Economic Dimensions:

**Income pattern:** This socio-economic measure to a great extent determines the standard of living of any group of the society. The standard of living refers to the actual mode of living conditions. The mode of living in any country depends primarily on the fundamental factor of food, shelter, and clothing.

**Work environment and working conditions:** Working in mines involves physical accident and blows, muscular and nervous strain, monotony, noise, unhealthy dust and air, which diminish and dampen workers efficiency. Different physical environments, say, cold, heat, dampness and noise also influence the efficiency of labour and can be measured for purposes of correlating conditions and results in output, accidents, lost time and turnover. Working conditions should be compatible with an employee’s physical comfort. It contributes to enhance the job satisfaction by maintaining the normal temperature, combating humidity, proper ventilation, illumination, noise and work place. Long hours of work and poor working condition render them inefficient and make them physiologically unwilling to work. So, on the whole we can say work environment has a considerable impact on the efficiency as well as on the health of the worker. Hence a supportive environment is
a prerequisite to keep the physical and mental stress of the employee at its minimum. It can also be said that these workers work in a very unhealthy and risky conditions in the mines.

Occupational hazards: Despite considerable efforts in many countries, the rates of death, injury and disease among the world’s mineworkers remain high, and mining remains the most hazardous occupation when the number of people exposed to risk is taken into account.

Social indicators to assess impacts of mining: To be able to fully establish the extent of social impacts on mining, I found it extremely important to use certain basic social indicators which can easily be identified and analysed by the researcher. Among the major social impacts experienced by the people in India, which all the respondents noted affects them in one way or the other is mentioned as high prices of good, services and food commodities, increase in certain types of crimes, prostitution, population growth, high levels of poverty, employment problems, conflicts, infrastructure development and business or economic activities in general.

Impact on goods and service: One important aspect of social life that is affected in communities where mining takes place is the prices of goods and services. On prices of goods, services and food commodities, majority of the respondents lamented how the start of mining operations in the community have resulted in escalated prices of goods, services as well as food commodities which hitherto were cheap. It is realized that the mere perception of the people about a gold mining firm to them indicates that workers of such companies are very wealthy people and as a result are willing to pay any amount for a commodity they need. As a result, providers of basic services, petty traders and prices of general goods are so high with the view that workers of Newmont would be ready to pay for them when they need them.

Impact on crime: Social vices are noted to be a necessary by-product in communities where mining takes place. These vices including various types of crime and criminal activities as well as prostitution is usually rampant in communities where there are economic activities, influx of strangers such as mining areas. Questions about crime and criminal activities in the community since mining operation began were asked and the responses from the respondents are at best “mixed”. A crime that is noted to be common in India is stealing from farms and assault. However, very heinous crimes such as murder and burglary are very uncommon. In fact, only thirty (30) representing 60% out of the fifty (50) respondents indicated having heard about someone caught stealing from someone’s farm or any other property. They however attributed the low level of crime rate especially murder to the existence of certain traditional folklores and taboos in the community that provide for serious consequences for people who engage in such criminal acts.

Impact on prostitution: Prostitution is usually described as „an old age” profession. It employs people in most countries although its widespread could be very devastating and could have long term social and health impacts for any society if not properly controlled especially when certain categories of people are involved. Views about the subject of prostitution have been very diverse and in some societies, its discussion is much closed.

Population growth and mining: Population growth is usually expected in communities where mining takes place because of the increased presence of mine workers in such communities. The impact of mining India on population growth is also very visible.

Poverty in mining in India: The general belief is that the presence of such a huge mining company such as Newmont in any particular area would inject massive capital investments into the area or community which would in effect trigger capital or cash flows, put more money in the system and hence reduce poverty since economic activities would be generated. This belief I can say to a larger extent accounts for the high prices of goods, services and food commodities in India, because it is not uncommon to hear people say something like „oh, gold is here and as such people here are rich.

Impact on Employment: The promise of jobs has been one of the major incentives for most communities to open up mining activities. In order to confirm the responses on high levels of poverty, respondents were asked about employment situation in the community because most of the respondents had earlier indicated that
families who have any of their relative working at the Newmont Company have had an improvement in their livelihood.

Findings:

- The study findings mining laboures leave in an condition life style.
- The mining labourers don’t have safety precautionary in mine activities.
- Socio-economic conditions also imbalance to the mining labourers.

Conclusion

Mining is considered as one of the major economic activities which have the potential of contributing to the development of economies. Not only do mining companies prosper, but governments also make money from revenues. Workers also receive income and benefits. At the same time, the environmental and health impacts of mining have been a major concern to governments and society. There must be needed to proper implementation of Mining Labourers Acts for safeguarding the rights of workers and wellbeing of them. It should be made mandatory to provide safety devices to workers by the company. The mining company and govt.’s at most duty to implement family welfare measures of workers. Eradicating the problems of mining labourers in grass-root level is impossible but minimization is possible.

Reference


