



Closed Mining Workers Socio-Economic Conditions – with Special Reference to Bhartha Gold Mines Limited(BGML)

***Nagesha HV,**
Ph.D Student,
Department of Social Work,
Bangalore University,
Jnanabarathi Campus Bangalore-560056
E-mail-nageshahv@gmail.com,
Contact No- 9449396802, 7411328968.

****Dr.Kodandarama,**
Professor,
Department of Social Work,
Bangalore University,
Jnanabarathi Campus Bangalore-560056
Contact No- 9445665219, 08022961761.

Abstract

A large section of the mining workers population in the country is engaged in mining sector. In spite of a very elaborate mining legislation in the country, it is felt that there exist a number of gaps. These gaps need to be bridged. Certain amendments are on the anvil both at the level of the Central Government and also various State Governments, which would be of assistance to the prospective investors. This paper concentrates on analyzing and highlights the socio-economic conditions of closed mining workers. The aim of the study is assessing how the socio-economic problem is a prime factor in making the people to enter in the field of mining work. 50 samples were chosen by the convenient sampling method and study was conducted by adopting the empirical research design as an attempt has been made to describe the conditions of mining workers. As a result they develop unhygienic conditions in their living places and develop as slum-dwellers. The paper is based on research study conducted in Bharth Gold Mine Limited-BGML by the researcher/presenter where great portion of migrant population comes in search of jobs and they find mining work as an easy mode of earning.

Key words: Migration, Causes, Socio-Economic Conditions, Income level, Health, Intervention,

Introduction

India is a country of large dimensions. It spreads over a geographical area of 3.29 million square kilometers, which is about 2.5 per cent of the globe and makes the country the seventh largest in the world. Its population of over 1,000 million ranks it the second largest only next to China. India is Asia's third and world's eleventh largest economy.

The metallurgical and mineral industries constitute the bedrock of industrial development as they provide the basic raw materials for most of the industries. India produces as many as 84 minerals comprising 4 fuel, 11 metallic, 49 nonmetallic industrial and 20 minor minerals. Their aggregate production in 1999-2000 was about 550 million tons, contributed by over 3,100 mines (reporting mines) producing coal, lignite, limestone, iron ore, bauxite, copper, lead, zinc etc. More than 80 per cent 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. The mining leases numbering 9,244 are spread over 21 States on about 13,000 mineral deposits occupying about 0.7 million hectares

which is 0.21 per cent of the total land mass of the country. The aggregate value of the mineral production in 1999-2000 was more than Rs. 450 billion (approximately \$10 billion). The distribution of the value of mineral production shows that fuel minerals accounted for about 82% (of which solid fuels 44% and liquid / gaseous fuels is 38%), metallic minerals about 8%, non-metallic minerals 4% and the balance 6% is contributed by minor minerals.

The Mineral Policy opened the gates of Indian mineral industry to domestic and foreign investment, much of which was earlier reserved for the public sector. It aims to boost the country's exploration and mining efforts and render the mineral industry more competitive.

In October 1996, the ministry of steel and mines, Government of India, issued guidelines for grant of large areas for aerial prospecting under the provisions of the amended MM(R&D) Act. As a sequel to this directive, foreign investors evinced keen interest for investment in carrying out aerial prospecting

operations especially for base metals, diamond and gold in the states of Rajasthan, Maharashtra, Uttar Pradesh, Bihar & Gujarat. The total area covered for aerial prospecting in these states till March 1999 were about 71, 000 sq. kms for minerals like copper, lead, zinc, gold, silver, diamond, cadmium, bismuth, nickel, cobalt and molybdenum. The statewise details are as follows: Rajasthan –61938 sq. km., Maharashtra 3490 sq. kms., Uttar Pradesh –2956 sq. kms., Bihar–2472 sq. kms and Gujarat –206 sq. kms.

History of India's mineral sector

The history of mineral development is as old as the civilization. In case of India, the mineral production dates back to the ancient times as the mining activities can be traced as far back as 6,000 years or so. The remains of some of the old mine workings are a witness to this fact. A few of these workings have led to the discovery of a number of significant mineral deposits, which are being worked in the present time. These include the lead-zinc deposit at Zawar, copper deposit at Khetri, and gold deposits in Karnataka. Techniques used specially in smelting were in fact ahead of the time in which they were applied. Rust-free iron pillar in New Delhi is considered to date back to the 4th Century.

In recent times the impetus to the mineral development was imparted in the country only after the political Independence came in the year 1947 when the significance of role of minerals was realized in nation building. On the eve of Independence, the annual value of mineral production was merely Rs. 0.58 billion and only a few minerals were mined and the country largely depended on imports of commodities such as copper, lead, zinc, sulphur, graphite, petroleum and their products. The inventory details were available only in respect of coal, iron ore, chromite, bauxite, manganese ore and magnetite.

Realising the significance of industrial development of the country, Industrial Policy Resolution was promulgated in 1956 by the Central Government. The exploration of minerals was intensified and the Geological Survey of India was strengthened for the purpose. The Indian Bureau of Mines (IBM) was established to look after the scientific development and conservation of mineral resources. IBM was also assigned the responsibility of conducting exploration with more of emphasis on coal, iron ore, limestone, dolomite, and manganese ore keeping in view the requirement of the proposed steel plants. Later, in 1972 when the Mineral Exploration Corporation was established, this function was transferred to it.

Under the Industrial Policy Resolution 1956, ambitious programme of developing several industries (such as steel, non-ferrous metals, cement, power, fertilizers, etc.) were launched which required increasing quantities of minerals. Coal was the one to have received the maximum attention for being the basic fuel for a whole range of industries such as steel, railways and power plants.

Table No:1 -Capacity for large-scale production of various minerals was created in the public sector, which is summarized as follows:

Sl.No	Name of the Company	Year of Creation
1	National Coal Development Corporation(NCDC)	1956
2	National Mineral Development Corporation (NMDC)	1958
3	Bharat Aluminium Company (BALCO)	1965
4	Pyrites, Phosphates and Chemicals Ltd. (PPCL)	1960
5	Hindustan Zinc Ltd.(HZL)	1966
6	Neyveli Lignite Corporation Ltd. (NLC)	1957
7	Hindustan Copper Ltd.(HCL)	1967
8	Bharat Gold Mines Ltd.(BGML)	1972
9	Steel Authority of India (SAIL), formerly Hindustan Steel Ltd	1973

The entire production of lignite, petroleum and natural gas, copper, lead- zinc ores, gold, silver, diamond, tungsten concentrates, pyrites, rock phosphate, etc. was contributed from the mines operated under the public sector.

In the infancy of mineral consuming industry, no significance was assigned to beneficiation of minerals, therefore, only high-grade minerals were mined. With the concept of conservation of minerals assuming an important role, mineral processing plants were set up. National Metallurgical laboratory was established in 1950. for undertaking beneficiation tests. During the same year, the Metal Corporation of India set up the first beneficiation plant in the country to process its lead-zinc ore. A number of coal washeries were set up in the 1950s to beneficiate coking coal required for the steel plants. As the significance of mineral processing was realised, Indian Bureau of Mines (IBM) set up a pilot plant of 250

kg/hour capacity which played an important role in designing commercial beneficiation plants in the country. In order to meet the growing requirement in mineral beneficiation, IBM set up two processing laboratories at Ajmer and Bangalore followed by a modern plant at Nagpur. A number of beneficiation plants were set up in the mines producing copper ore, lead-zinc ore, manganese ore and iron ore.

History of Bharat Gold Mines Limited at KGF

The Bharat Gold Mines Limited occurred towards the beginning of the nineteenth century. In 1802, John Warren, a British surveyor set up a camp to explore the possibility of mining gold in the Kolar region. The ancient gold workings, other workings which may have been 200 to 600 years old and the workings of Tipu Sultan were all located by Captain Warren in 1802. In 1873, M.F. Lavelle, an Irish soldier who returned from New Zealand after fighting Maori war and settled in Bangalore, applied to the Mysore Government for the exclusive privilege of mining in the Kolar district. His request was granted and he commenced operations by sinking a shaft near Uirgam (Oorgaum) in 1875, but, finding that large capital would be required, in the following year and with the approval of the government, Lavelle transferred all his rights and concessions to Major General G. de la Poer Beresford. General Beresford formed a syndicate known as the Kolar Concessionaries which took up the matter in earnest, and gradually acquired most of the area now known as the Kolar Gold Fields. However, large-scale mining only came in the 1890s under the British firm John Taylor & Company which did much of the prospecting and mining with more skilled manpower and sophisticated machinery. The principal mines in the Gold Fields starting with Michael F. Lavelle in 1864 to the mines developed by John Taylor & Company up to 1905 were: Later, after 1956, BGML amalgamated the Champion and Mysore mines and started the Yeppamana and Old Baisanathan Mines. The mines were taken over by the Government of Mysore in 1956 and by the Ministry of Finance, Government of India in 1962. They were handed over to the government company called Bharat Gold Mines Limited under the Ministry of Mines in 1972. The Bharat Gold Mines Limited has thus come out of various combinations and permutations. The company has the record of having Morarji Desai as its chairman (when it was with the Finance Ministry) and some

of the erstwhile chief Ministers of Mysore State (when it was with the government of Mysore).

The gold mines of KGF were closed down by BGML in 2001 due to reducing deposits and increasing costs. Since then a legal struggle is being waged by the ex-employees of BGML against the Ministry of Mines. In September 2003 the Karnataka High Court directed the government to hand over the mines to the employees and in December 2006, the Ministry undertook in court to do so at a market determined price. In July, 2010 after protracted litigation, the High Court of Karnataka finalized the terms and procedure of transfer. In July 2010, the Supreme Court approved the central government's plan to float global tenders to revive the gold mines, 12 years after they were closed down. The court recorded a 2006 cabinet decision to invite bids to run the mines, and to take appropriate subsequent steps. Within 2014 they have to re-open mining, with selected mining units.

Present Legal Issues of BGML Workers

BGML employees and others took the legal route after the closure. In 2006, the union cabinet allowed the ministry of mines to sell, through a global tender, BGML assets, and invite bids to run the mines. A tender document was prepared in 2008. In 2010, the Karnataka High Court asked the Centre to revive KGF on its own. In 2013, the Supreme Court allowed the Centre to float global tenders to revive the mines. The mines ministry has received a large number of representations from various quarters for exclusion of housing colonies from the global tender. BGML has 25 colonies comprising mainly hutments in 3,753 acres. "The issue needs to be addressed properly as it might lead to civil unrest in the area. The colonies along with common facilities for policing and transport need to be excluded from the global tender," The Mines and Minerals Development and Regulation (MMDR) Amendment Act passed by Parliament early this year means that there can only be a fresh auction of these mines, a move that may upset the federation of erstwhile BGML employees. A major voice among former BGML employees, said, "The 3,100-odd people who lost jobs in 2001 still have to be technically considered as employees. The mines cannot be auctioned. The best way forward is to identify a suitable partner which along with us can revive the mines." The Bharat Gold Mines Employees Union (BGMEU), affiliated to the Centre of Indian Trade

Unions (CITU), seeks revival of BGML mining activities either by Centre or the state government. The Karnataka government has also said it would renew the mining leases but not in favor of any successful bidder in case of sale of BGML assets. In that case, the Centre will be left with only the surface right of the land.

Most BGML employees have taken up alternative employment in Bengaluru, as Kola Gold Fields is well-connected by train to the state capital. A self-sustaining city during its glorious days, the local municipality is now responsible for the housing colonies and the amenities in the KGF. The forum says that the 3,100 people, who were given VRS in 2001, have to be technically considered as “employees”, as their back wages are yet to be cleared by the Centre. Employees have still not accepted the VRS settlement because wages were not revised as required. Various courts have ruled that the settlement has to be done in accordance with the rules.”.The forum also contends that it is imperative for the government to revive the mines on its own.

METHODOLOGY

Present Study

The present study is the researcher conducted pilot study to focused on the background of the 'BGML mining workers', what problems they are facing in mining area?, and their socio – economic conditions and also try to explore the different mechanisms to improve the conditions of workers.

Objectives of the Study

The main objective of the research was to study the socio-economic conditions of themining workers.

The specific objectives of the study were:

- ♣ To study the socio – economic conditions of BGML mining workers.
- ♣ To asses economic status like income, asset, indebtedness, expenditure and savings.
- ♣ To study the awareness about the social security measures available in the area for the benefit of workers in general and mining workers in particular in the study area.
- ♣ To suggest the social work intervention strategies to improve the conditions and obstacles of workers.

Universe

Universe of this study will be BGML mining workers who are basically worked in Bharth Gold Mines Limited.

Sampling and Sampling Techniques

This study is exclusively based on empirical data. The present study covers the five mines areas in BGML viz., Marikuppam mines, Urigam Mines, Cormandal mines, Champion reef mines, and Mysore mines to ensure that the sample is statistically representative of every 50 respondents from each mining area, the investigator has selected 10 sample respondents on random basis and a total of 50 samples is taken.

Tools of Data Collection

The researcher collected both qualitative and quantitative data. The primary tool for pilot study the researcher used for collection of qualitative data was a pre – tested semi – structured interview schedule. The qualitative data were collected using case study & observation as the tools of data collection. The information collected by this method was in – depth in nature. A semi structured interview schedule was prepared keeping the objectives in mind. The interview schedule was pre-tested by interviewing 50 mining workers before the actual work was started. The whole exercise was carried in an open and friendly manner. The timing of the researcher to take interview varied from morning, evening and most of the time in the night. Observation is a strong tool as well as source of information.

Socio-Economic Conditions of Bharth Gold Mines Limited-BGML Workers

The researcher interacted with 50 mining workers. Out of total mining workers, 15 lived without family and remaining (35) with family in other area. It was very difficult to find out mining workers with family because most of them migrated. The researcher came to know that those mining workers with families who have been staying in other mining area since long time seldom visit their native places. In mining area most of the construction workers are staying in BGML quarters wherever the remaining have rented houses.

BGML quarters wherever the remaining have rented houses.

As per as social interaction and community relations of the mining workers within their own occupational groups are concerned, these are mostly restricted to their own caste groups and states of origin. This way they feel a sense of social sensitivity in a micro-group far away from their native places. The feeling so security and belongingness is especially felt during festivals which they celebrate together. Many of the mining workers above the 60 years and have many children. A positive factor is that quite a number of mining workers are sending their children to jobs.

This part has divided into three sections to get complete information about their socio – economic conditions. These sections are

- a) Background information
- b) Family background
- c) Income & Expenditure

Findings of the Study

Majority of the respondents are found in the age group between 55-70 in all most of the study area. In terms of percentage it works out to be 74.3. It was found that 100 percent of respondents were married. It is found from the study that a substantial number of the respondents of the study area belong to converted Christian religion (27%) (TABLE-4).. There is high incidence of literacy and low levels of education among the respondents of the study area. The mining workers hailed from number of states a majority of them were basically from Tamil Nadu 60 percent (TABLE-5). It is found from the study that about 44 percent respondents have entered the job before attaining 18 years of their age. It indicate that more than half (56%) of the respondents lived in nuclear family (TABLE-6). 80 percent of the respondents have the work on an average between 26-30 days in a month. It is found from the study of expenditure pattern that food and clothing constitute the major expenditure items. TABLE-7 highlights that nearly 50 percent of respondents migrated to Bangalore for the sake of financial problem. It is found from the study that more than 63 percent of the respondents have resorted to borrowing from either money lender or contractor.

As regards the awareness about the general measures of the social security schemes such as food subsidy, housing, group insurance, the extent of awareness varies from scheme to scheme for the area under study. About 90 percent respondents are aware of food subsidy and about 57 percent respondents are aware of housing scheme whereas, only 85percent respondents respectively are aware of group insurance and old age pension. About 55 percent of go by train to job. It is found from the study that nearly 30 percent of workers are suffering from mining work related health problems such as, body pain, knee-pain, back-pain and the like.

The following observations are major findings of the study.

- ♣ 86% of the workers do not have own houses.
- ♣ 75% of the workers have oversized families.
- ♣ 60% of the children of the families have studied only up to SSLC or Pre- University and thus failed to acquire better qualifications.
- ♣ 85% of the workers have not taken steps to take care of their future by investing in life insurance schemes etc.
- ♣ Rate of indebtedness among the workers is as high as 51%.
- ♣ Habit of liquor consumption is very high and 39% are still under its grip.
- ♣ There is lack of alternate skills resulting in the workers who are now unemployed not getting remunerative jobs. The survey leads the researcher to the conclusion that the trade unions had not made any effort in improving the socio-economic conditions of the workers.

TABLE-2: Caste Compositions of the Sample Respondents

SL-NO	Mining Area	Caste						Total
		SC	ST	Cat-1	OBC	Christian	Muslim	
1	Marikuppam	02 (20%)	01 (10%)	1 (10%)	1 (10%)	04 (40%)	01 (10%)	10 (100.0%)
2	Urigam	02 (20%)	--	--	--	07 (70%)	1 (10%)	10 (100.0%)
3	Cormandal	03 (30%)	--	1 (10%)	--	06 (60%)		10 (100.0%)
4	Chompion reef	02 (20%)	2 (20%)	2 (20%)	--	04 (40%)	--	10 (100.0%)
5	Mysore	01 (10%)	1 (10%)	1 (10%)	1 (10%)	06 (60%)	--	10 (100.0%)
Total		10 (20%)	04 (08%)	05 (10%)	02 (04%)	27 (54%)	02 (04%)	50 (100.0%)

Source: Primary data figures in parenthesis show percentages

TABLE-3: Distribution of the Respondents by Their Married Status

Marital Status	Respondents	Percentage
Married	50	100
Un-married	00	00
Total	50	100

TABLE-4: Distribution of the Respondents by Religion

Religion	Respondents	Percentage
Hindu	21	42
Muslim	02	04
Christian	27	54
Total	50	100

TABLE-5: State Wise Distribution of the mining Workers

State	Respondents	Percentage
Tamil Nadu	30	60
Andra Pradesh	12	24
Karnataka	06	12
Kerala	02	04
Total	150	100

TABLE-6: Distribution of the Respondents by Type of the Family

Family Type	Respondents	Percentage
Nuclear	28	56
Joint	19	38
Extended	03	06
Total	50	100

TABLE-7: Causes of Migration of the Workers in Bangalore

Causes	Respondents	Percentage
Unemployment/underemployment	03	06
Financial problem	25	50
Lack of agricultural land	20	40
Family dispute	01	02
Peer influences	01	02
Total	50	100

Some recommendations for their upliftment and development

In the course of the research the following recommendation are suggested which are very important for the development of their social and economic conditions.

- Poverty alleviation programmers of any kind should give preference to this working community.
- Mining workers cooperative societies should be formed and facilities such as housing, sanitation, proper civic amenities etc. should be provided to them.
- Evening and night classes should be organized to raise literacy levels among mining workers so that their literacy level could be high.
- All their health needs should be catered to by the government hospitals. Moreover, a separate unit/counter should be made for them so that they do not have to stand in long queues and miss out

on their day earnings. Awareness about various diseases especially STDs and AIDS should be generated by organizing health camps, workshops and gatherings.

- Recreation centers meant for them should be opened by the government so that their leisure time may be constructively utilized.
- They should provide legal aids so that the violation of human rights could be protected.
- They could be provided short term loans to do small business along with the mining work so that their economic upliftment could be possible.
- Avoiding mushroom growth of trade unions.
- For the settlement of grievances instead of confrontation an attitude of cooperation and collaboration with the employers has to be adopted.
- Collective bargaining mechanism has to be strengthened.
- Negotiations on and settlement of disputes must be held and finalised only with a union or a consortium of unions. The consortium should not have more than three unions in it. Such a union/consortium must have the support of more than 50% of the workers of the industrial unit. This fact has to be decided by a referendum held by the Labour Department or Registrar of Trade Unions.
- While the unions argue for betterment of benefits to the workers the state of affairs of the company should be taken into consideration and a balanced approach has to be adopted.
- In the days of competitive world order failure of industrial units and their closure are common. Unions must educate the workers the necessity of developing alternate skills and help them in getting remunerative jobs in the event of closure of an industrial unit.
- The unions must pay special attention to the social conditions of the workers. They should be taught the necessity and importance of having small sized families, providing better education to their children, making provisions for their future from their monthly or daily earnings and discourage them from undesirable habits like alcoholism.

- Unions must involve families of the workers in creating awareness of the vulnerabilities faced by the children, women and the old aged.
- A specific tenure for holding office has to be fixed for an individual leader. The ideal period is a maximum of five years.
- Training camps, refresher course and orientation programmes must be made mandatory for the leaders annually.
- Only those individuals who had successfully completed a refresher course or a training programme must have eligibility to occupy official positions in a particular union. This criterion has to be applied for the executive committee members also.
- Declaration of assets by union leaders including executive committee members at various points of time must be made mandatory.
- Appropriate strategies have to be evolved to develop a collaboration of unions and other social organizations that are involved in the amelioration of social maladies that hamper unity and peaceful coexistence.
- Instead of getting affiliated to any national level central union, the workers of all Public Sector Undertakings must formulate a single union.
- The structure of this central union must be such that each branch union organized at unit level will function as an autonomous unit and a proportional delegate congress will be elected every five years.

Social Work Intervention

NGOs and other socially sensitive groups working the weaker sections should apprise the authorities about the plight of mining workers so. The necessary steps should be taken to improve their conditions. Campaigning for the cause of mining workers should be under taken by using print and electronic media. Social work professionals can use case work and group work techniques to identify persons with problems. They can study and diagnose the problem correctly and prescribe suggestive treatment for the same. For all the above, counseling forms an integral part. Through proper counseling,

mining workers can be helped in building their capacities to counter any and all kinds of adverse situations. Awareness regarding the rights, duties and responsibilities of mining workers also needs to be generated through various training programmes.

A carefully planned approach in implementing all kinds of awareness generation programmes would go a long way in achieving the desired goals. Professional social workers can motivate mining workers to increase their literacy levels. NGOs, support groups and even literate peer groups can facilitate this process by adding more neo – literates to the society. Posters and other mass awareness materials should be circulated depicting the adverse impact of alcoholism, smoking etc. Health camps to assess their general physical health should also be conducted from time to time by various NGOs working in the field of health. Medicines and other medical facilities can be made available to the mining workers by collaborating with various charitable trusts and hospitals. Networking forms the crux of successful interventions at all levels. Liaisoning / networking with appropriate authorities, health officials, education providers, other para-professionals etc. would make all attempts made at improving the socio-economic conditions of mining workers successful.

Conclusion

It will be seen from the above, that in the closure of mines the economic factors play a major role than other factors. Before the mine is closed, the Government is required to be informed under Rule 23 of the Mineral Conservation and Development Rules, 1988. The mine workings should also be fenced both in case of open cast as well as underground mines in order to avoid any incident.

Many times it is seen that when a mining lease is about to expire the management does not apply for its extension for some reason even though the deposits can be worked. The mine is thus abandoned though the reserve could have been mined for a few more years. The statutory authorities are not in a position to compel the mine management to apply for renewal of extension even though the action of the management is against the interest of conservation of mineral resources. Once the decision for closing a mine is taken several problems arise. Unions become active. The local politicians become

Presently there is no specific legislation in India, which covers the requirements for workers protection during the closure of a mine. Planning for closure can generate benefits at two levels: First, at the level of the local community or region; and second, at the level of the mining company. Closure of mines, in the absence of any systematic planned closure process, may have serious consequences for local communities because of their dependence on a livelihood provided by the mining activity. A forward looking approach can involve developing viable economic alternatives, transforming mined land for productive purposes such as for growing cash crops, and possibly timing new mining projects in the region to follow on consecutively. It can also provide the framework for the psychological adjustment to unemployment. Planning for closure can enable the region's resources to be mined in a manner that does not result in a net impoverishment at the close of mining operations and avoid damage to ecosystems that have a positive value to local communities and business activities.

Reference:

- Alan Heap., (1999) Titanium, Mining Annual Review, 1999 Mining Journal Ltd, Salmon Smith Barney, President G & S Trading pp: 88-89.
- Annual Reports, BGML 1972-2006, KGMU 1952-62, Mysore, Oorgaum, Championreef, Nundyaroog and Balaghat Mining Companies 1881-1950.
- Badhwan, M. “Workmen's Competition Act, with special reference to the Coal Mining Industry in India” Unpublished thesis submitted to Patna University, Patna, 1959-64
- Caplan, Antony. *A Critical Analysis of Collapse in Under Ground Workers on the KGF*, Kolar Gold Field Mining and Metallurgical Society, Bulletin No.54, Vol.11, June 1942.
- Chari KSR, *Bharat Gold Mines Limited. A Case Study 1985*.
- Department of Mines & Explosives, Mysore State. *Report of the Chief Inspector of Mines in Mysore 1920s to 1940s*.
- Deshpande SR, *Report on Enquiry into Conditions of Labour in the Gold Mining Industry in India*, Labour Investigation Committee, Government of India -1946.
- Gillian Dooley and Anthony Leddin (2005) The Perspectives on mineral policy in Ireland. Resources Policy, Vol, 30, Issue 3, pp: 194-202.

- Gupta PD, *The Past Hundred Years and the Future of the Kolar Gold Mines*, Centenary Souvenir, 1980, BGML Publication.
- Hazards Centre & The Other Media, New Delhi. *Issues regarding closure or revival of Kolar Gold Fields or Bharat Gold Mines Ltd.* A Peoples Perspective. (1997).
- Heathcote, CF. *Presidential Address*, The Kolar Gold Field Mining and Metallurgical Society, Bulletin No.24, Vol. No.4, July December 1928.
- Indian Bureau of Mines, Indian Minerals Yearbook 2008, IBM Press, Nagpur pp: 78-1-78-7.
- Krishnaiah, B. “Work Life and Welfare of Miners in Singareni Collieries Company Limited”, Unpublished thesis submitted to Acharya Nagarjuna University, 1994.
- Labour Bureau, “Study of Labour Conditions in Public Sector Undertakings in Coal Mining Industry”, 1963.
- Mining, Minerals and Sustainable Development. (December 2001) **Overview of Mining and Mineral Industry in India**, Tata Energy Research Institute New Delhi, No.185
- Mishra, N.M, “History and Working of Trade Unions in the Mining Industry of Bihar, Unpublished thesis submitted to Patna University, Bihar, 1978.
- Nair, Janaki, *Miners and Mill Hands. Work, Culture and Politics in Princely Mysore*, Sage Publications, New Delhi, 1998.
- Report of the Coal Mines Labour Enquiry Committee in Public Sector Undertakings, 1963.
- Saktipada Dutta, “A Study of Labour Productivity, Wages and Profits in the Coal Mining Industry of Bihar”, Unpublished thesis submitted to Bagalpur University, Bihar, 1976.
- Simmons, Colin, *The creation and organization of a Proletarian Mining Labour in India: The case of Kolar Gold Fields, 1813-1955.* In Mark Holmstrom Edition, *Wage for Work in South Asia*, Manohar, New Delhi, 1990.
- Sreenivasan, MA, *Labour in India. Socio-economic Conditions of Workers in Kolar Gold Mines*, Vikas Publishing House Pvt. Ltd., New Delhi, 1980.
- Srinivasa Rao, B. “Functioning of Trade Unions in Indian Coal Mining Industry - A Study of Singareni Collieries Company Limited”, Unpublished thesis submitted to Osmania University, Hyderabad, 2004.
- Srivastava, V.L, “A Socio-economic Survey of the Workers in the Mines of India (With special reference to Bihar)”, Scientific Book Agency, Calcutta, 1970, p.53.