

Working Conditions of Contract Workers of Coal Mines: A study of Dhanbad District

Samar Kumar Mishra¹

Abstract

India's growth story in last two decade shows accelerating insecurities and inequalities (Kannan, 2014). Formal or organized sector and informal or unorganized sector is the main two divisions of the Indian economy. Almost 90 percent labour force of India is in the unorganized (unorganized and informal employment) sector (ILO, 2016). There are various studies which are showing the inequality status of the country as well as the meager incidence of the informal employment and poverty (Naik 2009; ILO, 2012; Kundu, 2009). During the last few decades, the composition of contract workers has increased significantly as the policy focus of the government moved from production to outsourcing. The industry having hazardous nature of work and perennial in nature, needs serious attention from the principal employer and policy makers regarding the conditions of work and workers enumeration. The study is based on the primary sources of data to analyze the social status and working conditions of the contract workers engaged in outsourcing mines or the one engaged through contractors as no secondary sources covers the issue. Study finds workers living with minimum subsistence with no or very few assets and without proper arrangements of housing, drinking water and other facilities. Furthermore, the workers only get minimum wages as fixed by the principal employer but a section of workers are also not registered. Other non-wage benefits are completely absent. In recent years, the contactors are also switching to bank mode for payments of wages. The study therefore emphasizes on the greater attention of the principal employer as well as other policy makers to ensure and enforce the healthy and sustainable working conditions which would also improve the social status of the workers employed.

Key Words: Social Status, Working Conditions, Coal Mines, Outsourcing

¹PhD Scholar, IIT Kharagpur
samarmishra.2008@gmail.com

Background and Introduction

Mining has been the main component of the evolution of almost all the civilizations in the world. Minerals provide the prime resource for any civilization. No article in the world can be imagined to be without directly or indirectly contributed by mining. India is among one of the oldest civilizations of the world and has also its own long history of mining. Though the chronological order of the ancient mining history has not been recorded properly anywhere. Like other parts of the world, workforce in the Indian mines has also been treated as the slaves, bonded labours and war prisoners. The mining industry witnessed the transition phase after the industrial revolution in Europe and the British rule but the condition of the mine workers remained the same as before. Even cruel phase of human or labour exploitation was carried out by the colonial rulers which continued till 2nd world war (Directorate General of Mines Safety, 2013). The coal mining industry possesses the oldest history among all other mining industry in India and since the first commercial coal mining in 1774 by the East India Company, the working conditions of the labours has been neglected on the shade of the coal production and the same continued till the whole colonial period. After independence, the coal mine workers got immediate attention and to change the working scenario of the labours, the 'Article 246' was laid down which ensured the health, safety and welfare of the labours employed in all mines within the country.

Mines act, 1952 was enacted by the union government to follow the constitutional responsibility and further under this act, mines rules were formulated in 1955 to take care of the several issues of the mines labours. Subsequently several other legislative regulations were formed to ensure the workplace safety of the mines labours but the formation of standard pattern of wage in form of wage board to ensure the appropriate remuneration of the work took 20 years. The exploitation of mines labour in the form of bonded labour, child labour and migrant labour continued and the mining industry witnessed the similar kind of situations even after independence as most of the mines were owned by the private companies (DGMS, 2013).

Mining industry and especially the coal mining industry has always been a major source of the employment especially to those who are either less or uneducated. At the time of independence, the industry was employing 321 thousand workers in its 900 coal mines spread in different parts of the country. The coal industry engages 369 thousand (0.7% of the total) workforce of India which is more or less stagnant since 1951. The coal India Limited which has been given the responsibility of the coal production after nationalization is the

biggest corporate employer of India. The states of Jharkhand, Odisha, West Bengal, Madhya Pradesh, Andhra Pradesh, Uttar Pradesh, Maharashtra and Assam are the coal producing states of India. The contracting of coal mines which started in the late twentieth century has generated the informal nature of work in the industry.

India's growth story in last two decade shows accelerating insecurities and inequalities (Kannan, 2014). Formal or organized sector and informal or unorganized sector is the main two divisions of the Indian economy. Almost 90 percent labour force of India is in the unorganized (unorganized and informal employment) sector (ILO, 2016). There are various studies which are showing the inequality status of the country as well as the meager incidence of the informal employment and poverty (Naik 2009; ILO, 2012; Kundu, 2009). Work based social and economic securities are the pillars on which the organization of the welfare state stands and comprises of the core element of the social policy in most of the countries. It is through the social security that the government seeks to uphold every individual at a certain positive level below which no one is allowed to come down (John, 2004).

Though Government of India has taken some initiatives through welfare schemes/ programmes, to improve working and living conditions of informal workers, the coverage is not yet adequate, partly due to lack of initiative on the part of the government and partially due to inherent problems associated with functioning of informal sector itself and also, due to the lack of awareness on the part of the workers regarding various schemes (Majumdar & Borbora, 2013). There exists a high congruence between poverty, vulnerability and informal work status (Mishra, 2014).

Social security is progressively perceived as an essential part of the development process. The concept of welfare has been discussed in the *Arthashastra* has included wider areas of the social welfare through various issues like maintenance of social order, increasing economic activity, protection of livelihood, protection of weaker sections of the population, consumer protection and welfare of slaves and prisoners (Kannan & Vijaymohan, 2007). Labour absenteeism can be brought down and productivity in the Indian industries can be enhanced to a larger extent through the appropriate provisions of housing, health and family care, canteen, educational and training facilities and some other provisions of the welfare measures or activities. The broad objective of the labour welfare lies in the development of the nation through increased productivity and production (Mishra and Bhagat, 2007). Moreover, industrial peace is one prerequisite to achieve sustainable growth which further requires a basic level of wage and social security benefits to be provided to the workers.

Social security has a dual role to play in the economy. On the one side it constitute a significant step towards the goal of welfare state while on the other side it enable the workers to become more efficient or productive and thus reduce the wastage arising from the industrial disputes (Gupta, 2013). The productivity of labour is a necessary requirement for the prosperity of the enterprise, well-being of the workers and their family and the most important for the economic growth of the country. Productivity of the workers also raises the stock of wealth. The profits through the increased productivity raises the national income and plays a big role in increasing the investment in physical capital as well as research and development which further contributes to the stock of the physical capital (Sharpe, 2004). The NCEUS consider the need to ensure socially acceptable conditions of work based on the principles of moral philosophy and human dignity as well as workers right. The need of minimum conditions of work has also been considered by the international organizations like ILO and others who are concerned with human rights and development. Based on a worldwide survey on the socio-economic security, ILO reported that increased funding or investment on the basic social and economic security leads to improvement in the economic growth and development and further leads to the social stability. The report suggested that the government must invest and promote larger share of its national income in providing their citizens with basic social and economic security (Somavia, 2004). All pervasive characteristics of work in the unorganized sector of the non-agricultural economy constitute the major features of poor quality of employment (Papola&Sahu, 2012).

While the role of working conditions and social security has widely been covered in many studies, it needs to be extended in case of the informal workers of the coal mining industry which has emerged in last couple of years and is to dominate the industry in coming days. Therefore the study aims to cover the social status as well as the working of the workers. Due to limited data available regarding the issue, the study has been carried out using the primary data of the survey conducted during the year 2014. The survey was conducted in the Dhanbad district because the district. Ten coal mines which were producing totally through contractual workers were selected for the survey randomly. From these coal mines 100 contract workers were chosen for data collection. The survey was done in the workplace either at the beginning of their shift or at the end or during informal break as going into the mines is not permitted for others. Primary data has been computed and simple statistical analysis has been done from the data for clear understanding of the issue. The proceeding sections of the paper discusses the nature of work and labour structure of coal

mines along with social status and working conditions followed by the main conclusions as drawn from the study.

Nature of work and labour structure in coal mines of Dhanbad

The coal industry in India is witnessing contracting in several aspects opening a wide scope for the private contractors to enter into the industry. Providing ambulance facilities to the permanent employees', car service to the officers, jeep to engineers & personal managers and bus service to the labours are provided through contracting. All these services are limited to permanent (Coal India Limited) CIL employees and to some extent the employees of the captive mines given to other Public Sector Undertakings (PSU) or multinationals. The mine contracting began with the overburden² removal and the coal extraction for which the contract used to issue based on the stripping ratio³ (SR). Later on the concept of Mine Development and Operator (MDO) was introduced in the coal industry which provided the contractors more work with more freedom. MDO included the complete process from making the detailed outline of the mines and coal reserve to the dispatch of coal

The work in the coal mines is physical and not mental. Most of the work in the open cast mines is carried out through heavy machines and therefore the labour constitutes mainly the operators or helpers of operators. Drilling in rocks for blasting, the process of blasting, overburden removal, coal extraction, dumping of coal to coal yards are the main process being carried out in an open cast coal mine. Since all these work require hard physical labour and are highly accident prone, employment of women is very rare and those who are working are generally employed in the attendance office or related work. Therefore in the present study women are not included as it is based on the labour engaged in mining and allied activities only.

The employees in a coal mine can be broadly classified as executive and non-executive class. The executives include officers, managers & engineers and are performing the task of supervision, direction, control and management. On the other side, the non-executives consist of the supervisors and workers. The supervisor class consists of overman, fireman, mining sardar etc and the workers include operators, helpers and others. Due to the nature of mining work, the major section of manpower is of workers i.e. operators, helpers and others. This structure is not universal as it may vary according to the convenience of the

² Overburden is the layer of soil and rock which need to be removed in order to extract coal under it.

³ Stripping Ratio is the quantity of overburden in cubic meter to be removed for the extraction of 1 ton of coal.

contractors but is generally followed as it is systematic and the easy to understand and divide the responsibility of work. This structure is important to study as it determines the salary and other benefits. The open cast coal mines now are mechanized to some extent and most of the work related to mining and quarrying is being carried out through heavy machines; this led to the division of task and responsibility. Employee structure in pre-nationalized mines used to be very short. The owner of the mines used to be the only policy maker and all the responsibility of the supervision, direction, control and management was to him only. Other than the owner of the mines, everybody was considered as labours. Due to lack of machines and technology, the work was complete manual and was carried out through iron gadgets being hand operated.

Social status of the coal mine workers of Dhanbad District

Social status includes the availability of minimum or basic facilities that enables an individual to be a part of the society and mingle with its culture and traditions. Housing and amenities, drinking water, toilets, source of fuel, availability of electricity, asset ownership, expenditure pattern and the credit facilities are considered as the indicators to study the social status attainment of the labours under study.

The study involved only the non-executive labour class i.e. operators, helpers etc. The age group, gender, education, religion & social group and place of origin is analyzed and discussed below:

Table-1: Age, Social group and Education status of workers

		Age of Respondent (years)			Total
		15-25	26-35	36-45	
Social Group	General	6	6	5	17
	OBC	6	20	4	30
	Others ^a	8	34	11	53
	Total	20	60	20	100
Perceived Level of Education	Below H. Education	7	42	19	68
	Tech. Education ^b	12	13	01	26
	Others	1	05	00	06

	Total	20	60	20	100
--	-------	----	----	----	-----

Source: Field Survey Data

Notes: ^a Scheduled Caste (SC) and Scheduled Tribe (ST).

The working labour in contract mines of Dhanbad constitutes mainly the young working population. Since the phenomenon started in large scale only in a decade past, therefore persons beyond 40 years of age is rare in numbers. The age of the working population during the field survey was found to be between 22 to 42 years with mean value of age 31.46 years.

The labour class in contract mines is dominated by the Hindus and more specifically, those belonging to backward castes (SC-ST and OBC). The nature of work being performed in the coal mines does not attract qualified or skilled technicians. Educational attainment is very important factor which determines the productivity of labours and also it may reduce the chances of accidents and hazards. Generally those who have completed Industrial Training (ITI) or diploma in the mining are getting jobs easily in the mining industry for the labour class. The secondary and higher secondary level education is most common among the working labour class which accounts for 59% or around two third of total work force. Even though the number of illiterates is very few rather negligible which shows the awareness towards education but simultaneously the graduates and diploma level education are also very low which is due to the unfavourable conditions for college level education and need of economic independence in early stage of life. The mechanisation of industry has led to the increasing demand of the skilled technicians which has resulted in the increasing number of students opting for ITI degree.

Place of origin

The nature of work and the risk associated with it does not attract the workers from all across the country. People from the nearby states are coming to work in the industry. Most of the respondent's family were found to have migrated Dhanbad few generations back and therefore they are completely settled and mingled with the customs or traditions of the local society. It was found in the field survey that maximum number of labours belonged to the Jharkhand state (37%). Among those who belonged to other states, maximum workers are coming from Bihar (31%), followed by Uttar Pradesh (17%) and West Bengal (11%). It was found that apart from Jharkhand, the labours from nearby states are coming to work in the industry where there is high rate of unemployment and agricultural wage rate is low.

Ownership and types of House

It was seen during the field survey that there is a big proportion of labour living in either company's house or state government house for which they are not authorized. Coal India limited provides housing to its permanent employees and it is seen that sometimes it is occupied by other persons also with help of labour unions or others. Some government colonies have been vacated due to fire in coal and these houses are being acquired by the private persons on their own risk. The maximum number of workers was found to be living in semi-pucca house (57 percent), of which maximum (56 percent) were having their own house. The number of workers living in kaccha house was very low. A significant number of workers were found to be living in puccahouse (40 percent), of those 75 percent were staying in the illegally acquired house. The details of housing status have been shown in the below table:

Table-2: Types and ownership of house

Type of House	Ownership of House				Total
	Own	Rented	Living in public spaces	Illegally acquired	
Kaccha	3	0	0	0	3
Semi pucca	32	1	24	0	57
Pucca	2	6	2	30	40
Total	37	7	26	30	100

(Source: Field survey data)

Hence, 63 percent of total labour does not have own house and are living in rented, public spaces or in the illegally acquired houses. Among the rest 37 percent labour, 19 percent belong to tribal community who has their traditional inherent semi-pucca house.

Basic Accommodation Facility

Number of rooms has been divided into 2 categories, one category includes that of having two or less than two rooms while other category is that of having more than two rooms. Table 2 shows the number of room along with availability of toilets and access to electricity.

Table-3: Availability of basic accommodation facility

Number of rooms		Availability of toilets		Access to Electricity	
No. of room	percentage	Toilets available	Percentage	Available	Percentage
2 or less	87	Yes	73	Yes	89
More than 2	13	No	27	No	11
Total	100	Total	100	Total	100

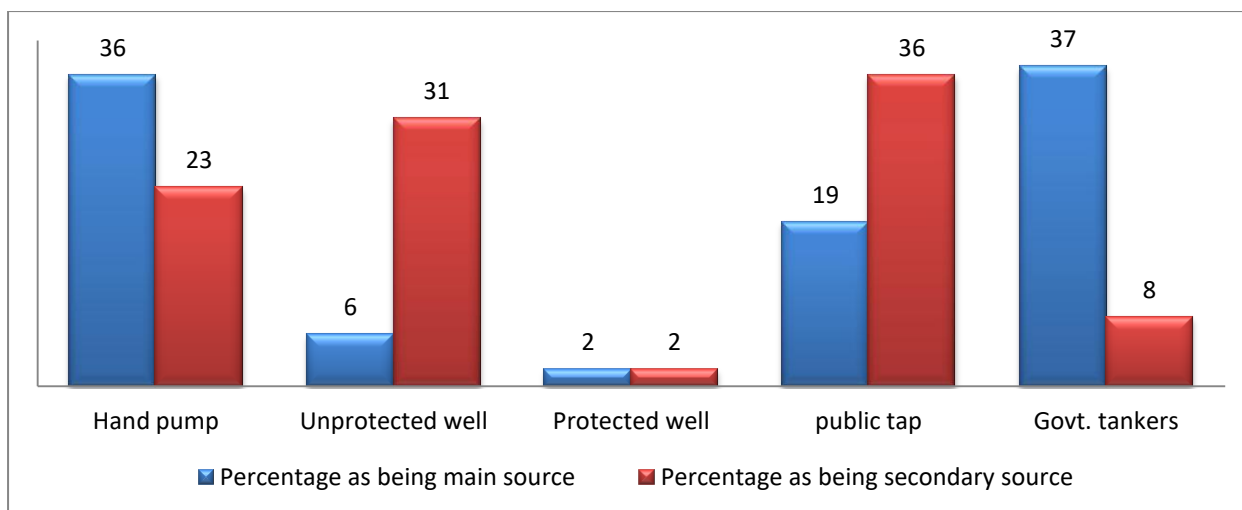
(Source: Field survey data)

Table shows that 87 percent of labour is staying in 2 or less than 2 rooms while 13 percent is staying in more than 2 rooms. 27 percent of labour families do not have toilet facility in their house and 11 percent is living without access to electricity. Those having their own house are more likely to have unavailability of toilets (16 percent) and electricity (9 percent).

Sources of Drinking Water

In most part of the Dhanbad town, drinking water is provided by Mines Area development Authority (MADA) through water tankers and public tap. In rural area hand pump and well are the main sources of drinking water. It was found that Dhanbad district is exposed to shortage and irregularity of supply of drinking water. Therefore two sources of drinking water (main source and secondary source) are considered for study. Even though the public tap is available in almost all colonies but it is not considered as pure and therefore they are less dependent on taps and prefers to rush behind tankers or bringing water from nearby village on cycles. MADA is providing water tankers for every colony which consists of around three hundred households. But the frequency of coming water tanker in a colony is not as per the demand and the water tanker don't even provided per week also. Therefore the labours generally store the water whenever the tanker comes. Handpump and well are mostly used in rural area which mainly consists of tribal population. Figure 3 shows the dependence on various sources of drinking water as main and secondary sources.

Figure - 1: Main & Secondary Sources of Drinking Water

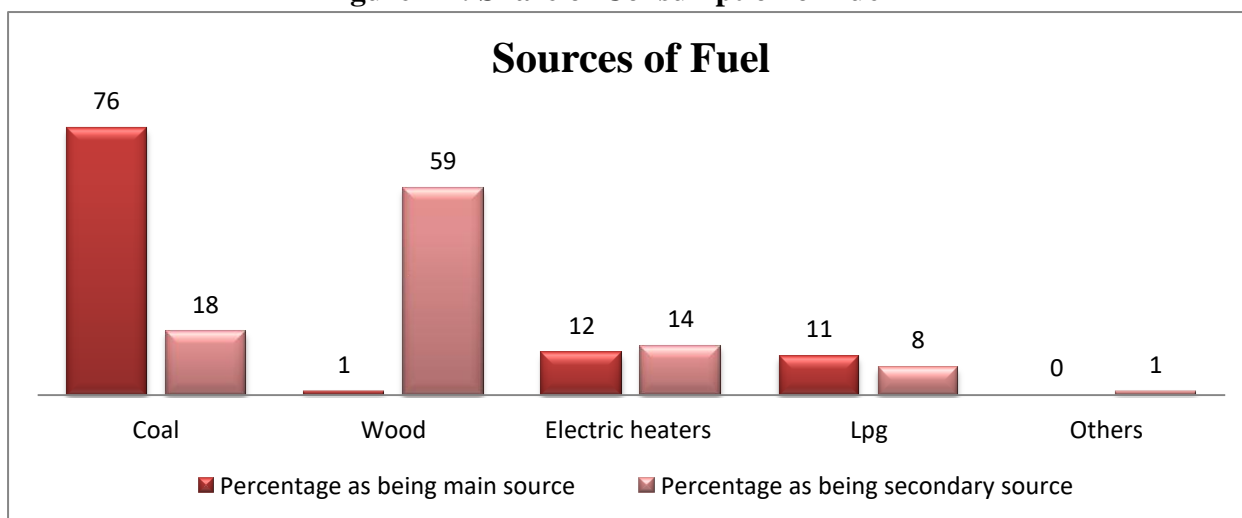


(Source: Field survey data)

Sources of Fuel (daily cooking purpose)

Coal is most easily available and cheapest source of fuel in Dhanbad district and is commonly used in both urban and rural parts. Wood in rural and electric heater & LPG in urban areas are also used as fuel sources. It has been described in figure 3.7 below:

Figure – 2: Share of Consumption of Fuel



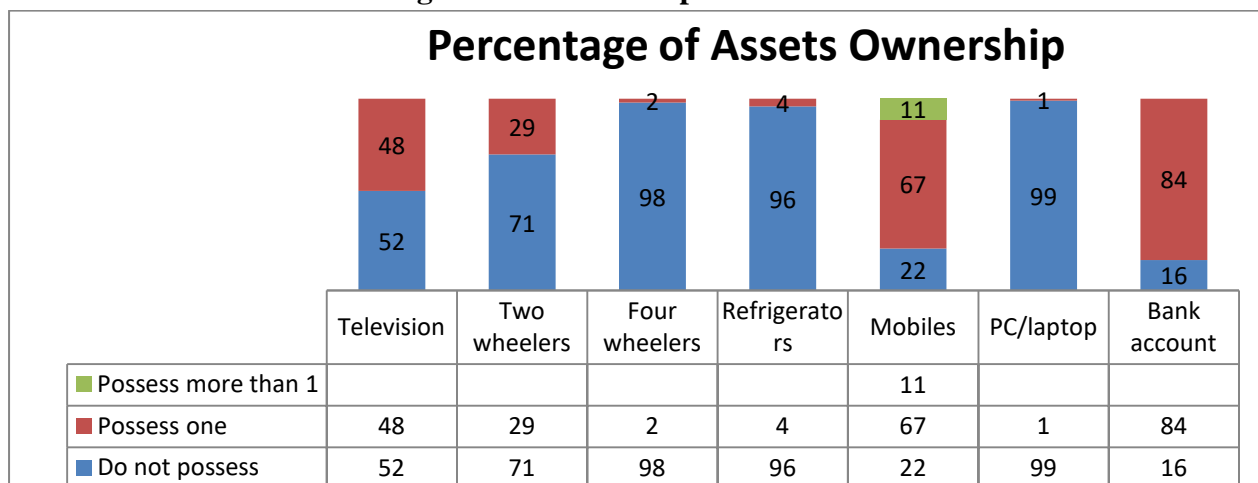
(Source: Field survey data)

Coal is the dominant source as is used by one fourth (76 percent) of the labours as the main source of fuel. The use of Electric Heaters and LPG is very limited and is used by 12 percent and 11 percent labours respectively as the main source. For secondary source, Wood is used by majority of labours (59 percent) followed by the use of Coal and Electric Heater by 18 percent and 14 percent respectively. Electric Heaters are used mostly by those living in illegally acquired houses as they don't need to pay charges for electricity consumption.

Assets Ownership

Analysis of the personal belongings of the respondents has been done in the following figure. For this purpose availability and number of mobiles, two wheelers, four wheelers, refrigerators, television pc/laptop and bank accounts⁴ has been taken into consideration.

Figure – 3: Ownership of Assets



(Source: Field survey data)

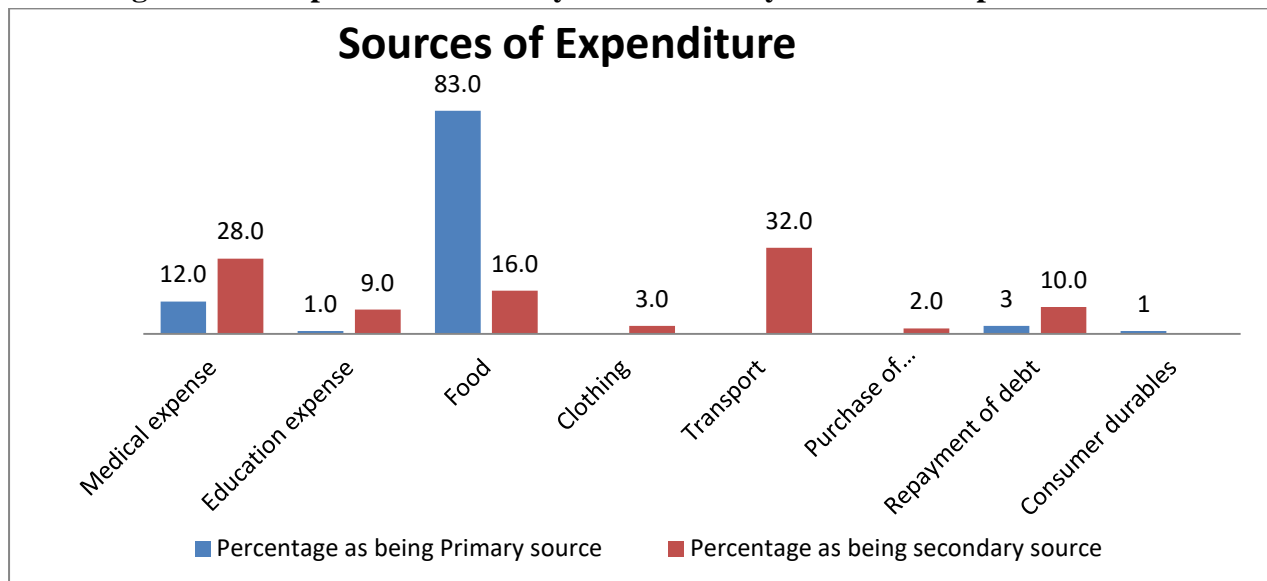
Majority of the respondents were found to be using mobile phones. Though 22% labours were not having mobile phones at all but 11% were found to be having more than one. Two wheelers were found to be used by 29% labours. Four wheeler and pc/laptop was almost absent while 4% reported that they are using refrigerator, it was beyond their ability within constrained income but television was found to be a bit common being used by 48% of the respondents. The number of labours having bank account was found to be 84%. In last two years government is very much focussing on the mode of payment and therefore most of the contractors are paying wages through bank accounts except to those who has recently joined. This resulted in the considerable change in the number of account holders among working labour class.

Main Sources of Expenditure:

To study the expenditure pattern of the expenditure pattern of the respondents, two main sources of expenditure was considered. Following figure shows in brief the expenditure pattern of the respondents:

⁴Bank account has also been included in the category of assets as it is one of the important indicator of the financial inclusion and also in the report of RaghuramRajan Committee, it has been included as one of the indicators of development.

Figure – 4: Proportion of Primary and Secondary Sources of Expenditure



(Source: Field survey data)

Food constitutes the main source of expenditure to 83 percent of the respondents. Medical expenses are the main source of expenditure to 12 percent while it is secondary source of expenditure to the 28 percent of the respondents. Transport is also a major source of expenditure as it constitutes 32 percent of the total secondary expenditure. Expenditure on Education (1 percent & 9 percent), Clothing (0 percent & 3 percent), purchase of land/construction of building (0 percent & 2 percent) and Consumer durables (1 percent & 0 percent) are almost negligible which reflects their poor quality of life. The pattern of expenditure shows that it is confined to fulfill basic needs only. The expenditure of the labours is confined to fulfill the first level of the deficiency needs as mentioned in the Maslow's Hierarchy of needs. The physiological needs are yet to be satisfied even to those who are working since a decade.

Working Conditions of contractual coal mine workers

The working conditions of the contract labour have been discussed several times. In The report of S.R. Deshpandey in the pre-independence period (1946) "Enquiry into Conditions of Labour in the Coal Mining Industry in India", the working conditions of the labour were to be very difficult with ventilation, sanitation and lighting were the most crucial issues. Again the report mentioned that there had been no change or increment in the wage while the working hour is gradually increasing on the eve of increasing coal demand. Again after many decades of the independence also it remained more or less the same. D.S.Kolamkar (2011) in his study found that the labours have remained as a disadvantaged section of the working

class due to lack of proper organisation and ignorance by the side of contractors and government. Even though they are being backed by several legislative rules and regulations, the contract labour has been found to be suffering the issues of working hour, leisure period, leave on festivals, appropriate wages, payment of wages on time, overtime, lack of training etc.

Working Hour

The working hour of the coal mines labour has always been a serious issue. The labour working in underground mines had to spend even the whole day before nationalisation of coal mines. After nationalisation the condition somewhat improved as the labour started getting organised and trade unions evolved as an active powerful body. There are strict provisions related to working hour in mines act, 1948 and CL (R & A) act, 1970. However there have been several issues of working hours being reported under the contractual production of coal in last two decades thus raising the question on effective implementation of acts. The working hour as recorded in the field survey is shown in the table below:

Table - 4: Working hours per day per shift

	Less than or equal to 8 hr	Between 8 hr to 10 hr	Between 10hr to 12 hr	More than 12 hr
Percentage of labour	0%	45%	55%	0%

(Source: Field survey data)

Against the mentioned legal regulation to control working hour of mines worker, it was found in the field survey that none of the labours are working for less than or equal to eight hours. More than half of the labour force is working for more than 10 hours every day in one shift without the overtime payment. The working hour per shift was found to be dependent on the terms between labour union members and owners of enterprise. The local contractors are exploiting more as most of them are having good terms with union members and therefore labours are left with no alternatives.

Leisure and Leave

Leisure is very important for a worker while work as it helps in restoring energy and retaining the level of potential with which a labour works. We have already seen that the working hour of the labour is very long and therefore being hard manual work with full potential proper rest between works is required. Leave on festivals is also essential without wage cut to preserve the religious value as well as to maintain good social and family status. The detailed description of rest and leave is shown in the following table:

Table- 5: Leisure & Leave

	Rest while work	Leave on festivals
Yes	10	41
No	90	59
Total	100	100

(Source: Field survey data)

It was reported in the field survey that 10 percent of labour is getting rest regularly while working. The rest 90 percent are either not getting rest or getting only when the production is stop due to breakdown of machines, shortage of fuel etc. Leave on festivals is also being enjoyed by 41 percent of labour, while the rest 59 percent are working even on festivals that too without incentives.

Wages

The payment of wages in Coal mines has always been highly uncertain. Even though the payment is done on monthly basis, it is not paid on every month. A separate wage board, National Coal Wage Agreement (NCWA) being decided by the Joint Bipartite Committee for the Coal Industry (JBCCI) was formed by the Coal India Limited after nationalisation coal mines which reviews the wages and other allowances of employees in every five years which started operating in 1975. But there is no such authority being made to ensure and revise the wage of the labours working in contract mines. Though the issue of wages of contract labour was coined by the union representatives of the JBCCI-IX and it was decided that the contractors under CIL will have to pay wages to their labours as mentioned:

Unskilled Labour	Rs 464 per day
Semi-skilled Labour	Rs 494 per day
Skilled Labour	Rs 525 per day

Highly Skilled

Rs 554 per day

According to the above mentioned wage line the workers are supposed to get rupees 13920 to rupees 16620 per month. But the base of categorisation was nowhere mentioned in the notice and there was no official being appointed to check the implication of the notice. CIL being the principal employer are several times forced for bonus payments by the leaders of labour union but due to the unavailability of the actual number of contract labours working under them the demand is being ignored. The period of payment of wage and mode of payment of the respondents are shown below:

Table- 6: Period of Wage & mode of Payment

	Wage Period		Mode of payment	
	Monthly	Uncertain	Cash	Bank Account
Percentage	33%	67%	22%	78%

(Source: Field survey data)

During field visit it was found that 67 percent of the respondents are not getting their wages monthly even though they are employed on monthly basis. The payment of wages depends on the terms & relationship of the contractor with the members of the labour union. It was found during the field visit that the local contractors are having good personal relations with the labour union members which results in the poor conditions of wages, payment period and working hour of the labours.

Twenty two percent of the respondents were found to be getting payments through cash and remaining through bank account. It is after the notice of the JBCCI-IX IN 2012 that contractors were forced to pay through bank or cheque. The 22 percent labours that are getting through cash are either in the process or new comers.

Table - 7: Amount of Wage

	Range	Minimum wage	Maximum wage	Mean wage
Wage amount	6000	7000	13000	9535.0

(Source: field survey data)

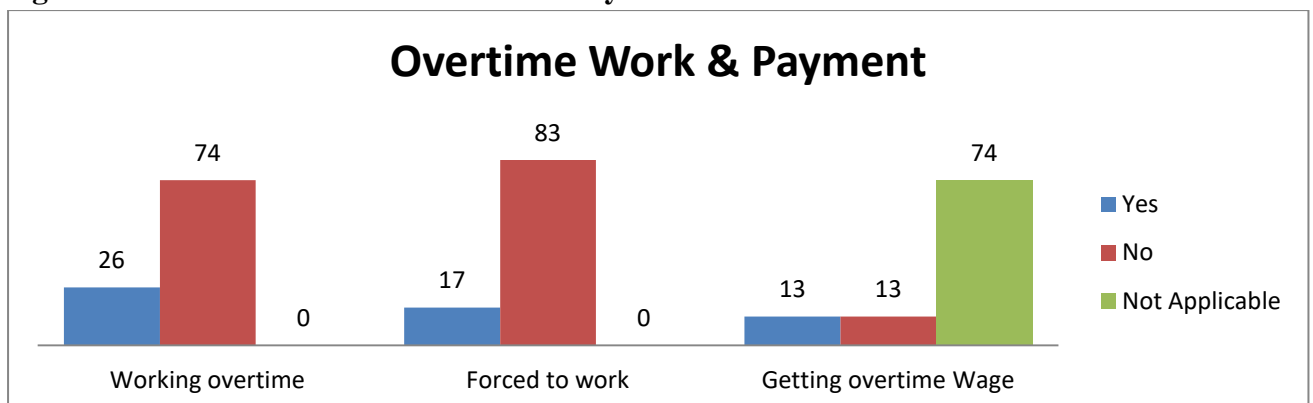
Since the payment is done on monthly basis, data has also been collected based on per month salary. As against the notice of CIL to contractors with fixed monthly wage to be implemented from 2013, it was nowhere found during the field survey. The wage of the labours were found to be between seven thousand to thirteen thousand and the mean value as calculated is near to nine thousand five hundred with standard deviation of 1.257 which means that wage is concentrated near nine thousand. This wage structure is far away from the prescribed minimum wage of the government shown above. The value of correlation coefficient between the age of respondent and amount of wage has been found to be 0.214 revealing the positive relationship but the degree is low. Apart from age, educational attainment and work experience of the labour, some other factors like nature of work being performed, personal relation with employer & trade union leaders and relations employer with union leaders were some factors affecting wage rate.

Overtime Work and Payment

Overtime is the amount of time someone works apart from regular working hours. This has been determined and mentioned in laws applicable for the functioning of that organisation. The labours are given strict legal protection related to overtime work and its payments. Section 28 to 30 of the mines act, 1952 explains that no person employed in a mine shall be required or allowed to work in the mine for more than 10 hours in any day inclusive of the overtime and section 33 explains that wages for overtime are to be paid at the rate of twice the ordinary wage rate of the workers.

The CL (R&A), 1970 provides security against the forceful employment over the regular working hours. Figure below explains the overtime work and remuneration status of the labours:

Figure - 5: Status of Overtime Work and Payments



(Source: Field survey data)

Working for 8-11 hours daily is common in coal mines but sometimes they are called for extra work especially when the target of production is to be achieved or when the whole production process comes to standstill due to shortage of the operators like drill operators, shovel machine operators etc. During the field survey, 26 percent labours were found to be doing overtime on regular intervals and out of them 17 percent were forced to work in overtime either under the threat of wage cut employment loss or by paying the extra remuneration for the work. Out of 26 labours working for overtime, 13 reported to be getting remuneration on behalf of extra work they performed.

Technical Knowledge & Training

The mining work in India has been fully or partially mechanised. Most of the activities related to overburden removal and coal extraction are performed through heavy machines which require trained technicians as the nature of work is highly hazardous and even a simple mistake can lead to serious accidents. Also proper training increases the efficiency of labour which further leads to increased production. The observed technical knowledge and training status is explained in the table below:

Table - 8: Status of Technical Knowledge & Training

	At the time of joining	provided before or after joining	Training required
Yes	28	0	70
No	72	100	30
Total	100	100	100

(Source: Field survey data)

It is clear from the table that the employer does not provide any technical training before or after joining. At the time of joining the workers are simply asked to perform some task which is easily performed by most of the workers. In the field survey, it was found that 72 percent of the working labours were not having any technical knowledge or formal training. The rest 22 percent includes those who have done ITI, diploma or any other

certificate course. 30 percent labours were found to be satisfied with their work and 70 percent still needs some kind of training to improve their productivity and efficiency.

Conclusions:

Like in other industries, coal industry has also witnessing contracting in several activities. Most of the allied activities are performed through contracting to reduce the administrative burden and increase efficiency of work. Apart from carrying out related activities of mining, the core process of mining and extraction is also given to contractors.

The contract mines are mostly employing young working age population. Due to less wages and long working hours the number of educated and upper caste person is very less and it is concentrated to semi educated backward caste, schedule caste and schedule tribes. Only a limited number of workers are having specific industrial training to carry out the mining activity apart from the fact that they are not given any kind of work based training before or after joining. Still due to lack of other employment opportunities and subsistence agriculture in nearby states, labours from all the nearby states are engaged with maximum from Bihar followed by Uttar Pradesh and West Bengal.

Most of the labours do not have their own house and were found to be living either in illegally acquired houses or the houses made in public spaces with 2 or less than 2 rooms and using stored water collected from public tap, hand pump, tankers or unprotected well. The asset ownership status and pattern of expenditure shows that the labours are somehow managing their livelihood and are lacking even the basic day to day needs.

The working conditions of the labours is very poor as they are getting less than minimum wage as described in the act and notice issued by the principle employer and working even more than 10 hours every day against the norms mentioned in mines act without the payment of remuneration for the overtime. Only a few contractors are allowing their workers to take rest while work apart from the fact that the workers don't get paid leave on festivals also. The continuous working without rest may lead to several health problems to the workers and there also exist the risk of accidents. Though the mode of wage payment is getting better day by day but the payment period is highly uncertain and the wage rate has also remained more or less constant over the period of time. The skill development and recreation activities are completely absent and the workers are left to perform the work without proper knowledge and training. Also to some extent, the working conditions vary

among the different contractors and the dominance of trade union representatives in that particular mine.

Thus, the contract workers engaged in coal mines needs serious attention by the side of policy makers as well as principal employers. The working conditions on the one side improves the social status and on the other side improves the productivity of workers which is further important for the sustainability of the industry in specific and economy in general. Also, the labour representation needs to be strong as it is in the case of permanent employers to have strong bargaining power on welfare related issues.

References

- Chaudhay, A., & Iqbal, R. (2011). 'An Empirical Study on Effect of Welfare Measures on Employees' Satisfaction in Indian Railways'. *International Journal of Research in Commerce & Management*, 2 (11), pp. 130-137.
- Das, A., & Pandey, D. (2004). 'Contract Workers in India: Emerging Economic and Social Issues'. *Indian Journal of Industrial Relations*, 40(2), pp-242-265.
- Deshpandey, S.R. (1946). 'Enquiry into Conditions of Labour in the Coal Mining Industry in India'. Shimla: Government of India press.
- Directorate General of Mines Safety. (2013). 'Safety, Health and Welfare of Contractual workers'. 11th conference on safety in Mines: New Delhi.
- Gee, E. (1940). 'History of Coal Mining in India'. Delhi: Geological Survey of India.
- Gupta, A. (2013). 'Labour Welfare and Social Security in Globalising Economy'. *Global Advanced Research Journal of Economics, Accounting and Finance*, Vol. 2 (3), pp. 62-66.
- Gupta, R.D. (1994), 'A Labour History of Social Security and Mutual Assistance in India', *Economic and Political Weekly*, (29) 11, pp. 612-620.
- Indian Chamber of Commerce (2013) 'Is Private Participation the Answer'. 5th India Coal Summit, New Delhi.
- John, C.P. (2004). 'Social Security and Labour Welfare with Special Reference to Construction Workers in Kerala'. (KRPLLD Working Paper, No.65). Retrieved from CDS Thiruvananthapuram, <http://www.cds.ac.in/krcpds/publication/downloads/65.pdf>.
- Justino, P. (2003), 'Social Security in Developing Countries: Myth or Necessity? Evidence from India', (PRUSU Working Paper, No. 20/2003). Retrieved from *Poverty Research Unit at Sussex*, University of Sussex Falmer.

- Kannan, K.P. & Vijayamohan P.N. (2007). 'Social Security in India: The Long Lane Treaded and the Longer Road Ahead Towards Universalization', *MPRA Paper*, No. 9601.
- Kannan, K.P. (2014). 'Interrogating Inclusive Growth'. London: Routledge India.
- Mishra, S. & Bhagat, M. (June 11, 2007). 'Principles for successful implementation of labour welfare activities: from police theory to functional theory'. Retrieved from <http://www.tesionline.com/intl/indepth.jsp?id=575>.
- Papola, T.S. (1994). 'Employment Growth and Social Protection of Labour in India'. *Indian Journal of Industrial Relations*, 30(2), pp. 117-143.
- Parasuraman, S. (2010). 'Economic Liberalisation, Informalisation of Labour and Social Protection in India'. New Delhi: *Aakar Books*.
- Prabhu, K.S. (2001). 'Socio-Economic Security in the Context of Pervasive Poverty: A Case Study of India'. Geneva: ILO. Retrieved from <http://www.ilo.org/public/english/protection/ses/download/docs/india.pdf>.
- Rajkuar, B. (2014), 'A Study on Labour Welfare Measures and Social Security In It Industries With Reference To Chennai', *International Journal of Enterprise Computing and Business Systems*, (4) 1, pp. 1-25.
- Sabarirajan, A., Meharajan, T., & Arun, B. (2010). 'A study on the various welfare measures and their impact on QWL provided by the Textile Mills with reference to Salem District, Tamil Nadu'. *Asian Journal of Management Research*, 1 (1), pp. 15-24.
- Saxena, R. C. (1994). 'Labour Problems and Social Welfare'. Meerut: *k. Nath & co.*
- Sharpe, A. (2004). 'Exploring the Linkages between Productivity and Social Development in Market Economies'. *CSLS Research Report 2002-04*, Ottawa. Retrieved from <http://www.csls.ca/reports/ProdSocDevMktEcon.pdf>.
- Sinha, P. (2004). 'Representing Labour in India'. *Taylor & Francis*, 14(1/2). Pp. 127-135.
- Verma, R. (2002). '2nd National commission on labour'. Ministry of labour. New Delhi: Ministry of labour.
- Vijay, G. (1999). 'Social Security of Labour in New Industrial Towns'. *Economic and Political Weekly*, 34(39), pp. 10-18.