

**SOCIO-ECONOMIC AND HEALTH CONDITION OF QUARRY WORKERS IN
LUNGRANG 'S'**

Submitted in partial fulfillment of Bachelor of Social Work,2022

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CERTIFICATE

This is to certify that the project title '*Socio-Economic and Health Condition of Quarry Workers at Lungrang South*' submitted by M. Lalremruatpuii, Department of Social Work, Higher and Technical Institute, Mizoram for the award of Bachelor of Social Work is carried out under my guidance and incorporates the student's bonafide research and this has not been submitted for the award of any degree in this or any other Universities or Institute of learning.

Dated: 1st November, 2022

Place: Lunglei, Mizoram

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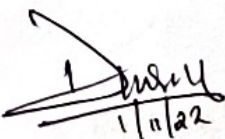
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Bachelor of Social Work

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CHAPTER - I

INTRODUCTION

The present study tries to find out the Socio economic and Health Condition of the Quarry Workers in Lungrang 'S'. People are increasing entering the workforce in the quarry due to their low economic situation. They also seek employment outside the home in order to improve their Socio-economic situation. Due to their ignorance and lower earnings, quarry workers' living and workers conditions have not improved. They are working in dangerous and risky circumstances. They are exposed to varying concentration of silica dust. They encounter natural disasters. They must spend a significant quantity of their own money due to injury and accidents. They don't have time to take care for family members due to first aid and other expenses, and the quarry worker's pay is insufficient to cover both demands. They lack the time to participate in society's activities and the community as well.

1.1 Quarry workers in India

With active ground and underground quarrying operations in Northern and Southern areas, granite quarries in India produce top quality stone products. Indian granite manufacture extract various colourful granite blocks, using modern natural stone quarrying processes and techniques.

Undoubtedly, India is a granite hub that caters to the needs of granite dealers, suppliers, and exporters in a professional manner. With the help of modern quarrying tools, including saws, splitters, and explosive charges, granite extraction experts split stone from mammoth rocks. Once blocks are separated from rocks, they are sent to granite factories and processing units for further treatment. At a broader level, you can divide Indian quarrying destinations in North and South India. From Sivakashi to Chamrajnagar and from Ongole to Madurai, there is a long list of quarries that produce high quality stone products for residential and commercial purposes.

1.2 Quarry workers in Mizoram

In Mizoram there are 419 permitted quarry holders located in different parts of the District; namely, Aizaw-176, Lunglei-29, Mamit-65, Champhai-36, Serchhip-37, Kolasib-65, Lawngtlai-

6, Saiha-5, (source: Geology and Mining Department Luangmual). According to 2001 census in Mizoram the population is 888573. There are approximately 30 people working per day in every quarry (source: Census Data 2011).

In Mizoram, quarry work entails strenuous physical labour that must be performed either in the sweltering sun and pouring rain. As a result, workers often experience chest pain, back pain and other pains, and the Socio-economic situation is to blame for their constant stress and strain. There is no trade union or organization to stand out for the right and issues of the quarry workers, so they lack motivation and direction. They help from the government and other organization for their well being, such as insurance plans and worker's compensation, etc. Majority (85.54) of the working population in Mizoram are from the unorganized sector (Economic & Political Weekly May 27, 2006; p. 2110). Their problems are also manifold. According to the Statistical Abstract of Mizoram 2011 census: the total number of main workers in Mizoram is 362,450 workers, 104,709 marginal workers and 421,414 non workers. Among the main workers 225,428 are males and 45,749 are females (ref: Statistical Abstract of Mizoram 2011, pp. 12 & 13). A quarry is a place where natural stone, gravel or sand is extracted for use in construction or other decorative building purposes. Quarry produce a wide variety of natural stone materials. The study, conducted by the National Institute of Rural Development and Panchayat Raj (NIRDPR), discloses the hidden aspects of the lives of stone quarry workers. According to the 2011 census data on migrations released recently, 28.3% of the Indian workforce and migrants. Labour is circulated far and wide, and construction sector has emerged to be the largest employer with 40 million migrant workers. Most of the workers engaged in stone quarry workers are from backward castes. And most of the quarries were privately owned and no safety standards were followed.

1.3 Socio-economic Condition

Socio economics is the social science that studies how economic activity affects and is shaped by social processes. Social economics definition, the study of the interrelation between economics and social behaviour relating to or concerned with the interaction of social and economic factors and economics that focuses on the relationship between social behavior and economics. (Roberts, J.t. & Carmin, J. 2011)

1.4 Objectives of the study

- Profile of the quarry workers.
- To study the working and living conditions of the quarry workers.
- To study the health conditions of the quarry workers.
- To suggest suitable measures for social work intervention.

1.5 Statement of the Problem

The main objective of this study was to evaluate the Socio- economic and health condition of the quarry workers. In order to asses health and other problems for the workers and the living condition of the quarry workers. Due to the poor working environment and lack of use of any safety equipment, accidents occur resulting in heavy injury and threat to the lives of workers. These occupational injuries are one of the reasons for some major health problems that all developed, developing and underdeveloped nations are currently facing. In the quarry there is an increasing trend of people joining labour force due poor economic circumstances to generate additional income for their family; also, they seek outside the home to improve the Socio-economic condition of life. The working and living condition are not improved due to their ignorance and lower wages. Therefore, Socio-economic and health conditions of quarry workers remain low. They are working in unsafe and hazardous condition; they are exposed to silica dust of different concentrations. They are exposed to natural disaster. They face injuries and minor accident, they spend large amount of their own money for first aid and other expenses.

1.6 Chapter Scheme

Chapter 1 : Introduction

Chapter 2 : Literature Review

Chapter 3 : Methodology

Chapter 4 : Result and findings

Chapter 5 : Conclusion and Suggestion.

CHAPTER - II

LITERATURE REVIEW

In this chapter attempts have been made on the review of literature has been arranged according to the studies related to the study.

2.1 STUDIES BASED ON QUARRY WORKERS

Duraisingh, V (2009) studied on a study on the condition of Quarry worker at Vagai Kulum area in Thoothukudi District. He selected 50 male stone quarry workers survey method is used in hois studies. The study found that the majority of the workers belong to the age group of 20-40 years. 48 percent of the quarry workers have been working below 10 years and maximum of 52 percent. Majority of the working is more than eight hours per day. Overtime shift work in very common. Seven workers had discontinued their job because of their sickness. All the workers were suffering from chronic cough and heart pain disease (40%) of the annual income is between Rs 15,000-20,000/- Their main problem is low wages, next is accident, disease problem, no job security and hazard work are various problems met by the quarry workers.

Sefan Gary Cosher M and Sudharsan S studied on the status of quarry workers in Kandegai Nagar, Kanchipuram District. Quarry is a place from which stones, rocks, sand gravel and many more can be excavated for human resource. Quarries are generally used for extracting building materials such as dimension stones. The history of quarry work begin from the Egyptian, Romans times where they did their work in making pyramids, temples, etc. Considering the Indian context, it can be traced to the Pallava period where they built cave, monuments and temples. At the present time, things have changed. People land up in their job due to the lack in the place, and then to move where there is opportunity for job a living. In the India context, the labor is classified or informal. Organized are documented. Quarry also is a form or unorganized work because it does not follow any systematic procedures. Therefore, this study focus on the status of the quarry workers where it particularly focus on the status of the quarry workers where it particularly focuses on the Socio economic condition. These are the objective of the study. The main findings of then research are as follows, the study gives the main findings, based on the Socio-economic condition, physical health condition, and working condition, and working of the respondents.

Based on the findings, the suggestions were given to the government, NGO and social workers and to help the quarry workers to live a life of dignity and happiness.

Az amah, A Nwazunku, AN Amadi, EC Esenwah, NC Ikoru, AU Megwas According to the study quarry is a form of mining which involves crushing of stones and obtaining quarry resources on or below the earth surface. This study was carried out in Abakali, Southeastern Nigeria, to investigate the major problems and found among quarry workers and residents. Quarry work is carried out using different equipment like explosive, power saws and hand tools. The environment of quarry activities is dry, dusty and heavily polluted. These factors increase the risk of contact of foreign particles into the eyes. There is a high risk of ocular injuries and some studies have attributed quarry work to having the highest rate of injury among industrial work. This study was a cross-sectional observational study carried out at quarry sites in Abakali, Southeastern Nigeria. Majority of these quarry workers are of the lower socioeconomic status and they cannot find any other job to do in order to feed their families but to work at the quarry sites.

M Talib (2010) studies on writing labour stone quarry workers in Delhi on 1987. The workers selected for the study is situated in the village of Pul Pehlad located on the southern outskirts of Delhi nearly 30 kms. A quarry worker discarded the indispensability for learning in the school on grounds that the ancestors did not attend school and yet were entirely illiterate. Workers constructed their dwelling out of the material detritus of the wider society's organized economy. The present analysis also drew support from studies that have focused on workers' lives beyond the workplace to develop a more informed sense of labour politics.

2.2 STUDIES BASED ON HEALTH RELATED ISSUES ON DIFFERENT TYPE OF WORKERS

Dr. Manish A Prasad studied Assessment of health status of the stone quarry workers in Yelakeli, Wardha District in Central India. Stone crushing Industry is an important industrial sector in the country engaged in producing crushed stone of various sizes depending upon the requirement which acts as raw materials for various construction activities such as construction of Roads, Highways, Bridges, Buildings and canals etc. Most of the workers 63% of them were between 21 to 40 years of age. 89% were staying in stone crushing industry. 68% workers were between 5-10 years. In this study it has been noted that most of the

workers had been noted the most of the workers had health related problems like the respiratory problems, musculoskeletal problems, eye problem. Protective measure were not used. Most of the people used to live near the stone quarries. Similarly decreased PEFR was found to be decreased in the smoker's. Similarly decreased PEFR was observed as the age and duration of work increase.

Ponnamabily Jobin, Angel Sudha Veparala, Anmery Varghese, Aparnna T Jose, K.Imanainla Walling, Vathsala Sadan stated state quarry is the dangerous place to work in and quarry workers are more likely to be killed in accidents at any time. Therefore, the investigators tried to asses the occupational safety, hazards and related health problems among the quarry workers at work place in India. The majority of the workers had frequent respiratory tract infection (88.8%), back ache (65.2%) join pain (48.8%) and sinus (26.3%).Regarding vision and hearing acuity and 15.3% of them had negative Weber and Urine test too. The study results make and urgent call on authority for job redesigning, scheduling policies, implementation of strict rules and regulations, health protection programme and insurance schemes for workers who are involved in dangerous work place such as construction sites, quarrying, mining and nuclear power plants.

Dibakar Dey, Sanjeev Kumar, Supriyo Chakraborty stated that quarry workers perform tasks in unhealthy atmosphere. Quarries are scattered all over India. Morbidity is associated with this occupation. Present experiment is a cross sectional study on a sample size of 40 individual who were never exposed to quarry dust and the remaining 20 individuals are the quarry workers. A prescribe questionnaire was given to each of the participant to obtain the basic information like age, smoking habit and addiction to alcohol etc. Result indicate that Silica dust effects on pulmonary function parameters in quarry workers over a long time. Silica dust declines pulmonary health. Attention is to be given for suitable mask and glasses to each of workers. Awareness of the individual working in quarry is essential for better health.

Aloh E. Henry, Aloh O.Getrude, Otuu F. Chibuisi, Elvis N.Shu, Maduka C.Ignatius, Inya- Agha I. Stella , Nwando C, Obi-Ezeani, Tilako B.Halilu, Okechukwu C. Cyril stated that quarry industry is among the many extractive industries implicated in the etiology of a myriad of occupational health hazards. This study brought forth the case of health hazards among the quarry workers in Ebonyi state, southeast geopolitical zone of Nigeria. Simple randomized sampling technique was adopted in selection of 49 sites among 130

quarry sites, within Ebonyi state. The study design was cross-sectional and assessed the health hazard confronting quarry workers in Ebonyi. Symptoms of silicosis include dyspnea (breathless), cough (Soutar et al., 2000), weight loss, fatigue, night sweat and occasional fever (Laraqui et al., 2001). The present study is in tandem with the above previous reports, indicating that the workers were exposed to pulmonary diseases. The quarry workers decreased with years of exposure, suggestive of a gradual loss of lung function as years of exposure, suggestive of a gradual loss of lung function as years of exposure to respirable dust increased. The findings in this study showed that there was evidence of decreased lung function and renal pathology and perhaps other disease among quarry workers.

AQ Aigbikhaode, EC Isah, AR Isara, according to this study quarry industry remains one of the most dangerous industries to work in because of the most enormous hazards associated with the art of quarrying which may manifest long after the worker ceases to work in the quarry. The aim of this study was to determine the knowledge and practice of occupational safety among quarry workers in Ikpeshi, a rural community in Edo State, Nigeria.

Elgin, RA 2017 reveals that a survey of quarry dimensions and available reserves at three of the major quarries in the Qikiqtaaluk Region of Nunavut has led to a revision of the amounts of carving stone reserves available for use by Inuit artists. Kangiqst is estimated to have <3000 tonnes of accessible stone, almost all confined to the northern pit. The relatively smaller Ujaraniarvik body holds an additional reserve <3000 tonnes. The dwelling reserves at known deposits along the southern coast of Baffin Island indicate that an active program of prospecting and quarry development is necessary in the immediate future, before carving stone becomes significantly harder to source and quarry development is necessary in the immediate future, before carving stone becomes significantly harder to source and quarry workers reoverhanging walls. Although accessible stone at Qullisajanivvik has been downgraded to a maximum of 15700-18540 tonnes.

CHAPTER - III

METHODOLOGY

This chapter (Research Methodology) will help us to understand more in detailed about the study on Socio economic and health condition of quarry workers in Lungrang 'S'. The methodology used is given below:

Field of the study

The name of the community where the researcher went for the research was Lungrang South which consist of 944 population (According to 2011 census). The community is classified into 5 sections and the community contain a number of 196 households.

Research Design

Descriptive research design is used to describe various aspects of the phenomenon.

Sampling

Simple random sampling method is employed in the selection of the respondents. The sample size of the study is limited 40.

Tools of Data Collection

Both the primary and the secondary source of data are used in this study.

The Primary sources of data are the quarry workers working in Lungrang 'S'.

The Secondary sources of data were collected from Journal, Books, Web Sites etc.

Universe of the Study

The universe of the study comprises of the quarry workers who are located in Lungrang 'S'.

Method of the study

Interview schedule was adopted for the collection of primary data. The study is conducted in quantitative methods.

Data Processing and Analysis

The data collected were processed and analyzed by using Statistical Package for the Social Sciences (SPSS).

CHAPTER - IV
RESULTS AND FINDINGS

This chapter describes the present results of the analysis of the data through pre-tested interview scheduled, Researcher had interviews among the Quarry Workers in Lungrang ‘S’.

Profile of the respondents :

Profile of the respondent is presented into 8 categories viz Age, Gender, Educational Qualification, Member living in the family, Type of the Family, Personal Monthly Income, Type of residence and Type of Housing.

4.1 Age

The Socio economic characteristics of the respondent play a significant part in ascertaining the respondent knowledge level management skills. The majority of the responses were from adulthood, there were 17 responses, which is 42.5 percent.

SL/NO	AGE	FREQUENCY	PERCENTAGE
1	Adulthood	17	42.5
2	Late Adulthood	16	40
3	Elderly	2	17.5
	TOTAL	40	100.0

Source : Computed

Table 4.1 Age of the respondents

The table below displays the gender responses with 15 percent of the respondent were female while 85 percent were male. These results clearly demonstrate that men are more involved in working in quarries than women.

SL.NO	GENDER	FREQUENCY	PERCENTAGE
1	Male	34	85

2	Female	6	15
	TOTAL	40	100.0

Source : Computed

Table 4.2 Gender of the respondents

It is important to determine the qualification of the worker. The table show their responses where middle standard are the most (47.5 %), followed by High School where (25 %), where Primary (15 %), Higher Secondary (4%) and 1 post graduate.

SL.NO	QUALIFICATION	FREQUENCY	PERCENTAGE
1	Primary	6	15
2	Middle	19	47.5
3	High School	10	25
4	Higher Secondary	4	10
5	Graduate	Nil	
6	Post Graduate	1	2.5
	TOTAL	40	100.0

Source: Computed

Table 4.3 Qualification of the

respondents

The data reveals that there were 1-5 family members in 21 households, where 5-10 family member in 16 household and 10-15 members in 3 households.

SL.NO	FAMILY MEMBERS	FREQUENCY	PERCENTAGE
1	1-5	21	52.5
2	5-10	16	40

3	10-15	3	7.5
	TOTAL	40	100.0

Source: Computed Table 4.4 No. of family of the respondents

Family members of the nuclear type are more numerous than join family in the data collection.

SL.NO	TYPE OF FAMILY	FREQUENCY	PERCENTAGE
1	Nuclear Family	30	75.5
2	Join Family	10	25
	TOTAL	40	100.0

Source : Computed Table 4.5 Type of family of the respondents.

These table depicts their individuals income. The highest-earning household had an income ranging from 29,000 to 33,000. The next two families had incomes between 24,001 and 28,000. Seven households had incomes between 19000 and 23,000 , eight had incomes between 14,000 and 1,8000, and five households had income between 4,000 and 8,000. According to this table, they receive a respectable amount of money from the quarry workers.

SL.NO	INCOME	FREQUENCY	TOTAL
1	4000-8000	5	12.5
2	9000-13000	17	42.5
3	14000-18000	8	20
4	19000-23000	7	17.5
5	24000-28000	2	5
6	29000-33000	1	2.5
	TOTAL	40	100.0

Source: Computed
 Respondents.

Table 4.6 Monthly Income of the

According to the table, 37 households own their homes, while just 3 household.

SL.NO	TYPE OF RESIDENCE	FREQUENCY	PERCENTAGE
1	Owned House	37	92.5
2	Rented House	3	7.5
	TOTAL	40	100.0

Source: Computed

Table 4.7 Type of Residence of the Respondents

37 households live in Tiled homes, which are the most common type of home, while 4 households have Concrete homes, including 2 Pucca homes and 2 Kutcha homes.

SL.NO	TYPE OF HOUSING	FREQUENCY	PERCENTAGE
1	Tiled House	32	80
2	Concrete	4	10
3	Kutcha House	2	5
4	Pucca House	2	5
	TOTAL	40	100.0

Source : Computed

Table 4.8 Type of Housing of the Respondents

4.2 Health Condition :

Health Condition of the respondents is presented into 10 categories.

When asked if they had health issues, 52.5% responded yes, while 47.5 % who indicated that they did not.

When asked if they are satisfied with their jobs, they often respond that they aren't.

Low wages were mentioned by 22.5 % respondents, disease problems were mentioned by 20 %, accidents happened to 2.5 % and excessive physical work to 5 %.

In the next table no one had done their insurance.

There are 95.5 % have there saving account and 5 % do not have.

When asked whether there is a high risk of accident at work, 50 % of respondents said it was moderate, 35 % said it was high, 10 said it was low, and 5 % said it was extremely high.

When asked if they have adequate shelter while working(92.5 %) of people have adequate shelter while 7.5 % do not have.

92.5 % still working in the middle of the rain or heavy hot sun while 7.5 % do not work due to their improper shelter.

72.5 % take rest for 1 hour while 27.5 % rest for 2 hours.

87.5 % of people have the thought to keep first aid on hand in case of emergency, but 12.5 % do not.

Asking that are there any factor that are connected to how they live. 52.5 % respond living environment is poor, 37.5 % have low income 5 % are more dependents and 5 % are indebtedness.

Sl.No	Characteristics	Frequ ency	Percent
1	Health problem		
	Yes	21	52.5
	No	19	47.5
2	Do you face problem like		
	Low wages	9	22.5
	Disease Problem	8	20
	Accident	1	2.5
	Excessive Physical Work	2	5
3	Have you done your insurance		
	No	40	100

4	Do you have saving account		
	Yes	38	95.5
	No	2	5
5	How are your chances of accident		
	Very High	2	5
	High	14	35
	Moderate	20	50
	Low	4	10
6	Do you have proper shelter while raining during work		
	Yes	37	92.5
	No	3	7.5
7	Working in the middle of raining or heavy hot sun		
	Yes	37	92.5
	No	3	7.5
8	Resting hour		
	1hr	29	72.5
	2hrs	11	27.5
9	Keeping first aid kit in times of need		
	Yes	35	87.5
	No	5	12.5
10	Any causes related to your living condition		
	Living environment is poor	21	52.5
	Low Income	15	37.5
	More dependents	2	5
	Indebtedness	2	5

Source: Computed

Table 4.9 Health Condition of the respondents

4.3 ECONOMIC CONDITION :

Economic Condition of the respondents is presented in 11 categories.

When asked do they take an advance wages from the quarry owner or contractor majority of them respond No (70 %) while (30 %) respond No.

When asked if they are satisfied with their monthly income,(50 %) respond “Yes” and(50 %) respond “No”.

Inquiring as to why they pursue quarrying (52.5 %) respond. It is easy and available,(45 %) respond it is for earning the money while the rest (2.5 %) says for other.

Then majority of employees at the quarry work full time (75 %), while (25 %) part time.

These table depicts there family income from quarry work,(60 %) of the family had incomes between 18,000-27,000,(17.5 %) of the family had 8000-17,000, (15%) of the family had 28,000-37,000 while (7.5%) had 38,000- 47,000 also got the highest income.

When questioned about their level of experience (54%) for 1-5 years, (42.5%) for 5-10 years, 5% for 15-20 years and (2.5%) for 10- 15 years.

When asked if they are content with their job experience, (62.5%) responded that they are (30%) said they are not, and (7.5%) said they are highly satisfied.

The table show that (55%) of those employed at the quarry are the owner, and (45%) are others who work for the owner or with the owner.

When asked if they receive sufficient pay, (85%) responded that they do, while (15%) did not.

When asked their working environment (42.5%) respond it is safe, (32.5%) respond as clean, (17.5%) answered as accident free zone, (7.5%) are not safer.

When asked if they satisfied in there family income, (65%) of respondents indicated they were content with their family income, while (35%) disagreed.

Sl.N o	Characteristics	Frequ ency	Percen t
1	Taken advance wages from quarry owner or contractor		
	Yes	12	30

	No	28	70
2	Sufficiency monthly income		
	Yes	20	50
	No	20	50
3	Reasons for taking up quarry		
	Easy and available	21	52.5
	To earn money	18	45
	Other	1	2.5
4	Nature of employment in the quarry		
	Full Time	30	75
	Part	10	25
5	Family Monthly Income		
	8000-17000	7	17.5
	18000-27000	24	60
	28000-37000	6	15
	38000-47000	3	7.5
6	Working experience		
	1-5	20	54
	5-10	17	42.5
	10-15	1	2.5
	15-20	2	5
7	Opinion of your experience		
	Highly Satisfied	3	7.5
	Satisfied	25	62.5
	Not Satisfied	12	30
8	Category working in the quarry		
	Owner	22	55
	Other	18	45
9	Proper wages		
	Yes	34	85
	No	6	15

10	Working environment		
	Clean Environment	13	32.5
	Safety Environment	17	42.5
	Accident free zone	7	17.5
	Not Safer	3	7.5
11	Sufficiency family income		
	Yes	26	65
	No	14	35

Source: Computed Table 4.1.1. Economic Condition of the Respondents.

4.4 SOCIAL CONDITION AND GOVERNMENT INTERVENTION

Social Condition and Government Intervention are divided into 9 categories.

When asked do they feel neglect in the society (90%) said no while (10%) said yes.

The next table depicts that there is no one to the areas to sale illicit.

When questioned about whether they feel depressed at work, quarry (57.5%) respond rarely, (25%) respond sometimes, (12.5%) had not comments and the rest (5%) respond always.

When asked how they feel about their own situation since becoming quarry workers, (47.5%) them give stability , (35%) give insecurity, and (17%) give security responses.

The next table depict that all the quarry workers do not get any benefit from NGO and Government.

When asked if they face problem from these family, (47.5%) said yes while (42.5%) said no.

When asked do they feel sometimes bored to work in the quarry, (57.5%) respond yes while (42.5%) responded no.

When asked do they feel tired in the work of the quarry (52.5%) said no while (47.5%) said yes.

Sl.N o	Characteristics	Frequen cy	Percent
1	Do you feel that the society neglect you		
	Yes	4	10
	No	36	90

2	Is Anybody coming to this area to sale illicit		
	No	40	100
3	Do you feel depress that you are a quarry worker		
	Sometimes	10	25
	Rarely	23	57.5
	Always	2	5
	No Comment	5	12.5
4.	Own status after becoming a quarry worker		
	Stable	19	47.5
	Unsecurity	14	35
	Security	7	17.5
5.	Attitude towards quarry workers		
	Independent	23	57.5
	Low wages	8	20
6.	Benefit from NGO and Government		
	No	40	100
7.	Problem from family		
	Yes	23	47.5
	No	17	42.5
8.	Bored working in the quarry		
	Yes	23	57.5
	No	17	42.5
9.	Feel tired working in the quarry		
	Yes	19	47.5
	No	21	52.5

Source: Computed Table 4.1.2 Social Condition and Government Intervention of the Respondents.

CHAPTER- V

CONCLUSION AND SUGGESTIONS

This chapter will give information on the findings of the study and suggestion given by the respondents which is collected through interview schedule.

Major findings:

5.1 Profile of the respondents:

The present study tries to find out the Socio-economic and Health Condition of the quarry workers in Lungrang 'S' community. The number of households present recently in Lungrang South village was 350, out of those 40 households are chosen at random for the study region. Quarry work is one of the primary source of occupation in Lungrang South village. There are also fewer business workers in the study area, because doing business in the village is tough. Male labourer in a quarry surpass a women worker in a quarry. Male quarry workers outnumbered female quarry workers across the board in the study sites due to the dangerous and physically demanding nature of the labour.

5.2 Health Condition of the Respondents:

Men are more dependable than women to work and earn a living in a quarry because quarry work requires a lot of energy, such as dressing, cutting and loading cubic stone from the earth to a truck, however, women also work but doing the lighter job like stone chipping; many houses used quarry work to support the family. It was intriguing to learn that older people also perform these tasks to pass the time and make money to support themselves. These individuals serves as excellent role models for younger people because many young people today prefer to stay at home and live off of their parent's income, which is not healthy. Additionally, it was discovered that youngest were employed in the quarry, which was noted to be a significant source of money for the workers. Some female employees went to the quarry while others let the vehicle trip the bolder and drop in their compound, turning into stone pieces and later sold it to the company.

The average level of education among quarry workers is Middle school, followed by High School, indicating that all quarry workers are literate. It also has demonstrated that many quarry workers initially attended school but soon dropped out due to lack of interest in

their studies. They then joined the workforce because it was available and convenient for them in their villages and it also paid well from the quarry. It is evident that this quarry is a good source of revenue for families because they can use it to build homes, send their children to school and pay for their tuition fees.

When we say that it is a good source of income, we must also acknowledge that it requires a lot of effort and energy. Additionally, it is risky because bombing the stone and working in the quarry both carry the potential for danger to the worker, as well as the possibility of the stone collapsing. The work they do in the quarry is very difficult and if they work continuously they get joint pain, cough and some of them start working from morning so they take the meal very late which let to stomach illness. Additionally, some are having health issues because during the day time, it is very sunny and when monsoon it is rainy some do not have a proper shelter and they are just tolerant even if it was rain or sun this has led to illness. The vast majority of the workers in these village have the concept to place first aid close by. Some people have higher incomes than others since the range of incomes fluctuated according on the type of job done, how many hours were put in each day or week and it also depends on the quantity of worker.

5.3 Economic Condition of the Respondents:

The quarry worker used to take advance wages from the employer whenever they are facing family, personal and health problem. There are no illegal sales in the workplace area, making it a secure location. Few quarry workers have bank accounts for savings, and those who do typically do not have much money. Typically, quarry worker fulfill daily necessities. Additionally, the manner of receiving wages makes the quarry worker less interest to save money. It is clearly show that there is an economic a feeling of unease among quarry employees. It is important to save money, but their saving rates are modest, and the money they do save is primarily used for housing and for emergencies.

5.4 Social Condition and Government Intervention of the respondents:

Some people find working at the quarry depressing while others do not. Some people have family issues within the family, such as fever workers but more consumers, which causes the economy to suffer. Some employees experience occasional boredom because, although not having a serious health issues, they are required to work daily and are sincere about their profession. The quarry employee use to be quite exhausted because it takes a lot of energy.

5.5 Conclusion

According to the data gathered, many people in these villages depend on their work in quarries, which provides a lot of work. They use the money they make from selling their stone to buy motor and build house, and send their kids to good schools. When the monsoon arrived, the quarry road was very terrible, so the motor could not get inside the quarry and could not load the stone, which causes a lot of problems, but on the other hand, the villagers also faced difficulty because they carry such big loads, the villager, also experience difficulties including back and joint ache. The results highlight their greatest needs, which are clearly a strong shelter for rainy and hot weather as well as modern equipment like large crushers and drillers and high-quality tools.

5.6 Suggestions

- The workplace is dangerous for quarry workers, who frequently suffer accidents and injuries. The quarries are not near a hospital. First aid supplies, medication and access to the first aid facility may be arranged by the quarries management.
- Workers at open cast quarries are subjected to unfavourable weather conditions like high temperatures, humidity, rain and intense sunlight. For protection from the sun and rain, quarry owners might offer silpaulin, or the employee should have their own. To protect themselves from strong winds and rain as well as in emergencies, they require a robust shelter.
- The government or NGO should be aware of their situation in terms of meeting their fundamental necessities, such as silpaulin, in order to support their profession and provide compensation in the event of an accident.
- The quarry workers organization needs to be reinforced in order to adopt welfare measures for the workers and regularize their wages, which they are unable to do at the moment. To register under “The Mizoram Trade Union Regulation, 1992”, association must be informed.
- The quarry workers must be instructed in family finance. The quarry workers should be made aware of the value of saving.

- For the quarry workers, manual labour is exceedingly taxing and difficult. To make work easier for quarry workers, quarry owners may implement cutting-edge technology such as drilling machines, cutting machine, lifting machine etc.

REFERENCES

Duraisingh, V(2009) studied on a study on the conditions of Quarry workers.

Stefan Gary Costner M and Sudharsan S study on the status of Quarry Workers in Kandegai Nagar, Kanchipuram District.

AZ Amah, A Nwanzunku, AN Amadi, EC Esenwah, NCI Koro, AU Megwas ((2007)

Dr Mohammad Talib (2010) Writing labour stone quarry workers in Delhi.

A study of pulmonary function test in stone quarry industry workers in Wardha District, M.Prasad, V Wagh. J Acad Ind Res 8, 52,2019.

Ponnamabily Jobin, Angel Sudha Veparala, Anmery Varghese, Aparna T Jose, K. Imanainla Walling, Vathsala Sadan. Assessment of occupational safety, hazards and relates health problem among quarry workers at work places in India. Int. J.Nur .Edu. and research 2007, 5 (1) 65-68 doi 10. 5958/2454-2660-2017.00014.X.

Dey, Dibakar, Kumar, Sanjeev, Chakraborty, Supriyo; Indian Journal of Public Health Research and Development. Oct- Dec 2017, Vol 8. Issues 4, P 382-386 5p.

Aloh E. Henry, Aloh O. Getruda, Otuu F. Chibuisi, Elvis N.Shu, Maduka C. Ignatius Inya-Agha Stella, Nwando C, Obi-Ezeani, Tilaka, B.Halilu Okechuchu C. Cyrid (2017)

AQ Aigbkhaode, EC Isah, AR Isara; Journal of community medicine and primary health care 23 (1-2), 16-24,2011.

Elgin, RA 2017.

SURVEY SCHEDULE

Topic: Socio - Economic and Health Condition of Quarry Workers in Lungrang ‘S’

A. PERSONAL INFORMATIONS

- 1.Name :
- 2.Age :
- 3.Locality :
4. Sex : 1. Male 2. Female
- 5.Educational qualification (if any) : 1. Primary 2.Middle 3.High School 4. Higher Secondary 5.Graduate 6.Post graduate
- 6.How many members are living in your family? :
- 7.What is the type of your family?
- i) Nuclear family
- ii) Join family

8. Personal Monthly Income? :

9. What is the type of your residence?

- i) Own House
- ii) Rented House

10. What is the type of your housing?

- i) Tiled House
- ii) Concrete
- iii) Kutcha House
- iv) Pucca House

B. HEALTH CONDITION

1. Do you have any kind of health problems? (Yes/No)

2. Do you face problems like :

- i) Low wages
- ii) Disease Problem
- iii) Accident
- iv) Excessive Physical work

3. Have you done insurance? (Yes/No)

4. Do you have saving account? (Yes/No)

5. How are your chances of accident?

- i) Very High
- ii) High
- iii) Moderate
- iv) Low
- v) Very Low

6. Do you have proper shelter while raining during\work? (Yes/No)

- i) Yes
- ii) No

7. Do you still working in the middle of raining or heavy hot sun. (Yes/No)

- i) Yes
- ii) No

8. How long you have taken for rest during work? _____

9. Do you keep first aid kit in times of need? (Yes/No)

- i) Yes
- ii) No

10. Is there any causes related to your living condition?

- i) Living environment is poor
- ii) Low income
- iii) More dependents
- iv) Indebtedness

C. Economic Condition

1. Have you taken an advance wages from the quarry owner or contractor? (Yes/No)

2. Do you think that your daily/monthly income is sufficient? (Yes/No)

3. What is the reason for taking up quarry? _____

4. What is your nature of employment in the quarry?

- i) Full Time
- ii) Part time

5. Family income (Monthly) : _____

6. How long you have experienced in this work? _____

7. What is your opinion of your experienced in this work?

- i) Highly Satisfied
- ii) Satisfied
- iii) Not Satisfied

8. In what category you are working in the quarry? _____

9. Do you get proper wages?

10. How is your working environment?

- i) Clean Environment
- ii) Safety Environment
- iii) Accident free zone
- iv) Not Safer

11. Do you think that your family income is sufficient? (Yes/No)

D.Social Condition &Government Intervention

1. Do you feel that the society neglect you? (Yes/No)

2. Is there anybody coming to this areas to sale illicit activities (Yes/No)

3. Do you feel depress that you are a quarry worker?

- i) Sometimes
- ii) Rarely
- iii) Always
- iv) No comment

4. What do you think of your own status after becoming a quarry worker?

- i) Stable
- ii) Unstable
- iii) Security

5. What is your attitude towards quarry workers? _____

6. Do you get benefit from:

- i) Government
- ii) NGO

7. Do you face problems from your family? Yes/Yes
8. Do you feel sometimes bored to work in the quarry? (Yes/No)
9. Do you feel tired to work in the quarry. (Yes/No)

