



Research Article

**STUDY ON THE STATUS OF QUARRY WORKERS IN KANDEGAI NAGAR,
KANCHIPURAM DISTRICT**

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ABSTRACT

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 this quarry work begins from the Egyptian, Roman 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 this job due to the lack of livelihood opportunity that they have. Most of them are migrants. Since there are no livelihood opportunities back in their place, and then tend to move where there is opportunity for job for a living. In the Indian context, the labor is classified into organized or formal and unorganized or informal. Organized are documented whereas the unorganized sector is non-documented. Quarry also is a form of unorganized work because it does not follow any systematic procedures. Therefore, this study focuses on the status of the quarry workers where it particularly focuses on the socio-economic condition, physical health condition and the working condition. These are the objectives of the study. The researcher has used a quantitative research methodology. Descriptive research design is used to analyze and describe the data that has been collected from the respondents. Interview schedule was prepared by the researcher as a tool for data collection. The researcher census method of sampling. The main findings of the research are as follows, the study gives the main findings based on the socio-economic condition, physical health condition, and working condition of the respondents. Based on the main findings, the suggestions were given to the government, NGOs and the social worker and to help the quarry working to live a life of dignity and happiness.

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INTRODUCTION

A Quarry is a place from where the rock, sand, marble, stone will be excavated away. General process will be crushing, blasting and drilling of rock materials. This is one dangerous industry to work on with, because there are lot more airborne particulates which when inhaled becomes hazardous to health. The life of the quarry worker is set at risk. Not only the worker themselves, but the whole family sails in a sea of risk. While the quarry owner lives a luxurious life physically, mentally and economically. Discriminations can be faced by the quarry workers in terms of wages, hours of work. The life in quarry will be a huge rock with which they would be surrounded and no room for hope. The workers suffer from bondage, lack of pay and absence of any infrastructure required for a dignified life. Quarry Workers Development Society (QWDS) has been working with the quarry workers in Tamil Nadu. India holds for almost 20 percent of the world's granite resource.

The quarry workers live in depressed condition, poverty, debts and occupational diseases. Their working conditions lack of working hours and low wages. They are not providing safety equipment and lack of basic amenities such as drinking water, medical facilities, toilets, etc. Quarry work falls under the category of organized sector. They leave their native land since there is a lack of job opportunity, which in turn hinders the economic growth of the family and therefore they migrate to unknown land. And they land up in such organized sector. They also face migratory issues where they won't be able to adapt to. They toil themselves and work and the pay they get won't be sufficient enough to run their family. And also, they work in a hazardous place where they get physically weak. Hence, a study about the health problems and the developmental schemes proposed for the benefit of the community.

Significance of the study

Quarry is one form of labor and also one of the finest resources of India. The study will help in understanding the more about the quarry workers and their livelihood. The study will help us understand the physical health condition of the quarry workers.

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Also, it will help us understand the socio-economic condition of the workers and also their working condition.

General objective

A study on the status of the quarry workers in Kandegai Nagar, Kanchipuram district.

Specific objective

- To assess the socioeconomic status of the quarry workers.
- To study the physical health problems of the quarry workers.
- To study the working condition of the quarry workers.

Hypothesis

- There is a significant association between hours of work and the salary of the respondents.
- There is a significant association between the age and the years of work of the respondents.
- There is a significant association between the age and the type of work of the respondents.
- There is a significant association between the years of work and salary of the respondents.

RESEARCH METHODOLOGY

The researcher has used purely quantitative method of data collection. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon. (Muijs, 2010)

Descriptive design is used to describe systematically and accurately the facts and characteristics of a given population or area of interest and to provide an accurate portrayal or account of characteristics of a particular individual, situation or group. Descriptive design helps us to observe, describe, and document aspects of a situation naturally and to discover associations or relationships between or among selected variables. Accurate and systematic description is the cornerstone of this research design (Helen L. Dulock, RN, DNS, 1993). In this descriptive research design, we produce statistical information on the status of health and well-being of quarry workers.

The universe for the study is all the quarry workers in Gandhi Nagar, Kattangalathur block, Kanchipuram district. In this study, purposive method of sampling is used for selecting the respondents where the items for the sample are deliberately selected by the researcher. - (C. R. Kothari 2004)

Inclusive criteria

- The respondents should be working in quarry.
- Respondent should be above the age of 18.
- Respondents should have a minimum of 3 years of working experience.

Sampling is the science and practice of selecting information from populations in a manner that allows defensible inferences to be drawn from the data. The sample size for this study is 50.

Tools: Research tools enable researchers to construct theories and system models. They typically support capturing hypothesis, inferring mechanisms, and formulating experimental results within the same framework. The researcher has used Interview schedule for the purpose of data collection. Interview schedule is a set of questions which are

asked by an interviewer and filled in on the spot in a face to face interaction with another person. (Goode & Hatt, 2008)

Definitions

Conceptual definition: According to Quarries Control Act 1984, quarry means any place where quarry material or quarry mineral has been removed or is being removed, whether by excavation or otherwise, to supply material for construction purposes other than dimension stones for the construction industry.

Operational definition: Quarry is a place from where the stones, rocks and stones are being extracted and are used a resource in Kandegai Nagar, Kanchipuram district.

DISCUSSIONS ON MAIN FINDINGS

Socio-demographic condition of the respondents: According to WHO, people between the age group of 40-49 were considered to be middle-aged adults. This study has 42% of the respondents as middle-aged adults. A study on the socio-economic study of Quarry workers in Jalna district states that 26.67% of the respondents were in the age group of 40-50 (Solanke, 2017). 90% of the respondents were male who were involved in quarry work. Women also shares 10% in this profession. Considering the religion of the respondents, where 96% of the respondents were Hindus and the rest 4% were Christians. Regarding the marital status of the respondents, 88% of the respondents were married. A study on the socio-economic study of Quarry workers in Jalna district states that 97.92% (n=240) were married (Solanke, 2017). 36% of the respondents had 3 members in the house whereas 24% reported they have more than 5 members in their house.

Socio-economic condition: This reveals the socio-economic condition of the respondents where, 44% of the respondents worked for about more than 15 years. A cross analysis has been done with the years of work of the respondents and their salary. 22% of the respondents who work for about 5 to 10 years earns a sum of around 5,000 to 10,000 Rs. 20% of the respondents who has work experience for more than 15 years, earns the sum of around 5,000 to 10,000 Rs. 16% of the respondents who work for more than 15 years, earns a sum of less than 5,000 Rs. 14% of the respondents who work for around 10 to 15 years, earns a sum of around 10,000 to 15,000 Rs. Another cross analysis between the hours of work and the salary of the respondents reveals 44% of the respondents who were working for about less than 12 hours per day were earning between the range of 5000 to 10,000 Rs and 18 % of the respondents who were working between 12 to 15 hours per day were earning between the same range of 5000 to 10,000 Rs. These data reveal the approximate amount of salary the respondents receive. 98% of the respondents had the ownership of the house, where 62% of the respondents resided in a Cemented house and 38% of the respondents resided in a Kutcha kind of house.

Migration: The movement of the people from one place to another is called migration. They move for different reasons like job, shelter and any other circumstances which makes them feel they have absolutely nothing to survive in that place. 'Local employment prevents migration'. Strengthening the employment force in the local, would prevent the flow of migration to a larger extent. A study on the status of health and well-being of the Quarry workers in Tamil Nadu reveals

84.4% of the responded did not have any other livelihood opportunities and therefore were forced to work in Quarry. The study shows that 62% were migrants who moved from the district of Salem. 19% of the respondents (n=31) revealed that due to lack of livelihood opportunities, they were forced to move out from their place in search of job ultimately landing in Quarry. Another study on the socio-economic study of Quarry workers in Jalna district states that 67.92% (n=240) of the respondents were migrated where 26.99% migrated due to unemployment in their village(Solanke, 2017). These shows how when there is no local employment, it results in the increasing number of migrations.

Conditions at working place: This will explain the situation or the surroundings that is prevailing at the place of work of the respondents. Here, 50% of the respondents work between 21-25 days in a month. A study on the socio-economic condition of Quarry workers in Jalna district states that 42.25% (n=240) is working for 23 days in a month(Solanke, 2017). The payment that the respondents receives is classified into daily wages and quantity/units based, where 96% of the responded gets paid by quantity/units based and 4% of the respondent on daily basis. Considering the facilities at respondent's working place, 82% of the respondents mentioned that they do not have drinking water at the place of work, 72% mentioned that they do not have restroom, 84% mentioned that there is no resting room, 82% mentioned that there is no access to quality food and 54% mentioned that they have access to medical facilities which includes first-aid. The respondent does work under minimal facilities. 62% of the respondents said they are not paid if in case they are working for extra time, 80% of the respondents said they are not appreciated for the work done, 78% of the respondents said they trust their fellow workers at their work place, 84% of the respondents said their suggestions are not accepted by management, 76% of the respondents are not able to express their feelings freely, 86% of the respondents said their work is fairly distributed with all the workers in quarry. Also, the respondents are working without safety materials provided at their quarry site. 64% of the respondent reported that they are not provided any safety materials and work at risk. While, the remaining 36% were provided helmet, ropes, masks. On a comparative note, 64% of the respondent work with their life at risks. Considering Maslow's hierarchy of needs, the first and the foremost need is the basic need where safety, security falls under.

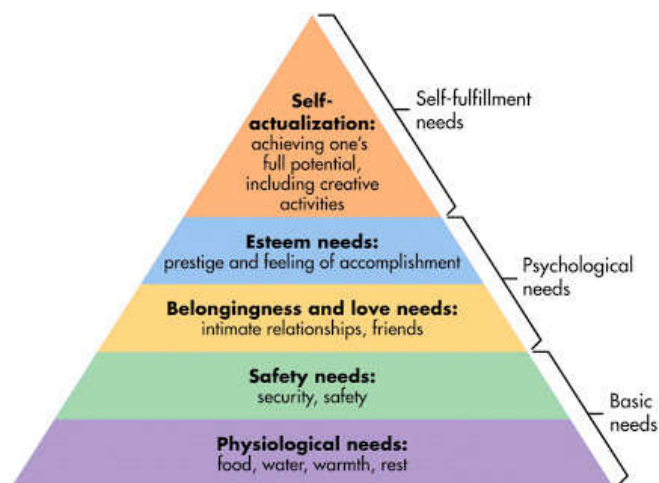


Figure 4 Maslow's hierarchy of needs

Safety falls under the basic need of an individual, but here in the study we could see that 64% of the respondents were not provided that basic need. The scenario is worse because some wrong moves might turn the situation into a serious one. Therefore, it must be ensured that the basic need is provided.

Physical health condition: Working under a hardcore situation might disturb the flow of work of the respondents in many ways. Lots of physical barriers or hinderance is faced by the respondent. The major problem that anyone could think of when working in quarry is Respiratory issues due to all the dust emissions that erupts while crushing or drilling rocks. But, the study here reveals that only 16% of the respondents said that they have respiratory issues. A study done among Quarry workers of stone crushing has revealed that respiratory problems is a major health hazard they face being dust exposed workers. The study determined the prevalence of respiratory problems and lung impairment among quarry workers and revealed that exposure of dust due to stone quarrying increases the risk of respiratory problems(A.N.Nwibo, Emmanuel Ugwuja, N.O.Nwambeke, Obiageli F Emelumadu, Lawrence Ogbonnaya, 2012). 88% of the respondents suffer from painful condition, hearing impairment, problem with their sight. Painful condition meaning the pain the respondents have in their hands, legs, back, neck and so on. Work involving the drilling of the rock, and transporting will create a significant impact with their hearing. A study on the Status of health and well-being of Quarry Workers in Tamil Nadu reveals that 24.9% had hearing issues(Enoch, 2016). 86% of the respondents has felt that their health does not help them to work effectively. Thus, their health condition does not help them to help them the way they want to. 92% of the respondent responded that they had woken up too early and not been able to get back to sleep. Therefore, there is a disturbed sleep that the respondents are facing. 92% of the responded has said that they are not been able to sleep properly. 98% of the respondent believe that working in quarry will create serious respiratory issues. Not surprisingly, every respondent does believe that they are working in a hazardous place. Because of the lack of livelihood opportunity in their native place, they are forced to moved where there is job and ultimately lands in the quarry where their life is at risk.

SUGGESTION AND CONCLUSION

This chapter will deal with the suggestion that has been put forth by the researcher followed by the conclusion.

Government

1. As there are laws in the constitution pertaining to the safety of the workers, one of the main finding that the study has found was that more than half of the respondents were not provided any safety materials. Thus, it must be made sure that the government does monitors the site regularly to ensure that there are proper safety measures provided.
2. The workers who are severely injured in the site must be given proper compensation.
3. Since there are lots of migration that has been observed from the study, the government should ensure that they strengthen the employment in each rural setting thus making them to stay in their own place to work.
4. Also, government should conduct free regular medical camp because that the worker does not need

to spend money at private institution where the study has observed that more than half of respondents were treated at private institution.

5. The government should ensure and monitor every site and made sure that they have facilities like clean drinking water, toilets, resting room for the worker since the study has observed that more than half of the respondents responded that they do not have such facilities.

NGOs

1. There should be a greater number of NGOs initiated to work from the grass root level for these quarry workers to their rights are protected and also to empower them.
2. The NGOs along with the government can ensure that they monitor they site regularly to ensure that workers are working in a safe surrounding.
3. The NGOs also should assist the family members of the workers to empower them by providing livelihood opportunities and education to children.
4. The NGOs must adopt a quarry workers community thereby providing them assistance and support through constant monitoring and implementing developmental programs to the community.

Social workers

1. The social workers should take innovative ideas to promote development in the well-being of the workers and their family members.
2. The social workers should collaborate with the NGOs for to work with the people in protecting their rights and also educating them the rights and schemes.
3. The social worker should conduct some recreational program regularly for to assist the workers with mental support.

CONCLUSION

The researcher concludes the study by summarizing that many workers are still facing tough times with their employment opportunities and thus landing up as migrants. They are not provided any safety materials before work and thus they are more vulnerable to risks. Also, their health is also in worst situations therefore enhancement has to be provided not only financially but also physically and mentally.

Implication to the Social Work Practice

Social work is a profession of helping people to help themselves. Especially, it is a field working for the development of the vulnerable community. The issues of the vulnerable community are not addressed in the first place. It is not even considered as an issue and it is put under the carpet. Social work profession brings these issues into the light that the development reaches these community from different sides. It is much evident from the study that many workers still are working in a circumstance where they are not provided basic facilities like drinking water, toilets, etc. The Mines Act 1952 states the importance and the facilities are supposed to have at the work place. Thus, through the lens of social work profession it can be practiced through raising awareness about the rights to the community. Also, through advocating for the welfare of the vulnerable community. The dignity of the labor

is preserved thereby enhancing the community through development in their rights and also in their well-being. Empowerment is one way where the community gains control, efficacy and social justice. Community's participation is an important component when considering empowerment. The community must join together for any forms of development and this can be achieved through empowerment. Empowerment in the forms of economic, social, political, psychological. These are all the empowerment that can be provided to ensure the development of the community. Networking with NGOs is also a key component to address the issues of these vulnerable communities and also in protecting their rights and dignity. The need for social workers will arise in the days to come, where number of issues arises and the of needs for developmental works also arises. Thus, social work profession is in its core period.

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