

General Status of Brick Kiln Workers in Ahmednagar District of Maharashtra

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Abstract

A research on brick kiln workers was conducted in Ahmednagar district of Maharashtra to understand the general status of these workers. In all, 120 workers were interviewed and the information related to their general status was obtained by using a questionnaire schedule. It was found that, the general status of brick kiln workers was alarming. Low income levels of workers lead them to their substandard living. Malnutrition, addiction and absence of basic education are the major problems among these workers. Provision of technical assistance, strengthening of basic amenities and improvement of income levels may enhance the general status of these brick kiln workers.

KEY WORDS: Industry, Migration, Economic Condition, Living Standard, Poverty

INTRODUCTION

The word 'brick' was originated from late middle English from middle low German, Middle Dutch 'bricke', probably; reinforced by old French 'brique', of unknown origin or 'briquette', which means a block of compressed coal dust or peat used as fuel (Kahkonen and Lintukangas, 2012). In India, the history of making bricks is almost 5,000 years old which is as old as the earliest known Indian civilization, "Indus Valley Civilization". It is actually owing to the discovery of Indus valley civilization. The people of that civilization extensively used bricks to lay complex mathematically planned cities (Thirupati, T. and Anthonisamy M. 2015). Indian brick industry is the second largest producer of brick in the world after China. India is estimated to produce more than 14,000 crores of bricks annually, mainly by adopting age-old manual traditional processes. The brick sector consumes more than 24 million tones of coal annually along with huge quantity of biomass fuel (Rajgor, et al. 2013). Bricks are an indispensable component of each and every construction activity. These are made of clay and other minerals that are processed into a workable consistency, formed to standard sizes and fixed in a kiln to make them strong, durable and attractive. Bricks are inexpensive building materials. Their low cost and structural versatility have led to their wide use for walls, floors, pavements and other structures. Because of the basic characteristics of the industry, brick kilns are always observed to be located on the outskirts of cities and towns or near places of construction activity. As the production and processing in the industry has to be done in the open, its continuance depends on climatic conditions. The work being sensitive to rainfall, the industry stops functioning during the rainy season and is therefore, seasonal in nature. Although the brick industry is several thousand years old, even today it is highly labor intensive. So far as India is concerned, the industry mostly depends on the rural migrant labor (John, J. and NasirAteeq, 1998). Brick industry in

India still remains unorganized and no official authentic data is available regarding its status (Khan, et al. 2015).

India's brick sector is characterized by traditional firing technologies; environmental pollution; reliance on manual labor and low mechanization rate; dominance of small-scale brick kilns with limited financial, technical and managerial capacity; dominance of single raw material (clay) and product (solid clay brick); and lack of institutional capacity for the development of the sector (ASSEFCWF2012). The brick kilns serve as a source of livelihood for thousands of unskilled laborers from across the country and from the neighboring country, Bangladesh. The seasonal nature of the work attracts migrant labor, many of them landless farmers (Cheruvari S.2006). Brick workers are known for poor health and poor access to health care. They are living in poor environmental conditions near brick kilns and have poor access to the health care facilities. They are at risk to various types of illnesses. It is very surprising that the first response on falling ill is to come back home. Thus, the outcome is loss of job and the earning. Work related illnesses are very common (Mehta, R. 2010) in these workers. Though, the brick industry in India is one of the oldest industries, and many scholars and researchers have stated the problems of brick workers, the issue has not been properly addressed yet. Thus, now it has become very necessary to study the general status of the brick kiln workers. The findings of the study would help draw attention of policy makers and other stake holders to take the essential steps for the overall development of the workers engaged in the brick kiln industry.

STUDY AREA

Ahmednagar, geographically the largest district of Maharashtra, is located in the mid-western part of the state. The area covered by the district is 17,410.91 sq km. and is extended between $18^{\circ} 2' N$ - $19^{\circ} 9' N$ latitudes and $73^{\circ} 9' E$ - $75^{\circ} 5' E$ longitudes. It is divided into Godavari and Bhima river basins. The northern part of the district is occupied by Godavari river basin while, the southern part is occupied by the Bhima river basin. Physiographically, the district is positioned on the Deccan Traps, with north-south stretching Western Ghats in the west. Climate of the district is hot and dry, on whole, extremely genial and is distinguished by hot summers and general dryness during most parts of the year except during the period of south-west monsoon. On an average, the district receives 501.8 mm as annual rainfall. May is the hottest while; December is the coldest month of the year. The district belongs to the Nasik Administrative division of the state, and is surrounded by the districts of Nasik, Aurangabad, Beed, Osmanabad, Solapur, Pune and Thane. It comprises of 14 tehsils, of which 13 tehsils of the east are located in the low rainfall receiving (drought prone) area of the state. These tehsils receive less than 700 mm. of rainfall.

MATERIAL AND METHODS

At least one brick kiln site from each of the fourteen tehsils is selected for the study and by using proportionate random sampling method, 120 workers from 23 brick kiln sites were interviewed. Data was obtained by using well-structured and pre-tested questionnaires. Interviews of brick kiln workers and owners were conducted for getting the information. Empirical evidences were considered while obtaining the required

information. Statistical techniques viz. mean, percentage and frequency were used to arrive at the conclusion.

RESULTS AND DISCUSSION

Pattern of migration

Brick kiln workers in the district are of two types. Some are native and others are those who migrated from other states. It was found that, the majority of workers 76 (63%) were immigrants. They had come from the states of Madhya Pradesh, Uttar Pradesh, Bihar and Karnataka. Most of them have reached here through labor contractors while some reached with their family and friends. Higher rate of wages in this area is the major factor responsible for immigration of these workers. December to May is the brick making period in India. However, in the months of December, January and February, temperature remains very low in the northern states and adversely affects the efficiency of workers. Thus, the workers migrate towards Maharashtra.

Food and health

The evaluation of nutrition informations shows that, the workers have poor knowledge of health care and nutrition. Thus, they are not health and food cautious. Poverty and inaccessibility to public distribution system, particularly in case of immigrants, does not allow them to spend sufficient money on food. Though the workers in the brick fields are a combination of local and immigrants, their dietary habits are almost same. They eat maize, rice, wheat, pulses and vegetables. Their diet is not balanced. It was found that, the 69 (58%) workers were vegetarian. They rarely used milk and meat as their food.

Table 1: Distribution of workers according to their health problem

Health Problem (Multiple response)	Number of workers (n=120) (%)
Musculoskeletal	19 (16%)
Weakness	35 (29%)
Other (skin, eye, ENT)	17 (14%)
Respiratory Problems	12 (10%)
None	37 (31%)

Brick making is an accident-prone work and has many other occupational hazards. Inhalation of smoke and ambient dust particles, carrying bricks for long hours create certain health issues among workers. They had no easy access to health care facilities. Table 1 shows that, 19 (16%) workers complained about the musculoskeletal problem. This could be explained by the fact that these workers had to carry bricks for a long time and thus, suffer from such problem. As they were exposed to gases like carbon monoxide, some of them were suffered from headache. It was found that, 35 (29%) workers suffered from weakness whereas 17 (14%) workers suffered from other problems of skin, eyes and ENT. Some of the workers, 12 (10%) complained about

respiratory problems. Due to their poor economic conditions, the workers could not buy sufficient amount of good quality food. Thus, majority of them, particularly women and children were malnourished.

Water

Potable water is the basic need of a human being. It was observed that, only native workers were having tap water facility in their houses. Workers those who stayed at sites of brick kiln, dug wells and public tanks, hand pumps and bore wells were the sources of water for them. In northern part of the district, ground water has become saline due to over irrigation. Workers, particularly in southern part of the district described their source of water was far away from their houses. Thus, it was clear that majority of the migrants were experiencing hardships due to uncertainty of drinking water.

Housing

So far as housing is concern, most of the brick kiln workers live in temporary houses built at brick kiln sites. These small houses are made up of brick walls with a tin sheet roof at a height of only 8 feet and a room space of only 50 to 60 sq. feet. These houses do not offer adequate protection to the workers and their personal belongings. Houses are not provided with the basic facilities like bathrooms and toilets. Altogether 26 respondents were found living with no electricity connection. Inadequate ventilation and smoke of brick kilns create unhygienic conditions.

Demographic Characteristics

Out of 120 interviewed workers, 78 (65%) were male and 42 (35%) were female. Ages of these respondents ranged between 18 and 49 years. Most 48 (40%) workers were aged between 23 and 28 years, Ages of 32 (27%) were found between 28 and 33 years, 23 (19%) were having their age above 33 years, while rest 17 (14%) were having their age between 18 and 23 years (Table 2).

Table 2: Demographic characteristics of the brick workers

Age	Number of workers (n=120) (%)
>33 years	23 (19%)
28-33	32 (27%)
23-28	48 (40%)
18-23	17 (14%)
Gender	
78 (65%)	Male
42 (35%)	Female
Education	
Illiterate	26 (22%)
Primary	46 (38%)
High school	39 (33%)
H.S.C. and above	09 (07%)

In all 79 (66%) workers were married. Majority i.e.76 (63%) of workers was immigrants. They had come from other states of the country. Every year, they work in this district for 6 months; from December to May.

Education

The educational status of the workers was found to be very poor. Table 2 depicts that, altogether 26 (22%) workers were not even enrolled in primary school. Most of them 111 (97%) had not completed their education up to twelve standard. In all 39 (33%) had completed their education up to high school level and 46 (38%) had completed up to primary level. Only 9 (7%) of them had passed the examination of higher secondary certificate. It was found that the percentage of female literacy (32%) was very low. Nonetheless, the alarming fact was that, the children of school going age were deprived of education and were engaged in helping their families to earn for their livelihood.

Economic Condition

Brick kiln workers are unorganized, unskilled and poorly educated. They often change their place of work and employer. As they don't have union, they do not raise their demands. Thus, they have to bear with low wages. On an average, they are paid Rs. 400 for making 1000 breaks. A couple can make around 1500 breaks in a day and can earn up to 600 rupees. It is hardly possible for them to meet up their daily expenses and save for their livelihood during the next half of the year.

Addiction

Addiction is a habit in which a person ingests a substance like alcohol or nicotine that can be pleasurable but the continuation of which becomes compulsive and interferes with ordinary responsibilities like work, relationships or health. It was found that, the majority of the workers were addict.

Table 3: Distribution of workers according to addiction

Tobacco and tobacco products Chewing	Number of workers (n=120) (%)
Yes	93 (78%)
No	27 (22%)
Smoking	
Yes	31 (26%)
No	89 (74%)
Alcohol	
Yes	43 (36%)
No	77 (64%)
Reasons for addiction	
To relax mind	21 (18%)
To work at fast pace	16 (13%)
Family problem	29 (24%)
Peer pressure	11 (09%)
Cannot answer	31 (26%)
None	12 (10%)

Table 3 reveals that, the most 93 (78%) workers answered that; they chew tobacco and its products. In all 89 (74%) workers replied that, they never smoked, While 43 (36%) men were found addict to alcohol. Smoking and drinking was not found among women. For relaxation of mind, to work at fast pace, due to family issues and peer pressure were the common causes of addiction. Altogether 31 (26%) workers could not give the reason for why they were addicted.

Energy use

Since per capita energy consumption is accepted as one of the criterion to understand about standard of living, an attempt had been made to know the level of energy use by the workers. The study revealed that, due to the low income, the workers could not afford electric appliances and auto mobiles. Thus, the per capita energy consumption was found to be very low.

CONCLUSION

The study concludes that, the general status of brick kiln workers in Ahmednagar district of Maharashtra is very poor. They lack basic amenities like proper food and shelter. The literacy rate amongst these workers is low. They are getting addicted and found caught in vicious cycle of various problems.

SUGGESTIONS

As the living standard of brick kiln workers is poor, it is suggested that, the concern authorities and policy makers must pay special attention to improve upon their economic condition so that; the workers can cope up with their problems. Technical assistance in the process of brick making may reduce the hardship of these workers and strengthen their working capacity. Coal with high amount of ash and sulfur being used as a fuel should be avoided to overcome the problem of air pollution. Workers must be provided with the health facilities and protection of life insurance. Education facilities must be provided to the Children and attention should be given to improve the housing condition of these workers.

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