

## CHALLENGES AND OPPORTUNITIES IN BRICK KILN INDUSTRY

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### ABSTRACT

*The brick kilns serve as a source of livelihood for thousands of unskilled migrant labourers. The seasonal nature of the work attracts migrant labour from neighboring Odisha state, every year near to one Lakh labour that are marginal and landless farmers migrate to Andhra Pradesh in search of seasonal job. These laborers migrate along with the families. Each unit consists of 15-20 members comprising of adults and children, and all of them are engaged in brick kiln work. Brick kiln workers always remain under heavy work pressure to work and produce more number of bricks during peak seasons with limited facilities, resources and management skills.*

*The main objectives of the study are 1) To understand the socio economic conditions of brick kiln labourer families around Hyderabad. 2) To Analyse the nature of work and payment system in brick kiln workers. 3) To estimate the loss of wages and its possible contribution to family.*

*The present study is confined to the suburban areas of Hyderabad metropolitan city. The study focused on the following research methods. Community based cross sectional and observational study is conducted in the selected brick kilns of Hyderabad followed by The household visits and Focus group discussions with key informants like sardars and brick kiln owners.*

*In the present study it is found that all workers in brick kilns are subjected to living in extreme conditions of poverty with an average income of under \$2 per day. Multiple factors account for these extreme conditions. Laborers migrate for a period of 8-9 months in a year and go back to their respective places. During the entire period of stay they are not allowed to take work- holiday neither they are paid during the work -holiday period of 3-4 months nor they are covered under any existing national labor laws. Minimum wages are not followed and no care is provided to these workers by the owners of the brick kilns. Due to extreme work conditions, some of the workers fall sick and in such cases no medical care is provided to these members.*

## INTRODUCTION

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The history of mud brick manufacturing dates back to our ancient civilization. The brick kilns serve as a source of livelihood for thousands of unskilled migrant labourers. The seasonal nature of the work attracts migrant labour from neighbouring Odisha state, every year near to one lakh labour that are marginal and landless farmers migrate to Andhra Pradesh and Telangana in search of seasonal job. These labourers migrate along with the families. Each unit consists of 15-20 members comprising of adults and children, and all of them are engaged in brick kiln work. Brick kiln workers always remain under heavy work pressure to work and produce more number of bricks during peak seasons with limited facilities, resources and management skills.

## OBJECTIVES OF THE STUDY

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The main objectives of the study are

- To understand the socio economic conditions of brick kiln labourer families around Hyderabad.
- To analyze the nature of work and payment system in brick kiln workers.
- To estimate the loss of wages and its impact on the family.

## METHODOLOGY OF THE STUDY

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The present study focused on the following research methods. Community based cross sectional and observational study, it is conducted in the selected brick kilns situated around Hyderabad of Rangareddy district. Based on the purposive random sampling

method, and self administered direct questionnaire was used to collect the information as primary data. The sample size of the study is 148 brick kilns, followed by the household visits and focus group discussions with key informants like munim/munshi of the kiln and brick kiln owners.

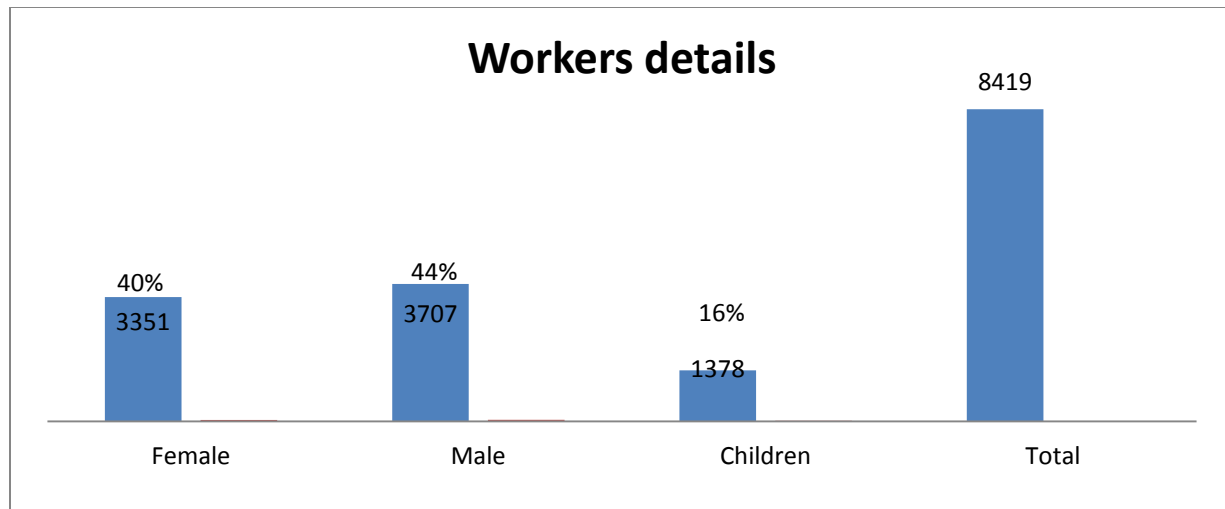
### I. **Socio economic conditions of brick kiln laborers:**

Brick-making is one of the most ancient industries. The craft is as old as the Indus Valley Civilization (2500 – 1500 BC). Brick kiln workers are semiskilled and unskilled workers which includes moulders or the lifters. These labourers were contacted by the employers for their recruitment. Illiteracy was common feature among them. Working conditions were far from satisfactory with unsanitary surroundings, dusty environment, excessive temperature in May and June and excessive cold in December and January, lack of lighting and the long working hours. The one-room houses provided by the employer were temporary shelters (Kachcha).

## WORKERS DETAILS

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During the assessment, it is found that 8419 individuals comprising of 3351 females, 3707 men and 1378 children found working in 148 brick kilns situated in Rangareddy district. Number of children counted includes all the children till the age of 14 years. All these migrant workers have come from western districts of Odisha state.



Brick making is collective work and all the members of all age groups in the family work in brick kilns, working long hours and undertaking arduous work ranging from mixing loading and moulding.

## STEPS INVOLVED IN BRICK MAKING

1. **Material Procurement:** Clay is primary raw material for mud bricks. Selection of right raw material is the key for business. The clay is mined and stored in the open. This makes the clay soft and removes unwanted oxides.
2. **Tempering:** This clay is then mixed with water to get the right consistency for moulding. Earlier mixing used to be done manually with hands and feet. Sometimes and in certain areas, animal driven pug mills are used. In present day context around Hyderabad, tempering is done mechanically to prepare a fine mud paste suitable for moulding. This is a crucial step and the quality of bricks depends on this. This 'dough' is then formed into balls or lumps of clay. The chief of the team then forms the lumps of clay into bricks using a mould. A team of 4-5 people can make 2000- 3000 bricks per day. The wage rate is Rs 200-250 per thousand bricks
3. **Moulding:** A lump of fine mixed mud paste is taken, rolled in burnt husk and slapped into the mould made of polymer, poly propylene or poly

ethylene material . Burnt husk is used so the brick does not stick to the mould.

This stage involves transporting formed bricks from the moulding area to drying area the distance between the two is around 25-30 metres. The wage rate for this work is Rs 100-120 per thousand bricks. Workers walk fast during this stage as the wage is related to the number of bricks transported. Apart from women, children are also involved in both the stages, wherein they work as head loaders, carrying from six to eight to twelve bricks at a time carrying 35- 49 kilograms on head. Since both male and female members of the migrating families can engage in the brick manufacturing process, it is common for them to bring their children along to the destination.

4. **Drying:** The mould is emptied onto the drying area, where the bricks are arranged in a herring bone pattern to dry in the sun. Every two days they are turned over to facilitate uniform drying and prevent warping. After two weeks they are ready to be burnt.
5. **Firing:** The green bricks are arranged in a kiln and insulation is provided with a mud pack. Fire holes left to ignite the kiln are later sealed to keep the heat inside. This is maintained for a week. Firing like other operations also depends

on the knowledge and experience of the brick maker.

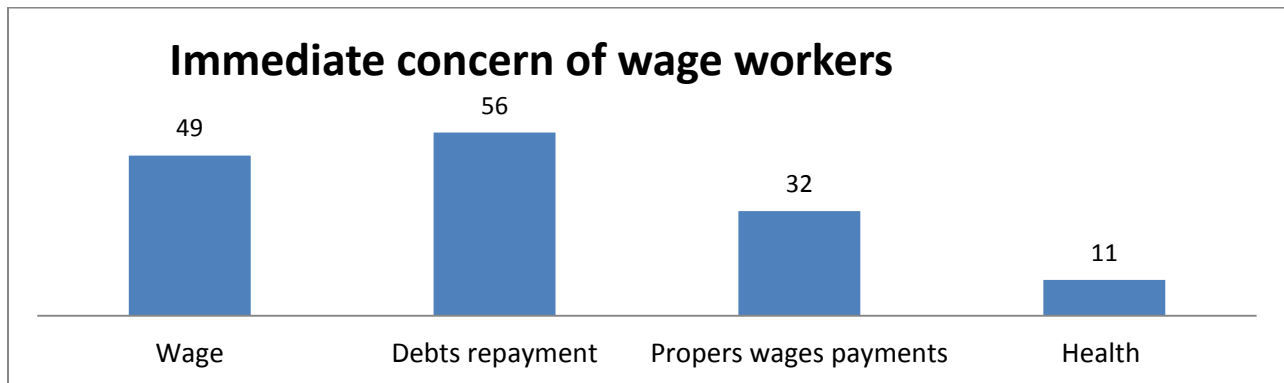
- 6. **Arranging bricks for firing:** This is considered to be a skilled task. Experienced male workers are usually employed for this task. Workers take the bricks from the head-loaders and arrange them in an organised manner. After they are arranged they are covered and fired. The wage rate is Rs. 6000-7000 per 1,00,000 bricks.
- 7. **Sorting:** After the kiln is disassembled, the bricks are sorted according to colour. Colour is an

indication of the level of burning. Over burnt bricks are used for paving or covering the kiln while slightly under burnt bricks are used for building inner walls or burnt once again in the next kiln.

Brick making season for brick kiln workers is from November to May. Brick manufacturing usually begins every year after Deepawali, in the month of November-December, and continues till before the onset of the monsoon in June. Each brick preparation cycle usually takes around 16-30 days.

**Some Important information collected from the brick kiln workers by asking through direct questionnaire method:**

**As a wage worker, what is your major and immediate concern?**

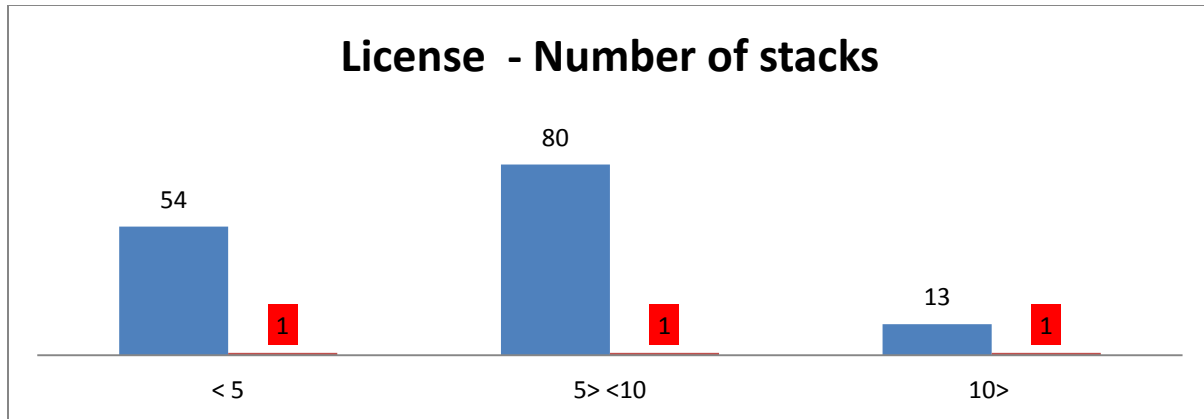


It is evident from the data gathered during the study about 81 respondents (33%) are seriously concerned about the matters related to wages. Among them 49 individuals are worried about what wage rate they are going to get during the current season. Will there be any increase? Or what it going to be? Similarly, another 32 members are worried about whether they would be getting any amount as wages or not?

In general the wage rate is fixed by the employers during the end of the season.

**LICENSE - NUMBER OF STACKS**

It is observed that across all the 148 kiln sites visited, the team found that all kiln owners who have obtained licence were operating more than one kiln in the season. Around 80 kilns are having 5 – 10 stacks of 2 – 3 lakh capacity each.



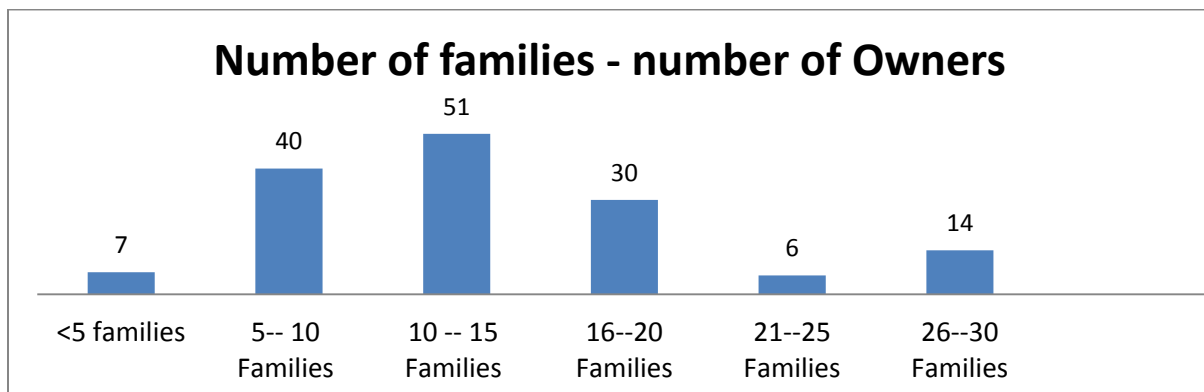
This phenomenon triggers various aspects. The study team raises following key concerns pertaining to the license and operational aspects of brick kilns in the state.

- ❖ No clear definition of brick kiln.
- ❖ Lack of properly defined operational guidelines for brick kiln industry
- ❖ Is license is given based on number of employees or based on production quantities?
- ❖ Poor and inconsistent implementation and monitoring mechanism

❖ This kind of unrestricted brick making process creating and harbouring modern times bonded labour

### ENGAGING WORKERS FAMILIES

Among all 148 kilns visited, 51 kilns were holding 10-15 families in each kiln. 40 kilns were harbouring 5-10 families in each kiln. Similarly, 30 kilns were having 16-20 families in each kiln. There is direct relationship between number of families and size of a kiln, production capacities.



### ARE YOU COMFORTABLE WITH THE HOUSING FACILITY PROVIDED?

Out of 148 respondents, only 18 have said that they are contended about the quality of housing facilities provided at the work site. Rest of 130 members have

expressed their discomfort about the housing facilities. When we tried to understand what really makes them discontent about the housing facility, we have observed that their homes are untidy and not clean. It is not because they do not want to keep them clean but they cannot afford to due to lack of

time. Whatever the little time they get during the work breaks, they utilize it to reenergize and recoup aching bodies.

Lack of awareness about sanitation also adds to this issue. However, following responses have surfaced during the dialogue.

- Lack of ownership
- Temporary and makeshift structures
- Why should we invest into this? Because any way they will be dismantled after the season.

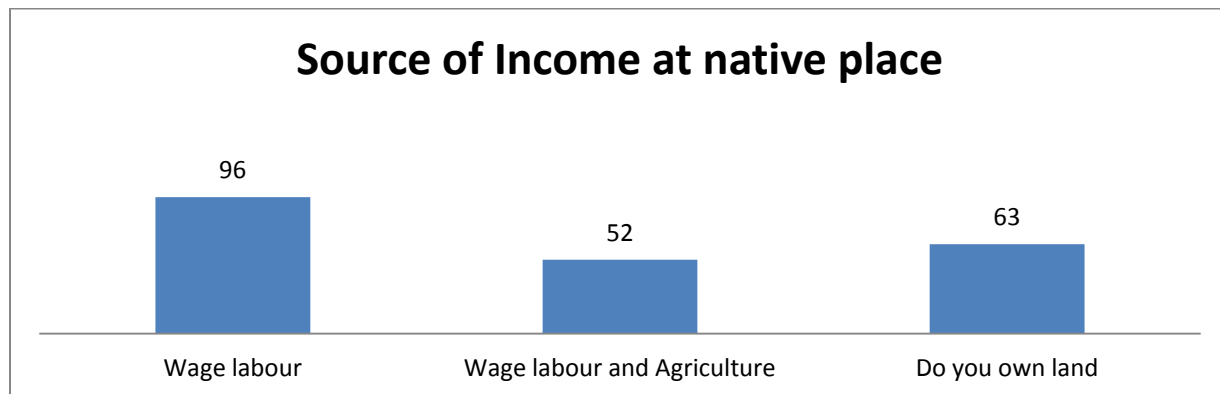
## DO YOU HAVE ACCESS TO SUFFICIENT AND GOOD QUALITY WATER?

132 respondents (92%) have said they have access to good quality drinking water and 12 (8%) respondents have said they do not have access to good water. Here the catch is respondents are not very clear about what “*Good quality water*” means in scientific manner and neither we have tried to explain basics of water chemistry.

Assuming that bore water is relatively safe to drink, we have probed into the context to understand the situation. The fact is that all the brick kilns are having bore wells and drawing drinking water from same bore wells.

Here the key aspect is that, lack of awareness about hygiene practise. People are less informed about sanitation and hygiene practices.

### What is your source of income at native place?



Out of 148 respondents, 96 respondents have said wage labour is primary source of income at the native place. 52 respondents have said that both wage labour and agriculture is the source of income. 63 respondents out of 148 have said they own land as well. However they are engaged in rain fed agriculture.

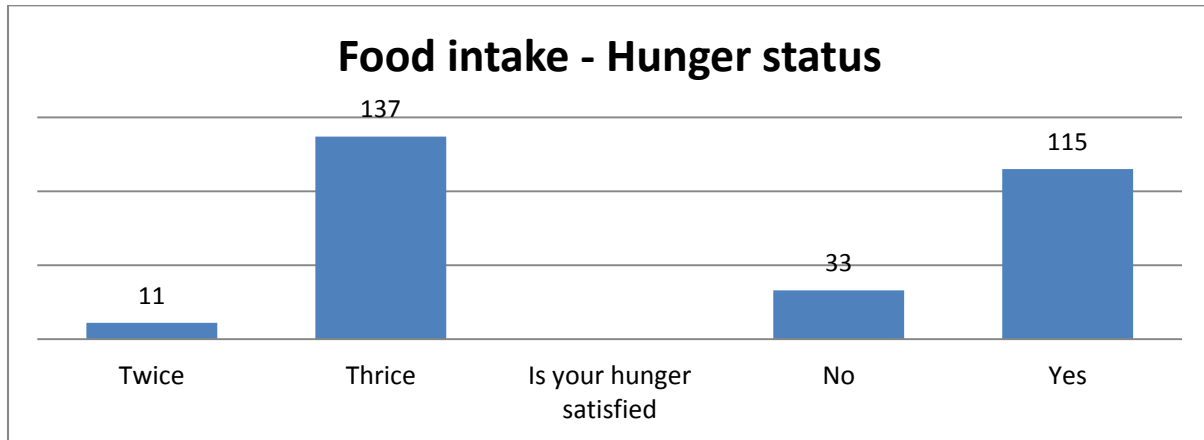
## HOW MANY TIMES YOU EAT IN A DAY

Food consumption and food habits are quite different from place to place and region to region. Though the staple food is the same rice, significant variation is seen across the geographical regions.

Food habits are also associated with the culture and social proactive.

Intestines, legs and head of chicken are the non-vegetarian delicacy for majority of brick kiln workers. Though the habit is associated with the culture and food patterns, it is a clear indication of affordability of food prices. Brick kiln workers prefer to consume those items of chicken otherwise which are discarded.

Majority of the respondents have said that they are able to access food thrice a day. Number of times accessing food cannot guarantee good health. Brick kiln workers are eating three times in day and still all of them are “flat bellied” none of them are fat bellied. They eat three times in a day and still children are chronically malnourished and women are severely anaemic.

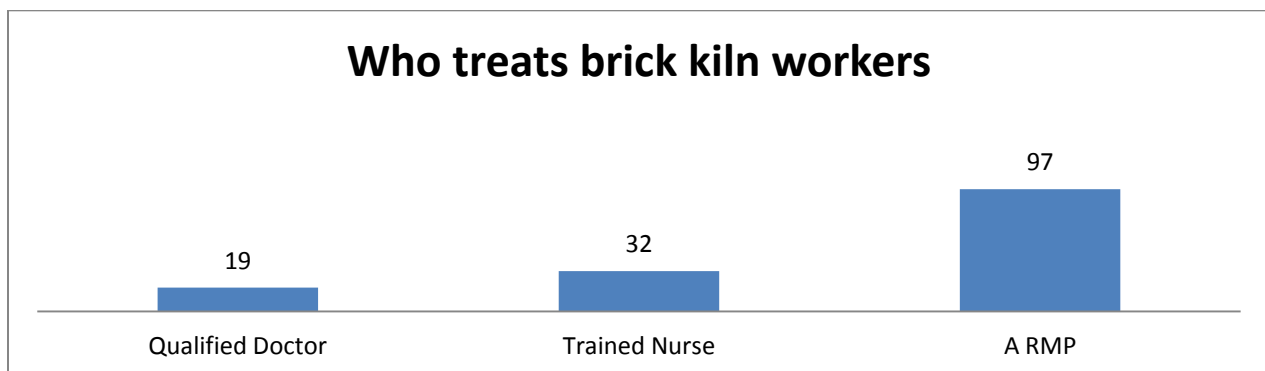


### WHO GENERALLY TREATS YOU?

Employers argue that they taking very good care of workers. Some of the owners have said that they have incurred an amount of 60,000 to provide medical care to a worker. Owners concern about the health of the workers is connected with the economic interest of the owner. The better the

health of the worker is directly related to the production and economic returns.

In pursuit of economic interests, the owners are providing basic health services but none of the owners are concerned to provide better and qualitative health services to the workers. This can be established through the following chart.



Only 19 members out of 148 had an opportunity to be treated by a qualified and trained doctor. Other 32 members were treated by a trained nurse. On the

other hand 97 individuals (66%) were treated by a local practitioner (Quack) who is neither trained nor qualified to provide treatment.

Interesting fact is that, Government hospitals are situated within a radius of 5 Kms. Still none of the owner approaches government hospital. All these government hospitals are 24 x7 PHCs or CHCs and tertiary care hospitals. Owner never venture to step into these premises stating that doctors will not be available. The same owners upon the advice of local quack, are willing to travel about 40-50 kilometres to reach a private corporate hospital

## **NATURE OF WORK AND PAYMENT SYSTEM IN BRICK KILN:**

The study found that 15-16 working hours in a day. The advance amounts per set according to this study varied between Rs.15000 to Rs.25,000. Majority of the labourers engaged in brick kiln industry were from the Scheduled Castes/ Tribes. There were no fixed hours of work as such. Most of the workers, being piece-rated, worked according to their convenience. They usually started work early in the morning and after taking rest in the noon hours again come to work sites in the afternoon and continued working till dusk. Majority of them are illiterate. However, it is also observed that the younger generations are semi – literates.

Washing and bathing facilities are provided in few places, toilets are constructed but not in use either

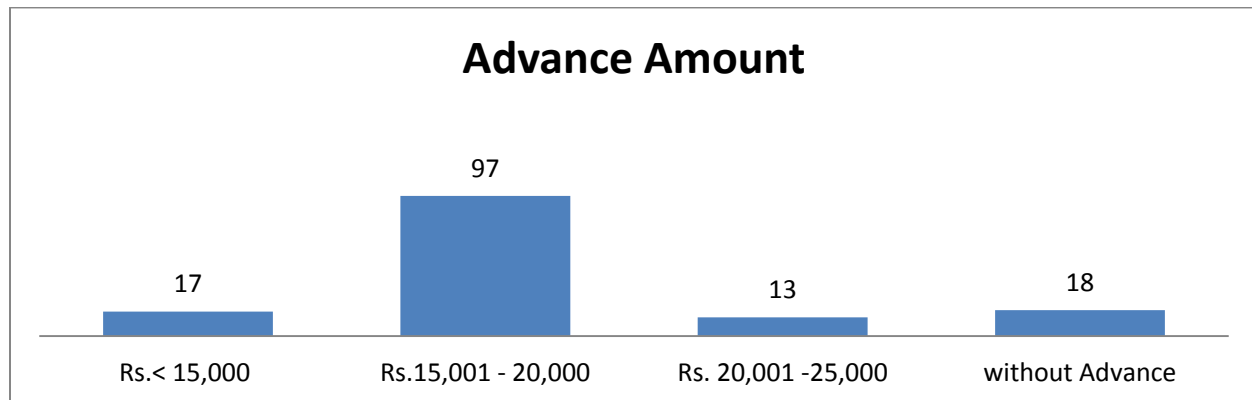
lack of water facility or lack of practice. Rest shelters, crèches are not provided. Systemic medical care is not provided except symptomatic treatment to the workers engaged in the brick kilns.

Urban growth and rapid urbanization has created the demand for bricks and has given thrust to the brick kiln industry. Hyderabad being a mega city and has always set demand for bricks for construction. It was observed that there is increase in number of Kilns in periodic intervals after every bumper season in construction sector.

## **PRESENCE OF MIDDLEMEN**

Across the 148 kilns visited, except 18 workers, all others have come to work with taking advance amount. This phenomenon indicates the importance of middlemen or Sardar's presence in the industry. Mostly these sardars are invisible and very strong presence in terms of Economic power and influencing capacity. These sardars comes into picture rarely Once at the time of taking advances from the kiln owners and the second time for collecting commission of 3-4% on the production volumes. The advance amount ranges from 15-25 Thousand per head paid at once during the time of "Nuakai" festive season.



**Advance Amount to workers:**

The advance amount ranges anywhere between Rs. 15,000 to Rs. 25,000. The price is fixed in mutual terms mostly between the employer and the Sardar. Sometimes the worker also comes into the picture. However in most of the circumstances, the worker has to listen to the Sardar.

The study team also spotted that about 18 respondents who have come to work without taking any advance amount. It is found that the bunch of these 18 individuals working in different places have following few things in common.

- ❖ All these individuals are well articulate and well spoken and educated than others.
- ❖ All of them have direct contacts with the owners. The study team also found that some of these individuals are having contact details and direct access to multiple owners than just present employer.
- ❖ Majority of these individuals are multi tasking people.

The work within the brick kiln is collective work of the family or "Pathri". In case of disputes, workers settle their disputes or issues by going to the munim , or jamadar mostly. In case issue does not get resolved, the owners come into picture. Most workers were unaware of any workers organization or union and the few who knew of a union were

suspicious of it. Nature of work in Brick kilns is a tedious and physically exhausting. Unlike other sectors daily wage system, Piece meal rate is implied in brick kilns. The system of work is based on a piece rate basis. Wages are paid on the basis per every 1000 bricks made.

Brick-making work is carried out by a team of two workers who can be a husband-wife, father-son, brother-sister or the like. The study also explains the baking and transporting operations in the kilns and underlines that the work in brick kilns is very hard. The working conditions are harsh. The process of making a brick has not changed much over the centuries or across geographies. Interestingly, unlike others, brick kiln workers have two shifts in a day. The first spell of work starts at early in the morning and the second spell begins during the evening time and continues till late night.

It is observed that brick kiln work is spread into two shifts per day, the workers take work break in two spells during the day. They put on around 12-13 hours of work every day and take a break of 9-11 hours in two spells. This break includes sleep time and time required for other things and daily routines.

	Starting the work	Closing the work	Number of workers	shift work hours	Total Work hours
SHIFT –I	AM				15- 16 hours per day
	03:00:00	11:00:00	5	08:00:00	
	04:00:00	12:00:00	15	08:00:00	
	05:00:00	13:00:00	65	08:00:00	
	06:00:00	15:00:00	63	09:00:00	
SHIFT –II	PM				
	03:00:00	10:00:00	37	07:00:00	
	04:00:00	11:00:00	77	07:00:00	
	05:00:00	12:00:00	31	07:00:00	
	06:00:00	01:00:00	3	07:00:00	

## HARASSMENT/EXPLOITATION

In search of seasonal employment, thousands of people along with their families move to Southern states from Odisha. Seasonal migration phenomenon is a regular feature that happens every year. With having limited number of general compartments in trains and thousands of Odisha borne labour to travel might look like an adventure for an enthusiastic but it is a “trail of torture” from a humanitarian point of view.

Having many hidden eyes closely watching the exodus for an opportunity, the journey to workplace from source location is a cumbersome experience. 101 out of 148 respondents have said they have faced harassment mostly in the form of extortion during the transit journey.

We have posed the question “Do you or your family members experience any harassment/exploitation from the owner”?

Out of 148 respondents, 141 respondents have clearly said that owners bother workers much for extra work and more production. 35

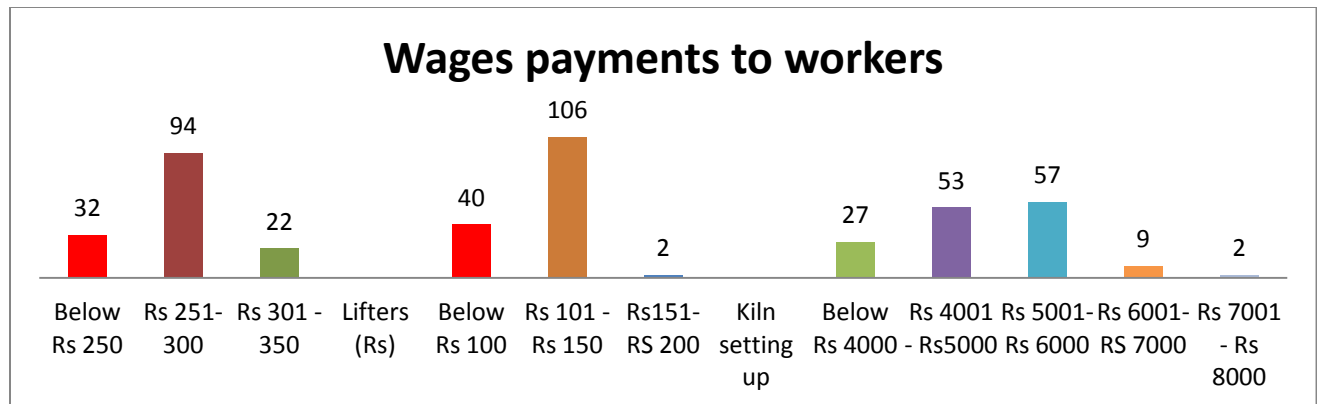
respondents have said that owners physically harass workers for extracting work.

During the first instance, majority of the workers have said they do not face any kind of harassment while working in the kiln. This is due to, because various people understand the term “harassment” in various ways.

Some workers do not treat slandering and abusing and sometimes slapping by the kiln owners is very common and regular and hence they do not treat it as harassment.

## WAGE PAYMENTS TO THE WORKERS

There are three categories of workers in the kiln. The first moulders, Lifters and the kiln firemen. All these three categories of workers have different basis for wage calculations. Moulders and lifters wage is based on making or lifting 1000 bricks. Whereas wages for kiln firemen is calculated for every 1,00,000 or sometimes a lump sum amount irrespective of number of bricks.



Prescribed wage rate for making 1000 bricks is Rs 396/- and Rs 262/- for lifting 1000 bricks.

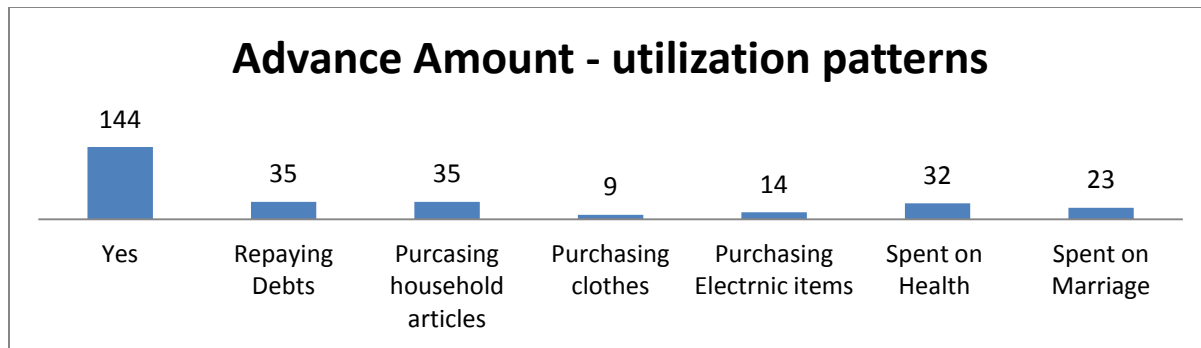
- The fact is that none of the employers are paying wages as per the prescribed wage rate
- 32 kiln owners are paying a minimum of Rs 250/- per thousand bricks.
- 94 owners are paying up to Rs 300/- per one thousand bricks.
- Only 22 owners are paying up to Rs 350/- per every thousand bricks.
- On the other hand only Two owners are paying wages up to Rs 200/- for lifting every 1000 bricks.

Actual wages per piece meal rate is decided by the lobby of the owners and their association. Owners have a clear and vehement argument to state that what they are (under)paying to the workers is quite right and justified. This is a clear indication to depict the condition of strong legislation and poor implementation mechanism.

## LOSS OF WAGES AND ITS IMPACT ON THE FAMILY.

Usually, an entire family is involved in brick production and they get Rs 250-300 for 1,000 bricks against prescribed minimum wage of Rs 396 for every 1000 bricks violating their rights as the labourers are underpaid and exploited. The labourers become bonded after they take advance. They are harassed. There is no question of choice of work for labour. Workers are physically tortured by the employer if they wish to leave their job. Even their payments are stopped, making it hard for an entire family to survive,

The workers in the brick industry are subjected to extreme working conditions and poor remuneration. Currently in India, brick manufacturing is a labour-intensive sector, with crude techniques causing considerable worker drudgery. As well as during the manual mixing of fly ash and clay and due to the open dumping and storage of fly ash. Transportation of green and red bricks is done by a head load of 9 to 12 kgs causing health problems, especially in women. Even though the brick workers are exposed to these occupational hazards, coverage under any sort of insurance or medical facilities is virtually unheard of.



The study team has posed an open ended question to the respondents about the utilization patterns. The responses received from 144 respondents revealed interesting aspects. For majority of the respondents, repaying debts, building the home like purchasing household items is a priority. Similarly, spending on health care and treatment and Social issues like festivals, marriages carry more or equal importance. Across the 148 kilns visited, production of bricks are estimated to be 11,10,00,000 or 1,11,000 thousand bricks. While estimating the figures we have taken an average number of 2,50,000 bricks per kiln.

In terms of payment, a total of Rs. 2,99,70,000 paid as wages including advances and weekly expenditure or weekly food allowance. The wages is calculated basing on the average wage figures of Rs. 270 per 1000 bricks derived from the field observations. Keeping minimum prescribed wage of rupees Rs 396/ - for 1000 bricks, it is estimated that Rs. 4,39,56,000 were supposed to be paid as wages. Where are only Rs. 2,99,70,000 ( 68.18% ) paid as wages. Workers have lost a sum of Rs.1,39,86,000 (31.8%) as a result of under wage payment.

Since they are not on the payrolls of the brick kiln owner, they are not covered under the current labour laws, e.g. Minimum Wages Act. The work force is paid on basis of quantum of work and against completion of certain tasks such as moulding of 1000 bricks, transportation of 1000 bricks etc. The seasonal nature of brick production generates employment for a limited period of six - seven months in a year. Majority of the workforce has no option, but to engage as labourers (generally as

agricultural labourers) for the rest of the year. Minimum wages are not followed and no care is provided to these workers by the owners of the brick kilns. Due to extreme work conditions, some of the workers fall sick and in such cases no medical care is provided to these members and some are died also.

## CHALLENGES AND OPPORTUNITIES

- With an average consumption of 18 tons of coal per 100,000 bricks, in other words, each brick consumes 5.5 kgs of coal or firewood. This is slightly higher than the actual weight of the brick. Brick kiln owners of Rangareddy district were so bothered about increasing prices of raw materials for brick industry. Day by day raw materials availability is diminishing.
- The workers in the brick kiln industry are subjected to extreme working conditions and poor remuneration. Brick manufacturing is a labour intensive work often associated with crude techniques.
- Having intensive physical work associated with unsafe working conditions, extended working hours and lack of suitable facilities. The work in brick kiln is far away from "decent work".
- Poor working conditions and living conditions without proper access to safe drinking water and adequate sanitation

remains a major challenge in brick kiln sector.

- In the brick sector, labour is brought in by giving advance through a contractor known as sardar. The advance giving system treating them as bonded labourers.
- Brick kiln workers are not covered under social security schemes such as MGNREGA, PDS, and other welfare schemes.

## CONCLUSION

In the present study it is found that all workers in brick kilns are subjected to living in extreme conditions of poverty with an average income of under \$2 per day. Multiple factors account for these extreme conditions. Labourers migrate for a period of 8-9 months in a year and go back to their respective places. During the entire period of stay they are not allowed to take work- holiday neither they are paid during the work -holiday period of 3-4 months nor they are covered under any existing national labour laws. Minimum wages are not followed and no care is provided to these workers by the owners of the brick kilns. Due to extreme work conditions, some of the workers fall sick and in such cases no medical care is provided to these members.

## POLICY OPTIONS

1. A comprehensive piece of legislation is to be enacted at the national level to safeguard the legitimate interest of the workers in the informal sector
2. Minimum facility are to be living accommodation provided to the migrant workers including basic health facilities protected drinking water, healthy Crèches for the infants
3. A corpus fund is to be setup to meet the exigencies. Advance payment can be made to the workers out of this fund.
4. A system of middle men is to be dispensed with completely. Hiring of the migrant

workers is to be done by the owner of the brick kiln industry directly. Negotiations with the workers by the owner or vice versa are to be done in the presence of reputed NGOs and higher level official of labour department.

5. Above all, there is to be a change with the attitude of the management toward the workers, increased awareness among the workers about their rights and an effective civil society- are the sinequanon to end the exploitation of migrant workers.
6. The government of Odisha and Telangana State should liase to ensure that the interest of the brick kiln industry and the migrant workers.

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