

Brick Industry in Bihar: An Overview

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ABSTRACT

In an economy like India which is growing very rapidly, the construction sector plays a very important role. Brick is one of the most important construction materials in India which is used almost in every structure and in large amount. Though the brick sector is one of the unorganised or informal sectors in India, but it plays a significant role in employment and Income generation. As almost 90% of the workers in India are employed in the informal sector, brick industry remains one of the largest employers of unskilled labourers and provide them with the means of living their life. It also provides with some revenue to the government in the form of fees, taxes etc.

Keywords: Brick Industry, Employment, Income, Revenue

Introduction

Bricks are a fundamental building material which are essential for construction of residential and commercial structures across the world. In India also it is being used for hundreds of years, but its composition, structure and production technology keeps on changing. There are many types of Bricks such as Sun-dried Bricks, Burnt clay Bricks, Fly ash Bricks, Concrete Bricks etc. Also, there are different methods of production or different types of Kilns such as: Bull's Trench Kilns, Fixed Chimney Kilns, Zigzag Kilns, Vertical Shaft Brick Kilns, Hoffman Kilns etc. Brick industry in India is mainly Labour Intensive, as the production of brick requires a large number of labours. Since India is also one of the most populous country so labour is available in large quantity and at cheaper rates. This is one of the most important factors of growth of this Industry, the brick manufacturing units are mainly located in rural or sub-urban areas where they are a very important source of employment.

The main motive of this article is to give a brief description of the Brick Industry in Bihar and analyse its role in employment, income and revenue generation

in the State. This is mainly a descriptive study based solely on the secondary data available through different sources and analysing them.

Review of Literature:

Amit Kumar Singh (2012) conducted a baseline study on Status of Brick sector in Bihar for Development Alternatives, the study shows that there are more than 5,700 authorised Brick Kilns in Bihar which produces around 17 billion bricks per year. This sector is growing at the rate of 9%, but still continues to use the traditional technology, the Fixed Chimney Bulls Trench Kiln. This technology uses more resource and energy as compared to newer technologies and also produces more pollution. The main fuel used here is coal, on an average the coal uses is 20-25 tons/lakh bricks produced. These coals (4 million tons) when burnt produces around 12 million tons of CO₂ and high level of SPM. The main raw material used is Soil which is 16,500,000m³ per year, 90% of which is taken from agricultural land and only 10% from river bed. There is an immediate need for adoption of alternate technologies like VSBK, High Draught and Fly Ash.

Sunita Kumari (2018), in her Article on Neobondage of Brick Kiln workers in Bihar writes that despite the implementation of Bonded Labour System (Abolition) Act 1976, debt bondage is a very common phenomenon in Brick industry, as the workers are both poor and illiterate, they are forced to take advance money and fall into the trap. The study shows that about 20% of the workers had taken advance money from their employer and hence they need to work there in the coming season at existing wage rates. The main purpose of borrowing money is medical expenses (35% of respondents), Marriage or other social ceremony (25%) and for Household consumption (15%). It was also seen that mainly those workers borrowed funds who had no agricultural lands or those who do not possess the MGNREGA job card. In order to pay off the borrowed money they are forced to leave in a very miserable condition with not even basic facilities and in an unhealthy environment.

Mayuree Das (2016), in a study on Brick Industry and its role in Employment and Income Generation, found that the brick industry is mainly labour intensive in nature. Though it is providing employment to thousands of people but the income of these people is not up to the mark and hence they can't afford all the modern facilities and even some basic facilities. The workers making raw bricks gets only ₹ 450 per 1000 raw bricks, which may take about 2-3 days, hence roughly they earn around ₹ 5000 to ₹ 6000 per month. Their health is deteriorating due to the long working hours (10 hrs a day), the main health problems among them are; headache, back pain, eye problem, skin problem and respiratory diseases.

Pallavi Kashyap (2020), in her study of Brick Industry in Shivsagar District of Assam found that to start the Kiln most of the owners have borrowed from banks and the average annual investment is around 35 lakhs and they make a profit ranging between 6-12 lakhs annually. On an average each firm produces around 8 lakh bricks per year. These firms are helping in the development of the area by constructing roads and donating for Schools etc. At an average 60 labourers are employed in a firm whose age ranges

between 30-40 years, most of them have only primary education and belong to the lower sections of the society.

Rakibul Islam (2018), in a study on Brick Industries in Murshidabad district of West Bengal found that though, the brick industry provides some employment to the workers (mostly landless daily wage earners) from the district and also to the labourers coming from nearby districts and states, but this do not help in improving their living condition or raising their standard of living. Most of the labourers do not have basic facilities and they can't fulfil their daily basic needs. This is mainly because the Brick Industry owners exploit them and do not give wages or other facilities as per government regulations.

Demographic profile of Brick Industry in Bihar:

Bihar is one of the largest producers of Bricks in India, along with the states like Uttar Pradesh, Punjab, Haryana and West Bengal. According to the Mines and Geology Department, Government of Bihar, there are about 6600 Brick Kilns in Bihar which is spread in different districts all over Bihar. The number of Brick Kilns in different divisions of Bihar can be seen from the following Table.

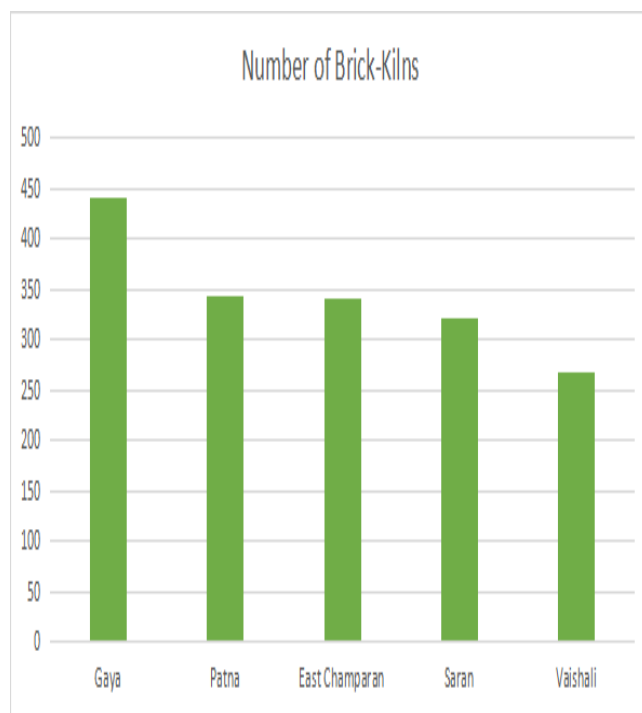
S.no	Name of Division	Number of Brick-Kilns
1	Tirhut Division	1330
2	Patna Division	1215
3	Magadh Division	1085
4	Saran Division	744
5	Darbhangha Division	707
6	Purnea Division	571
7	Munger Division	523
8	Kosi Division	261
9	Bhagalpur Division	160

Source: Mines & Geology Department, Government of Bihar

From the above table, we can see that the largest number of Brick-Kilns are situated in the Tirhut Division of the Bihar, followed by Patna Division and Magadh Division. This shows that these are the areas

where the production of Bricks is maximum and hence large number of labourers are employed in the Brick industry in these areas.

If we see the number of Brick-Kilns in different Districts of Bihar we find that the top five districts having largest number of Kilns are: Gaya(442), Patna(344), East Champaran(341), Saran(322) and Vaishali(269).



Source: Mines & Geology Department, Govt. of Bihar

Brick Industry as a source of Employment and Income generation:

Brick Industry in India is a labour-intensive Industry, most of the works in the process of brick making like Preparation of clay, moulding of bricks, drying them in sun, carrying them to the Kiln for firing, and back after cooling and again to the storage area is done manually by hand, and hence there is a large number of labourers needed in this industry. Most of these works do not require any special skill or specialisation and hence almost all the labourers working in this industry are unskilled. This sector is one of the largest sectors to provide livelihood to these unskilled labourers along with the sectors like

agriculture and construction. These Brick-Kilns vary in size from small to large, the smaller Kilns have 20-30 workers and the larger Kilns may have more than 100 workers working at their sites. It is estimated that on an average there are about 80 labourers employed in one Brick-Kiln and according to this estimate all over Bihar (in all the 6600 Kilns) there are more than 5 lakh labourers employed in this industry.

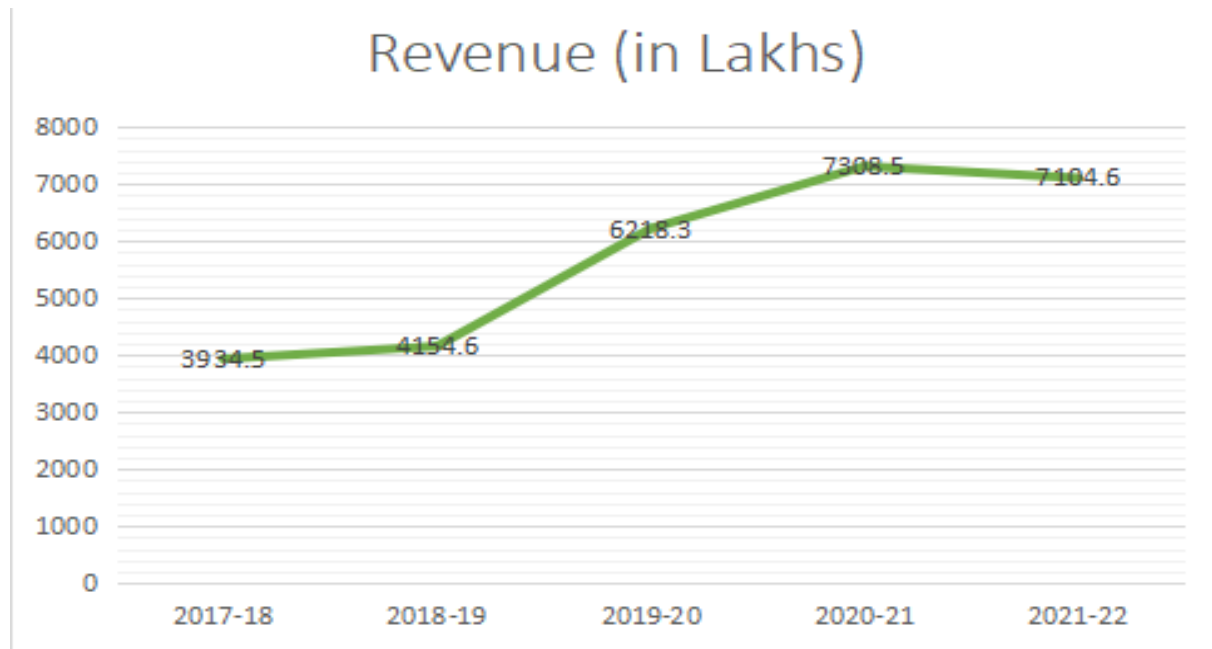
Along with providing employment to a large portion of the labour force in the state, the Brick sector also contributes to the income generation for the self and also for the workers working in it. The workers get wages for working in the Brick Kilns which is income for them which they use to buy goods and services required for daily consumption as well as living a comfortable and healthy life.

Brick Industry as a source of Revenue for the government:

Government collects revenue from different sources and mining is one of the very important sources of revenue for the Bihar government. As the brick industry comes under the mining sector, the revenue collected from Brick Kilns is also included as a sub-part of revenue from mining. According to the Economic Survey 2022-23, the total revenue collected from the mining sector was Rs. 1766.14 crore in 2021-22 out of which 7104.6 lakhs (71 crores approx.) comes from the Brick sector.

Revenue collected from the Brick sector over the last five years is shown in the table below:

Year	Revenue (in Lakhs)
2017-18	3934.5
2018-19	4154.6
2019-20	6218.3
2020-21	7308.5
2021-22	7104.6



Source: Mines & Geology Department, Government of Bihar

From the Table and the Graph shown above it can be seen that the Revenue collected from the Bricks in the year 2017-18 was Rs. 3934.5 lakhs which increased to Rs. 7104.6 lakhs in the year 2021-22. This shows that in this span of five years the Revenue collection has increased more than 80 percent. If we see in the absolute terms the collected revenue doesn't look that great but it should be noted that it is increasing at a considerably higher rate and hence it will show a great number in near future.

Conclusion:

Development and Urbanisation is a continuous process and hence during this process the creation of physical infrastructures is must. This has increased the demand for Bricks which is required for construction of buildings. The increase in demand has increased the number of firms in this sector which in turn has increased the number of persons employed in the Brick-Kilns and helped in reducing the unemployment which has been a big problem for the Indian economy for many years. It has also contributed in the revenue collection for the government and has generated income for the Kiln owners and labourers working in it.

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