

INDUSTRIAL ACCIDENTS AND OCCUPATIONAL HEALTH HAZARDS: A STUDY OF PERCEPTION OF WORKERS--EMPLOYERS OF BRICK INDUSTRY IN KARIMGANJ DISTRICT OF ASSAM

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ABSTRACT

Brick industry plays a key role for economic development of the country. It is a small scale unorganised industrial sector. Brick manufacturing is very labour-intensive and uses traditional firing technologies. The activity of the employer is very significant to maintain adequate safety and health of workers. According to the ILO, the prime responsibility for the health and safety of workers in their employment's rests with the employers. The employer should provide and maintain a safe and healthy working environment, ensure the provision of occupational safety and health services to workers, and give a high priority to health, safety and working environment in order to reduce the incidence of occupational accidents/injuries and diseases. Occupational hazard has a harmful effect on workers' health and as a result the worker loses his earning capacity gradually. The dangerous or harmful effects of the industrial activities give rise to occupational health hazards in the workplace.

Government of India has been taking various measures in order to prevent occupational hazards. Factories Act, 1948 provides guidelines for prevention of occupational hazards. The various provisions regarding hazardous processes are mentioned in (Sections 41-A to 41-H) under the Factories (Amendment) Act, 1987. The legal decision is to be incorporated to scrutinize legislations and administrative actions. The main and prior function of the judiciary is to deliver justice to all without fear or favour. The courts are intermediary between people and other organs of the State. The present paper highlights the perceptions of the workers and the employers/managers with regard to the state of implementation of legislative provisions for prevention of industrial accidents and occupational health hazards in Brick Industry. Likert type five-point ranking scale which ranges for fully implementation of legislative provisions to not at all implementation of legislative provisions has been developed for the study. Both primary and secondary data are used in the present paper.

KEYWORDS: Unorganised Industry, Health Hazards, Preventive Mechanism, Legislations, Judicial Decision.

INTRODUCTION

The brick making industries are unorganized and dispersed throughout the length and breadth of the country. The status of their technology has remained virtually stagnant over the last 100 years, with very few improvements in brick making procedures. At present, brick manufacturing is very labour-intensive, since bricks are usually hand-molded and sun-dried before firing in the kiln. The burning of the bricks is often done in the traditional process such as in bull's trench kilns (BTKs) and in clamps. BTKs are generally the choice of medium and large scale industrial sector and covered approximately 70 per cent of the total production in the country, while clamps are often used in operations with limited production capacities.¹

¹. Vasudevan, N. & Fellow. *Research on Innovative and Strategic Policy Options (RISPO), Good Practices Inventory; Adaptation of vertical shaft brick kiln (VSBK) technology for Indian brick industry*. Asia-Pacific Environmental Innovation Strategies (APEIS).

Brick making involves crude techniques causing considerable worker drudgery. Brick workers, particularly moulders are exposed to the sun for long hours. They are exposed to high concentration of dust and smoke while they are engaged in manual breaking of coal. There is also the risk of exposure to dust (from bottom ash spread on the kiln) and open fire during manual coal feeding. The workers have to walk on hot surface (top of the furnace) while monitoring and regulating the fire. They are also exposed to high concentrations of respirable suspended particulate matters (RSPM), during monitoring and regulating the fire, as the furnace chamber is covered with ash (ash acts as insulator). Generally, 9 to 12 green and burnt bricks are carried at a time as head load. Carrying head loads on a regular basis causes health problems particularly in women workers.²

According to the ILO international instruments, the prime responsibility for the health and safety of workers in their employment's rests with the employers. The employer should provide and maintain a safe and healthy working environment, ensure the provision of occupational safety and health services to workers, and give a high priority to health, safety and the work organization in general in order to reduce the incidence of occupational accidents/injuries and diseases. The employer plays an essential role in the performance of occupational health practice. To ensure its success, the employer should allocate the necessary resources; demonstrate his desire for workers to participate in the implementation of occupational health programme.³

The legal decisions of the different cases basically related to the industrial accidents and occupational health hazards of employees and workers of brick units all over the country is to be incorporated to scrutinize legislations and administrative actions in matters brought before the courts for adjudication or reference. The main and prior function of the judiciary is to deliver justice to all without fear or favour. The courts are intermediary between people and other organs of the State. It has powers to scrutinize legislations and administrative actions on the anvil of the Constitution and the law, in matters brought before it for adjudication or reference. This is termed as the Court's power of judicial review and has been proclaimed to be a basic feature of the Constitution.⁴

TERI, Darbari Seth Block, India Habitat Centre, Lodi Road, New Delhi – 110 003. Retrieved from www.0028.

² Dubey, R. M. (Chairman). (2013). *Guidelines on Brick manufacturing Unit*. Retrieved from www.guidelines of brick kiln in Assam. pp. 4

³ Government of India, Ministry of Labour and Employment (2011, August): *Report of the Working Group on Occupational Safety and Health for the Twelfth Five Year Plan (2012-1017)*, www.wg_occup_safety.

⁴ L. Chandra Kumar v. Union of India, AIR 1997 SC 1125, See also K. Ramaswami J. in S. R.Bomma v. Union of India, AIR 1994 SC 1918.



A Brick Kiln of Karimganj District of Assam

REVIEW OF LITERATURE

A good number of studies have been conducted on industrial accidents, occupational health hazards and the implementation of different Social Security Acts of brick industry/Indian industries. The main findings of these studies are discussed below:

1. Sivaprakash P and M. Sakthivel (2011)⁵ examined accidents, hazards and risk in industries. The review focused that safety and security lapses result in accidents and disaster in industries and hence they need to be prevented. Safety education is the proactive development of knowledge, attitude, and behaviour and skill of the workers on safety. Good safe attitude, behaviour and skill evolved by the safety education contribute to the overall accident reduction programme in the industry. The main objectives of safety education are:

- (i). To develop safety consciousness among employees, to build up a favourable attitude on their part for safety measures and precautions, and
- (ii). To ensure safe work performance on the part of each work by developing their skill in the use and operation safety equipment. The safety and security management system should be adopted in a complete manner by providing all the required inputs.

2. Saha Arpita (2009)⁶ has referred to the preamble of the Constitution of International Labour Organisation (ILO) and stressed the need for protection of workers against sickness, disease and injury arising out of their employment, pension for old age etc. Subsequently, the UN General Assembly, while adopting the Universal Declaration of Human Rights also recognized the right to social security. The paper examined the implementation of the various laws and doctrines providing social security in India, and suggested the need for changes in certain sections of the law. It also provides an analysis of empirical data gathered from a field study conducted in the cement factory plants of ACC Limited in the District of Bundi in Rajasthan.

⁵. Sivaprakash, P., & M. Sakthivel. (2011). Discussion on Accidents, Hazards and Risk in Industries-- A Review. *European Journal of Scientific Research*, Vol. 52 (No.1). PP.38-43. @ Euro journals Publishing, Inc.2011, <http://www.eurojournals.com/ejsr.htm>

⁶. Saha, Arpita. (2009). The concept of social security: Health, Safety and welfare Measures in a factory. *The Indian Society of Labour Economics*, 51st Annual Conference, Organised by – Punjabi University, Patiala (Punjab), New Delhi-2. 11-13 December. PP. 221-222.

3. Saxena A. N (1978)⁷ estimated the accident rate in Indian industries from the annual returns filed by the industries under the Factories Act, 1948 for 20 years and found that the problem of accidents had been gaining increasingly due to the phenomenal development of Indian industries. He also found that the accident rate in Indian industries was 100 to 200 for the study period of twenty years.

4. International Labour Office Geneva (2002)⁸ in its 5th items of the agenda in 90th session discussed recording and notification procedure of occupational accidents and diseases in chapter-I, issues related to lists of occupational diseases for compensation as well as recording and notification purposes in chapter-II, and argues the case for new ILO instruments in chapter-III. The Governing Body of the International Labour Office decided to place an item on the recording and notification of occupational accidents and diseases, including the possible revision of the list of occupational diseases, Schedule-1 to the Employment Injury Benefits Convention, 1964, on the agenda of the 90th Session of 2002 of the International Labour Conference, with a view to standard setting under the single-discussion procedure and highlighted that the development of a mechanism for regularly updating the list of occupational diseases should be examined by the conference as part of the above agenda item.

5. Monga Vikas et al (2012)⁹ examined a study on “Respiratory Health in Brick Kiln Workers”. The objective of this study was to investigate the prevalence and determinants of respiratory symptoms and their association with occupational dust exposure among the brick kiln workers. This study evaluated 120 brick kiln workers occupationally exposed to dust and 80 were executive employees and unexposed as control group. It is observed that brick kiln workers are exposed to dust particles and are susceptible to multiple pulmonary complications. Problems like asthma, chronic obstructive pulmonary symptoms, and silicosis are more common among them. It is found that there is strong association between hazardous environmental conditions and the physical and respiratory health of industrial workers. The decrease in lung function values of industrial workers as compared to control workers can be attributed mainly to respiratory disorders. The absence of pollution control and monitoring devices at workplace add to the hazardous environmental conditions. Moreover most of industrial workers showed reluctance in use of safety equipment which indicates lack of safety awareness and appropriate managerial steps. This is either due to negligence of the company or due to them being uneducated. This resulted in prevalence of occupational health disorders in lungs, eyes and skin among industrial workers.

6. Khan Rizwana, and Harish Vyas (2008)¹⁰ examined in their article “A study of impact of brick industries on Environment and Human Health in Ujjain City (India)” and focused on the effect of brick industry on water quality of Kshipra River. Towards this, total solids,

⁷. Saxena, A. N. (1978). Industrial Safety. (Second Edition). National Productivity Council, New Delhi, PP. 164. India. Retrieved from @ Euro journals Publishing, Inc.2011, <http://www.eurojournals.com/ejsr.htm>

⁸. International Labour Office Geneva.(2002). *Recording and Notification of Occupational Accidents and Diseases*. Fifth item on the agenda, 90th Session, Geneva, PP.1-3. June, 2002, <http://www.ilo.org/>

⁹. Monga, Vikas., Lakhwinder, Pal Singh., Arvind, Bhardwaj., & Harmanpreet, Singh. (2012, April). Respiratory Health in Brick Kiln Workers. *A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal- included in the International Serial Directories, International Journal of Physical and Social Sciences. Volume-2 (Issue-4)*, <http://www.ijmra.us>, IJPSS, ISSN:2249-5894, PP. 226-244.

¹⁰. Khan, Rizwana., & Harish, Vyas. (2008). A study of impact of brick industries on Environment and Human Health in Ujjain City (India). *Journal of Environmental Research and Development. Vol. 2 (No. 3)*, January-March 2008. PP. 421-425.

dissolved oxygen, calcium hardness, and total hardness were estimated. Kshipra River originates from Kshipra Village and there are no brick industries in the vicinity. The objective of the present study was to evaluate the impact of brick making process on environment and human health. The results show that there are adverse effects of these industries on soil, water, air, vegetation and human health. Bricks are mainly made of soil and a number of additives are added to the soil to increase the strength of bricks. The use of excessive amount of soil causes soil degradation. These industries use huge amount of fuel and kiln process used at present in these industries is highly inefficient which leads to air pollution and causes damage to vegetation and human health. Apart from these, the waste along with water flows back in the Kshipra River, increasing the total solids, suspended solids, dissolved oxygen, calcium hardness, total hardness etc.

7. N. Ambreen. et al. (2012)¹¹ examined the status of Occupational Health and Safety in Brick Kiln Industries at Hatter Industrial Estate Haripur, Pakistan and found that it is a legal and moral requirement that owners of the Kilns should provide accident-free working environments and basic welfare facilities for their workforce but Pakistan has a poor health & safety status; due to in-adequate medical facilities and illiterate workforce. Workers are exposed to high level of hazards in all sectors i.e., construction, mining industry and agriculture. Brick making is one of the leading sectors in construction industry; where workers are mostly from deprived sectors of the society; with low income and where the whole family is involved as one unit. Workers involve in work for 12-14 hours without any overtime. Their income was not enough too full-filling their basic needs. Provision of Personnel Protective Equipment's (PPE); a last line of defence for workers and welfare facilities were not made at all in the brick kilns of the study area. Some of the major contributing factors to the poor health and safety status of the workforce are poor implementation of the health and safety laws with dangerous, unsafe and polluted working environment.

8. Mazumder (2009)¹² observed different activities of brick manufacturing units of Barkhola Development Block, Cachar, Assam, and health hazards problems to the people of surrounding area due to the existence of dust particles, fume and emission of different particle matters. The brick kilns are using slag coal and other indigenous fuel which work with natural up-draught and down draught having fuel efficiency in the range of 18 to 23 per cent and are bound to emit a lot of pollution in the form of Hydro Carbon Monoxide, Sulphur Components and unfired Carbon particles. He has also observed that people are becoming conscious of the evil effects of pollution. Different environmental conscious NGOS, committees constituted by Government and other agencies have given much stress on pollution free technology. In this situation there is an urgent need for technological up gradation of brick industry.

9. Sebastian Gilbert (2009)¹³ discussed various legislations on labour welfare and mentioned the need for reviewing the existing labour laws in the organised sector, and suggesting comprehensive legislative measures to ensure a basic level of protection to

¹¹. N. Ambreen. et al. (2012). Status of Occupational Health and Safety in Brick Kiln Industries at Hatter Industrial Estate Haripur, Pakistan. *Journal of Environment*. Vol. 01, (Issue 02), pp. 56-63 ISSN 2049-8373.

¹². Majumder Judul, Islam. (2009). *A study of brick industry in Barkhola Development Block of Cachar District*. (M. Phil Dissertation, Department of Commerce, Assam University, Silchar). unpublished. pp.128.

¹³. Sebastian, Gilbert. (2009). Labour Legislation in India and the Neo-liberal Shift. *The Indian Society of Labour Economics*, 51st Annual Conference, 11-13 December. Organised by – Punjabi University, Patiala (Punjab), New Delhi – 2.pp. 190-191.

workers in the unorganised sector. The recent legislations in favour of unorganised workers and the self-employed may be considered to have been long overdue for the very legitimacy of the system. Neo-liberal reforms have created the material basis for greater unity amongst the workers in the organised and unorganised sector.

10. Kumar Anil (2009)¹⁴ examined the perceptions of industrial workers towards the social security legislation in the industrial sector with reference to the Employees' State Insurance (ESI) Act; 1948. The objective of the study was to analyse the level of satisfaction among workers with the following provisions of the Employees' State Insurance Act.

- i) Medical benefit provision,
- ii) Sickness benefit provision,
- iii) Disablement benefit provision,
- iv) Dependent benefit provision, and
- v) Funeral benefit provision.

A sample of 103 workers was taken from two districts of the state of Haryana, namely Gurgaon and Faridabad. The study reveals that only 41 per cent workers were found to be satisfied with the medical benefit provision, 60 per cent workers on sickness benefit provision, 25 per cent workers on disablement benefit provision, 26 per cent workers on dependent benefit provision, and 32 per cent workers on funeral benefit provision.

The author has pointed out that there is a need to bring changes in the management of various services provided under this act. Health services need to be managed in a professional manner. Existing hospitals and dispensaries need to be modernised further. The procedure of availing different benefit needs to be made easier.

11. Deboucha Sadek and Hashim Roslan (2011)¹⁵ studied a review on bricks and stabilized compressed earth blocks and observed that the process of manufacturing clay bricks requires high energy to burn and a huge quantity of CO₂ gas is emitted during this process. The alternative of clay bricks is stabilized compressed earth blocks. The benefits of stabilized compressed earth blocks include; uniformed building component sizes and reduction of transportation cost. The reduction of transportation time, cost and attendant pollution can also make compressed earth block (CEB) more environment friendly than other materials.

12. Patil et al (2009)¹⁶ covered the unorganised sector and argued in favour of umbrella legislation for ensuring minimum level of protection to the workers. They referred to the suggestions given by the National Commission on Labour (NCL) for improvement of the situation. Some of the suggestions given by NCL are:

¹⁴. Kumar, Anil. (2009). Social Security Legislations in the Industrial Sector: A study of workers' perception. *The Indian Society of Labour Economics*, 51st Annual Conference, 11-13 December. Organised by – Punjabi University, Patiala (Punjab), New Delhi – 2. PP. 218-220.

¹⁵. Deboucha, Sadek., & Hashim, Roslan. (2011, Feb. 4). A review on brick and stabilized compressed earth blocks. *Scientific Research and Essays*. Vol. 6 (3), PP. 499-506, www.academicjournals.org/SRE, ISSN 1992-2248.

¹⁶. Patil, D. N., Swapna, Patil., & S. L. Patil. (2009). Unorganised Sector and Umbrella Legislation. *The Indian Society of Labour Economics*, 51st Annual Conference, 11-13 December, Organised by – Punjabi University, Patiala (Punjab), New Delhi-2.pp. 207-208.

- i. The workers in the unorganized sector are recognized as workers and included in official survey.
- ii. Every worker in the unorganized sector should be given an official identity card.
- iii. Workers in the unorganized sector are entitled to protection and welfare not only because they are citizens, but also because they are the main contributor to the wealth of the nation.
- iv. The most important intervention is improving the economic status of poor woman working in the unorganized sector.

It implies that right to work will have to be viewed as a necessary concomitant of the right of social security.

OBJECTIVES OF THE STUDY

1. To study the Judicial Inference to Industrial Accidents and Occupational Health Hazards.
2. To examine the perception of the workers and the employers/managers with regard to the state of implementation of legislative provisions for prevention of industrial accidents and occupational health hazards in Brick Industry of Karimganj District.
3. To recommend the remedial measures to strengthen the state of implementation of the legislative provisions for prevention of Industrial Accidents and Occupational Health Hazards in Brick Industry.

METHODOLOGY OF THE STUDY

The present study was carried out with the help of both primary and secondary data. For this study, 12 numbers of brick units were selected by using simple random sampling in Karimganj District of Assam. The primary data were collected in the form of the opinions of the sample workers and employers or managers through questionnaires/schedules, specially developed for these two categories of people, on the state of implementation of legislative provisions regarding prevention of industrial accidents and occupational health hazards in Brick Industry of Karimganj District. The secondary data, on the other hand, were collected from the different books, journals, periodicals, Government and Non-Government reports, statistical hand books, judicial decision, research papers, articles and relevant websites etc. There are 12 registered brick units in Karimganj District, out of which 6 brick units have been selected by using simple random sampling which covers 50 per cent of the registered brick units. There are some unregistered brick units available in Karimganj District, out of which 06 have also been included in our study. Therefore, 12 numbers of brick units were selected from both registered and unregistered for the present study.

The perception and awareness of the workers and employers/managers were studied after collecting relevant information by canvassing schedule among the sample workers of the units and employers or managers of the selected brick units of Karimganj District of Assam. Thus, it covered 120 respondents from workers and 12 respondents from the employers or managers of the selected brick units of Karimganj District for this study. Thus, the total number of respondents of both the categories of people is 132 for this research work.¹⁷

The collected data were tabulated and analysed by using statistical tools like average. The diagram was also used in order to make the data visible and attractive. To analyse the perceptions, a Likert type five-point ranking scale which ranges for 'fully implementation of legislative provisions' to 'not at all implementation of legislative provisions' has been developed for the study.

¹⁷ . Field Survey, Feb, 2019

JUDICIAL INFERENCE TO INDUSTRIAL ACCIDENTS AND OCCUPATIONAL HEALTH HAZARDS

Occupational hazard has a harmful effect on workers' health and as a result the worker loses his earning capacity gradually. The dangerous or harmful effects of the industrial activities give rise to occupational health hazards in the workplace. Occupational hazards and diseases are basically grown in the industry where essential elements like, chemical, gas, silica, dust, pollution, etc. are regular component of the industry.

On the issue, in *Vishram v. Dadabhoy*¹⁸ if the workman with the knowledge and permission of the employer lives at some distance from the place where he is called upon to work and if in the course of proceeding at reasonable time and in a reasonable manner from his place to the place of work, he meets with fatal accident then the court opined that his accident must be held to arise out of and in course of employment.

In *Pruce v. Davey*,¹⁹ the Court opined that the period of rest during the period of employment is in the course of employment. But if the workman goes outside the employer's premises during the rest period and meets with an accident, it is not in course of employment.

In *Dennis v. White*,²⁰ it was observed that, "When a man runs a risk incidental to his employment and is thereby injured, then the injury arises out of the employment."

In *L & Y Railway v Highley* Lord Summer²¹ set the test as follows: "Was it a part of the injured person's employment to hazard, to suffer or to do that which caused his injury ? If yes, the accident arose out of his employment, if any other reason, it did not".

The Court held that in the case of *M/s. Jayanthi Shipping Co. Ltd. v. Bernaditta Pereira*,²² Section 3-One of the chief cooks on Board the Ship Bharat Jayanthi died due to heart failure. No post-mortem was conducted. Till his death the deceased was performing his duty. It would be deemed to be an accident arising out of and in the course of employment. Therefore, if any employee dies of heart attack as was found in the field work in brick industry, the employer was liable to pay compensation as per Workmen's Compensation Act 1923.

In *Bhayabhai v. Central Rly, Bombay*²³, a worker was stabbed to death on the way to work. The accident arose out of the employment. A boy served tea in his usual round. While returning to the factory canteen he was struck by a bullet and died. The Court observed that the death of the boy was held to be an accident arising out of and in the course of employment.

In the case of *Barbara, D. Paul - white (Employee) v. Christiana Care (Employer)*, (2009) came before a Hearing Officer of the Industrial Accident Board of the State of Delaware and found that there is some validity to both arguments. The statutory provision contains no

¹⁸ . AIR, 1942 Bom.175

¹⁹ . 1926 20 B.W.C.c.237

²⁰ . 1917, A.C.479

²¹ .1917 A.C.352

²² . 1976 -33 FLR 262

²³ . AIR 1955, Bom. 105

suggestion that the legislature intended anything other than that an injured employee's actual mileage should be reimbursed. There is certainly nothing in the statutory language to support Ms. Barkley's approach of using Claimant's home address at the time of injury as the starting point for calculating mileage for all future medical treatment.²⁴ It was also found that Christiana Care is right that a reasonableness restriction must apply. It is axiomatic that when interpreting statutory language, the courts should avoid interpretations that lead to absurdities. It is absurd to think that the legislature's intent in writing Section 2 (g) was that mileage should be reimbursed "no matter how unreasonable" similarly, it had also been found that "reasonable" mileage to medical treatment must involve individualized focus on the Claimant and the particular fact that's of her case. In case of reimbursement, it has been found that Claimant should be reimbursed for mileage for her actual visits for treatment with Dr. Yalamanchili within the basic principles of reimbursement mentioned earlier.

It was held in the case of *Chairman, Cochin Dock Labour Board v. George*²⁵ that according to Section-3, if the worker after duty hours travelled by only available mode of transport, namely, country rowing boat and involved in an accident resulting in permanent partial disablement, it could be said to be in the course of employment if there was a nexus between employment and accident. The theory of notional extension of premises could not be restricted only to cases where transit was contemplated and the employer gave facility of free transport to the employees or where the employer's service conditions required the employee to go outside the premises of the establishment.

The Court in *Ram Autar v State of U.P.*,²⁶ held that the stoppage of work of the factories would deprive the workers there of their means of livelihood has no application in the cases before us because the danger that the general public has to face by the service mixing of carbon without adequate equipments to prevent dissemination of carbon outweighs the advantage in the form of jobs for a few persons and that too under threat of hazards to their own health.

In *Pravinbhai J. Patel v. State of Gujrat*,²⁷ B.N. Kirpal, C. J found that hundreds of industrial units were engaged in large scale pollution and had made little or no effort to comply with the law. 'Neither the industry, which causes pollution, nor the government nor the Gurajrat Pollution Control Board (G.P.C.B.) nor the Gurajrat Industrial Development Corporation (G.I.D.C) has paid more than lip service to the Environmental laws. It will not be wrong to say that the continued violation of the law by the industrial units has become a habit and condoning it by the governmental authorities, a practice.'

The court was dismayed by the rule of the enforcement agencies: 'Since 1980, till today not a single unit or person has been convicted of having violated any of the pollution laws. In fact, not in a single case [have] the prosecution proceedings been completed.' Later in the judgment the court observed that government 'has abetted or collaborated with the industry in breaking the law' and that the G.P.C.B. (Gurajrat Pollution Control Board) had neglected its duties despite citizen complaints.]

²⁴. Indeed , as Claimant pointed out , now that Claimant is receiving pain management care in Georgia the carrier certainly would not want to calculate mileage from the address-when -injured. Rather , it would calculate based on the actual mileage from Claimant's current residence.

²⁵. 1976-II LLJ 65

²⁶. AIR 1962 SC 1794

²⁷ Pravinbhai. J. Patel v State of Gujrat , 1995 (2) Guj L Rep 1210, B. N. Kirpal, C.J.

The Vellore²⁸ and Shrimp Culture Case²⁹ models appear more victim-friendly. In both these cases the authorities to be constituted by the Central Government under section 3(3) of the EPA were asked to identify the victims of the pollution; assess the compensation to be paid; and determine the liability of individual polluters after following a just and fair procedure.

Perhaps the most effective approach was the one adopted by the Supreme Court in the Patencheru Case.³⁰ Here, the court was dealing with extensive loss suffered by farmers on account of damage to crops from contaminated surface water. The court accepted the loss estimated at Rs. 28, 34,000 by a team of government officials, directed the state government to deposit the full amount (less contributions from industry) in court to enable distribution to the farmers; and ordered the state to recover the entire amount from industry.³¹

PERCEPTION OF WORKERS AND EMPLOYERS/MANAGERS

The opinions of workers and employers/managers regarding the state of implementation of legislative provisions in brick industry were taken by using 5 point Likert type of scale. Table-1 was developed by the summary of the views of the workers and employers/managers of brick industry of Karimanj District.

Table No. - 1

Perception of workers and employers/managers regarding the state of implementation of legislative provisions for prevention of industrial accidents and occupational health hazards in Brick Industry of Karimanj District (measured on “5” Point Scale)

Owners/Managers and workers in brick industry	“Scale-5” Full Implementation of Legislative Provisions	“Scale-4” Large Implementation of Legislative Provisions	“Scale-3” Some Implementation of Legislative Provisions	“Scale-2” Poor Implementation of Legislative Provisions	“Scale-1” Not at all Implementation of Legislative Provisions	Total No. of Owners/Managers and workers
No. of Owners/Managers in Brick Industry	03 (25.00)	06 (50.00)	02 (16.67)	01 (8.33)	0 (00)	12 (100.00)
No. of Workers Brick Industry	19 (15.83)	41 (34.17)	36 (30.00)	17 (14.17)	07 (5.83)	120 (100.00)
Total	22 (16.67)	47 (35.60)	38 (28.79)	18 (13.64)	07 (5.30)	132 (100.00)

Source: Field Survey.

Note: Figures in parentheses indicate the percentage of responses.

It is observed that 25 per cent employers/managers of brick industry admitted ‘full implementation’ of the legislative provisions for prevention of industrial accidents and occupational health hazards, while 50 per cent replied that implementation of the provisions was done in ‘large extent’, 16.67 per cent replied that implementation of the provisions were also done in ‘some extent’ and remaining 8.33 per cent admitted ‘poor implementation’ of legislative provisions.

Further, from the point of view of workers of brick industry, 15.83 per cent workers of brick industry admitted ‘full implementation’ of the legislative provisions for prevention of industrial accidents and occupational health hazards, while 34.17 per cent replied that

²⁸ AIR1996 SC2715

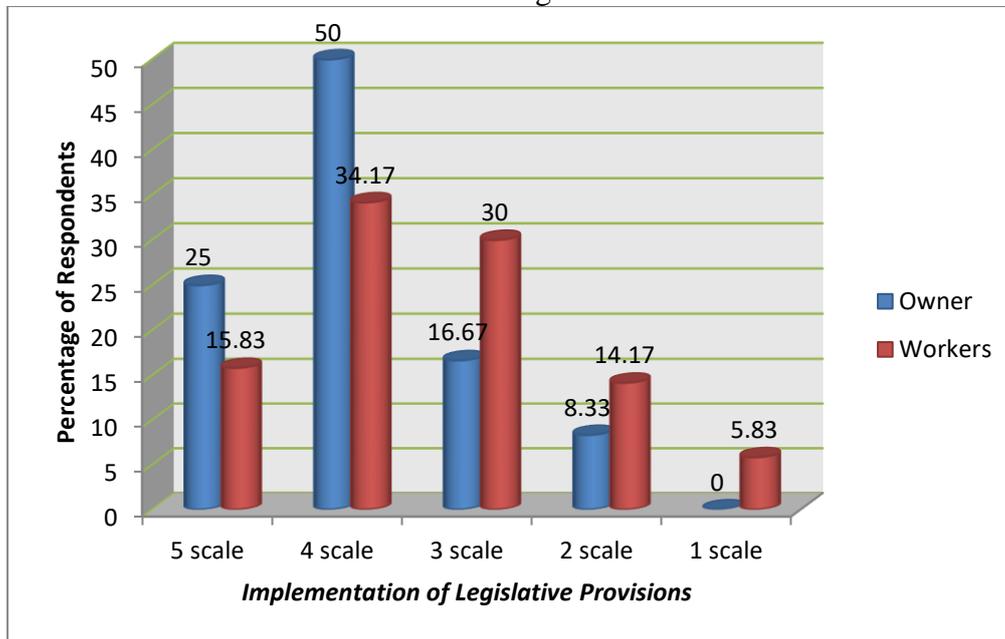
²⁹ S, Jagannath v. Union of India AIR 1997SC811

³⁰Indian Council for Enviro-Legal Action v Union of India 1995(6)SCALE 578; 1996 (4) SCALE 36 (SP);1996(5) SCALE 412;1997 (1) SCALE 21(SP);1997(5) SCALE 405;1998(1) SCALE 5(SP);1998(3)SCALE 664;1998 (4) SCALE 1;1998 (6) SCALE 5; 1999 (4) SCALE 331 and 2000 (2) SCALE 330.

³¹ The estimate of Rs.28, 34,000 (1995 (6) SCALE 578) was revised to Rs.1,39,09,737 (1996 (5) SCALE 412).The state government was directed to deposit the larger amount as well.

implementation of the provisions were done in ‘large extent’, 30 per cent replied that implementation of the provisions were also done in ‘some extent’, and 14.17 per cent opined ‘poor implementation’ of legislative provisions, and remaining 5.83 per cent replied ‘no implementation’ of the provisions.

Figure-1



FINDINGS OF THE STUDY

The findings are discussed as under:

1. It is found that 25 per cent employers/managers of brick industry admitted ‘full implementation’ of the legislative provisions for prevention of industrial accidents and occupational health hazards, while 50 per cent replied that implementation of the provisions was done in ‘large extent’, 16.67 per cent replied that implementation of the provisions was also done in ‘some extent’ and remaining 8.33 per cent admitted ‘poor implementation’ of legislative provisions.
2. It is observed that 15.83 per cent workers of brick industry admitted ‘full implementation’ of the legislative provisions for prevention of industrial accidents and occupational health hazards, while 34.17 per cent replied that implementation of the provisions were done in ‘large extent’, 30.00 per cent replied that implementation of the provisions were also done in ‘some extent’, and also 14.17 per cent opined ‘poor implementation’ of legislative provisions, and remaining 5.83 per cent replied ‘no implementation’ of the provisions.
3. It is revealed that 16.67 per cent workers and employers/managers of brick industry admitted ‘full implementation’ of the legislative provisions for prevention of industrial accidents and occupational health hazards, while 35.60 per cent replied that implementation of the provisions were done in ‘large extent’, 28.79 per cent replied that implementation of the provisions were also done in ‘some extent’, and also 13.64 per cent opined ‘poor implementation’ of legislative provisions, and remaining 5.30 per cent replied ‘no implementation’ of the provisions.
4. It is also observed that there is disagreement between the perception of the workers and employers/managers of brick industry with regard to the state of implementation of legislative provisions. From the part of the employers/managers, the reason may be that

owners/managers may not be interested to disclose rightly the matter regarding the implementation of legislative provisions, or unawareness about the implementation of provisions, or data and information provided by the employers/managers may not be accurate. On the contrary, most of the workers of brick industry may illiterate, or may literate in their own regional language, and they might not have any knowledge regarding the legislative provisions and its implementation, or data and information provided by workers may not be proper.

5. Moreover, the workers and employers/managers belong to two separate groups; as a result, there may be intentional conflict from the point of view of status of existence. We may not deny the difference of views of the selected two groups of persons, because brick industry belongs to unorganised industrial sector where profit earning is the prime motto of the owners of the units. The intention of owners is to provide very meagre facility to their workers in respect of safety, health and welfare. Sometime, owners may be least interested to provide even the preventive measures such as helmet, nose protector, safety shoes, goggles for eyes etc. to their workers. The workers may be unaware regarding the enactment of different laws and they do not raise their voice/legitimate claim. Furthermore, the workers may also be in a fear of losing of their jobs and so prefer to remain silent.
6. It is revealed from the survey that only medical expenditure is provided to the injured workers by the employers/managers. The employers neither maintain Employees' State Insurance Fund, nor follow the Workmen's Compensation Act, 1923.

Apart from the above-mentioned findings, some other important findings are as follows:

7. The study revealed that 25 per cent of employers / managers in brick industry opined need for improvement in case of implementation of legislative provisions.
8. It appears that 33.33 per cent of employers / managers in brick industry informed that the workers are using preventive dresses during working hours in the selected brick industry in Karimganj District.
9. The study has observed that 58.33 per cent of employers/managers opined that safety inspection and audit are carried out in brick units in Karimganj District.
10. In respect of preventive measures, 9.17 per cent workers informed that preventive measures have been taken to minimize the accidents in Brick Industry.
11. In case of implementation of safety instructions, 1.67 per cent of workers of brick industry opined that work/safety instructions are implemented and displayed in the units.
12. It is revealed that the pollution control measures have been notified from time to time to brick industry.
13. It has been found that 91.67 per cent of the brick industry installed water sprayers for controlling dust in the unit.
14. It showed that 93.33 per cent of workers are suffering from pollution during working hours in the unit.
15. The walkways were found clear and free from obstructions in brick units.
16. It is found that no technology is used in brick industry.

SUGGESTIONS

Certain suggestions are provided to strengthen the state of implementation of legislative provisions for prevention of industrial accidents and occupational health hazards in Brick Industry. These are as under:

1. All provisions of different Acts should be implemented for prevention of industrial accidents and occupational health hazards in Brick Industry, so that workers can get benefits as per Act.
2. There is a need to arrange awareness programme regarding the enactment of different laws, so that workers can understand their legitimate rights.
3. As per the Welfare and Health of Contract Labour under the Contract Labour (Regulation and Abolition) Act, 1970, contractors/middleman should provide the various facilities to the contract labourers who have been supplied/employed in brick industry.
4. Employees' State Insurance Fund should be implemented in every brick unit as per the Employees' State Insurance Act, 1948, so that all workers can get the all types of benefits which have been prescribed under this Act.
5. Medical and Health Check-up facility should be extended in every brick unit, so that all workers can get appropriate and adequate benefit if any accident/injury occurs or even for illness of the worker and records of workers should be maintained properly, at the same time some other arrangement than first-aid treatment in the unit for health of the workers.
6. Compensation should be paid to injured workers as per compensation Act 1923, if any accident/injury occurs in the workplace of the brick unit.
7. Workers' participation in safety management should be involved in every brick unit for prevention of accidents and health hazards during the working hours.
8. All types of measures for pollution control should be installed and implemented as per prescribed by the State Pollution Control Board / State Government for prevention of occupational health hazards and diseases of workers in brick industry.
9. Brick kiln industry should adopt methods and clean technologies which would lead to improvements in quality and fulfilment of need of good quality construction material market.
10. Talley-wheeler/Vehicles should be installed for transportation of unfired bricks (raw bricks) and finished products (brunt bricks) in every brick unit.
11. Employers should maintain compulsory insurance including group insurance and health insurance for every worker of brick industry.
12. Toilets should be kept clean and provided with soap for workers for hand washing in brick units.

CONCLUSION

It is found that there is disagreement between the perception of the workers and employers/managers of brick industry with regard to the state of implementation of legislative provisions. The occupier of an industry should implement the legislative measures provided for preventing occupational health hazards, injury and accidents. The occupier becomes liable if there is substantial injury caused due to the dust emanated from brick industry. In fine, it has been observed that brick industry installed fixed chimney and stopped movable chimney. Every brick unit should spray water sufficiently so that dust can be controlled and also tree plantation is necessary in the surrounding of the brick unit. It is the ultimate aim to prevent dust and pollution and also remove the health hazards of both workmen and people of the society.

It is concluded that the judiciary has tried to take painstaking job to remove accidents and occupational health hazards. We can find the despair of the Supreme Court in several cases like M.C. Mehta v. Union of India where the courts directions were not complied with in the same spirit, as the court had desired. In some case like Taj Trapezium case the Court could succeed in taking appropriate measures.

The various judgments of the Hon'ble Supreme Court and different High Courts of the country regarding the control of environmental pollution, hazardous or inherently dangerous activity and payment of compensation to the injured workers or employees of the brick industry have immense contribution towards the development of the redressal mechanism of industrial accidents and occupational health hazards. The judicial decision, order and notice etc. are very important not only for the settlement or negotiation of any claim but also to ascertain whether the industries, firms, factory and mills are complying with the provisions of The Environment (Protection) Act of 1986, The Workmen's Compensation Act 1923, and Bhopal Gas Leak Disaster (Processing of Claims) Act of 1985 for functioning properly. The Supreme Courte has also issued directions for preventing pollution in the workplace for people.

REFERENCES

1. All India Reporter, May, 2012, Vol.99, Part 1181.
2. Assam Brick Kilns Establishment and Regulation Rules, 2013. Retrieved 10 Sept, 2014 from [www. Brick Kilns in Assam_ Estblmnt and Regulation_Rules 2013](http://www.BrickKilnsinAssam_EstblmntandRegulation_Rules2013).
3. Brick Kilns threat to air quality in Assam.
4. Deboucha, Sadek., & Hashim, Roslan. (2011, Feb. 4). A review on brick and stabilized compressed earth blocks. Scientific Research and Essays. Vol. 6 (3), PP. 499-506, www.academicjournals.org/SRE, ISSN 1992-2248.
5. Dhar Sarker, Madhumita. (2005). Legislative Measures and Control of Air Pollution in India: Retrospect and Prospect. (Ph. D. Thesis, Department of Law, North Bengal University, West Bengal). unpublished.
6. Divan, Shyam., & Armin, Rosencranz. (2001). Environmental Law and Policy in India: Cases, Materials and Statutes. New Delhi, Oxford University Press: Oxford India Paperbacks, Published in India.
7. Dubey, R. M. (Chairman). (2013). Guidelines on Brick manufacturing Unit. Retrieved from [www.guidelines of brick kiln in Assam](http://www.guidelinesofbrickkilninassam). pp. 4
8. Environment Systems Branch. (2005, December 30). Environmental & Social Report for VSBK. A Guidance Document for Entrepreneurs and Project Auditors. Development Alternatives. New Delhi-70, India, PP.1-8, www.devatl.org
9. Government of India, Ministry of Labour and Employment (2011, August): Report of the Working Group on Occupational Safety and Health for the Twelfth Five Year Plan (2012-1017), www.wg_occup_safety.
10. Guidelines on Brick Manufacturing Unit: Retrieved from [www.guidelines of brick kiln in Assam](http://www.guidelinesofbrickkilninassam), 2013.
11. Indeed, as Claimant pointed out, now that Claimant is receiving pain management care in Georgia the carrier certainly would not want to calculate mileage from the address-when -injured. Rather, it would calculate based on the actual mileage from Claimant's current residence.
12. Indian Council for Enviro-Legal Action v Union of India 1995(6)SCALE 578; 1996 (4) SCALE 36 (SP);1996(5) SCALE 412;1997 (1) SCALE 21(SP);1997(5) SCALE 405;1998(1) SCALE 5(SP);1998(3)SCALE 664;1998 (4) SCALE 1;1998 (6) SCALE 5; 1999 (4) SCALE 331 and 2000 (2) SCALE 330.
13. International Labour Office Geneva.(2002). Recording and Notification of Occupational Accidents and Diseases. Fifth item on the agenda, 90th Session, Geneva, PP.1-3. June, 2002, <http://www.ilo.org/>
14. Khan, I. A. (2002). Environmental Law (Text Book). Allahabad: Central Law Agency.

15. Khan, Rizwana., & Harish, Vyas. (2008). A study of impact of brick industries on Environment and Human Health in Ujjain City (India). *Journal of Environmental Research and Development*. Vol. 2 (No. 3), January-March 2008. PP. 421-425.
16. Kumar, Anil. (2009). Social Security Legislations in the Industrial Sector: A study of workers' perception. *The Indian Society of Labour Economics*, 51st Annual Conference, 11-13 December. Organised by – Punjabi University, Patiala (Punjab), New Delhi – 2. PP. 218-220.
17. L. Chandra Kumar v. Union of India, AIR 1997 SC 1125, See also K. Ramaswami J. in S. R. Bommai v. Union of India, AIR 1994 SC 1918.
18. Manash Das. (2015). A study of the state of implementation of legislative provisions regarding prevention of industrial accidents and occupational health hazards in brick and stone crushing industries of Barak Valley, Assam. (Ph.D. Thesis, Department of Commerce, Assam University, Silchar). unpublished.
19. Maithel, S. et al. (2000). Environmental regulations and the Indian brick industry. *Environmental Practice Journal of the National Association of Environmental Professionals*. 2 (3): 230-231, the Energy and Resources Institute Creating Innovative Solutions for a Sustainable future.
20. Maithel, Sameer., et al. Brick Kilns Performance Assessment, A Roadmap for Cleaner Brick Production in India, Monitoring of brick kilns & strategies for cleaner brick production in India, A Shakti Sustainable Energy Foundation and Climate Works Foundation Supported Initiative, pp. III.
21. Majumder Judul, Islam. (2009). A study of brick industry in Barkhola Development Block of Cachar District. (M. Phil Dissertation, Department of Commerce, Assam University, Silchar). unpublished. pp.128.
22. Malik, P. L. (2007). *The Industrial Law (Twentieth Edition)*. Lucknow: Eastern Book Company Law Book.
23. Malik, P. L. (1971). *The Industrial Law (Tenth Edition)*. Lucknow: Eastern Book Company Law Book.
24. Misra, S. N., & S. K. Misra. (2004). *An Introduction to Labour and Industrial Laws*. Allahabad, 107- Darbhanga Colony: Central Law Publication. Law Publishers and Book Sellers.
25. Monga, Vikas., Lakhwinder, Pal Singh., Arvind, Bhardwaj., & Harmanpreet, Singh. (2012, April). Respiratory Health in Brick Kiln Workers. A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal- included in the International Serial Directories, *International Journal of Physical and Social Sciences*. Volume-2 (Issue-4), <http://www.ijmra.us>, IJPSS, ISSN:2249-5894, PP. 226-244.
26. N. Ambreen. et al. (2012). Status of Occupational Health and Safety in Brick Kiln Industries at Hatter Industrial Estate Haripur, Pakistan. *Journal of Environment*. Vol. 01, (Issue 02), pp. 56-63 ISSN 2049-8373.
27. Patil, D. N., Swapna, Patil., & S. L. Patil. (2009). Unorganised Sector and Umbrella Legislation. *The Indian Society of Labour Economics*, 51st Annual Conference, 11-13 December, Organised by – Punjabi University, Patiala (Punjab), New Delhi-2. pp. 207-208.
28. Saha, Arpita. (2009). The concept of social security: Health, Safety and welfare Measures in a factory. *The Indian Society of Labour Economics*, 51st Annual Conference, Organised by – Punjabi University, Patiala (Punjab), New Delhi-2. 11-13 December. PP. 221-222.
29. Sarma, A. M. (1985). *Aspects of Labour Welfare and Social Security*. Bombay-4: Himalaya Publishing House.

30. Saxena, A. N. (1978). Industrial Safety. (Second Edition). National Productivity Council, New Delhi, PP. 164. India. Retrieved from @ Euro journals Publishing, Inc.2011, <http://www.eurojournals.com/ejsr.htm>
31. Sebastian, Gilbert. (2009). Labour Legislation in India and the Neo-liberal Shift. The Indian Society of Labour Economics,51st Annual Conference, 11-13 December. Organised by – Punjabi University, Patiala (Punjab), New Delhi – 2.pp. 190-191.
32. Sivaprakash, P., & M. Sakthivel. (2011). Discussion on Accidents, Hazards and Risk in Industries-- A Review. European Journal of Scientific Research, Vol. 52 (No.1). PP.38-43. @ Euro journals Publishing, Inc.2011, <http://www.eurojournals.com/ejsr.htm>
33. Statistics of Factory, (2008). Labour Bureau, Ministry of Labour & Employment, Govt. of India, 10th, August, 2011.
34. Universal's Legal Manual. (2012). Labour & Industrial Laws. India, New Delhi: Universal Law Publishing Co. Pvt. Ltd.
35. Varanasi Brick Cluster. (2010). Detailed Project Report on Induced Draft Fan in Brick Industry. Brick SME cluster Varanasi, Uttar Pradesh (India), Bureau of Energy Efficiency, (BEE), Feedback Ventures Pvt. Ltd, pp. 1-2. Retrieved from www.bee-india.nic.in,
36. Vasudevan, N. & Fellow. Research on Innovative and Strategic Policy Options (RISPO), Good Practices Inventory; Adaptation of vertical shaft brick kiln (VSBK) technology for Indian brick industry. Asia-Pacific Environmental Innovation Strategies (APEIS). TERI, Darbari Seth Block, India Habitat Centre, Lodi Road, New Delhi – 110 003. Retrieved from www.0028.
37. World Health Organisation (WHO), (1997), “Health and Environment in Sustainable Development: five years after the earth Summit” Geneva.
38. AIR, 1942 Bom.175
39. AIR 1955, Bom. 105
40. AIR 1962 SC 1794
41. AIR1996 SC2715
42. 1917 A.C.352
43. 1917, A.C.479
44. 1926 20 B.W.C.c.237
45. 1976 -33 FLR 262
46. 1976-II LLJ 65
47. Pravinbhai. J. Patel v State of Gujrat , 1995 (2) Guj L Rep 1210, B. N. Kirpal, C.J.
48. S, Jagannath v. Union of India AIR 1997SC811
49. The estimate of Rs.28, 34,000 (1995 (6) SCALE 578) was revised to Rs.1,39,09,737 (1996 (5) SCALE 412).The state government was directed to deposit the larger amount as well.
50. The Telegraph 10th Jan, 2013.