

EXPLORING THE COMPLEXITIES OF SIVAKASI'S FIREWORKS INDUSTRY: SHADOWS OF CONCERN, SPARKS OF JOY

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ABSTRACT

Firework workers' hands create sparks of delight, composing the symphony of celebration. But underneath the glittering spectacles and vibrant explosions is a complicated sector full of risks and difficulties. It takes a lot of effort and talent from committed workers to make the crackers that make everyone happy. The unsung heroes of celebration, fireworks workers illuminate the night with their hard labor. In Sivakasi, India, the fireworks sector makes a substantial economic contribution to the community. Fireworks manufacture, however, raises questions over worker safety and environmental effects. This study intends to investigate the legal structure that oversees India's fireworks sector, with a particular emphasis on Sivakasi. The main laws that set standards for environmental and worker safety will be reviewed in this article. The implementation of policies and initiatives that forbid child labor as well as guaranteeing adherence to safety and environmental standards will also be covered in the report. We'll also talk about how these rules are changing and how government organizations may encourage public participation and safety awareness. This study paper aims to give a thorough overview of the regulatory environment around the Sivakasi fireworks sector by illuminating these factors.

Key Words: Fireworks, Regulations, Safety, Sivakasi, Workers.

INTRODUCTION

Sivakasi serves as a meeting point for the complex issues of sustainability and safety with the grandeur of celebration. This distinctive village perfectly captures the complex relationship between fireworks and happiness, economic success, and inherent dangers. The city's lifeblood,

the fireworks business gives the local workers a sense of direction and significance. But while they make the crackers that light up our sky, these workers' hands are permanently marked by darkness.¹ The market size of the fireworks business is growing as a result of the demand for Sivakasi's goods not only in India but also in other parts of the world. The town has developed into a major industrial hub for the production of fireworks, with many companies manufacturing a wide variety of firecrackers and fireworks for different occasions and celebrations. However, the industry's rapid expansion has raised questions about labor conditions, safety, and the impact on the environment.

Over time, several legislation and safety rules have been implemented to address these issues.² The promotion of safer and more ecologically friendly pyrotechnics has received increased attention in Sivakasi in recent years. Efforts have also been made to address labor concerns and improve working conditions for industry employees. Sivakasi is well-positioned to keep developing as it strikes a careful balance between celebration and accountability, welcoming innovations that put the welfare of its employees and the environment first.

Child Labour in Sivakasi Fireworks Industries:

Despite continuous efforts to solve the issue, child labor is still a concern in Sivakasi, India's fireworks sector. Since the 1980s, the industry has been linked to child labor; estimates suggest that at least one lakh child laborers were employed in this sector. The issue has not been entirely resolved by state government initiatives, such as the adoption of a child labor project that prioritizes education over dangerous labor.³

About 45,000 of the 100,000 workers in Sivakasi's match and fireworks industry are child laborers, the majority of them are under the age of 14, according to a study published by India Today. The problem is made worse by factory owners' predilection for underage labor, which is motivated by perceived reliability and efficiency.

According to a research by Hope for the Future, the issue still exists in the fireworks production industry despite efforts to address child labor, such as stricter state regulations and penalties for hiring children under the age of 14. According to an India Today study, over 90% of youngsters who work in the fireworks industry develop health problems including asthma, eye disorders, and TB as a result of being exposed to dangerous environments.⁴

Children, teenagers, and women make up the majority of the workers in these companies; they are not formally trained, operate without safety equipment or gear, and come into direct

contact with explosive chemicals, especially while filling crackers with gunpowder.⁵ Even after the Child Labour (Prohibition and Regulation) Act was passed in 1986, there is still a preference for child labor. At least one lakh child laborers are employed in the sector, according to Nobel Prize laureate Kailash Satyarthi.

In addition to contributing to the issue of child labor, the dangerous working circumstances put these young employees at serious risk for health problems.⁶ Despite attempts to reduce child labor in the sector, the situation is still dire, highlighting the necessity of more steps to shield kids from exploitation and guarantee their right to an education and a secure upbringing.

The panel, which included Kuldip Singh, B.L. Hansaria, and S.B. Majmudar, provided insight into the state's stance on ending child labor in the 1996 case of *M.C. Mehta vs. State of Tamil Nadu* and others. The importance of raising and educating children in achieving India's goals was recognized by the Constitution's framers. Despite this forethought, the unpleasant truth is that children in India are frequently exploited, just like in many other countries. Sivakasi in particular was found to be a serious infraction of the regulations pertaining to child labor.

The public-spirited attorney, Shri MC Mehta, used the court's authority under Article 32 to address this unacceptable circumstance. He filed this petition in response to the infringement of children's fundamental rights, which are protected by Article 24. The court gave explicit directions on improving the quality of life for minors working in factories, taking into account the requirements of Article 39(f) and Article 45 of the Constitution. The court decided to create a committee to oversee the execution of these orders because it recognized the necessity of oversight.

Accidents:

Unfortunately, the Sivakasi fireworks business has had a number of incidents over the years, which highlights the urgent need for stronger safety laws to prevent catastrophes in the future. Protecting employees and nearby communities requires immediate action.⁷ The occurrences listed below demonstrate how urgently improved safety procedures are needed:

In addition, a sad event that occurred at a firework factory in Sivakasi in 2012 claimed the lives of fifty-four people. Sivakasi has had several mishaps despite being the center of cracker production, but this one stands out as especially destructive.⁸ A fire that broke out as chemicals for flamboyant fireworks were being mixed killed the victims, including workers and rescuers. Firefighting operations were hampered by the production's dense, stifling smoke, which was

stored against government recommendations. 237 people have died in incidents using 88 fireworks units in Sivakasi during the last 12 years. In recognition of the necessity for more stringent measures, the government has reinforced safety standards.⁹

The chief minister of Tamil Nadu expressed his sorrow for the victims, the most of whom had suffered serious burns, and promised to provide their families with financial support from the Chief Minister's General Relief Fund. These occurrences highlight how urgent it is to improve safety procedures in the Sivakasi fireworks sector in order to protect the health and safety of both employees and the local community.¹⁰

Suggestion to Guarantee Employee Safety

Stakeholders have received a thorough Code of Practice for Occupational Safety and Health (OSH) in Fireworks Manufacturing Factories. Section 41E of the Factories Act of 1948 permits the Tamil Nadu government's Directorate of Industrial Safety and Health to implement this code as an Emergency Standard.

Workers in fireworks factories are required to complete both induction training and periodic OSH training, which is held at least once every six months, in order to protect their health. The Factories Act of 1948 and the Tamil Nadu Factories Rules of 1950 stipulate that no worker may begin work until these sessions are successfully completed.

At least once a year, officials from the Tamil Nadu government's Directorate of Industrial Safety and Health are required to participate in fireworks safety training offered by the Directorate General Factory Advice Service and Labour Institutes, Mumbai/Regional Labour Institute, Chennai.

Owners, workers, and government representatives of fireworks factories must attend the Directorate General Factory Advice Service and Labour Institutes' (DGFASLI) recurring workshops and training sessions.

The Government of India may designate an Inquiry Committee to look into the health and safety regulations in companies that make fireworks in accordance with Section 41D of The companies Act, 1948. Reports from accident investigations have to be posted on the DGFASLI website.

In factories that manufacture pyrotechnics, workers, foremen, and supervisors must have clear eligibility requirements that include experience, credentials, and the successful completion of induction and recurring training. To reduce the risk of trips, falls, and slips, internal routes in

these facilities should be carefully planned and maintained. It is essential to put policies into place that address preventing static charge buildup and promoting charge dissipation.

Based on its permitted capacity, each fireworks manufacturing facility should have output limitations set and regularly monitored in order to uphold safety requirements and avoid overproduction. It is essential that both PESO and DRO certified factories adhere to the same and consistent enforcement criteria for Occupational Safety and Health (OSH). To aggressively advance OSH in factories that manufacture pyrotechnics, DISH, FRDC, PESO, and RLI must cooperate together.

Conclusion

The Sivakasi fireworks business is a diverse enterprise that faces inherent risks and challenges while offering happiness and economic prosperity. Its significant economic influence reverberates throughout the country and the area, providing numerous individuals with essential job opportunities. However, this sector is not without danger, with significant environmental and safety issues that put employees at risk for a number of illnesses. Recognizing these difficulties, the government has put laws and rules into place to protect the environment and employees. To prevent future fatalities, there is still a pressing need for improved safety procedures in spite of these initiatives.

The urgent necessity for quick action to protect employees and the surrounding community is highlighted by recent occurrences in the sector. The government's policy efforts demonstrate its dedication to safeguarding the safety and welfare of the Sivakasi fireworks industry personnel. These include the creation of the National Environmental Engineering Research Institute (NEERI) lab in Sivakasi and the aggressive promotion of environmentally friendly behaviors.

Innovations like more automation, real-time monitoring systems, and sustainable practices are essential to advancing the sector toward a safer future. These developments promote ethical production in addition to improving safety. For the sake of the community's general safety as well as the lives of the employees, it is crucial to ensure the wellbeing of everyone working in the fireworks sector. For the Sivakasi fireworks industry to enter a new age of safety and sustainability, cooperation between the government and industry partners as well as the implementation of innovative methods are essential.

End Notes:

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