
PUBLIC AWARENESS AND COMPLIANCE WITH FIRECRACKER REGULATIONS: A NON-DOCTRINAL STUDY

Sangeerthana V, B.Com. LLB (Hons), LL.M., [Environmental, Energy and Climate Change Law], Chennai Dr. Ambedkar Government Law College, Pudupakkam.

ABSTRACT

Firecrackers are an essential component of festivities in India. Although they are typically utilised at festivals like Diwali, they are also used at weddings, sporting events, political rallies, religious meetings, and in some places, funerals or death processions. Firecrackers are frequently thought of as a means of expressing happiness, drawing attention, or celebrating important occasions. However, there is a price for their extensive use. The toxic gases and tiny particles released by firecrackers are a major source of air pollution. Additionally, they contribute to noise pollution, which impacts not only people but also animals and birds. The careless handling of firecrackers, particularly by children, results in numerous accidents and injuries each year.

Regulations like encouraging green crackers, limiting the amount of time they can burst, and prohibiting firecrackers in specific locations have been implemented by the Indian government, the Supreme Court, and the National Green Tribunal (NGT) in order to relieve these worries. Awareness and compliance are still uneven in spite of these initiatives. Due to peer pressure, cultural views, or a lack of education, many people choose to disregard the rules or are unaware of them.

This study investigates Indian public awareness and adherence to firecracker laws. It collects information from many societal segments through online questionnaires and interviews. The social and psychological elements that affect people's beliefs and actions about the use of firecrackers are also examined in this study. Finding practical ways to raise awareness, enhance adherence to regulations, and advance a cleaner and safer environment for everybody is the ultimate objective.

Keywords: Firecrackers, Air Pollution, Noise Pollution, Public Awareness, Green crackers, Government regulations, Environmental Safety, India, Cultural Beliefs, Public Safety, (NGT) National Green Tribunal, Supreme Court.

LIST OF ABBREVIATIONS

- 1)NGT - National Green Tribunal
- 2)CPCB - Central Pollution Control Board
- 3)SO₂ - Sulfur Dioxide
- 4)NO₂ - Nitrogen Dioxide
- 5)WHO - World Health Organization
- 6)AIR - All India Reporter
- 7)SC - Supreme Court

LIST OF REFERRED STATUTE

- 1)The Environment (Protection) Act,1986
- 2)The Explosives Act,1884
- 3)Indian Constitution,1950

CHAPTER I: INTRODUCTION

1.1 INTRODUCTION

Firecrackers are a major part of Indian celebrations. They use them in festivals such as Diwali, weddings, New Year, and a host of other festive events. Firecrackers are viewed as means of expressing happiness and adding zest to occasions. They are an integral part of Indian culture and habits for decades. Also, firecrackers create severe issues. They emit smoke and toxic gases that contaminate the atmosphere. This can be hard to breathe, particularly for children, older persons, and individuals with health issues such as asthma. The thunderous sound of firecrackers also leads to noise pollution, which impacts humans, animals, and even birds.

Firecrackers are not only employed in festivities. Individuals explode them during political rallies, religious celebrations, victories in sports, and other festivities. Unfortunately, firecrackers have also resulted in numerous accidents. A large number of people, including kids, get injured or even killed every year as a result of firecracker explosions. Such accidents tend to occur owing to mishandling or bursting crackers in public places.

Conventional firecracker recipes contain hazardous chemicals such as sulphur, potassium nitrate, barium nitrate, and charcoal. When firecrackers are combusted, these chemicals emit toxic release gases and small particles into the atmosphere. Sulphur is among the largest pollutants. It assists firecrackers burst into flames, but it also emits sulphur dioxide (SO₂), a toxic gas that can make worsens breathing and also produces acid rain.

Due to these issues, there is presently an effort towards greener alternatives. Scientists and the companies are attempting to employ natural ingredients such as sawdust and peanut shell powder in place of sulphur. The materials are already incorporated in other explosives such as dynamite. Now, they are being tested in fireworks to determine if they are safe and work.

To minimize the pollution and accidents, the government and courts such as the Supreme Court and NGT have imposed strict regulations for the use of firecrackers. They have instructed the use of green crackers, imposition of time limits, and even prohibition of the crackers in some location. Humans must learn and act upon these rules to protect themselves and the environment. Humans who disobey the rules can be fined or take legal action against them. Even though these rules are in place, many people are unaware of them. Some choose to ignore them, while others genuinely don't know they exist. Public awareness is extremely important.

If the people know the hazards and the regulations, they will be more inclined to comply with them. This research based on public awareness and compliance with firecracker regulations is rooted in the constitutional setup of India. Article 21, which ensures the right to life and personal freedom, emphasizes regulation in the form of protection for citizens from the health hazards and safety risks of using firecrackers. Article 51A, which talks about the basic duty of citizens toward protecting the environment, also goes hand in hand with stricter regulations of firecrackers in order to minimize environmental pollution and encourage eco-friendly practices.

This research article considers the extent to which people are aware of these regulations and how well they are adhered to. It also attempts to identify the means to create awareness and enhance public safety. It employs online questionnaires and interviews to gather information. The study also attempts to identify the cause of people's actions, including their beliefs, customs, education, as well as the influence of social media. The purpose is to grasp how to enhance awareness and get more individuals to adhere to the regulations of a cleaner and healthier world.

1.2 RESEARCH PROBLEM

Despite innovation in formulating environmentally friendly firecracker ingredients with alternatives such as sawdust and peanut shell powder to mitigate hazardous sulphur dioxide emissions, the public consumption of conventional fireworks is still common. Such continued consumption is a cause for concern regarding environmental pollution, health hazards, and public safety. While regulations exist to control firecracker usage, public awareness and compliance with these rules are often inadequate due to cultural practices, limited education on environmental impact, and weak enforcement. The gap between scientific innovation, regulatory efforts, and public behaviour presents a critical issue that this study seeks to explore and address.

1.3 REVIEW OF LITERATURE

1. “Health Impact Assessment of Fire Crackers – 2017” by the Central Pollution Control Board (CPCB):

The Central Pollution Control Board (CPCB) ¹ in collaboration with the Centre for

¹ <https://cpcb.nic.in/uploads/healthreports/Health-impact-assessment-of-fire-crackers-2017>

Occupational and Environmental Health, Maulana Azad Medical College, conducted a comprehensive study titled “Health Impact Assessment of Fire Crackers – 2017” during the Dussehra and Diwali festivals in Delhi. This assessment was based on both field surveys and hospital data across four residential areas.

The report documented severe air quality deterioration post-Diwali, with PM_{2.5} levels exceeding 700 µg/m³, nearly 29 times the WHO's recommended limit. Although gases like SO₂ and NO₂ were within permissible limits, particulate matter and toxic metals (like barium, cadmium, lead, and strontium) were found in excess due to firecracker combustion.

Health outcomes showed a marked rise in respiratory issues, eye irritation, fatigue, and burns, with hospitals reporting spikes in cardiac and pulmonary emergencies. Lung function decline (noted through spirometry) and elevated heavy metal levels in urine confirmed the acute impact of short-term exposure. The report concluded that firecracker usage results in intense, short-term environmental and health hazards, especially affecting vulnerable groups like children and the elderly. It also stressed the need for stronger public education and enforcement mechanisms, as awareness alone had limited influence on behavioural change.

2. Arjun Gopal & Others v. Union of India (Writ Petition (Civil) No. 728 of 2015)²:

This landmark case was filed by three children's (Arjun Gopal, Arjun G. Bhagat and Zoya Rao Bhasin) under Article 32 of the Indian Constitution, seeking protection of their right to clean air and good health, which fall under Article 21 (Right to Life). The petition highlighted the health and environmental dangers caused by firecracker pollution during festivals like Diwali. They also submitted medical studies and air quality reports showing that pollution levels, especially harmful particulate matter and toxic gases, rise sharply after Diwali.

The court, after hearing everything, decided to take strict steps. It banned harmful firecrackers, fixed specific hours for bursting them, and even encouraged the use of eco-friendly green crackers. The judgment clearly shows how the Court can take strong action when public health and the environment are at risk.

² AIR 2018 SC 5731

3. The Environment (Protection) Act, 1986³:

This Act plays an important role governing the environment pollution due to firecrackers. In this act Section 3 empowers the Central Government to take steps for the protection and improvement of environmental quality. Section 6 enables the government to publish rules for the administration of hazardous substances, such as those used in firecrackers.

Severe penalties are laid down under this Act for those individuals or organizations who violate environmental laws, including the rules pertaining to the manufacture, sale, and use of firecrackers. Under Section 15 of the Act, whoever does not obey or violate the provisions, rules, or directions made under the Act shall be punished with imprisonment for a term which may extend to five years, or with a fine which may be up to ₹1,00,000, or with both. If the offence continues after conviction, there is a fine of ₹5,000 per day in addition. In addition, if the defaulting continues for over twelve months since the first conviction, then the penalty can increase to a jail term of up to seven years. Such provisions are meant to enforce responsibility and realize compliance with environmental standards, especially when festivals cause an appreciable rise in pollution levels due to firecracker use.

4. ‘Exploring the Possibility of a Firecracker-Free India by Anagha V. Nair 2021.

This article speaks about the possibility of eliminating firecracker use in India by addressing environmental, legal, and social challenges. It highlights the adverse health and environmental impacts of firecrackers, especially during festive seasons. The article identifies a gap between existing laws and public compliance, attributing this to limited awareness and weak enforcement. In this article Nair suggests that a combination of stricter regulations, public education, and sustainable alternatives is essential for achieving a firecracker-free society.⁴

5. ‘Right to life above right to employment: SC on firecracker ban’ by Abraham Thomas, 2021

It highlights the Supreme Court's position that the fundamental right to life and health under Article 21, takes precedence over employment concerns. The Court addressed petitions filed

³ The Environment (Protection) Act, No. 29 of 1986

⁴ Volume 1, International Journal of Policy Sciences and Law.1209,1209–1226 (2021), https://ijpsl.in/wp-content/uploads/2021/09/Exploring-the-Possibility-of-a-Firecracker-FreeIndia_Anagha-V-Nair.pdf

by firecracker manufacturers, asserting that public health risks due to air and noise pollution during festivals cannot be overlooked in the name of sustaining jobs. This judicial viewpoint emphasizes the need to balance economic livelihoods with the constitutional right to clean air and good health, thereby setting a precedent for future policy and legal measures related to firecracker usage in India⁵.

1.4 OBJECTIVE OF THE STUDY:

1. To assess the level of public awareness regarding firecracker regulations.
2. To examine compliance patterns and the factors influencing both compliance and noncompliance.
3. To evaluate the effectiveness of public education campaigns and community awareness initiatives.
4. To explore cultural and social influences on firecracker usage during festivals.
5. To analyse primary data from surveys, interviews, and online responses (e.g., Google Forms) to identify behavioural patterns and attitudes toward firecracker regulations.

1.5 HYPOTHESIS

"Greater public awareness regarding firecracker regulations is associated with improved compliance, as individuals with higher awareness are more likely to follow legal guidelines, consider environmental and health consequences, and choose safer alternatives during festivals, public celebrations, personal events, and even in day-to-day situations. This relationship will be examined by analyzing the correlation between respondents' understanding of the regulations and their actual firecracker-related practices, under the assumption that informed individuals demonstrate more responsible behaviour."

1.6 SCOPE OF THE STUDY

The purpose of this research is to evaluate the level of public awareness regarding firecracker

⁵ <https://www.hindustantimes.com/india-news/right-to-life-above-right-to-employment-says-sc-overfirecracker-ban-101632855186778.html>

regulations and the degree of voluntary compliance with these rules, by analyzing public knowledge, attitudes, and behaviour during festive periods, public events, and celebrations, particularly in relation to health and environmental concerns. Data will be exclusively gathered through online surveys and interviews from selected urban and rural populations, while excluding in-depth legal analysis or governmental enforcement strategies, and instead emphasizing the influence of educational background, cultural norms, and exposure to awareness campaigns on people's decisions to follow or ignore firecracker-related guidelines.

1.7 LIMITATION OF THE STUDY

This study has certain limitations that may affect the broader applicability of its findings. First, the research is confined to specific regions within India, which means the outcomes may not accurately reflect the situation across other parts of the country that have different cultural traditions, economic backgrounds, or enforcement levels. Additionally, the study focuses solely on the public's awareness and personal compliance with firecracker regulations, without examining the roles played by law enforcement agencies, policy-making bodies, or public institutions which also influence regulatory success.

Another limitation arises from the use of self-reported data collected via Google Forms. Respondents may not always provide fully accurate answers, either unintentionally or due to social desirability bias—where individuals present themselves in a more favourable light. The study also does not take into account external factors like economic dependence on the firecracker industry, availability of safe alternatives, or the influence of local customs and festivities. Lastly, the sample size was small, which might have limited the variety and depth of the responses because of limited time and resources.

CHAPTER- II

RESEARCH METHODOLOGY

2.1 INTRODUCTION

Research methodology is defined as a specific procedure or techniques used to identify, select, process and analyse information about the topic. In other words, Research methodology is a way of explaining how the research is carried out by Researcher. It's a logical, systematic plan

to resolve a Research problem. In this chapter, I would like to discuss about the research methodology which I use for this paper.

2.2 RESEARCH APPROACH

There are two types of research approaches. One is **Qualitative research approach**. The second one is, **Quantitative research approach**. Quantitative research is expressed in numbers and statistics. It is used to test or confirm theories and assumption. Qualitative research approach is express in words. It used to understand concepts, thoughts or experience.

This study adopts a non-doctrinal or **empirical** research approach, focusing on collecting and analysing primary data to understand public awareness and compliance with firecracker regulations. The research relies on a **quantitative method** using a structured questionnaire distributed via Google Forms to gather responses from around 50+ individuals across different demographic backgrounds.

The empirical approach helps capture real-life views, feelings, and actions of the public about firecracker use, following regulations, and the success of public education campaigns. The paper also looks at cultural and social factors to give a wider understanding of public behaviour.

2.3 DATA COLLECTING INSTRUMENT

I utilized Google Forms in designing and posting a structured survey(questionnaire) for collecting data for my project. I selected this online tool as it can be easily disseminated to more people in just a short amount of time and is easy to use and share. I used Google Forms in developing and sharing a formatted questionnaire for gathering information for my project. The survey included multiple-choice and open-ended questions to assess how well respondents understood firecracker regulations, their compliance behaviour, and their opinions on firecracker use. The online format allowed for quick gathering and analysis of results, which minimized human error and simplified statistical analysis. I shared the poll through messaging apps, social media, and email to boost participation and expand my sample size.

2.4 DATA COLLECTION METHOD

Digital data collection methods, including online distribution, were used to measure public awareness and compliance with firecracker regulations. The survey was circulated via social

media platforms like Instagram, WhatsApp, and email. Online distribution also took place through messaging apps. This approach helped the researcher reach a wide and diverse group of participants. It was particularly useful given the limits on time, budget, and physical access. The survey remained open for a set period, which encouraged voluntary participation. Additionally, this digital method aligned with the study's environmental goals by reducing paper use.

2.5 VARIABLES

Variables are an important part. Any research project must include variables. A variable refers to any feature or characteristic that can change or vary, such as age, gender, or behaviour. In simple words, variables are things that researchers observe, measure, or analyze during the study.

In this study, I used both **Independent and Dependent** variables to explore the relationship between public characteristics and their awareness and compliance with firecracker regulations.

2.5.1 DEMOGRAPHIC VARIABLE

In my research paper, I included several demographic variables to better understand the patterns of public awareness and compliance with firecracker regulations.

THE DEMOGRAPHIC VARIABLES USED WERE,

1. AGE
2. GENDER
3. EDUCATIONAL STATUS
4. LOCATION
5. MARITAL STATUS

2.5.2 TYPES OF VARIABLES IN THE STUDY

Independent Variables: The **Independent variables** includes:

Age,

Gender,

Education Level,

Location,

Marital Status.

Dependent Variables: These are the outcomes being measured in the research. In this study, the dependent variables are:

Firecracker Awareness,

Firecracker Compliance,

Firecracker Safety Knowledge.

These dependent variables help to understand how much people know about firecracker rules, whether they follow them, and how aware they are of safety issues.

2.6 POPULATION

In my research paper, the population consists of members of the general public who are aware of or affected by firecracker regulations, including individuals from various age groups, genders, educational backgrounds, and locations (urban and rural).

2.7 SAMPLE AND SIZE

This study was conducted with a sample size of 50+ people from different age groups, education levels, and locations. The questionnaire was distributed online through Google Forms, allowing voluntary participation from a diverse group of individuals. While participants were not pre-selected, efforts were made to share the form widely to ensure fair representation. The sample size was determined based on available time, resources, and accessibility, and it was sufficient to understand the level of public awareness and compliance with firecracker regulations.

2.8 SAMPLING

For data collection in this research paper, The convenience sampling and a non-probability

sampling⁶, was employed. This was because it is a convenient method, particularly in online research where it is hard to reach participants randomly. The questionnaire was distributed through Google Forms on social media channels such as WhatsApp, Instagram, and email for easy access to a large pool of voluntary respondents. The participants were not chosen on the basis of certain criteria, but on their availability and willingness to reply. This strategy helped the researcher to gather useful information on public perception and compliance with firecracker legislation despite time, budget, and physical access limitations.

2.9 DATA ANALYSIS PROCEDURE

Descriptive⁷ and inferential statistical methods were applied to quantify and analyze the data obtained via surveys and interviews. Descriptive statistics including frequencies, percentages, pie charts, and bar graphs were applied in summarizing the levels of awareness and compliance with firecracker laws among respondents. These helped to clearly exhibit overall trends and patterns in the data. Cross-tabulation⁸ was also employed to contrast awareness and compliance levels between different demographic segments like age, education, and geography. For purposes of analyzing the strength and direction of the relationship between compliance behaviour and public awareness, correlation Analysis⁹ was done. This justified the testing of the research hypothesis on the relationship between knowledge and its actual practice.

CHAPTER III: FINDINGS & INFERENCE

3.1 INTRODUCTION

This chapter provides a structured analysis of data gathered from approximately 50+ respondents through a Google Form survey. The study aims to assess public awareness of firecracker regulations and examine the level of compliance. It also explores the impact of public education campaigns, the role of cultural and social factors in firecracker usage, and the ongoing effort to balance traditional celebrations with environmental concerns. The quantitative data has been analyzed using thematic tables and basic statistical tools. Visual

⁶ Non-probability sampling refers to a sampling technique where samples are chosen by the researcher using their subjective assessment rather than by chance.

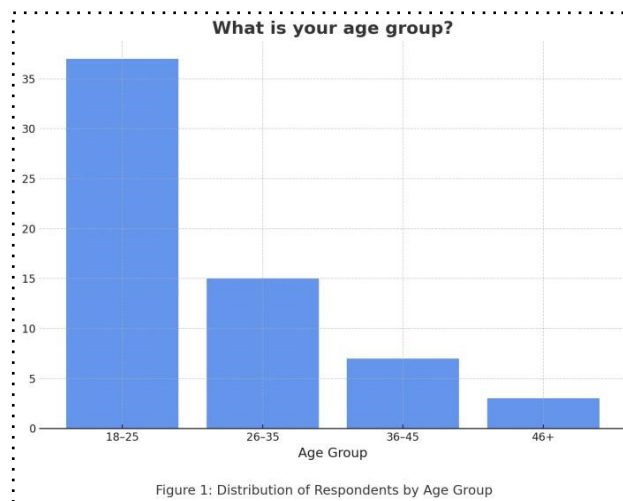
⁷ Descriptive statistics defined as tools like frequencies, percentages, pie charts, and bar graphs summarize the data for clearer understanding.

⁸ Cross-Tabulation is defined as used to compare categorical variables across different demographic groups.

⁹ The degree and direction of the relationship between awareness and compliance are measured by correlation analysis means.

representations of the findings are included in Annexure A, while the complete dataset is presented in Annexure B.

3.2 Demographic profile of respondents



Findings:

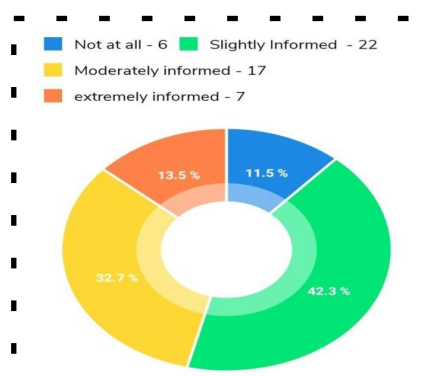
Most respondents (42 out of 52) are aged 18–25, showing a strong youth presence. Very few are above 26, and none are over 45.

Inference:

The data mainly reflects views of young adults, making it less representative of older age groups.

Awareness of firecracker regulations

How informed do you feel about Firecracker regulations (e.g., usage of timings, safety requirements, types of firecrackers allowed)?



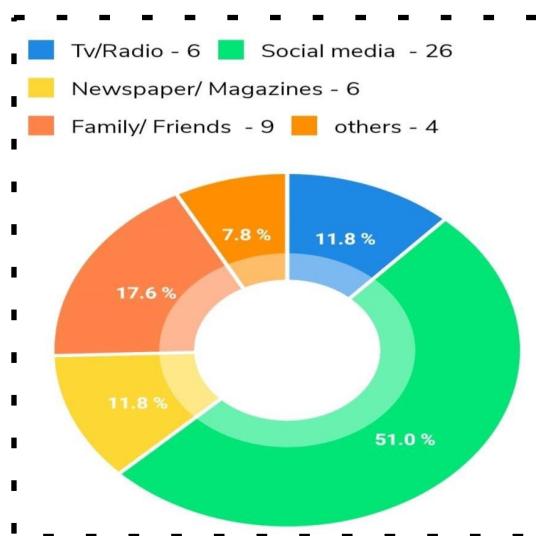
Findings:

Most respondents are only slightly or moderately informed; very few are extremely informed.

Inference:

There's limited awareness of firecracker regulations, highlighting the need for better public education.

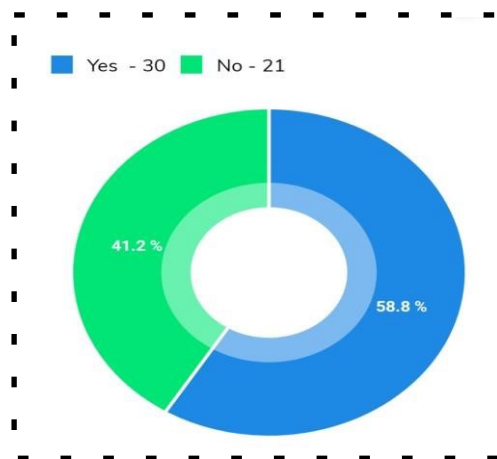
1. Where have you primarily obtained your information about firecracker regulations?

**Findings:**

51% of respondents (26 people) got information about firecracker regulations from social media, 17.6% (9 people) relied on family and friends, TV/Radio and Newspapers/Magazines were each used by 11.8% (6 people), 7.8% (4 people) mentioned other sources, 1 respondent skipped the question.

Inference:

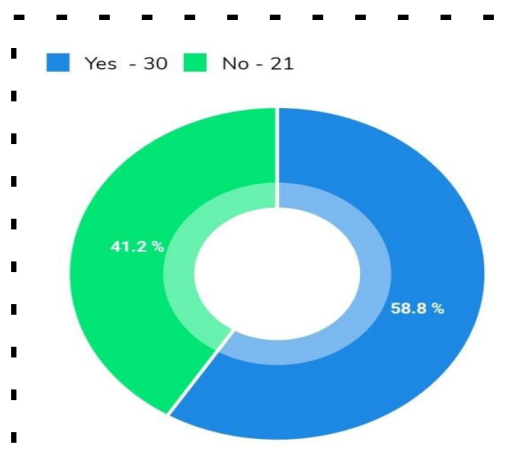
Social media is the primary source of information for most people, indicating a digital-first trend in information consumption. Traditional media and interpersonal sources are still relevant but less dominant. This highlights the importance of ensuring accurate and responsible content on social platforms.

Are you aware of any penalties or fines for non-compliance with Firecracker Regulations?**Findings:**

Out of a total of 51 respondents, 30 individuals (58.8%) responded “Yes,” indicating awareness, while 21 individuals (41.2%) responded “No,” showing a lack of awareness.

Inference:

Over half of the population is aware of firecracker regulations, but a significant 41.2% lack this knowledge, risking unintentional violations. This highlights the need for targeted awareness campaigns, especially before major festivals, to promote compliance and reduce environmental and safety risks.

Compliance behaviour**Have you ever switched to using eco-friendly (green) Fire Crackers?**

Findings:

Out of 51 respondents, 30 (58.8%) have switched to eco-friendly firecrackers, while 21 (41.2%) have not. This shows that a majority are aware and have adopted green alternatives, but a considerable number still use traditional firecrackers.

Inference:

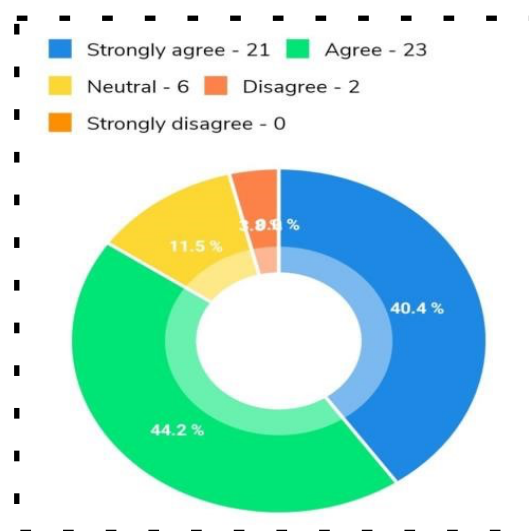
The results indicate growing awareness and partial compliance with firecracker regulations. However, the 41.2% non-compliance suggests the need for more awareness drives, easier access to green firecrackers, and stronger enforcement to encourage wider adoption.

Attitudes and perceptions

To what extent do you agree with the following statement. "Firecracker regulations are necessary to reduce environmental pollution and protect public health".

Findings:

Out of all respondents, 86.6% (21 strongly agree, 23 agree) support the need for firecracker regulations. Only 11.5% were neutral and 3.8% disagreed. No one strongly disagreed.

**Inference:**

The results show strong public awareness and support for firecracker regulations to reduce pollution and protect health. Very few oppose, indicating high potential for compliance and

acceptance of such rules.

How much do cultural traditions influence your decision to use firecrackers during celebration?



Findings:

Out of the total responses, 20 (38.5%) said cultural traditions influence them "a little", 13 (25%) said "significantly", and 10 (19.2%) said "completely". Only 9 (17.3%) said "not at all". This shows that cultural traditions play at least some role for a majority in their decision to use firecrackers.

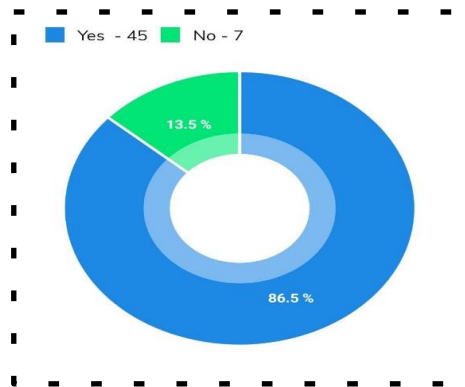
Inference:

Cultural influence is a key factor in firecracker use, with over 80% affected to varying degrees.

This suggests that awareness and regulation efforts should consider cultural sensitivity and include alternative celebration ideas to encourage compliance without dismissing tradition.

Knowledge of health and environmental impact

Do you know that firecrackers can cause respiratory problems, especially in children, elderly, and people with asthma?

**Findings:**

The survey shows that 86.5% of respondents are aware that firecrackers cause respiratory issues, especially in children, the elderly, and asthma patient. Only 13.5% were unaware, indicating a generally high level of public awareness.

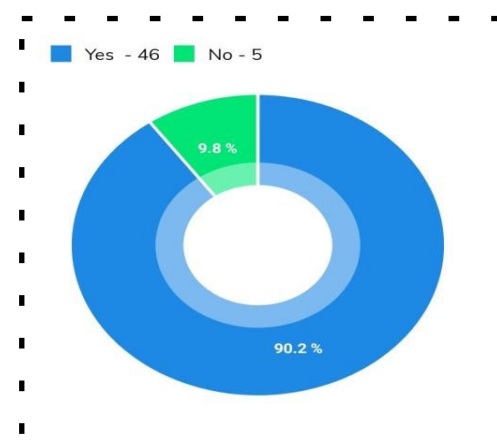
Inference:

High awareness suggests strong potential for compliance with firecracker regulations. However, the unaware minority highlights the need for continued awareness campaigns to ensure full understanding and support for health-based policies.

Are you aware the excessive noise from firecrackers can be harmful to animals and people?

Findings:

90.2% of respondents are aware that excessive firecracker noise can harm animals and people, while only 9.8% are not.

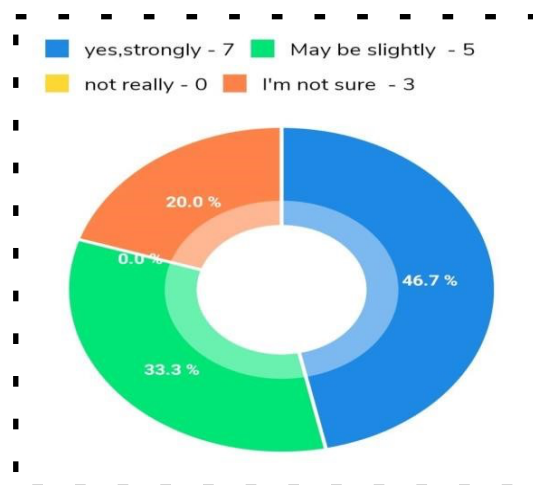


Inference:

High awareness exists about the harmful effects of firecracker noise, but further study is needed to determine if this awareness results in actual compliance with regulations.

Social Impact

Do you think banning firecrackers will negatively affect the livelihoods of poor workers?

**Findings:**

Nearly 80% of respondents believe banning firecrackers could negatively impact poor workers—47% strongly agree, 33% think it may slightly affect, and 20% are unsure. No one disagreed.

Inference:

There is strong public concern about the livelihood impact of firecracker bans on poor workers. This suggests the need for balanced policies that address both environmental goals and economic support.

CHAPTER IV: CONCLUSION & SUGGESTION**CONCLUSION & SUGGESTIONS**

The study reveals that there is considerable public awareness regarding firecracker regulations,

particularly concerning health and environmental impacts¹⁰. However, compliance remains inconsistent, with a significant portion of respondents still using traditional firecrackers despite support for regulations. Cultural traditions play a substantial role in firecracker usage, indicating the need for culturally sensitive awareness campaigns. Additionally, awareness of penalties for non-compliance is limited, suggesting that more targeted education is necessary¹¹. To improve compliance, it is recommended that public awareness campaigns emphasize the benefits of eco-friendly firecrackers, highlight penalties for non-compliance, and educate the public on the health risks associated with firecracker usage¹². Furthermore, policies should consider the socio-economic impact on workers in the firecracker industry while striving to meet environmental goals¹³.

¹⁰ The Environmental (Protection) Act, 1986, No. 29 of 1986, S 3(1).

¹¹ The Explosives Act, 1884, No. 4 of 1884, S 9.

¹² Central Pollution Control Board, Guidelines on Firecrackers available at <https://cpcb.nic.in>.

¹³ Ministry of Labour and Employment, Report on the Socio-Economic Impact of Environmental Regulations on Firecracker Workers (2017), available at <https://labour.gov.in/>

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APPENDIX

QUESTIONNAIRE PUBLIC AWARENESS AND COMPLIANCE WITH FIRECRACKERS REGULATIONS

1. Name
2. Age
3. Marital status
 - a. Single
 - b. Married
 - c. Divorced
 - d. Widowed
 - e. Prefer not to say
4. Gender
 - a. Male
 - b. Female
 - c. Other
5. What is your highest level of education?
 - a. Below 10th
 - b. 10th - 12th
 - c. Graduated
 - d. Post graduated
 - e. other

6. Where do you live in?
 - a. Rural
 - b. Urban
 - c. other
7. How informed do you feel about Firecracker regulations (e.g., usage of timings, safety requirements, types of Firecrackers allowed)?
 - a. Not at all
 - b. Slightly Informed
 - c. Moderately informed
 - d. extremely informed
8. Where have you primarily obtained your information about firecracker regulations?
 - a. Tv/Radio
 - b. Social media
 - c. Newspaper/ Magazines
 - d. Family/ Friends
 - e. others
9. Are you aware of any specific penalties or fines for non-compliance with Firecrackers Regulations?
 - a. Yes
 - b. No

10. On a scale 1 to 5, how frequently do you use firecrackers during festivals (with 1 being "Never" and 5 being "very frequently")?

- a. 1
- b. 2
- c. 3
- d. 4
- e. 5

11. Do you follow safe practices when using firecrackers?

- a. Always
- b. Usually
- c. Sometimes
- d. Rarely
- e. Never

12. To what extent do you agree with the following statement. "Firecracker regulations are necessary to reduce environmental pollution and protect public health".

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly dis-agree

13. Do you believe that strict enforcement of Firecrackers regulation (e.g., Fines, Restricted usage times) will result in safer celebration?
- a. Yes
 - b. No
14. How much do cultural traditions influence your decision to use firecrackers during celebration?
- a. A little
 - b. Significantly
 - c. completely
 - d. Not at all
15. Do you know that firecrackers can cause respiratory problems, especially in children, elderly and the people with asthma?
- a. Yes
 - b. No
16. Are you aware the excessive noise from firecrackers can be harmful to animals and people?
- a. Yes
 - b. No
17. Have you ever switched to using eco-friendly (green) firecrackers?
- a. Yes
 - b. No
18. In your opinion, what could be done to improve public awareness of Firecrackers Regulations and safe practices?

19. What are your thoughts on using eco-friendly firecrackers or alternative celebration method? would you be open to adopting them, and why or why not?
20. What do you understand by firecracker regulations? can you name any specific rules or Regulations related to their use?
21. How do cultural or social tradition influence your decision to use or not use firecrackers?
22. In your opinion, who is most responsible for enforcing firecracker regulations?
 - a. Local government authorities
 - b. community leaders
 - c. individual citizens
 - d. environmental organizations
 - e. National governments
23. What is your general attitude towards firecrackers during festivals?
 - a. I enjoy them and see them as an essential part of an celebrations
 - b. I like them but think they should be regulated
 - c. I don't like them and avoid them if possible
 - d. I don't care either way
 - e. not sure
24. Would you prefer to celebrate festivals or other functions without any use of Firecrackers, even if that means losing part of the tradition?
 - a. yes, I would prefer a celebration without firecrackers
 - b. No, I believe firecrackers are the important part of the celebration

c. Maybe, if there is alternative celebration available

d. not, sure

25. Would you be willing to participate in a community initiatives (e.g., light shows, noise-free celebrations) as an alternative to traditional firecracker use?

a. yes, I would actively participate

b. yes, but only if it's easy and accessible

c. No, I prefer tradition firecrackers

d. Not sure

26. How important do you think it is for cultural traditions to be maintained through the use of Firecrackers

a. Yes

b. No

27. Do you think banning firecracker will negatively affect the livelihoods of poor workers?

a. yes, strongly

b. May be slightly

c. not really

d. I'm not sure