

THE IMPACT OF NOISE POLLUTION: HOW REGULATIONS CAN HELP

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ABSTRACT-

Noise pollution is a major problem in most cities around the globe. Noise is defined as unwanted sound. Every sound that we encounter in our neighborhoods, other than those made at work—that's ambient noise. Environmental noise, one form of air pollution, threatens health and well-being. It is more serious and widespread than ever before and continues to increase due to population growth, urbanization and the accompanying use of increasingly powerful, diverse and highly mobile noise sources. It continues to grow because of the continued growth of road, rail and air traffic, which remains to be an important source of environmental noise. At the factory workplace, workers are exposed to loud noise from conventional machinery. The possible health effects of noise pollution are many, widespread, persistent, medically and socially significant. Noise leads to harmful health effects that impact the living, social, and work environment, resulting in both financial and non-material damages. Noise is a major public health problem that can cause hearing loss, sleep disturbances, cardiovascular disease, social disabilities, reduced productivity, negative social behavior, irritability, absenteeism and accidents. This can reduce the ability to enjoy possessions and leisure time and increase antisocial behavior. Noise negatively affects overall health and well-being just like chronic stress. This affects negatively the future generations, weakening the living, social and learning environment and causing corresponding economic losses. Government should aim to protect citizens from the harmful effects of air pollution, including noise. People have the right to choose the nature of their acoustic environment; it must not be imposed by others.

Keywords- Noise pollution, health, health problems, environment, government.

INTRODUCTION-

"Unwanted sound is what is known as noise." The Latin term "nausea," which means "unwanted sound" or "sound that is loud, unpleasant, or unexpected," is where the word "noise" originates. It can be summed up as the inappropriate sound occurring at an inappropriate moment and location.

There are innumerable noise sources. Various sources of noise include mechanical appliances, entertainment systems, speakers, cell phones, and transport vehicles such as cars, trains, and boats. Other sources of noise include mechanical equipment like air conditioners, drills, and mowers, as well as huge construction equipment. On the other hand, pollution is the introduction of substances into the environment that have the potential to cause harm and adverse impacts. By combining the two, all undesired noise that happens in an environment that can be harmful is referred to as noise pollution. The incidence of noise pollution will only increase due to the world's ongoing industrialization. Exposure to noise pollution has been linked to a variety of negative consequences on mental and physical health of humans.

The World Health Organization (WHO) defines noise above 65 decibels (dB) as noise pollution. Decibels (dB) are used to measure noise pollution. With prolonged exposure to levels exceeding 75 dB is considered hazardous to human health and painful.¹

When Florence Nightingale said, "Unnecessary noise is the most cruel abuse of care which can be inflicted on either the sick or the well," in 1859, she acknowledged that noise posed a health risk. In every metropolis, noise pollution has become a major territorial urban issue. Pollution has been happening more frequently and intensely every day.

¹ (Anon., n.d.)

People find noise pollution to be annoying. Typically, the noise is produced by a machine and interferes with human activity or calm. It's a developing environmental issue that's spreading throughout wealthy and developing nations alike, becoming an invisible but widespread kind of pollution.

The historical issues with noise are insignificant. In contrast to the experiences of modern city people, noise pollution is increasing in volume, frequency, and intensity due to urbanization, population increase, and technological advancements. People are experiencing a variety of disorders because of noise exposure, including hearing impairment, speech interference, sleep problems, cardiovascular problems, annoyance, etc.

HARMFUL EFFECTS OF NOISE ON HEALTH-

The World Health Organization has classified noise pollution's harmful impacts on human health into following categories.²

a. Hearing impairment:

For safety and overall wellbeing, hearing is crucial. A rise in the clinically measured hearing threshold by audiometry is commonly used to characterize hearing impairment. The community, the workplace, and several other factors (such as trauma, ototoxic drugs, infection, and heredity) can all contribute to impaired hearing. Most people think that being exposed to sound levels higher than 85 dB for longer than 8 hours may be dangerous. Although exposure to noise from other sources, especially during leisure activities, can also result in significant impairments, work exposure is the primary cause of hearing loss. Research indicates that children appear to be more susceptible than adults to hearing impairment brought on by noise. Hearing loss can eventually lead to depression, speech impairment, poor performance in school and at work, limited job opportunities and sense of isolation.

b. Annoyance and negative social behavior:

Anger, disappointment, dissatisfaction, withdrawal, helplessness, melancholy, worry, distraction, agitation, or tiredness are all aggravated when there is a perceived lack of control over the noise.

The consequences of noise exposure on social behavior are multifaceted, and indirect. Changes in everyday behavior such as avoiding yards and balconies and turning up the volume on radios and televisions; changes in social behavior such as hostility, unfriendliness, lack of participation, or disengagement); changes in social indicators (such as hospital admissions and residential mobility; and mood swings are some of these effects. Noise, however, has the potential to provoke aggressive behavior when combined with other psychotropic substances, alcohol, or pre-existing hatred or rage.

c. Interference with spoken communication:

In addition to impairing comprehension of regular speech, noise pollution can cause a variety of additional problems. These include issues with focus, exhaustion, uncertainty, low self-confidence, annoyance, miscommunication, decreased efficiency, disrupted interpersonal connections, and stress responses. A few of these consequences could result in more mishaps, disrupted classroom interactions and lower academic achievement. Those who are not familiar to spoken language, the elderly, and children are particularly vulnerable groups.

d. Sleep disturbance:

In healthy adults, it is well established that adequate sleep is essential for proper physiologic and mental functioning. One of the main factors causing sleep disturbances is noise pollution. Mood swings, decreased performance, and other long-term negative impacts on health and wellbeing are the outcomes of chronic sleep disruption.

In addition to its own effects on sleep, noise during sleep raises heart rate, blood pressure, pulse amplitude, and produces cardiac arrhythmias. It also results in increased movement of the body. The amount of noise that annoys you during the night extends during the course of the next 24 hours. The elderly, shift workers, people

² (WHO Guidelines for Community Noise - A complete, n.d.)

at risk for medical or mental illnesses, and people with sleep difficulties are among the most vulnerable categories.

e. Effect on mental health:

The development of latent mental diseases is believed to be accelerated and intensified by noise pollution, although it is not thought to be the cause of mental disorders. The negative impacts of noise pollution include anxiety, tension, nervousness, nausea, headaches, emotional instability, arguing, mood swings, increased social conflicts, neurosis, and more. Due to potential limitations in their coping skills, children, the elderly, and individuals with underlying depression may be more susceptible to these effects. Children who live in noisy areas report feeling less happy and finding the noise to be bothersome. When people argue about loudness, they frequently get into violent altercations that result in harm or even death, which is frequently noticed in the news also.

f. Cardiovascular Disturbances:

An increased risk of heart disease has been associated with constant exposure to traffic noise. It was discovered that an increase of 5 decibels in the average 24-hour noise level was linked to a 34% rise in heart attacks, strokes, and other major heart-related disorders. Chronic exposure to noise pollution has been linked to hypertension, elevated heart rate, and increased risk of cardiovascular diseases such as heart attacks and strokes.

Children are also in danger. It has been demonstrated that kids who grow up in noisy surroundings have higher blood pressure and higher levels of stress-related hormones.³

STATUTORY PROVISIONS RELATED TO NOISE POLLUTION IN INDIA-

In India, there are various legal regulations related to noise pollution. These sections are dispersed throughout numerous statutes and modifications, and the different statutory provisions include the following:

1. The Indian Constitution

ARTICLE 21-

The Indian Constitution's Article 21 guarantees citizens the right to life. It has been made evident by several Supreme Court rulings that a person's right to life extends beyond their ability to survive or even to exist. Article 21 guarantees the right to a better life or the ability to live with dignity, and its scope is quite broad. Therefore, if someone experiences issues as a result of noise pollution and it interferes with their ability to relax and feel at ease, then the noise pollution is in violation of person's right to life.⁴

ARTICLE 48A-

It imposes a duty on every citizen of India to protect and improve the natural environment including forest, lakes, rivers and wildlife and to have compassion for living creatures. The citizens are duty bound to improve the environment and make it noise free.

The mandate of the constitution is clear that the state as well as the citizens shall make all efforts to make environment free of the noise pollution.

- In *Church of God (full gospel) v. KKR Majestic Welfare Association* case, The Court noted that no religion prescribes the use of voice amplifiers during prayer. Article 19(1)(A), which states that no person may be made to endure an unpleasant sound, is open to annulment in light of the basic right to religion as protected by Article 25 of the Constitution. A person can only exercise their right in a way that respects the rights of others.⁵

³ (World Health Organization, n.d.)

⁴ (Singh, 2016)

⁵ (Church Of God (Full Gospel) In. vs K.K.R.Majestic Colony Welfare., 2000)

- *Moulana Mufti Syed vs State of West Bengal and ORS. 1998*, In this particular case, the State of West Bengal placed some limitations on the usage of microphones. The restriction stated that only public authorities were permitted to use microphones between the hours of 9 p.m. and 7 a.m. A writ application was filed by the petitioners. The petitioners said that since azaan is an essential part of their religion, the restrictions infringe Article 25, which guarantees freedom of religion. When the court heard their petition, it ruled that no one else could be made to listen to such azaan and that the following restriction did not in any way violate their Article 25. The police in the state of West Bengal were also instructed to seize any microphones used prior to 7 in the morning.⁶

2. The Code of Criminal Procedure (CrPC)

SECTION 133-

An executive magistrate, district magistrate, or sub-divisional magistrate may conditionally remove anything that is causing a nuisance under Section 133 of The Code of Criminal Procedure.⁷ Thus, in the event of a noise-related nuisance, this clause may be invoked. Therefore, within a set amount of time, the executive, district, or sub-divisional magistrates may order the removal of a nuisance if they receive a report from a police officer or another source stating that loud noises are causing an unlawful obstruction or nuisance and that the source of the loud noises needs to be removed from public areas that the public is lawfully using. If the executive magistrate, district magistrate or sub-divisional magistrate doesn't take the required action then, in that case, this section can be called into question in a Civil Court.

- *Ram Autar vs State of Uttar Pradesh, 1962*, In this case, the appellant was a vegetable vendor. He used to auction off the price of the vegetables during the selling process, which led to annoyance and disturbances. Even though this auction was conducted in private, there were still problems. A restraining order was issued by the court regarding auctions. Subsequently, the Supreme Court repealed the order and declared that the purpose of Section 133 of the CrPC was not to prohibit such trade on the simple pretext of causing inconvenience or distress. As a result, the appeal was granted.⁸

3. Indian Penal Code (IPC)

The Indian Penal Code addresses specific offenses in Chapter 14. All acts that jeopardize public health or safety are considered such offenses. Noise pollution is addressed in Sections 268 through 294 and in Sections 287 through 288.⁹

SECTION 268 –

Public nuisances are defined in Section 268. A person is considered to have committed a public nuisance if they have done anything that could endanger the safety of others, aggravate the public, or create a general hindrance.

SECTION 287 –

The careless use of any machinery is covered in Section 287. Anyone operating machinery carelessly enough to endanger or injure someone else.

So, if someone is causing noise pollution with a machine then, in that case, that person may attract imprisonment up to 6 months or a fine of Rs.1000.

SECTION 288 –

According to Section 288 during the construction or maintenance of a structure, an individual who causes harm to someone by negligence faces a maximum sentence of six months in prison and a fine of one thousand rupees.

⁶ (Moulana Mufti Syed Md. Noorur Rehman ... vs State Of West Bengal And Ors. , 1998)

⁷ (Singh, 2016)

⁸ (Ram Autar vs State Of U. P, 1962)

⁹ (Rajasekharan, 2020)

There is a lot of noise pollution these days when buildings are being built or repaired. Because of this, noise pollution has the potential to hurt people or the public at large. If this occurs, the offender faces penalties under Section 288 of the Indian Penal Code.

SECTION 290-

Any further public nuisance that is not covered by the Indian Penal Code is discussed in Section 290. So, if there is any noise related incident which is not been mentioned under the code and such incident is causing any form of a public nuisance, in that case, the offender is served a fine of Rs.200.

SECTION 291-

An individual faces a maximum sentence of six months in jail or a fine if they continue to cause a public nuisance after being served with an order from a court prohibiting them from repeating their actions.^[10]

SECTION 294 –

It discusses offensive music and states that it is considered a nuisance if someone plays, recites, or sings offensive music. An offender of this type faces a three-month jail sentence, a fine, or both.

4. Law of torts^[10]

According to law of torts, noise pollution is one of the offences classified as a nuisance. Anyone who is negatively impacted by noise pollution has the right to launch a civil lawsuit and seek damages. Anybody can launch a lawsuit relating to noise pollution if they can demonstrate that the noise pollution interferes with their ability to use the land and has caused them harm.^[10]

5. Motor Vehicle Act^[11]

The Motor Vehicle Act establishes rules for the operation of car horns. This Act prohibits the use of horns that are excessively loud or bothersome.^[11]

- The court in *Rabin Mukherjee v. State of West Bengal* banned the use of air horns as a means of mitigating noise pollution. The Court noted that noise pollution is a serious concern and that the careless and unlawful use of air and electric horns is harmful to one's health.¹¹

6. Noise Pollution (Regulation and Control Rule), 2000 under The Environment Protection Act, 1986

served as the legal framework through which the Central Government formulated these regulations. The regulations address the use of loudspeakers and set noise-related air quality standards. The authority to enforce regulations strictly is delegated to the Pollution Control Board. There are designated "silence zones" that are within a radius of 100 meters from courts, hospitals, and educational institutions. It is strictly prohibited to make loud noises of any type in the silence zone. Maximum level of noise permitted is 75 DB in industrial areas, 65DB in commercial areas and 55 DB in residential areas.¹²

7. The 1861 Police Act

One aspect of noise pollution is music-related noise, which is covered under section 30(4) of the Police Act, 1861. Superintendents of Police are empowered to control the amount of music played and the power to restrict high volume sound that may cause disturbance to the neighbouring residents in the streets during festivals and ceremonies in accordance with the terms of this Act.¹³

¹⁰ (Dr. Brind Kumar, 2004)

¹¹ (PILLAI, n.d.)

¹² (LAURA, n.d.)

¹³ (Dutta, 2019)

8. The Workman Compensation Act of 1923

imposes a duty on employers to provide workers with compensation in cases of work-related injuries, such as total deafness and hearing impairment brought on by severe noise pollution. The Act also attempts to lessen excessive noise levels in the workplace in order to prevent both temporary and permanent harm.

9. The Factories Act of 1948

mandates that all industrial locations be kept hygienic and free of effluvia, or undesired discharge through the drain or privy, and other annoyances. Permissible sound contact is provided in the appropriate location under the Factories Act, 1948 Model Rules.

10. Air (Prevention and Control of Pollution) Act, 1981

The Act was passed in response to the 1972 Stockholm Declaration, which was adopted by the United Nations Conference on the Human Environment.¹⁴ The goal of the legislation's implementation was to protect the air's quality and reduce air pollution. Noise was added to the list of pollutants as a result of an amendment to the Act. According to Section 17(1)(a), the State Pollution Control Boards are able to regulate the further spread of air pollution caused by loud noises. In addition, the Board is responsible for establishing and enforcing noise limits pertaining to vehicles and industry.

CONCLUSION-

According to the study, the law governing noise control is insufficient to address the issue of noise pollution.

Internationally, there is no clear legislation governing the reduction of noise pollution. All industrialized and emerging nations now face a greater noise pollution problem because of globalization and technological innovation. It now poses a severe risk to all living creatures as well as non-living things. Thus, a variety of elements within the current Indian framework contribute to the ineffectiveness of laws and increasing noise pollution. Following are some contributing factors:

- Wide gap between law in theory and its implementation in practice.
- Illiteracy and unawareness among public about the problem of noise pollution
- Non-cooperation of public towards control of noise pollution.
- Inactive role of Judiciary to control the problem of noise pollution.
- Insufficient laws for controlling of noise pollution.
- Speedy growth of urbanization and industrialization.
- Ineffective laws to prevent pollution of environment by automobiles, loudspeakers and other countless sources of noise.
- Customs, festivals or religious ceremonies.
- Political intrusion in pollution control matters

So, these are several factors which causes noise pollution or which are liable for the ineffectiveness of laws and prolongation of noise-pollution.

Suggestions regarding control of noise pollution-

- Loudspeakers should only be used for authorized purposes and only with the consent of a qualified authority. For a variety of uses, the volume level and usage period should be clearly stated.
- It should be legally forbidden to use loudspeakers within 500 meters of medical facilities and educational establishments.
- In densely populated regions, drivers ought to be mandated to utilize their horns as little as possible, particularly pressure horns.

¹⁴ (Gorai, 2019)

- Vehicles that make noises over a certain threshold, whether because of a broken silencer or other issues, should not be allowed to drive on public roads.
- No industrial complex, no matter how big or little, may be built within five kilometers of a city's boundary.
- Except in cases of urgency, aircraft should not be permitted to fly below a certain altitude close to cities.
- It is best to discourage the use of fireworks, especially those that explode.
- Raising public awareness is crucial to preventing and controlling noise pollution. Most people are illiterate; hence they are mostly unaware of the strategies for reducing noise pollution. In this situation, news publications, radio, television, and the internet should launch a campaign to raise awareness of noise pollution.
- Noise pollution can be decreased by plantations. Plants are excellent at absorbing sound, particularly high-frequency sounds.

Undoubtedly, there is an urgent need for a law that addresses all forms of pollution; but, the implementation and enforcement of any law will be just as crucial. It will be necessary to act to guarantee that any legislation aimed at reducing pollution is upheld by the government and faithfully and genuinely followed by the public. Law protects all only if everyone abides by it.

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