

## Noise Pollution - Issues and Measures

**Mains: GS III - Environmental Pollution and Degradation**

### Why in News?

*The noise pollution is one of the health hazard that has crept up unacknowledged on Indian cities.*

### What is noise pollution?

- **Noise pollution** - Noise pollution is the presence of excessive, loud, or unwanted sound in the environment that negatively affects human and animal health, well-being, and the surrounding ecosystem.
- **Major sources** - These include transportation, industrial activities, construction, and household appliances.




- **Impacts** - It can cause issues like hearing loss, increased stress, and sleep disruption in humans, and can interfere with communication and behavior in wildlife.
- Medically, it is among the leading contributors to hypertension, sleep disruption, stress disorders, and cognitive decline.
- **Safe level** - The World Health Organization recommends residential daytime exposure not exceed 55 dB (A) — roughly the volume of a normal conversation.

### How is noise pollution regulated in India?

- **Legal recognition** - Legally, it is already recognised as an air pollutant under the Air (Prevention and Control of Pollution) Act, 1981.
- **Regulation** - In India noise pollution is regulated by The Noise Pollution (Regulation and Control) Rules, 2000.
- It set similar limits of 55 dB from 6 am to 10 pm, and 45 dB at night.
- But the decibel scale is not linear, a 10 dB increase means a ten-fold rise in intensity.
- Traffic corridors in Indian cities often exceed 70 dB (A).

## THE LOUDEST ALLOWED

Under The Noise Pollution (Regulation and Control) Rules, 2000

<b>INDUSTRIAL AREAS:</b> 75 dB (A) leq during daytime; 70 at night		<b>Silence Zones</b> are defined as areas comprising up to 100 m around hospitals, educational institutions, courts, religious places, or any other area which is declared as such by the competent authority.
<b>COMMERCIAL AREAS:</b> 65 dB during daytime, 55 at night		<b>Sound levels</b> are measured in dB (A) leq, which is the time-weighted average of the level of sound in decibels on scale A, which is relatable to human hearing.
<b>RESIDENTIAL AREAS:</b> 55 dB during daytime, 45 at night		
<b>SILENCE ZONES:</b> 50 dB during daytime, 40 dB at night		

DAYTIME IS DEFINED AS **6 am to 10 pm**; NIGHTTIME IS **10 pm to 6 am**.

- **Increased burden** - Most towns and cities in India routinely endure noise levels far above what is safe.
- **Most vulnerable people** - Along air pollution, the burden of this unchecked exposure falls heaviest on those least able to shield themselves.
- They are street vendors, delivery workers, traffic police, and residents of informal settlements.
- For them, the roar of the city is not an occasional nuisance but an everyday occupational hazard that slowly erodes health and well-being.

### What are the issues in regulation of noise pollution?

- **Inadequate investment** - Yet, despite this dual recognition, India has barely invested in systematic monitoring or data collection to understand the scale of the damage.
- **Weak enforcement** - The responsibility is scattered across multiple authorities.
- **Short term interventions** - As with air quality, symbolic fixes occasional honking

bans or festival crackdowns do little to tackle structural drivers.

- The result is a chronic, unaddressed public health crisis.
- **Inadequate monitoring** – Unlike air pollution, where satellites and low-cost sensors have transformed measurement, noise data in India are sporadic, reactive, and incomplete.
- **Structural and cultural barriers** – These factors hinder effective enforcement.
- **Lack of recognition** – Without recognition that noise can be as harmful as smog, many citizens tolerate or even participate in noisy practices.
- **Fragmented governance** – Pollution control boards, municipalities, and police all have partial jurisdiction, limited resources, and weak incentives to act.

## What must be done?

- **Acknowledge the issue** – Treating noise on par with air and water pollution can make a significant change.
- **Monitoring** – Real-time sensors can create integrated maps of sound exposure.
- **Innovation** – Machine-learning tools can distinguish sources like traffic, construction, industry and it may guide targeted responses.
- **Including in planning and research** – Urban planning must incorporate noise mitigation.
- Researchers and policymakers should design evidence-based interventions grounded in public-health data.
- Health studies should explicitly track noise exposure, especially near schools, hospitals, and low-income areas.
- **Creating green buffers** such as trees and parks absorb sound, while zoning can shield residential areas from high-intensity noise corridors.
- While limited experiments with green belts for noise-reduction are promising, broader efforts must be scientifically assessed and community-informed.
- **Governance reforms** – Noise regulations must be enforceable, backed by transparent data and accountability.
- **Inter-agency collaboration** – Agencies must collaborate across sectors — from pollution boards to transport departments and municipalities.
- **Behavioral change** – Promoting walking and cycling for urban mobility.
  - **For example**, initiatives such as “No Honking Day” must evolve into sustained behavioural campaigns.
- **Adoption to e-vehicles** – A faster transition to electric buses, and enforcing honking restrictions systematically will bring measurable relief.
- **Community engagement** – Noise is tied to cultural and social practices, hence the solutions must be sensitive but firm.
- **Campaigns and Partnerships** – Awareness campaigns and partnerships with religious and community leaders can reshape norms without alienating communities.
- **Ensuring equity** – Those most exposed to noise often have the least means to protect themselves.
- The right to quiet must not be a privilege it must be a baseline condition of public health.

## What lies ahead?

- India has already learned, painfully, that neglecting air pollution magnifies harm and widens inequity.
- The law already names it an air pollutant, what is missing is the political and civic will to act.
- By treating noise with the seriousness it deserves integrating it into clean-air agendas, embedding it in urban planning, and making it a priority for public health we can save lives, protect communities, and reclaim the basic human right to quiet.

## Reference

[The Indian Express| Noise pollution](#)

