

“AIR POLLUTION A MONSTER IN ENVIRONMENT”

An Overview By

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" INTRODUCTION: AIR POLLUTION THE INVISIBLE MONSTER "



"UNDERSTANDING AIR POLLUTION"

Air pollution is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere.

Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Pollutants of major public health concern include particulate matter, carbon monoxide, ozone, nitrogen dioxide and sulfur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases and are important sources of morbidity and mortality.

CAUSES OF AIR POLLUTION

- ✓ Industrial emissions
- ✓ Vehicle exhaust
- ✓ Crop burning
- ✓ Construction and dust
- ✓ Waste burning

CAUSES OF AIR POLLUTION

Industrial Emissions

I Can't Breathe

Household Activities

Dust storms

Vehicle Exhaust

Open waste burning

Deforestation

Agricultural Practices

HEALTH IMPACTS

- ✓ Respiratory problems (asthma, COPD)
- ✓ Cardiovascular diseases
- ✓ Lung cancer
- ✓ Mental health issues
- ✓ Other health concerns

Health effects of pollution

Air pollution



CO
Particulate matter
Ozone
Nerve damage
Lead
Volatile organic compounds

Headache
Fatigue

Respiratory
illness

Cardio-
vascular
illness

SO₂
NO_x

Gastroenteritis

Cancer risk

Nausea

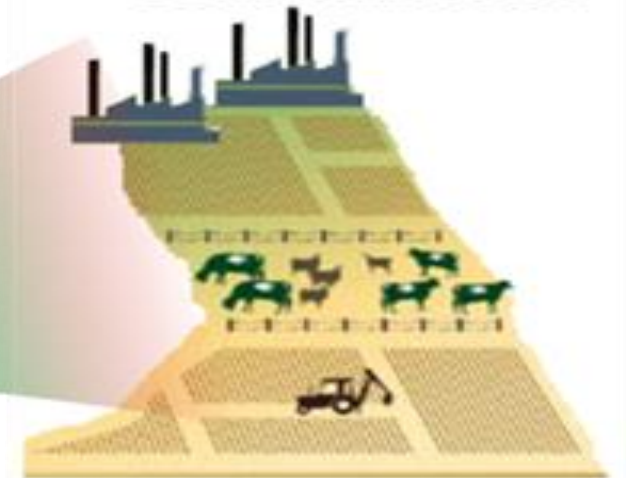
Skin irritation

Water pollution



- Bacteria
- Parasites
- Chemicals

Soil contamination



Pesticides

STATISTICS AND DATA

- ✓ **Number of deaths attributed to air pollution annually**
 - **1.5 million deaths**
- ✓ **Cities with the worst air quality –**
 - **Delhi** :AQI of 357, PM2.5 levels 332
 - **Ghaziabad** : AQI of 332, PM2.5 levels 322
 - **Byrnihat** : AQI of 130, PM2.5 levels 130
 - **Noida** : AQI of 309, PM2.5 levels 309
 - **Baghpat** : AQI of 280, PM2.5 levels 280
- ✓ **Economic impact of air pollution**
 - 3 % of India's GDP is impacted by the air pollution.
 - Increase in health care cost.

"IMPORTANCE OF THIS TOPIC, ESPECIALLY IN THE CONTEXT OF INDIA"

Air pollution in India is a critical issue that affects public health, economic productivity, and the environment. It is caused by various factors, including industrial emissions, vehicular pollution, and agricultural practices.

The problem is exacerbated by rapid urbanization and the reliance on fossil fuels. The consequences of air pollution in India include respiratory illnesses, cardiovascular diseases, and increased mortality rates, particularly among children. Efforts to combat air pollution involve comprehensive action plans, monitoring systems, and community participation to address the root causes and improve air quality.

SOLUTIONS AND INITIATIVES

- ✓ **Emission Control:** Promoting electric vehicles
- ✓ **Increasing green spaces and urban forestry**
- ✓ **Sustainable Practices:** Eco-friendly product choices, supporting green companies, proper resource management.
- ✓ **Regulation & Policy:** Implementing stricter emission norms, Fitting factories with scrubbers, using cleaner energy, noise-absorbing materials, silent generators.
- ✓ **Encouraging public transport and carpooling**
- ✓ **Waste management and reduction strategies :** Shift to circular economy (reduce, reuse, recycle), better industrial waste treatment.



What Can We Do?

Call to action

- ✓ **Reduce personal contribution to pollution**
- ✓ **Support policies and initiatives that prioritize air quality**
- ✓ **Spread awareness about the issue**
- ✓ **Participate in local clean-up drives and environmental activities**

Invest in Energy-Efficient
Power Generation.

Improve Domestic, Industry
and Municipal Waste
Management.

Make greener and more
compact cities with
energy-efficient buildings.

Reduce Agricultural Waste
Incineration, Forest Fires and
Certain Agro-Forestry Activities.

Provide universal access to clean,
affordable fuels and technologies for
cooking, heating and lighting.

Build safe and affordable public
transport systems and pedestrian
and cycle friendly networks.







CONCLUSION

- ✓ it's a global health emergency causing millions of premature deaths from diseases like heart attacks, strokes, lung cancer, and respiratory issues, while also crippling economies through healthcare costs, lost productivity, damaged crops, and reduced tourism, impacting everyone from unborn babies to adults, with severe effects on climate, ecosystems, and food security, making clean air essential for sustainable development.
- ✓ Investments in cleaner transport, energy, and waste management yield significant economic and health benefits.
- ✓ "Our Clean, Green Bharat" Green Cities & Sustainable Living: Cities powered by renewable energy, with efficient public transport, green corridors, and circular economies, where waste is a resource, not a burden.



धन्यवाद THANK YOU