



Comprehension Passage: Delhi, India – A 21st Century Clean Air Crisis

Delhi, the capital of India, has become one of the most polluted cities in the world. The city regularly records Air Quality Index (AQI) values above 400, a level classified as “hazardous.” At such levels, the air is unsafe for everyone to breathe, even healthy adults, and long-term exposure poses severe risks.

The main sources of Delhi’s pollution are varied and persistent. Crop residue burning in neighbouring states releases large amounts of smoke during harvest seasons. Vehicle traffic, which has expanded rapidly with urbanisation, contributes high levels of nitrogen oxides and particulates. Coal-fired power stations add sulphur dioxide and fine dust, while construction activities release airborne particles that worsen the already heavy smog.

The health consequences of this crisis are especially alarming for children. Medical studies show that many school-age children in Delhi have reduced lung capacity, suffer from chronic coughs, and experience higher rates of asthma compared to peers in less polluted areas. Adults are also at risk: scientists have established that PM_{2.5} particles (particulate matter smaller than 2.5 micrometres) can penetrate deep into the lungs, enter the bloodstream, and increase the risk of cardiovascular diseases such as heart attacks and strokes.

In response, the government has attempted several policies. The “Odd-Even” vehicle rationing scheme restricts cars on alternate days based on their number plates. During extreme smog episodes, schools are closed to limit children’s exposure. New smog towers—large structures fitted with air filters—have been built in parts of the city to clean limited volumes of air. Despite these measures, the overall problem remains critical, highlighting the complexity of balancing industrial growth, energy needs, and public health in a rapidly growing urban environment.





Comprehension Questions

A. Recall and Understanding

What AQI level does Delhi often record, and why is this dangerous?

List four major sources of air pollution in Delhi.

What are the main health effects of air pollution on children in Delhi?

B. Application and Analysis

4. Explain how PM_{2.5} particles affect the human body and why they are considered especially dangerous.

5. How do Delhi's pollution sources reflect challenges in balancing economic growth with environmental protection?

6. Evaluate the effectiveness of one policy response (Odd-Even scheme, school closures, or smog towers).

What are its strengths and weaknesses?

C. Critical Thinking

7. If you were a policy advisor, what long-term solutions would you recommend for Delhi's air quality problem? Consider energy, transport, and farming practices.

8. Compare Delhi's pollution crisis with the Great Smog of London (1952). What similarities and differences exist in causes, health impacts, and government responses?

