ENVIRONMENTAL ISSUES IN URBAN PLANNING

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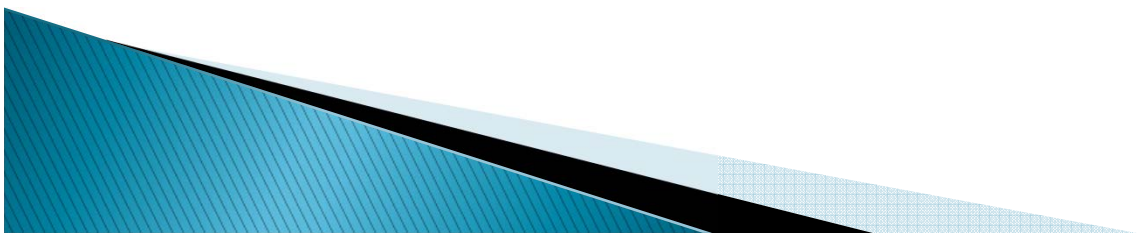
PLAY

RELEVANCE OF ENVIRONMENTAL ISSUES FOR URBAN PLANNING

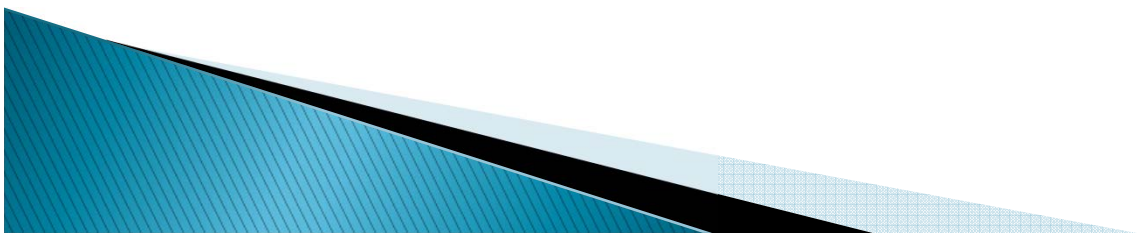
Different Activities in Urban Areas can affect the Environment

1. Locally,
2. Regionally, and
3. Globally.



NATURE OF ENVIRONMENTAL PROBLEMS

1. Localized environmental health problems
2. City-regional environmental problems
3. Extra-urban impacts of urban activities
4. Regional or global environmental burdens

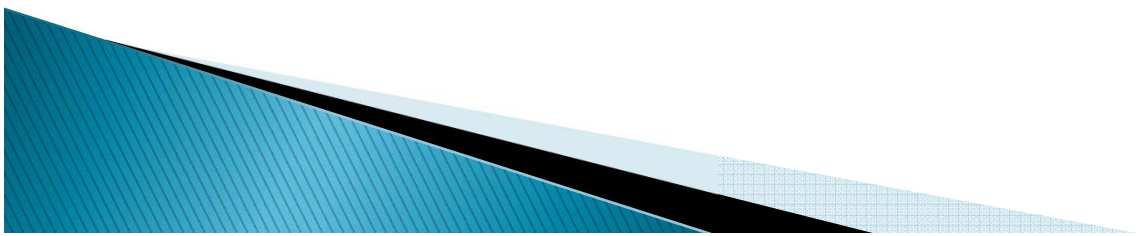


KEY ENVIRONMENTAL ISSUES

1. Environment and development
2. Protecting the atmosphere
3. Protecting the oceans
4. Waste management
5. Land resources
6. Biological diversity
7. Freshwater resources
8. Biotechnology

THRUST AREAS OF GREENHOUSE GAS EMISSIONS REDUCTION STRATEGIES IN URBAN PLANNING

1. TRANSPORTATION
2. SHELTER
3. FOOD SUPPLY
4. LIFESTYLE
5. INFRASTRUCTURE
6. URBAN NATURAL ENVIRONMENT

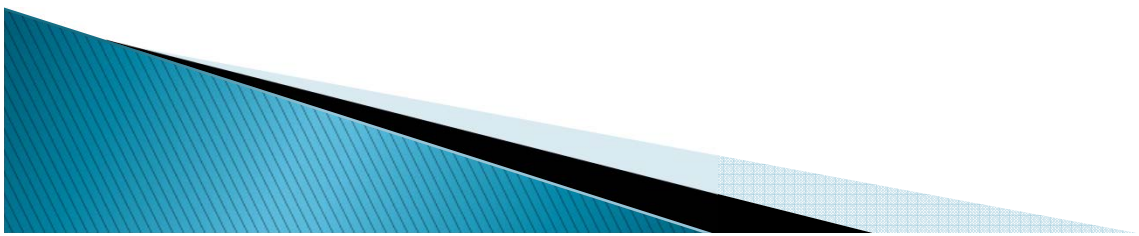


TRAFFIC CONGESTION IN DELHI

- Traffic congestion on inadequate road infrastructure is a daily reality of India's urban centers. Slow speeds and idling vehicles produce, per trip, 4 to 8 times more pollutants and consume more carbon footprint fuels, than free flowing traffic. This 2008 image shows traffic congestion in Delhi

CONTROLLING AIR POLLUTION

- Air pollution in India is quite a serious issue with the major sources being fuelwood and biomass burning, fuel adulteration, vehicle emission and traffic congestion.
- In May 2014 the World Health Organisation announced New Delhi as the most polluted city in the world.
- In November 2016, the Great smog of Delhi was an environmental event which saw New Delhi and adjoining areas in a dense blanket of smog, which was the worst in 17 years



SHRINKING URBAN SPACES

- The harsh reality about shrinking spaces in urban centres "a majority of Indians have per capita space equivalent to or less than a 10 feet x 10 feet room for their living, sleeping, cooking, washing and toilet needs".

- 33% of Indians live in less space than US prisoners". The average is 103 sq ft per person in rural areas and 117 sq ft per person in urban areas.

- For example Slum growth rate in Mumbai is greater than the general urban growth rate. Financial Times writes that "Dharavi is the grand panjandrum of the Mumbai slums". Dharavi, Asia's second largest slum is located in central Mumbai and houses over 1 million people. Dharavi Maumabai

THE URBAN PLANNING AND ENVIRONMENT CHALLENGE DHARAVI MUMBAI.

SECURING FOOD SUPPLY

- As mentioned above, the energy-efficient nature of urban agriculture can reduce each city's carbon footprint by reducing the amount of transport that occurs to deliver goods to the consumer.

- Also these areas can act as carbon sinks offsetting some of carbon accumulation that is innate to urban areas, where pavement and buildings outnumber plants. Plants absorb atmospheric carbon dioxide (CO_2) and release breathable oxygen (O_2) through photosynthesis. The process of Carbon Sequestration can be further improved by combining other agriculture techniques to increase removal from the atmosphere and prevent release of CO_2 during harvest time. Green Roofs

GREEN ROOFS FOR MAKING CITIES FOOD PROOF

Environments Conducive To Active Lifestyles Ideally Have The Following Characteristics:

1. High residential density and mixed land use, which make various destinations such as shops and services close enough for walking or bicycling.
2. Accessible public transportation systems that help reduce private vehicle use, and encourage activity for transport.
3. Availability of recreational spaces, such as parks, community gardens, play grounds, and river banks, which entice recreational physical activity.
4. Good walking and cycling infrastructure with attractive surroundings.

STRUCTURING THE URBAN INFRASTRUCTURE

- **Key areas of intervention for the improvement of urban infrastructure are:**
- Improved planning at regional, city and area level Transportation infrastructure for better mobility through public transport,
- Improved walkability and most importantly a policy on parking
- Urban services: sewerage, drainage and water supply, power distribution, Solid waste management
- Housing including affordable housing Social infrastructure such as parks, playgrounds and leisure spaces Preservation of heritage precincts Green Coridors

DEVELOPING GREEN CORRIDORS

MODERN ENVRONMENT HEALTH ENGINEERING

1. Public Water Supply
2. Wastewater Disposal
3. Solid Waste Management
4. Air Pollution Control
5. Housing and the Built Environment
6. Recreation Facilities
7. Food Protection Program
8. Energy Development
9. Environmental Planning
10. Institutional Sanitation
11. Noise Pollution Control
12. Vector Control
13. Emergency Management