



EDITORIAL: INDIAN EXPRESS

GENERAL STUDIES 3: SCIENCE & TECHNOLOGY

DATE: 03.03.2025

TOPIC: ARTIFICIAL INTELLIGENCE

Indian cities need a plan

India's Urban Crisis & the Need for Reforms

Challenges Facing Indian Cities

- Severe pollution, weak infrastructure, and climate risks make cities unlivable.
- Delhi faces extreme air pollution, but overcrowding and poor governance affect many cities.
- By 2036, over 600 million people will live in cities, requiring urgent reforms.

Learning from Global Cities

- Cities like Bangkok, London, and Singapore excel in public transport, planning, and sustainability.
- Bangkok's metro system boosts tourism, while Singapore leads in smart city initiatives.
- Indian cities must improve infrastructure, governance, and business-friendliness.

Climate-Resilient Urban Planning

- Mumbai and Bengaluru experience floods; Delhi faces record heatwaves.
- Solutions:
 - Green infrastructure and modern drainage systems.
 - Heat-resistant urban planning.
 - Early warning systems for disasters.

Pollution Crisis: Air, Water & Waste

- India has 42 of the world's 50 most polluted cities.
- Air pollution costs \$95 billion yearly.
- Water pollution affects major rivers and urban lakes.
- Poor waste management causes toxic landfills and methane emissions.
- Urgent action needed in air, water, and waste management.



The Challenge of Census Towns

- Small towns function like cities but lack urban status and funding.
- Between 2001-2011, their numbers tripled, increasing urban expansion.
- These towns need to be formally included in urban governance.

Lessons from Singapore's Urban Transformation

- Singapore overcame slums, congestion, and pollution through smart urban planning.
- Key strategies:
 - Efficient land use & affordable housing.
 - Sustainable public transport.
 - Green urban spaces.
- India can adopt similar models.

Urban Challenge Fund: A Step Forward

- ₹1 lakh crore Urban Challenge Fund aims to improve waste management, air quality, and transport.
- Cities can compete based on sustainability and governance improvements.

Solutions for Urban Challenges

1. Environment & Sustainability

- **Sponge City Concept:** Use permeable pavements, green roofs, and rainwater gardens.
- **Decentralized Waste Management:** Encourage community-led waste collection and energy recovery.
- **Smart Water Management:** Use smart meters to detect leaks and optimize water use.

2. Technology & Smart Cities

- **Urban Digital Twins:** Create virtual city models for better planning and crisis management.
- **IoT-Enabled Public Services:** Smart traffic management, energy-efficient grids, and better urban services.



PL RAJ IAS & IPS ACADEMY

MAKING YOU SERVE THE NATION

- **Cybersecurity Measures:** Protect urban digital infrastructure from cyber threats.

3. Better Governance & Accessibility

- **Participatory Governance:** Improve citizen engagement in urban planning.
- **Better Information Dissemination:** Ensure government schemes reach all residents.

Conclusion

- Indian cities must embrace strategic reforms to become livable and globally competitive.
- The next decade is critical—cities will either thrive with smart, green solutions or struggle with congestion and pollution.

Source: <https://indianexpress.com/article/opinion/columns/indian-cities-need-a-plan-9864968/>

