Transforming India’s Urban Landscape

This editorial is based on “India's green buildings thrive, but its cities remain unsustainable” which was published in Business Standard on 19/03/2025. The article brings into picture the paradox of India's urban development—while cities flaunt green buildings as a marker of progress, they remain "two-hour cities," where residents endure exhausting commutes and persistent pollution.

For Prelims: 74th Constitutional Amendment Act, 12th Schedule, Urban poverty, Urban heat islands, Urban local bodies,Sponge Cities, Climate Action Plans, Digital public infrastructure

For Mains: Governance Framework of Indian Cities, Key Issues Associated with India’s Cities.

India's urban cities present a striking contradiction - while celebrating green-certified buildings and sustainability achievements, they have evolved into **"two-hour cities"** where daily commutes become tests of endurance and pollution chambers. True sustainability must extend beyond building walls to encompass entire urban ecosystems, **requiring India to work significantly harder in reimagining its metropolitan fabric**.

What is the Urban Governance Framework in India?

- **Constitutional Basis: 74th Constitutional Amendment Act (1992)**
  - Provides constitutional status to **Urban Local Bodies (ULBs).**
  - Mandates the formation of three types of ULBs based on population:
    - **Municipal Corporations** (for large cities)
    - **Municipal Councils** (for smaller urban areas)
    - **Nagar Panchayats** (for transitional/rural-urban areas)
  - Adds the **12th Schedule** with **18 functional areas** to be devolved to ULBs.
- **Three-Tier Institutional Structure**
  - **Elected Wing**: Mayor and Municipal Council (elected by the people).
  - **Executive Wing**: Municipal Commissioner or CEO (appointed by the state government).
  - **Deliberative Bodies**: Ward Committees and Standing Committees for specific functions.
- **Functional Domains (12th Schedule)**
  - Includes urban planning, water supply, solid waste management, public health, slum improvement, urban forestry, etc.
  - Functions to be devolved by state governments as per state legislation.
- **Administrative and Planning Institutions**
  - **Parastatal agencies**: **Development Authorities, Water Supply Boards, Transport Corporations (usually state-controlled).**
  - **State Town and Country Planning Departments**: Often prepare Master Plans.
  - **Urban Development Authorities (UDAs)**: For metropolitan and regional planning.

What are the Key Issues Associated with India's Urban Areas?

- **Urban Inequality and Segregation:** Despite the urban prosperity narrative, Indian cities are increasingly becoming enclaves of affluence surrounded by deprivation.
    - **Gated communities, luxury towers, and SEZs** exist alongside slums, informal settlements, and homeless populations.
        - Urban planning is increasingly tailored to elite interests, leaving basic services out of reach for many.
    - **Urban poverty in India is over 25%**; some 81 million people live in urban areas on incomes that are below the poverty line.
- **Climate Vulnerability and Heat Stress:** Indian cities are becoming **urban heat islands**, with rising temperatures, extreme weather events, and poor climate resilience.
    - **Glass-facade buildings, vanishing green cover,** and over-reliance on air conditioning intensify heat stress.
    - A recent study found that the magnitude of heat stress has risen by almost **30% in India** over the past 40 years.
        - Also, approximately **34 million people in India** will experience job losses due to reduced productivity caused by heat stress.
    - Also, infrastructure remains **unprepared for flash floods, cloudbursts, and prolonged dry spells.**
- **Inadequate Urban Governance and Institutional Fragmentation:** Indian **urban local bodies (ULBs)** are politically and financially disempowered, despite the **74th Constitutional Amendment.**
    - Planning is often outsourced to parastatal agencies or private consultants, with little citizen engagement or accountability.
        - Functions are fragmented across departments, leading to overlaps and inefficiency.
    - For instance, according to a recent CAG report. **Only 22.2% functions (four out of 18 functions) have been fully developed.**
        - The intergovernmental transfers (IGT) for city governments in India remains at **0.5% of the GDP.**
- **Unsustainable Urban Mobility and Congestion:** Urban mobility in India is **car-centric, polluting, and inefficient**.
    - **Poor last-mile connectivity,** unsafe pedestrian infrastructure, and inadequate public transport make cities dependent on private vehicles.
        - The **"two-hour city" model,** where long commutes dominate daily life, **hurts productivity and well-being**.
            - The shift toward electric mobility is welcome but remains uneven and infrastructure-starved.
    - **In Metropolitan cities, commuters spend an average of 1.5–2 hours** daily in traffic. Though Metro networks now cover **1,000 km of metro network across 17 cities**, walkability **and cycle lanes remain weak**, limiting accessibility.
- **Informality in Employment and Housing:** Urbanisation in India has **not translated into secure jobs or housing for the majority.**
    - Most city dwellers work in the **informal sector,** lacking job security, benefits, or protections.
    - **Housing markets remain unaffordable**, pushing millions into slums or informal settlements.
        - The economic recovery **post-Covid remains K-shaped,** favouring formal and high-income segments.
    - **Over 90% of employment** in India is informal. Also, India's slum population in 2020 is estimated at **236 million** suggesting that nearly half of its urban population lives in slums **(UN-Habitat 2021).**
- **Environmental Degradation and Poor Urban Resilience:** Rapid urbanisation has led to a **sharp decline in green cover, loss of wetlands, and pollution of water bodies.**
    - Construction-driven development ignores ecological planning, causing flash floods, drainage failures, and poor air quality.
        - **Cities are increasingly unable to absorb environmental shocks,** and building regulations continue to favour high-energy designs.

    - **13 Indian cities** made it to the list of the world's top 20 most **polluted cities** by IQAir, that include **Byrnihat (Assam), Delhi, Mullanpur (Punjab), Faridabad, Loni.**
- **Weak Mayoral Leadership and Political Disempowerment:** Mayors in India have **largely ceremonial roles** with limited executive powers.
    - In many states, the **Municipal Commissioner (a state-appointed IAS officer)** wields greater authority than elected representatives.
        - **Unlike global cities where mayors lead urban policy,** Indian city leaders often lack decision-making autonomy.
    - This mismatch undermines local democracy and leads to **a top-down, bureaucratic approach to urban governance**.

What are the International Best Practises for Urban Development?

- **15-Minute City (Paris, France)**
    - **Concept:** Urban model where residents can access work, education, healthcare, and recreation within a 15-minute walk or bike ride.
    - **Relevance for India:** Can inspire **zonal planning**, **mixed-use development**, and **last-mile mobility improvements** in cities like Delhi and Bengaluru.
- **Transit-Oriented Development (Tokyo, Japan)**
    - **Concept:** Integrates high-density housing, commercial areas, and public services around mass transit hubs.
        - **Relevance for India:** Aligns with India's **Metro Rail Policy** and helps cities reduce congestion and pollution.
- **Green Infrastructure & Sponge Cities (China)**
    - **Concept:** Urban design that absorbs rainwater using wetlands, green roofs, permeable surfaces.
        - **Relevance for India:** Cities like Mumbai and Chennai can replicate these to combat **urban flooding**.
- **Affordable Housing with Inclusionary Zoning (Vienna, Austria)**
    - **Concept:** Mandating a percentage of affordable housing in all new real estate projects.
        - **Relevance for India:** Can strengthen **PMAY-U** by integrating it with private development regulations.
- **Citizen Participation & Participatory Budgeting (Porto Alegre, Brazil)**
    - **Concept:** Citizens are directly involved in deciding how to allocate municipal budgets.
        - **Relevance for India:** Supports the **74th Amendment** and efforts to empower **ward committees** and local planning.
- **Integrated Digital Urban Governance (Tallinn, Estonia)**
    - **Concept:** E-governance platforms that integrate city services—property, permits, utilities—into a single digital interface.
        - **Relevance for India:** Can be scaled under **Smart Cities Mission** and **Urban Digital Public Infrastructure (DPI)** models.
- **Vertical Greening and Bioclimatic Architecture (Singapore)**
    - **Concept:** Use of vertical gardens, green roofs, and climate-responsive building design.
        - **Relevance for India:** Encourages a shift away from **glass façades** and supports **passive cooling architecture**.

What Measures can India Adopt for Sustainable Urban Development?

- **Adopt a Place-Based, Tiered Urban Governance Model:** Indian cities must move beyond one-size-fits-all frameworks and adopt **tiered governance models** for metropolitan, mid-sized, and small towns.
    - **Metropolitan regions need empowered planning authorities** for integrated land use, mobility, and resource management.
    - For emerging and peri-urban centres, **District Urban Development Authorities (DUDAs)** and **State Urban Development Authorities (SUDAs)** should anchor local planning.
        - This enables **bottom-up, locally adapted planning** while supporting rural-urban

convergence.

- **Shift from Car-Centric to Human-Centric Urban Mobility:** Cities must prioritise **public transport, walkability, and cycling infrastructure** to reduce emissions and improve accessibility.
    - Integrating **metro networks (under Metro Rail Policy)** with **bus systems (under PM-eBus Sewa)** and last-mile options can make public transport seamless.
    - Upgrading pedestrian paths and creating **non-motorised zones** in business districts can reclaim urban space for people.
        - City mobility plans should adopt **transit-oriented development (TOD)** and **multi-modal integration** strategies.
- **Decongesting Urban Landscape:** Decongesting urban cities requires a **strategic shift towards strengthening rural infrastructure and opportunities.**
    - By expanding **healthcare, education, digital connectivity, and employment hubs in rural areas**, developing **counter magnet cities** and building upon PURA initiative, migration to overcrowded cities can be reduced.
    - This balanced urban-rural development will enhance overall quality of life and ease pressure on city resources.
- **Reorient Building Codes Toward Climate-Responsive Architecture:** India must revise the **National Building Code** to enforce **climate-sensitive design** using passive cooling, natural ventilation, and local materials.
    - Glass façades and deep-plan buildings should be discouraged, especially in hot tropical zones. Incentivising developers through **Green Building ratings (IGBC, GRIHA)** linked with **property tax rebates** can nudge better practices.
    - Mandating **energy audits** and passive design in commercial and institutional projects will reduce energy load.
        - This shifts architecture from being aesthetic-driven to **ecology-aligned and occupant-focused**.
- **Integrate Smart City Components with Urban Housing:** Urban transformation must bridge the divide between digital infrastructure and basic shelter.
    - Linking **PMAY-Urban** (affordable housing) with **Smart Cities Mission** (technology, sensors, public services) can create **inclusive smart neighbourhoods**.
    - Housing clusters should be equipped with solar panels, greywater systems, and smart metering to optimise resource use.
    - Using **Geospatial and AI tools** for slum mapping and redevelopment will improve targeting and monitoring.
- **Mainstream Urban Blue-Green Infrastructure for Climate Resilience:** Indian cities need to restore and integrate **urban water bodies, wetlands, and green corridors** into core planning for resilience against floods and heatwaves.
    - Urban planning must reserve land for **urban forests, bioswales, and rain gardens** under a **Green Master Plan**.
    - Cities like **Ahmedabad and Pune** can be models where **city lakes and parks** were revived to reduce temperature and improve groundwater.
        - **Urban greening and watershed restoration** must be linked with **AMRUT 2.0 and SBM-U 2.0**.
- **Build City-Level Climate Action Plans with Fiscal Empowerment:** Each city must formulate and implement **Climate Action Plans (CAPs)** aligned with **India's Net Zero vision.**
    - CAPs should include **emission inventories, climate risk mapping, energy transition targets, and nature-based solutions.**
        - For effective implementation, urban local bodies should receive **performance-linked grants** under the Finance Commission.
    - Capacity-building for climate budgeting, data systems, and monitoring must accompany decentralised funds.
- **Institutionalise Community Participation and Participatory Planning:** Sustainable cities cannot be built without the people they serve.
    - Institutionalising **ward committees, mohalla sabhas, and citizen report cards** can bridge planning and lived realities.
        - Municipal budgeting should be made participatory, with citizens deciding local infrastructure priorities.
    - Tools like **digital grievance redressal, social audits, and area sabhas** must be

mandated under state municipal laws.
        - This builds a culture of **urban citizenship and accountability**.
- **Enable Data-Driven, Interoperable Urban Platforms:** India must invest in **urban digital public infrastructure (DPI)** for real-time monitoring, service delivery, and urban planning.
    - Platforms like **Integrated Command and Control Centres (ICCCs)** under the Smart Cities Mission can be scaled and made interoperable across cities.
    - Linking property records, utility billing, mobility data, and GIS layers can unlock urban efficiencies.
        - This ensures that **digitalisation enhances governance rather than just visibility**.

Conclusion:

India's urban transformation must move **beyond fragmented governance and elite-centric planning to embrace inclusive, climate-resilient, and people-friendly cities**. Linking urban development with **SDG 11 (Sustainable Cities and Communities)** is crucial to ensuring livability, resilience, and equitable access to resources. Only then can India's cities evolve from **"two-hour commutes" to thriving, sustainable ecosystems for all.**

Drishti Mains Question:

Indian cities are at the crossroads of rapid urbanization and sustainability. Discuss the key issues and suggest measures for their holistic development.

UPSC Civil Services Examination Previous Year's Question (PYQs)

Prelims

Q. As per the Solid Waste Management Rules, 2016 in India, which one of the following statements is correct? (2019)

(a) Waste generators have to segregate waste into five categories.

(b) The Rules are applicable to notified urban local bodies, notified towns and all industrial townships only

(c) The Rules provide for exact and elaborate criteria for the identification of sites for landfills and waste processing facilities.

(d) It is mandatory on the part of the waste generator that the waste generated in one district cannot be moved to another district.

Ans: (c)

Mains

Q. The frequency of urban floods due to high intensity rainfall is increasing over the years. Discussing the reasons for urban floods, highlight the mechanisms for preparedness to reduce the risk during such events. (2016)

Q. Do government's schemes for up-lifting vulnerable and backward communities by protecting required social resources for them, lead to their exclusion in establishing businesses in urban economies? (2014)
