



Kerala Model for Sustainable Urbanisation in India

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Why in News?

Kerala is the first State in India to set up an [Urban Policy Commission \(KUPC\)](#) with a 25-year roadmap to manage [rapid urbanisation](#) sustainably.

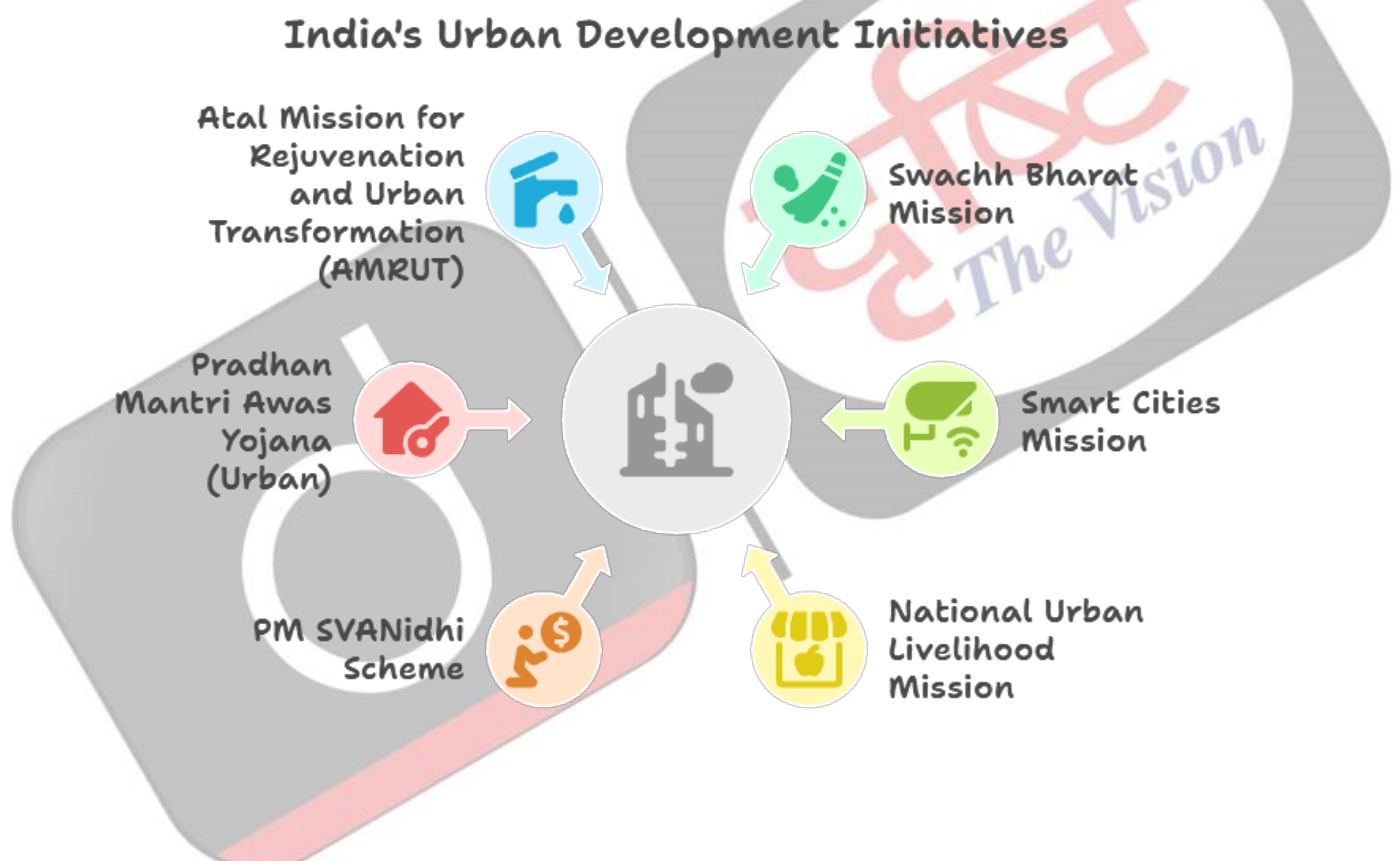
- KUPC report, submitted to the State government, has drawn national attention as the Kerala model offers lessons for other States in **balancing growth with climate resilience, governance reform, and financial empowerment.**

What are the Key Recommendations of the KUPC Report for Sustainable Urbanisation?

- **Kerala Urban Policy Commission (KUPC):** It was set up to rethink Kerala's urban future, viewing cities as climate-aware ecosystems rather than just infrastructure clusters.
 - With Kerala's urbanisation expected to cross 80% by 2050 and rising climate risks, the KUPC recommends a place-based strategy focusing on climate resilience, finance, governance, city identity, and inclusive well-being.
- **Key Recommendations:**
 - **Climate-Sensitive Urban Planning:** Use hazard maps (floods, landslides, coastal risks) in zoning rules to prevent disaster-prone development.
 - **Real-Time Urban Data System:** Set up a digital observatory using tools like [LiDAR \(Light Detection and Ranging\)](#) satellite data, and weather sensors to guide municipalities.
 - **Green Fees & Climate Insurance:** Introduce green fees for [eco-sensitive](#) projects and parametric climate insurance to fund resilience and disaster response.
 - **Municipal and Pooled Bonds:** Major cities can issue municipal bonds, while smaller towns should adopt pooled bond models for infrastructure funding.
 - **Urban Governance Reforms:** Create elected city cabinets led by mayors. Form expert teams in municipalities for waste, climate, transport, etc.
 - Launch "Jnanashree" to recruit skilled youth into local governance.
 - **Place-Based Urban Growth and Inclusive Planning:** Recognize and promote **unique strengths of each city** (e.g., Kochi as a FinTech hub, Thiruvananthapuram & Kollam as a knowledge corridor, Kozhikode as a literary city, and Palakkad & Kasaragod as smart-industrial centres).
 - Restore wetlands, waterways, and heritage zones to preserve local ecosystems and cultural heritage.
 - Establish **City Health Councils** to provide healthcare and welfare support for **migrants, gig workers, and students**, ensuring equitable urban services.
 - **Community-Driven Data:** Advocates blending community experiences (like those of fisherfolk and street vendors) into urban data systems, making planning participatory and grounded.

Urbanisation in India

- According to the World Bank, India's urban population will reach **600 million (40%) by 2036, up from 31% in 2011**, with cities driving nearly **70% of GDP**.
- **Key Drivers of Urbanisation in India:**
 - **Demographic Transition & Migration:** Rural-urban migration driven by jobs, education, healthcare, and better amenities.
 - Agrarian distress, shrinking landholdings, and climate change push migration further.
 - **Economic Transformation:** Shift from **agriculture to industry and services**. Expansion of IT, manufacturing, and services **makes cities engines of growth, innovation, and employment**.
 - **Policy Push & Urban Missions:** [Smart Cities Mission](#), [AMRUT \(Atal Mission for Rejuvenation and Urban Transformation\)](#), [Pradhan Mantri Awas Yojana - Urban \(PMAY-U\) 2.0](#), and [National Infrastructure Pipeline](#) reshape urban infrastructure, improve housing, and promote entrepreneurial hubs.
 - **Technological Integration:** [AI](#), [Internet of Things \(IoT\)](#), and digital public infrastructure (DPIs) enable smart governance, efficient service delivery, and better resource management in cities.
 - **Globalisation & Aspirations:** Integration into global markets and rising aspirations of the youth accelerate demand for urban lifestyles, consumption patterns, and modern urban spaces.



What Measures Can the Kerala Model Offer for India's Urban Planning?

- **Mnemonic: KERALA**
- **K - Knowledge & Community Data:** Blend **satellite and sensor** data with citizen inputs, ensuring policies reflect lived realities.
- **E - Elected & Specialist Governance:** Shift from **bureaucratic inertia to elected city cabinets**, specialist municipal cells, and youth technocrats.
 - Set up time-bound urban commissions tailored to local geography, culture, and climate instead of relying only on centralised frameworks.
- **R - Resilience & Climate Integration:** Make **hazard mapping** and resilience integral to every

stage of planning, not an afterthought.

- **A - Autonomy in Finances:** Equip municipalities with tools like **pooled bonds, green fees**, and climate insurance for fiscal autonomy.
- **L - Livelihood & Land-sensitive Planning:** Promote **regional economic hubs** rooted in local strengths while safeguarding commons, culture, and heritage.
- **A - Awareness & Citizen Participation:** Strengthen voluntarism, community engagement, and public participation in urban planning decisions.

SMART CITIES MISSION

About

- **Launched:** 2015
- **Nature:** Centrally Sponsored
- **Nodal Ministry:** Ministry of Housing & Urban Affairs
- **Implemented through:** Special Purpose Vehicles (SPVs) at city level
- **Mission Deadline:** Extended to June 2024
- **Coverage:** Developing 100 selected cities as Smart Cities

Six Fundamental Principles

- Citizen at the core
- More from Less
- Cooperative and competitive federalism
- Integration, innovation & sustainability
- Technology as means, not the goal
- Convergence

SMART SOLUTIONS

E-Governance and Citizen Services

- Public Information, Grievance Redressal
- Electronic Service Delivery
- Citizen Engagement
- Citizens-City's Eyes and Ears
- Video Crime Monitoring



Energy Management

- Smart Meters & Management
- Renewable Sources of Energy
- Energy Efficient & Green Buildings



Waste Management

- Waste to Energy & fuel
- Waste to Compost
- Waste Water Treatment
- Recycling and Reduction of Waste



Water Management

- Smart Meters & Management
- Leakage Identification, Preventive Maintenance
- Water Quality Monitoring



Urban Mobility

- Smart Parking
- Intelligent Traffic Management
- Integrated Multi-Modal Transport



Others

- Tele-Medicine & Tele Education
- Incubation/Trade Facilitation Centers
- Skill Development Centers



■ 60% projects have been completed so far ■

Challenges

- **Managing Finance:** Difficulty in mobilising funds, transferring them to SPVs, and using them efficiently
- **Urban Problems:** Like air pollution, road congestion & decline in public transport
- **Policy Issues:** Like hindrances in getting environment clearances
- **Data privacy and security**
- **Lack of Center-State Co-ordination**

Way Ahead

- **Decentralisation:** Planning at Municipal & state level for better implementation
- **Policy Issues:** Like red-tapism, environmental clearances need to be taken care of
- **PPP Model:** For better administrative & technological capabilities
- **Integrated Approach:** For holistic development of transportation, energy, housing
- **Promote Citizen Engagement**



Drishti Mains Question:

Q. India's urban planning must shift from bureaucratic inertia to participatory and place-based governance. Discuss

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

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 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)

PDF Reference URL: <https://www.drishtiias.com/printpdf/kerala-model-for-sustainable-urbanisation-in-india>

