



Smart Classrooms Under the Smart Cities Mission

[Source: TH](#)

A study by the Indian Institute of Management, Bangalore, revealed that the [Smart Cities Mission \(SCM\)](#) has improved education quality through **smart classrooms**.

- **Smart Cities Mission:** It was launched in 2015 by the **Ministry of Housing and Urban Affairs** and aims to enhance infrastructure, quality of life, and sustainability in cities.
 - The **'SAAR' (Smart Cities and Academia towards Action and Research)** platform, launched in 2022, connects academia and government to document and **research urban initiatives under the SCM**.
- **SCM and Education:** The IIM Bangalore study shows that **smart classrooms** under the SCM **have increased enrolment by 22% across 19 cities** from 2015-16 to 2023-24.
 - 71 cities have implemented around 9,500 smart classrooms in around 2,400 government schools.
 - **Karnataka leads with 80 smart classroom projects**, followed by Rajasthan (53), Tamil Nadu (23), and Delhi (12). West Bengal has only two projects.
 - Teacher training has improved comfort with smart classrooms, especially in senior secondary schools.

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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 2023
- **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



Urban Mobility

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



Water Management

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



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**

Read more: [Smart Cities Mission](#)