SMART CITIES MISSION: SHAPING THE VISION OF TOMORROW'S INDIA

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Abstract

As global population increasingly migrates towards urban areas, it has created rapid and significant challenges in infrastructure, housing, waste management, transportation and environmental sustainability. The goal targets making cities sustainable by 2030 there by improving urban planning and efficient resource use. The paper mainly examines the objectives, key features, and implementation strategies of smart cities mission and analyzing

its role in achieving success in sustainable development goal.

It majorly focuses on area-based development, digital governance, smart mobility system, renewable energy integration and efficient waste management practices. The study also discusses about the challenges faced in the development of funding constraints, digital divide, governance issues and urban inequalities, from selected examples of leading cities in India. In addition, the paper evaluates the role of information and communication technology in improving transparency, accountability and citizen participation. By adopting new strategies and sustainable practices, Indian cities can achieve balanced development and become a model for future urban transformation.

Keywords*: Smart Cities Mission, Urban Development, Sustainable Infrastructure, Digital Governance, India.*

Introduction

As we are looking at major Indian city today like Mumbai, Bengaluru and Hyderabad the first thing which strikes us is the large scale of activity. Streets are crowded; construction is everywhere. That

will be a massive number of people who will be in the need of housing, jobs, sanitation and connectivity.

The Smart Cities Mission was India's answer to these growing urban challenges. It was launched by Prime Minister Narendra Modi in 2015. This mission selected 100 cities across the country through a comparative process and helped by funding and supporting to the development of smart and sustainable infrastructure. The core idea was not just to build shiny new technology but to improve the quality of life for the people.

This concept is not uniquely Indian but many other countries like Singapore, South Korea and The Netherland are building for years. And it's challenging in India because of its large urban issues. It would have easily worked in mid-sized cities but not in crowded Indian cities with decades of unplanned growth. This paper examines the Smart Cities Mission from multiple angles. About the results it achieved and the challenges it's still facing and what lessons it holds for the future of urban India.

Background and Context

- **India's Urbanization challenge**

Indian cities contribute approximately 63% of the country's GDP, yet they face severe systemic hurdles. Key issues affecting almost every major Indian city include.

Overcrowding and traffic congestion.

Environmental hazards such as air pollution and water scarcity. Social infrastructure gaps, including poor sanitation and a lack of affordable housing. Informal settlements, which are particularly prevalent in tier-1 cities like Delhi and Mumbai.

- **The launch of Smart Cities Mission**

To address these challenges, the central government launched the Smart Cities Mission in June 2015. Investment of this mission was backed by total investment of □2.05 lakh crore. Around 100 cities were selected through a unique "City Challenge" competition. Cities were chosen in multiple rounds based on their ability to submit comprehensive proposals aimed at improving urban services and infrastructure.

Projected growth: By 2030, it is estimated that over 40% of India's population will live in urban areas.

Objectives of the Smart Cities Mission

The Smart Cities Mission mainly focuses on improving urban life through Area-Based Development (ABD), where selected city areas are redeveloped using smart planning. Along with these cities implement Pan-City Initiatives that apply technology to enhance services across the entire city.

This even aims for:

1. Clean water supply
2. Electricity
3. Efficient waste management
4. Smart transportation systems

It also emphasizes affordable housing, strong infrastructure, and e-governance. Promoting sustainable environment through green spaces and eco-friendly practices is another main important goal. This prioritizes projects based on local needs.

Key Strategies and Implementation Approaches

Under the Smart Cities Mission, the important implementation strategies include the creation of Special Purpose Vehicles (SPVs) to manage projects with greater financial and administrative flexibility. Another major initiative in establishment was Integrated Command and Control Centers (ICCCs), which uses technology to monitor traffic, emergencies, and public services.

Cities like Pune and Ahmedabad effectively used ICCCs during COVID-19. It also promotes smart infrastructure such as

- LED street lighting
- Sensor-based traffic system
- Transport hubs

Cities like Bhopal and Coimbatore improved public transport, and Indore became a model for solid waste management.

Case Studies from Selected Cities

- **Surat: Technology-Driven Urban Management**

Surat is considered one of India's cleanest and best-managed smart cities. Its Integrated Command and Control Center (ICCC) monitors traffic, waste management, flood alerts, and emergency services from a single platform. The city also uses IoT-based smart water systems to detect leaks and reduce wastage. Surat shows how strong administration and technology together can improve urban life.

- **Pune: Citizen-Centric Services**

Pune focuses on digital governance and citizen participation. Through the Pune

Smart City App, residents can pay bills, register complaints, and access public services easily. The city has introduced smart parking and CCTV-based surveillance systems. Pune highlights the importance of making smart services accessible to common citizens.

- **Bhubaneswar: Greenfield Development**

Bhubaneswar was the first city selected under the Smart Cities Mission. It developed greenfield projects with pedestrian-friendly spaces, energy-efficient buildings, and a public bicycle-sharing system. The city focused on planned urban design rather than only adding technology. It shows how smart planning can reshape urban development.

- **Bengaluru: Smart Mobility and Innovation**

Bengaluru has focused on improving traffic management and public transport systems. The city has implemented smart traffic signals, CCTV surveillance, and digital monitoring systems to reduce congestion. It also promotes sustainable mobility through metro expansion and cycling initiatives. Bengaluru reflects how technology and innovation can address challenges in fast-growing metropolitan cities.

Challenges and Limitations

The Smart Cities Mission faces several important challenges. Financial limitations remain a major issue, as central grants are often insufficient and many urban local bodies struggle to raise additional funds, while private investment has been slow. Project implementation has also been delayed due to land acquiring problems, administrative procedures, and coordination gaps. The mission has been extended multiple times beyond its original deadline. There are concerns about inclusivity, as some projects focus more on beautification than on the needs of poorer communities. Additionally, the expansion of CCTV networks and data systems has raised privacy concerns due to limited data protection regulations in India. This is an issue that will need careful attention as these systems expand.

Conclusion

The Smart Cities Mission is one of India’s most ambitious urban development initiatives. It has transformed the way cities approach infrastructure, technology, and governance through digital services, smart systems, and improved transport. However, a truly smart city is not just about technology but about improving the quality of life for all citizens. Challenges such as poverty, housing shortages, and social

inequality still need greater attention. For long-term success, the mission must become more inclusive and financially sustainable. If implemented effectively, it can play a key role in shaping a more equitable and sustainable future for India.

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