Smart Cities Mission

Source: TH

Why in News?

Despite **two extensions** until June 2024, the **Smart Cities Mission (SCM)** launched in 2015, is **unlikely to meet its deadline,** with 5,533 completed projects funded at Rs. 65,063 crore and 921 ongoing projects worth Rs. 21,000 crore.

What is the Smart Cities Mission (SCM)?

- **About:**
  - It is a **Centrally Sponsored Scheme**, launched in June 2015 to transform **100 cities** to provide the necessary **core infrastructure** and clean and **sustainable environment** to enable a decent quality of life to their citizens through the application of **"Smart Solutions"**.
  - It aimed to improve the quality of life for citizens through s**ustainable and** inclusive development.
- **Objectives:**
  - Provide core infrastructure and decent quality of life
  - Clean and sustainable environment
  - Application of 'Smart' Solutions
  - Sustainable and inclusive development
  - Compact areas
  - Replicable model
- Components of the SCM:
  - **Area-based Development:**
    - **Redevelopment:** Renewal of existing urban areas to improve infrastructure and amenities. **E.g. Bhendi Bazar, Mumbai.**
    - **Retrofitting:** Upgrading infrastructure in existing areas to make them more efficient and sustainable. **E.g. Local Area Development (Ahmedabad).**
    - **Greenfield Projects:** Development of new urban areas with a focus on sustainability and smart technologies. **E.g. New Town, Kolkotta, Naya Raipur, GIFT City.**
  - **Pan-City Solutions:**
    - Implementation of **Information and Communication Technology (ICT)** solutions across various sectors such as **e-governance**, waste management, water

management, energy management, urban mobility, and skill development.

- **Governance Structure:**
  - To enhance effectiveness, a new governance model was adopted.
    - A **Special Purpose Vehicle (SPV)** was created under the **Companies Act, 2013** led by a bureaucrat or a representative of a multinational corporation (MNC),
- **Current Status of the Smart Cities Mission (SCM):** Initially planned for completion by 2020, the mission was **extended twice,** with the current deadline set for June 2024.
  - The funding Pattern was envisioned through Public-Private Partnership (PPP) Route.
- **Government Initiatives**
  - **Atal Mission for Urban Rejuvenation and Urban Transformation (AMRUT)**
  - **Pradhan Mantri Awas Yojana-Urban (PMAY-U)**
  - **Climate Smart Cities Assessment Framework 2.0.**
  - **TULIP-The Urban Learning Internship Program.**
  - **Smart Cities Mission (SCM)**: Launched in June 2015, aimed to adapt to global changes by selecting 100 cities for smart city development over five years.

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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**

What is a Smart City?

- The term **'Smart City'** gained prominence after the 2009 financial crash, referring to cities designed with advanced ICT integration, often **likened to new Silicon Valleys.**
- However in the Indian context, a Smart City would be the one which plans judiciously to meet its aspirations and challenges in a sustainable manner while fostering **principles of good governance.**
- **A Smart City is one which has** basic infrastructure, uses 'smart' solutions to make infrastructure and services better, and relies on Area-based development.
- **Evolution of Smart Cities:** Before 2009, cities were mainly seen as hubs of commerce and culture with little emphasis on integrating ICT however after 2009, there was a **marked shift toward leveraging ICT** for enhanced **efficiency, sustainability, and economic growth,**

partly driven by post-financial crash recovery needs.

City wide Smart Solutions

E-Governance and Citizen Services
1. Public Information, Grievance Redressal
2. Electronic Service Delivery
3. Citizen Engagement
4. Citizens - City's Eyes and Ears
5. Video Crime Monitoring

Waste Management
6. Waste to Energy & fuel
7. Waste to Compost
8. Waste Water to be Treated
9. Recycling and Reduction of C&D Waste

Water Management
10. Smart Meters & Management
11. Leakage Identification, Preventive Maint.
12. Water Quality Monitoring

Energy Management
13. Smart Meters & Management
14. Renewable Sources of Energy
15. Energy Efficient & Green Buildings

Urban Mobility
16. Smart Parking
17. Intelligent Traffic Management
18. Integrated Multi-Modal Transport

Others
19. Tele-Medicine & Tele Education
20. Incubation/Trade Facilitation Centers
21. Skill Development Centers

Cities may add any number of smart solutions to the area based developments to make government funds cost effective.

What are the Challenges Faced by the Smart City Mission?

- **Lack of Clarity in Definition:**
    - The SCM **did not clearly define a smart city,** acknowledging the varied conceptualisations based on local contexts and aspirations.
        - The definition's ambiguity makes it challenging to allocate resources effectively and prioritise projects.
- **Top Down Approach:**
    - The role of elected representatives being sidelined by **reducing the role of elected councils** in decision-making raises concerns about **democratic governance and** accountability.
- **Flawed City Selection Process:**
    - Selecting cities on a **competitive basis** overlooked the **diverse urban realities** of India, which are dynamic and not static like the West.
    - The scheme focused on **developing less than 1% of a city's area,** leading to exclusion of many areas from development.
        - For example, **Chandigarh** had invested Rs 196 crore into one pocket-sector 43.
- **Inadequate Funding and Scope:**
    - **McKinsey reports** indicate that to improve livability in Indian cities by 2030, USD 1.2 trillion is needed, making Rs. 1,67,875 crore over nine years a mere 0.027% of the total urban India expenditure.

- Initially planned for completion by 2020, the mission was **extended twice**, with the current deadline set for June 2024, indicating the complexity of the urban development process.
  - **Governance Structure Issues:**
    - The **Special Purpose Vehicle (SPV) model** created for smart cities was not aligned with the **74th Constitutional Amendment Act**, leading to objections from cities regarding the governance structure as it bypassed traditional city governance structures.
      - Despite **PPP** being an important driver of the mission, **not more than 5%** of the funding has come through this route.
  - **Displacement and Social Impact:**
    - Smart city projects led to the **displacement of people** living in poorer localities, such as street vendors, disrupting urban communities.
    - The focus on infrastructure development in some towns led to **enhanced** urban flooding, as water channels and contours were disrupted or dismantled.

What are the Steps Needed to Strengthen the Smart City Mission?

The **Standing Committee on Housing and Urban Affairs** gives the following overarching recommendations.

- **Governance and Implementation:**
  - **Dedicated CEO should be appointed** with fixed tenure, ensuring the **representation of experts and stakeholders,** and utilising existing expertise.
  - **Members of Parliament (MPs)** need to be included in State-Level Advisory Forums, and should be consulted for project identification, selection, and implementation, as they have grassroots-level expertise.
- **Project Focus and Priorities:**
  - Th**e emphasising should be more on pan-city projects** for **comprehensive and holistic development,** optimising resource allocation and reducing wastage.
  - **Digital infrastructure** protection mechanisms are needed to safeguard against cyber threats **and maintain** data privacy.
- **Capacity Building and Funding:**
  - A plan to **strengthen Urban Local Bodies (ULBs)** capabilities in small cities and central government assistance for organisational restructuring and capacity building in states requiring support should be taken up.
- **Project Completion:**
  - The focus should be on timely completion of project. The ministry's role should not be confined to fund transfer but **extend to ensuring execution and completion by intervening with inputs and expertise.**

__Drishti Mains Question:__

Q. Discuss the challenges faced by the Smart Cities Mission in India. Suggest measures to address these challenges and ensure the mission's effectiveness in promoting sustainable urban development.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Mains:

Q. With a brief background of quality of urban life in India, introduce the objectives and strategy of the 'Smart City Programme.' **(2016)**