

RECONCEPTUALISING SMART CITIES: A REFERENCE FRAMEWORK FOR INDIA

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Government of India



MDGs and SDGs



Built upon MDGs



SDG Principles



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Sustainable Smart Cities: Guiding Principles









- Empowerment of city level governance structures
- Focus of planning at local levels
- Building adequate capacity of urban institutions and local governments
- Need for a institutionalised long term planning process
- Creating **enabling conditions** supportive policy environment, coherent suggestive framework for planning cities



Key Imperatives



Need for Reference Framework



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Proposed Smart City Reference Framework



Way Forward



THANK YOU

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Definition and Concept

Mission Guidelines

No universally accepted definition of a Smart City

➢ 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

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**. These are achieved in a Smart City by utilising the enhanced power of **technology**, engaging with a more **aware and informed citizenry** and creating a more competent and capacitated set of people working within an **accountable framework**.

- Shift to a process-oriented path
- Short-term interventions to showcase success

Long -term structural improvements at all functional stages of city planning and management









Strategic components of area-based development

Panel of consultants and external hand-holding agencies

'Smart' Solutions and infrastructure services to be present in the Plan

Plan preparation process

Modalities of public consultation

How to baseline the city for plan preparation

Social and Environmental sustainability plan

Smart City Proposal (Plan) Preparation

Strategies

City Improvement – Retrofitting

City Renewal – Redevelopment

City Extension – Greenfield development

Pan-city Initiative – Application of 'Smart' Solutions to existing city-wide infrastructure



Project Identification



Monitoring and Evaluation



Convergence with othe Government Scheme

Framework for convergence of different schemes





Sustainable Development Goals

	ustainable Development Goals			
	oal 1: End poverty in all its forms everywhere			
	oal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture			
	Goal 3: Ensure healthy lives and promote well-being for all at all ages	WB		
	Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	EQ+FS		
	Goal 5: Achieve gender equality and empower all women and girls	EQ		
	Goal 6: Ensure availability and sustainable management of water and sanitation for all	EQ+EF		
	Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all			
	Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for a			
	Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	FS		
	Goal 10: Reduce inequality within and among countries	EQ		
	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable	FS+EQ		
	Goal 12: Ensure sustainable consumption and production patterns	EF		
	Goal 13: Take urgent action to combat climate change and its impacts	WB+FS		
	Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development	FS		
	Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	WB+EF		
v.cstep.ir	Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	WB		
MMM	Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development	FS		



CSTEP City Selection Process

Objectives

Replicability and Scalability Addressing Vulnerability **Regional Sustainability Goals** Successful Demonstration

STEP



Development of Selection criteria and Indicators

Constitution of expert group (Government, Think Tanks, Academia other Stakeholders)

Concensus on expert rating system/evaluation methodology

Finalisation of indicator list and evaluation methodology

Replicability & Scalability

Cities of different population size

ranges

Cities with varied physical

characteristics

Cities with different types of

economic activities

Regional

Sustainability Goals

Regional development

strategy

State development strategy

Climate change action Plans

Addressing Vulnerability

Area prone to climate/other disasters

Natural resource constraint, especially water

Ecologically sensitive areas (natural trails etc)

Successful Demonstration

Economic growth potential Pro-active Responsive city government Educated/aware citizen Infrastructure preparedness

Proposals can be invited from cities based on criteria defined under successful demonstration. The responsiveness of cities in making a competitive proposal would indicate pro-activeness of city government which is a critical factor for the success of the Mission.



Call for **Proposals**

STEP

Shortlisting Cities

The eligibility for cities to be covered under the Smart Cities Mission can be evaluated based on the criteria and associated indicators under all 5 sets. An expert rating (Delphi method) can be used for the same. Weightages can be given on a scale of 1 to 10. The cities to be included under the first phase of the Mission can be decided based on concensus.

STEP

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Indicators for Baselining: Urban Transport

	Principle	Questions	Indicators
	Well-being	What is the average travel time for commute?	 Average travel time Maximum travel time for the longest trip Average travel time to amenities/work/recreation
	Equity	What is the gap between well-being indicator performance with equity indicator performance?	 Percentage/number of test samples collected from slum areas exceeding permissible limit for air and noise Road traffic noise measurement in slum areas Availability of public transport/ 1000 population in slum areas Kilometres of bicycle paths and lanes per 10000 slum population in slum areas
	Efficiency	What is the efficiency in transport operation	 Average Waiting time at intersections with traffic signals Cost of Travel Per Km per person Average Cost of public transport per capita Percentage of people choosing public transit over car fatality rate / 100000 population Fatality rate for NMT
www.cstep.in	Foresight	Does it consider climate change, resilience building, and energy efficiency?	 Use of zero-emission vehicles – percentage Availability of air quality standards and management plans. R &D expenditure on "eco-vehicles" and clean transport fuels Total expenditure on pollution prevention and clean-up Percentage use of renewable fuels (alternative-fuelled vehicles, use of biofuel) to total fuel consumed by urban transport sector



• Transport Strategies- dovetailing projects





Decision Support Platform



