The Smart Cities: Strategy and Planning In India

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ABSTRACT

There is no precise and universally accepted definition of 'smart city'. In context of India, a smart city is that city which has basic infrastructure and uses smart solutions to make infrastructure and services better. It works toward an environmentally, socially, healthy and resilient habitat for existing populations without compromising the ability of future generations to experience the same.

The present paper discusses India's strategy of developing smart cities through Smart Cities Mission and other associated programmes. The smart cities project aims at enhancing the quality of urban life and providing a clean and sustainable environment to 100 smart cities with 'smart' solutions. It will be implemented through 'area based' approach consisting of retrofitting, redevelopment and pan-city initiatives. New areas (Greenfield cities) will be developed around cities in order to accommodate the expanding populations in urban areas.

Key Words-Smart city, urbanization, sustainable, planning and strategy.

I. INTRODUCTION

India is on the path of massive and unplanned urbanization since 1980's. As per census 2011, for the first time since independence, the absolute increase in the urban population (91 million) was higher than that in rural population (90.5 million) .Currently 377 million people live in 7936 cities and towns. Unfortunately, most Indian cities are currently challenged in terms of infrastructure and delivery of basic services to the inhabitants. Most of them don't have master plans and the entire urban landscape looks rather like an unplanned sprawl with built up residential and commercial structure mushrooming haphazardly. Further, by 2030, 600 million people will be living in urban areas and 78 cities in India will become metropolitan. As per estimates of stakeholders, about 70% of population will be living in cities by 2050. It will need 500 new cities to accommodate the influx from rural to urban areas.

Efforts to improve the deteriorating conditions caused by urbanization in Indian cities have been made from time to time. These include a variety of measures such as empowerment of urban local governments through provisions of 74th constitutional amendment act and a comprehensive urban development program in the name of JNNURM. Despite the existence of urban governance machinery at the national, state and local level as well as democratic institutions, Indian cities continue to lag behind on numerous developmental and environmental parameters.

Recognizing these facts, the govt. has now realized the need for the cities that can cope with the challenges of urban living and also be magnets for investment. The announcement of 100 smart cities falls in line with this vision.

The present govt. has launched various programmes along with Smart Cities Mission

such as Atal Mission for Rejuvenation and Urban Transformation (AMRUT), National Heritage City Development and Augmentation Yojna (HARIDAY), Swachh Bharat Abhiyan and Housing For All . All these initiatives aim at making cities livable, inclusive, vibrant, technologically advanced, economically and environmentally sustainable.

Many definitions of 'smart' city' exist and 'smart' approaches have been understood differently by different people and sectors. But concepts for defining smart cities are still emerging and evolving.

After extensive analysis of numerous definitions, the following standardized definition has been derived:

"A smart sustainable city is an innovative city that uses information and communication technologies(ICTs) and other means to improve quality of urban life ,efficiency of urban operation and services and competitiveness while ensuring that it meets the needs of present and future generations with respect to economic ,social and environmental aspects.''(Sekhar N. Konepundi 2014)

As per Ministry of Urban Development, a smart city in Indian context is that city which has basic infrastructure and uses 'smart' solutions to make infrastructure and service better and relies on area based development.

II. OBJECTIVES OF THE STUDY:

The objectives of the current study are following:-

1) To highlight the need of smart cities in India.
2) To explore and analyse India's initiatives in developing sustainable cities.

3) Understanding the strategy and planning of smart cities in India.

III. RESEARCH METHODOLOGY:

The present study has been exploratory in nature where pertinent information has been derived from secondary sources such as journals, books, magazines, websites, reports, newspapers etc.

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IV. INDIA'S SMART CITIES PROJECT

Ministry of Urban Development launched Smart Cities Mission on June 25, 2015, with the dream of transforming 100 cities with cutting edge urban planning and smart infrastructure aiming at enhancing the quality of urban life. Government of India has committed allocation of Rs.48,000 crore in next 5 years i.e. 2015-16 to 2019-20.As per Ministry of Urban Development, the objective of this holistic mission is to:

"Promote cities that provide core infrastructure and give a decent quality

of life to its citizens ,a clean and sustainable environment and applications

of smart solutions .The focus is on sustainable and inclusive development

and the idea is to look at compact areas ,create a replicable model which

will act like a light house to other aspiring cities.''

(1). Selection Procedure

Stage I of the Smart city Mission involves the competitive selection of 100 cities covering all the states of India which is based on the combination of population weighing of each state and a range of governance indicators along with capacity benchmarks .The city selection process is based on the principle of cooperative and competitive federalism. Since Indian cities

are diverse, each city has to construct its own idea and vision of a smart city that is aligned to its local conditions.

The selection process follows a challenge method passing through two stages:-

Stage -1: Intra-state city selection based on equitable and objective based criteria to identify cities to compete in stage –II.

Stage-2: All India competition to select smart cities from list of potential cities of Stage -I .The selected cities will be called the short listed Smart Cities

(2).Strategic Components

The Smart Cities Project of India follows the area based development model consisting of following strategic components:-

Retrofitting- Development of an existing built up area through better planning with the objective of creating more efficient and livable cities. In retrofitting, an area greater than 500 acres will be identified by the city in consultation with citizens. Then, the cities will prepare a plan depending on the existing level of infrastructure and vision of the residents to become smart, e.g. Local Area Development in Ahmadabad.

Redevelopment- Replacement of existing built environment in an area of more than 50 acres and enabling co- creation of a new layout plan focusing upon enhanced infrastructure and mixed land use planning e.g. Bhendi Bazaar in Mumbai and East Kidwai Nagar in New Delhi.

Greenfield –Developing a previously vacant area of more than 250 acres using innovative planning and plan financing. Greenfield developments are required around major cities in order to accommodate the needs of the expanding population. GIFT City in Gujarat

and Net Town Kolkata are examples of Greenfield development.

Pan- city Development-Applying ' Smart Solutions' using ICTs throughout the larger parts of the city e.g. smart water meters and billing systems, intelligent traffic management etc.

(3) Funding and Institutional Mechanism

Being a centrally sponsored scheme, each selected city would get central assistance of Rs.100 crore for five years under the Smart City Mission. State Governments and Urban Local Bodies (ULBs) will have to contribute an equal amount on a matching basis .Out of government funding ,about 60 percent amount to be spent on infrastructure i.e. physical, social, institutional and economic infrastructure.

For implementation of the mission at city level, Special Purpose Vehicles (SPVs), which will plan, appraise ,approve, release funds, implement, manage, operate, monitor and evaluate the smart city development projects, are being created . Each proposed Smart City will have an SPV headed by Chief Executive Officer and have nominees of Central Government, State Government and ULBs in its Board.

(4). Benchmarks of a Smart City

> Adequate Water Supply .

> Sanitation and solid waste management (using provisions of Swachh Bharat Abhiyan).

> Assured Electricity Supply.

> Reliable Public Transport and efficient urban mobility.

> Affordable housing, especially for the poor.

> Good governance, especially e-governance and citizen participation.

> Education and Health- tele-education and tele-medicine.

> Robust IT connectivity and internet services.
> Safety and security of citizens particularly vulnerable sections.
> Sustainable environment.

V. SUGGESTIONS

Developing smart cities will take time and strong efforts as it is a challenging task to create an enabling policy and regulatory environment .The concept of smart city implies oversimplified vision of technology as it seems to be based on the belief that technology can solve any problem without fundamentally changing lifestyles. For a diverse country like India, simply a linear vision based on technology can not accommodate the heterogeneity of its cities. There is need to give impetus to advanced research in urban planning to encourage innovations suited to local conditions. Moreover there is need to bring together all considerable efforts and research work already initiated by various organizations in context of urban planning in India on a common platform.

VI. CONCLUSION

Since the strategy for development of smart city revolves around concepts like retrofitting, redevelopment and greenfield development, the policy makers, implementers and other stakeholders will require capacity assistance at different levels. Also the Smart Cities Project requires smart people who actively participate in governance and reforms. Till now, out of 100 smart cities, a list of 90 proposed cities has been announced by Ministry of Urban Development. Along with smart cities, government has to take effective steps for developing smart villages otherwise it will lead to huge migration from rural to urban areas. If this holistic vision has to be transformed in

reality, there is need to work upon 4 's' – smart leadership, smart governance ,smart technologies and smart people.

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