

Smart Cities and Urban Development

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Abstract: *Man is the only living creature which has been blessed with a potential to think in various paradigms within his own reach and strength. Right from its birth and thereon there has always been phases of growth and quest to conquer something new and novice with all the risk associated. With passage of time and exposure to different survival patterns lifestyles and general being has evolved over a period of time. Urban living in India can be traced in timeframe between 2350BC and 1750BC – history of about 600 years tracing back to the ancient Indian period of the INDUS VALLEY CIVILIZATION setting standards of well-planned, well-structured, content living with settlements providing more than basic to the dwellers of the place. Design confirming a place for all and all for the place.*

As we discuss urban approach, impetus needs to be given to BRITISHERS for changing the course of our living and introducing us to improved governance better facilities & amenities formalising the growth process by setting up the first municipal corporation in india 1687in Madras (Chennai), in 1726 in Bombay and Calcutta. In 1882, resolution was passed to setup panchayats, village level, district board, taluka board. During the British Reign contributions of LORD RIPPON “the father of local self- governance” in setting up hill stations in Himalayan regions and southern India, the modification of the urban landscape of the existing cities with the introduction of civil lines and cantonments, the introduction of railways and modern industry, the improvements in urban amenities and administration, the Initiation of modern education by establishing some colleges and universities in major urban centers. These living mechanisms have been some strong base of today’s modern-day existence.

India is rightly addressed as “the melting pot” of diverse people with varied ethnic, linguistic, and religious backgrounds. City dwelling being the core attraction to most due to its the strength of the economic activities and more organized working potentials existing within itself leading to migration or change of location of residence of people involving the movement of people from one place to another with the intention of settling down temporarily or permanently due to economic and technological growth or advancement in their desired destination especially post liberalization 1991 being a fundamental reason for urban development. Nearly 30 per cent of India’s population lives in urban agglomerations. The fast-paced urbanization in the country, which is closely linked to the overall socio -economic progress. The government within its capacities have taken many initiatives to help cities absorb these human capital pressures. Ministry of Housing and Urban Development has been actively introducing new schemes and reinventing the existing schemes which deal with these specific issues. Smart Cities Mission (SCM), Swachh Bharat Mission (SBM), Heritage City Development and Augmentation Yojana (HRIDAY), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Pradhan Mantri Awas Yojana (PMAY) – Housing for all (Urban)

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I. INTRODUCTION

It’s said that those who look for progress and growth eventually find their way to the city. All progressive thinkers and leaders would want to move from basic to smart in all aspects and arenas of living functionality like from finances to smart finances, transport to smart transport, learning to smart learning, commerce to smart commerce models, city to smart city and endless demand to be contemporary continues.

Smart cities were born from a necessity to deviate from the clouded and clustered big cities and even some adversities and tragedies which shaped the need to redesign our ways of living and reach with modern technology for a safer, healthier, smarter lifestyle. The history of smart cities has evolved on some fundamental school of thoughts situational to the era when it evolved: -

In 1960's post war scenarios where security was the key factor and to provide a cushion for failed government machinery.

In 1970, s and 1980's with comprehensive living cluster providing growth development and sustainability.

In 1990,s more technological aides were considered to speed up the reach and provide advanced improvised services to the mass on whole.

Cities everywhere are growing – and feeling the strain. Some 55% of the world's population lives in urban areas today, and that number is expected to reach 68% by 2050 – which means

2.5 billion more people living in cities.

Indian statistics speak a different tone- Census 2011- almost 31% population stays in cities contributing 63% of GDP. In 2030 around 40% of India's will be living in cities and

contribute 75% to the GDP.

WHAT CULMINATES A SMART CITY?

Every institution, every habitation has its paradigms what smart cities are. Countries around the world have taken remarkable strides in their smart city initiatives and in adopting innovative smart technologies as a way to make their home cities more sustainable and energy efficient as well as minimising carbon emissions requiring smarter urban transport networks, environmentally-friendly water disposal facilities, and buildings with high energy efficiency. Incorporating smart technology including the Internet of Things (IOT) – objects that are embedded with sensors for data mining and sharing not only improving the quality of life of its citizens but also ensuring overall public safety.

A 'smart city' is an urban region that is highly advanced in terms of overall infrastructure, sustainable real estate, communications and market viability. It is a city where information technology is the principal Infrastructure and the basis for providing essential services to residents with maintaining green environment and energy efficiency.

Smart city formulations work to resolve urban issues and rejuvenate the city's environmental and social imbalances. Smart cities are envisioned as creating a better, more sustainable city, in which people's quality of life is higher, their environment more livable, and their economic prospects stronger.

Some of the most prominent and influential benchmark smart cities of the world are Singapore, Helsinki -Finland, Zurich Switzerland, Oslo- Norway, New York- USA, Amsterdam -The Nether lands, Seol-South Korea.

In India according to the 2022 list Ahmedabad, Amritsar, Bhopal, Chennai, Pune , Thane, Mumbai, Rajkot, Coimbatore, Hyderabad, Indore, Bhopal, Nagpur are some of the top Indian smart cities. Cities which are being developed as a smart city are Port Blair, Visakhapatnam, Tirupati, Kakinada, Amaravati, Pasighat, Guwahati, Muzaffarpur, Bhagalpur, Bihar Sharif, Patna, Chandigarh, Raipur, Bilaspur, Naya Raipur, Diu, Dadra & Nagar Haveli, Silvassa, New Delhi Municipal Council, Panaji, Gandhinagar, Surat, Vadodara, Dahod, Karnal,

Dharamshala, Shimla etc. For swift concise and precise designing of the urban developments both the public and private figures need to work hand in glove for effective implementation of the whole model. Two processes are considered for the same –

TOP-DOWN APPROACH- Government, Corporate, industrial city model seeks to maximize efficiency, security, and state control. Not much inputs are considered from the citizens and its is a ready breed model where in they are required to stay.

BOTTOM-UP APPROACH- Fosters sociability, transparency, and entertainment make it more socially viable and attractive. Its mostly tailormade to the requirements of the citizens.



CORE ESSENTIALS TO A SMART CITY AND URBAN APPROACHES TO LIVING

STATE OF ART INFRASTRUCTURE

Affordable Housing, adequate water supply, assured electricity, sanitation, waste management, health facilities, education, green , a clean and an energy efficient .pollution free enviroiment

ROBUST IT CONNECTIVITY AND DIGITIZATION

Connecting people and security machinery of the place, faster internet and advanced technological equipments to monitor local functioning of the smart city and data generation of its habitants.

EFFICIENT MOBILITY , TRANSPORT AND JOB OPPORTUNITIES

Easy of trasportation and accessibility of work to and from home providing good working opportunities in close proximity.

GOOD GOVERNANCE AND EGOVERNANCE AND PEOPLE PARTICIPATION

For any survival to be functional to full capcity involvement of all stakeholders is absolute necessary

SAFETY AND SECURITY OF CITIZENS, PARTICULARLY WOMEN, CHILDREN AND THE ELDERLY

create a well connected safe haven for all under the same framework.

SMART CITIES AND URBAN DEVELOPMENT-THE INDIAN DIMENSION

India is geographically, socially and culturally very diverse and distinct demanding stage wise adoption of cities transformations. It has been adopting various innovative urban concepts right from 2005 with more impetus from 2015. Many initiatives of the government in small portions have helped shaping many of cities with modern outlooks and technologies supporting integrated approaches to urban enhancements.

2005- ‘Heritage city development and augmentation yojana’ (HRIDAY) The scheme was introduced on 21st January 2015 for the holistic development of heritage cities. It deals with preserving and reviving the soul of the heritage city, as well as the development of core heritage infrastructure projects and revitalization of urban infrastructure for areas around heritage assets 2006- The National Urban Transport Policy involves incorporating urban transportation as an important parameter at the urban planning stage. It also focuses on the introduction of intelligent transport systems, reduction of pollution levels and encouraging greater use of public transport and nonmotorized modes through central financial assistance.

2008- The National Urban Sanitation Policy was formulated in 2008 which laid out the government’s vision to provide hygienic and affordable sanitation facilities for the urban poor especially women as well as addressing the challenges with effective city sanitation plans.

2013- The Ministry of Housing and Urban Poverty Alleviation (MHUPA), the scheme is a livelihood promotion programme to reduce poverty and vulnerability of the urban poor households by enabling them to access gainful self-employment and skilled wage employment opportunities thereby enhancing their livelihood. It also addresses the livelihood concerns of urban street vendors. It has been implemented across 790 cities.

2015- AMRUT (Atal Mission for Rejuvenation and Urban Transformation)-connected to the Swachh Bharat Mission, the scheme includes provision of water supply facilities, sewerage networks, stormwater drains, urban transport, and open and green spaces, across the selected 500 Indian cities. The allocated budget under the scheme is around Rs 50,000 crore for the period 2016 – 2021.

2015-PMAY- Pradhan Mantri Awas Yojana (PMAY) (Urban) or Housing for All The beneficiaries include Economically weaker section (EWS), low-income groups (LIGs) and Middle-Income Groups (MIGs). Implemented as Centrally Sponsored Scheme with two components – PMAY (Urban) and PMAY (Rural), the mission involves providing central assistance to implementing agencies through States and UTs.

2015- “Prime Minister Modi wisely recognizes the vital role cities can play in building a strong future for India, especially if local innovation is encouraged and rewarded. The Smart Cities Mission was outlined by Prime Minister Modi today during a forum at Vigyan Bhavan in Delhi, India that was attended by over 1,200 public sector leaders, urban planning experts and citizens from across the country. This flagship effort will allocate Rs. 48,000 crore (an estimated \$7.5 billion) over five years to promote progressive urban planning, improve governance, and strengthen the economic, social and physical infrastructure of 100 cities So far only 34 cities could meet targets remaining 66 are yet to complete their work targeted to complete in period of 5 years extended to 2024 due to pandemic abruptions. After successful completion of these 100 cities the target is now going to be 4000 different cities.

Bloomberg Philanthropies reveals its partnership with the Government of India in support of the Smart Cities Mission, ambitious urban development programs to improve quality of life in India’s fast-growing urban centres. Bloomberg Philanthropies is providing strategic and technical support in the design and delivery of a Smart Cities Challenge. Bloomberg

Philanthropies’ support for the effort includes: Strategic and technical assistance to design and administer a Cities Challenge that enables central government to articulate standards and goals while ensuring local officials have broad flexibility to develop approaches that are citizen-centered and responsive to local needs. Providing supports to help India’s municipal officials assess challenges, engage citizens, draw from best practices, and generate smart proposals – the best of which ultimately receive government funding. Galvanizing an international network of urban practitioners to

share global best practices and evidence in urban planning and smart solutions with India's municipal and state officials and their partners over the course of the competition.

SMART CITIES TURBULANCES

Every new effort has teething times and hiccups from time to time some issues crippling the growth of smart cities, coordination of and from all the three tiers of governments- center, state and local bodies. Sustaining a continuous financial flow to support the development is a challenge sometimes. Maintain and upgrading the technological equipment's and data centers can be an inundating task. Redesigning of cities in many cases can be difficult due to its geographical and physiological structures. Retrofitting the weak areas or areas with heritage significance can be exhaustive on time and resources. Many inherent factors could cripple the setting up of urban smart transportation. Technology within its gamut is risky subjected to breach and personal space infiltration subject to cyber-attacks and data leaks.

II. CONCLUSION

It's important to remember that cities are first and foremost places for people. Instead of centering their attention on urban dynamics, those who seek to build smart cities ought to refocus their lens on the human scale design, with its emphasis on livable mixed-income communities. Smart city should be fun places where order isn't imposed top-down but allowed to emerge spontaneously from the interplay of the diverse individuals who live, work, and play within them. Its just not the structural composition making living convenient but also connected in ways beyond the internet of things giving breathing space for freedom of speech and behaviour and conduct. Focus should not only be containment but contentment.

It should be ideologically a right mix of social, economic and political paradigm creating a conducive balance for growth and development where stakeholder is equally responsible for its being. Though in india the concept has picked up many years after prominent smart cities of the world have emerged it seems just on track holding more scope of technological enhancements with green growth and environmental preservation with all the urban diaspora,

SOURCES

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- [2]. Indian government site Photos from google