

# People make a city smart

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## 1. INTRODUCTION

### 1.1. PAPER OBJECTIVE

Urbanization is rapidly increasing across the world. Nearly 55% of the world's population presently resides in urban areas as compared to 30% in 1950. The United Nations (UN) Report titled "World Urbanization Prospects" projects that by 2050, global urban population will rise to 66%.

However, the level of urbanization varies from region to region and country to country. North America, South America, Europe and the Caribbean are largely urbanized. On the other hand, most population of Africa and Asia live in rural areas. The UN Report "World Urbanization Prospects" maintains urbanization will continue, and projects Africa and Asia will be urbanizing at a faster rate than the other regions of the world. The Report also states that of the projected increased urban population about 90% will be in these two continents.

In the backdrop of this global scenario, this paper focuses on India, which is the largest democracy of the world and has been integrating into the global economy accompanied by economic growth. India is an emerging economy and occupies an important position in South Asia and globally.

Over the past decades, Government of India had brought in various structural and economic reforms that have unleashed investment and growth. To sustain this momentum, one of the key issues is to turn around the cities in the country and release their dynamism. According to the research conducted by Mckinsey Global Institute, it is estimated that the cities in India could generate 70% of new jobs created to 2030, produce more than 70% of Indian GDP and drive nearly four-fold increase in per capita income across the nation.

The speed of urbanization in India poses an unprecedented managerial and policy challenge. Being cognizant of this challenge Government of India launched "Smart City Mission" for comprehensive development of physical, institutional, social and economic infrastructure of cities to improve the quality of life and attract people and investments to the cities, and set in motion a virtuous cycle of growth and development. The "Smart City Mission" underlines the need of active involvement of the people to meet the planned objectives.

This paper aims to assess the need for public participation in the context of “Smart City”, examines the challenges in people’s participation and identifies the factors that create variations among cities in people’s involvement. In broader context, people’s participation in planning, development and governance is of relevance to effectively meet the overarching goal of the United Nations Sustainable Development Goals, and assumes importance.

## 1.2. PRIOR WORK

Prior to “Smart City Mission”, India focused on City Development Plan (CDP) under the national program named Jawaharlal Nehru National Urban Renewal Mission (JnNURM). Studies were carried out to review, examine and assess the impact of CDP, its shortcomings and means to enhance the scheme. This paper is continuum to these previous studies; and is largely premised on the previous research findings. Also, the rationale for involving people in “Smart City” as articulated in the directives of the Government of India is analyzed and co-related with the experiences observed in the past under JnNURM program. Further, the paper has borrowed from research findings of other studies conducted on participatory development in India.

## 1.3. APPROACH

In planning for “Smart Cities”, interactive consultations were held with government officials, local governance system was reviewed, and citizen survey on their issues and expectations was conducted for various cities in different regions of the country. The paper incorporated the observations and findings of this exercise. Besides, the paper draws insights from project management team of a few cities in respect of getting people involved and nature and extent of people’s participation have as case examples.

# 2. THE INDIAN URBAN SCENARIO

## 2.1. URBAN CHALLENGE

In India, out of 1.2 billion population, 8 million people live in rural areas and 4 million are urban residents, which is about 33% of the country’s total population. The UN Report “World Urbanization Prospects” projects that between 2014 and 2050 India will add 404 million urban dwellers. With speedy progress of economic development in India and cities becoming “engines of growth”, it is likely that in the coming decades India will witness unprecedented rapid urbanization.

Hitherto, urban growth in the country has been largely unplanned and haphazard. With growing population, Indian cities are under severe stress, and quality of life has been adversely affected. Dearth of safe drinking water, poor sanitation, shortage of housing, and lack of transport infrastructure are the main challenges before urban administration in India. In addition, there are concerns for adequate and affordable health service, environmental degradation, unemployment, and poverty in urban areas.

To meet these challenges number of policy reforms and actions has been taken by the Government. Under JnNURM, considerable progress has been made to improve the civic conditions of the cities. Yet, the result is far from meeting the growing urban needs.

To accelerate urban development and address the current deficiencies, Government has undertaken, as stated earlier, a flagship program “Smart City Mission” (SCM), which covers 100 cities of the country. These cities mainly comprise of satellite towns of large cities and mid-sized cities.

## 2.2. MEANING OF SMART CITY

Smart City is defined by different people in different ways. The concept of Smart City in Europe will differ from the meaning of Smart City in India. It depends on the stage at which the city is; the needs of the residents; and the willingness to change. Even in India, with cities varying in terms of development and diverse culture and tradition cannot have a common definition for Smart City.

However, the general perception of Smart City is a place where information technology is used to supplement and augment the facilities and services of the city. This, albeit, is not the correct concept of Smart City. For example, where there is lack of basic civic infrastructure and services, the priority lies in constructing these facilities and introducing the amenities to the public, before venturing into application of digital technologies. Say, a city which does not have garbage bins (no matter how strange it may sound, but a reality in the developing world!) or proper solid waste management system, how can it be expected to get electronic alerts for garbage bins which are spilling over or stop people from littering on the streets. Similarly, where there are un-serviced areas in a city for water supply how can the need for electronic leak alert communication come before the water pipelines are laid down and house connections are provided.

In other words, there is no universally common meaning of Smart City. The central point is “Smart City” is much more than place where new technologies are adopted. It encompasses features and facilities which meet safety, security, and environmental needs, thrives economically, and maximizes performance. Increasing a city’s “smarts” requires great many things.

Therefore to make a city smart, the initial task is to assess the current civic situation, understand the priority needs of the citizens, and prioritize the list of work to be carried out in terms of creation of physical and social infrastructure and making provision for effective, efficient and economic service delivery. Based on the priority list of works, designing and developing the plans and projects requires adoption of suitable information technology to ensure “world-class” service.

It is important to understand that the objective of Smart City is to provide basic infrastructure and give a decent quality of life to city residents through clean and

sustainable environment and application of “Smart” solutions. The intended beneficiaries of Smart City are the citizens. Hence, addressing their needs and meeting the challenges that they face are paramount than imposing a utopian program through top-down approach. The issue is who and how the citizens’ needs and priorities are to be determined. And, it is in this context that for developing Smart City, the focus has to be on people. However, too often the focus on people is neglected. To succeed as “Smart City”, it is incumbent to get people-centric. Recognizing the significance of citizens’ role, the Guidelines for SCM issued by the Government of India mandates detail consultation with the city residents.

### 3. SMART CITY MISSION IN INDIA

An example in point is Bhubaneswar, the capital of Odisha – a province in eastern part of India. In preparing the proposal for Smart City, the city authorities of Bhubaneswar adopted community participation approach. Citizens’ engagement followed a five-pronged strategy as outlined below.

- **Inform** – Provided objective information to the citizens through print media (newspaper advertisements and street hoardings), electronic media (sms, mass mailer, radio talk, face book, website), and workshops and discussion meetings.
- **Consult** – Organized stakeholder meetings, focused group discussions and conferences to obtain feedback and inputs from the citizens, along with specialists and experts, on challenges faced and proposed solutions.
- **Involve** – Conducted participatory planning exercise to co-create solutions through contest for vision statement, logo design, and holding discussion forums, community meetings, and setting idea box.
- **Collaborate** – Partnered with individuals, formal and informal groups, educational institutions, and public organizations to generate ownership in implementation by forming execution volunteer teams and providing tool kits, holding Smart City Labs.
- **Empower** – Allowed final decision with the public through ballot and citizens’ juries, and public-private-community partnership.

As demonstrated by the Bhubaneswar city authorities, engagement of people requires to – (i) build an enabling environment for public to voice their views and thoughts; (ii) develop public awareness through sharing and providing access to information; (iii) identify talents available within the city to provide and implement solutions; and (iv) form teams to guide, assist, and monitor implementation.

Apart from involvement in planning and execution, maintaining civic discipline is an essential element for sustainable “Smart City”. For instance, where there are designated place for depositing garbage, littering on the streets need to be stopped to keep the city clean. Use of public transport in place of owned vehicle, and following traffic rules are other requirements to reduce congestion and maintain road safety. Judicious use of electricity and water to save resources is no less important. And, this requires the

“right” mind-set. This calls for behavioral change, for which civic societies, schools and educational institutions have important roles to play. It is awareness and education that can make the change, which cannot be expected to happen overnight. It is continued persuasive effort that will yield result. Government can be a facilitator and play a supportive role. It is the people who are the principal actors who can bring the change through awareness of their duties and responsibilities and acting accordingly. Lastly, enforcement of law where it is broken needs to be made, which unfortunately is often lacking in the developing democracies for political interference arising out of electoral sensitivities.

Besides, awareness about smart solutions plays crucial role in developing true smart citizens. In this regard the city authorities cannot ignore to take efforts to raise citizen awareness on the efficient usage of the smart solutions and services in which substantial investments are made. For example, simply installation of smart meters is not sufficient to save energy unless the citizens change their energy usage behavior, which entails reducing television time, and switching off electrical appliances when not in use.

Thus, if every citizen can simply adopt better practices and develop ethical connection with the surroundings, smart living can be sustainable. This requires first, education for mind-set change of the people, good governance, and enforcement of law where there is any infringement.

It may be underlined that Smart City is not an indicator of developed economy. A developing economy can also successfully implement Smart City provided the citizens upgrade and update themselves. To put it differently, having proper civic sense and respect for law make a smart citizen; and that profusely contributes to build Smart City. It is heartening to note that residential societies and businesses in India are now taking up initiatives like cleaning the neighborhood, roads and water bodies, tree plantation, electronic waste, and waste recycling.

In India, Government has introduced necessary tools to help citizens participate proactively. These include street campaigning, education programs in schools and colleges, media advertisements and hoardings, consultation programs with government officials, and online participation. *MyGov.in* is an excellent example of Information Communication Technology (ICT) integrating and increasing the efficiency of citizen engagement. This platform facilitated to create more transparent system and act as an interactive forum between citizens and the Government. It allows citizens to post their comments and suggestions on any proposal.

Also, private technology developers in the country are exploring smart technologies from smart mobiles to smart furniture and appliances, marketing them at affordable prices to reach to all categories of people. This has helped in cost saving and connecting with globally-employed smart technologies.

## 4. THE STUDY OBSERVATIONS

However, as the saying goes, the grass in the field is not all green. There are instances of political indifference which limits people's involvement. Lack of political will to support and strengthen people's participation is, at times, seemed by some political leaders with skepticism, and as if involving people might erode their authority; and consequently these leaders act contrary to the principles and policies of participatory development.

The political indifference is aggravated in some cases by bureaucratic negligence, especially where there is close nexus between the political and bureaucratic class. This combined negative approach keeps away people from active involvement in development of their cities. As a result, there is an imposed scheme of development, which does not meet the real needs of the people; and contrarily benefits a group of elite and the powerful.

Notwithstanding the challenges, people's participation in India achieved successes of varying degree through empowerment of people. For instance, with enactment of Right to Information Act in India, the people are empowered to ask for information from public authorities. This facilitates transparency in operation and promotes accountability of the public authorities. The transparency and accountability would assist in eliminating the corruption and nepotism by making such government authorities and their instrumentalities accountable for acts while rendering services to the public.

It is observed that the city governments suffer from bureaucratic control, political intervention, and top-down approach. Representation of the vulnerable sections such as residents of slums and informal settlements has been undermined by the influential groups. People's involvement has been more of ceremonial participation than a real committed practice. The challenge and priority lies in bringing change in the leadership style of the city governments, which can facilitate a people's approach to urban issues and development.

In few instances reformist approach had been adopted at the initiative of chief executives of the city governments. In these cities, the views were clearly articulated; but required convergence of diverse interest groups. However, progress in development has been better than in cities which are slow and laggards in reform implementation.

It is noticed that relatively economically strong cities and those having forward-looking leadership fared better in engaging the residents.

## 5. CONCLUSIONS

### 5.1. STUDY RESULTS

It is significantly paramount to ensure participation of citizens from cleaning to safety requirement. Citizen participation generates citizen satisfaction of being considered as part of the city and, in the process, motivates for maximum cooperation and support that makes a city better place to live in. It may be underlined that in an increasingly complex situation as in most countries, especially India with vast diversity, citizens' inputs are a critical resource for policy-making. Good decision-making requires the knowledge, experiences, views and values of the public. People's participation reduces conflicts through stakeholders' consultation and eases the implementation process, helps in sustainable and inclusive development. The most vital aspect is the citizens, who live and work in these cities, must be integral to the implementation process as well. The success of "Smart City" is firmly vested in smart citizens. A smart citizen is one who not only participates in planning and implementation but also who has civic sense and respects the law so to ensure development that would be constructive and positive legacy for the future generation. Therefore, public participation with civility and discipline is in nutshell the need of the hour in the developing world along with political support and bureaucratic encouragement.

Rightly, hence, Amitabh Kant, the Chief Executive Officer of Niti Ayog (Planning Commission), Government of India, said "You cannot have smart cities without smart people".

This paper based on the study which has been carried out provides a platform for researchers to discover effective ways for people's participation in a system dominated by powerful vested interest groups averse to change. The further research findings will not only be useful inputs for development of "Smart City", but also present directions for facilitating people's participation for democratization, decentralization and development; and provide gainful employment to the growing urban population. In other words, Agenda 2030 that has poverty alleviation as the overarching goal can be achieved through involvement of people in determining their development plan and scheduling their destiny.

As articulated by Amitabh Kant, the innovative ways of engaging people in development of "Smart City" and its maintenance will equally provide directions to the development practitioners for their activities.

### 5.2. IN SUM

This paper is primarily based on an empirical study. The paper is researched on ground realities and facts connecting evidences from the past studies and relating with the current situation. Further, the paper brings forth findings that are common for most developing countries continuing controlled regime. It acts as lighthouse to the countries,

especially in the developing world, embarking on “Smart Cities” for involving people. The outcome of the research could provide guiding posts to other countries for following people centric approach not only for “Smart City” but also for development of other sectors as well to ensure convergence of diverse interests and ensure greatest good for the greatest number.

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