

# Journal of Advanced Zoology

ISSN: 0253-7214 Volume **44** Issue **5 Year 2023** Page **1167-1171** 

# **Smart City A Vision To Transform-Nation**

Simon Paul D Souza<sup>1\*</sup>, Maya M<sup>2</sup>

<sup>1</sup>\*Research Scholar, Department of Sociology and Social Science, CHRIST (Deemed to be University), Hosur Road, Bengaluru-560029 (Karnataka), India

<sup>2</sup>Assistant Professor, Department of Sociology and Social Science, CHRIST (Deemed to be University), Hosur Road, Bengaluru-560029 (Karnataka), India

\*Corresponding Author: Simon Paul D Souza \*Email: treekarra@gmail.com

#### Abstract

India (Bharath) requires new actions over policies, personal implementation over communal ideas, sustainability than over consumption, urban ecosystem over urban economics and more pathways to urban sustainability. The creation is crying, from flooding to hotter and drier summers to raging forest fires, nature is asking us to change our modern lifestyle, not just bare technology. Hence the purpose, of the paper focuses on the responsibility of each individual(leader) and their vision about the smart city to look forward to. A major survey has been conducted from individuals of various age groups belonging to multiple locations of India. Good number of people responded and in fact suggested how each individuals can be Indian leaders and citizens. Due to the shortage of land and rising sea levels, the idea of a floating metropolis was developed as a creative way to give people somewhere new to live. Our main research topic in this article is to motivate academics and scientists with new IoT technologies and applications, while also bringing attention to the existing condition of smart city concepts around the world by recognizing significant future trends, such as floating cities. As a result, we provide an overview of smart city projects and examine their key ideas as well as various data management strategies. Using a sophisticated literature matrix that included terms like 'smart people,' 'smart economy,' 'smart governance,' 'smart mobility,' 'smart environment,' and 'smart living,' we conducted a thorough literature scan and evaluation. Smart City program is transforming Bharath as modern, global eco and smart city.

CC License CC-BY-NC-SA 4.0

Key words: smart city; clean city; transformational leadership; green credits

# 1. Introduction:

'Smart city' (Zhou et al.) encompasses a vision of an urban space that is ecologically friendly, technologically integrated and meticulously planned with a particular reliance on the use of Information Technology to improve

efficiency. India has framed Smart City program in the year 2015 with a sole aim to have sustainable cities. It is a city that has an affordable products, sustainable future and amiable society or in other words, Institute of Electrical and Electronic Engineers considers that - "a smart city brings together technology, government and society to enable the following characteristics: a smart economy, smart mobility, a smart environment, smart people, smart living, smart governance" (Satyam and Calzada). Its general assumption Smart City means with high data and working with most advanced technology but fortunately not, Smart cities are "liveable and resilient" (UK dept. of business 2013). Planning for 'unplanned areas'. The main agenda is to boost urban areas, not urbanization. Smart city is represented by four pillars, instructional, social, physical and economic infrastructure. Smart city requires a critical mind-set (analyse the situation) and creative leadership (resolve the issue) to transform our nation(Sharma and Rajput).

Climate change has been the biggest challenge in the 20 th century, in a way the smart City program is a baby step towards solving climate change and vesting sustainability. Smart city offers sustainability in terms of economic activities and employment opportunities to a wide section of its residents, regardless of their level of education, skills (Government of India 2014)(Ahmed et al.). To make India (that is Bharath) has an outstanding country in environment, education and economics is not in technocratic and policies but under the sense of 'faith pavilion' which was confirmed by UN summit cop 28 which also ushered invitation to spiritual leaders, (imams, pastors, and rabbis) to exchange ideas on climate change, among the hub of ecological activists, climate scientists, and fossil fuel lobbyists. In the climate negotiations, when we come here to COP 28, it's all about money, money, profit, profit," said Athena Peralta, but the climate emergency is, at root, a moral crisis and a spiritual crisis." To combat climate change, mankind needs to combat its basest impulses and showcase extraordinary 'altruism and empathy' through this 'cosmos is restored' (Maheswar et al.)

Under the mission Sustainable development Goals (SDG's) India kick started the Smart city program. Smart cities are smart governance, smart energy, smart building, smart mobility, smart infrastructure, smart technology, smart healthcare and smart citizens (Frost and Sullivan 2014). According to SDG11 and 13, "Sustainable cities and community" and "climate action" to fight against climate issues is having eco-lovers, hence the backbone in mitigating climate change is to plant trees. Bharath aims to restore 26 million ha of forests by 2030, under the Bonn challenge of achieving 33% tree cover which is at present 24%.

However, reflecting deeply how nonstop urban projects explore to the extent at which these cities in their smartness embrace the holistic vision of sustainability. As Indian leaders and citizens, this vision needs empirical solutions to see India moving forward in terms of environmental and economic sustenance one of the aspects of these diverse and stimulating reflections highlight how of the global north have been unreflectively taken as the default or benchmark for comparisons. As a result, theory production is severely limited "as variables or topics to be considered [are restricted]to those relevant to the privileged locations (Robinson 2011,10)

According to the 2011 census India's current population lives in urban areas or cities and importantly contributes 63% of the country's Gross Domestic Products (GDP). After the pandemic India holds a brand as one of top countries to grow in urbanisation and industrialisation which reveals by the end of 2030 Indian Urban areas house 40% of the population and contribute 75% of India's GDP. The central point is replacing village to cities in fact boosts country's GDP, but fails to express ones duty in conservation and sustainability. Replacing is not only seen as modernisation but marketed the basic amenities water, plants and etc.

Initiatives Under smart City program are: National Urban Learning Platform (NULP), City Investments to Innovate, Integrate and Sustain (CITHS), Climate Smart Cities, Consultation on city GDP measurement framework, Data smart cities, Data Maturity Assessment Framework (DMAF), Ease of Living Index (EOI), Municipal Performance Index (MPI), Indian Cycles for change (IC4C), India Smart Cities Awards Contest (ISAC), India smart cities fellowship program, India Urban data, India Urban observatory, National Urban digital mission, National Urban innovation stack (NUIS), Smart Cities Open Data Initiative, Smart net, streets for people challenge, the Urban learning internship program. Promoting Transit Oriented Development (TOD).

#### 2. Materials and Methods

The concept of the "smart city" is new and is developing simultaneously in terms of theoretical study and practical application. Largest cities worldwide have begun to implement smart projects for achieving a smarter life in urban areas, while academic researchers have been examining the theoretical features of a smart city and offering definitions and models for their understanding. Since the smart city movement is unplanned, individual cities follow their own objectives, giving varying priority to smart initiatives. For example, in some cities, the use of ICT is prioritised, while in others, the main focus of smart programs is the production of green energy(Vinod Kumar, *E-Democracy for Smart Cities*). Here in India we still dream for the smart India at the same time keeping the values of sustaining nature. The cities are working hard to become more inventive and

intelligent through a range of programs. Indian Cities differ greatly from one another in a variety of ways, including population, demography, economics, and geography; as a result, the contexts and circumstances surrounding the cities' attempts to become smarter are reflected in the various smart city programs. To gain a qualitative understanding of the concepts and characteristics and role of each each individuals that define smart city initiatives, interviews and google surveys were conducted using the Smart City Initiatives Framework(Satyam and Calzada). People of different age groups and from all over the regions of the Indian geography responded and vision of them is discussed in separate sections.

# 3. Outcome from Smart City program

Outcomes of Smart city - excellent physical infrastructure, enlightened citizenship, social harmony, cohesion, equity, social justice, life bubbling with enthusiasm, community participation, spiritual, ethical and moral values, good governance, institutions for mental growth, innovation and creativity and ultimately sustainable development. Citizens in fact expect 10 goals form of the Smart City namely; a)better public transport, b)adequate place for non-motorized transport c)parking management d)reduce traffic issues e)safe and security for living f)tension free civic services g)protection against natural disaster h)waste management i) easy access to primary necessity j)city beautification.

#### 4. Results and Discussion

# 4.1 Area- based development in Karnataka

According to a survey all citizens have stressed that Smart city requires transformative leadership to be leaders across gender and positions. Smart city programs drive to be 'engines of economic growth'. "Three chief principles in Smart Cities are competitiveness, sustainability and quality of life" (Bhushan et al.). In Karnataka, Mangalore, Davanakere, Belagavi, shivamogga, Hubli –Dharward, Tumkur and Bengaluru have been selected to implement smart city under the leadership of Ministry of Urban Development (MoUD) (Chatterjee and Chattopadhyay).

Fortunately there is a good fight between Brand Bengaluru and Hubli –Dharward when it comes to 'quality of life' Bengaluru holds 12<sup>th</sup> rank with 55.67 cent comparing to Hubli –Dharward which has 52.53 cent and holds 24<sup>th</sup> rank in the country.

Secondly in terms of 'economic activity', Brand Bengaluru potentially holds first rank employing all category people, leaving no community behind and has 78.82 cent of higher level of economic activity in the nation. Hubli –Dharward showcases 6.58 cent and achives 40<sup>th</sup> rank.

In addition to, 'sustainability 'Hubli –Dharward gone to 53.61 cent and ranks to be 34 in smart solutions for strong issues .on the other hand Brand Bengaluru conquers 13<sup>th</sup> place with 59.97 cent in terms of smart goals

Additionally in 'citizens perception' Brand Bengaluru is heading well past with 78.00 cent and achieves to be 18 rank. Whereas Hubli –Dharward holds 40<sup>th</sup> rank with 71.00 cent.

Municipal performance: Then in terms of 'Services' Brand Bengaluru achieves to be  $25^{th}$  rank with 56.00 cent and in the next Hubli –Dharward has 53.22 cent with the ranking 33 among the country . Next in technology the Hubli –Dharward ranks  $46^{th}$  with the growing level of 15.89 cent however Brand Bengaluru dynamically moves ahead and ranks to be  $25^{th}$  with 26.21 cent. Finally in terms of 'governance' brand Bengaluru ranks  $18^{th}$  and 'Hubli –Dharward ranks to be  $32^{nd}$  with the percentage of 51.01 and 44.51 simultaneously.

## 4.2 Brand Bengaluru an ideal to uphold smart city

The shift of name itself has been revealing the depth at which Karnataka is moving, in a direction of constructive and competitive. Apart from its majestic infrastructures , multinational Companies (MNC's)(Vinod Kumar, *E-Democracy for Smart Cities*), advanced rural development organised by Rasht Riya Gram Swaraj Abhiyan (RGSA) with Gram Panchayath Development Plans (GPDP)(Maheswar et al.), palpable education and institutions, augmented daily routine ,glisty mall, The present government of Karnataka has taken baby step to gather suggestions from citizens and leaders for progress and preservation as Ideal urban foam to integrate between urban and rural in a city in the following ways: a) Population mobility b) Urban mobility c) Environmental and ecology d) Solid Waste Management e) public place utilisation f) public and animal health g) people-friendly e-governance, and h) Water security(Sharma and Rajput; Zhou et al.).

Available online at: <a href="https://jazindia.com">https://jazindia.com</a>

## 5 Challenges:

Challenges of smart city are lack of 'transformational leadership, urban governance, capacity building, ineffective urban planning and urban policies, urban reforms and lack of indigenous models, urban poverty, and poor urban services. Urban citizens should be motivated to take up measures on their own. Voluntary organisations (Non-Governmental Organisations) can play a very important role in mobilising public opinion towards this initiative. Motivation of the urban citizens through meetings and mass media like radio, television, newspapers and social media can also be done effectively. For the success of Smart City, incorporating people's participation is essential, therefore it's necessary to approach citizens in urban areas to create public awareness, 'educate and motivate' the masses.

## 5.1 The need of dynamic politico- administrative

Transformational leadership: Major issues are ultimately under the Government from. Whom people are chosen to make India a 'transformed nation', hence without 'political will' the targets on Smart City cannot be met. The experience of the past years has shown that unless urban citizens are totally involved in the planning and implementation of Smart City a 'little will be achieved'. A democratic reorientation of the attitudes of the officials and the citizens has become very much necessary for the complaints and prompt redressal. The leaders should not only possess traditional service like 'efficiency', 'integrity' and 'loyalty' but should shed their sense of superiority and exclusive tendencies. The leader should be 'agent change' if they are willing to consult, involve the marginalised community, readiness to understand citizens' perceptions, integrity, accountability and objectivity. Civil servants' authority should be honest and upright in discharge of public duties especially when there is 'political uncertainty' and instability hovering over national and global bodies(Vinod Kumar, E-Governance for Smart Cities).

## 5.2 Individual transformative-leadership is need of the hour

The initiatives cannot be left only to change makers, politicians, policymakers, and top management but individual proactiveness Or efforts of the personal 'soul to sole' is expected to satiate the agenda on Smart City Program(Vacca). Leadership is the art of motivating others to fulfil the goals of Smart City. It has been said human rather than capital is important. 'Lifestyle for environment' (LiFE), has campaigned aloud to abreast eco-friendly nature around a person. As it says changing individual behaviour itself can make a tremendous dent in the urban lifestyle and thrive on climate change. According to the United Nations Environment Program (UNEP), if one billion people out of the global populations of eight billion vest environmental friendly behaviour in daily life, global carbon emission could drop by approximately 20 cent. According to the Government of India (GoI),in 2015 India planned to set up 100 smart cities by the end of 2023.Out of 7997 projects 6,449 (81%) is probably completed. Fantasizing smart cities is not about economics and development, it's based on redevelopment, retrofitting and green fields. Smart leadership. Government of India also assured to honour individuals with green credits at least through these the nation may progressively march towards in fulfilling desires of Smart City.

#### **6 Conclusion**

The objective here is to promote cities that provide core infrastructure and a decent quality of life to its citizens, a clean and sustainable environment and applicable 'smart' solutions'. The purpose of the smart cities Mission is to promote 'economic growth' and improve the 'quality of life' by enabling local area development and harnessing technology, especially technology that leads to 'smart outcomes'. Area based development will transform existing areas 'retrofit and redevelop', including slums, into more planned ones, thereby improving liveability of the whole city. New areas 'Greenfield' will be developed around cities in order to accommodate the expanding population in urban areas. A smart city is a developed urban area that creates sustainable economic development and high quality of life by excelling in multiple key areas eg. Economy, mobility, environment, people, living and govern, through strong human and social capital and ICT infrastructure. Countries like - Toronto, Paris, New York, London, Tokyo, Berlin, Copenhagen, Hong Kong, Barcelona, Amsterdam, Melbourne, Seattle, Sao Paulo, Stockholm, Vancouver are ranked high for Smart City In the 20th century the nation wants transformative leaders to be fully involved in the act of 'TIKKUN OLAM' or 'Repair the world'. Unearth lessons relevant to development even in a hectic, digitalized, capitalist corporate world. Modern thinking goes like mitigating global warming, sustainability, climate change, fossil fuels or

carbon credits became a part of our lexicon. In Fact requires robustness of individual actions. Living in empirical exploration doesn't solve the problems, it requires '4R strategy' Reduce, Reuse, Recycle, and Recover. Adopting and implementing green infrastructure, more urban parks, and street trees and reducing carbon footprints, sustainable industries. 'Youth (in) action' and 'digital transformation' as sustainable catalysts. Adopting smart mobility and transportation.

#### Reference

- 1. Ahmed, Sirajuddin, et al. *Smart Cities—Opportunities and Challenges: Select Proceedings of ICSC 2019*. Springer Nature, 2020.
- 2. Bhushan, Megha, et al. *Artificial Intelligence for Smart Cities and Villages: Advanced Technologies, Development, and Challenges.* Bentham Science Publishers, 2022.
- 3. Chatterjee, Amit, and R. N. Chattopadhyay. *Satellite Towns in Neo-Metropolitan Development in India: Lessons from Selected Cities*. Springer Nature, 2020.
- 4. Maheswar, R., et al. Challenges and Solutions for Sustainable Smart City Development. Springer Nature, 2021
- 5. Satyam, Amitabh, and Igor Calzada. *The Smart City Transformations: The Revolution of The 21st Century*. Bloomsbury Publishing, 2017.
- 6. Sharma, Poonam, and Swati Rajput. *Sustainable Smart Cities in India: Challenges and Future Perspectives*. Springer, 2017.
- 7. Vacca, John R. Smart Cities Policies and Financing: Approaches and Solutions. Elsevier, 2022.
- 8. Vinod Kumar, T. M. E-Democracy for Smart Cities. Springer, 2017.
- 9. ---. E-Governance for Smart Cities. Springer, 2014.
- 10. Zhou, Rongjun, et al. "Smart City Construction and New-Type Urbanization Quality Improvement." *Scientific Reports*, vol. 13, no. 1, Nov. 2023, p. 21074.