

Smart Cities Mission as a Means of Achieving UN New Urban Agenda 2016: Indian Perspective Post Covid-19 Analysis

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Abstract:- Worldwide Cities occupy approximately 2% of the total land. They contribute to 70% to GDP, over 60% to Global Energy Consumption, over 70% to Greenhouse Gas Emissions and 70% to global waste (The UN Habitat New Urban Agenda III, 2016). The statistics are very clear that Urbanization is present and inevitable. Urbanization has its own merits and demerits. Increasing Urbanization is posing various challenges and creating problems today. However, the same Urbanization can be a source of solutions that our world is facing today. With proper urban planning, a lot of problems are associated with urbanization can be avoided and mitigated. The discussions in The UN-Habitat New Urban Agenda III Conference, majority have agreed to the ‘Smart City Model’ as a solution to the problems faced by urbanization. India’s Smart Cities Mission is efficient to promote sustainable and inclusive development. The study shall discuss how the Smart Cities Mission and UN New Urban Agenda contributes to urbanization and sustainability issues. The study also developed a model to ascertain significant parameters which shall provide a direction for future researches.

Keywords:- UN-Habitat New Urban Agenda III, Smart Cities Mission, Sustainability, Sustainable Development Framework, Urbanization.

I. INTRODUCTION

Over the past few centuries, there has been a huge migration of people from rural to urban areas. The majority of people across the world lived in rural areas and in small communities for most of human history.

UN World Urbanization Prospects estimated that 4.1 billion people were living in urban areas which reveals that over half the world lives in urban settings. The year 2007 is a breakthrough event, where the number of people in urban settings overtook the number in rural settings. It is found that globally 1 in 3 people in urban areas live in slum areas. It is projected that more than two-thirds of the world population will live in urban areas by 2050. People tend to migrate from rural to urban settings, as they become richer (Hannah & Max, 2018)

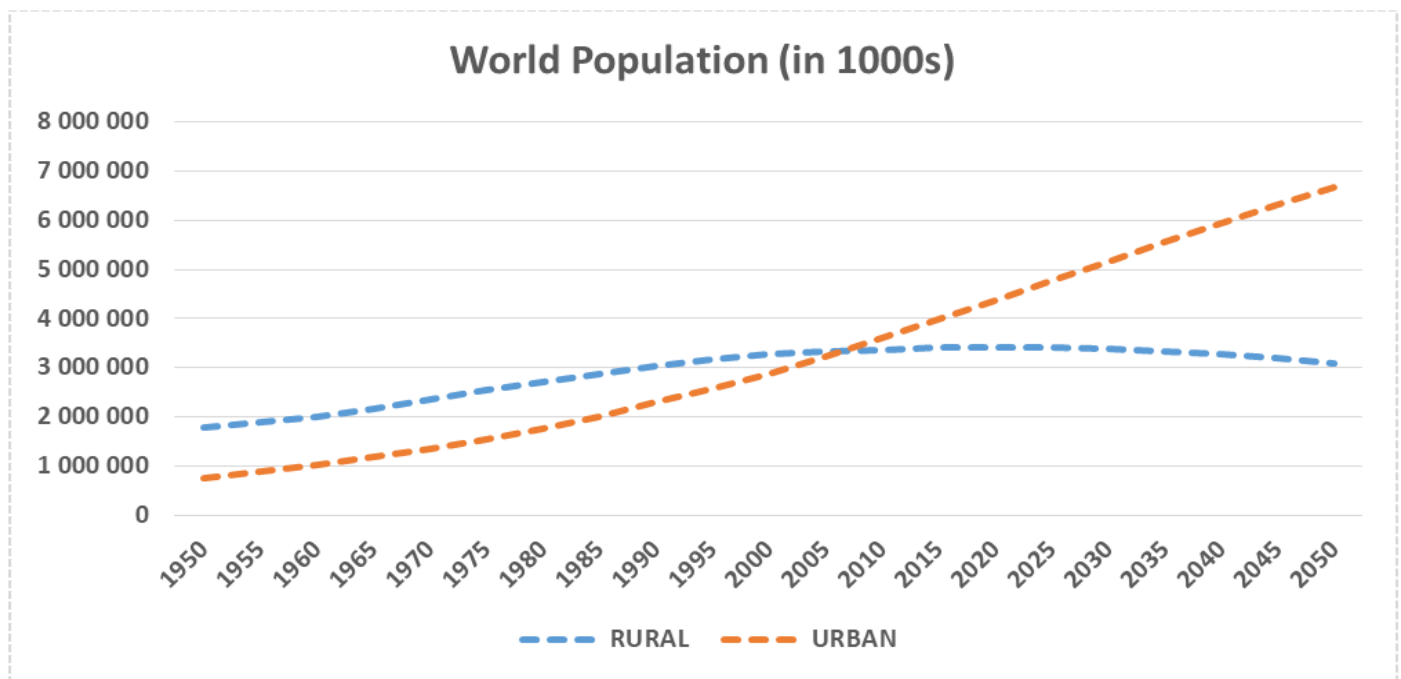


Fig 1 World Urban and Rural Population Stats and Projection Data
Source: (United Nations, 2018)

➤ *Reasons for Rural-Urban Migration*

Imaging opportunities open gates for rural-urban migration. Industrialization leads to the movement of a large number of Migrant workers to the urban area. There are pull and push factors, which have been instrumental in the rural-Urban migration. Push factors include emerging opportunities, better services. Autonomy, education, economic Improvement, climatic conditions. Pull factors includes, Better Health a higher level of literacy and education, empowerment, freedom, greater access to Social Services, political engagement. (National Immigration Forum, 2019) (Bhati, January 2015).

➤ *Urbanization as a Right*

Urbanization has rapidly increased spatial inequalities in most of the regions of the world. This has called for the concept of the right of the city. This idea was first advocated by (Henri, 1968) as he viewed a city as a co-created space detached from the effects of capitalism and commodification. Moreover, the right of the city is viewed as something more than the individual liberty to access urban resources. The thought of right of the city has gained international attention in the last few years, the same can be sensed in the vision of New Urban Agenda “Cities for all” (Ada, 2016). David (David, 2008) opined that the citizens’ freedom to make cities, is the most precious, yet most neglected human rights.

➤ *Effects / Impact of Urbanization*

People migrate to cities and towns because they assume rural areas as places with primitive lifestyle, hardships and backwardness. When the people move from rural to urban areas, the immediate outcome would be urbanization. This results in a development in commercial properties such as transportation, residential buildings, social and economic support institutions which eventually raise several urbanization issues such as water and air

pollution, depletion of natural resources, pollution, waste-disposal issues, population density (Richmond, 2017)

The issues can be categorized into two.

- *Socio-Economic Issues*
- *Sustainability Issues*

Strong city planning is essential in managing both socio-economic and also sustainable issues. Well planned Cities and systematic infrastructural development using smart technologies can be a powerful tool for sustainable development for both developed and also developing nations. Sustainability in the era of urbanization without the employment of technology is not possible and attempting to achieve without the use of technology is a futile exercise as the technology and urbanization are inseparable in the present era.

➤ *UN-Habitat New Urban Agenda:*

UN General Assembly in its 66th meeting of the 71st session, held on December 23, 2016, adopted the New Urban Agenda. Various discussions were done in order to address urban challenges, building sustainable cities, etc. The main objective of the discussions is to make communities more resilient, safe and sustainable. The concern that was highlighted and discussed excessively is ‘Urbanization and its effects. There are numerous issues associated with urbanization, some of them are, limited resources, pollution, slum creation and density of population. This is the negative side of urbanization whereas, urbanization can be a great source of solutions rather than the cause of many challenges that the world is facing today.

The majority have agreed that the ‘Smart City Model’ as a remedy for the urbanization issues (Wolfgang & Sandra, 2017).

Table 1 Four Mechanisms of New Urban Agenda

Mechanism	Description	Objective	Contributes to
1	Integrated Administration of Cities and Human Settlements	Sustainable, Integrated urban development	Sustainable Development
2	Stronger Urban Governance. Sound Institutions and Mechanisms	Promote predictability, social inclusion, economic growth, and environmental protection	Socio-Economic Issues and Sustainable Development
3	Long-term Integrated Urban and Territorial Planning Design	Derive positive outcome through urbanization	Socio-Economic Issues
4	Efficient Financing Frameworks	Value creation generated through Urban Sustainable Development	Sustainability and comprehensive Development

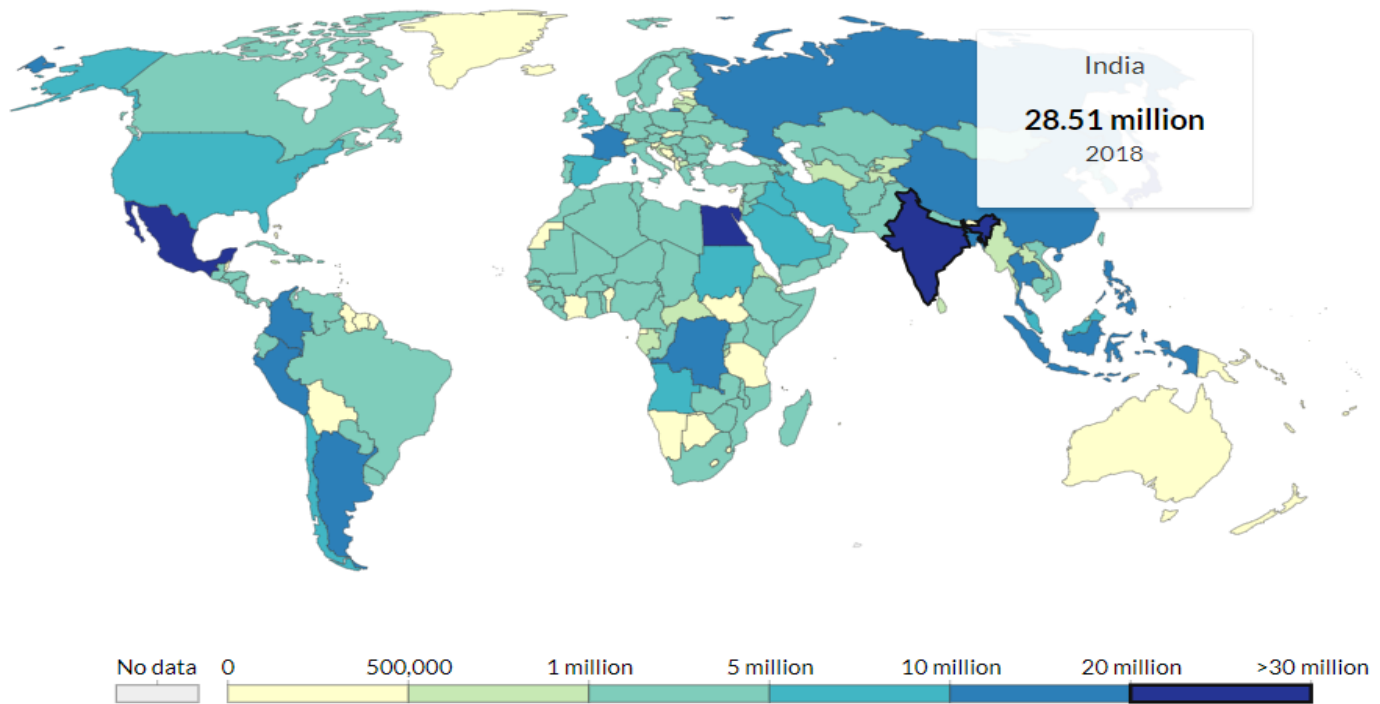


Fig 2 Population Living in the Capital City, 2018, Source: (United Nations, 2018) & (Hannah & Max, 2018)

➤ *Smart Cities Mission*

India has initiated Smart Cities Mission which was an ambitious project in the year 2015. The Smart Cities Mission was established with an objective “to promote cities that provide core infrastructure, clean and sustainable environment and give a decent quality of life to their citizens through the application of ‘smart solutions’”. The mission was set to develop 100 cities with a deadline to complete projects between 2019 and 2023. Initially, 5,151 projects were proposed, 2862 projects were actively pursued of the 6084 projects tendered. Of the projects tendered, 47% of the projects have been completed which is approximately 24% of the total share of work in terms of value and 27% of the total value of projects were completed of the projects already tendered as of July 22, 2021 (Ministry of Housing and Urban Affairs, GOI, 2015).

Table 2 Six Fundamental Principles of Smart Cities

S.No.	Principle	Explanation	Contributes to
1.	Community at the Core	Communities at the core of planning and implementation	Urbanization Challenges
2.	More from Less	Ability to generate greater outcomes with the use of lesser resources	Sustainability and Conservation of Resources
3.	Cooperative Competitive Federalism	Cities selected through competition; flexibility to implement projects	Urbanization Challenges
4.	Integration, Innovation and Sustainability	Innovating methods; integrated and sustainable solutions	Sustainability and Conservation of Resources
5.	Technology as means, not the goal	Careful selection of technologies, relevant to the context of cities	Urbanization Challenges
6.	Convergence	Sectoral and Financial convergence	Urbanization Challenges

Source: (Ministry of Housing and Urban Affairs, GOI, 2015)

India is one of the promising countries which was identified to accelerate economic growth through urbanization. Prime Minister of India, Narendra Modi noted in his speech at the United Nations Sustainable Summit “Much of India’s development agenda is mirrored in the Sustainable Development Goals” (United Nations Sustainable Development Summit, 2015). Urban Cities are the engines for Economic Growth (Sandip & Biswajit, 2015).

➤ *Making a City Smart:*

Figure 3 gives the details of the process involved in making a city smart (Smart City Mission, 2021). The major steps in the process are as follows

- Identifying or defining the outcomes based on economic-ability, livability and sustainability.
- Analyzing how these outcomes help in making a smart city.
- Diagnosing of current state and reasons why the city needs progress.

- The measures to be implemented for a smarter City.
- Collection of information, organizing, evaluating through survey research etc.
- Exploration opportunities to ensure the set deductions and conclusions lead to set objectives.
- The draft of the Smart City plan to be prepared carefully to fit the set conclusions
- Collecting the community feedback, if the feedback is not positive go back and revisit and reanalyze the need and identify the potential to make the City smart.
- Based on the feedback from the community if positive.
- identify credible Smart City projects
- backup with international partnership /identify and partner with International stakeholders

- incorporating technology know-how by deploying and procuring or transfer of technology
- Plan and the blueprint of the Smart City is available for implementation
- Control measures to be taken employing competent team for evaluation and monitoring / or by engaging the existing robust team to monitor and evaluate the processes engage the local community by promoting an awareness program showing transparency between the local community with the current UN agenda.

The process is repeated from step 1 to re-engineer for further improvisation and development. Hence, the process is a never-ending continuous process to stay relevant and update as per the changing needs and technology.

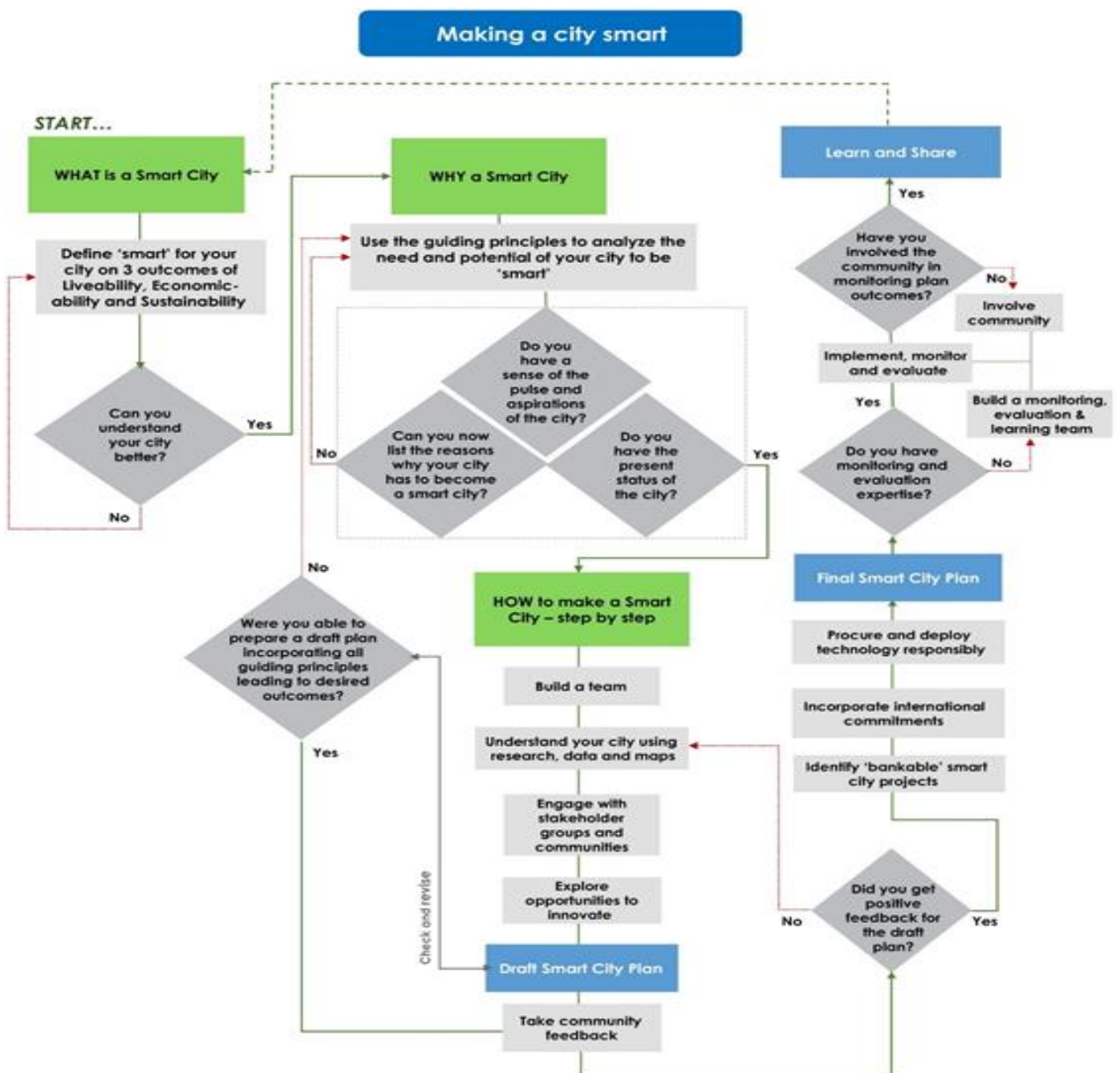


Fig 3 Making a City Smart
Source: (Smart City Mission, 2021)

➤ *Sustainable Development Framework 2018-2022*

NITI Aayog on behalf of the Government of India partnered with the UN in India to implement the Government of India - United Nations sustainable Development Framework (SDF) for the period 2018 -2022.

Table 3 Outcomes Outlined in SDF in Collaboration of UN Agencies in India

S.No	Outcome	Contribution to
1.	Education	Urbanization Challenges
2.	Gender Equality and Youth Development	Urbanization Challenges Urbanization Challenges and Inclusive Growth
3.	Health	Urbanization Challenges
4.	Natural Resource Management and Energy Efficiency	Sustainability and Conservation of Resources
5.	Nutrition and Food Security	Urbanization Challenges and Inclusive Development
6.	Elimination Of Poverty	Urbanization Challenges and Inclusive Development
7.	Skilling, Entrepreneurship And Jobs Creation	Urbanization Challenges

A vision for a New India by 2022 focuses on the Transformation of Aspirational Districts programme and is aligned to the globally agreed-upon 2030 Agenda for Sustainable Development. The transformation of the programme to the aspirational district was aimed to improve the socio-economic conditions of 117 districts across 28 states.

• *The 3 Core Principles of the Programs are Listed below*

- ✓ Convergence among Central and state government schemes
- ✓ Collaboration among citizens and functionaries of Central and state government including district teams
- ✓ Competition among districts

The recent SDG INDIA Index & Dashboard 2020-21 Partnerships (developed by NITI Aayog in the Decade of Action in march 2021 gives an overview of the SDG monitoring tool at the national and sub-national levels. India has been driving an array of SDG initiatives in the past five years. At the national and sub-national levels, governments have adopted the SDGs as a guiding framework to steer development action. The flagship government schemes, such as Ayushman Bharat, POSHAN Abhiyan and Swachh Bharat, Abhiyan, to name a few, align with SDG priorities.

Calibrating the extent of progress in a comparative context, the two editions of the Index & Dashboard, launched in 2018 and 2019, have helped identify issues and areas needing improvement, pointed out strategies and interventions that could be a source of solutions and opened up space for peer learning (NITI Aayog, 2021).

➤ *Challenges in the implementation of the New Urban Agenda / Smart Cities Mission:*

Governments played an important role in implementing the Smart Cities / New Urban Agenda implementation. Governments face various challenges in the process of implementation of the mission. For instance (UN Secretary-General, 2018),

- *Ignorant of the potential benefits of urbanization.*
- *Lacking transparency on the committed Global agenda.*
- *Non-allocation of budget for development.*
- *Meager institutional and legal capacities.*

- *Insufficient Leverage from stakeholder partnership and governance*
- *Lack of progress in institutional organizational policies and financial capacity.*
- *Nonfunctional existing system financial and human resources.*
- *Lack of strong processes in devolution and local autonomy.*
- *Insufficient local Revenue, taxes and financial resources.*
- *J) Lack of competent and skilled personnel.*

➤ *The Impact of Covid-19 Pandemic on the New Urban Agenda & Smart Cities Mission:*

There were many disasters India has faced, extreme and severe weather conditions, earthquakes landslides. The system bounced back in admit of all these disasters, but the country never had a greater loss like what we are experiencing during this pandemic.

The observed impact of post-covid-19 on Infrastructure Projects may also have faced with supply chain issues, transportation halt, and many investments had a major effect due to covid-19 recession had a direct impact on the urbanization (MSCI, 2020). The pandemic leads to revisiting of norms, formulating new norms to ensure the cities move to the recovery stage. Due to unforeseen situation of the pandemic, the need to formulate revisit, renew norms, reform, redesign, realign, reconstruct towards the Smart Cities Missions growth stage. This stage calls for a resilient thought process to bounce back and take a leap towards transformation. The intensity with which the pandemic hit and the duration look like a road without an end. In the current scenario, the need to bounce back and renew and adapt City planning approaches at one hand and the economy and the other hand the challenges “city for all” resurfaced to provide the necessities and amenities for the needy and the people who suffered more were the daily wage workers, the homeless, the urban power and the migrants. The pandemic has led to surfacing urban inequalities, the central and the state government have work on, as to how to reduce the effect on those unlucky and marginalized members of the society.

➤ *Measures for Resilient Urbanization after Covid-19 Pandemic*

The central and the state government has to have a focused approach and become resilient for sustainability and inclusive development. The government needs to come on track to enable functional conditions, conducive to the scenario, by changing the long-term strategic planning for Smart Cities. A deliberate realigning, restructuring to be adapted to bring economic development opportunities and to take a step forward towards the growth. To achieve the smart cities mission, the design for “cities for all” has to be sustainable and resilient. The crisis needs to be addressed and explore opportunities to revisit and redesign the norms and more towards a transition from crisis to growth. A transformational approach has to be incorporated. Thus, the need of the hour to sustain in the current situation, the central and the local government bodies need to become resilient Government and focus on decentralizing to strengthen the local administration, as it used to handle during other disasters faced. The decentralized integrated approach helps to monitor and control by adapting a spatial neighbourhood approach on the areas with minute details of clusters and establish a system of crisis handling. The decentralization of the state government, local bodies will help in empowering local, state bodies to create conditions, conducive to the environment in making cities focusing on people by giving better services and leading the growth sector (MSCI, 2020).

II. CONCLUSION

The modern problems need smarter solutions that is why India has launched the Smart Cities Mission which is very progressing and promising sustainable development and also solves the urbanization issues. The pandemic has disturbed the Smart Cities mission at the same time, it allowed the government to build robust systems to implement the mission by improvising the existing policies and systems by considering new challenges paved by the Covid-19. This study has attempted to highlight the parameters in which both the New Urban Agenda and also the Smart Cities Mission is built, which helps the scholars to come up with the studies that may give directions for the governments to build robust models for the building of smart cities and the implementation of New Urban Agenda especially in the new scenario after the Covid-19 pandemic.

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