## Urbanisation is the Key to India's Future

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Abstract: Our cities occupy just 3% of the nation's land, but their contribution to the GDP is a whopping 60%. India is swiftly moving forward for becoming half urban in a couple of decades. This would bring enormous opportunities of economic growth and global competitiveness. Efforts must be channelised to ensure preparedness of the nation to manage such a massive urban transition and save our cities from the clutches of unplanned urbanization and unregulated construction activities. Our urban planning machinery has not grown at the pace of the demands posed by urbanisation and global technological advancements.

Urbanisation is one of the most critical domains of research and knowledge production in the 21st century. India's urban transition alone will see 600 million people living in urban areas by 2031. There is no doubt that urbanisation is transforming India socially, politically, economically and ecologically—as is the case in much of the Global South. It is not only its empirical importance that makes urbanisation the foundation of a new knowledge paradigm; it is equally its inherently interdisciplinary nature. The urban crosses disciplinary boundaries and practice domains repeatedly and at all scales.

Urban local bodies face a massive shortage of skilled and trained human resources as well as financial challenges. Furthermore, poor quality of planning is a huge limiting factor to realize the true economic potentials of urbanization. Over the years, the country has witnessed the expansion of cities based on car-centric planning. However, the future of urban mobility and urban living needs to evolve on the back of public transportation. The cities need to be very compact and adopt a circular economy system to minimize their negative impacts on the environment.

A global city like Singapore was raised through firm political leadership, a professional approach, and intelligently created capacities. Therefore, it is not just important to enhance the number of urban planners in India but to also ensure a simultaneous improvement in the quality of planning. Of the 7933 towns that are accounted as urban, almost half have a status of census towns and they continue to be governed as rural entities. With business as usual, the country may become a haven for unplanned urbanization. This needs planning interventions at a massive scale, which could be fostered by private sector companies through their problemsolving capacities and efficiencies. However, currently the ecosystem for the development of private sector companies and start-ups in this domain is not robust enough to meet the needs.

If the country has to witness a quantum leap in its planning capacities, the private sector companies need to be nourished and developed-to provide innovative solutions to the public sector and good quality jobs to the future urban professionals. On the front of the education system of urban planning, a lot needs to be done to ensure that future planners are equipped with all the technological prowess and multi-disciplinary expertise to pave the socio-economic progress of the cities as well as the upcoming rural settlements.

India is the second largest urban system in the world with almost 11% of the total global urban population living in Indian cities. In absolute numbers, the urban population in India is more than highly urbanised countries/regions across the globe. The country has reached a turning point in its journey of its economic transformation wherein half of the country would be 'urban' in a few decades. Urban growth is expected to contribute to 73% of the total population increase by 2036 (MoHFW, 2019). Over the years, cities have expanded and become burdened by the stresses and strains of unplanned urbanization, the brunt of which is faced by the poor and the marginalised, the biodiversity and the economy.

In fact, Covid-19 revealed the dire need for planning and management of our cities, with an emphasis on the health of citizens. Issues like lack of availability of serviced land, traffic congestion, pressure on basic infrastructure, extreme air pollution, urban flooding, water scarcity and droughts are not merely a reflection of infrastructural shortcomings in the cities. These issues indicate a deep and substantial lack of adequate urban planning and governance frameworks.

#### URBAN MOBILITY SRINAGAR CITY

There are many models of smart cities in the world today, which define themselves in different ways. One thing they all have in common – smart cities embrace technology as a key component for innovation, efficiency, and improving urban systems and more importantly – they all place their residents, and their resident's needs at the center.

Smart cities are expected to address global challenges and increase the quality of life. However, due to the overemphasis on physical and technological aspects, social rights and democratic values have often been neglected in smart city projects. In this paper, we introduce the concept of 'societal smart city' and discuss how and why it should be prioritized in the post-pandemic era. We argue that a societal smart city is a city that integrates social rights and democratic values with technological innovations.

Six major dimensions of a societal smart city are: social sustainability, citizen-centeredness, edemocracy, social justice, participatory governance, and cultural resilience. We encourage urban planners and policymakers to pay attention to these dimensions and caution against physical and technological determinism.

#### METHODOLOGY

Insights reported in this study are synthesized from peer-reviewed and grey literature using inductive qualitative content analysis (Mayring, 2014). For the analysis, we relied on 74 academic papers, book chapters, and online pages that addressed issues related to social and democratic values in smart cities. When analyzing the documents, we extracted any information relevant to the definition of 'societal smart city' and its dimensions. Based on the inductive content analysis approach, we

#### SOCIETAL SMART CITY

While there is no universal definition for a smart city, there is a consensus that smart cities should not just focus on technology and infrastructure, and socioeconomic dimensions such as governance, people, and living are equally important (Sharifi, 2019). The social dimension has been associated with qualities and characteristics such as equality (Kitchin et al., 2019), citizen-centeredness (Malek et al., 2021), pluralistic space and democracy (Vinod Kumar, 2017), and justice (Kitchin et al).

#### A CITY FOR THE POST-PANDEMIC ERA

The COVID-19 pandemic is the most serious crisis that humanity experienced since World War II. Besides the health consequences and the high death toll around the world, with over 6600 million deaths as of 22 December 2022 (see Fig. 2), recent studies highlight an extensive trend of segregation and social inequalities as a major consequence of the COVID-19 pandemic among affected communities (Karaye & Horney, 2020).

This study emphasizes that recognizing and realizing the concept of a societal smart city is imperative to realize democratic values and social rights in smart cities. Scholars have uncovered the unjust manner of reshaping urban relationships and spaces in smart city initiatives.Critics have gone further and used terms such as 'dehumanization' to discuss these problems in the context of smart cities.

In light of these issues, we demonstrated the necessity to move towards the realization of a Smart City-A CITY FOR ALL.

#### PRESENT SITUATION OF SRINAGAR CITY:

#### TRAFFIC & TRANSPORTATION:

According to rough estimates, Srinagar residents lose an average of one to two hours daily in traffic jams. When calculated annually, this translates to a staggering 365 to 700 hours lost per individual. It is a huge National Loss despite having well defined Comprehensive Mobility Plan.

Srinagar with annual population growth rate of 2.0 per cent has registered a phenomenal increase in vehicular population during the last decade. Its vehicular traffic is increasing rapidly at more than 7.0 per cent per annum1. Due to this rapid growth of vehicles vis-à-vis marginal increase in road infrastructure, the problems related to transportation have grown manifold. Traffic congestion is already severe on many city roads and the gridlock plaguing Srinagar has reached a tipping point, with the region spending millions of man hours in traffic congestion each year. Vehicular pollution is assuming critical dimensions and parking problems are aggravating. These problems among others will grow in size and scale unless action is taken now.

Two comprehensive Traffic and Transportation Plans have been prepared for Srinagar city which include the Srinagar Urban Transport Project 1992 and Comprehensive Mobility Plan (CMP), 2012 (by Rail India Technical and Economic Services).

As per CMP, about 36% of urban road space is consumed by private modes (Cars/TWVs) which share about 30% of the total motorised passenger trips. On the other hand, public transport using 44% of road space caters to 71% of the total motorised passenger trips in main city areas; however, in the periphery at outer cordon stations, public transport consumes only 13% of the road space while sharing about 70% of the motorised passenger trips. Interestingly, buses and mini-buses occupying just 8% of the existing road space cater to 32% of the total motorised passenger trips.

Existing transport network is characterised by inefficient pattern, inadequate widths, missing links, bottlenecks, flawed design of intersection curves etc. The total existing road network of Srinagar Local Area (SPA) is 03 percent with average link length of 0.50 Km. As per CMP, 60 percent road length measures less than 10 metre in RoW (6.5 metre c/w) while only 15 percent road length is having RoW more than 20 metre. The four-lane to six-lane c/w configuration is only for almost 12% length while about 90% of the existing road network has undivided carriageway without roadside footpaths2 even though pedestrians constitute a major proportion of road users.

The Master Plan proposes to create streets for everyone, and reform the practice of designing streets solely for use by automobiles. They are designed and operated to enable safe access for all users, including pedestrians, cyclists, motorists and transit riders of all ages and abilities.

Srinagar has geographical disadvantages with physical thresholds like mountains, wetlands, and water bodies which turn out to be the major constraints in the development of an organised road network.

The city road network is cramped because of missing links, incomplete rings, inefficient radials, bottlenecks, etc. Some of the radials like Rangreth Road, Airport Road are virtually dead ends as they are not connected to any major arterials. Also the location of strategic installations across city has been another key impediment in the development of efficient transport network. Srinagar has historically developed with a radial road network spanning in north, south and west directions. All the radials are witnessing extreme traffic flows much beyond their capacities, hence poor level of service. The city road network needs a complete relook so that an efficient and sustainable transport network is developed to cater to the future demand.

As per the travel demand model based on \_Business As Usual' (BAU) scenario given in the CMP, daily intra-city travel demand is projected to 3.6 million person trips by 2031. As per the model, overall modal share for public transport by 2031 is estimated to be 61% down from 80 percent recorded in 2011. Therefore, major challenge will be to sustain the modal choice in the years to come. The Master Plan envisages a sustainable and inclusive transportation system for Srinagar city and underlines the need for keeping the share of non-personal transport at 65– 75% to achieve the goal of National Urban Transport Policy (NUTP), 2006.

If Srinagar city and its suburb are allowed to grow without any intervention towards sustainable transport system, the city may witness systemic breakdown. The guiding principle of this Master Plan, accordingly is to place \_People before Cars' for their mobility on city roads. For this, walking and bicycling have to be made safer and public transport more proficient and attractive.

The traffic characteristics of Srinagar reveal that there are huge enablers existing in our city which need to be properly exploited to develop a safe, reliable and comfortable public transport system. The primary requirement would be the identification of potential public transport corridors supported by a High Capacity Transport System (HCTS).

The policy has been supported by strategic densification linked to the road hierarchy as one of the basic concepts adopted in the land use model of Srinagar. Accordingly, a mass transport network has been identified to meet the future travel demand of the city.

Transport Department JK-UT has started An Aggregator policy and few stake holders are operationg which is infact transport at your finger tips a big relief to common people especially women folk who otherwise were dependent on men but still it needs quality audit to improve its service benchmark E rickshaws are also adding to multimodal transportation, old BUSSES AND MINI BUSSES needs replacement for induction of a fresh fleet. Almost all services rendered by MOTOR VEHICLES DEPARTMENT J&K are faceless which has improved upon our Service Benchmarks and people apply directly or through CSCs without any delay.

#### SMART CITY INITIATIVES

The year 2023 marked a historic chapter for Srinagar as it proudly hosted the prestigious G20 Summit. In preparation for this global event, the city underwent a remarkable facelift, setting new standards for urban excellence. Major roads were repaved, new streetlights illuminated the cityscape, and public spaces were adorned with captivating landscaping and artwork, showcasing the city's commitment to global standards.

#### PEDESTRIAN MOBILITY

Improving urban mobility, especially pedestrian mobility, is a current challenge in virtually every city worldwide. To calculate the least-cost paths and safer, more efficient routes, it is necessary to understand the geometry of streets and their various elements accurately. we see smart footpaths now within city which are improving day by day.

#### REFURBISHED POLO VIEW MARKET

On May 12, 2023, the bustling Polo View Market underwent a stunning metamorphosis. This pedestrian-friendly and wire-free market is a testament to modern urban planning. With universal access, underground infrastructure, and public bicyclesharing facilities, it stands as a shining example of the Srinagar Smart City Project's vision.

#### GHANTA GHAR RESONATES WITH HERITAGE

On August 15th, Srinagar witnessed the grand inauguration of the renovated iconic Ghanta Ghar, Lal Chowk's pride. The clock tower, with its renewed architecture, has become a major attraction, drawing comparisons to London's iconic Big Ben. This fusion of local heritage and global symbols creates a unique sense of connection and curiosity among the city's residents.

#### JHELUM RIVERFRONT – A RECREATIONAL OASIS

On May 30, the enchanting Jhelum-Rajbagh riverfront was inaugurated, heralding a new era of urban excellence. Envisioned as a continuous walking and cycling promenade, it boasts parks, public plazas, sanitation facilities, seating spaces, and high-quality lighting, enriching the citizens' quality of life and contributing to socio-economic growth.

#### DAL LAKEFRONT

Under the Smart City Project, Dal Lake Sunset Plaza, Eco Park at Shalimar, 9.30 km stretch of right-side Walkway of Boulevard Road from Badyari Chowk to Nishat Bagh and Phase-I of Northern Foreshore Road Lakefront project from Nishat to Naseem Bagh were completed.

#### SMART INITIATIVES FOR CONNECTIVITY

The introduction of GPS-enabled smart buses in July, 2023 has revolutionised city transportation, enhancing connectivity and providing a comfortable commute for residents. This initiative aligns with the Smart City's vision of integrating technology for a smarter, more efficient urban experience.

#### HOLISTIC URBAN DEVELOPMENT INITIATIVES:

Beyond these milestones, the Srinagar Smart City project has undertaken numerous initiatives, including the upgradation of heritage markets, improvement of Jhelum ghats, facade enhancement of heritage markets, redevelopment of the Shalimar Canal and Nishat Bagh precincts, lakefront development, and the creation of cycle tracks and walkways.

The facade upgradation of heritage markets at Zaina Kadal,Jawaharnagar and Maharaj Gunj and the Shalimar Canal redevelopment project are notable efforts to transform historic areas into vibrant public spaces besides upgradation of old Historical Mosques,Churches etc

#### CONCLUSION

# NEED FOR A COMPREHENSIVE STUDY ON TRAVEL DEMAND:

Accessibility and urban mobility are critical for promoting sustainable urban economic development in Indian cities. They are also directly connected to urban stock and flows – in terms of spatial development and consolidation of the built form. However, urban mobility has not contributed to desired outcomes owing to car-centric policies adopted by successive plans and projects at the city level. Urban mobility is multi-dimensional in terms of policy and operational implications. Therefore, coherence in policy interventions and linkages among processes are essential. Improved accessibility is neither achieved by adding more roads, rail or vehicles, nor through ad hoc spatial interventions such as traffic management techniques in isolation to achieve delocalization and decongestion.

In addressing complex urban mobility issues, a systems approach seems well suited for a thorough understanding of the issues and their causal linkages. Only after understanding the interdependencies between the system components that operate behind the symptoms can significant policy interventions be formulated to address it. For example, mispricing leads to overconsumption of roads in peak periods; sprawling settlement patterns render public transport systems ineffectual; urban design for machines rather than people creates cities for cars rather than people.

It is essential to understand that mobility is a derived demand that is derived from the need for people to meet their necessary social or economic interactions. Private vehicles, public transport or NMT are simply the means to achieve it. This realisation envisages cities and mobility systems as tools that promote desired societal outcomes with transport playing the facilitating role. This can be achieved by compact city forms and mixed use communities that dramatically reduce travel distances and sometimes travel needs. Compact cities not only put activity centres closer to each other, but also provide safe and efficient pedestrian and cycling corridors, along with affordable, high-quality public transport options.

In conclusion, sustainable mobility is a key enabler of economic growth and towards eliminating poverty and shared prosperity in Indian cities. Comprehensive integration of urban transport and land use planning systems is needed so that synergies are harnessed, interconnections are promoted and functionality optimized through multimodal mobility solutions for Indian cities. Present urban transport issues such as congestion, road accidents, pollution, etc. cannot be wished away by conventional interventions that favour public funding and investments for private transport instead of public modes of transport More public resources need to be allocated to developing NMT and high capacity public transport infrastructure. It is also important that urban transport sector is treated as an integrated whole through systems financing and pricing. Urban transport systems influence the spatial morphology and configuration of built form of its cities.

The paper suggests that sustainable mobility systems in Indian cities which includes our smart city-Srinagr city can only be achieved when robust, integrated and participatory institutions are created and enabled through clear responsibilities, legislative authority, financial independence and professional competence to effectively enhance accessibility of our cities. Most importantly, mechanisms for transparency, oversight and accountability of such institutions towards its people need to be ensured. All this can only be possible by strong political will and sustained public pressure for change.

#### REFERENCE

- [1] Indian-institute-of-human-settlements-iihsbanglore.
- [2] Niti-udyod-GOI
- [3] Rites-survey-CMP-srinagar
- [4] Greatorkashmir.com