What Can We Learn from COVID-19 Pandemic about City Planning?

23 April 2020

BACKGROUND

The unprecedented global pandemic of COVID-19 has virtually stopped everyone and confined us in our respective residences. It poses challenges in provisioning of health care, food and essential supplies, sanitation and hygiene services apart from dealing with several million marginalised people whose lives and livelihood are in disarray. As infections spread far and wide, cities are becoming hotspots every day and numbers of confinement zones are increasing in the large urban centres. Historically, the spread of diseases and public health concerns have influenced how cities are planned particularly the sanitation system, neighbourhoods, and public spaces. What was learnt in the 19th Century Europe was attempted to replicate in colonised countries and India was no exception. More contemporarily, the planning of cities are guided by economic efficiency in provisioning of basic services, maximising land use, and minimising travel distances within the city limits. These priorities have led to densification of habitations and workplaces. Cities in India have also grown and densified without planning as can be seen from the presence of numerous high-density informal settlements.

COVID-19 pandemic has pushed the city planning at several crossroads. A city cannot exist in isolation and what happens in a city also impacts its surroundings. A city is a producer as well as a consumer. It is dependent on supplies from the rural hinterlands but also provides market and economic opportunities to rural people. A city cannot be 'inclusive' 'resilient', 'smart' and 'futuristic' unless its planning takes into account the needs of women, children, and elderly people particularly from the marginalised sections. The current pandemic is an imminent threat to human existence but it is also an opportunity to redefine how India can plan its cities in the short- and long-term keeping public health at the centre.

PRIA International Academy (PIA) and Ansal University (Sushant School of Planning and Development) organised a webinar "What Can We Learn from COVID-19 Pandemic about City Planning?" on 23 April 2020. Dr. Anil Roy (Associate Professor, Faculty of Planning, CEPT University, Ahmedabad), Prof. Shrawan Kumar Acharya (Professor of Urban and Regional Planning, Centre for the Study of Regional Development, School of Social Science, Jawaharlal Nehru University, New Delhi), Dr. Sainath Banerjee, (Senior Expert - Capacity Development for NUHM, Asian Development Bank, New Delhi) and Ms Banashree Banerjee Independent Architecture and Planning Professional, New Delhi) participated as panellists. Dr. Ajith Kaliyath (Associate Professor, Sushant School of Urban Planning and Development, Ansal University, Gurgaon) and Dr. Rajesh Tandon (Founder-President, Participatory Research in Asia – PRIA and UNESCO Chair on Community Based Research and Social Responsibilities in Higher Education) participated as commentators.

Moderated by Dr Kaustuv Kanti Bandyopadhyay (Director, PRIA International Academy, New Delhi), the webinar was attended by over 100 participants and focussed on the following questions:

- *How cities and neighbourhoods could be planned differently to deal with pandemic like COVID-19?*
- *How to deal with the densification of Indian cities (planned "high-density high rise" in neighbourhoods and unplanned "high-density low rise" in urban informal settlement?*
- *How the practice of regional planning can become new normal to maximise urban-rural interdependence?*
- *How urban planning professionals should approach the new ways of city planning in the face of pandemic?*

Moderator

Dr. Kaustuv Kanti Bandyopadhyay, Director, PRIA International Academy, New Delhi

Panellists

Dr. Anil Roy, Associate Professor, Faculty of Planning, CEPT University, Ahmedabad

Prof. Shrawan Kumar Acharya, Professor of Urban and Regional Planning, Centre for the Study of Regional Development, School of Social Science, Jawaharlal Nehru University, New Delhi

Dr. Sainath Banerjee, Senior Expert - Capacity Development for NUHM, Asian Development Bank, New Delhi

Ms Banashree Banerjee, Independent Architecture and Planning Professional, New Delhi

Commenters

Dr. Ajith Kaliyath, Associate Professor, Sushant School of Urban Planning and Development, Ansal University, Gurgaon

Dr. Rajesh Tandon, Founder-President, Participatory Research in Asia (PRIA) and UNESCO Chair on Community Based Research and Social Responsibilities in Higher Education

KEY TAKEAWAYS

Adopt transdisciplinary approach to city ...

Manage high density population through big data, AI and multi-functional public assets

Strengthen institutional mechanisms to make decentralised governance of ULBs effective

Include climate change and disaster management as core courses in urban planning teaching

* *The process of city planning should adopt transdisciplinary approach and keep functionality of people at its core including health as a basic right as also internalising the problems of urban poor, unplanned spaces, environmental needs along with building responsiveness to address the situations of disasters and pandemics.*
* *Creating a balance between high-density high-rise areas and high-density low-rise areas is critical for cities and it is essential to provide better services, transit systems and housing for all. Use of big data and AI will be essential to create a real time data to deal with these issues.*
* *Integrated planning of the city along with their hinterlands and regional planning will provide ways to manage the density through better interlinkages and interconnectedness.*
* *The urban planners, designers, architects must re-imagine the focus of planning from maximising land use to community empowerment. Their training should prepare them to develop master plans by prioritising human lives and their basic needs along with ecological needs.*

INTRODUCTION

Dr. Bandyopadhyay opened up discussions on the effects of corona pandemic and subsequent lockdown on the way we live in the city. It is a common knowledge that historically every pandemic or disaster has changed the way in which cities are planned and managed. In India however, we do not realise how city planning can change the way we live, prosper or even decline or die as two-third of the cities do not have any development plans. The webinar aimed to critically reflect on six broad challenges the cities are confronting in the present and provide solutions for the ways in which planning of cities might change in future.

The first and foremost challenge is the way in which our neighbourhoods are organised, especially the places where low income families and middle-class population live. Informal settlements usually take the worst hit because of lack of space, lack of access to services and available economic opportunities within or in vicinity of the settlements. It compels us to think of self-sufficient neighbourhoods especially in the wake of lockdown.

The second challenge for people living in the cities is related to mobility with the focus on how public transport systems are planned and managed in the cities. The lockdown has posed

restrictions on mass transportation systems. If this kind of restriction continues what may surface as a solution is the increase in use of private vehicles including bicycles.

The third steep challenge is the ways in which work and educational institutions are organised and function. This includes organised factories, informal workplaces, markets, malls, schools, colleges and other educational institutions. Does the current situation entail newer ways of looking at how we work such as work from home that might further increase? Or the cities might become functional twenty-four by seven workplaces to avoid crowding and working through multiple shifts.

The fourth critical challenge is related to water and sanitation. COVID-19 pandemic has challenged our personal hygiene behaviour and made the significance of WASH even clearer. The inadequacy of sanitation infrastructure is further exposed in the informal settlements because of chronic water shortage and lack of solid and liquid waste management that is throwing critical challenge to handle pandemic situation.

The pandemic has also raised alarm on the ways in which our public health system is organised. For example, in Delhi, the *mohalla* clinics that were the source of relief for many city residents especially from the lower income became source of mass infection for the spread of the virus.

Finally, the need for integrated data and information management for cities remains to be a critical point. The city authorities are able to take decisions on the basis of the data that is available to them. However, no one really knows how many migrants live in the city, in which locations do they reside and what are the things that they need.

The webinar aimed to discuss these challenges and how they impact the process of city planning and explored solutions to how these could be managed in the future.

PANEL DISCUSSION

How cities and neighbourhoods could be planned differently to deal with pandemic like COVID-19?

Dr. Anil Roy in his opening remarks highlighted that the disaster of COVID-19 is different from all other natural or man-made calamites experienced, so far and therefore, has to be dealt with differently. The global pandemic is ridden with the fear of the unknown. The urban discourse has been talking about planetary urbanisation and the data suggests that by 2050, 68 percent of the world population will reside in the cities. The COVID-19 seems to change this discourse and shift to planetary health. The planning of cities will need to be relooked and a paradigm shift has to be made. Until now city planning has largely focussed upon conservancy planning and then moved to SMART cities. This needs to be rethought to include planning for healthy neighbourhoods. The city planning will have to look at making cities economically self-sufficient and create healthy neighbourhoods.

Professor Shrawan Acharya commented that in the current scenario people across the world have started expressing concern about how health is the primary indicator of a city's liveability. He emphasised that cities are complex entities and focussing on any one sector such as economic opportunities, for example, could be a limited way of thinking about city planning. Today the global world has realised that public health in the city is intricately linked to its economy. The challenge is that as experts we have been trained to view each development indicator in isolation. However, we need to look at the processes and linkages in tandem to each other. Quoting the recent example

of movement of a huge number of migrant worker populations from cities towards their villages on foot in India during lockdown, he noticed the lack of visualisation in the process of decision making. He further argued that till now urban planning has been land based focussing on built environment. In the process sociological aspects of environment and health have been completely ignored. He urged that the urban planning will need to go beyond the physical beautification of cities and have to be looked at from the point of view of functionality both for economy and people including the marginalised and informal settlement dwellers. The laws and acts governing the cities must be framed to provide for rich and poor alike and not on the basis of who can afford more. He concluded by suggesting that morbidity rate by COVID-19 suggests that people with chronic diseases are at higher fatality risk which means that people living in the cities are already unhealthy. People in the cities must be encouraged to adopt healthy living through provision of spaces such as open parks, cycle paths, open gyms etc. there is a need to plan cities such that people become healthy as they live here.

Dr Sainath Banerjee discussed the importance of city health planning, in addition to city planning. While the latter traditionally focuses on infrastructure such as roads, buildings, parks, and the provision of utility services, the wellbeing of citizens must be at the centre of designing the built environment and health services in a city. He defined a City Health Plan as "systematic collection, analysis, and interpretation of data related to health and determinants of health, which helps to develop an effective, responsive, preventive, promotive, and curative health care delivery system that fulfils the health care needs of the most *vulnerable*, and the *needy population* of the city". If one attempts to develop a city health plan currently, then issues revolving the following will immediately surface – public health system and programmes, the private healthcare sector, urban health practitioner, the listed as well as unlisted urban slum population, multiple service providers and authorities, and the state-wise differences in public healthcare discourse and practices even under the same government. He gave a road map to develop a city health plan by listing out its components as well as essential aspects that need to be kept in mind while developing one.

Ms Banashree Banerjee discussed how the current pandemic presented an opportunity to develop health plans for cities in future emergency situations. Mainly diseases, especially contagious diseases and lifestyle diseases cannot be cured by medical intervention alone. In such situations, we need to look at special aspects – the working space and nature of work, the living environments and quality of life of people, the sanitation and hygiene aspects of these spaces. The principles of density planning that took place during and after epidemics that occurred in the past still continue to inform current practices of health and safety planning. Unfortunately, public planning has ceased to be of importance in the growth of Indian cities. Such planning is essential not just in cases of pandemics, but also to address a variety of issues like poverty and starvation.

How to deal with the densification of Indian cities (planned "high-density high rise" in neighbourhoods and unplanned "high-density low rise" in urban informal settlement?

Dr. Anil Roy highlighted that the city planning has failed to address the balance between different densities and provide house for all in the cities. Quoting Shri Ratan Tata on the issue he said that we are suffering from the problem of proximity and city governance and planning must ensure housing for all. Sharing the experience of mapping the ward level COVID cases in Ahmedabad there are two scenarios of high-density high rise and high-density low rise. In West Ahmedabad the core to periphery have reported COVID-19 cases but in East where there is low rise high density have lesser reported cases. This east-west dichotomy needs to be understood beyond COVID for health planning and needs a relook at questions of density and unplanned areas. As of 19th April, the districts which are hot spots in India have a clear difference between Eastern and

western parts of India. It seems like more urbanised regions are more acutely affected by the virus than less urbanised areas. He suggested that cities, their periphery and hinterlands should be planned together because cities are essentially interdependent and interconnected. Hence, it becomes important to develop a fresh perspective towards labour market facilities in and around cities, the issue of food security of the cities which is dependent on the hinterlands. This is especially important in the context that by 2050 it is expected that about 400 million people will reside in the Indian cities. Unless we do the paradigm shift the density of urban areas can't be changed which means that we will have to look at managing this density. This can be done through physical intervention such as redesigning the slum pockets to include open spaces, better drainage and proper environment upkeep. With social distancing as an effective solution to prevention of the pandemic our city plans need to evolve to contain the problem of density.

Professor Shrawan Acharya added to the solution of managing density in urban areas by relooking at zoning and segregated land usage in the urban. Talking about USA where the central park has been converted into the hospital as a response to the pandemic he suggested we need to think about creating public assets and spaces for the mixed land usage and multi-functionality especially in low income neighbourhoods that has the possibility of enhancing self-sufficiency.

Ms. Banashree reflected that density in urban areas is a pressing concern both in planned and unplanned areas of the city. For example, in Delhi, as per data from the DDA, 52 percent of the population lives in informal housing (such as squatter settlements, unauthorised colonies, urban villages, individual housing, and unplanned resettlement colonies). It is essential to provide access to services and infrastructure even in localities with high population density. For instance, the density in Dwarka, New Delhi is quite high, but despite that, the provision of services, infrastructure, and open spaces is efficient. On the other hand, the unauthorised colony of Som Vihar near Dwarka has the same population density, but has no open spaces or spaces for building schools and health facilities. Despite having the same density, these localities experience very different forms of urban living. Quoting example of access to services in planned and unplanned areas of the city she revealed that the logic of development is quite different in Dwarka, as compared to Som Vihar. In Dwarka, the progression of land development begins with planning, followed by land subdivision, setting up infrastructure, constructing buildings, followed by the occupation of land. While this involves a lot of expenditure, this area is occupied for many years to come. However, in Som Vihar, land subdivision takes place first, followed by occupation of the land, construction of buildings, and inclusion of infrastructure. Planning does not feature in this process. Therefore, instead of rehabilitating the inhabitants of unplanned colonies to even more unsuitable locations, it is better for planners to play a larger role in this process.

Additionally, when we talk about planned versus unplanned areas in cities, while public planning has reduced in cities, the creation of cities as exclusive projects has sprung up, including gated townships and smart cities. Smart cities focus on digitisation, and are limited to certain exclusive areas within cities, at the cost of general resilience in other parts of the city, where people live without access to housing, land, and basic infrastructure. Planning in cities must focus on the efficient flow of people, services, and goods. This will help in working out the interconnections between cities, villages, regions, and the world, and to ascertain if containments should be at the neighbourhood, block, or ward levels, and to understand how communication should function.

How the practice of regional planning can become new normal to maximise urban-rural interdependence?

Dr. Anil Roy hailed the significance of including periphery, hinterlands and regional development in the process of city planning. This could be achieved through participatory and localised governance in an effective manner especially in situations of disasters and pandemics. He explained that the current upsurge in work from home is largely IT enabled. However, a good population of urban poor has always worked from home. Nevertheless, a large number of slum dwellers continue to go to factories and visualising a work from home option for them seems to be a difficult preposition. However, if city planning includes regional planning to accommodate issues of public housing and public transport infrastructure such as bicycle lanes and intercity connectedness then things could improve.

Professor Acharya agreed that regional planning should be integrated with the city planning, especially to manage density and develop responsiveness of cities to pandemics and disasters. He shared that experiences from all over the world suggest that a beautiful city may not necessarily be a responsive city. If that were so then cities such as New York and London would not have given such a huge mortality data. On the other hands state of Kerala in India and South Korea has given the world significant lessons on managing the pandemic despite high density and linear settlements. Kerala has succeeded in handling the pandemic through its effective decentralised local governance and ensuring adequate medical facilities at the unit level. The Panchayati Raj Institutions (PRIs) have been able to manage information effectively and utilise reach of health workers such as ASHA, ANM in the community. Since these mechanisms are institutionalised in the state its efficacy of handling this situation achieved commendable level. Hence, the regional and city planning must be responsive in situation like the current one. He further reiterated that regional planning is critical to reduce the density of the urban centres by recognising the role of small and medium towns. Using the concept of work and home, bigger cities can outsource work to smaller towns to increase employment locally and reduce migration. There is a need to think about spatial economy to address spatial inequality. He also submitted that problem of density in India is bound to persist, however, we need to strategize based on our country experience to manage it well. For this the state must play a proactive role and be better equipped to respond to the issues of urban poor. If ward committees mandated under 74th CAA function well ULBs would be in better positions to respond and better equipped to revive their economy. The master plans developed for the region must internalise the disaster component in the planning process. COVID-19 has exposed the vulnerability of urban poor across the world including the US where the African-American and Hispanic communities are the worst sufferers of this pandemic. It creates ground for the master plans to internalise the problem of urban poor in the process of planning. Additionally, the current situation also makes us ponder on the laws and regulations under which we are responding to this situation in India. It is based on Epidemic Act 1897 made by Britishers and Disaster Management Act 2005 where the latter has no provisions to deals with a health crisis. These laws and regulations need serious revision such that they reflect in the planning process.

Dr. Sainath Banerjee agreed that participatory planning is crucial in making effective health plans. He informed that city health planning is a complex, multi-dimensional, and resource intensive activity. If health planning is incorporated as a component of city planning, then municipal governments must be ready to invest the budget required for such an undertaking. The identification, enumeration, and understanding the health status of vulnerable and marginalised groups is central to such planning, as slums are essential parts of a city. Understanding many stakeholders in the city and adopting an inclusive approach is essential to engage them in addressing determinants of health. This encourages participatory planning, which helps to minimise the risk and improve the outcome by involving communities. An assessment and development of decentralised institutional arrangements and set-ups at the ward and city level is important for health planning. Health plans must be developed at the ward level, as it is the smallest

administrative unit, while including representatives from local RWAs, CSOs, and vulnerable communities. In an emergency like COVID, the local health plan should include a guide for healthcare service providers, availability of helpline numbers and IEC materials in local languages, the involvement of community groups, coordination mechanism at the ward level, and maintaining access to healthcare services.

How urban planning professionals should approach new ways of city planning in the face of pandemic?

Dr. Roy suggested that there is a lot to learn from health mapping system and emphasised the need for mapping the behaviour of pandemic as well. The urban planners need to adopt the approach of community health planning. He said that the big data needs to be used and innovative technologies such as GIS should be practiced more. Artificial Intelligence could be used to design models for land use. He urged to reimagine the focus of planning from maximising land use to community empowerment. Second approach in the new normal, he suggested, would be to prioritise human lives and their basic needs along with ecological needs in the master plan. Training of urban planners, designers and architects should focus on building their capacity on reaching the poor and address their needs of equity. On the other hand, there is a need for change in curriculum and pedagogy in the teaching. Course work on climate change and disaster reduction must be included as independent subjects. The curriculum should include topics such as epidemiology, social distancing as core courses.

Professor Acharya suggested that discipline of urban planning must become transdisciplinary. Issues such as urban food security, health provisioning as a public good and basic right etc. needs to be included. He further suggested that there is a need to have more planning schools in the country and promote planners coming from smaller towns to develop better understanding of the problems of the poor and marginalised.

REMARKS FROM THE COMMENTERS

Dr. Ajith Kaliyath summarised the key takeaways from the panel discussion. First, he emphasised the importance of a shift in the economic process, from being globalised in focus to being more localised and context specific. There is a further need to create planning norms that focus on place specific details and requirements. Secondly, rather than viewing density as a problem, it needs to be viewed as a tool of planning and development, because enhancing the value of hyperlocal reality is already a tool utilised by the economic and business sector. Thirdly, in the current context of the pandemic fuelled lockdown, the need to plan around local contexts can be justified even more. local planning must be reflected in policymaking, practice, and pedagogy. He also cited the classical Greek period as adopting a human-centric approach to urbanisation. Complex, mammoth urban systems can often be unmanageable, whereas spatially articulated, poly-centric city regions or smaller cities that are well-integrated into the larger hinterland are more human centric. He was also interested in the idea of de-growth, and suggested that development post COVID-19 should be slow, and integrated with the specificities of local regions. Fourthly, in the current context, it is more important to emphasise the social infrastructure such as health, education rather than physical infrastructure.

Dr. Rajesh Tandon discussed the participatory city planning venture undertaken by PRIA in 2005, in Janjgir and Rajnandgaon, Chhattisgarh, before the launch of the JnNURM, and how the current panel reflected the recommendations made in 2005. The 74th Amendment Act of the Constitution talks about the provision of the District Planning Committee (DPC), which was included deliberately

into the 74th Amendment (as opposed to the rural-centric 73rd Constitutional Amendment Act), in order to encourage convergence between the rural and urban planning. While all states in India have ULBs, no other state apart from Kerala operated the DPCs since 1994. In Kerala, the district disaster management body is governed by the district Zilla Parishad. The role of local authorities is mentioned in the Disaster Management Act, 2005 referred to by different panellists. Local governance is essential to encourage local participation and planning. The pandemic responses so far, has demonstrated the irrelevance of the local, especially in terms of the economy of scale. Similarly, having different scales for different socio-economic groups contributes to the lack of localised development. Equity must be an important consideration post the pandemic, in order to address the rampant economic inequity seen during the pandemic. The local capacity of cities needs to be strengthened, while increasing the interconnectedness of these cities.

OPEN DISCUSSION

Mumbai city has reported 65 percent of total COVID-19 positive cases in Maharashtra; Kolkata reported 40 percent of positive cases in West Bengal and Thiruvananthapuram 3.2 percent cases in Kerala. Is there a correlation between urban primacy and COVID 19 positive cases as we talk of regional planning to tackle the situation?

In current scenario it seems that reverse primacy is happening. In other words, the disease is concentrated in these urban areas and the hinterlands are not suffering in the way in which core cities are suffering. However, we need to look at the issue of regional planning beyond this disease. Primacy is not always good at the regional level. India has primacy at the regional level and Kolkata, Chennai, Mumbai, Delhi are prime cities. Despite that the question of prime vs hinterland development is crucial. Exchanging of resources between cities and hinterland and vice-versa is important.

Why is density a 'problem' and not an asset? What made it a 'problem'?

We are not treating density as a problem. However, density provides us a concrete scenario during current crisis. At the global level land occupied by urban areas are only 2 percent. In India it is a little more than that. Hence, there is a possibility of reorienting density as a norm of planning based on geographical context and socio-cultural dynamics. At the same time there cannot be singular norms such as FSI for pan country.

There seems to be broad agreement on what needs to be strengthened in planning process, significance of decentralised planning and funding to ULBs. What in your opinion needs to be included in the process of implementation and monitoring and how can we practically include participation from all stakeholders and raise resources for the same?

Initial resource requirement is the land and planning of the same after which structures are created. The resource hungry approach of the cities is because of the way formal cities appear. Structure building locks up the capital for a long time. Hence validating approaches that do not lock up the capital makes resources available to plan the cities in a longer period of time. Resource intensive approach can deal with only a very small part of the urban population and the rest of the city continues to build and expand as they can. This leads to unplanned grown and to space crunch.

The ULBs are not really grappling with capital expenditure as much as with the variable cost. The problem is that the cities tend to follow norms that are higher than what the revenue can support.

Financial management of the cities requires optimum resources not only for creating infrastructure but also for maintaining them.

In the 70 years we have not built new cities except Chandigarh, Raipur, and Gandhinagar. What about creating more smaller cities to address resource crunch such as water scarcity where water has to be transported from more than 200 kilometres to meet the needs of bigger cities?

Building green field cities cannot be a solution to the problem of urbanisation that we are talking today. It may be better to invest incrementally in existing cities and therefore we are laying thrust on having regional planning. Cities are already embedded in a region and its problems need to be thought about beyond migration. If there is a critical need for building green-field cities then one could think about it. However, in India we have example such as that of Lavasa city that is completely privatised and is surely not a solution. Hence, there is a need to invest more in existing cities where people are still living.