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This is our city too!
MESSAGE FROM THE DIRECTOR

Cities are places defined by people for the people. They are spaces where people can interact, transact, and recreate. In the last two decades, India has undergone a huge shift in its urban population. Today, we have a myriad of people coming to cities for better opportunities, education, access to better facilities and much more. For cities to accommodate these increasing needs and aspirations, it becomes necessary to create spaces—both physical and virtual—as sustainable, inclusive, safe and vibrant. This could be through building climate resilient housing in the informal settlement, or leveraging the current trends of youth engagement to improve their participation in cities and decision-making.

The magazine by the Inclusive Cities Centre of the National Institute of Urban Affairs stands as a notable effort of telling a story of inclusive development. A narration that weaves together the perspective of the urban poor, women, children, youth, and persons with disabilities, all of who inhabit the urban space. Recently, the trend in digitisation has brought a new dimension to the discourse of development. Especially with the onset of the COVID-19 pandemic, this trend has been accelerated. The penetration of digitisation can be seen through our dependencies on the online transaction that we do on a daily basis to purchase items, get a ride to the office or book an appointment. Taking cognisance of this growing trend that is projected to occupy more parts of the urban lifestyle, the Centre has done an excellent job of ensuring that each marginalised section has an equal and fair chance to adjust to this digital transition.

I must congratulate the Inclusive Cities Centre (ICC) team for bringing this magazine to life. This magazine, as its name, proposes cities to be ‘Exclusively Inclusive’ in all shapes and forms. The magazine covers a wide range of discussions, narrations and illustrations on the grand wave of urbanisation. A product of cumulated efforts put forth by the team, it brings insight to understand the larger and more vulnerable part of our cities that often tends to be neglected.

Hitesh Vaidya  
Director, NIUA
India stands at the threshold of a critical ‘moment’ in its developmental trajectory with a need to create adequate opportunities for cities/towns to grow, flourish and become vibrant centres of investment and productivity.

Hon’ble Minister, Sh. Hardeep Singh Puri, Ministry of Housing and Urban Affairs
CITIES ARE ENGINES OF GROWTH PROVIDING NUMEROUS OPPORTUNITIES FOR INDIVIDUALS AND CONTRIBUTING SIGNIFICANTLY TO THE NATIONAL ECONOMY. THIS ACTS AS THE PULL FACTOR REFLECTED IN THE SIGNIFICANT INCREASE IN URBAN POPULATION, ESPECIALLY IN THE LAST TWO DECADERS. WHILE THE TOTAL POPULATION IN INDIA INCREASED BY 35%, THE URBAN POPULATION GREW BY 85% DURING 1991 - 2011. AS STATED BY THE HONOURABLE MINISTER OF HOUSING AND URBAN AFFAIRS, “INDIA STANDS AT THE THRESHOLD OF A CRITICAL ‘MOMENT’ IN ITS DEVELOPMENTAL TRAJECTORY WITH A NEED TO CREATE ADEQUATE OPPORTUNITIES FOR CITIES/TOWNS TO GROW, FLOURISH AND BECOME VIBRANT CENTRES OF INVESTMENT AND PRODUCTIVITY.” TO ACHIEVE THIS, IT IS CRITICAL TO ADOPT A SUSTAINABLE GROWTH MODEL FOR CITIES/REGIONS BASED ON INCLUSION, ECOLOGICAL BALANCE, BETTER GOVERNANCE, EFFICIENT RESOURCE MANAGEMENT AND A UNIQUE IDENTITY FOR COMMUNITIES. THE RAPID INDUSTRIALISATION AND EXPONENTIAL GROWTH OF THE SERVICE SECTOR HAS LED TO THE HIGH GROWTH OF THE URBAN AREAS PUTTING FORTH NUMEROUS CHALLENGES – KEEPING PACE WITH THE DEMAND FOR HOUSING, INFRASTRUCTURE, AND SOCIAL FACILITIES, AND ENSURING MOST PRODUCTIVE USE OF THE HUMAN RESOURCE IN CITIES. INDIAN CITIES HAVE, IN GENERAL, EXPERIENCED SPONTANEOUS GROWTH RATHER THAN PLANNED EXPANSION. THE CITIES HAVE BEEN UNABLE TO RESPOND ADEQUATELY TO THE DEMANDS ARISING FROM UNPRECEDENTED IN-MIGRATION AS IS REFLECTED IN INADEQUATE INFRASTRUCTURE AND THE UNCONTROLLED GROWTH OF INFORMAL SETTLEMENTS.

WITH LACK OF ACCESS TO AFFORDABLE FORMAL HOUSING, MOST OF THE URBAN MIGRANTS FIND SHELTER IN SLUMS, UNAUTHORISED TENEMENTS, AND SETTLEMENTS IN PERI-URBAN AREAS. THIS DEPRIVES THEM ACCESS TO SOCIAL FACILITIES AND INCOME EARNING OPPORTUNITIES FOR VARIOUS REASONS INCLUDING PEOPLE’S PERCEPTIONS AND LACK OF MOBILITY. CENSUS 2011 ENUMERATED 65.5 MILLION PERSONS LIVING IN SLUMS WHICH ACCOUNTED FOR 17.4% OF INDIA’S URBAN POPULATION. THE ECONOMIC AND HOUSING VULNERABILITIES OF THE MARGINALISED SEGMENTS OF URBAN POPULATION HAS BEEN HIGHLIGHTED IN THE ON-GOING PANDEMIC-INDUCED CRISIS. THE PROLONGED NATIONAL LOCKDOWN IN 2020 LED TO SHUT DOWN OF ALL NON-CRITICAL ESTABLISHMENTS AND ACTIVITIES. THIS ADVERSELY AFFECTED THE INCOME FLOWS RESULTING IN ECONOMIC HARDSHIPS, PARTICULARLY FOR THE DAILY WAGE EARNERS AND INFORMAL SECTOR WORKERS. IN ADDITION, THE HIGH POPULATION DENSITIES IN INFORMAL SETTLEMENTS POSED THE CHALLENGE OF CONTAINING THE SPREAD OF THE CONTAGION. THE VULNERABILITIES OF THE MARGINALISED GROUPS, MOST OF WHOM ARE MIGRANTS, FORCED THEM TO RETURN TO THEIR NATIVE PLACES RESULTING IN REVERSE MIGRATION FROM URBAN CENTRES AWAY FROM THE OVERCROWDED LIVING AREAS AND UNCERTAIN EMPLOYMENT PROSPECTS. THE NATIONAL GOVERNMENT HAS RESPONDED TO THE PANDEMIC AND THE RESULTANT SITUATION TO PROMOTE INCLUSIVE DEVELOPMENT IN CITIES AS IS REFLECTED IN THE STRATEGIES TO CONTAIN THE SPREAD, MITIGATE THE IMPACTS OF THE LOCKDOWN, AND REBUILD BETTER.

IT IS IN THE ABOVE CONTEXT THAT A NEED HAS EMERGED FOR AN AGGREGATED APPROACH TO URBAN DEVELOPMENT - ONE THAT ENCAPSULATES THE VARIOUS ECONOMIC, SPATIAL, DIGITAL, AND STRUCTURAL CONCEPTS AND INTERSECTS THE DIVERSITIES IN THE SOCIETY WITH RESPECT TO GENDER, ABILITIES AND AGE. UNDER THE AEGIS OF THE MINISTRY OF HOUSING AND URBAN AFFAIRS (MoHUA), THE NATIONAL INSTITUTE OF URBAN AFFAIRS (NIUA) WITH STRATEGIC SUPPORT FROM THE DEUTSCHE GESELLSCHAFT FÜR INTERNATIONALE ZUSAMMENARBEIT GmbH (GIZ) HAVE FORMALISED A ‘INCLUSIVE CITIES CENTRE’ (ICC) TO FACILITATE CITIES IN EVIDENCE-BASED PLANNING AND INVESTMENTS FOR INCLUSIVE DEVELOPMENT TO IMPROVE URBAN PRODUCTIVITY AND QUALITY OF LIFE FOR ALL FOCUS IS ON THE MOST VULNERABLE GROUPS IN CITIES INCLUDING URBAN POOR, PERSONS WITH DISABILITIES, WOMEN, CHILDREN, YOUTH...
The specific objectives of the Inclusive Cities Centre are as follow:

- Reducing inequity in access to public goods and services including urban infrastructure such as WASH services, social facilities such as education and health, public transport, electricity and public spaces, among others.
- Promoting local economic development and facilitating access to income earning opportunities for all.
- Supporting cities to improve livability in low-income settlements and planning the delivery of a bouquet of housing solutions for various market segments by public agencies, private sector and community groups.
- Improving participation by all in urban governance through multi-stakeholder engagements including community groups, covering issues related to city planning, budgeting and project cycle.
- Establish benchmarks to track progress in achieving inclusive development in urban India, adopt indicators- and indices-based approaches.
- Partnering with national, sub-regional, regional and global networks and think-tanks for advocacy, knowledge exchange and to draw inputs for developing cutting-edge knowledge products and tools for the cities.

The Centre will focus on, but not limit itself to, the following thematic areas:

1. **Spatial inclusion:** Reducing spatial segregation by provision of affordable land, housing, and Infrastructure and basic services

2. **Social inclusion:** One of the key aspects of social inclusion is participation in governance by urban poor, women and PwDs, to help improve citizen engagement, reduce crime and support community based organisations.

3. **Economic inclusion:** By incorporating informal economy, job creation, access to jobs, skill development and access to credit and finance.

4. Leveraging current ICT based solutions to improve digital interface between city and citizenry

**Projects under the Centre**

1. **The Building, Safe, Accessible and Inclusive Indian Cities (BASIIC) project** of the National Institute of Urban Affairs (NIUA) was formulated in partnership with the Foreign, Commonwealth & Development Office (FCDO) in September 2019. The programme aims to support select Indian cities towards ensuring universal access and strengthening the institutional capacities of cities to be sensitive to the needs of persons with disabilities and other marginalised groups. It endeavours to promulgate the tenets of accessibility, inclusion, and safety in the ethos of urban planning and design. The project is being implemented with support from the Ministry of Housing and Urban Affairs (MoHUA). The key activities undertaken by BASIIC programme are: formulation of focused policy-level interventions; pilot demonstration of innovative solutions; training and capacity development and; formulation of quality knowledge and research. To facilitate and drive this initiative, a Technical Assistance and Support Unit (TASU) was established at NIUA in October 2019. Over the past two years, TASU has created a vast knowledge network that includes government agencies, civil society organisations, research and academic institutions, and start-ups across the globe. In collaboration with its
knowledge partners, it has developed a reservoir of knowledge products, guidelines, and IEC materials, provided technical assistance on the ground and continuously engaged in dialogues to advocate for disability inclusion.

Some noteworthy achievements of the project include; the revision of the Harmonised Guidelines and Space Standards for Barrier-Free Built Environment for Persons with Disabilities and Elderly Persons in collaboration with IIT-Roorkee; formulation of an Inclusive Cities Framework in collaboration with IIT-Kharagpur, preparing a City Audit toolkit, and launching a training programme for city officials on fundamentals of disable inclusion in collaboration with AILSG. TASU has been working closely with the partner city of Varanasi for making its public spaces more accessible and inclusive.

2. **Infant Toddler and Caregiver-Friendly Neighbourhoods (ITCN) Capacity Building Programme** has been designed to implement a structured multi-level ITCN training and capacity building with specific outcomes for city officials and young professionals over a period of two years starting January 2021. The programme utilises

the vast body of knowledge developed by BvLF partnership programme and NIUA under the CFSC initiative and develop knowledge products and training modules covering new aspects of ITC. The major milestones are- on-boarding of ToT agencies and training delivery agencies; Knowledge Needs Assessment study; several rounds of consultations with government officials; development of training modules for capacity building of urban local bodies officials, state department officials and young professionals; creation of a toolkit on data baseline for young children in cities; training of close to 250 government officials from 10 states and 100 cities of India on the basic level of course covering 4 training modules by 5 training delivery agencies. The programme successfully orientated and sensitized city officials on the relevance of young children and caregiver-friendly neighbourhoods. The Programme developed a policy brief which looks at the impact of COVID-19 on the health and well-being of young children and their caregivers and a policy advisory which recommends specific areas of intervention for creating ITC-friendly cities. The knowledge products developed under ITCN programme have been launched during the ‘World Urban Forum 11’ held in Poland in June 2022. The programme aims at creating more knowledge products in the form of training modules, toolkits, policy briefs, policy advisories; capacity building of the government officials on advanced level of course; and capacity building of close to 300 young professionals from several parts of India.
3. The project **Shaping Youth Futures** was initiated in March 2020, in partnership with the University of Edinburgh, Youth for Unity and Voluntary Action (YUVA), International Centre for Research and Policy on Childhood (CIESPI), at Pontifical Catholic University of Rio de Janeiro and Fields of View. Since its inception, the partners have established community-based Youth Expert Groups (YEG) in India and Brazil who have participated as co-researchers and advisors throughout the project, carried out policy analysis in both the countries focused on youth livelihoods, drawing on Sustainable Development Goals (SDG), national census and other relevant datasets, and conducted two ‘City Caravans’ that supported youth-led social innovation projects (one in Mumbai, India and one in Volta Redonda, Brazil). In addition, practices related to youth engagement are in the process of compilation based on the knowledge exchange activities of the research to inform the national level policies, along with a youth engagement model toolkit for policy development. Apart from the above, 2 peer-reviewed publications are produced by partners addressing specific disciplinary audiences on youth livelihoods and inclusive cities.

To facilitate and sustain the network created between India and Brazil, a knowledge exchange event was organised in Rio de Janeiro in May-June 2022 that saw research outputs presented by youth groups from both countries and interactions between experts from Brazil, Mexico, Argentina, Canada, and India. A similar knowledge exchange event is planned to be organised in New Delhi, India in December 2022, which will bring together Indian experts as well as experts from neighbouring countries of Nepal, Myanmar, Bangladesh, and Bhutan.
Neighbourhood
A neighbourhood is considered to be a basic planning unit, it is generally described in terms of avenues and buildings, however, Lewis Mumford believes that a neighbourhood is structured by the individual units living in it (Stunkel & Novak, 1999). A neighbourhood can nurture people, create connections and build a sense of responsibility (Prajapati & Padhya, n.d.). An
ideal neighbourhood, in an Indian context, should have mixed land use and the recommended distance for caregivers to all community facilities and amenities is 5-15 minutes walking distance. Cities in India have an average density of 45-200 people per hectare based on various city sizes as defined by Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines. This corresponds to a population of five to fifteen thousand people living within this zone, which in Indian planning norms, equates to a neighbourhood unit. Wards and blocks/pockets developed by Resident Welfare Association (RWA) can also be considered neighbourhoods. In terms of Young Children and Caregiver-Friendly neighbourhoods, a neighbourhood can also be defined as an area around an anchor institute providing Early Childhood Development (ECD) services like Anganwadi Centres (AWC), creches, pre-primary schools and other services. It is important to understand that in the neighbourhood we are talking about the areas where young children interact with the external environment regularly.

**Neighbourhood Planning**
Neighbourhood Planning is a form of urban planning through which professional urban planners and communities seek to shape new and existing neighbourhoods. The neighbourhood planning process includes defining the neighbourhood boundaries; public engagement and consultation; evidence collection; plan-writing; implementation, evaluation and monitoring. The planning of a neighbourhood is essential for a community to give them a shape, and opportunity to develop their local area through the neighbourhood development plans.

**Inclusive Neighbourhood Planning**
The city and neighbourhood plans are generally focused on service provision and local economic development. The planning practices follow a piecemeal approach and result in exclusionary neighbourhoods where citizens are often left out of the entire process. Urban neighbourhoods are typically inaccessible and there is an unequal distribution of social and physical infrastructure (like pre-primary school, Anganwadi, primary health centre, etc.) between the various socioeconomic groups. Lack of universal accessibility in cities results in the exclusion of marginalised population groups such as urban poor, women, persons with disabilities (PwDs), elderly, youth and children from accessing public spaces and their movement.

The key component of any neighbourhood is its citizens. Urban planners need to design a space as per the needs of the community members. There is an arising need for Inclusive Planning, a strategy to develop a space which includes a wide variety of individuals and activities. Inclusive Planning will try to accommodate various verticals of urban challenges in the formulation and implementation of the plan. It deeply influences people’s livelihood, irrespective of their financial status. It is a comprehensive approach to planning and assimilating the interest of all community groups for overall improvement in ease of living through the development of all physical and social infrastructure in the identified neighbourhood (Koirala, 2019).

**Community Engagement**
Non-Government Organisations, Community-Based Organisations, representatives from the marginalised populations, local leaders, other influential individuals, and RWAs are important community stakeholders. Community engagement may be defined as the use of the community as participants in a collaborative decision-making process that guides the creation and execution of a defined scope of work. Engagement may increase or decrease throughout the project depending on need and focus. In the process, members inform and influence the overall direction, priorities and implementation of the project.

Improving access to information flow and knowledge exchange between disadvantaged groups and urban planners is critical to ensuring that development
occurs for all, and not just for the already-privileged. Stakeholder participation is being increasingly incorporated into city planning processes; however, this process needs to be conducted with the best interests of marginalised or excluded groups at heart. People can participate in the development process for identification of development priorities, implementation of development programmes, evaluation of development programmes and sharing the benefits of the development.

There are several mechanisms and avenues for people’s participation which can be used to bring wider and more interactive participation of the community in the planning and development process which includes Community Design Charrettes (It is a multiple-day interactive meeting, workshops and site walks/visits that fosters diverse and community-sourced ideas), Advisory Committees, Focus Groups, Citizens Report Card, Participatory Mapping and Participatory Budgeting etc. The indirect participation of people is ensured through elected representatives in the Municipal Council/Corporation and Ward Committees.

Guiding Principles and Challenges
There are some guiding principles for successful community engagement. It is important to understand that engagement is about influencing the process, not just information. The community should not be engaged if the decision has already been made.

Successful community participation also encompasses the inherent diversities within the community. For example, in low and middle-income communities the above-cited mechanisms should be planned for later in the day when community members are back from work. Moreover, diversity in terms of gender, age and abilities are key determinants to neighbourhood planning being considered inclusive. Members of the community have responsibilities that stretch from work to family; planning is a long-term process, hence setting up linear reporting that allows everyone to participate must be set in place early in the planning process.

Managing expectations and public perception is often a critical factor in community participation in the planning process. People often assume the worst and predict the project won't go anywhere; as such it becomes important to explain the roadmap and key challenges in achieving it. This allows community members to become accountable for the outcomes. Mobilisation and identification of key stakeholders that can devote time to the process is a determinant for success or failure.
**Some Good Practices**
Cities have space to provide everyone something, but only when it’s created by everyone. Countries such as Vietnam have adopted macro-level planning, the ‘Vietnam Urban Upgrading Project’ to implement low-income areas in Ho Chi Minh and other secondary cities to aid the issue of flooding, sanitation and environmental risks. The Vietnam Urban Upgrading Project enhanced the lives of millions of urban poor with improved water, sewerage connections, roads, lakes and water systems. It led to infrastructure with the stronger engagement of the community and helped the marginalised to identify upgrading options and also receive a certificate of tenure for land use (Koirala, 2019).

The changes made in the urbanisation approach for it to become inclusive of the urban poor in Harare, Zimbabwe offers a useful case in inclusive urban development. In the early 2000s, the urban poor in the city were living in a severe state of disenfranchisement, with the constant threat of evictions, as evidenced by wide-scale demolition programs of slums in the city. However, in recent years, the development of urban poor communities has strengthened significantly, in part due to the Harare Slum Upgrading Programme, a government-led initiative to formalise urban services and provide opportunities for development for informal settlement inhabitants in the city (Muchadenyika, 2015).

The case of the Sringeri Mutt Road, Chennai is an encouraging example of citizens shaping their spaces and doing their bit to make streets safer. The quick and cost-resilience was community-driven to enhance the road and safety for the neighbourhood, primarily women and children. The transformation was brought by a group of community developers to reclaim the public space via art and display the power of Community-driven efforts. The project inspired various neighbouring groups and communities in Chennai to reclaim their locality and make it a safer and more inclusive children-friendly city (Some Paint, Few Brushes, Kids Young & Old: Sringeri Mutt Road’s Tale of Transformation, n.d.).

**Conclusion**
Community engagement in the planning process is one of the most important factors in enabling inclusive and sustainable urbanisation. Engaging directly with marginalised communities offers the best insight into the needs and desires of these target groups. Community engagement in inclusive neighbourhood planning allows communities the opportunity to voice their opinions and concerns. This also provides an opportunity for policymakers to assess new urban planning interventions, directly in partnership with beneficiaries. Community engagement in the planning process also has the benefit of engaging the community in their urban spaces on a higher level. Also, there is a need to use digital technology for increasing community engagement.
A N I C H E  F O R  E V E R O N E

—Akruti Murehkar, Anshul Rathore, Ojaswini Bansal, Sarayu M, and Vignesvar J

ISCF Fellows

Headmistress: How can we improve the involvement of children and make their learning more interesting?!

Student 1: Why is the homework so boring and it is only writing the same subject taught in class again and again!

Student 2: There is literally no space for us in the hostel to practice dance or yoga!

Student 3: My neighbor uncle yelled at me for playing cricket on the street and refused to give back the ball.

Mayor of the area: I need to first know the citizens' aspirations and their needs and then utilize the public funds accordingly.

Kid: I have a very interesting new assignment for you. We are trying this exercise for the first time! I think you will all enjoy doing this.

So... exciting!

What does our neighborhood lack?

What does it need?

A Playground? A Park?

I'm confused! Now!

Grandpa! I'm confused! Help me with this assignment...

Current... The lanes are so crowded and dangerous for you to play. Also, your little sister needs a proper wash area near the play zone...

Mayor: Let us come together and build the neighborhood. I'm elated to play a small role as the mayor in building a happy living society for all.

Let me ask people! What do you think of this idea?

True that! I will come with my sister too!

Yeah! The design and ideas have to be more inclusive, leaving no one behind!

Yeah that will be cool! I will come cheer for you if you can access the dorm floor area!

Student: Mayor is the one who is building the space for us!
Research shows that in most countries, youth make up the largest and most dynamic portion of the population. UN-Habitat estimates that by 2030, 60% of the population will be under 18, which means young people are our urban future. According to theory, developing nations with a sizable youth population may experience rapid growth if they make investments in health, education and protection of the rights of the young people. India, currently, is one of the nations with the highest young population in the world, with a median age of 25 in 2020, compared to...
40 in the USA, 46 in Europe and 47 in Japan (The New Indian Express, 2020). This gives India a demographic dividend advantage over other countries. On the other hand, research also shows that the majority of youth in India and a few other countries face the problems of unemployment, poverty, lack of access to education, gender bias and class divide, among others.

Having said that, when we consider the digital sphere, the situation is albeit different; the young feel more included, they have free access to multiple contexts and concepts, and the opportunity to connect with like-minded individuals. Youth engagement in the digital space became more relevant in 2020, where according to UNICEF, ‘as COVID-19 forced the world indoors, young citizens embraced digital media to make their voices heard and spur collective action when the world needed it the most’. Youth has and continues to use the digital space for multiple activities, be it self-paced education, access to livelihood opportunities or to voice their dissent. Youth activism has a “deep and magnificent history” in India. Young people have time and again passionately voiced their thoughts and consistently risen to the occasion to defend their rights. Today’s youth is trying to live up to that, which is only natural because Indian youth have a natural tendency to challenge and question the frameworks used for “making change.” Whether it be in the Nirbhaya case or the Mandal Commission in the past, young people have continued to be the “voice of the dissent” and participate in “collective forums” to do so.

Now that teenage activists have moved the conversation online, having access to the internet provides them with a powerful sense of agency and community. It is viewed as a tool for inclusiveness, direct engagement with others, and reaching and mobilising more people, even across national boundaries by young civic actors. A different analysis by UNICEF also found that many adolescents and young people use digital spaces to develop their civic identities and express political stances in creative ways, claiming agency that may not be afforded to them in traditional civic spaces. Is the digital space the new Jantar Mantar or Azad Maidan for the young citizens of the country? According to a survey by UNDP, young people feel that online activism gives higher visibility to important issues. However, a sizable number of the respondents also felt that taking part in digital activism does not reach all the young population, especially the ones in rural areas and the ones who do not have access to digital technology. Therefore, it is important to keep in mind that while digital technology may improve democratic participation, it does not do so equally across the youth groups (UNDP, 2021). Many activists highlighted the influence of online initiatives during the COVID-19 pandemic and considered this as having a positive effect on digital activism.

Besides online activism, digital technology also offers young people a low-barrier-to-entry platform to create content that can reach scales and types of audiences that young people don’t have access to in everyday life (UNICEF, 2020). The content created by the youth online today is not limited to blogs and images but, has gone beyond to integrate a range of multi-media resulting in vlogs, memes and reels to advocate the cause more engagingly. The pandemic induced the need for the rest of the population to sit up and take notice of this and in no time, everyone had jumped on to the trend wagon. It is evident that the digital future is certainly going to be ruled by the young and we should be giving them that liberty. But, are we prepared for this? Do we have adequate infrastructure? Are the available services accessible for everyone?

The pandemic has made the difference between isolated younger generations more evident than ever, aggravating vulnerabilities and lowering their participation in social and civic life. According to NSSO data, only 4.4% of rural households and 23.4% of urban households own computers. Moreover, while 42% of urban households have a computer with an internet connection, the same is available to only 14.9% of rural households. A report by Nielson in 2019 concluded that
70% of the rural population does not have an active internet facility in states such as West Bengal, Bihar and Jharkhand with Odisha having the lowest internet penetration (SPRF, 2020). If we talk about geographical disadvantages, “the north-eastern states, the findings of the report indicate that users are less affluent and predominantly male. Remote learning has also been a challenge for students in the union territory of Jammu and Kashmir” (SPRF, 2020).

As Nelson Kwaje, a youth activist and Program Director of Defy Hate Now, a community-based organisation in South Sudan puts it, ‘whether the internet is considered a private service, a national right or a global public good is a norm set by policymakers. Internet might not be a classic human right but given the wide spread of digital service delivery, the internet becomes a core access issue. There are already policy frameworks being developed for this and so we need to keep an eye on their rollout’. India has seen a rapid expansion
in the country’s digital infrastructure in the form of mobile telephony towers and optic fibre networks. The large-scale penetration of smartphones and other devices has also contributed to making the hardware available to a large number of citizens. The presence of this infrastructure is the first step in making services available to citizens on a digital platform (IDR, 2018).

The Digital India campaign, which was launched in 2015 had the vision to transform the country into a digitally-empowered society and knowledge economy by 2022. It has incubated several initiatives that have enabled digital access for all. For instance, e-Pathshala is a platform developed by the NCERT that showcases and disseminates all educational e-resources including textbooks, audio, video, periodicals and a variety of other print and non-print materials through a website and mobile app. The platform addresses the dual challenge of reaching out to a diverse clientele and bridging the digital divide (geographical, socio-cultural and linguistic), offering a comparable quality of e-contents. Another one, ‘Study Webs of Active Learning for Young Aspiring Minds’ (SWAYAM), is an integrated platform for online courses, using Information and Communication Technology and covering school to postgraduate level. Platforms like these had an important role to play with the onset of the COVID-19 pandemic.

The narrative of the internet just being a means to communicate is obsolete in today’s day and age. As it has become a foundation for an intelligent society, the ambitious vision of building smart cities and villages, modern agriculture prospects, effective healthcare, online education and more would not be possible without the internet (Nagarajan, 2020). Seeing the importance of digital literacy, the Supreme Court of India has declared the right to access the internet as a fundamental right, making it a part of the right to privacy and the right to education that comes under Article 21 of the Constitution. This certainly gives an encouraging foresight to have a digitally-empowered society; a safe space particularly for the young who hold the key to creating a better future.

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Opportunities and Obstacles: Scouring the Digital Space for Jobs

Ashwani Kumar
Intern, BASIIC Program

Neha Sharma Sangma,
Professional Intern, BASIIC

Networking is about relationship building. It is a powerful tool to make friends, find clients, create collegial collaborations and build referral relationships”

-American Bar Association

Humans are social creatures, yes, even introverts, and being sociable is a part of our adaptive toolkit that enables us to work together to accomplish things that we wouldn’t be able to do on our own. But what happens if there is a social distance of two meters between this networking? Has COVID-19 affected the traditional methods of job hunting? Since 2020, the pandemic has disrupted the labor market and turned it upside down. Almost all of the changes were severe and visible right away. Millions of people lost their jobs, while others adjusted to working from home. Some were also considered essential workers, such as grocery store owners, pharmacy owners, health practitioners, as well as garbage collectors, who had to operate in a physically demanding manner while adhering to COVID-19 protocols. During and after the pandemic, the job portals also saw a sharp rise in job seekers.

Digital Hiring is the New Black
In this digital era, the process of applying for jobs has become simpler by just writing an email to the employer. There are numerous sites and softwares that can be freely accessed to prepare a resume on the online platform that has replaced the traditional system of using paper and personal follow-ups to apply for any type of job.

Technological advancement has changed everything, more profoundly than ever; it has changed the search for employment. A decade ago, job hunting was dependent only on print media and introductions from
family and friends. At present, the process is more standardized globally where most people collect job information and search for opportunities through networking sites (online platforms such as LinkedIn, Twitter, and even Facebook). This is mainly because the growing popularity of online platforms provides more inclusion and accessibility for all, not only in searching for a job but also in applying for multiple job opportunities at the click of a button. Making it easy for the employee to look for job opportunities, and for the employer to find qualified candidates as per the post. Gone are the times when one would be competing with local talent; now one is potentially competing with job contenders from around the globe. One thing is for sure, geography has become less of a factor when it comes to recruiting and finding someone with the right skill set for a job. In the era of COVID-19, this gained more significance and power.

The process chain leading up to a job application has fundamentally changed in the past few years. One just has to sign up to have job positions sent directly to their email. Before the advent of digital technology, networking involved going to social gatherings and job fairs to meet new people. Nowadays, you can attend online job fairs, join social media groups and even meet with professionals in the industries via Skype, Google Meets, Microsoft Teams, etc. Despite the advent of technology, networking hasn't lost its significance. Applying for jobs through online networking platforms enhances the reachability and accessibility of these applications. Meaning, when the hirers receive one's resume and want to schedule an interview right away, it may be possible for them to do so even if one is not physically present and is at the remote relocation. Development of such digital networking platforms by hiring agencies has also changed the usual way of receiving job offer confirmation from any employer, making it considerably faster. AI also plays a significant role in this process, sorting through thousands of CVs to ensure that only those with the desired skill sets reach the employer.

The Problem and the Opportunity
While the use of digital platforms has made it easier to obtain work online, it has also led to a digital gap. The digital gap raises the cost of a job search, lowering both the likelihood of finding a suitable position and the capacity to earn a decent income. Online job applications alone create a great inequality amongst job seekers and divide the camp into two—those who are broadly competent and those who are “wet behind the ears” when it comes to access to, knowledge of, and use of information and communication tools [Linford, J. (2020, December 8)]. Most people who did not have access to the internet as children lack the technological and digital abilities needed in today's employment market. No matter how highly qualified they may be, lack of a reliable internet connection might very well jeopardise their chances of bagging the job. Although all people may not be able to use these tools efficiently, it is estimated that more than one million users come online each day. More than four billion and three billion people use the internet and social media respectively, with the usage graph growing vividly.

“Disparities in labor force participation rates between young women and young men persist. In 2017, the global labor force participation rate for young men aged 15-24 was 53.7% whilst that for young women was 37.1%” [Robinson, D. S. (2018)]. This tale of the challenges faced by searching equal opportunities for the underrepresented groups is not entirely told by discrepancies in labor force participation rates, though. Women's empowerment and wellbeing are further hampered by ongoing disparities in men's and women's wages, productivity, types of work and other social inequalities. Therefore, enhancing women's access to high-quality employment is more important than merely creating more jobs. “This gender disparity in the labor market is replicated in the digital economy. The global proportion of women using the Internet is 12% lower than that of men” [Robinson, D. S. (2018)]. As per world bank men are more likely than women to use the internet in practically every region of the world.
There are many obstacles in the way of hiring young women for jobs and training programs. The majority of possibilities are shared in the male-dominated workgroups. Almost always, men only need to meet the minimum qualifications, while women also need to possess additional skills, such as the ability to fly or teleport.

If the digital gender gap can also be reduced, which in turn can have positive economic and societal effects. Young women’s productivity, income and financial independence can all grow thanks to digital jobs. As technology continues to change societies, our digital tools and services must be reflective of the variety of the world’s population. The current labour force participation figures do not take into consideration the LGBTQI+ community, research on their share in the labour force participation is bound to change the current figures. “Youth employment programs targeting digital job creation must advocate and educate companies on gender-inclusive human resource policies and practices.” [Robinson, D. S. (2018)].

According to the CDC, 1 in 4 adults has a form of disability. This is 20% of the population that needs accessibility but currently, out of 1 Billion active websites worldwide, less than 2% are accessible to people with disabilities. This disproportion has created the ‘Web Accessibility Gap’ (accessFind). Now we can perhaps create a new search engine that will assist people with impairments in finding websites that are user-friendly to them. Additionally, social media businesses have tested artificial intelligence to make their sites more accessible to people who are blind. People with disabilities who are frequently housebound might access income-generating opportunities through online outsourcing and e-lancing with the aid of digital skills. While there are many new opportunities in digital jobs for young people with disabilities, there are also challenges that policymakers should take into account. These include the unavailability and high cost of digital tools, the implicit biases of online communities, the inadequate social safety net and the dangers of social isolation.

To close the digital divide, there is a need to ensure that every person has affordable access to the Internet by 2030. This requires that governments promote universal access to ICT infrastructure, address affordability, enhance digital skills and literacy, and improve the relevance and awareness of the benefits of being online (“Leveraging Digital Technologies for Social Inclusion, DISD”).

Targeted and comprehensive actions are also necessary for the digital inclusion of disadvantaged and marginalized groups, such as women, the elderly, people with disabilities and indigenous peoples. These include identifying and changing discriminatory laws and institutions, educating people about the digital divide, and eradicating prejudices by using more positive representations of women, the elderly, and other underrepresented groups online. Establishing gender-responsive national broadband plans, addressing the digital skills gap through education, creating gender-friendly public internet access and training venues are only a few examples of measures intended explicitly to close gender gaps.

With the rising usage of the internet for job searching and application processes, sophisticated knowledge of cutting-edge technologies and systems like social media is just as important as literacy. By leveraging
the rapid advancement of technology and the daily creation of new tools and websites, job searchers can significantly increase their chances of landing desired job roles. The existing digital divide is only expected to widen, providing people with superior computer literacy with more options. Given that the internet becomes more widespread in rural areas and poor countries, the gap might lessen, but owing to how quickly new technologies are being created, it won’t be simple to catch up. Even if digital inclusion isn’t the vaccine against inequality or discrimination, but it is a very important and fundamental aspect in social inclusion. Therefore, digital inclusion is crucial for the governments’ commitment to leave no one behind in the execution of the 2030 Agenda and to enable a socially fair transition toward a more inclusive, egalitarian, and resilient society that ensures no one is offline.

References

The pandemic showed us the importance of technology and its power of connecting people and systems and thinking beyond borders. The mere fact that we are connected all the time to share, to create, to collaborate and solve critical issues and yet not have to be in a room is a prime example of the power of technology. But the technology we use every day and vouch for, in some ways is merely a manifestation of a hunch or an idea triggered by a real-life problem, that turned into a crude concept, which in turn took the shape of a solution, and eventually found a market and scaled up. In essence, every product or solution that we so elegantly use or leverage to optimise our lives; from the internet to our computers or even the cell phone is a product of a self-actuating innovation cycle.

Historically, a great driver of technological innovations across cultures has been “the increase in connectivity” among individuals, systems, communities, cities and nations. We are objectively innovating faster and more frequently now than ever before, and it is for this very reason that cities become so important. Cities are the engines of economic growth, but a more obscure reference of it is that cites are also “Universities of Life.” A place where ideas coalesce and becoming something more than just an idea.

Consciously or unconsciously, we all realize this intrinsic value of being in a city - an environment that allows for greater exchange of ideas, and the opportunity to be part of something breakthrough or innovative. While such viewpoint on urbanization is truly exciting, but for it to harness the true potential, we have to understand that ‘innovation doesn't happen in silos.’ If inputs are limited, then outcomes are also limited. To solve critical problems and face challenges bigger than us, we need to foster an inclusive culture that encourages diversity.
of thought while ensuring visibility for ideas and innovation on a global scale. This is achieved when we all look past our differences or diversities in terms of gender, class, abilities, age and so on so forth, and give them a chance to contribute.

While innovation at large as a sector is growing and is complimenting the development narratives of economies around the world, much needs to be done to mainstream assistive technology to bring the marginalises communities to the forefront. It is estimated that about 800 million people live with disability in low and middle-income countries (LMICs). Only 10-15% of people with disabilities who require assistive technology have access to them, especially in LMICs settings. In a country like India, which is home to about 30 million people with disabilities, common sense dictates that a sector like Assistive Technology (AT) should prosper and thrive.

But the observable evidence is counter-intuitive to the dictates of business logic. That tells us that there are some intrinsic and macro extrinsic factors at play. The factors being - disharmonious demand and supply value chains, lack of purchasing power among users, lack of knowledge and awareness, policy, legal, and research level challenges, and more importantly an incongruent ecosystem setup.

Step one must and should always be to acquire knowledge and educate masses. For Assistive Technology (AT) to be able to create more as a sector, there is a need to be able to sensitize people and systems to demand more. Concerted efforts must be made to educate the users and prime the vital cogs in the AT ecosystem to understand the needs better, this will help innovators and solution providers to design better and more effectively for the user groups.

The next logical step should always be to map the cross applicability of solutions at all levels of the society. Technology solutions by design are adaptable to systemic needs, which is why we should look at integrating these solutions to sectors like education, health, mobility, sanitation, municipal services, among others.

For a seamless integration of a solution across systems and institutions you need to have a robust training and capacity development process. One that is easy, standardised and universal in its use. Working towards the empowerment of users is also an important factor to boost the sector. A participatory approach must be adopted in the design, development and deployment of these solutions. Similarly, schemes and policies should be developed to empower individuals and families to be able to afford and use such technologies. Lastly, the most critical enabling factor is a coherent and congruent ecosystem that is representative of the entire value chain of innovations in AT and one that fosters and promotes the culture of effective and meaningful collaboration.

A notable effort to achieve such an outcome is the Building Accessible Safe Inclusive Indian Cities Programme (BASIIC) spearheaded by the National
Institute of Urban Affairs (NIUA). The program, which was rolled out in 2019 as pilot, managed to touch upon each of the identified pathways to mainstream universal access and inclusion in India. The interventions demonstrated by the pilot city of Varanasi through this programme are a valuable case study to demonstrate the change that one can bring through a whole of system approach. These interventions go beyond making infrastructural changes – and technological solutions and innovations - digital inclusion within cities including sensitization and capacity building of the state and local machinery.

Moreover, institutionally NIUA has been continuously pushing the envelope of innovation in various areas of urban development through our different centres and programme – the ‘SMART MOVE Innovative Urban Mobility Challenge’ is one such example which was an international challenge that is helping cities improve the accessibility and mobility of people, including persons with disabilities, women and children, and the elderly and goods by unlocking the potential of urban mobility datasets. The Innovation Hub for Urban Water Sanitation and Hygiene Solutions promoted an ecosystem approach to improve the performance of urban WASH programs within a collaborative framework. It did so through incubation and acceleration of innovative, scalable, community and market-based solutions using technologies, programs and service-delivery models.

On a similar footing, BASIIC in collaboration with the UN in India has launched the ‘Smart Solutions and Inclusive Cities Awards’ that seeks to crowd-source innovative technological solutions in early and late stages, as well as pan-city solutions to encourage Indian cities to compete on all aspects of inclusion. The challenge attempts to seed innovative approaches for solving long standing issues pertaining to universal accessibility and inclusion of persons with disability and mainstream them into quotidian life.

While impetus needs to be directed in improving the ability of individuals to access and leverage technology, it is equally important that we look at addressing issues around universal access and inclusion from the lens of a city and institutionally. Technological frontiers give us a window to live the future in the present and we must leverage that in creating a better future for our cities and living up to the vision of creating ‘cities for all.’
Inaccessible/Unsafe public spaces

Universally designed spaces

Lack of adequate urban services

Inadequate urban services

Evidence based planning

Stigmatizing people for their disabilities

Lack of adequate representation in government services

Accessible and Inclusive ICTs

Equalised opportunities

Participatory planning

RACE TO INCLUSION
Heritage is the cultural legacy which we receive from the past, which we live in the present and which we will pass on to future generations”

—United Nations Educational, Scientific and Cultural Organization

Source: https://en.wikipedia.org/wiki/Heritage_Street_Amritsar#/media/File:Heritage_Street_of_Amritsar.jpg
Repositioning Heritage Conservation in City Planning

Sonali Mahamna

Research Associate, ITCN Capacity Building Programme

“Heritage is the cultural legacy which we receive from the past, which we live in the present and which we will pass on to future generations”

—United Nations Educational, Scientific and Cultural Organization

Heritage is considered both a product and a process, that provides societies with a wealth of resources inherited from the past, created in the present and bestowed for the benefit of future generations. It is not confined to tangible aspects but includes natural and intangible heritage. According to UNESCO, these resources are often “fragile wealth”, and would require supporting policies and development models that preserve and respect their diversity and uniqueness since once lost, they are non-renewable. Heritage has become a process whereby objects, events, sites, performances and personalities, derived from the past, are transformed into experiences to and for the present (Gregory ASHWORTH (2011) Preservation, Conservation and Heritage: Approaches to the Past in the Present through the Built Environment, Asian Anthropology, 10:1, 1-18, DOI: 10.1080/1683478X.2011.10552601).

Drifting through the different times, sometimes heritage tends to lose its original essence and may require us to intervene for its conservation, which includes restoration, sustenance or maintenance. Conservation is the process of maintaining and managing change to any asset in a way that sustains its significance. It deals with actions or processes that are aimed at safeguarding the character-defining elements of a cultural resource to retain its heritage value and extend its physical life. It is not only limited to preserving and safeguarding of the resources but to bringing about a sense of identity, pride and belonging to residents. The feeling of ownership encourages communities to voluntarily be involved in the stages of heritage conservation.

This brings to light a common perspective of heritage being an ineffable object that can only be appreciated from afar by tourists, archaeologists, geographers and conservationists; or can we align it with the contemporary urban scale of our growing cities. When we weave heritage in the fabric of a city, it facilitates bridging the gap between past and present while giving way to the future. It may prove to be an inevitable pillar of growth in the development of cities. It can be included in urban regeneration processes as a driver for economic development, social cohesion and cultural identity.

As per UNESCO, heritage is inherently linked to the most pressing urban challenges; ranging from climate change and natural disasters (such as loss
of biodiversity or access to safe water and food) to conflicts between communities, education, health, migration, urbanization, marginalization or economic inequalities. For this reason, heritage is considered essential for promoting peace and sustainable societal, environmental and economic development (Heritage. UNESCO culture for development indicators https://en.unesco.org/creativity/sites/creativity/files/cdis/heritage_dimension.pdf). Urban heritage can be capitalised on by retrofitting it into public spaces and recreational tours as a behavioural manifestation. Furthermore, heritage is a source of inspiration for creativity and innovation that generate contemporary and cultural future products.

Figure 1 above illustrates the dimensions of heritage conservation that accrue not only for heritage assets but also to larger development aspects (across the x-axis). Distinctions across the y-axis on the other hand show the benefits at the community and city level (H. Srinivas. Heritage and Conservation Strategies: Understanding the justifications and implications. Policy Analysis Series (April 2020) https://www.gdrc.org/heritage/heritage-strategies.html).

Conservation planning is an instrument that tries to bind all these coordinates together that forms a pathway between the city and community-level heritage assets. It helps cities decide how to manage their inherited heritage. While organisations such as ICOMOS and UNESCO have been expediting global conversations on heritage conservation, local practices continue to operate within different socio-economic and political contexts. This is evident in conservation planning as a part of urban planning that sets out policies and strategies to manage and valorise the

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**Figure 1 Dimensions of heritage conservation**

<table>
<thead>
<tr>
<th>City Level</th>
<th>Community Level</th>
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<tbody>
<tr>
<td>Tourism development</td>
<td>Security and safety/disaster resilience</td>
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<td>Job creation</td>
<td>Community well-being</td>
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<td>Poverty reduction</td>
<td>Community participation</td>
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<tr>
<td>Urban planning/zonning</td>
<td>Creating a “sense of place”</td>
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<tr>
<td>Infrastructure/services provision</td>
<td>Urban identity and pride</td>
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<td>Transportation management</td>
<td>Historical preservation</td>
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significance of heritage. Conservation planning can be looked through the following three dimensions:

- The recognition and understanding of heritage
- Conservation objectives, principles and substantive goals
- The planning tools utilised for delivering conservation

Though these dimensions are not exhaustive but are identified as being the key to conservation planning practice based on a review of existing literature and practice (Fei Chen, Carol Ludwig & Olivier Sykes (2021) Heritage Conservation through Planning: A Comparison of Policies and Principles in England and China, Planning Practice & Research, 36:5, 578-601, DOI:10.1080/02697459.2020.1752472). The analysis reveals that enduring socio-cultural and institutional specificities contribute to moulding approaches to conservation planning. Understanding such contextual specificities and distinctiveness is essential for international exchanges of experience around conservation planning.

International exchange is often facilitated by the tourism industry, luring people to experience the contrasting cultures across the globe. Hence, tourism often becomes the impetus for conservation planning, forming a feedback loop of generating economy, building a unified identity for the city, sustaining cultural values and establishing a captivating public space. The tourism sector has been growing exponentially over the years. While some prefer to travel their way to natural heritage others remain mesmerized by the grandeur of built heritage. Humans tend to learn, live and appreciate the times that have been lost in the pages of the past; and this is what makes tourism the focal point for conservation planning.

As per the decision taken at the 43rd session of the UNESCO World Heritage Committee (WHC), Director-General of UNESCO Audrey Azoulay presented the ‘World Heritage City’ certificate to the Pink City, Jaipur in 2020. Jaipur envisions itself as a city which takes the creativity and imagination of its heritage to showcase a model of sustainable development. ‘World Heritage City’ inscription status is a unique opportunity for Jaipur to safeguard its iconic town planning; built heritage and myriad crafts and folk arts. To ensure the above goal, Special Area Heritage Development Plan (SAHDP), 2041 is being prepared for the walled city of Jaipur. Nagar Nigam Jaipur has framed heritage conservation and protection bye-laws being notified in the Rajasthan Gazette. Guidelines for Architectural control and Heritage impact assessments are outlined to be followed in the entire heritage area. The entire city is a beautiful example of amplifying heritage through city development and planning roadmap (Special Area Heritage development Plan (Walled city Jaipur 2041)).

The city doesn’t always require to be declared of importance by the outlooker, the initiatives to acknowledge and strengthen heritage aligned with city development, can rise within the city, state or national government as well. For instance, Mysore city has been identified as a heritage city for conservation by the State and Central Governments. Awareness programmes have been launched under Jawaharlal Nehru National Urban Renewal Mission (JNNURM) by the city Corporation in collaboration with Heritage Commissioner’s office. The city has been successfully focusing on bringing its heritage to the centre of tourism planning by spreading awareness amongst city stakeholders and training the government official on the conservation and maintenance of Mysore heritage. The workshops, seminars, photo exhibitions of heritage buildings/structures and visits to heritage areas are being conducted for tourists, officials, the public, and school and college students. Besides, dance, dramas, heritage walks, cultural activities, essay writing, debate, painting/sketches and Janapada programmes are also conducted (Dr. B. Shankar. Dr. Chidambara Swamy. Creating Awareness for Heritage Conservation in the city of Mysore: Issue and Policies. International Journal of Modern Engineering Research (IJMER). Vol3, Issue2 (March-April 2013)).
One very important aspect to be kept in mind while working with tangible or intangible heritage is to acknowledge its fragility. Living expressions inherited from our ancestors, such as oral traditions, performing arts, social manners, rituals, festive events, knowledge and practices hold the status of heritage because they are unique and carried on to next generations; if we wouldn’t strike a balance between capitalising them and worshipping them, they might end up losing the charm of ‘being heritage’. Similarly, conservation of built heritage needs to maintain the authenticity of spaces formed, materials used, uniqueness and overall experience that together makes it a heritage site. We cannot over-exploit the benefits of heritage development potential; there is a constant need to strike a balance between benefiting from heritage and preserving its authenticity for the coming generations.

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1. Bunkaars of central India
2. Festival named after a bird
3. India’s first UNESCO World Heritage City
4. Heritage rail in the blue mountains
5. The melting kababs from the ‘Land of Nawabs’
6. Paintings from the Honey Forests
7. The classical dance form of travelling bards and news-mongers
8. The traditional art of Tie-N-Dye
9. The link between Miami and Mumbai
10. The capital of the medieval-era victory city
Sprawl to Densification and Horizontal to Vertical Low-Income Housing - the Need for a New Approach to Revitalization of Indian Cities

Ajay Suri
Senior Adviser, NIUA and Head, Inclusive Cities Centre

Indian cities, historically, have grown spontaneously, mostly as urban sprawls under the existing regime of Development Control Regulations (DCR). The urban areas are largely characterized by low-height buildings and low Floor Area Ratio (FAR) but with low per capita living space as well resulting in high population densities in the cities. The FAR values are generally close to 1.0 and the ‘high rise’ are walk-ups with G+3 structures. Such development and the low delivery rate of formal housing have resulted in a high house price to income ratio. This is pushing the city-dwellers to seek affordable informal housing solutions in core city areas, resettlement colonies, chawls, urban villages, unauthorized layouts and squatter settlements which are generally categorized as slums. These shelter solutions are often sought by low-income families - predominantly migrants, low-wage blue and white-collared formal sector workers and informal sector workers. Besides the dilapidated housing structures, such settlements are also devoid of basic urban services and social facilities. This has resulted in the urban decay of the Indian cities.
Besides pushing up the house price due to a component of a larger land cost, urban sprawls also enhance the cost of service provision due to the need for wider services and transport network. Such considerations and limited possibilities of city area expansion point toward the need for more intensive use of land and a shift from sprawl to densification. These are important considerations for urban revitalization in India which have also been recognized in the central urban missions. The ongoing Smart Cities Mission and Pradhan Mantri Awas Yojana focus on urban revitalization – area-based development under the former mission and in situ slum redevelopment under the latter one. This intensive use of land facilitates the increase in per capita living space for low-income families from 20 sq. ft. in squatter settlements to 45 sq. ft or more in rehab units – assuming an average size of a shanty and rehab unit of 100 sq. ft. and 250 sq. ft., respectively for an average family size of 5.

The vertical housing development requires a higher FAR beyond the current level of around 1.0 in Indian cities. The general critique of higher FAR is that the cities do not have the carrying capacity in terms of services and transport networks to support still higher population densities than now. The argument is invalid on two accounts: first, it assumes that carrying capacity cannot be enhanced by strengthening network services; and, two, that FAR needs to be increased uniformly across the city whereas it could vary across the wards and

Source: Author
zones in the city. Transit-Oriented Development (TOD) is a case in point where FAR has been increased on TOD corridors after enhancing the carrying capacity. A similar approach could be adopted for decisions on redevelopment initiatives across the city. The process of setting variable FAR across wards/zones in cities should be transparent and based on planning criteria, which would also help manage the conflicts of interest and the related court battles.

Digital technology can be effectively used to plan pan-city revitalization at the macro level and redevelopment projects at the micro level. The redevelopment projects could be identified and prioritized under the pan-city plan rather than as sporadic efforts. The challenge is to develop the prioritization criteria for redevelopment projects and map the carrying capacity at the sub-city level. It is not that the cities need to start at ground zero and that there have been no efforts in the past. Many of the Indian metropolitan cities have digital city maps and network services - both trunk and internal have been mapped using the GIS including water, sanitation, drainage, power and transport networks. Also, the footprints of buildings in the city have been mapped for property tax assessment. The information available with the cities could be used as attribute data for GIS-based assessment of carrying capacity at the sub-city level. This may be used for FAR mapping across wards/zones in the city. Such a robust system would also help in Land Value Capture linked to enhanced FAR.

There are ample instances, particularly in metropolitan cities, where settlements in dire need of redevelopment are located on sites not amenable to habitation. In such cases, the revenue mobilized by assigning higher FAR on plots for ‘high value’ use may be allocated for the rehabilitation of low-income settlements on alternative sites. The process could be made transparent by the ULBs by putting their financial operating plan in the public domain – showing the utilization of fiscal transfers and OSR for various development works.

Micro-level data are required for prioritization of redevelopment of settlements in the short, medium and long-term and also for planning such projects. Also, given the high slum concentration rates in Indian cities, there are immense challenges to planning in-situ slum redevelopment for urban revitalization. Mumbai and Faridabad, for example, have more than one-half of the population living in slums. The biggest challenge is the lack of data on informal settler families and the settlements – the socio-economic profile of the inhabitants, their affordability, needs and aspirations and the service level benchmarks for the settlements. Digital technology could be used to assist the communities in mapping their settlements and developing a database on the settlement and inhabitants. Communities may be facilitated to use the open-source platforms to prepare the digital maps of the settlements using satellite images and the footprints for each dwelling through ground-truthing, assigned with a unique door number, with attribute data on households and services. The highest priority for redevelopment may be given to the ‘worse off’ settlements in wards/zones assigned with a higher FSI.

The urban revitalization efforts need to adopt an inclusive approach to promote the ease of living of families living in slums by facilitating a higher per capita living space and improved access to urban services and social facilities. Equity in access to housing and public goods and services will also help promote equitable economic growth. The urban revitalization efforts may be bolstered by tweaking the DCR for achieving higher FAR to enable land value capture. The technology could facilitate the entire process by helping use data-based criteria for decision-making.
Housing for ‘Diverse Needs’

— Taha Mama, ITCN Capacity Building Programme Intern
Accounting for 38 per cent of total global energy-related CO2 emissions, the construction industry will play an important role in achieving our goal to limit global warming to well below 2°C. According to some estimates, investing in more resilient infrastructure could also save humanity a whopping $4.2 trillion from climate change damage.

—United Nations Environment Programme
Relocating the household without any sort of assurance of housing, livelihood and basic services is a tough decision to make, but back in 2015, Binod and Savita were prepared to take that chance. Following the 2015 Nepal earthquake, they were ready to travel more than 1800 km in search of employment and better living conditions. Bengaluru, to them, seemed like a city of prosperity, but little did they know that the city is fighting its own struggle. Lack of potable water and increased temperatures in the region stood in their way of achieving their aspiration of a better quality of life.

If we wonder why the Garden City of India has more than two months of sustenance on water tankers, average temperature soaring above 35 degrees celsius and poor air quality, the answer is climate change. The impact can be seen across all Indian cities but might differ in its intensity. According to the report by the Ministry of Earth Sciences (MoES) (2020), temperatures in India have risen by 0.7 °C (1.3 °F) between 1901 and 2018, thereby changing the climate in India. In May 2022, severe heat waves were recorded in different cities in India with temperatures reaching as high as 51 °C. A report titled “Composite Water Management Index (CWMI)”, published by NITI Aayog in June 2018 mentioned that India was undergoing the worst water crisis in its history; that nearly 600 million people were facing high to extreme water stress; and that about 200,000 people were dying every year due to inadequate access to safe water. The report further mentioned that India was placed at the rank of 120 amongst 122 countries in the water quality index, with nearly 70 per cent of water being contaminated.

India is among the world’s most disaster-prone countries. With 27 of its 29 states and seven union territories exposed to recurrent natural hazards such as cyclones, earthquakes, landslides, floods and droughts, these challenges are expected to be further aggravated by the impacts of climate change. Hurricanes, tsunamis, earthquakes, and landslides have made the last decade the most traumatic one in terms of natural disasters recorded in human history. Nature seems to be compelling us to take a moment to - stop, look around, and reflect on our actions. It’s a race against time for us to rapidly adapt to the constantly changing climate.

While we are contemplating each impact of climate change, we often forget to recognise the hidden relationship among various impacts and their consolidated effect on the marginalized groups, both socially and economically. It is interesting that the impacts of climate change are neither the only, nor the primary challenge for the groups of urban poor, dwellers of informal settlements, homeless/street dwellers, people with disabilities, women, children, and the elderly, but compound the risks and challenges already
posed by urban areas which get further exaggerated by the virtue of inherent intersectionalities among these groups.

It is estimated that approximately 1 billion people currently live in informal settlements across the world (SDG goal Report, 2022). By definition, informal settlements are poor-quality houses or shacks built outside formal laws and regulations. Taking the examples from Delhi, notified slums, squatter settlements and unauthorized colonies are all typologies of informal settlements. Most informal settlements are poor-quality houses or shacks that lack piped water supply or adequate provision for sanitary services, drainage, and other basic services. Since land is so scarce in the major cities, most of the informal settlements are on vulnerable and dangerous sites like floodplains, and buffer space near landfill sites, along the railway line as inhabiting these often ensures lesser chances of eviction.

“Kalender Colony in the North Delhi Region is a typical example of any slum area in India. Located at the foothills of the Bhalswa Landfill site, the hand pumps which is the primary source of water for the community there, are drawing yellow colour contaminated water. With every passing day, even the contaminated groundwater from these pumps is seen to be receding. Residents are forced to bring drinking water in the form of 20 litre cans from neighbouring municipal connections. In addition, the vulnerable location of the slum by the Yamuna floodplains and in the watershed of the Bhalswa Lake, exposed the community to flash floods and waterlogging in every instance of rain. The congested semi-pucca houses of less than 15 sq.m. area house the fumes of the kitchen stove more than the households. The only respite in the summer heat, going up to 50 degrees, is the open Community spaces where one can experience the cool wind flowing through the narrow unpaved streets. The community, once renowned for their public performances, are now picking treasured items from the landfill site. The methane emissions and smoke from the constant fires in the landfill pollute the air to unbreathable level, but shifting from this place is not a consideration, since it is the only space they can call "Apna" in the dense city of Dilli.

Imagine these settings coupled with impacts of climate change, including decreased frequency but the increased intensity of rainfall, the annual occurrence of heat and cold waves, depleting groundwater sources and amplified vulnerability towards climate-induced disasters including floods, among others that are not quantified yet, is adding to the vulnerability of about 25,000 residence in this particular settlement to climate change. Informal settlements fall outside formal laws and regulations on land ownership, land use, and buildings. It has been observed that their Source: Author
illegality makes it difficult for government agencies to include them in climate change action plans. According to the UN Intergovernmental Panel on Climate Change (IPCC) risk-reducing infrastructure (paved roads, storm and surface drainage, piped water, etc.) and services relevant to resilience (including healthcare, emergency services, and rules of law) have not been extended to these informal settlements. Considering the projected rates and regions of urban population growth by 2050, along with increased frequencies of climate displacement, there is an urgent need to build resilience to climate change in these settlements and to do so at scale.

India is progressively working towards climate resilience. From the commitment to attain net zero carbon emissions in the four major cities joining the C40 cohort, it has been acting in a conscious way for a developing nation. Although climate policies are typically created at the state level or city level, when they are applied at the local level, they frequently fail to account for the complexity of the local areas. For instance, a planner can assume that flood plains would be empty, as per the EIA norms, but forget about squatter settlements, encroachment and informal occupants, making them more vulnerable to the impacts of climate change and induced disasters. Given their legal status, most governments do not collect data on informal settlements or their inhabitants, which affects the reach of emergency warning and response systems in these settlements. Taking the case of the recent COVID-19 pandemic, most of the cases were not reported in the slum areas, and neither recovery nor response systems specific to the health impacts of the disease were provided. Also, a large portion of the residents constitutes people with disabilities, the elderly, women and children, whose vulnerabilities are not compounded while calculating the resilience of the informal settlement’s population. Moreover, the inherent organic nature of these settlements makes them act as complex living organisms which can be better understood by the local players only.

It can therefore be concluded that traditional methods of risk assessment and infrastructure diagnosis, which are often based on inspections and supported by conventional monitoring and analytics, do not offer an integrated strategy for quick decision-making, particularly in the case of low-income settlements, especially when the issue at hand is climate change resilience, which requires informed and quick interventions. With adequate data at a disaggregated scale, digital technologies can become a promising tool to develop an infrastructure of enhanced resilience, by delivering efficient and reliable decision-making, in a proactive and/or reactive manner, prior to, during and after hazard occurrences. The available roadmaps, tools and emerging digital technologies, e.g. GIS, Point Clouds, Artificial Intelligence, and and
Building Information Modelling among others, can act as powerful means for more informed and precise decision making. Digital technologies including sophisticated assistive technology can be integrated into disaster management to develop community-based emergency warning systems. The usage of digital platforms like mobile applications and websites can help in the identification of nearby shelters, healthcare facilities, and food distribution points in case of floods, droughts and other disasters. Again, taking the example of the Covid-19 pandemic, sick people with disabilities, and the elderly faced difficulties in accessing the social services as well as healthcare provided by the city authorities. The use of digital technology like Google Plus codes, and GIS mapping can help collection of useful disaggregated data, to locate the most vulnerable in the informal settlement and provide services, assistance as well as priority evacuation. Vulnerability mapping through GIS can again help in the identification of the most susceptible areas and relocation drives could be proposed by the local authorities. While the emerging technologies have the potential to significantly reduce the uncertainties in all phases of infrastructure resilience evaluations, they are also avenues to build the capacities of the local communities. The creation of community WhatsApp groups can emerge as digital safety nets which can help disseminate information and give out early warnings as well as the endorsement of actions at the community level.

More out-of-the-box strategies could be developed with the development of technologies. The most important point remains that climate change is an unavoidable reality and resilience, in terms of both adaptation and mitigation measures, needs to be developed. While we are still in the process, it is imperative to be cognizant of the diversity existing in our societies, be considerate of the most vulnerable, acknowledge the existence of informal settlements, and develop inclusive climate resilience strategies for all to truly achieve the goal of leaving no one behind.

Note: The name of the person has been changed in order to protect the person’s privacy.

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Gender Pay Gap in the Informal Sector:
A View of Digital Economy

Toreiloi Ronglo  
Professional Intern, Shaping Youth Futures

Shubhika Tagore  
Professional Intern, C-CUBE

The Cambridge dictionary defines the gender pay gap as “the difference between the amounts of money paid to women and men often for doing the same work” (Cambridge Dictionary). For the purpose of this article “women” mainly refers to those women from low-income families whose source of livelihood are dependent on the informal economy. Volumes of studies have been dedicated to understanding the pay gap between men and women. Historically, because of various socio-economic and political reasons, women did not have as much access to skills as compared to men. It has in turn impacted their ability to contribute to the labour market leading to a steep pay gap. Although in recent times the pay gap has narrowed because of the improved socio-economic and political conditions, the changing nature of the job market with the introduction of digital technology has again left a gender-based skill gap. The Mobile Gender Gap Report 2020 shows that there is a 20% gap in
mobile ownership and internet usage between men and women in India, leading to an evident disparity between the genders (GSMA.2020). However, beyond the gender digital divide, the difference in pay persists for doing the same work for the same amount of time with the same amount of productivity. The Minimum Wages Act, 1948 safeguards the interest of all workers, especially women, by ensuring equal pay through a standardised minimum wage for all employees irrespective of their gender. However, it was followed by poor implementation and long intervals in the revision period (5 years)(Prof. Varkkey B, Mehta K (2015).

The gender pay gap tends to be higher in the informal sector where the flow of money is unregulated and unmonitored by the government. In 2021-22, close to 90% were in the informal economy (Economic Survey 2021-22) which leaves a big chunk of the Indian economy unregulated in the hands of an uncertain source of employment. Surviving this would be more challenging for marginalised gender who are already socially backward. In the urban areas, wage workers primarily engage in manufacturing, hotels, restaurants, construction, transport, storage, communications, and other non-agricultural works. Women in the informal sector mostly engage in jobs like tailoring, domestic help, street vendors or others whereas their participation in tech-related informal jobs like printing stores, cyber cafes, photo studios, etc is minuscule. According to the 2011 Census of India, out of the 74.64% of literacy rate, only 65.46% of females were literate against 82.14% of males (Census 2011.) As per the Periodic Labour Force Survey for the quarter of January- March 2022, out of 47.3% of the labour force, females accounted for only 20.4% of it (PLFS,2022). This indicates their position at the disadvantageous end of receiving higher education and building skills. The lack of equal opportunity for education, coupled with poor healthcare and regressive social norms leads to women falling behind men in terms of access to livelihood. The 'Human Capital Theory' formulated by Becker and Rosen proposes that there is a connection between the investment in human capital development and production capacity. Educational qualifications, health, and skills contribute to people’s ability to be productive employees. As women along with other marginalised gender groups do not have easy access to many of these opportunities in life, their ability to get employed is further reduced.

India has been ranked 140th out of 156 countries in Global Gender Gap Report 2021 conducted by the World Economic Forum (Gender Gap Report, 2021). It retrograded from 112th out of 149 countries in the year 2020. While gender discrimination is reflected in many forms and nuances, its practice in the pay gap is glaring and adversely impacts the socio-economic well-being of women. It poses barriers to their financial equality and autonomy and points to deeper and stronger roots of inequity and the social reluctance against women empowerment. To begin with, women have to juggle work and household management to maintain a stable livelihood, with less pay and almost zilch ownership. Even if their participation is encouraged, oftentimes, the motivation is far from empowerment. Women are instrumentalized into taking up the role of breadwinner without having any ownership over their earned resources. Hence, the challenge of a gender pay gap goes beyond capabilities. The lack of institutional support has extended into the digital world causing a gender digital divide. Digitisation has worked its way in financial transactions as well however, women still lack behind in terms of financial autonomy and digital inclusion. An example of this would be the practice of using digital payment wallets. It is often observed that the QR codes used in UPI payments in small shops run by women are linked to the bank account of the male in the household. In the growing digital economy, the rapid use of UPI payments barely benefits those without bank accounts. Generally, in the case of the households in the informal sector, a household has a single functioning bank account under the name or identification of “the male head” of the family. UPI payments are directly
transferred to that single bank account leaving women with limited to no rights over their yields, thus moving them to the margins of the economic sphere. The PM-JDY scheme by the government of India is an attempt at the financial inclusion of women by expanding affordable access to financial services such as bank accounts, pension schemes, credit societies etc. The scheme makes it plausible to open a bank account for free. However, while schemes like such are a step toward achieving the target of financial inclusion and digitally empowering women, there is a strong need for disaggregated data that provides the status of gender disparities in the informal sector.

Multiple news articles, research papers, and surveys have tried to examine this gender pay gap yet deriving definitive data still remains a challenge. Formalising a way to collect data is important in order to understand and draft a clear picture of the gender pay gap. Additionally, it is important to strengthen the existing laws on wage payments such as the Minimum Wages Act and the Equal Remuneration Act. A correlation analysis study on digital payment and the size of the informal economy showed that the two variables are inversely correlated (Digital Payments and the Global Informal Economy, VISA.) This means that the growth of digital payments can reduce the size of the informal sector. It also infers that technology can facilitate better ways of identifying gender pay gaps in the informal sector. The study showed that countries with large informal economies such as Nigeria and Bolivia currently function with low digital payment transactions per capita. Digitisation may further increase the scope of conducting pay audits in the informal sector to ensure equal pay. Collecting and analysing data in a systematic way is important in order to understand and draft a clear picture to bridge the formal-informal divide. The gender pay gap is a structural issue and thus it needs structural solutions.

Note: The name of the person has been changed in order to protect the person’s privacy.

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In India, street food is extremely popular. It is estimated that nearly 50% of vendors sell cooked food affordable to many, and over 30% of them sell fresh fruits and vegetables catering to over one-third of the demand of urban India. However, the onset of the COVID-19 pandemic has taken a heavy toll on these street vendors. Strict lockdowns and social distancing norms meant that people stopped dining out. In India, the economic consequences have been especially hard on small business owners. When the pandemic hit India, the country was put under lockdown and without a social safety net, small companies and daily wage people were left in uncertainty, resulting in a huge exodus from big cities to rural heartlands.

**Digital Journey of “Baba ka Dhaba”**
A story that took the internet by storm, Baba and his wife Ms. Devi, who started Baba ka Dhaba in 1990 is an example of the opportunities the digital space can provide livelihood opportunities to even the most marginalised. Baba’s dhaba offered fresh, homemade meals of parathas; flaky buttered bread with a side of sauce, rice, and dal, a thick lentil soup. A dinner there would normally cost less than 50 rupees. They could
make ends meet all these years, but the pandemic was terrible. With the observance of COVID-19 protocols, there were no customers to serve. Baba added that on some days, they did not prepare dinner for themselves since they would have to take the unsold food back home. Two years ago, after the video of the proprietor of the "Baba Ka Dhaba" restaurant discussing the loss of business brought on by the epidemic went viral, hundreds of people lined up outside the restaurant in South Delhi. The owner also received kind donations from all over the nation. When blogger Gaurav Wasan posted the video of baba and his wife’s struggles online, everything changed for them overnight. A continuous stream of customers has been coming into the stall ever since the video went viral. Among those who have assisted are cricketer R. Ashwin and Bollywood actress Sonam Kapoor. Zomato also tweeted that Baba ka Dhaba was now listed on their app, and they invited people to notify them of any other struggling food stalls so they could assist them.

However, just like Baba, many street vendors lost their livelihood. Bhagwan Devi, an 80 year old widow has been running the food stall for the past 15 years selling a thali of roti, dal, vegetables, and rice for just Rs 20. Another vendor, ‘Rotiwali Amma’ too saw a sharp decline in her business as footfall became scarce in the wake of the Coronavirus pandemic. It is to be noted that the case of baba is a unique case study that went viral, for street vendors to be sustainably uplifted, they would need to be included in the mainstream economy along with enhancing their capacity to adapt to the changing trends of the market.

In India, digitisation is no longer a luxury that exists as an add-on feature to functions such as banking, shopping, and travel. It has now permeated practically every aspect of society, transforming corporations and governments into a new way of life. Whether it’s paying a vegetable vendor via a United Payment Interface (UPI) or filing taxes online, New India is rapidly embracing a digital lifestyle. Over 45 per cent of the country’s population is now online. This means that more than half of the country’s 1.3 billion people are online, have easy access to internet services and receive high-quality services. This massive digital onboarding has naturally raised the emphasis on doing business online, emphasizing the significance of digital literacy in New India’s digital financial inclusion.

In the same regard, online food delivery has now become a popular medium for foodies across different age and socioeconomic categories, especially in the lockdown. While the attempt to induct street food vendors was not so successful back in back in 2015-16 due to their resistance in adopting technology, crisis like the COVID-19 has enabled street vendors to onboard the digitisation trend through platforms like Swiggy, Zomato, BlinkIt, Zepto etc. providing boost to their economy. This large-scale adaptation by the street vendors would provide a better opportunity to serve their loyal customers in the safety of their own homes. They are able to reach a much larger customer base using their ICT technology and last-mile delivery services. But most importantly, the use of digital transactions will help these vendors to have better access to formal banking channels and create behavioural change towards adapting newer methods of innovations and technologies.

References

Auto-Rickshaws of Kolkata - A Para-Transit Network or an Accessible means of Mobility for Marginalised Groups?

Taha Mama

Intern, ITCN Capacity Building Programme

Growing up in Kolkata, Google maps would often fail me, a cha-wala (tea seller) would then come to my rescue, directing me to the closest auto rickshaw stand. A sense of familiarity would set in, and from there on, a CNG burning caravan would direct me home. Sitting in auto-rickshaws back home from school sowed the seeds for my interest in the ways people commute through a city. I wondered why one should even invest in an elaborate GPS when an intricate network of navigation is already woven into the fabric of urban life.

Perhaps, this notion is far too romantic, and I am just terrible at reading a map. However, I seek to unpack the auto-rickshaws of Kolkata in order to make a case for them as an accessible means for mobility rather than a declining paratransit system, specifically for users that have been pushed to the margins during transport planning. This decline has been driven by the digital divide, amplified owing to the COVID-19 pandemic restrictions, causing a drop in the use of autos in favour of app-based on-demand transit services such as Uber and Ola. Let’s have a look at how the digital realm could add value to the existing transport system to make it more accessible for all.

So, what is a Paratransit system? Paratransit, (‘para’ translates to ‘alongside of’) is the name given to all forms of modes of transport that operate on schedules determined by the demands of individual passengers (Lave and Mathias 2009). The fare then varies too. These work ‘alongside of’ Mass Rapid Transit Systems which carry large numbers of people on set routes and fixed rates in a city. These two, along with various other subsystems make up a Public Transport System for an urban area (Kharola 2013). Now, the autorickshaw network in Kolkata slips through this framework, hence can be referred to as Intermediate Public Transport. A more bottom-up network sprouted to meet the dynamic demands of urban residents (Gadapalli 2016).
Now, autorickshaws in most other cities do not travel fixed routes, they operate simply as paratransit, as cabs charging by the meter. While the jury is not out on the specifics, when autorickshaws first appeared in Kolkata around 1981, they too were metered, charging a minimum of 20 paisa. Soon after, unions were formed, routes were allotted, and prices were fixed. Autorickshaws are still very easy on the pocket, operating on a sharing basis. In my 4.5 kilometre journey from school to home, it would take me ₹8, by the time I finished school in 2019 it was increased to ₹10. Even today, in less than ₹50 you can end up halfway across Kolkata.

Here I should mention that Kolkata allowed for other modes of paratransit. For instance, growing up, the term rickshaw would evoke a different mental image of a two-toned three-wheeler. A rickshaw referred to a muscular man (ripped, to use the parlance of our times) pulling a two-wheeled cart. The hand-pulled rickshaw was very much paratransit. Now, by the time I could set foot in a gym, my inspirations were long gone from the streets. They were replaced by the cycle-rickshaws and their obnoxious horn, while the term ‘rickshaw’ was reserved for the unique mode of mobility of Kolkata. For the sake of this piece, I’ll refer to them as autos.

Coming back to the claim made earlier, autorickshaws do not fit a usual framework of definition, they differ by the virtue of their design and their mode of functioning; but are they accessible? I make this case by comparing accessibility with mobility.

Mobility is how far you can go while accessibility is how much you can get to in that time (Lokre 2020). Lokre further argues for travel to not only be able to cover ground but also to get us to the things we want to do. To get us to our jobs, our friends and families, recreation, and daily needs. While the focus of mobility is to get from point A to B in the shortest possible time, accessibility, on the other hand, focuses on how many places could be reached in that time. This distinction, for

Lokre, is at the heart of sustainable planning principles, with a mobility-focused approach leading to cities with dispersed land uses and a need to travel long distances, while an accessibility-focused one gives us cities with mixed land uses and most needs within short distances. Additionally, it allows for activities such as walking and cycling. Here I would extend Lokre’s definition which is more place or activity focused to a more people-focused one. Accessibility then is not about how many places reached, but the number of people transported by that journey. This not only refers to numbers in a quantitative sense but a qualitative one, where a diverse set of groups cutting across socio-economic hierarchies and different abilities can utilise a service. Most importantly, can we include those groups that are often left out of such planning decisions?

The target group then becomes children travelling to and from school (a group missed out by the Indian Road Congress Guidelines), women who work as domestic help while being caregivers themselves as well as daily-wage labourers travelling from the outskirts of the city.

Primarily, the interests of these groups are protected in the autorickshaw set-up since they are affordable. Second, it is not a new system and would take minimum time to adapt to – both by its users and the city. Third, since auto is a small vehicle its routes can go right up to the entrances of schools, residence complexes or industrial areas, acting truly as a ‘last-mile’ service. Additionally, one seat for a person can be reserved in an auto.

Now, individuals from all these groups are availing these services however, since the onset of the COVID-19 pandemic auto-rickshaws have been on a decline. Hesitancies to use shared transport crept in owing to social distancing norms. Now auto routes do not even find their way to the directions provided by Google Maps; a service most folks with a phone will have at their fingertips. A means of mobility relying largely on human communication clubbed with the inflow of app-
based on-demand transport services such as Uber and Ola are seeing a driver that made ₹1000 per day is now struggling to gather ₹400 for a day’s work (ANI 2020). People tend to use a facility if it is convenient to them and can be relied upon consistently. Certain digitisation of the autorickshaw network could prove to be what is lacking. Say, the routes are mapped, colour coded, and the schedules and seats made readily available. While multiple factors could be attributed to their decline, a few packaging tweaks could make the system more attractive. But attractive to whom? Not only for its users but the autorickshaw drivers themselves. A more streamlined system with a more consistent income could attract more people for the job or ensure that the ones who are in it stay.

There is no shying away from the glaring limitations of the autos. Most of the drivers are male and have a reputation for their rowdiness. Safety, especially when women and children are concerned, is a huge challenge to tackle. Additionally, autos are unsuitable during adverse weather conditions and cannot be used for long distances due to their speed limitations.

My account on the autos is in no manner a means that replaces other mass transit systems, but rather explores the potential of an already existing network without being lassoed by terminologies. Call it a paratransit or an intermediate public transport, it must operate along with all the other modes of mobility; each tweaked a little for a respective group, so that at the end the transport system is accessible for all. I do not propose the autorickshaw as an answer to urban transport issues but seek for its integration in the larger network, for it is one that already exists in the city. Again, I do not claim for this model to be scalable but perhaps the approach replicable. The realpolitik of this integration is again far from being straightforward. It would require negotiations with the labour unions, agreements of auto drivers themselves to make these changes and then large-scale public surveys to gauge the number of users this system would attract, prior to an investment.

From that little kid in his school uniform imagining autos as the saviour to writing this piece, I may have taken too many liberties. Bengal then might as well end up with yet another poem critiquing the urban realm than a proposed design solution for it.

References

1 (across): Bunkars of central India
2 (across): Festival named after a bird
3 (across): India's first UNESCO World Heritage City
4 (down): Heritage rail in the blue mountains
5 (down): The melting kababs from the 'Land of Nawabs'
6 (down): Paintings from the Honey Forests
7 (down): The classical dance form of travelling bards and news-mongers
8 (across): The traditional art of Tie-N-Dye
9 (down): The link between Miami and Mumbai
10 (across): The capital of the medieval-era Victory City

ANSWERS