

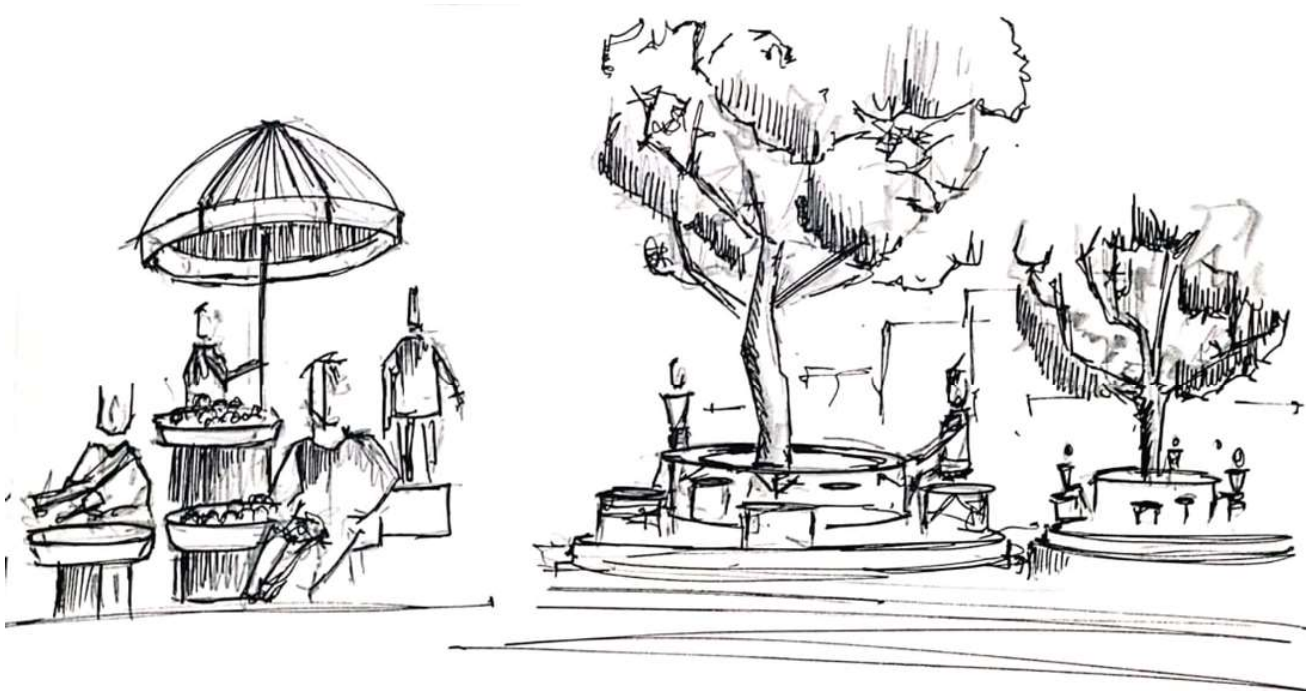
Cities of the Future

Learnings from COVID-19 Pandemic



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ACRONYMS LIST

ACD - Aesthetic Community Design

BOG – Board of Governors

CEO – Chief Executive Officer

DHA – Defense Housing Authority

DMC – District Municipal Corporation

EDR – Eduljee Dinshaw Road

EDRPT - Eduljee Dinshaw Road Project Trustee

GAD – Generalized Anxiety Disorder

GDP – Gross Domestic Product

HBW – Home Based Workers

IAP – Institute of Architects Pakistan

ICTA – Islamabad Capital Territory Administration

IVSAA – Indus Valley School of Art & Architecture

JICA – Japan International Cooperation Agency

KDA – Karachi Development Authority

KMC – Karachi Metropolitan Corporation

KNIP - Karachi Neighborhood Improvement Project

NED – Nadirshaw Eduljee Dinshaw

NGO – Non Governmental Organization

NIPS – National Institute of Population Studies

NMT – Non Motorized Transport

PDHS – Pakistan Demographic and Health Survey

PPP – Public Private Partnership

SBCA – Sindh Building Control Authority

SOPs – Standard Operating Procedures

SUMP – Sustainable Urban Mobility Planning

TOD – Transit Oriented Development

UN – United Nations

USD – United States Dollars

WHO – World Health Organization

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INTRODUCTION

Our urban spaces stand at the cusp of an uncertain future. In the wake of COVID 19, will there be a transition to a new understanding of urban spaces, lifestyles and societal makeup or will we revert to the pre-pandemic routines and spatial constructs? To what extent will the change happen or can happen is unclear for now; however, there is a growing consensus amongst urban thinkers and practitioners that the ravages brought about by the COVID-19 pandemic will reconfigure urban landscapes – for good or bad? Or both? The jury is still out on that.

Globally, particularly within cities in the western sphere, emerging trends and practices are being documented and future forecasting on the contours of the ‘post-pandemic city’ has begun, so that the policies, designs and practices can be calibrated in good time to effectively adjust to the change. Such a discourse, unfortunately, has not found much space within Pakistan’s planning, development, and policy-making spheres. Therefore, through this *Study*, an effort has been made to start a dialogue on where we stand in this ongoing debate – how our cities are being impacted, and how best we can leverage opportunities to come out of the pandemic with a vision and plans to make our cities more liveable, more equitable.

The *Study* first highlights how these on-going debates were already being advocated for under the framework of green and sustainable cities. This context-setting is followed by a discussion on learnings and emerging international practices for the future of cities during the pandemic phase. By framing the study in the city of Karachi, this *Study* profiles Karachi’s urban livability challenges, which is supported with the views of noted professionals. Gendered implications of COVID-19 and issues faced by women in terms of mobility, access to recreational spaces, livelihood, health and associated challenges are also examined with reference to primary research synthesized with secondary data available. Lastly, documented are some conversations with noted architects, planners and urban design experts on evolving public space and urban settlement that may be leveraged to plan for a better Karachi. By listing key pandemic COVID-19 learnings on a global scale with local implications, the *Study* concludes by identifying policy-based recommendations and associated stakeholders for:

- (1) Public Spaces
- (2) Urban Mobility
- (3) Housing.

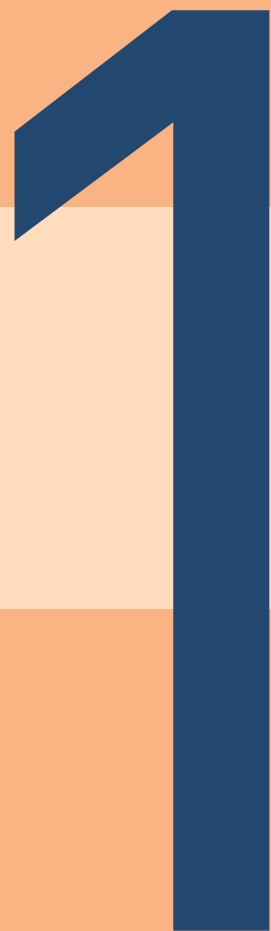
It is expected that this contribution will help in initiating an informed dialogue, in better understanding learnings from the pandemic and in translating lessons learnt in policy-based recommendations for urban reforms having a holistic footprint.

Farhan Anwar & Hiba Shoaib
December 2020

COVID-19 PANDEMIC

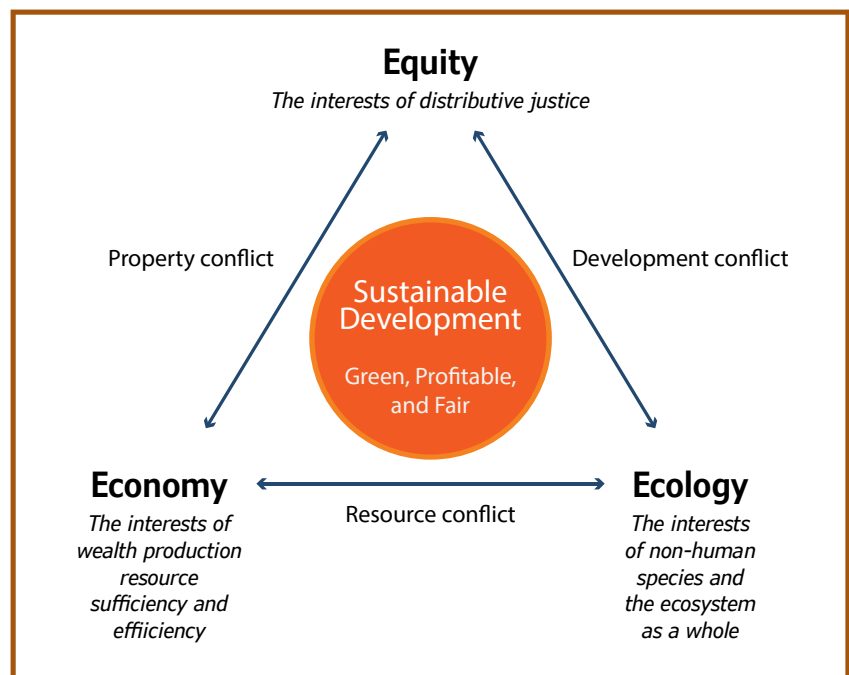
– Learning and emerging practices for the future of cities

*Within the context of the existing narrative of Sustainable City, this **Section** documents on-going debates and learning in the pandemic phase as they relate with the re-envisioning and reshaping of urban spaces, mobility and housing within the context of extremely critical aspects of urban equity and social justice. Profiled also are specific learnings from some global cities that have already experimented with innovative policies, designs and practices*



In the wake of the COVID-19 pandemic, a heated debate has been generated about the future of cities because cities are where the worst-case scenarios have been played out in terms of the number of cases and associated fatalities. Is the way large concentrations of human settlements live, access public spaces, opt for particular modes of mobility, contributing to the rapid and wide scale spread of the pandemic? Should we redefine the design of cities (housing, public spaces, and mobility modes) in the pandemic phase and can such reconfiguration find a lasting footprint even in the post pandemic phase? These are some of the questions that are being raised and debated by planners, architects, health experts and policy makers worldwide.

While there is no conclusive data to show that 'dense' living patterns have contributed to enhanced spread – as countries like Hong Kong, Singapore, Thailand that have extremely high population density levels have actually done much better in tackling the pandemic spread than much less densely populated cities - there still is a growing demand for 'greener', more 'open' residential and commercial structures to be built in times to come. Open spaces are being preferred more as compared to indoor spaces in terms of higher levels of safety and also as spaces that help reduce stress and anxiety



Source: The E's of Sustainable Development (Moore, 2007)

levels. Innovative public space design interventions are being made where in many cases 'indoor activities' and 'businesses' are finding a space outdoors. Non-motorized transport (NMT) options are much favoured as increased levels of walkability and bicycle use has been documented. Temporary 'pop-up' architecture is being produced to facilitate such mobility as well as long-term planning and projects are initiated being to make cities friendlier to non-motorized forms of human mobility.

However, what needs to be realized is that these are not 'new' ideas! This narrative already existed and was being worked upon within the construct of a 'green', 'smart' and 'inclusive' city framework. Over the years, urban planners have paid specific attention towards making cities more accessible and diverse through planning and investment on public spaces. The concept of 'sticky streets', first coined by urban planner Brent Toderian, has been extensively worked on as a way for cities to attract and serve all kinds of audiences in order to collaborate and create a healthy urban life. It was first developed as a counter argument to the notion that the purpose of a good street was to only facilitate vehicles.

A debate around 'sustainable development' had been going on since the 1972 Stockholm meet where world leaders first met under the umbrella of the United Nations (UN) to ponder over the need to balance 'development' with the needs of resource conservation and environmental protection. This debate, however, has gained a high level of urgency with the growing understanding that climate change is posing an existential threat to the humankind. Cities are where the vast majority of human populace is located and where most of the human activities contributing towards the greenhouse gas load are also placed.

Pandemics have always reshaped cities

Victoria Embankment, which runs for a mile and a quarter along the River Thames, is many people's idea of quintessential London. Some of the earliest postcards sent in Britain depicted its broad promenades and resplendent gardens. The Metropolitan Board of Works, which oversaw its construction, hailed it as an "appropriately civilized, cityscape for a prosperous commercial society". But the embankment, now hardwired into our urban consciousness, is entirely the product of a pandemic. Without a series of devastating global cholera outbreaks in the 19th century – including one in London in the early 1850s that claimed more than 10,000 lives – the need for a new, modern sewerage system may never have been identified. Joseph Bazalgette's remarkable feat of civil engineering, which was designed to carry waste water safely downriver and away from drinking supplies, would never have materialized.

Source: Cities after coronavirus: how Covid-19 could radically alter urban life, Jack Shenker, The Guardian, 26 March 2020

An outbreak of yellow fever in Philadelphia in 1793 prompted administrators to take over the task of cleaning streets, clearing gutters and collecting rubbish. It worked, and governments across the US adopted the responsibility over the next decades. A misconception that the odor emanating from wastewater was responsible for diseases such as cholera prompted one of the world's first modern underground sewer systems in London, and the development of wider, straighter and paved roads – which helped prevent water from stagnating

Source: Cities after coronavirus: how Covid-19 could radically alter urban life, Jack Shenker, The Guardian, 26 March 2020

Thus, comes out the emerging models of a 'Sustainable City'. Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. In the late 2019, as a result of COVID-19 pandemic, cities started to lose their aforementioned purpose. As countries around the world went under lockdowns, cities also shifted their purpose of offering collaboration and co-creation in a buzzy environment to being completely devoid of any human interaction.

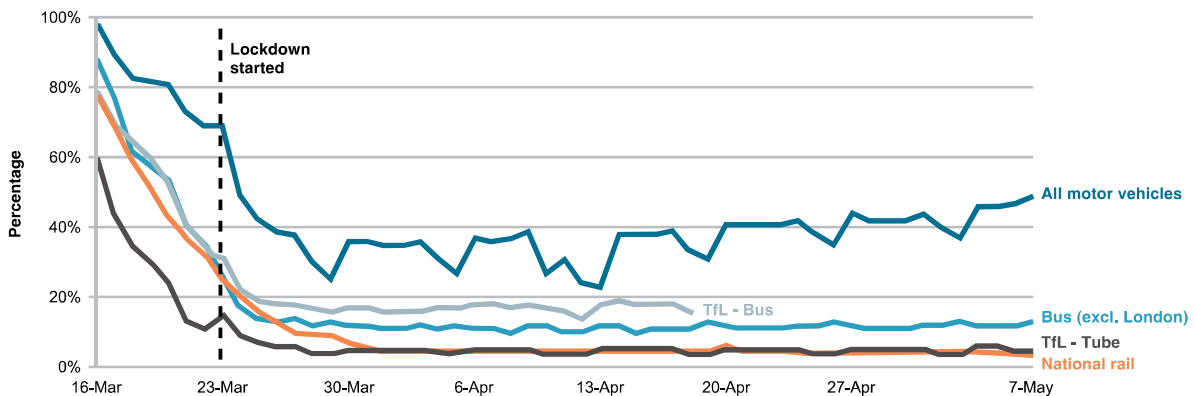
Harrowing images of empty cities took over the Internet. Contrary to the popular belief, the year 2020 is not unprecedented, especially for cities. City planning has been tested with health and wellness challenges in the past, whereby cities have adjusted to become better and more resilient spaces. Cholera outbreak in London in 1850, for example, led to the development of the modern sewage system, which carries waste water safely away from our drinking supplies. Such epidemics have led to major reforms in the design of the city, including access to tap water, indoor toilets, and windows for open air circulation.

The case is not any different today.

Among other implications, the spread of COVID-19 is highlighting certain aspects of urban life that may be facilitating greater spread. Ongoing is a critical rethink on urban design and development where planners are envisioning innovations in, for example, public space design, urban mobility and urban housing to make cities safer both now and in the post-pandemic phase. There is also a serious concern that certain takeaways from the pandemic may result in making cities less inclusive and more segregated. However, most agree that going forward cities may never be the same again, with significant adjustments happening in urban design and functions.

Transport use change (Great Britain)

Transport use is down by at least half for all transport types since February. Motor vehicle usage has increased over the week to date. Use of Tube and National Rail services has remained at around 5% of normal levels.



Source: Department for Transport. Bus (exc London), TfL tube and Bus data has been adjusted to compare against typical usage for the Easter break, whereas motor vehicles and national rail have not. Data on TfL Buses is not available from Sunday 19th April due to the change in boarding policy. DfT revised the previous week's National Rail usage data on 8-May.

Green building design narrative gets a boost from the pandemic experience

We need to remember how to design higher-density housing better. I say “remember” because we have historic buildings done in the context of previous pandemics that illustrate a lot about how we should be designing new buildings. The good news is that many of the building design improvements that will help with greener performance will also help make buildings safer from viruses. It can include things like more space in hallways, which are essentially the sidewalks of buildings; better and wider staircases; more space and opportunities for natural elements inside and even on the skin of buildings; natural ventilation for better airflow; more usable amenities like personal balconies and shared courtyards. Buildings with well-designed courtyards have been a real benefit for people during this pandemic, but we have allowed them to become rare. And here’s a big one: space that’s actually useful for working from home. I anticipate that’s going to be one of the lasting legacies of this pandemic, and the spaces we’ve been designing for working from home are almost as bad as our balconies.

Urbanist Brent Toderian, previously the chief planner for Vancouver, British Columbia, now a consultant and speaker - Source: How to make a city livable during lockdown -From wider sidewalks to better balconies: tips from a long-time urbanist - By David Roberts Updated Apr 22, 2020, 8:12am EDT

Paris

Under Paris En Commun strategy, the mayor of Paris, Anne Hidalgo is aiming to achieve a '15-minute city'. In her plan, as part of the re-design, all residents in Paris will only be at a distance of 15 minutes (either by car/train/bicycle/foot) from all daily and leisure activities in the city (Fig). As part of the 15-minute city plan, Paris is moving towards car free transit, dedicated bike lanes and promotion of pedestrian infrastructure. The plan is packaged as a 'pandemic economic recovery tool'. Its main premise is to bring activities to the people and not people to the activities, which will further help in improving the diversity and lowering the unbalanced distribution of facilities among districts.



Figure: Paris en Commun's 15-min city concept. From the top, clockwise, the headings read: Learn, Work, Share and Re-Use, Get Supplies, Take the Air, Self-Develop and Connect, Look After Yourself, Get Around, Spend, and Eat Well.

By allowing people to fetch a life essential within each neighborhood via a reduced radius, this strategy carefully aims to carve an integrated urban life where basic essentials like workplace, school buildings, health centers, leisure places, parks, shopping malls are all integrated and in close proximity to each other. As Hidalgo adviser Moreno states "there are six things that make an urbanite happy: dwelling in dignity, working in proper conditions, [being able to gain] provisions, well-being, education and leisure. To improve quality of life, you need to reduce the access radius for these functions".

The city mayor hopes that the project would lead to an equitable access to jobs and city service, and it is also hoped that every citizen would be able to access a doctor for timely check-up in 15 minutes. Under this model, not only more space would be dedicated to bikers and pedestrians, but the public spaces will be used for different and dynamic purposes. For example, day-time school grounds could be used as night-time sports facilities or several other functions outlets like mini-book or grocery stores. An urban bike network will also be built to connect the city center with the suburbs – this feature was already under discussion before COVID-19, however, now the design of this network has been accelerated and has been proposed as an emergency measure.

Debates on the urban densification and pandemic interface

One critical debate is on whether increased densification is contributing to faster spread of the virus or not. While there is no definitive evidence as yet to support or negate the either view, there is nevertheless a growing acknowledgement that design considerations for vertical growth and densification need review. In the sustainable cities discourse, vertical growth leading to compact cities has been promoted and urban sprawl discouraged. There is a significant field of thought that insists that 'vertical growth and densification' per se is not the problem, provided higher density housing and neighborhoods are designed and managed better. Learning is that more use of personal balconies, merging of vernacular and modern architecture should be considered that focuses on



provisioning spaces with more natural air and light, higher ceilings and wider staircases - more breathing spaces and nature, wider sidewalks. However, a counter narrative is also building. An interesting discussion relates with what is being termed as the 'declining cost of distance'. Digital giants like Facebook have already indicated that even in the post-pandemic phase a large percentage of their staff may be required to work from homes. This trend may gain momentum, particularly for information technology related entities. Other than employment - education and healthcare are two other sectors that can similarly be affected.

Source: Holland, O. (2020). *Our Cities May Never Look the Same Again After the Pandemic*. CNN. Retrieved from, <https://edition.cnn.com/style/article/cities-design-coronavirus/index.html>

Generally, more use of digital forums can also facilitate this reconsideration of the housing, employment and services construct. So, would this 'declining cost of distance' lead to more spread-out sprawling cities as people move from inner cities to the peripheral fringes without the associated cost impacts?

Future of public spaces and urban mobility

With two-third of global population expected to be living in cities by 2050, it is imperative for cities to be designed for good health. Urban planners are unaware of what our cities may look like post-pandemic, however, it provides us with an opportunity to rethink city designs, and avoid any future pandemics. The new unit to design cities and public parks and spaces is 6ft distance. Speculative designs, in respect to COVID-19, are based on encapsulating cohesion while maintaining physical distancing.

Adjustments are already being seen in urban mobility and public space design. There is a shift to more sustainable non-motorized modes of transit like walking and cycling. Milan has started work on building 22 miles of new cycle lanes and permanent widened sidewalks. Paris has set up more than 400 miles of 'pop-up' bike lanes. Multiple local governments, along with urban planners, have started adopting to the 'new normal'.

Milan

As part of 'Phase 2', the city of Milan proposed the adaptation strategy- Milano 2020 – that proposes a radical change in the lifestyles and in the city organization due to limitations imposed by the pandemic. Besides imposing immediate actions to address the COVID-19 crisis, this adaption plan aims to take a new direction of normalcy and, with the hope of minimizing the current inequities in the community, hopes to preserve the positive parts of this developmental model even after the crisis is over as suggested by Marco Granelli, the deputy mayor of Milan, in the following words "Of course, we want to reopen the economy, but we think we should do it on a different basis from before."

Since 55% of the city population used public transport before the virus, it was difficult for Milan – like other European cities – to provide enough space for private vehicles. Therefore, the strategy involved dynamic planning that re-evaluated timelines, schedule and rhythms of the city to better distribute the demand of the mobility throughout the day. Some of the features are listed below.

- Adapting the 'Time and Hours Plan' to a different schedule for public services - especially for social and educational services - and productive activities in order to avoid overlaps in entry and exit times, regulate the demand for mobility and facilitate physical distancing, identifying timeslots reserved for the most vulnerable groups
- Limiting the number of people using public buses, subways, and reducing crowds at bus stops and train stations by identifying solutions that allow for safety distancing and for the use of safety and security devices
- Promoting walking to lighten the burden on local public transport and promote active mobility. Clearing sidewalks of parked cars, implementing 30 km/h zones, developing residential roads and developing tactical urban planning projects
- Increasing short-term parking spaces for delivery of essential goods, for healthcare and emergency services
- Expanding public spaces to supplement the parks, creating temporary pedestrian areas in neighborhoods lacking green areas to allow children to play and exercise (Play Streets)
- Encouraging local bars and restaurants to create outdoor seating areas in order to compensate for a loss in indoor seating capacity due to distancing requirements
- Encouraging the use of public outdoor space to host cultural and sporting events by making said spaces more easily available
- Expanding hours of operations and decreasing the need for physical offices for both public and private services by promoting the development and use of online services
- Updating mobility restrictions (Congestion charge zones, low emission zones, restricted traffic zones, parking regulations) by encouraging traffic at off-peak times and guaranteeing compliance with mandatory environmental requirements
- Taking a decisive leap towards the use of bicycles and scooters, extending the cycle network and promoting shared mobility solutions

Sources: Milan 2020 , Adaptation Strategy, Commune di Milano, Retrieved from, <https://www.comune.milano.it/documents/20126/7117896/Milano+2020.+Adaptation+strategy.pdf/d11a0983-6ce5-5385-d173-efcc28b45413?t=1589366192908>;

Laker, L (2020) "Milan announces ambitious scheme to reduce car use after lockdown". Guardian. Retrieved from, <https://www.theguardian.com/world/2020/apr/21/milan-seeks-to-prevent-post-crisis-return-of-traffic-pollution>

In order to mitigate any chances for the spread of the virus, cities are going car free, while investing on pedestrian infrastructure and bicycle culture. The street spaces for London are being divided into three categories: pop-up bike lanes, widened footpaths, and low traffic neighborhoods. Bogota, Columbia, has opened 47 miles of temporary bike lanes, and Vancouver and other cities are creating small pockets of neighborhoods within cities where you're always near (15-20 minutes by foot or bike) to all amenities you may require in your daily life. The growing bicycle culture aims at reducing congestion in public buses and trains, reduce traffic in an effort to maintain social distance, and also promote local economy, as people on bikes are more likely to stop, interact, and shop at local stores and vendors. Making cities bicycle friendly is an effort in the right direction, however, it is unclear if the change will be sustainable in the long run.

Public transit has a question mark on it for now and while it will not go away, it is foreseen that more enabling urban design for walking and cycling will reduce load on public transport and, in the future, we may have more frequent and lesser carrying capacity public transport with more space for safe distancing.

The new normal!

- Increase in frequency and number of public buses and trains. Each transit option should continue to carry comparatively fewer passengers with mandated gaps between seats
- Mandate for a lower speed limit in order to keep roads safe for pedestrians and cyclists
- 15 minutes neighborhoods
- Increase width of sidewalks
- Socially distant outdoor meeting stops / restaurants
- Incorporating design for natural ventilation for better airflow
- Increase in use of automatic doors
- Replacing sidewalk buttons with sensors and 'placebo buttons' to discourage unnecessary physical contact
- Brightly colored ground markings to encourage distancing
- Placement of glass barriers between benches and bus stops to assure a safe distance
- Sanitation stations in streets markets and movable walls
- Grid designs for tiny markets, each selling specific items with limited customers allowed at one time

Issues of urban inequity and social justice

When the pandemic began, there was a general belief that it was a great 'equalizer' – that all irrespective of gender, color, race or class were equally impacted. However, very soon, it emerged that the more marginalized, poor and the disadvantaged were much more drastically impacted in terms of both their exposure and capacity to respond to the impacts. Ian Goldin, Professor of Globalization and Development and director of Oxford Martin Programme on Technological and Economic Change, and Robert Muggah, Founder of The Sec Dev Group and Igarapé Institute, write that "no city has escaped the deadly spread of COVID-19. But the virus has had a profoundly uneven impact on different groups of people, even within the same city. When New York City was



Source: Holland, O. (2020). Our Cities May Never Look the Same Again After the Pandemic. CNN. Retrieved from, <https://edition.cnn.com/style/article/cities-design-coronavirus/index.html>

the global epicenter of the pandemic, downtown Manhattan had an infection rate of roughly 925 per 100,000, compared to 4,125 per 100,000 in Queens. The reason for this gap is straightforward: New York's wealthiest residents could access a wide range of health services and work remotely in spacious multi-story buildings".¹

They go on to say that "around the world, it is not so much densely populated cities as overcrowded, marginalized neighborhoods that are struggling to contain the spread of COVID-19. Socio-economic factors, not physical geography, are a key of contagion risk, particularly in the built-up areas of developing countries. For example, it is estimated that over half of Mumbai's seven million slum-dwellers already have COVID-19. And in South Africa, where five million households do not have a refrigerator, barely 46% have access to a flush toilet in their homes and one-third share toilets with other families – it is not surprising that new infections soared despite drastic lockdown measures. The COVID-19 pandemic is especially for urbanites in the informal economy, where most jobs are low-paid and cannot be performed remotely.

Whereas 47% of college graduates could work remotely in the United States in July, only 4% of those without a high school diploma were able to do so. While this dynamic certainly hurts the urban poor in cities like New York, it is even more debilitating for those in, say, Dhaka, where over 80% of workers depend on the informal sector – the development organization BRAC reports that 62% of all daily wage income essentially disappeared in June".²

¹ Coronavirus hasn't killed the city. Here's why, Ian Goldin, Professor of Globalization and Development; Director, Oxford Martin Programme on Technological and Economic Change, University of Oxford and Robert Muggah, Founder, The Sec Dev Group and Igarapé Institute - World Economic Forum – COVID Action Platform – Published in collaboration with Project Syndicate

² Ibid

Learning from cities responses to COVID-19

1. Placemaking:

Bringing People Together but Keeping Them Apart

Today, Covid-19 is challenging urbanization again, re-opening the **debate regarding which city model is preferable**: urban sprawl or urban densification. While densely populated and hyper-connected cities are more efficient and sustainable, they can amplify pandemic risk of transmission. Thus, **cities –especially densely populated ones– will need to create and adapt public environments and infrastructures to be livable, safe, agile and adaptable**. Hence, **tactical urbanism** –short-term, low-cost, and scalable interventions– can play a big role in shaping and implementing pilot projects. Likewise, community involvement is essential as it allows for the acquisition of local knowledge while ensuring public compliance with policy decisions

2. Adapting Urban Environments to New Necessities

Due to the Covid-19 pandemic, both **urban facilities —public transport, leisure, shops, etc. — and public spaces will have to adapt** so all preventive measures are fulfilled. **Indoors, regulations will be more rigorous**: cleaning and disinfection will be done with higher frequency, new measures such as hand sanitizers use or shoe sole cleaning will be implemented, and their capacity will need to be reduced to comply with physical distancing. Additionally, **protective equipment** —masks, gloves, screens, sensors, etc. — and **access control** methods will be installed to avoid any risk of transmission and infection

3. Adjusting Everyday Life to the “New Normal”

The pandemic affected almost every aspect of people's life, and at the moment, **going back to old habits does not seem a possible scenario**. So, what will the “new normality” look like? **Local and international mobility will be monitored and controlled**, while **cities** are already trying to reorganize flows, reschedule working and school activities to avoid concentrations during rush hour. We will have to get used to new routines and social behaviors, which could radically change our way to use the public space. The psychological effects of stay-at-home policies and physical distancing will be strong, especially in those cultures where gatherings and open-air activities are at the core of social life. Everything considered normal until a few months ago could dramatically change, not only because of the new rules and restrictions, but also because of people's fear to physically interact with others

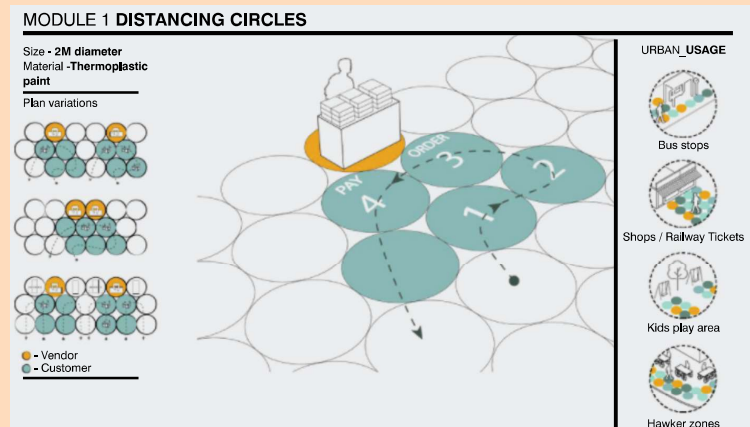
Source: Urban Solutions: Learning from Cities' Responses to COVID-19 - UNESCO Cities Platform Online Meeting

Mumbai

Focused on the spatial futures, the Bandra Collective (six architecture firms) decided to transform the Bandra town of Mumbai in the wake of the pandemic, and proposed six modules of short-term post-lockdown initiatives. Regarded as easy, economical, scalable and modular design interventions, these strategies can help in maintaining distance and safety especially in crowded markets.

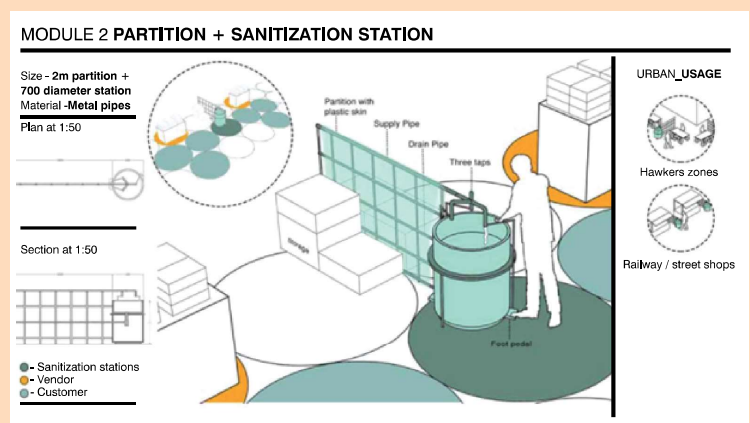
1. Circles

a 2-meter-wide circle keeps people apart in public spaces, and the color of each circle helps pedestrians and vendors locate themselves, thereby leading to a pattern of distanced circulation



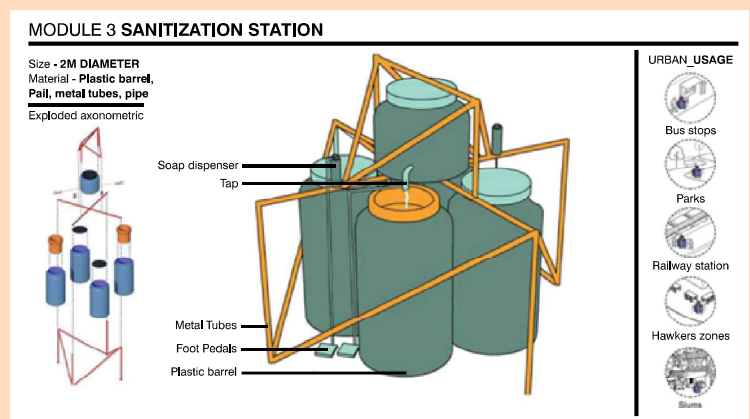
1. Partition & Sanitization Station

creates divisions between shops and vendors while providing the necessary water supply and disallowing the spread of germs



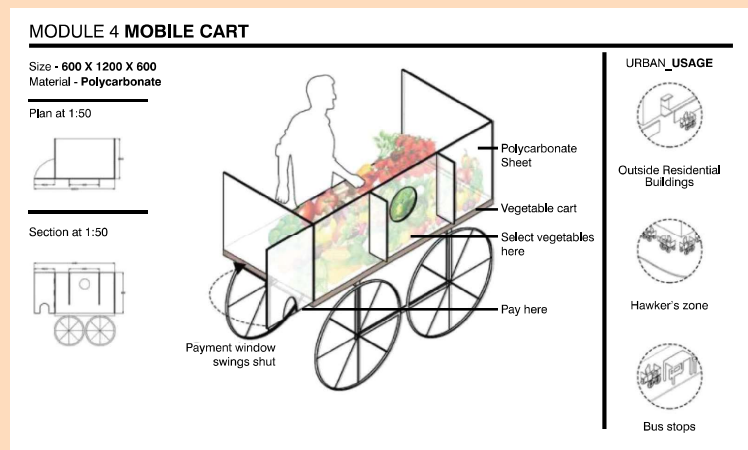
2. The Sanitation Station

facilitates people to wash their hands without touching any surface with the help of a foot pedal. It's an independent object that can be placed in various spots.



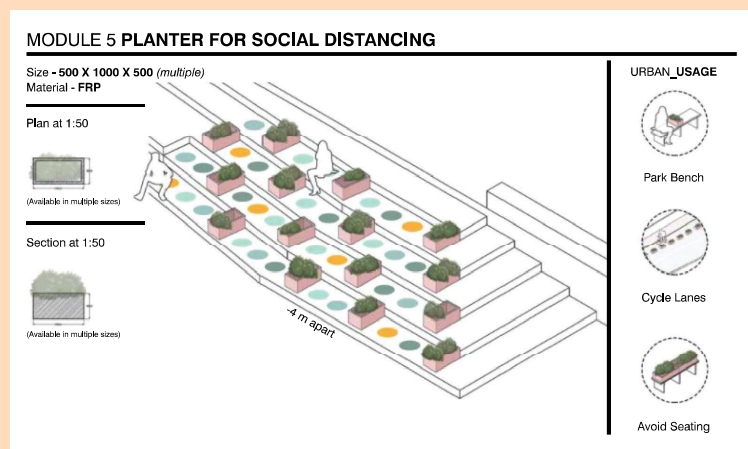
3. Mobile Cart

is a solution for fruit and vegetable vendors to keep safe distance and exchange money through a window



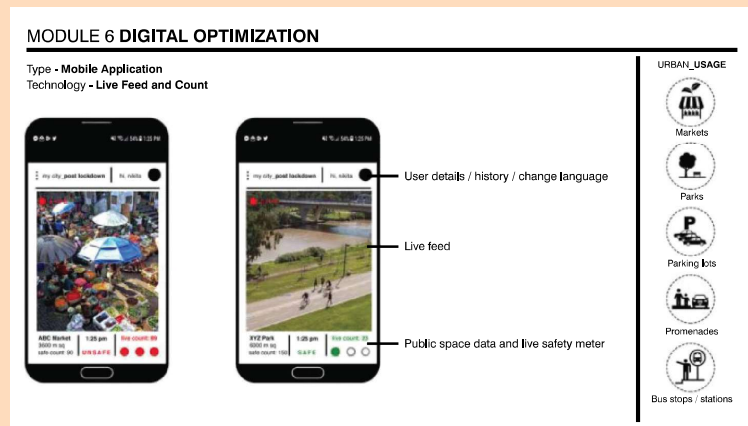
4. The Planter

have been proposed to distance people in public spaces, parks and promenades while promoting green and healthy outdoor environment



5. Digital App

leverages the benefits of technology for maintaining health and safety in urban spaces by providing targeted live feed and number of people before leaving the home for any activity



Source: "The Bandra Collective, Mumbai, proposes short term post-lockdown safety initiatives" by Meghna Mehta 2020; <https://www.stirworld.com/see-features-the-bandra-collective-mumbai-proposes-short-term-post-lockdown-safety-initiatives>; Surfaces Reporter (2020) <https://www.surfacesreporter.com/articles/71992/the-bandra-collective-mumbai-proposes-six-modules-of-short-term-post-lockdown-initiatives>

PROFILING KARACHI'S URBAN LIVABILITY —

Opportunities and Challenges

*This **Section** brings the debate on the cities of the pandemic and the post-pandemic era within the context of Karachi. Profiled are the critical urban livability challenges faced by Karachi. Then two (2) project interventions are documented that have happened in the recent past in the city through both government and civil society initiatives that have aimed at introducing innovative design and practices so that the urban spaces are viewed as shared and pedestrian friendly spaces, all while with a larger agenda of making the city more inclusive. The Section ends with a discussion with noted project focal points on the challenges and opportunities of implementing such projects on a larger footprint and whether the pandemic can be leveraged here to push for a sustainable city agenda for Karachi*



Recently, the World Bank conducted a Study (2018) - Transforming Karachi into a Livable and Competitive Mega City – A City Diagnostic and Transformation Strategy.³ Some parts of the Study have been directly excerpted here to bring out a profile on challenges of urban livability. By putting emphasis on critical issues of urban transport, solid waste management, water supply and sanitation, the Study, while discussing on urban livability challenges, focuses on the current state of Karachi and examines crucial gaps in the urban planning, policy and institutional capacity.

According to the World Bank (2018) Study, Karachi is the largest city in Pakistan, with a population of 16 million and accounts for one-third of Sindh's population and one-fifth of the country's urban population. Karachi is the country's financial and economic hub, generating 12–15 percent of Pakistan's gross domestic product (GDP). Karachi's economy centers on the manufacturing and trade sectors, rooted in the city's port, commercial centers in the historic core, and industrial areas developed since 1947. Karachi's economy has grown steadily in the past 18 years and per capita income has remained the highest in the country. Karachi's contribution to gross domestic product (GDP)—ranges from 11 to 20 percent, depending on the methodology used. However, despite its status as the financial hub of the country housing large scale services and industrial sectors, a vibrant middle class and exhibiting high literacy rates, Karachi is facing a rapid degradation of its natural and physical environment and decline in quality of civic and social services. This is coupled with issues related with law and order, social unrest and political conflicts and contestations based on identity politics. These conflicts often manifest in control over institutions of civic and administrative agencies that has significantly contributed in creating reduced capacities and dysfunctional mandates within such institutions further complicating the existing crisis in urban governance. It therefore comes as no surprise that Karachi in 2018 ranked among the bottom 10 cities in the *Global Livability Index*.⁴

The city's population has grown from just under 10 million in 1998 to 16 million in 2017, per official data. The resulting changes in the demographic composition of the city have had major impacts on Karachi's politics, social fabric, and governance. The World Bank's Study (2018) estimates show that Karachi saw substantial poverty reduction from 2005 to 2015, with 9 percent of the city's population living in poverty in 2014–15 compared to 23 percent in 2004–05.⁵ This makes Karachi the least poor district in Sindh province and third least poor in Pakistan. However, the low poverty rate masks the fact that Karachi is home to many people living in poverty, due to its size: 9 percent of Sindh's population living in poverty resides in Karachi. The aforementioned points have resulted in critical challenges to municipal service delivery, a proliferation of informal service providers, and deteriorating delivery in many sectors. The challenges include inadequate urban transport, water supply and sanitation, and solid waste management.⁶

Urban planning and policy

The Study identifies how with regards to urban expansion and Karachi's overall structure, the city's urban planning and management has failed to deliver and keep its pace with a rapidly growing population where with an average population density of 22, 800 persons per km², the city is unable to hold a population of 16 million people with its current standing resulting in low living standards.

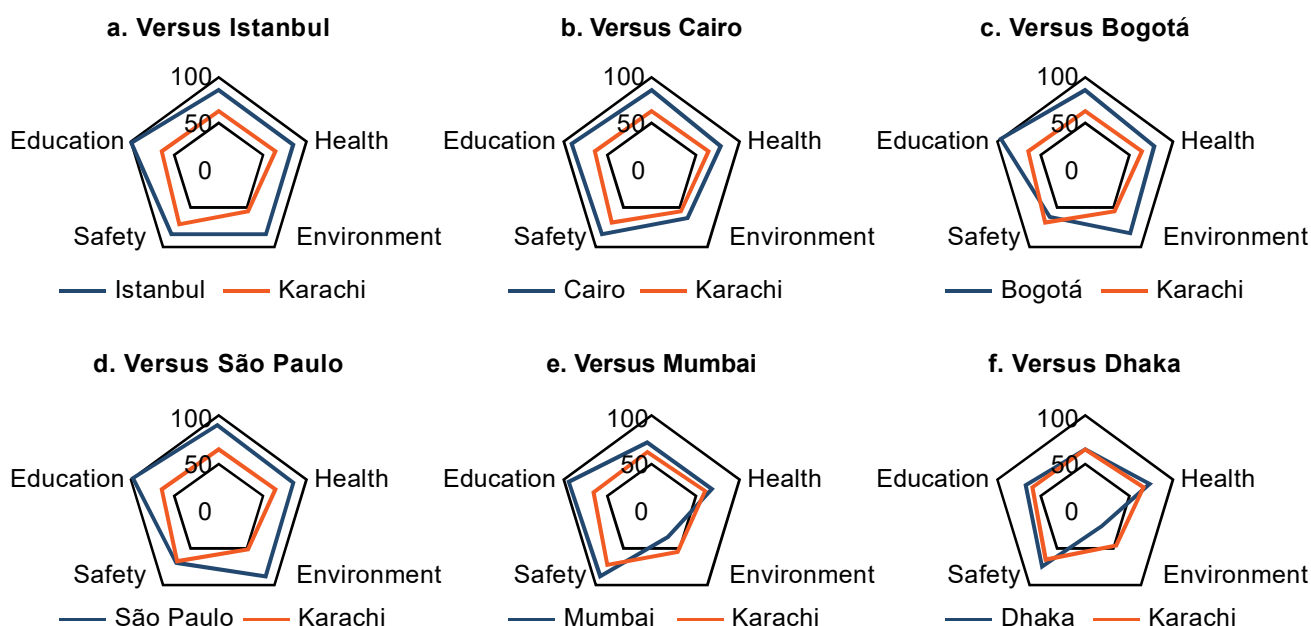
³World Bank (2018). *Transforming Karachi into a Livable and Competitive Megacity: A City Diagnostic and Transformation Strategy. Directions in Development*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1211-8.

⁴*Ibid*

⁵*Ibid*

⁶*Ibid*

The Study states in no uncertain terms that “the evolution of land-use patterns over the past 15 years suggests that Karachi is now at a tipping point and could be heading toward a spatially unsustainable, inefficient, and unlivable city form”.⁷



Source: Livability index calculated by World Bank staff, based on Amirtahmasebi and Kim 2014.

Karachi Lags Comparatively in Livability

Source: Transforming Karachi into a Livable and Competitive Mega City – A City Diagnostic and Transformation Strategy, 2018, the World Bank

An analysis between 2001 and 2013 revealed that urban green areas have declined as a proportion of the urban footprint, from 4.6 percent (27 km²) to 3.7 percent (30 km²).⁸ The Study by Hasan (2015) showed that more than half of the city’s population lives in informal settlements and that the current demand of housing units in the formal sector in relation to its supply falls short of 50, 000 units every year. This gap is made up through 32, 000 housing units in informal settlements annually.⁹ The World Bank (2018) Study further highlighted the issue of public spaces, which it suggests, if designed and managed strategically can lead to inclusive development in the highly segregated city of Karachi. It states that “access to public spaces for citizens, especially the lower class is under threat due to increased high-density development that displace the existing public spaces and recreational spaces, such as beaches, for the middle and lower classes. High-density developments and luxury apartments on inner city lands are also commonly perceived as displacing public spaces and recreational spaces, such as beaches, for the middle and lower classes. The recent completion of the pedestrianized street fronting the Karachi Port Trust Building and the public space at Pakistan Chowk are welcome additions to the city”.¹⁰

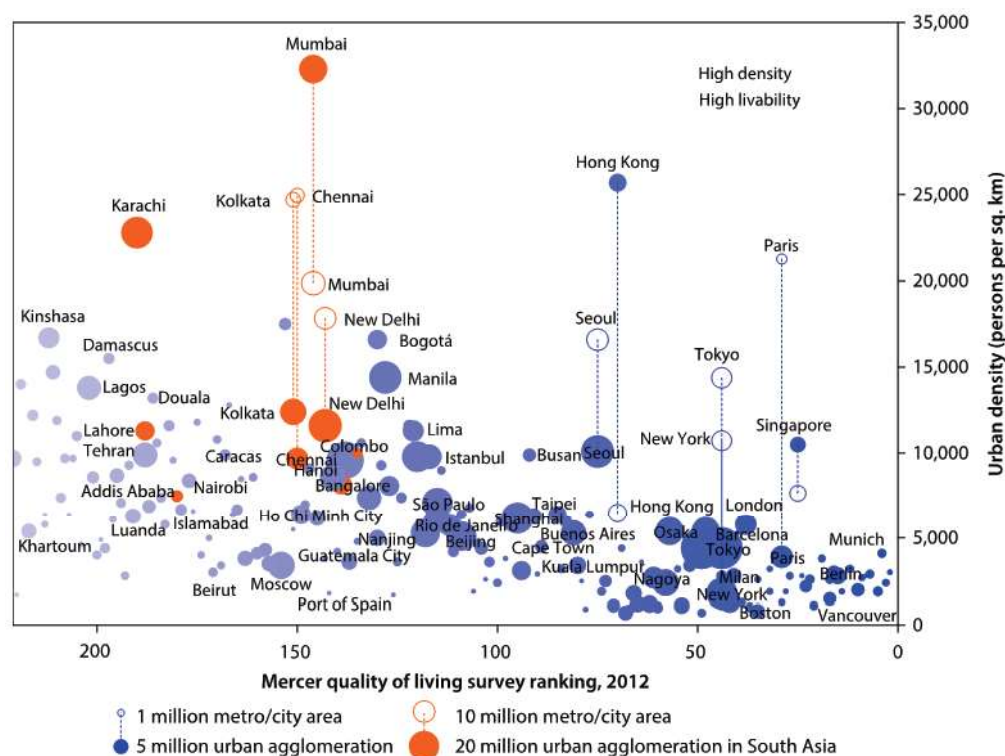
⁷Ibid. p.27

⁸World Bank (2018). Transforming Karachi into a Livable and Competitive Megacity: A City Diagnostic and Transformation

⁹Strategy. Directions in Development. Washington, DC: World Bank. doi:10.1596/978-1-4648-1211-8.

Hasan, A. (2015). Land contestation in Karachi and the impact on housing and urban development. *Environment and Urbanization*, 27(1), 217-230.

¹⁰World Bank (2018). Transforming Karachi into a Livable and Competitive Megacity: A City Diagnostic and Transformation Strategy. Directions in Development. Washington, DC: World Bank. doi:10.1596/978-1-4648-1211-8. p. 33



Karachi emerging as a densely populated city with a low quality of life

Source: *Transforming Karachi into a Livable and Competitive Mega City – A City Diagnostic and Transformation Strategy, 2018, the World Bank*

Municipal service delivery, urban infrastructure and living standards

Important contributors that ensure quality of life include provision of safe, reliable, and cost-effective urban infrastructure and access to basic services and healthcare. Over the years, Karachi has seen neglect and setbacks when it comes to urban infrastructure development.

Urban growth in the megacity has not been effectively managed or coordinated, resulting in poor public investment in infrastructure and an unsustainable urban development. Urban sprawl, both in the formal and informal sector, continues to put financial strain on the city's budget requiring new bulk and link infrastructure extensions. Of the services documented and analyzed in the Study by the World Bank (2018), urban transport is being sourced here due to its greater relevance to the present work.

Urban transport

The Study (2018) states that there is no sector-specific policy that is coherent and holistic for urban transport in Karachi. There exists no coordination amongst the many government departments and authorities in charge of transport in the city. Karachi has "approximately 10,000 kilometers of roads, with local roads accounting for 93 percent and highways and arterial roads for less than 5 percent of the total length. Karachi has also six arterial or trunk roads that extend radially from the central area."¹¹

The Study (2018) further documents the challenges and issues of inequity in service provision as follows: There is currently no mass transit system per se, although many people commute via the network of bus routes. There are nearly 13.5 million mechanized trips made each day within the city, of which about 42 percent are

¹¹World Bank (2018). *Transforming Karachi into a Livable and Competitive Megacity: A City Diagnostic and Transformation Strategy. Directions in Development. Washington, DC: World Bank. doi:10.1596/978-1-4648-1211-8. p. 40*

made by public and 58 percent by private transport. There were 3.6 million registered vehicles in Karachi as of mid-2015 (over 30 percent of the national total), and private vehicles—mainly motorcycles and cars—constitute about 84 percent of total registered vehicles, while public transport accounts for 4.5 percent of the total registered vehicles. With growth rates for private vehicles at over 4 percent, there are now over 1,000 new vehicles added to the streets of the city each day.

Buses, minibuses, coaches, and vans are the major transport modes in Karachi. There are over 12,000 buses, minibuses, and coaches plying 267 routes in the city. The bus fleet has been decreasing in size without any other mode to adequately replace it. The number of minibuses has declined from around 22,000 in 2010–11 to the current total of around 9,500.

Public transport carries 42 per cent of the traveling public while constituting only 5 percent of the number of vehicles on roads. On the other hand, private cars and motorcycles carry 21 percent and 19 percent of travelers respectively. This means that there is a clear gap between demand and supply since cars and motorcycles, which account for 84 percent of the vehicles, carry only about 40 percent of travelers. This gap has given rise to other modes of transport. A shift in demand from public buses to rickshaws, pickups and Qingqi can be seen while private cars and motorbikes on the road increase.

Transport issues in Karachi make for further problems like traffic congestion, poor air quality leading to health problems, noise pollution, high accident rates, environmental degradation etc. Traffic congestion is a pressing issue that exacerbates environmental problems, causes fuel inefficiency and results in productivity losses. The majority of commute is carried out by private vehicles such as motorcycles, cars etc. leading to overcrowded roads. Private vehicles constitute 53 percent of the total mechanized commuting. These problems contribute to low living standards, longer commutes and declining income levels while also restricting access for the most vulnerable group: women. The transport crisis has had a crippling effect on women's ability to work. Due to a failing transport sector that does not provide women with safe, secure and cheap travel options, many women do not work as a result which puts a huge strain on the economy.¹²

CASE STUDY-1

EDULJEE DINSHAW ROAD

Serving two of Karachi's century old landmarks i.e., the Karachi Port Trust Building and the Imperial Custom House, the Eduljee Dinshaw Road (EDR) is an approximately 1-kilometer road in Karachi that was named after Eduljee Dinshaw – a Parsi philanthropist who rendered his tireless services in the construction of several buildings of this metropolis.¹³ Not many know, but the famous NED university of Engineering and Technology stands for Nadirshaw Edulji Dinshaw (son of Eduljee Dinshaw).¹⁴

Previously, the road had turned into dumping waste ground with over-flowing sewage lines and garbage that would turn even filthier during the monsoon season. In addition to being a hide-out for drug peddlers, it was dominated by warehouses, truck stations, and haphazard parking lots. The century old building from the colonial times had lost its heritage because of vehicular congestion, pollution, household litter, dirty go-downs and foul smells. In fact, the Hindu Temple - Jhulay Lal Mandir- that stood close to it was also adversely impacted because of constant neglect.¹⁵

¹²Ibid

¹³Balouch, A. (2015). *Heroes Forgotten: Searching for the Dinshaws of Karachi*. Dawn. Retrieved from, <https://www.dawn.com/news/1207778>

¹⁴Ibid

¹⁵Zuby, D. EDULJEE DINSHAW ROAD PROJECT. Retrieved from, <https://danishzuby.blogspot.com/search?q=eduljee>

In an attempt to restore that space, the EDR project was inaugurated by the former Sindh governor, Ishratul Ibad Khan, in 2014. Eduljee Dinshaw Road Project Trustee (EDRPT) was then formed comprising technicians, professionals, concerned citizens, government officials and urban planners.¹⁶ The rejuvenation plan was divided into two following phases.

First Phase - The first phase focused on achieving rapidly visible results such as the installation of street lights and Victorian-era lamp posts, pedestrian streets paved with cobblestone, water bodies, green spaces, main gates, painted walls and street furniture.

Second Phase - The second phase aimed at preserving the historical background and the overall culture of that site. In doing so, it included preservation of the Imperial Custom House, the creation of a Custom House Museum and kiosks, upgradation of the Hindu Temple and organization of the parking lot.¹⁷

Besides catering to specific street furniture, the team also wanted to improve the ambience of the immediate neighborhood around the EDR such that it would complement the historical façade of the street. However, the surrounding soot-covered apartments standing in a dilapidated condition stood in the way as an unpleasant and an unfavorable sight. Thus, the team not only redesigned the parking lot by adding green walls to it, but the surrounding apartment blocks were also repainted, and the roads



Source: Danish Azar Zuby

were paved with the installation of street-lights and chained bollards. The entire redesign was done by keeping in mind the overall classic look of the Imperial Custom House.¹⁸ The EDRPT supervised the entire construction process. The team did not want EDR excessively on the public sector for its funding and management, and made attempts to receive political and financial support from other stakeholders. A fundraising campaign 'Give Back to the City' was also conducted, where most funds were received from the private sector. The total project costed around PKR 50 million and took almost a year to complete.¹⁹



Source: Danish Azar Zuby

EDR continues to serve as a space for outdoor activities. It now stands among Karachi's old cultural heritage sites and is a walkable space for all. From screening cricket match of the Pakistan's Super League to displaying art works on the 70th Independence Day of Pakistan to holding a vigil night in remembrance of late Amjad Sabri (a famous Pakistani qawwal) to inviting Chronicles of Khan (musical artists) at the Azadi Rock Festival on the 69th anniversary, EDR has become a place of natural commemoration as well as a space to appreciate and celebrate local art.²⁰

¹⁶Anwar, F. (2020). *The Hidden Wealth of Cities. Creating, Financing, and Managing Public Spaces*. World Bank. Chapter 11.

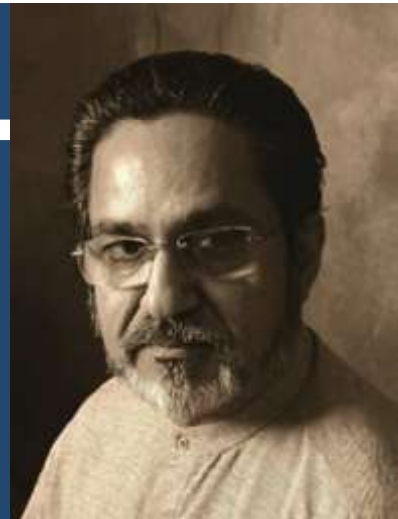
¹⁷Ibid

¹⁸Zuby, D. EDULJEE DINSHAW ROAD PROJECT. Retrieved from, <https://danishzuby.blogspot.com/search?q=eduljee>

¹⁹Anwar, F. (2020). *The Hidden Wealth of Cities. Creating, Financing, and Managing Public Spaces*. World Bank. Chapter 11.

²⁰Ibid

**DANISH AZAR ZUBY – Design Consultant,
CEO of DazDesign**



Danish, designer of EDR, says:

"In Karachi's context, there can be three components to rejuvenation of a public spaces: (1) Financial Aspects - People's Square was made possible because of the World Bank's funding; EDR was made possible because of Custom House's and some private funding; Pakistan Chowk was made possible because of the donation campaign led by the Marvi Mazhar Associates. If you have the money, you can do it. (2) The Land - who exactly controls that piece of land and what can be done over there? This brings in problems of jurisdictions. It has become very difficult to define Karachi as a single entity. (3) Executive Interference - the path to implementation is riddled with interference from various organizations who are either not willing to cooperate or have hidden political interests.

For the EDR project, we were lucky as the Custom Collector Preventive was the driving force behind the project. If you have such a strong authority and clear agenda, which I term as 'top-down bulldoze authority', then the projects become doable; the authority can overcome any obstacle that may come in its way, (example: Empress Market). The Custom Collector was the key initiator of the EDR project, and therefore, there was no problem as far as the three aforementioned components are concerned.

The issues concerning urban planning in our city are so huge and complicated that we can only create such community spaces in small pockets; it is difficult to take them on a larger footprint unless we can get rid of institutional problems. There is a lack of centralized authority and absence of good governance in Karachi. There is a constant rift between the Federal, Provincial and the Local government. Such reclamation projects can only be made possible in apolitical conditions.

Considering that the Urban Plans of Karachi were never implemented, it is difficult to imagine a new plan for Karachi based on the Coronavirus pandemic. Karachi is on the seismic belt and has seen urban flooding in the past, but we continue to allow buildings that are prone to earthquakes and have done nothing to prevent flooding. By calling Karachi a 'resilient' city, we tend to romanticize Karachi so much that we have ignored the severe urban and climate change issues that our city faces. I am skeptical that the city administrators will learn much from the pandemic; we will be back to square one very soon if we are not struck by the third wave. Although the 'Indoorification of Outdoor Dining' is taking place as restaurants have found creative ways of creating 'open enclosures' in outdoor dining spaces with social distancing and people are still enjoying dining, but regrettably, that is the only entertainment people of Karachi have i.e., eating outside. It is unfortunate that a city with millions of people have to live in a social void, have limited options of galleries, museums and theatres. Even before the pandemic, people here did not have enough green spaces to enjoy, and now, in total frustration, because of extended periods of indoor confinement, people have taken up walking and jogging on traffic laden roads because they have no other option"

CASE STUDY-2

KARACHI NEIGHBOURHOOD IMPROVEMENT PROJECT (KNIP)- PEOPLE'S SQUARE

The Karachi Neighborhood Improvement Project (KNIP) builds upon the initiatives put forward by the Government of Sindh to rejuvenate Karachi. KNIP is currently an active, World Bank funded project with a total project cost of US\$ 98.0 million. It is working on improving the three densely populated neighborhoods of the city: Korangi, Malir, and Saddar.



Source: KNIP

Among various KNIP's projects, People's Square is a place in Saddar downtown where community comes alive and sense of belonging is fostered. The ground breaking of this Square along with an underground parking plaza, enhancement of open spaces in Arts Council, and development of educational and cultural zone was made by Syed Murad Ali Shah, Chief Minister Sindh in 2018 as single sub-project of KNIP. The sub-project with its all components including public square has been completed in August 2020.

Spread on an 8000 m², some of its prominent features include:

- Event space for more than 2000 persons (at one time)
- 3 Lifts/staircase lobbies including security counters
- 11 Convenience/Food Kiosks
- Canopied and open seating on benches for 300 people (at one time)
- Entrance and Exit ramps with canopies
- Planters/Large Trees (Malaysian palm/Goldmohur) with seating
- Public Toilets (separate for women and people with disabilities)



Source: KNIP

The People's Square takes pride in its historic location; it is situated at a place where various public gathering and processions would regularly convene during the freedom movement of Pakistan. Moreover, the multiple access points allow people from various parts of the old town, downtown and uptown to enter People's Square through public and private transport.²⁴

The walls and ramps have also been decorated with artistic paintings that add bubbling colors to the ambience.

²¹World Bank. Retrieved from, <https://projects.worldbank.org/en/projects-operations/project-detail/P161980>

²²The People's Square (The outdoor living room of the Karachi City). KNIP. Newsletter provided by Tariq Ahmed (2020).

²³Ibid

²⁴Ibid

By exhibiting the cultural values of the city, this space offers various food stalls and other activities for the public to enjoy. In order to support livelihoods, it also gives special importance to women entrepreneurs who can run their small businesses in that space.²⁶ People's Square is also not only equipped with modern security and safety features, but is well lit with specially designed street poles and garden lights for safe and secure pedestrian movement. This includes the painting of 'Historic Buildings of Karachi' which has been conceptualized by the KNIP team and painted by Artist Mr. Wasi Hyder.²⁵

TARIQ AHMED – Urban Design Specialist, Karachi Neighborhood Improvement Project (KNIP)

"The city of Karachi has fragmented land use control depriving all sectors of government to plan at the city level. Therefore, most plans fail when it comes to implementation. Since the top-down approach seems practically impossible due to inefficient institutional arrangement, there is a need to develop Urban Design projects for Karachi at the neighborhood level, depending on the needs of the area. It is like a jig-saw puzzle of a larger mosaic.



People's Square has made an impact in various ways. Firstly, it shows that the government can deliver if there is unity of command, funds available and team professionals are allowed to work without political interference. Secondly, civil society academia support is essential which we luckily had as part of this project. Lastly, the needs of the space should be addressed in a minimalist urban design theme, and People's Square was able to deliver that, thereby making it a learning platform for future projects. We have learnt a lot from the process of developing a project in the hub of the city which makes the upcoming projects much easier. People's Square has left a legacy.

COVID-19 has so far affected the progress of our ongoing and upcoming projects. In short-term, I don't see any policy level changes due to the pandemic; however, fewer aspects are quite evident because the businesses are transforming and professionals are thinking differently about public space. The protocol of social distancing has compelled restaurants to create out door spaces, and for marriage halls to remove their roof tops and change furniture arrangement to comply with the Standard Operating Procedures (SOPs). The seating arrangements for parks and other public spaces is being looked at through a different lens now; the spaces are transforming and so are the professionals attached to them. The cost of doing business is increasing and more and more space is needed to meet the new requirements to address the pandemic. Without the support of professional bodies, government cannot transform policies on their own. It is time for our professional bodies to prepare proposals and submit to the relevant bodies for addressing the long-term compliance of the pandemic

²²⁵The People's Square (The outdoor living room of the Karachi City). KNIP. Newsletter provided by Tariq Ahmed (2020).

⁶Rafiq, Y. (2020). People's Square in Karachi is Now Open for Public. Lens. Retrieved from, <https://propakistani.pk/lens/peoples-square-in-karachi-is-now-open-for-public-pictures-videos/>

COVID-19 PANDEMIC AND GENDER — Case Study Karachi

*The pandemic experience has shown that people belonging to various profiles, whether based on socio-economic or gender sets have been differently impacted. Women, in particular, have been reported to have experienced adverse effects. In this **Section**, primary data collected is synthesized and an analytical review is conducted on the findings as they relate with challenges of access, mobility, health, livelihood and related issues faced by women in the city of Karachi as a result of the COVID-19 pandemic*



As COVID-19 continues to affect lives around the world, data collected on a global scale indicates that women are facing the greater brunt of the economic and the social fallout of the pandemic. In order to better understand the uneven implications of COVID-19 on women and young girls of Karachi, an online Gender-Assessment Survey was rolled out on various social media platforms in the month of September, 2020. The survey was designed with the help of the reference questionnaire and guidance document, *Rapid Gender Assessment Surveys on the Impacts of COVID-19*, that has been developed by the UN Women and covers common themes such as employment and livelihood resources on COVID-19.²⁷ Given our area-specific priorities and study objectives, the questionnaire guidelines were adapted to our specific circumstances.

In order to minimize respondent fatigue, the questionnaire was kept concise. This automatically limited the nature of the responses and did not include any in-depth insights. However, given the time-frame limitations, it should be understood that this survey tool was rather aimed at “rapidly taking stock of changes experienced at individual and household levels as a result of COVID-19” and was used for assessing relative changes, if not exact measures.²⁸ However, at the end of the questionnaire, respondents were given an option to share any detailed information that they may wish for, to which some respondents chose to answer.

Given the mobility restrictions due to the pandemic, the sample respondent profile was limited in terms of data collection points and the demographic reach. Since the survey was rolled on Facebook and WhatsApp, data obtained (sample size, 109) was limited to the subscribers of these platforms who usually come from upper-middle income households. In order to make our sample size as representative as possible and to assess the vulnerabilities of women from poor-income households as well, 15 (fifteen) individual and semi-structured interviews of women working in blue-collar jobs in Karachi were also conducted. Blue collar jobs typically include members from working-class involved in high degree of manual work and are typically paid hourly or by piece-rate, as opposed to white-collar jobs that are mostly office-based.²⁹ Given the available options, these interviews were conducted via phone-calls and participants were selected based on purposive and snowball sampling. The data collected through online survey and remote interviews was kept confidential and was exclusively used for analytical purposes. No one’s identity was revealed during the course of this study.

While the quantitative data obtained through online survey was analyzed for statistical inferences, the qualitative information obtained through interviews was translated from Urdu to English and was coded according to various themes. In addition to primary data collection, a thorough web-desk search of relevant national and international studies and reports on the gendered implications of COVID-19 was also done, which was then synthesized with our primary findings.

Profiling of the respondents

After circulating the survey on social media platforms, a total of 109 responses were obtained from women residing in the city of Karachi, out of which majority of the respondents (97%) were within the age bracket of 19-40

²⁷UN Women (May 2020). *Guidance: Rapid gender assessment surveys on the impacts of COVID-19*. Retrieved from, <https://data.unwomen.org/publications/guidance-rapid-gender-assessment-surveys-impacts-covid-19>

²⁸*Ibid*, p.4

²⁹Wickman, F. (2012). *Working Man’s Blues: Why Do We Call Manual Laborers Blue Collar?*. Slate. Retrieved from http://www.slate.com/articles/business/explainer/2012/05/blue_collar_white_collar_why_do_we_use_these_terms_.html

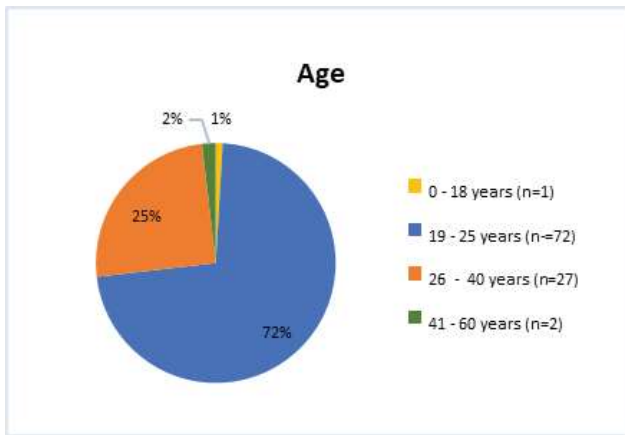


Fig 1

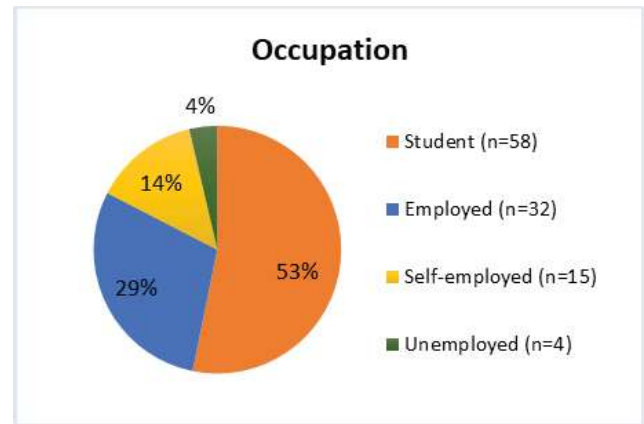


Fig 2

years (Fig.1). Regarded as the most economically active population that is either entering the labor market following education or are in their prime working lives ³⁰, this age bracket helped us examine the disproportionate impact of COVID-19 on working women in Karachi. Moreover, as displayed by Fig.2, 53% of the respondents were full time students and therefore did not constitute as part of the workforce. However, 29% of the respondents were formally employed by a company whereas 14% were self-employed as either freelancers, gig workers, or small-medium business owners.

Furthermore, fifteen (15) interviews of women working in blue-collar jobs were also conducted, out of which 60% of them were home-based workers (HBW), while the rest offered either parlor or janitorial services (Fig.3).

As shown in Fig.4, it is important to note that all working-women are either a part of the 'formal' or the 'informal' sector. The formal sector includes women working (n=32) for the state or the private enterprise that has regular wages with specific working hours. On the other hand, the informal sector includes the self-employed (n=15) such as the freelancers on digital platforms and the blue-collar workers (n=15) such as the domestic staff who are employed on piece- rate basis and have minimal to no access to labor welfare services and protection.

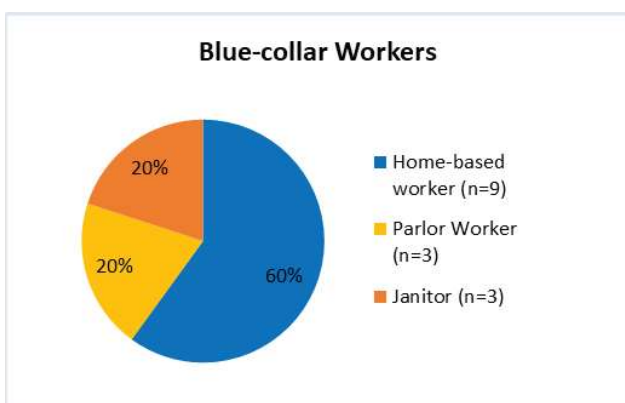


Fig 3

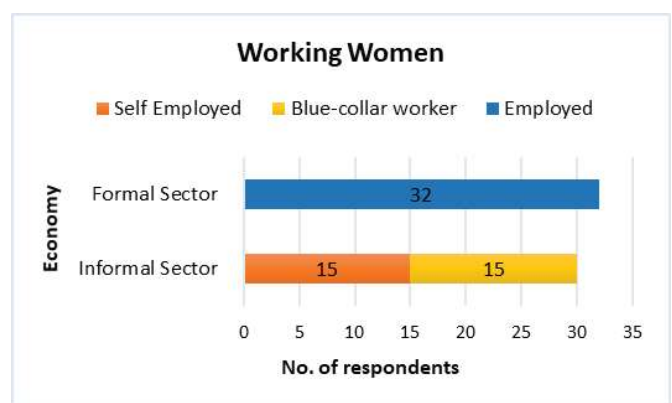


Fig 4

³⁰OECD (2020), *Employment rate by age group (indicator)*. doi: 10.1787/084f32c7-en

Findings and Discussion

Livelihood and Mobility

According to Center for Labor Research, Pakistan's employed labor force (59.8 million) is composed of employees (43% or 25.7 million), self-employed (36%), unpaid family workers (20%) and employers (1.4%). Only 10.6 million non-agricultural workers (28%) work in the formal sector with labor law protections while the remaining 72% toil in the informal sector.³¹ In the wake of the pandemic, the working groups that have been hit the most include women, youth, older workers, migrant workers, informal economy workers (such as the home-based workers), and the self-employed (such as the freelancers engaged with digital labor platforms).^{32 33}

According to the Labor Force Survey (2017-18), refined percentage of women in the labor force of Pakistan is 20.1% as compared to 68% for men, and the gap has further been exacerbated as a result of the pandemic.³⁴ Given that the companies still need to incur significant expenses even though there is little cash, it is not surprising that businesses and companies have furloughed employees and rolled back on their allowances and bonuses.³⁵ For example, one of Pakistan's largest hotel chains laid off 20% of its workforce, which included high paid employees in higher management as well as housekeeping.³⁶

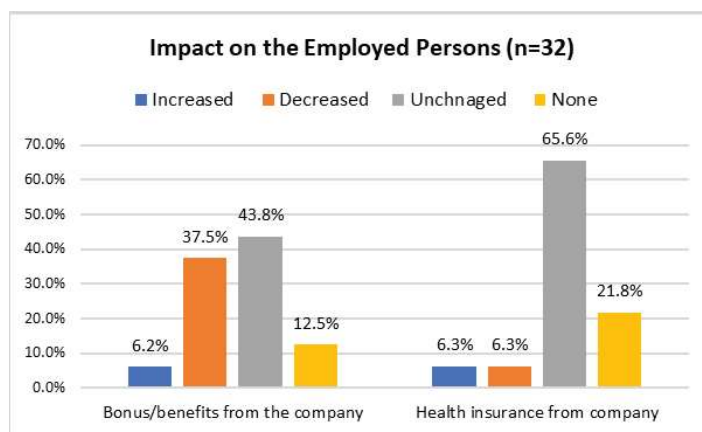


Fig 5

The survey results were analyzed to study whether women working for a company were able to avail any perks or bonuses offered by their employer. As shown in Fig.5, after the outbreak, only 6.2% of the employed women reported for an increase in company benefits which is in sharp contrast to 37.5% of them who suffered a reduction in benefits. Interestingly, for majority of the employed women, the benefits (43.8%) and the health insurance (65.5%) offered by their employer remained unchanged, thereby indicating a relative amount of security that is offered to the formally employed persons. Nonetheless, as argued by Sareen (2020), the formal sector is also at risk as companies continue to cut down on their costs; in fact, as further revealed in Fig. 5, not all formally employed persons necessarily enjoy any health insurance or benefits.

The outbreak has also led to unprecedented and dynamic changes in the workplace. As more and more people work from home due to safety protocols, the length of the working hours has extended from the usual 9-to-5

³¹Ahmad, I. (2020). COVID 19 and Labor Market Implications for Pakistan. Center for Labor Research. Retrieved from, <https://clr.org.pk/covid-19-labour-market/>

³²Ibid

³³Pakistan Worker's Federation (2020). COVID 19 and World of Work. Position Paper. Retrieved from, https://www.ituc-csi.org/IMG/pdf/pakistan_-_covid19_position_paper_by_pwf_20_5_2020.pdf

³⁴Gendered Impact and Implications of COVID 19 in Pakistan (2020). UN Women, Ministry of Human Rights, National Commission on the Status of Women. Retrieved from, <https://asiapacific.unwomen.org/-/media/field%20office%20esea-sia/docs/publications/2020/04/pk-gendered-impact-and-implications-of-covid.pdf?la=en&vs=2138>

³⁵COVID 19 and Employee Rewards (2020). KPMG Advisory Services. Retrieved from, <https://assets.kpmg/content/dam/kpmg/ng/pdf/advisory/covid-19-and-employee-rewards.pdf>

³⁶Siddiqui, S. (2020). Five-star hotels lay off staff as business plunges. Express Tribune. Retrieved from, <https://tribune.com.pk/story/2182602/1-five-star-hotels-lay-off-staff-business-plunges>

workday; in fact, spikes in the internet usage from midnight to 3 am have been noted as people turn their living spaces into makeshift offices, making it nearly impossible to disconnect.³⁷

Similar trends can be noted in Fig.6 from the survey results, whereby 9.4% of the employed women in the formal sector lost job after COVID-19. While for some (25%), their working hours decreased without having to lose their jobs, for most of them (31.3%), their working hours increased, thereby indicating an upsurge in the average work span.

“I was fired by my company. The men from my department were not fired. We were told that young and single women don’t need to provide for their families, so they fired us instead of men”

– Respondent; 19-25 years

Working hours have increased while I am being paid 15 % less than before. Workplace is taking over life as they can call anytime during the day or night for meetings, therefore affecting personal time”

– Respondent; 19-25 years

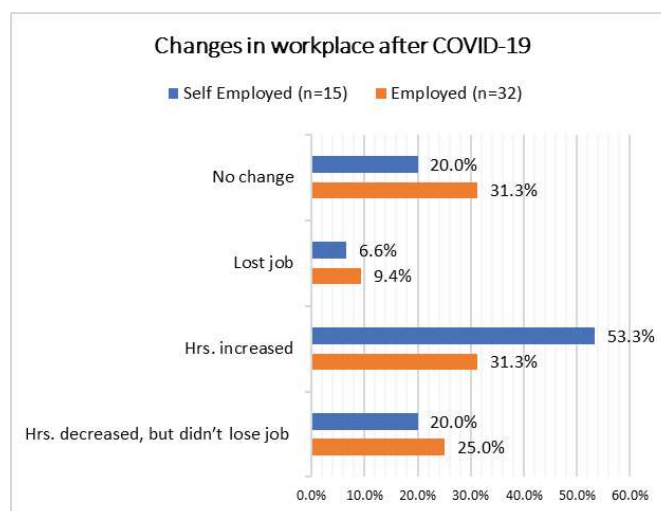


Fig.6

Besides looking at the formal economy, it is equally important to note that women, especially from developing countries like Pakistan, constitute a significant portion of the informal employment sector. An informal economy is such that it is neither taxed nor monitored by the government. On the higher end of its spectrum are the upper-tier informal activities that may have increased set-up costs and complicated licensing such as the small-scale service manufacturing businesses, gig workers and freelancers. On the other hand, the lower-tier includes the domestic workers, street vendors, parlor workers, nursing, waitresses, hairdressers, etc. However, most workers in the informal sector, even those that are at the upper-tier, do not have access to secure work, benefits, welfare protection, or representation. These features differ from employees in the formal sector who have regular hours of operation, a regular location and other structured benefits. In Pakistan, “most of 27.3 million informal workers are ‘paid employees’ (13 million, or 48%), while 11.2 million (41%) are ‘self-employed’ and ‘own account’ workers”.⁴²

³⁷Davis, F. M., Green, F. (2020). *Three Hours Longer, the Pandemic Workday Has Obliterated Work-Life Balance*. Bloomberg. Retrieved from, <https://www.bloomberg.com/news/articles/2020-04-23/working-from-home-in-covid-era-means-three-more-hours-on-the-job>

³⁸Gendered Impact and Implications of COVID 19 in Pakistan (2020). UN Women, Ministry of Human Rights, National Commission on the Status of Women. Retrieved from, <https://asiapacific.unwomen.org/-/media/field%20office%20esasia/docs/publications/2020/04/pk-gendered-impact-and-implications-of-covid.pdf?la=en&vs=2138>

³⁹Meier, G. M., & Rauch, J. E. (1995). *Leading issues in economic development* (Vol. 6). New York: Oxford University Press.

⁴⁰Ibid

⁴¹International Labour Organization. (2002). *Women and men in the informal economy. A statistical picture*. International Labour Organization. ISBN 978-92-2-113103-8

⁴²COVID 19 Pakistan Socio-Economic Framework. (2020). UNDP. p.48. Retrieved from, https://unsdg.un.org/sites/default/files/2020-07/PAK_Socioeconomic-Response-Plan_2020.pdf

The concept of vulnerable employment generally includes own-account workers and unpaid family workers that are usually paid by piece-rate or hourly wages. Since women constitute a huge portion of the informal sector of Pakistan, the impact of the pandemic on them has been uneven, exacerbating the existing marginalities.

In our survey, the upper- tier of the informal economy comprised the self-employed persons such as the freelancers, gig workers, and small-scale business owners. As displayed in *Fig.6* and *Fig.7*, below are a few prominent and important patterns that have been deduced from the survey results.

After the outbreak of COVID-19

- 6.6% of the self-employed women lost their means of earnings and livelihood as compared to 9.3% of the employed women that suffered job losses

- 53.3% of the self-employed women experienced an increase in the work-hours as compared to 31.3% of the employed women



Fig.7

- 20% of the self-employed women

experienced no change in the workplace as compared to 31.1% of the employed women

- 73.3% of the self-employed women experienced a reduction in their monthly earnings as compared to 21.8% of the employed women

These comparative trends between the self-employed and the employed indicate how the formal economy tends to offer more stability in times like pandemics. With regards to online or crowd work, Pakistan was ranked “fourth among the top 10 countries in the world in terms of growth in earnings by freelancers, according to the digital money transfer service, Payoneer”.⁴³

It has also been regarded home to the third-largest population of professionals related to the global crowd work gig industry after India and Bangladesh by the Oxford Online Labor Index.⁴⁶ However, the fact that this work is part of the informal economy, which offers minimal protections and workplace securities, it has consequently rendered women in informal jobs more vulnerable than those in the formal job market.⁴⁷

⁴³Ahmad, I. (2020). COVID 19 and Labor Market Implications for Pakistan. Center for Labor Research. Retrieved from, <https://clr.org.pk/covid-19-labour-market/>

⁴⁴Pakistan Worker’s Federation (2020). COVID 19 and World of Work. Position Paper. Retrieved from, https://www.ituc-csi.org/IMG/pdf/pakistan_-_covid19_position_paper_by_pwf_20_5_2020.pdf

⁴⁵Ahmad, I. (2020). COVID 19 and Labor Market Implications for Pakistan. Center for Labor Research. Retrieved from, <https://clr.org.pk/covid-19-labour-market/>

⁴⁶Ibid

The same has been observed in the aforementioned survey trends whereby the self-employed have experienced greater loss in jobs and earnings whilst the formally employed. The fact that 71.8% of women working in the formal sector said that their monthly earnings remained unchanged after the outbreak as compared to 13.3% of the self-employed ones, indicate how the informal sector stands to lose the most, and that the “major victims of COVID-19 are the micro, small and medium-sized enterprises”.⁴⁸ While the poor have indeed suffered severely during the crisis, many informal workers in the middle bracket of the income distribution have also experienced a big drop in their earnings.⁴⁹

In order to further investigate the impact on women comprising the lower-tier of the informal sector, 15 interviews of the blue-collar workers were conducted, which primarily included home-based, and parlor workers. Most of them expressed how their work came to a halt; while some of them were given paid leaves, others were simply laid off, thereby making it extremely difficult for them to sustain their livelihoods and pay for the rents in addition to food and other household responsibilities. Since these workers came from low-income backgrounds, they, as a parlor worker, stated “did not even own any assets or savings that could have been used in times like these”.

“I could not go to work during the lockdown but was given paid leave. Despite getting my salary, I had to take udhaar (loan) from one of the ladies whose house I worked at because my bills and responsibilities doubled during the lockdown. I live with my brother and his wife who also had been laid off during the lockdown. They have 3 kids. In Neelum Colony, where I live, I have had to pay rent and bills for every month of the three months that we were in lockdown. My rent is 8000 rupees and the electric bill is roughly 1700-1800 per month. I also had to send my daughter for tuitions to a lady in the neighborhood because she could not attend school and she was getting distressed sitting at home all day. I was worried that she would forget everything she had learnt at school this year if she stayed out of practice. The tuition fee was 1000 rupees. Had I’d not been given this paid leave by the lady whose house I work at, we would have not survived. We reached out to some government agency that my brother had a contact for but they never responded to us. We were completely on our own”

– Respondent; Domestic Cleaner; 40-45 years

“the work does not run like that anymore. We had four workers, but now only one is left. They had to be removed because there was no work, so it was not possible to give them salary. The parlor opened after Eid-ul-Fitar and we also use sanitizers and gloves, but people are so afraid that they don’t come anymore”

– Two Respondents; Parlor Workers; 55-30 years & 45-50 years

“Most female workers, including myself, were laid off because we work as maids and were not required unlike men who work as guards for security, and waiters for food delivery purposes”

– Respondent; Janitor at a Club; 40-45 years

⁴⁸Shafi, M., Liu, J., & Ren, W. (2020). Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan. *Research in Globalization*, 2, 100018. p. 1. <https://doi.org/10.1016/j.resglo.2020.100018>

⁴⁹Bussolo, M., Sharmna, S., Timmer, H. (2020). COVID-19 has worsened the woes of South Asia's informal sector. World Bank. Retrieved from, <https://blogs.worldbank.org/endpovertyinsouthasia>

⁵⁰UN Women Pakistan (2020). Retrieved from, <https://asiapacific.unwomen.org/en/countries/pakistan>

These findings are consistent with the UN Women's Status Report (2016), Women's Economic Participation and Empowerment in Pakistan, which states that although women account for 65 % of the PKR 400 billion (USD 2.8 billion) that home based workers contribute to Pakistan's economy, most of them receive low wages and are denied legal and social protection.⁵⁰

This is not to say that the formal sector is not at risk and has not suffered the economic brunt of the pandemic, but, as the World Bank expects, "...the major brunt of the recessions is to be borne by the informal sector (which accounts for 72% of employment) ..." ⁵¹ and the majority of this population includes, women. Similarly, Ahmed (2020) explains how the "lockdowns in provinces have protected the jobs of 'workers' in the formal sector requiring employers to pay full wages and not terminate any, the so-called 'independent contractors' do not have access to any of these protections". ⁵²

Women working as domestic workers and janitors - all part of the growing gig-economy - as well as the self-employed workers, especially the freelancers, "...are facing the tough choice between exposure to the pandemic (getting sick and infecting families) and exposure to starvation (by not working and losing income) ..." ⁵³

In short, COVID-19 and the nation-wide lockdowns have worsened the woes of women in the informal sector. Self-isolation is a luxury for them.

As the city experienced shut down of semi-public and public transportation, a lot of people lost their jobs because of their inability to commute to their work-place. Although the inability to access public transport was felt by a wide-cross section of the population, scholarship suggests that, as the lockdown was imposed, the impact on women was and remains more severe. In Pakistan, the ownership of personal automobiles is highly gendered because of poverty and perceptions owing to gender norms that hinder female mobility at large. While the 2012 study on Karachi's transportation by Japan International Cooperation Agency (JICA) found that the average number of trips per day for women is 0.71 compared to 1.92 for men, the 2007 Time Use Survey in Pakistan similarly revealed that 55% of women did not make any trip in their day compared to just 4% of men.⁵⁴

Since most women in Pakistan do not own motorized vehicles and rely heavily on public transport, or on-foot for their travel ⁵⁵, a lot of them had to give up on their jobs in the wake of COVID-19. This is particularly true for women belonging to low -income backgrounds who are typically employed as informal workers and almost exclusively rely on public transport systems such as qingqis.

A woman who resides in the outskirts of the city (Hawksbay) and goes door to door to offer facial and waxing services in Karachi, shared the following:

⁵¹Sareen, S. (2020). *COVID-19 and Pakistan: The Economic Fallout*. Observer Researcher Foundation. p.11. Retrieved from, https://www.orfonline.org/wpcontent/uploads/2020/06/ORF_OccasionalPaper_251_COVID19-Pakistan.pdf

⁵²Ahmad, I. (2020). *COVID 19 and Labor Market Implications for Pakistan*. Center for Labor Research. Retrieved from, <https://clr.org.pk/covid-19-labour-market/>

⁵³Ibid

⁵⁴Siddiqi, O., Ayesha. O. (2020) *The dangers of not knowing enough about COVID-19's impact on women in Pakistan*. International Growth Center. Retrieved from, <https://www.theigc.org/blog/dangers-of-not-knowing-enough-about-covid-19-impact-on-women-in-pakistan/>

“I am the only one who earns as my husband is sick. I come to the main city from the locality of Hawksbay by changing two to three buses daily. In the start of the lockdown, my son on his bike would take me for work but then it got difficult as sometimes he was busy in his work. This is why, I had to stay at home for around 2 months praying that public transport opens soon so that I can earn again. Feeding my family daily is more important than the fear of catching the virus”.

– Respondent; Parlor Worker; 40-45 years

Firstly, this demonstrates that the respondent was unable to earn for a couple of months simply because of the shut-down of the public transport. Secondly, the male member of her family i.e., her son, owned a personal automobile and could therefore use it for his benefit while the woman either relied on his son for conveyance or did not go to work at all. More respondents belonging from poor-income households shared how restricted mobility exacerbated their difficulties.

“I live in my employer’s house but I travel by bus. When the buses opened for a while, they were allowing men over women to board the bus as limited people were allowed inside. So, I couldn’t even go if something important was needed”

– Respondent; Maid; 20-25 years

“I was pregnant and gave birth in the second month of the lockdown. My husband lost his job as a security guard after the lockdown. We had planned to go our hometown in Punjab for the delivery because it would have been much cheaper over there as compared to Karachi, but it was very stressful to plan the journey because it was very difficult to get bus or train tickets. At the last moment, fortunately, my husband was able to catch a bus ticket and we were able to go. Otherwise, my delivery would have been painful”

– Respondent; Domestic Cleaner; 20 – 25 years

Restricted mobility has also affected women’s access to financial services. Reduced mobility means less access to banks and micro credit which is often used for livestock management, setting small businesses or other economic opportunities.⁵⁶

2. Workload and Responsibilities

As quarantine measures keep people at home, and schools and the day-care facilities remain closed, the burden of unpaid care and domestic work has exploded for women. According to World Bank, Pakistani women, on average, already spend 10.5 times more time than men on unpaid domestic care work, including household chores and caring for children and older relatives.⁵⁷ After the pandemic, although the household work has reportedly increased for both men and women, women continue to shoulder the bulk of this work.⁵⁸

⁵⁵Adeel, M., Anthony GO, Y., & Zhang, F. (2013). *Gender, mobility and travel behavior in Pakistan: Analysis of 2007 Time Use Survey*.

⁵⁶Gender and Pandemic: Protecting Women in Times of COVID 19 (2020). Advocacy Brief 3. UNODC. Government of Sindh. Retrieved from, https://www.unodc.org/documents/pakistan/Advocacy_Brief_3_Gender_COVID-19-Sindh.pdf

⁵⁷Tariq, F., Bibler, S. (2020). *Gender Impact of COVID-19 in Pakistan: Contextual Analysis and the Way Forward* (2020). International Foundation for Electoral Systems. Retrieved from, https://www.ifes.org/sites/default/files/gender_impact_of_covid19_in_pakistan_contextual_analysis_and_the_way_forward_may_2020.pdf

⁵⁸COVID 19 and Its Economic Toll on Women: The Story Behind the Numbers (2020). UN Women. Retrieved from, <https://www.unwomen.org/en/news/stories/2020/9/feature-covid-19-economic-impacts-on-women>

Note: Workforce here includes both the employed and the self-employed persons (n=47). They are the working women.

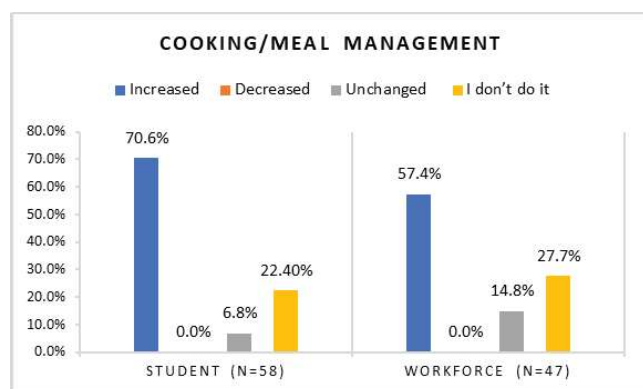


Fig 8

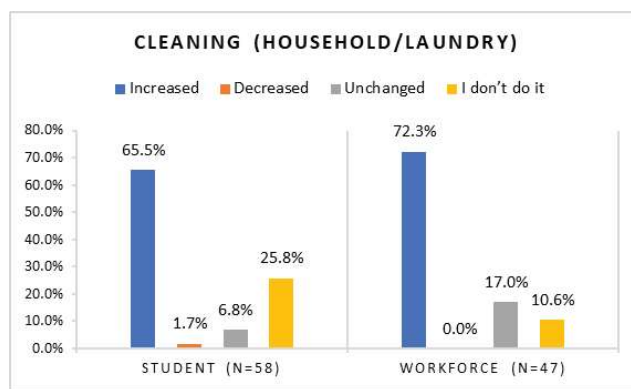


Fig 9

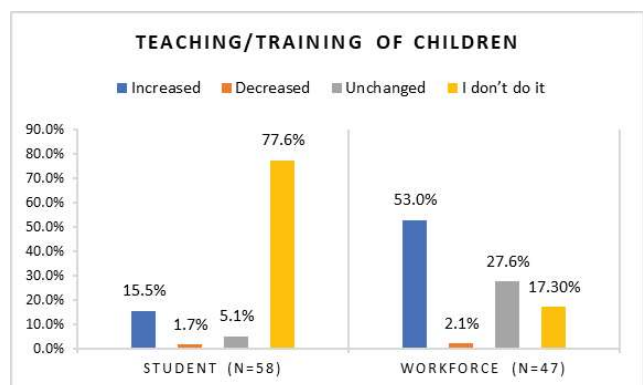


Fig 10

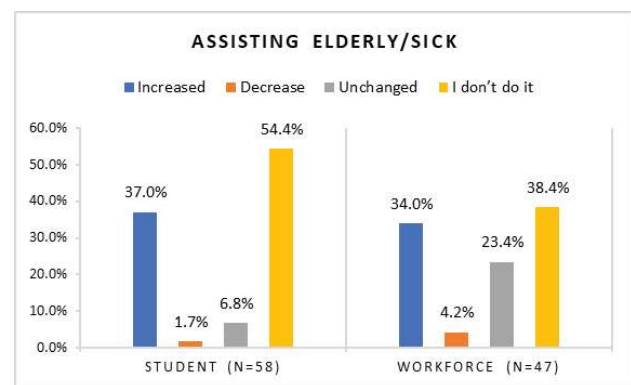


Fig 11

In order to obtain a thorough insight, we asked women how the pandemic affected the various household duties that they may have to perform as they stayed indoors.

As illustrated in these graphs, it can be observed how the time devoted to various household chores changed for female students and for working women who constitute the workforce (employed and self-employed); 68.9% of the students and 57.4% the workforce expressed an increase in cooking/meal management (Fig. 8), similarly, 65.5% of the students and 72.3% of the workforce expressed an increase in cleaning of the household and laundry (Fig.9). Moreover, as Fig.10 shows, while 77.6% of the female students said that they did not teach kids, 53% of the employed women expressed that their time teaching students had increased. This indicates that in addition to household maintenance, women also had to keep up with their child's school work and ensure their learning/ teaching as schools remained closed, which, for working mothers, meant balancing full time employment, coupled with schooling responsibilities.

Furthermore, for 37% of the female students and 34% of the workforce, the time devoted to the caring for the sick and the elderly had also increased (Fig.11).

"More was expected of me to contribute at home for domesticated work even though I work full-time & have maids, owing to the patriarchal mentality"

– Respondent; 19 – 25 years

“Both my mother and I, the only females in the house, often found ourselves severely agitated with the male family members' nonchalant and callous behavior towards helping out with household chores and their requests to cook something special every other day, refusing to acknowledge that we're tired and just because we females are home doesn't mean we need to be hooked up in the kitchen all day”

– Respondent; 19 – 25 years

Scholarship suggests that as home-based workers were laid off, most women had to manage domestic chores single-handedly.⁵⁹

In order to investigate this, we further examined whether working women had the support of house help after the outbreak. As demonstrated in Fig. 12, 95.7% of the working women said that the domestic worker did not perform longer hours while 85% said that they did not hire any domestic worker during this time. However, interestingly, 14.8% of

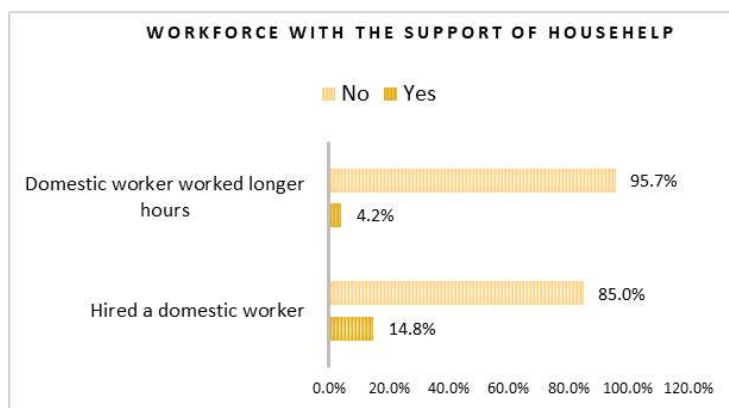


Fig.12

the working women reported that they had hired a domestic worker, thereby indicating that little employment was also generated during the pandemic. Nonetheless, the reduced availability of household help meant that working women had to shoulder most of the domestic tasks; after the outbreak, they became more time- poor as they had less time to spend on their own health, economic and skills development.⁶⁰

3. Health, Housing and Recreational Spaces

As shown in Fig. 13, for most women, work or university is a way to stay out of their home. Only 22% of

the women who took part in the survey do not consider work or university a means of staying away from home. However, the other 78% of women, one way or another, tend to use it as a means of staying out of their house. With no escape from homes, they have been forced to live with their abusers for extended periods. Stress and uncertainty of work often leads men to adopt aggressive or violent behavior, thereby making children and women a victim of domestic torture. Not having access to travel to the

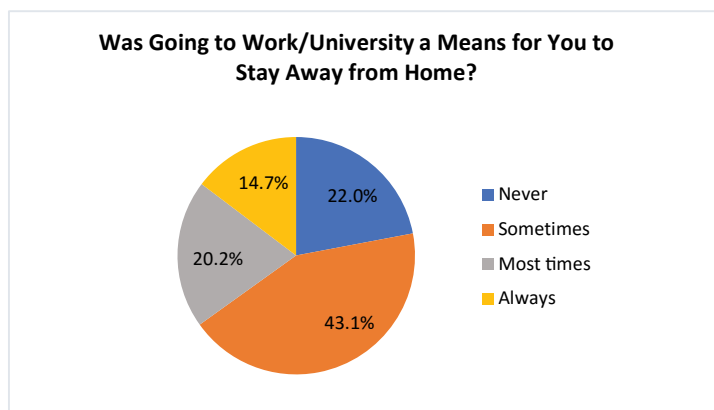


Fig.13

people or resources that could help them, has worsened their conditions. Especially in a country like Pakistan, where there are limited helplines and resources for domestic violence in normal circumstances- getting the help these women need in a pandemic is almost impossible.

“I didn't have any excuse or opportunity to leave the house. Home chores and work load increased as domestic help wasn't available which made it harder to focus on online classes”

– Respondent; 19 – 25 years

⁵⁹Gender and Pandemic: Protecting Women in Times of COVID 19 (2020). Advocacy Brief 3. UNODC. Government of Sindh. Retrieved from, https://www.unodc.org/documents/pakistan/Advocacy_Brief_3_Gender_-COVID-19-Sindh.pdf

⁶⁰COVID 19 and Its Economic Toll on Women: The Story Behind the Numbers (2020). UN Women. Retrieved from, <https://www.unwomen.org/en/news/stories/2020/9/feature-covid-19-economic-impacts-on-women>

Especially in a country like Pakistan, where there are limited helplines and resources for domestic violence in normal circumstances- getting the help these women need in a pandemic is almost impossible.

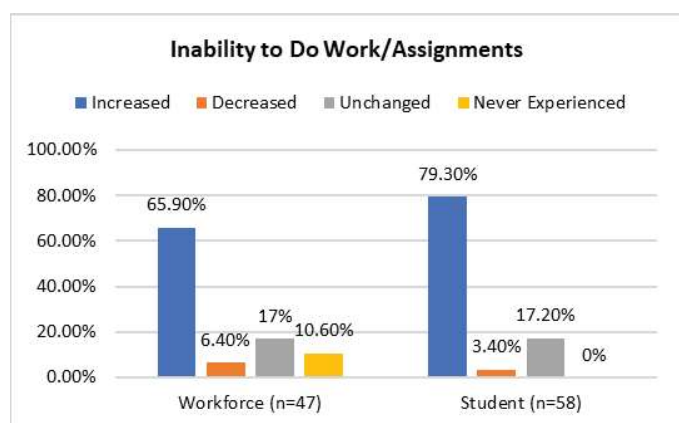


Fig.14

“Being unable to leave the house, and being forced to spend time with my abuser day and night has greatly affected my mental and physical health”

– Respondent; 19 – 25 years

“It feels like we are stuck in jail sometimes. Mental stress has increased because of losing my job. Paying university fees and other expenses that I used to with my income has become difficult... there is no privacy in a middle-class family”

– Respondent; 19 -25 years

Furthermore, many women expressed how this pandemic has led to an increase in emotional stress and anxiety. Majority of the respondents (79.3% of students, 65.9% of working women) found it difficult to do their work and assignments at home (Fig.14). Perhaps, one of the reasons could have been overcrowding at home and subsequent decrease in privacy.

As illustrated in Fig. 15, majority of the respondents (57.8%) lived in households comprising 5 ≥ persons. Upon further analysis, it was observed that out of those living with 5 ≥ persons in a household, 41.3% of them experienced a decrease in their privacy and 76.2% of them also suffered from the inability to do their work properly, which is in contrast to the answers of those living with 0-4 persons only. This pattern corroborates the hypothesis that

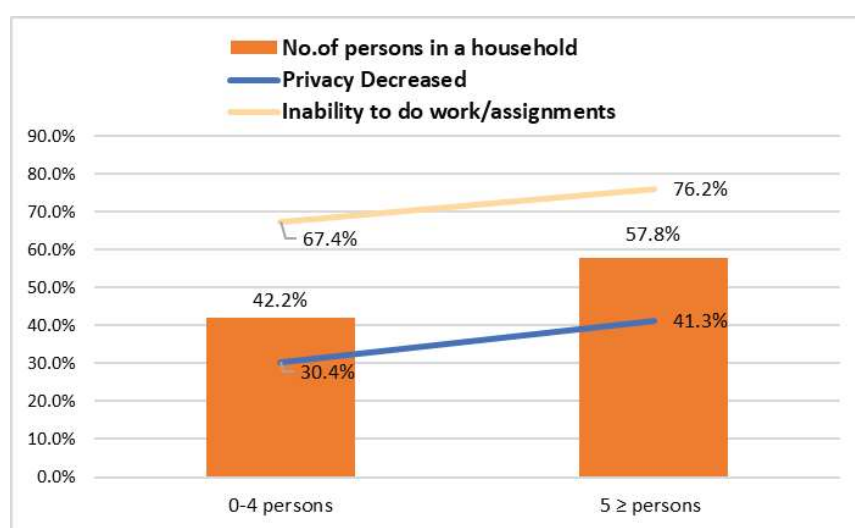


Fig.15

overcrowding in households may potentially lead to an increase in mental stress. Given that a typical household in Pakistan has an average of 6.7 persons living and eating together, which can go up to 7.2 persons in urban households as compared to 6.5 persons in rural households, it can naturally get arduous for people to focus on their work and tasks.⁶¹ This is particularly true for women who, in the wake of the virus, have not only found themselves juggling through increased responsibilities and reduced privacy, but, at times, have also suffered psychological and/or physical torture.⁶²

⁶¹Ahmed, T., Ali, M, S. Characteristics of Households and Respondents. Chapter 3. <https://dhsprogram.com/pubs/pdf/FR29/03Chapter3.pdf>

⁶²Gender and Pandemic: Protecting Women in Times of COVID 19 (2020). Advocacy Brief 3. UNODC. Government of Sindh. Retrieved from, https://www.unodc.org/documents/pakistan/Advocacy_Brief_3_Gender_-COVID-19-Sindh.pdf

Their well-being is aggravated because of poor housing design and conditions as well. A study by Amerio et al., (2020), *COVID-19 Lockdown: Housing Built Environment's Effects on Mental Health*, finds that "poor housing is associated with increased risk of depressive symptoms during lockdown", whereby poor housing is characterized with overcrowding, lack of sanitation, kitchen and plumbing facilities, poor ventilation, air and water quality, etc.⁶³ The 2017-18 Pakistan Demographic and Health Survey (PDHS) implemented by the National Institute of Population Studies (NIPS) under the aegis of the Ministry of National Health Services, Regulations and Coordination, reveals that 93% of households in Pakistan have access to electricity; 73% have drinking water on their premises while the 10% spend more than 30 minutes to obtain it; 93% have a place of handwashing while the 69% use soap and water.⁶⁴

Despite the availability of these basic necessities on a broad scale, the habitation density level is "more than 3 persons per room in Pakistan which is significantly higher than the tolerably crowding level proposed by the United Nation i.e. 1.4 to 2.0 persons per habitable room".⁶⁵ Moreover, one in ten persons is exposed to tobacco smoke daily as 93% of the cooking takes place inside Pakistani households with a poor ventilation system.⁶⁶ Presently, housing in Karachi is largely marked with scarce indoor quality, minimal ventilation, unpleasant balcony views and a lack of green surrounding spaces. Satellite images in 1987 suggest that 37% of the residents live in squatter settlements (katchi abadis) and 34% live in semi-permanent, high-density dwellings in Karachi.⁶⁷ The low-income residents and the informal sector have built high-rise apartments and extra rooms in existing structures that have led to an increase congestion in housing in Karachi.⁶⁸ According to the housing and health guidelines of WHO in 2018, such a poor housing environment limits the ability to effectively practice social distancing and personal hygiene, thereby increasing the risk of exposure to infectious diseases and worse outcomes of respiratory illnesses like COVID-19.⁶⁹

The well-being of women has further been endangered because of restricted mobility, and they have now been increasingly confined within the four walls of their house. Given that in Pakistan, women's mobility patterns are largely determined by gender norms and safety concerns, the pandemic has aggravated the already peripheral status of women. Hindered mobility and sporadic transportation, in turn, has had an adverse impact on women's ability to access basic necessities and health care utilities like contraceptives, sanitary pads, etc.⁷⁰

A respondent (25-30 years old) shared:

"I couldn't go to the hospital, specifically to my gynecologist for my regular checkups, because of which my health suffered a lot".

⁶³Amerio, A., Brambilla, A., Morganti, A., Aguglia, A., Bianchi, D., Santi, F., Serafini, G. (2020). Covid-19 lockdown: Housing built environment's effects on mental health. *International journal of environmental research and public health*, 17(16), 5973. doi: 10.3390/ijerph17165973

⁶⁴National Institute of Population Studies (NIPS) [Pakistan] and ICF. 2019. *Pakistan Demographic and Health Survey 2017-18*. Islamabad, Pakistan, and Rockville, Maryland, USA: NIPS and ICF. Retrieved from, <https://www.dhsprogram.com/pubs/pdf/FR354/FR354.pdf>

⁶⁵Haq, R. (2011). *Quantity and Quality of Housing Conditions*. UNICEF. Benazir Income Support Programme (BISP). p.5. Retrieved from, <https://bisp.gov.pk/SiteImage/Misc/files/Quantity-and-Quality.pdf>

⁶⁶National Institute of Population Studies (NIPS) [Pakistan] and ICF. 2019. *Pakistan Demographic and Health Survey 2017-18*. Islamabad, Pakistan, and Rockville, Maryland, USA: NIPS and ICF. Retrieved from, <https://www.dhsprogram.com/pubs/pdf/FR354/FR354.pdf>

⁶⁷Urban Resource Centre. (2001). *Urban poverty and transport: a case study from Karachi*. *Environment and Urbanization*, 13(1), 223-233.

⁶⁸Ali, M. S. (2015). *Karachi's Housing Problem- is there a solution?*. *Express Tribune*, Retrieved from, <https://tribune.com.pk/story/1003337/karachis-housing-problem-is-there-a-solution>

⁶⁹Ahmad, K., Erqou, S., Shah, N., Nazir, U., Morrison, A. R., Choudhary, G., & Wu, W. C. (2020). Association of poor housing conditions with COVID-19 incidence and mortality across US counties. *PLOS ONE*, 15(11), e0241327. <https://doi.org/10.1371/journal.pone.0241327>

⁷⁰Gender and Pandemic: Protecting Women in Times of COVID 19 (2020). *Advocacy Brief 3*. UNODC. Government of Sindh. Retrieved from, https://www.unodc.org/documents/pakistan/Advocacy_Brief_3_Gender_COVID-19-Sindh.pdf

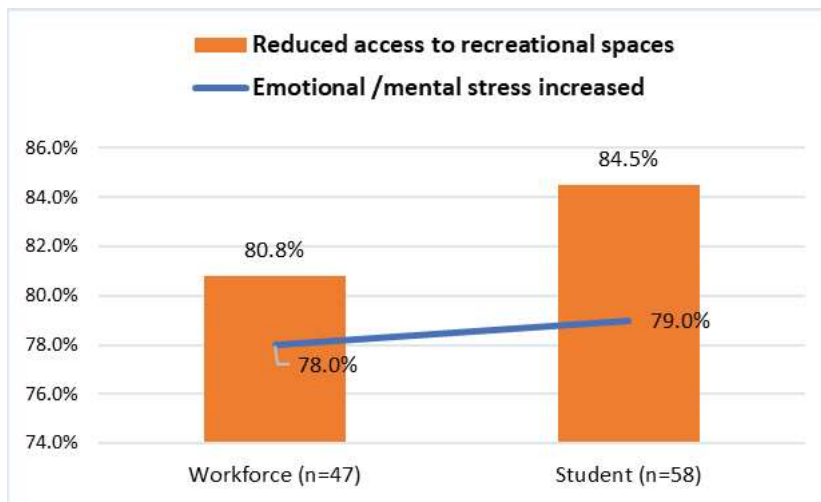


Fig.17

suffered increased levels of emotional stress; similarly, 84.5% of students who could not access recreational activities, 79% of them also suffered increased levels of emotional stress (Fig.17).

The study by Samuelsson et al., (2020), *Urban Nature as a Source of Resilience During Social Distancing amidst the Coronavirus Pandemic*, supports our finding; it argues that the “access to urban nature is especially important when stress levels are high in populations that suddenly are asked to shelter in place and that experience anxiety due to uncertainty and fear of infection”.⁷² Although important to curb the spread of the virus, closure and loss of outdoor recreational facilities such as parks and playgrounds not only reduces the opportunity to remain physically active, but is likely to have detrimental effect on the well-being of people, especially for an urban population like Karachi that already resides in dense settings with minimal public spaces at their disposal.⁷³

“I was fortunately given paid leave by my employer and stayed home for one month at the start of the lockdown because my employer felt that it was not safe to let me to come to work. However, a month later, I asked her to please let me return because I could not stay at home any longer in the company of my abusive husband. I actually enjoy going to work because my employer and her family are lovely people who take care of me”

- Respondent; Domestic Cleaner; 35 – 40 years

“My father started to abuse my mother physically and emotionally because he was frustrated due to the lack of work. Men think they can take advantage of women in these situations”

- Respondent; Sweeper at a club in Karachi; 20 – 25 years

“Being unable to leave the house, and being forced to spend time with my abuser’s day and night has greatly affected my mental and physical health”

- Respondent; Student; 19 – 25 years

⁷¹Rice, W. L., Mateer, T. J., Reigner, N., Newman, P., Lawhon, B., & Taff, B. D. (2020). Changes in recreational behaviors of outdoor enthusiasts during the COVID-19 pandemic: analysis across urban and rural communities. *Journal of Urban Ecology*, 6(1), juaa020. <https://doi.org/10.1093/jue/juaa020>

⁷²Samuelsson, K., Barthel, S., Colding, J., Macassa, G., & Giusti, M. (2020, April 17). *Urban nature as a source of resilience during social distancing amidst the coronavirus pandemic*. OSF Preprints. p.2. <https://doi.org/10.31219/osf.io/3wx5a>

⁷³Ibid

A recent study by Marroquin et al., (2020) suggests that extended indoor confinement and social distancing can lead to depression, Generalized Anxiety Disorder (GAD), acute stress and insomnia among people. By examining the implications of social distancing on mental health in a nation-wide online sample of 435 U.S. adults, their study concludes that the stay-at-home orders by the government "...were associated with symptoms of a range of mental health conditions...".⁷⁵ In uncertain times like the coronavirus pandemic, urban nature and natural ecosystems are said to provide a refuge and escape from household confinements and serve as stress releasers.⁷⁶

"Despite regulation, the amount presently spent on transport is a substantial burden on the budgets of low-income households".⁷⁷ After the outbreak, there was an abrupt and an unpredictable surge in the transport fare which was largely felt by the informal sector.

As shown in Fig.18, 73.3% of the self-employed respondents experienced a reduction in their monthly earnings which is in sharp contrast to just 21.8% of the employed respondents, and, as expected, a greater percentage of the self-employed (26.6%) - a part of the informal economy - also complained about the hike in transport-fare as opposed to the 6.3% of the employed persons.



Fig.18

This is likely because most of the formally employed persons own motorized vehicles and do not necessarily travel through public transport. Firstly, this indicates how the already middle to low-income groups were further pushed into increased poverty as a result of the pandemic, and secondly, it reflects on the failure of the government in being able to successfully regulate the fare of the transport to cater to the needs of the urban poor in such a crisis. Of the livelihood trips in Karachi, approximately 65 % are on public transport, including taxis and rickshaws., and some 83% of travelers cannot afford any motorized means of their own. This, yet again, suggests that the livelihood of most of the poor is directly dependent on their ability to get to their workplace via public transport, and the coronavirus pandemic only enhanced their mobility related hardship and frustration.

⁷⁴Marroquín, B., Vine, V., & Morgan, R. (2020). Mental health during the COVID-19 pandemic: Effects of stay-at-home policies, social distancing behavior, and social resources. *Psychiatry research*, 293, 113419. doi.org/10.1016/j.psychres.2020.113419

⁷⁵Ibid, p.6

⁷⁶Samuelsson, K., Barthel, S., Colding, J., Macassa, G., & Giusti, M. (2020, April 17). Urban nature as a source of resilience during social distancing amidst the coronavirus pandemic. *OSF Preprints*. p.2. <https://doi.org/10.31219/osf.io/3wx5a>

⁷⁷Urban Resource Centre. (2001). Urban poverty and transport: a case study from Karachi. *Environment and Urbanization*, 13(1), 223-233, p.226.

4. Migratory Patterns

With regards to migratory patterns, 12.5% and 7% of the respondents coming from a high-income bracket of Rs. 56,000- 75,000 and Rs. 76,000+ respectively, reported to have migrated internally within the country after the pandemic. Whereas, 5% of the respondents from the income bracket of Rs. 76000+ moved to a different country.

While not conclusive, these findings do reflect a growing willingness and desire on part of people with privilege and means, to relocate to city suburbs or to another city altogether that is less crowded and offers improved access to nature. These findings also equate well with a growing global documentation of this trend that has raised concerns for policy makers and urban planning and

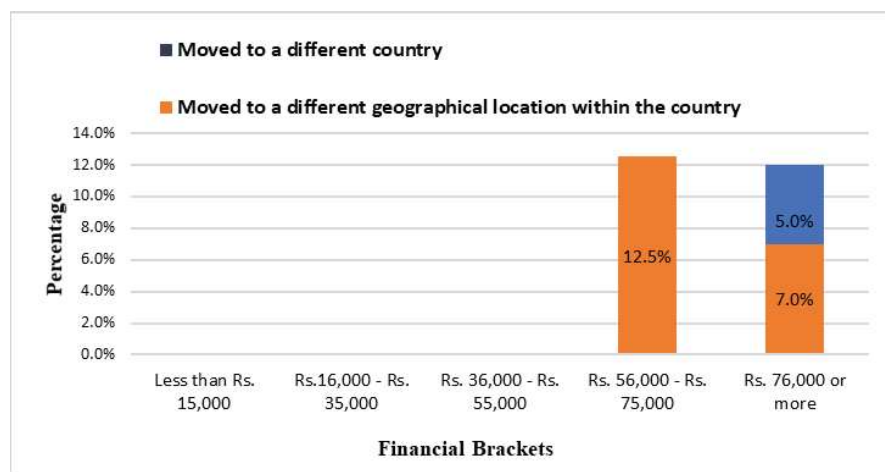


Fig.19

development practitioners of a move towards having less inclusive cities and increase in 'gated' communities. Some disturbing memories are being rekindled of the 60's and 70's, particularly of the North American experience, when enabled by improved access - highways and motorways being built - people with money moved out of the inner cities to set up the 'suburban' model. Where, as a result, the inner city faced decay with rise in drugs, crime and environmental degradation. While we do not find a complete compatibility here, our policy makers and planners still need to take cognizance of these trends and accommodate in the future planning of our urban spaces.

MAKING SENSE OF CITIES IN CHAOS — Some Conversations

*This **Section** documents some conversations with noted architects, planners and urban design experts on how they view the evolving trends in usage of public spaces, mobility, housing, urban settlement patterns and related issues of the urban construct in the pandemic and post pandemic urban landscape. Hopes, concerns and possible windows of opportunities that could be leveraged to plan for a better tomorrow for our cities?*



Dr. Noman Ahmed, Professor and Dean, Faculty of Architecture and Management Sciences, NED Engineering University, Karachi, feels that the impacts of the COVID-19 pandemic will leave imprints that would last beyond the pandemic phase. Even in developing and least developed economies, technology, particularly digital technology is making changes in lifestyles. There is a concern and fear that such pandemics can revisit us with more frequency so changes happening on an urban living scale need also to find some permanence. However, what concerns Noman is that while the wealthy and more privileged may adjust more easily, it would not be the same for those living on the margins.



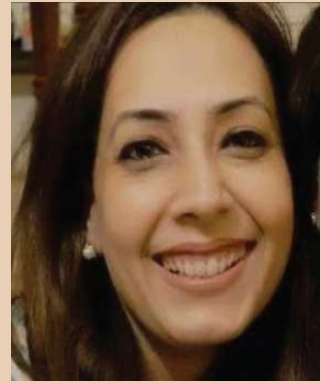
This is more of a concern in developing cities where rapid changes and adjustments are difficult to ensure. Like in the developed world, already institutions and policy frameworks have started to emerge that are designed to provide improved emergency healthcare, food supplies etc. In our context, it is difficult to foresee government systems responding to meet the emerging challenges. While there have been encouraging pilot scale interventions in the past, they have never translated into wide scale policy changes and adaptations.

Our institutions of civic governance are paralyzed and we are seeing severe institutional decay. Public policy instead of focusing on the needs of the more marginalized is instead moving away from them. Noman cites the example of the ongoing efforts to clean the Nullahs (storm drains) in the wake of the recent urban flooding in Karachi. Here he says the first intervention has been to remove and evict the poor, homeless people settled along the nullahs without having in place any effective, viable plans for resettlement.

Noman shares three (3) takeaways, of possible opportunity widows opening that we need to capture –

- (1) history has shown that economic recessions often lead to opportunities being created for more equitable growth, as along with the poor, the privileged also do suffer – he cited the New Deal of Franklin Delano Roosevelt in the USA in the aftermath of the great depression
- (2) when property markets take a hit, other more viable options for financial investment open up – manufacturing, industry, services – that can lead to enabling more equity in development
- (3) People, instead of just focusing investment in large cities start looking at investing in secondary towns that leads to overall improvement for both larger and smaller cities.

Maria Ansari, Principal Architect, Maria Ansari Designs, Chairperson IAP, Karachi Chapter and Member BOG, Indus Valley School of Art & Architecture, feels that our present times endorse adaptability at unprecedented levels and the idea of 24 hour cities has reinvented itself as a reaction to the social distancing norms. While the ways in which the cities have been adjusting are not presenting a totally new construct but the trends are emerging such as the mutation in the shape of outdoor spillage of eateries where it was earlier not the norm. She feels that the opportunity exists where such practices can lead to urban dead zones being activated by outdoor seating areas, as opposed to dead commercial zones post 6pm. As an urban community, she adds, we have always drifted towards a preference for indoor comfort, as opposed to the vulnerability of outdoors seating exposed by the ongoing hustle bustle of traffic, both vehicular and pedestrian. However, the jury is out on whether this will bring about a lasting socio psychological change in people with respect to a sheer acceptability of their surroundings. The pandemic has brought a new understanding to what can be defined as a 'norm' – like it is now acceptable for urban snobs to sit in a vulnerable outdoor situation, yet enjoying socially distanced company and delectable food. Maria feels that the second new COVID norm is 'virtual' – saturating our everyday existence with its pendulum swaying in both directions – personal and professional. She feels that 'social distancing' and 'virtual,' will become a powerful mandate in themselves as people and cities will have no option but to endorse to their permanence into our immediate surroundings. Settlements will most definitely redefine their boundaries. A concern about the times to come, Maria shares through a quote by Sikali - *To society, social distancing presents the dangers of increasing social rejection, growing impersonality and individualism, and the loss of a sense of community.*

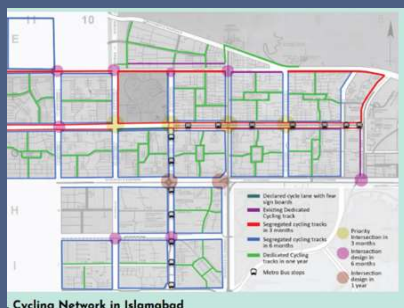


Hira Zuberi, Associate Director, the Playground - Center for Trans-disciplinarily, Design & Innovation at Habib University, Lecturer Communication & Design said that while in the 'lockdown' phase of the pandemic in Karachi a number of interesting and innovative uses of public spaces and mobility modes were witnessed, we all returned to the pre-pandemic 'normal' as soon as the situation improved. Citing her own example, she shared that while being a resident of Defense Housing Authority (DHA) living quite near the coast for twenty-five (25) years, she had never even walked in her neighborhood block – but come lockdown, she started walking and cycled almost daily to the coast – practices that many of her neighbors shared with her and Sea View became a public park! However, now the cars are back on the streets and cycles rest in the homes of people. One main reason she feels of the change brought about by the 'lockdown shock' was that the spaces that people, particularly the young, mostly frequented, like cafes, restaurants and gyms were closed, and also walking and cycling, even for girls, became so common that they did not feel threatened as was the case earlier. So, in the post pandemic phase she does not see changes happening any soon as the reasons preventing space and mobility uses as witnessed in the lock down phases are very deep rooted and it would take a major effort by all to create the enabling space for change to happen. Only once a 'critical mass' develops demanding such a change can spaces be re-configured. However, one important takeaway Hira shares is that previously we thought that to promote activities like walking, bicycling etc., you first need infrastructure to be built, but the pandemic has shown that a good beginning can be made even without infrastructure investment – you just need a change in behavior and attitudes! Therefore, we need to capture the moment and advocate for influencing public policy and a re-configuration of our public spaces and modes of urban mobility.



Cycling Sunday Islamabad!

Urban Innovation (Pvt.) Ltd. have catalyzed positive action in Islamabad by having initiated every month 'Cycling Sundays'- bringing shades of the famous Ciclovía experiment started by Mayor Enrique Penalosa in Bogota, Columbia! A collaborative program, 'Cycling Sundays' initiative came to fruition through the combined efforts of the Islamabad Capital Territory Administration (ICTA), Urban Innovation, Islamabad Cycling Association, Urban Platform, Municipal Corporation Islamabad, Traffic Police Islamabad and Graana.com. A comprehensive document 'Cycling Strategy Islamabad' was prepared by a multidisciplinary team of citizens and urban professionals to lay the groundwork for this initiative and aim to influence sustainable change in Pakistan's urban mindset.



The strategy document highlighted and illustrated possibility of non-motorized short distance inner city transport and outlined the importance of behavioral change initiatives and awareness campaigns encouraging and mainstreaming non-motorized short distance travel within the city.

The document outlines a four pronged approach: Behavioral change, infrastructure measures, policy and legislative measures, and the creation of sectoral level jobs and opportunities. This cycling strategy document also presents necessary diagrams, maps, a detailed action plan and timeline thereby simplifying the implementation process for the city administration. The subsequent strategy paper will be based on reviving the cycle manufacturing industry in Pakistan.

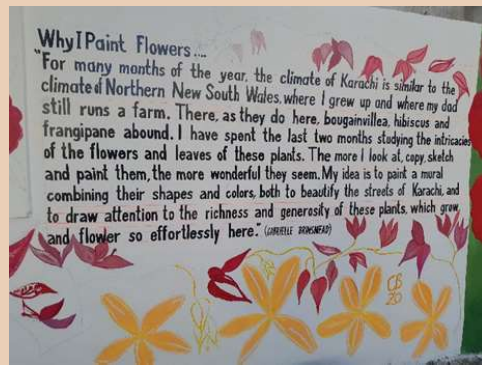
Sarah N. Ahmed, a trained urbanite and city thinker based in Lahore, and Managing Director of Urban Innovation (Pvt.) Ltd. agrees that in the wake of the pandemic there is a definite focus now on aspects that relate with 'quality of life' and healthy living. These considerations are being reflected in how people are making use of indoor and outdoor spaces. She cites the comeback that the 'balcony' space has made. A space that was an integral part of earlier pre-modern period urban architecture was beginning to disappear and now in the pandemic phase has become a symbol of people making 'connections' across neighborhoods and streets. Similarly, outdoor spaces like parks are being frequented not just by the elderly but by the younger generation that was not a very common sight earlier. People are thinking of moving to less populated and cleaner spaces such as urban suburbs but that is only possible for the wealthier and elite. Therefore, something that worries Sarah is that the most impacted – that are communities on the 'margins' may not be able to transform into the 'critical mass' needed to shape pro-poor policies and influence more equitable growth patterns. As such, she feels, changes if any, brought by the pandemic experience in city life will still be determined by powerful interests and this is more relevant in cities like ours.



Gabrielle Brinsmead, an artist, activist and resident of Karachi of an Australian decent, is presently working on a Wall Art Project that is a collaboration between I AM KARACHI, International Public Art Festival and the Australian Government. She is sketching local indigenous flowers near Teen Talwar, Karachi and says that the initiative got started when Ambareen Thompson of I AM KARACHI contacted her



and asked if she would like to paint a wall in Karachi. Gabrielle immediately agreed and said that she would like to sketch flowers. Her reason for this choice she expressed was the need to bring out the existing beauty of the city. She feels that we often demand things to happen – pick our garbage better, make our parks better, which is ok, but let's start first with sharing the inherent, existing beauty of the city. She says that Karachi has a very good enabling climate where we can grow beautiful plants and trees – and flowers are beautiful natural beings – they make people happy – people would like to be near them – and so such spaces can become magnets for building social capital and making Karachi a much more livable city. Gabrielle feels that if we all can get together in such campaigns and activities then good things will happen.



Sumera M. Bilgrami, an architect and founder of Aesthetic Community Design, feels that the trends evolving are not entirely negative and it is not that the earlier trends were totally positive either, as cities were becoming less equitable and more segregated. She feels that a design shift towards enabling good public health had started prior to the pandemic hit. What the pandemic has done is to 'organize' public spaces. While remote working may become more prevalent, Sumera does not see a major shift in urban living patterns. She feels that 'small solutions' need to be promoted. More inclusive living patterns happening at the neighborhood level – something that has happened during the pandemic phase. She feels that public spaces are not just designed for 'social distancing;' and will slowly return to normal and mobility practices such as cycling would increase. In the context of Pakistani cities, Sumera feels that design should respond to public behavior. The pandemic has led to more disciplined living even in our context and hopefully that 'discipline' can get reflected in urban design also. Government should 'enable' and not 'force' change. City organizations like the Karachi Metropolitan Corporation (KMC) should open avenues for public engagement, hold Town Halls, even for now have 'remote' meetings and work for making our neighborhoods better places through participatory, bottoms up planning that can lead to a better city for all and not just a few.



Aesthetic Community Design (ACD) is a professional startup based in Karachi, Pakistan which aims to change Karachi's rank from world's least livable cities to the most livable city! ACD strongly believes Public spaces such as streets, open spaces, parks, and public buildings in Karachi are a big part of problem as well as a solution in overall physical experience of the city because they are often overlooked in planning. ACD plans to transform and soften the harsh aggressive built environment better suited to be used by all through place making, universal design interventions and community mobilization on basis of spatial and sensorial order. Achieving a healthy built environment involves a cultural shift on all levels of society from administrative and policy making down to grass root community. Providing public with healthier alternatives, through sports, culture and creative activities in neighborhoods is where the importance of upgrading public spaces becomes imperative and it is embedded within the charter of Aesthetic Community Design.



Mishaal R. Merchant, Principal Architect and CEO, Eco Morph, feels a major change is in the way technology, particularly, digital technology has made a space in our lives – a reality that has the capacity to have profound impacts on human living patterns. Earlier, people generally were not acceptable to immersing themselves in the digital age but now work, education, healthcare are all happening online. She also points to the irony that while from their homes people are doing a lot that earlier involved mobility, a lot of indoor activities are spilling outdoors – like eating spaces. Restaurants in Pakistan giving a look of Paris with outdoor eating on pavements and sidewalks. Mishaal shares the concern that cities may spread horizontally, with urban sprawl happening leading to formation of 'gated' and secure communities leading to reduced inclusivity and community bonding. Mishaal has optimism about the future of public spaces in Karachi. She shares her own experience of working with communities and relevant government entities in reviving a neighborhood park in Clifton Block 7, Karachi that was facing decay. Her architectural firm Eco Morph and NGO Chhaaon, collaborated with the



management of District Municipal Corporation (DMC) South, and local residents to initiate a participatory visioning and planning process to revive the park space. They asked neighborhood residents what they wanted to happen and made innovations – like they added to the width of the walkways in the park from the normal 4 ft. practice to 7 ft. so that women with

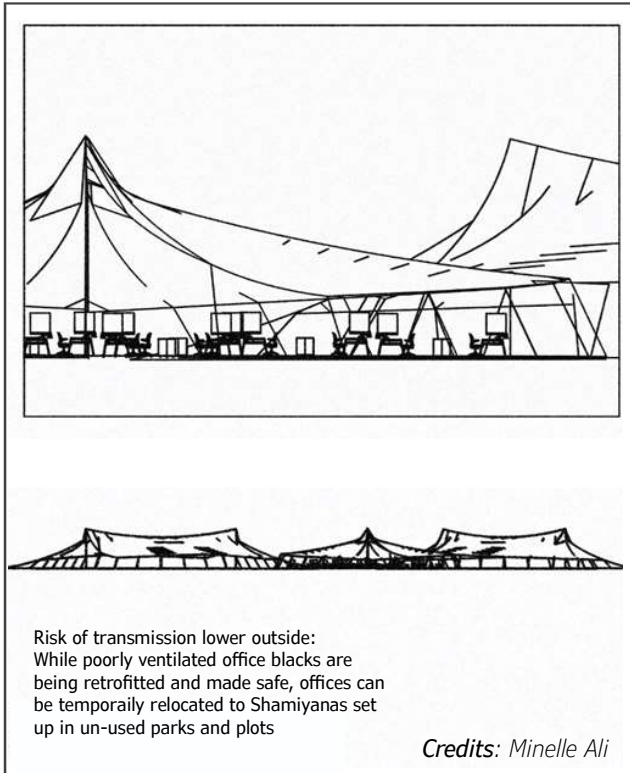
children can also come, with strollers and families can have a walking experience together. She said that the project team wanted a basketball court added but the community also wanted a badminton court, so they incorporated. Mishaal feels that we need to spread the footprint of such spaces at the neighborhood scale – as even in Clifton Block 7 there are so many parks – many not in good shape and having limited visitation that can be revived thus leading to making the neighborhoods so much more inclusive where people across lanes and districts get to know each other. She stresses that such pilots need to be streamlined in public policy to make a larger impact.



CONCLUSION

“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody”

– Jane Jacobs



Cities are shaped by a combination of factors. The trades and businesses they support, the spatial and geographical contours they exhibit, by the melting pot of cultures, languages, ethnicities of the people that inhabit its spaces, and above all, the urban governance construct that creates either the enabling or disabling space for incubating or distorting urban growth. Cities by their very nature are uniquely vulnerable to the consequences of any man made or natural calamity. Being the habitat of large human settlements and sustainers of multiple drivers of a nation's economic growth – the effects felt in the cities are magnified in terms of larger implications for national growth. In the recent past, significance of cities as both contributors to sustainability challenges and also as incubators of innovation and enterprise has become more and more apparent. Such as within the context of issues like 'climate change' – the most potent and in fact, existential challenge facing the

entire humanity. Focus, therefore, now is on influencing through appropriate policies, projects and urban design innovations - for the cities of the future to function as sustainable, smart, green, resilient and inclusive spaces.

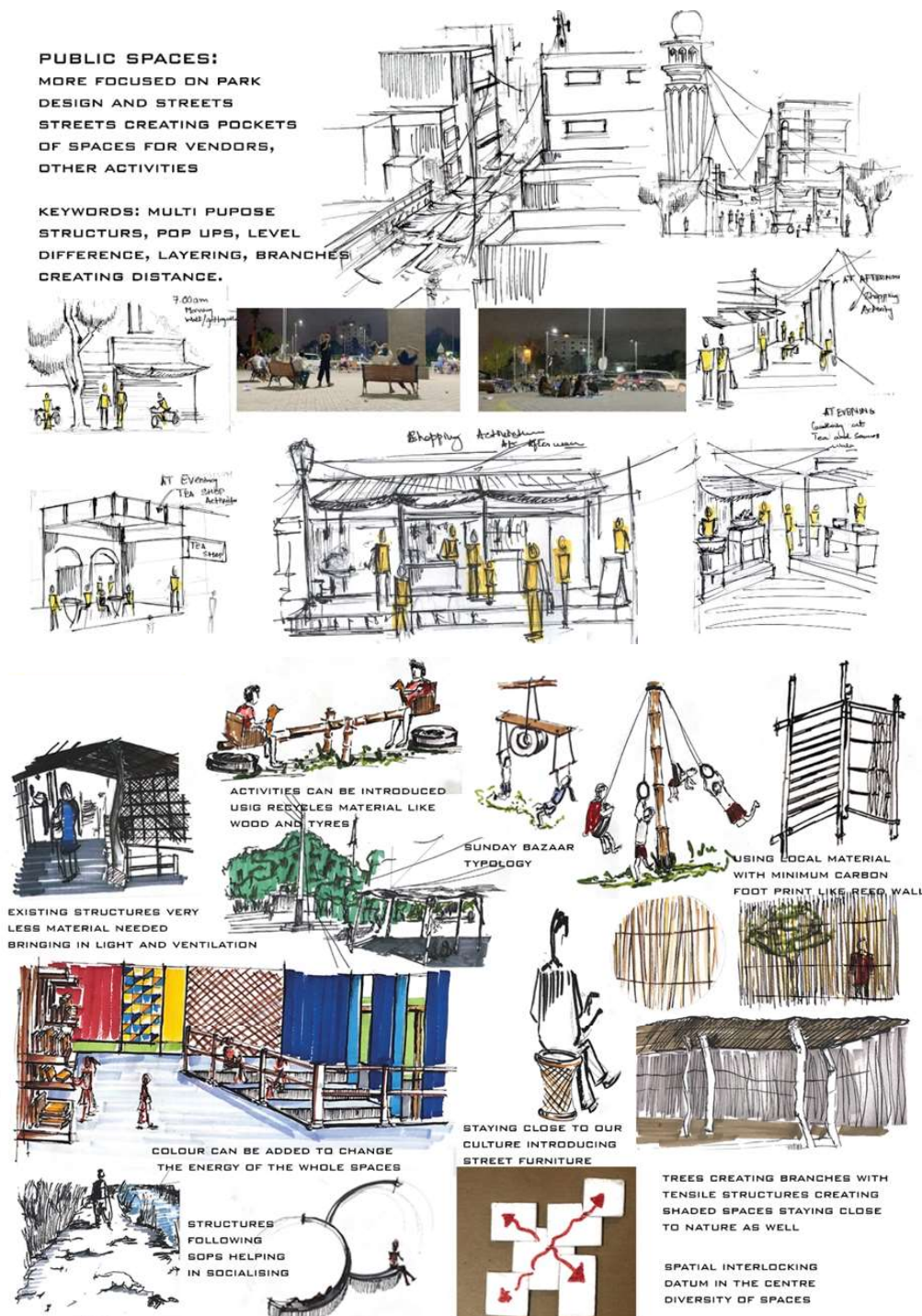
The pandemic COVID-19 has shown in no uncertain ways, what can terribly go wrong when cities are not equitable, where urban design and densities are not appropriately charted and where the 'compact' between the state and citizens is weak with a trust deficit, and where lack of viable service provision, weak social accountability and institutional inadequacies define the contours of the relationship. When the pandemic started, it was labeled as the great leveler, where all were equally impacted, rich and poor, privileged or underprivileged, black or white - very soon however, it became apparent that the worst effected were those already on the margins – living in undesirable housing conditions, with poor access to critical civic and social services such as water and sanitation, healthcare and education and with no access to social and financial security nets. In this concluding section, an effort is being made to identify key learnings within the context of Karachi city and how, if the right political will is exhibited, these learnings can be leveraged to make the city a more livable and inclusive space.

Three areas of urban planning and design are being addressed:

- Public Spaces
- Urban Mobility
- Vertical Growth and Housing

Public Spaces

The sustainable city discourse pre-dating the pandemic had already indicated more innovative and 'people friendly' uses of public spaces. Taking an understanding of public spaces beyond just the traditional typologies of parks and museums to add spaces like streets, squares, markets etc. – that in fact in the not-too-distant past used to be 'the' most vibrant of public realms – before the cars and shopping malls encroached their spaces. Karachi desperately needs to 'reclaim' its lost public spaces – something that will lead to making the city much more inclusive, environmentally sound and also open up new avenues for economic prosperity. Improved public open spaces in particular can lead to making cities healthier and also add to the 'social capital', thus contributing to increased bonding and inclusivity.



Credits: Mahnoor Jawad

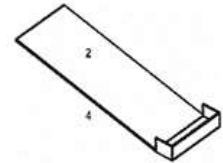
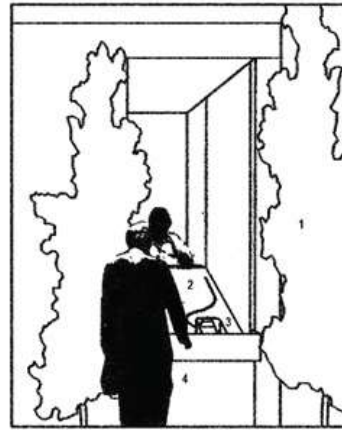
Urban Mobility

Karachi is served by a paralyzed and totally bankrupt policy and institutional framework when it comes to mobility and transport planning and implementation. Powers, functions and responsibilities are one inappropriate to meet the needs of the modern times and then are also distributed in all the wrong ways – spread out across different vertical and horizontal tiers of governance having no mechanism in place to coordinate and calibrate their actions in this dispersed policy and implementation space. These are political decisions that require a show of political maturity and consensus that for now is unfortunately missing. These matters need to be resolved first as a priority prior to rolling out any ground-based reform plans. In this Study, some much needed policy and planning interventions have been identified and a need stressed for centralizing authority for mobility planning at the city government level.

Housing

Karachi is a city where about 50% of the population resides in slum settlements often deprived of basic citizenship rights. Despite this glaring reality, Karachi has never been able to implement a viable 'affordable housing' program or enact a policy framework that ensures a viable 'affordable housing' percentage to be provided by law. These are issues of great shame that rest at the roots of Karachi assuming a growing profile of 'urban inequity' and 'social injustice'. While policy frameworks to address these gaps supported by well thought out upgrade programs need to be implemented at the earliest – a critical revisit has to be made also of ill planned efforts to facilitate high rise vertical growth in the city, in the absence of required social and environmental safeguards. A serious rethink has to be made of the continuing 'commodification of space' in the city where the 'public good' aspect of land use planning has been totally lost.

The majority of Pakistanis do not have access to online shopping due to barriers related to literacy, Internet access, gender disparity and income. In this context, how can we retrofit or redesign existing general stores to make in-person shopping a safer experience? One solution may lie in designing deeper, more detailed shop fronts.



A section of the shop front can be used to create a "shopping window" to create an option for users who do not wish to enter the store

1. Tree/Plant partitions
2. Counter extending out 6 ft. slopes down to make it easier for items to slide down and reach the customer
3. Basket attached to string/rope for payment
4. Shop storage underneath counter and slope

Credits: Minelle Ali

PUBLIC SPACES

Key Pandemic COVID-19 Learnings



Outdoor spaces with appropriate safety design found much more 'safer' than indoor spaces

Innovations in finding 'outdoor' spaces for originally 'indoor' activities opens up exciting avenues for activating 'open spaces' as vibrant 'public spaces' that are diverse and also more inclusive and less exclusionary

Enhanced use of 'outdoor spaces' led to viable **'urban design' changes such as widening of pavement widths** that can lead to promoting increased walkability in the future and greater compliance with requirements of 'universal access design'

Spaces such as **'parks' found a greater traction**, even among the younger population and 'neighborhood parks in particular received much higher levels of visitation

A heightened sense of connecting with 'nature' – the pure and healthy environment, led to more people and communities engaging in activities such as **organic farming, plantation and nature induced healing and visitation of nature spaces** increased

With 'lockdown' scenarios prevailing in many global cities, **'neighborhood spaces'** became much more activated giving hope of pushing the agenda of 'sustainable neighborhoods' in the future

Pathway for reforms



POLICY REFORMS

Universal Access Design requirements be made part of all future public space design projects in Karachi while existing spaces be 'retrofitted' as far as possible

'Public Districts' (predominantly pedestrianized) be identified to serve as viable public visitation spaces – Example Historic District, Cultural District, Entertainment District etc.

Comprehensive **'Parks Restoration & Renewal'** policy framework be formulated and implemented to find innovative, diverse uses of neighborhood, district and city level parks

Karachi be declared as a **'Market City'** and historic market/bazaar spaces be renovated and restored

Karachi's rich and diverse **'waterfront'** with consensus of land-owning agencies be opened up for 'public uses' instead of further 'privatization'

In the future 'planning exercises', concepts of 'micro-level' strategic planning be introduced with **'neighborhood level planning'** incorporated – sustainable, walkable, mixed use, inclusive neighborhoods

Public-Private-Partnership (PPP) models be introduced in all aspects of public space design planning and management – enforced with proper regulatory controls to protect public interest

STAKEHOLDERS

Government – All tiers collaborating – Elected & Appointed

Civil Society Groups

Private Sector

Professional Bodies

Trade & Business

Youth & Academia

Cultural & Performing Arts communities

Media

URBAN MOBILITY

Key Pandemic COVID-19 Learnings



Non-motorized transport (NMT) – walking and bicycling finding much greater favor as compared to vehicle (private and public transport) use – leading to influencing government led policy and infrastructure support

Innovative infrastructure forms put in place (example pop-up-architecture) to promote NMT that can find a more permanent space in the times to come

Public transit such as buses, trains etc. found lesser use and may lead to a re-configuration resulting in NMT form of mobility taking some of the user load of public transport

Urban design options such as 15-minute neighborhoods contributing to more utility of NMT and signaling a greater merger and **interface between urban land use and mobility planning** in the cities of the future

Technology options such as **‘drone use’ for consumer-based material/goods (eateries, parcels etc.) delivery** can lead to reduced traffic load on streets in the future as such technology options become more acceptable and economically viable

Enhanced levels of **‘home based’ activation** (employment, education, healthcare, shopping and retail) can lead to reduced traffic levels on the streets as such technological options become more acceptable and viable

Pathway for reforms



POLICY REFORMS

Transport policy and planning functions be **‘centralized’** at the level of city government

Universal Access Design requirements be made an essential part of all mobility plans and projects in the city

Comprehensive policy framework for promoting **‘Non-Motorized’** transport be formulated and implemented with critical interfaces created with ongoing and planned mobility projects and city organizations like KMC, KDA, SBGA, DMCS, and Cantonments etc.

An **Urban Street Design Manual** be prepared and implemented on an urgent basis – incorporate guidelines in ongoing and future projects and retrofits as best as possible existing street networks

Transit Oriented Development (TOD) be made an essential component of all mobility projects relating with introduction of ‘primary modes’ of transport such as BRT, KCR – as part of a larger focus on merging and interfacing urban land use and mobility planning

Gender mobility mainstreaming be done in all mobility related policies, plans and projects

Principles and guidelines of **Sustainable Urban Mobility Planning (SUMP)** be made an essential part of designing, planning and monitoring urban mobility projects in the city

STAKEHOLDERS

Government – All tiers collaborating – Elected & Appointed

Civil Society Groups

Private Sector

Informal Sector

Gig-economy actors

Academia

Professional Bodies

Media

HOUSING

Key Pandemic COVID-19 Learnings



While no conclusive evidence has been produced, there are concerns that **dense living spaces**, such as high rise/apartment complexes have led to faster and wider spread of the pandemic COVID-19

Squatter settlements/slums have posed unique challenges in terms of spaces supporting wider spread of the pandemic COVID-19 due to dense living patterns, inadequate housing and provision of essential services. Shelter spaces both contributed to greater spread and also made it difficult to take post infection safety measures such as 'self-isolation'

Greater use of indoor spaces like 'balconies', 'roof spaces' has reinforced the growing demand to aim for 'greener' housing designs where the **'modern' blend with the 'vernacular'** – enhanced ventilation, high ceilings, balconies/terrace spaces, wider staircases and pavements

A likely greater dependence on **digital technology/artificial intelligence** such as Internet of Things (IOT) will impact design of urban spaces with more interconnected and modular dwelling design taking shape

There is concern that **possible relocation of communities** with wealth and privilege to the suburbs or to cities that are less crowded and give improved access to nature – owing to the declining cost of distance and enhanced concern for personal physical and emotional health – can lead to more 'micro communities' and 'gated communities' coming up

Pathway for reforms



POLICY REFORMS

Comprehensive policy framework and plans for **regularization and design/rehabilitation upgrade of slum settlements** be prepared and implemented

Comprehensive policy framework be prepared and implemented to launch an **'Affordable Housing'** program –Not just focused on providing 'shelter' but linking it viably to essential civic and social services and employment centers and dovetailed with a viable financing mechanism

There should be made law that **30% of housing** in Karachi city should be 'Affordable Housing'

Through a collaborative effort – involving government, professional bodies, consultancies and academia, viable **'Green Building Standards'** be prepared that find relevance to all existing building typologies in the city

The **High Density Acts** and related legal instruments created need to be re-visited to ensure that provisions comply with 'green building' requirements

Efforts need to be initiated through policy instruments and strict monitoring and enforcement to **prevent urban sprawl and encourage compact growth** that is in compliance with required social and environmental safeguards

STAKEHOLDERS

Government – All tiers collaborating – Elected & Appointed

Civil Society Groups

Private Sector

Builders & Real Estate

Informal Sector

Services Sector

Academia

Professional Bodies

Media

About the Authors

Farhan Anwar did his Bachelors in *Civil Engineering* and Masters in *Urban and Regional Planning*. His portfolio includes urban sustainability planning, smart cities, public policy, climate adaptation, and institutional strengthening and change management. Anwar served as an *Urban Reforms Consultant* to the *World Bank* from 2006-2013 and is presently serving the *World Bank* in the capacity of *Urban Planning Consultant* on the *Karachi Transformation Strategy* project. He presently serves as a Visiting Faculty at the *Institute of Business Administration (IBA), Social Sciences & Liberal Arts Department*, where he teaches a Bachelors course on *Sustainable Cities & Communities* and at the *Indus Valley School of Arts & Architecture, Karachi*, where he teaches Bachelors Course in the *Architecture Department on Urban Theories*. In addition, at *Habib University*, he teaches a Bachelors Course in *Urban Planning in the Social Development and Policy Program*. Anwar is the *Lead Author* of the *Sanitation Strategy, Government of Sindh* and the *Author* of *Pakistan's National Strategy and Action Plan for the Mangroves of the Future Regional Program*. He has a number of publications to his credit and contributed (2013-2016) a weekly column – *Elasti-cities* focused on urban planning, environment, and development issues of Karachi City in the *Express Tribune Newspaper* - <https://tribune.com.pk/author/4268/farhan-anwar/>



Hiba Shoaib is a third-year student pursuing a bachelor's degree in *Social Development and Policy* from *Habib University*. Currently, as a researcher at the *Trans-disciplinary Design and Innovation Lab of Habib University*, she is working on human-centered design solutions and gender-sensitive policies on the issue of female mobility in Karachi. Recently, two of her primary research studies '*Female Mobility: Women Traversing Gendered Public Spaces in Urban Karachi*' (lead-author) and '*Low-skilled Labor Migrants: Struggles of a Pakistani Labor Migrant in Saudi Arabia*' were published in *Tehzib (Habib University's academic journal)*. Hiba was also in the President's List 2019 and qualified for the High Academic Achievement Scholarship in Fall 2019. Previously, she interned at *The Citizens Foundation and Akhuwat* for projects on poverty alleviation and education for the underprivileged. From 2019 - 2020, Hiba served as the *General Secretary* for *Habib University's Youth Chapter of the United Nations Association of Pakistan (UNAP)*, where she worked towards achieving the SDGs and was recognized as one of the top 10 UNAP members. On a full merit-scholarship given by the *U.S Department of State*, Hiba attended the *Kennedy-Lugar Youth Exchange and Study (KL-YES)* program to represent Pakistan as a cultural ambassador in the United States of America for a high school academic year (2014 – 2015).



SHEHRI-CITIZENS FOR A BETTER ENVIRONMENT (SHEHRI-CBE)

Shehri-Citizens for a Better Environment was formed in 1988 (based in Karachi City), as a non-political, noncommercial, non-governmental organization (under the Societies Registration Act XXI of 1860) by a group of concerned citizens to provide the citizens with a platform to effectively voice their concerns in determining their future and taking action in arresting the deterioration in their living environment and propose reform with a view to improve the same. Shehri-Citizens for a Better Environment is now fighting at the forefront of various issues of public concern related the environment. The organization is actively engaged in areas of work like public advocacy and public interest litigation, right to information, good governance, community policing, police reforms, urban mobility, climate change and last but not the least institutional reforms

OBJECTIVES

- Establishment of an aware and pro-active civil society, good governance, transparency and rule of law
- Promotion of research, documentation, dialogue and influence of public policies
- To provide technical assistance and guidance to local area citizens groups on their local area and environment
- Setting up an effective and representative local government system, e.g., capacity building and training
- Preparation of a proper master plan/zoning plan for Karachi and effective implementation of the same

HOW IS SHEHRI RUN

A volunteer Managing Committee, duly elected by the General Body for a term of two years, thereby functioning in an open and democratic manner. Membership is open to all who subscribe to its objective and memorandum

SUSTAINABLE DEVELOPMENT GOALS (SDGs) FOCUS

Shehri-CBE brings a focus in all its works on the 17 Sustainable Development Goals (SDGs) that define the global development agenda of today. This publication 'Cities of the Future: Learning from COVID-19 Pandemic', creates strong linkages with the targets of Goal 5 (Gender Equality), Goal 10 (Reduced Inequalities), Goal 11 (Sustainable Cities and Communities) and Goal 16 (Peace, Justice & Strong Institutions) other than finding cross-linkages with the remaining goals as well



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