## **Stimulating Public Open Spaces Post Covid-19**

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#### **Article Information**

#### **ABSTRACT**

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It is known that Public open spaces which include parks, playgrounds, streets and nodes play a significant role in a healthy community. As quoted in WHO document "Health is not only an outcome but also an essential input for Urban and Territorial planning, articulated in the 2016 World Health Organization document entitled *Health as the pulse of the New Urban Agenda*. Cities have been redesigned as a result of pandemics that happened in recent ages. Covid-19 pandemic has had a huge impact and disrupted lives all over the world. Apart from personal health and economy, it had a huge impact on the social lives and way of living. Workplaces closed, restrictions on gatherings and travel have led to an increase in the use of public spaces and parks where social distancing can be maintained. This paper is the outcome of research to study the impact of usage of public spaces in Metro cities during pandemic.

**KEYWORDS:** Public spaces, Pandemics, Covid-19, Future Cities, Open spaces, Parks, Playgrounds. etc.

### 1. INTRODUCTION

Streets, Parks, marketplace, open grounds, public transport hubs, configured to the Public spaces for Indian Urban cities. The Covid-19 pandemic has shown us the importance of accessible public open spaces in our lives.

Since Ancient days squares, Agoras and Chowks are remembered as public spaces. In addition to that nowadays parks, playgrounds and streets also contribute to make our cities more liveable. These public spaces are opportunities for recreation, social gatherings, religious activities and most importantly physical and mental health.

Today, After COVID-19 pandemic,it is important to rethink and revitalize public spaces in Indian cities in a

meaningful manner. The better planned open spaces and neighborhoods will contribute in building healthy and connected communities.



Fig 1: The Roman Forum

#### 2. Challenges faced by Public Open Spaces:

The pandemic has presented several challenges for public open spaces. Social Distancing measures has proven to be the biggest obstacle. As a result, there has been less use and upkeep. Public open spaces are more vulnerable to vandalism and neglect as a result of decreased use. Additionally, the number of people using the public places that are still available has

increased, which has contributed to problems like crowding, littering, and poor sanitation.

Parks, public squares, and other outdoor settings have all been significantly impacted by the COVID-19 outbreak. Here are few examples which explains in what ways the pandemic has affected these spaces:

- Increased Use: As the majority of public spaces like Theatres, Malls and Gyms were closed or restricted for recreation and exercise, people were turning to open spaces like parks and playgrounds thus leading to increase in its use and other outdoor recreational areas.
- 2. Change in usage: Other than sport activities people started using open spaces for walking,jogging,market spaces (keeping social distancing in mind)and at many places it was used for covid centers.
- 3. Mental Health: People were able to spend time outside and connect with nature which became a source of comfort for many people during pandemic.
- 4. Adaptation and innovation: The pandemic has spurred new developments in the usage of open spaces, such as drive-in movie theaters and outdoor dining areas. In an effort to satisfy the needs of their citizens during the pandemic, cities have also been experimenting with novel methods to use public spaces.
- 5. Maintenance and funding: Open spaces need more upkeep and financing to be kept clean and secure as their use increases. However, the epidemic has caused financial difficulties for many towns and organizations, which may have an impact on the standard of upkeep and maintenance in public areas.
- 6. Equity: The pandemic has also brought attention towards uneven distribution of open space. People who live in cities, for instance, might not have easy access to parks and other outdoor leisure places, which could be detrimental to their health and wellbeing.



Fig 2: Types of public open spaces in India

### 3. Opportunities presented by the pandemic :

The pandemic has created opportunities for public open areas despite its difficulties. People now value green spaces more than ever because they are spending more time inside. Parks and other public open spaces have become popular among city dwellers as a way to escape the monotony of lockdowns. Ingenious uses of

public spaces have also resulted from the pandemic, including turning streets into pedestrian paths and turning public areas into outdoor classrooms.



Fig 3: The Public open spaces in pandemic

#### 4. Methodology:

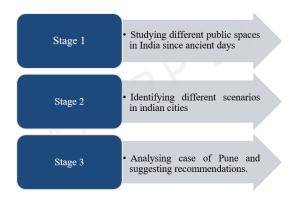


Fig 4: Methodology for study

Stage 1: Studying different public spaces in India since ancient days



Fig 4: Public spaces in India



Fig 5: Public spaces in India

Stage 2: Identifying different scenarios for Indian cities

## PERCENTAGE OF OPEN SPACES IN INDIAN CITIES

Name of the city	% of green areas to total city area	Name of the city	% of green areas to total city area
Mumbai city	0.65%	Kolkata	0.20%
Chennai	4.17%	Chandigarh	13.16%
Ahmedabad	2.03%	Jaipur	4.42%
Hyderabad	5.08%	Pune	8.52%
Bhopal	11.26%	Mumbai Suburban	19.28%

## ACCESSIBLE DISTANCE FROM HOME TO VARIOUS OPEN AREAS

Functional Level	Maximum Distance from home (m)	Minimum surface area (ha)
Residential green	150	-
Neighbourhood green	400	1
Quarter green	800	10(Park :5ha.)
District green	1600	30(Park :10ha.)
City green	3200	60
Urban Forest	5000	>200 (smaller towns) >300 (big cities)

Stage 3: Analyzing case of Pune and suggesting recommendations.

Pune, the historic city in India extends from latitude  $18.5204^{\circ}$  N and longitude  $73.8567^{\circ}$  E. It is Eight largest metropolis in India and second largest in state. Often known as oxford of east and cultural capital of India.



Fig 7: The Map showing core city area of Pune where 157,054.71 m<sup>2</sup> (38.8 acres) area is seen to be public open space out of 100 acres



Fig 8: The Map showing Dhankawadi area of Pune where  $2625.95 \text{ m}^2(0.64 \text{ acres})$  area is seen to be public open space out of 100 acres



Fig 9: The Map showing a part of Magarpatta city of Pune where 50,297 m<sup>2</sup>(12.4 acres) area is seen to be public open space out of 100 acres

#### 5. Findings:

From the observations, analysis of various case examples, and facts the public space typologies and respective design interventions can broadly be suggested as follows:

Public space	Functional level	Suggested locations and spatial design changes
Pocket parks	Block, Cluster, Street	Transforming abandoned and vacant spaces of small size Introducing in dense urban areas Minimum design elements Limiting public access Design should create opportunities for play and social interactions
Parklets	Block, Cluster, Street	Activating and Animating less active spaces     Tiny, minimal, and context-specific design elements     Open for diverse users     Interventions should focus on health and social interactions
Markets	Community, Neighborhood	Introducing Permanent and temporary physical distancing measures     Limiting access and managing crowd     Ensuring safety and hygiene through design
Sidewalks & Bicycle tracks	Streets, Community, Neighborhood	Introducing adequate sidewalks and bicycle tracks     Regular maintenance     Ensuring greenery for enhancing the visual experience     Design should promote social interactions and safety
Squares and Plazas	Cluster, Community, Neighborhood, District, City	Introducing Permanent and temporary physical distancing measures     Limiting access and managing crowd     Ensuring safety and hygiene through design
Green open spaces	Block, Cluster, Community, Neighborhood, City	Bringing green open spaces close to residential areas     Revitalizing abandoned and unused spaces     Introducing scope for physical activity for various user groups     Creating a network of green spaces wherever possible

Fig 10: Recommendations for Design of open spaces

# 6. Recommendations for Design and Management:

Policymakers and urban planners must take a number of things into account to ensure the resilience of public open spaces in the post-pandemic future. First, it's important to keep flexibility in mind while designing public open spaces so that users may quickly respond to shifting conditions. Second, fair access to public open spaces needs to be prioritized, especially in underprivileged populations. Third, legislators and urban planners ought to support the use of technology to improve the user experience in public open spaces, including smartphone apps that offer details on park services and activities. The utilization of renewable energy sources and waste reduction should be prioritized, with a focus on sustainability.

#### 7. Conclusion:

The COVID-19 pandemic has a huge impact on public open spaces, presenting both challenges and opportunities. Policymakers and urban planners must adopt a holistic approach to design and management with a focus on flexibility, fair access, technology, and sustainability to ensure the resilience of public open

spaces in the post-pandemic era. So, even during times of emergency, public open spaces can continue to offer vital advantages to city dwellers.

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