



Aditya College of Architecture, Mumbai

SHREE AMEYA PUBLIC CHARITABLE TRUST'S
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ARCHITECTURE
OF THE
URBAN
COMMONS

CONFERENCE THEME:
ARCHITECTURE OF THE URBAN COMMONS



VISION MISSION AND QUALITY POLICY

- To be globally recognized as an epitome of learning and innovation
- Imparting multifaceted architectural education driven by social sensitivity and supported by state of the art of infrastructure

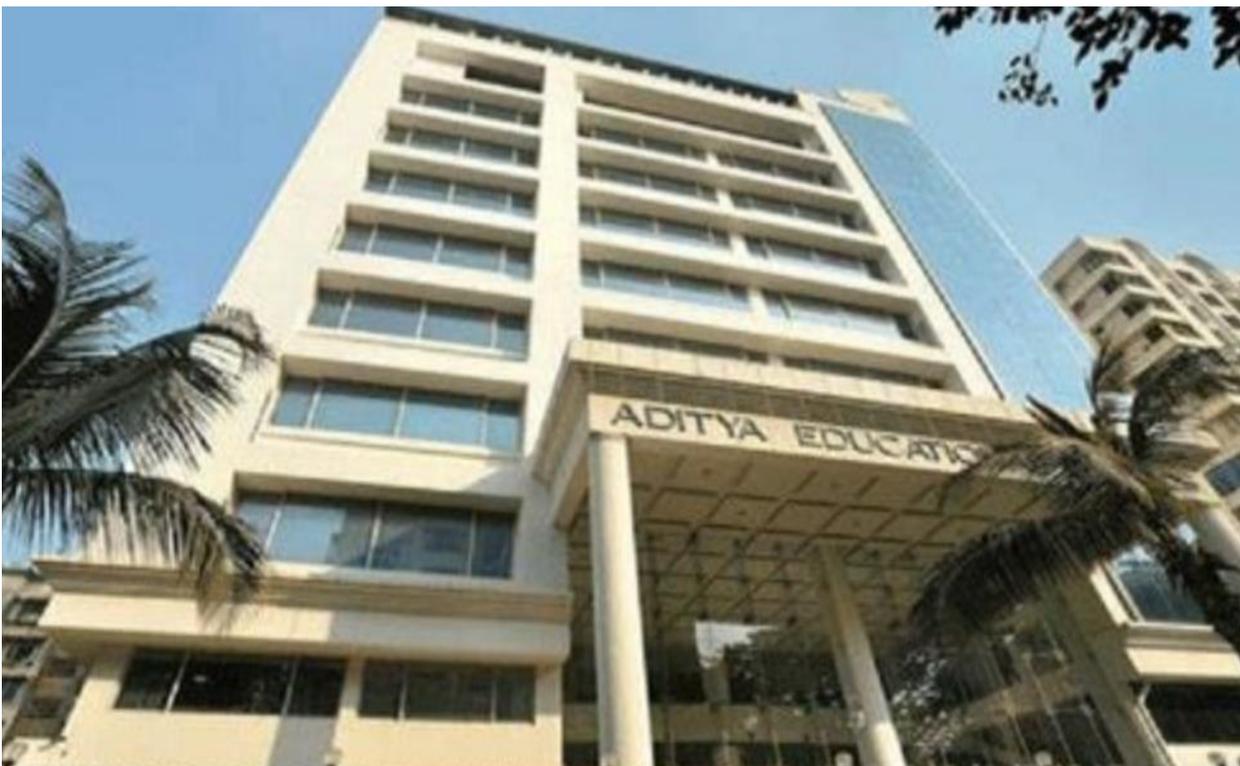
VISION

- To impart quality education that encourages students to be competent enough for best fit job roles
- To provide faculty members with facilities to research, experiment and implement contemporary learning tools.

MISSION

We, the Management, Faculty and staff of Aditya College of Architecture are committed to offer excellence in architectural education, by pledging to our core value of Agility, Innovation, Integrity our academic environment and state of the art facilities and infrastructure to our students, thereby ensuring mutual respect and trust for them. We will work as a team and interact with the students in pro-active manner to achieve our institutional quality objectives and fulfill all academic, statutory and regulatory requirements to continually enhance the satisfaction of our students."

QUALITY POLICY



ABOUT ADITYA COLLEGE OF ARCHITECTURE

Aditya College of Architecture established in 2013 is affiliated to Mumbai University, India. Since its inception, the college has continuously been working towards a vision to take architectural education ahead of traditional curriculum and achieve higher goals in grooming better professionals every year. The primary objective of the school is to create 'global practices with local concerns' to achieve excellence in architectural design, practice and profession.

The campus has infrastructure comparable to the best in the world. An ideal environment for exploring new ideas that encourage creative and independent thinking of young minds. It also provides platform for promoting innovation and research for students and faculty. The pedagogy of the school is building professional capacity and cherished individual interest of the student.

With the vision that educating professionals requires close coordination of industry and academic the institute encourages collaboration with eminent academicians and industry professions in the way of conducting workshops, seminars, and webinars in the present pandemic situation. The Institute has collaborated with Sri Lanka Institute of Architects by the way of exchange program and combine studios.



MESSAGE FROM THE FOUNDER TRUSTEE



Shri. Harishchandra Mishra
Founder Trustee &
Chairman

It gives me immense pleasure to see how Aditya College of Architecture has flourished with its abundant academic knowledge, immense industry exposure, and innovative strategies in the field of education and research. I heartily congratulate Aditya College of Architecture for organizing the 5th International Design Research Conference 2024-25 (IDRC) on the theme “Architecture of urban commons”. This year IDRC aim is to refer to the physical, social, and organizational structures that facilitate shared resources, collective governance, and equitable access in urban environments. It involves designing spaces and systems that enable collaboration, sustainability, and inclusivity in the context of urban life. I wish all the prosperity and fortune to the institution and to the students who will take the baton ahead, to illuminate the world with their spark. On behalf of Aditya College of Architecture, I wish the International Design Research Conference 2024-25 a grand success. May our team succeed in transferring knowledge.



Shri. Ashish Mishra
Trustee



Shri. Aditya Mishra
Trustee

MESSAGE FROM THE PRINCIPAL

As we complete a decade in imparting quality education, Aditya College of Architecture has become an institution to reckon with since its inception in the year 2013. We have always been a top-ranking college in Mumbai from various surveys conducted from time to time, and our students have won various accolades both at the University and other creative platforms. To have an international connect both with the profession as well as academia, ACA organizes the International Design Competition (IDC) and research conference (IDRC) since inception and the theme this year is the “architecture of the urban commons”

The global urban context today offers numerous examples of such spaces that are open, accessible, and expressive of the city’s public values, through community insight, citizen initiative and collective identity. The designs of these spaces, while highlighting the rich diversity of the people they represent, also uniformly demonstrate the designer’s conscious restraint and sensitivity. These perceptions capture some essential aspects of urban life such as the economic opportunities that cities offer, the morphological growth that cities undergo, or the complex spatial patterns that cities embody. They reveal the dynamic nature of urbanism, its intricate textures and incessant evolution, driven by the vibrant variety of activities and people that create, regulate, and perpetuate the city. It is this rich urban diversity within which we situate the “**urban commons**”, those spaces and buildings within the city that can be shared by all its inhabitants, can accommodate all forms of social interactions, and can exemplify the city’s collective identity.

MESSAGE FROM IDRC HEAD

“Architecture of the Urban Commons” the theme for IDRC this year, prompted several interesting research papers from academics and student communities as well as architecture fraternity which is a heartening sign.

The diverse range of topics selected by researchers, based on the conference's sub-themes, highlights the need, significance, and sensitivity felt by the community toward the concept. Furthermore, it reinforces our commitment as mentors to nurture these ideas within ourselves for the benefit of future generations.

It gives me immense pleasure and I feel honored to lead such a prestigious and relevant venture with a team of passionate and hard-working colleagues and where we get an opportunity due to such conferences to deliberate on important issues. We are thankful to the enthusiastic participants and to the esteemed review committee for their continuous efforts and commitment.

PILLARS OF ACA



Prof. Ar. Gurunath Dalvi
Mentor and Advisor, Ex President IIA



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ABOUT IDRC

THEME: ARCHITECTURE OF THE URBAN COMMON

The notion of "urban commons" refers to shared spaces, resources, and services within cities that are accessible to all members of society, contributing to the collective well-being and inclusivity of urban life. The architecture of the urban commons addresses how these spaces are designed, maintained, and adapted to serve a diverse population amidst rapid urbanization, technological advancement, and environmental challenges. It is about rethinking urban space to support communal life, foster social equity, and promote ecological sustainability.

As cities around the world grapple with housing crises, shrinking public spaces, and the rise of privatization, the urban commons serve as critical sites for experimentation and innovation in architecture and urban design. From parks and plazas to digital infrastructure and community gardens, these commons represent opportunities to rethink how shared spaces can be co-created, managed, and preserved by communities.

The International Design Research Conference aims to explore the architecture of urban commons through multidisciplinary perspectives, bringing together a diverse range of students and professionals. The conference seeks to stimulate critical discussions on how architectural practices can engage with the concept of commons to create inclusive, sustainable, and resilient cities for the future.

OBJECTIVES:

Explore the role of architecture in fostering urban commons that are accessible, socially inclusive, plural and equitable. Understand how urban commons can mitigate the effects of climate change and urban sprawl through sustainable development.

Investigate participatory design methods that allow communities to take an active role in creating and managing their shared spaces.

Share global case studies and innovative practices that have successfully integrated the urban commons into contemporary urban life.

SUBTHEMES:

Designing for inclusivity, plurality and social equity.

Climate resilience, renewable energy and energy optimization in the urban commons.

Governance, policy, and community engagement.

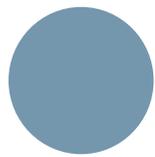
Reimagining the public realm: Social spaces for cultural expression.

DEMONSTRATION OF FINDINGS:

Participants are invited to submit research papers on innovative design interventions that enhance the architecture of urban commons. These could include adaptive reuse of underutilized spaces or integrating sustainable technologies for energy efficiency and climate resilience. Papers may also explore participatory design processes that empower communities to co-create inclusive, equitable public spaces. Research could also examine various case studies, blending ecological sustainability with social infrastructure, addressing challenges like housing shortages, privatization, and urbanization.

Proposals for governance models ensuring long-term stewardship and collaborative management are also encouraged, offering a comprehensive view of design's role in creating a resilient, inclusive urban environment.

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ARCHITECTURE OF THE URBAN COMMONS
REIMAGINING THE PUBLIC REALM: SOCIAL SPACES FOR CULTURAL EXPRESSION
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ABSTRACT

This research actually investigates how architecture can contribute to the emergence of the public realm as accessible, socially inclusive, plural, and equitable environments. In response to issues from climate change, social inequality, and the speed of urbanization, public spaces must transform into avenues for cities' diverse communities to come together in the expression of identity and participation in place-making. As for the first question, the study examines how architectural design can enhance inclusive public realm in equal access and empowerment of marginalized communities, emphasizing how architecture operates to provide space that is culturally diverse while allowing people to share social space. The environmental aspect is also looked at, discussing ways through which public realm can facilitate climate change and urban sprawl through sustainable development practices, among them having green spaces and efficient land use. Paper elaborates on participatory design strategies underlining the relevance of community participation for form and development processes of shared spaces. Thus, the public realm can stay relevant to changes among their users by embracing collaborative design approaches. This paper explores examples from all over the world to explain how creative public places can be included in the people's everyday activities in cities. They show how community projects make a place for everyone personally and provide some new kinds of public spaces characterized by a mix of different cultures. This research place stresses how architecture, in a condition of scarcity of resources, can be a mover for development in the urban realm.

KEYWORDS: Public Spaces, Social Inclusion, Cultural, Participatory Design, Sustainable Development.

INTRODUCTION

Public spaces in India are not just places in space but intrinsic parts of the social fabric representing the richness of a country's cultural heritage, communications among communities, and political debates. From traditional cacophonous marketplaces to sacred sites of worship, vibrant town squares have been critical unifying centers for interactions, civic engagement, and cultural expression. They are a boon for community life, which conducts festivals, congregations, and presentations that celebrate regional identity, folk art, and socialized values.

AIM

The primary aim of this study is to explore how architecture can transform public spaces into welcoming environments that encourage social interaction and cultural expression.

Historical Background of Indian Public Spaces



Figure 1. The Charminar (entrance Gate) at Laad Bazaar
Figure 2. Zohari bazaar showing the façade

Public spaces in India have been shaped over time by the cultural and social landscape of this country. Towns and cities were thus zoned according to important public spaces, such as ghats or riverfronts; chowks, or squares; and maidans, or open grounds. These were the spaces that served not only trade and commerce but also for people within their communities as well as for social meetings. Thus, the village markets, the haats, became

nodes that unite rural and urban people, creating a dynamic exchange of goods and cultural practices.



Figure 3. Bank of River Ganga at Haridwar



Figure 4. River Ganges at Varanasi



Figure 5. Dargah Masjid, Rajasthan

From religious angles, temples and mosques have been much more than a place of worship. They become performing centers where people come in thousands to celebrate festivals and participate in rituals or ceremonies. Socialization, too, is part of it. Such spaces



Figure 6. Change in Tradition and Modernity: A captivating view of the contrasting old and new city of Hyderabad, showcasing the city's rich history and its rapid

have always promoted a feeling of belongingness and identity and provide the tapestry of India's cultural heritage.

IMPACT OF URBANIZATION AND MODERNIZATION

The new scenario of fast urbanization and modernization in the late decades has drastically changed the face of public spaces in India. Urban growth has resulted in commercialization and privatization of space, often at the cost of social interaction than furthered by economic development. The shopping malls and corporate plazas

and gated communities are gradually replacing the traditional public space or outshining it- one that limits free access to people and restricts their cultural pluralism- the expression of which has been a hallmark of Indian public life for centuries. Another form of inequality is the socio-economic transformation that has profoundly improved inequalities in access to public space. Women, lower castes, and those working in informal sectors most often face exclusion in the homogenized environments. Such high-level homogenization of design in public space initiated by global influences risks losing unique cultural identity and historical significance of local spaces and induces alienation and feelings of disenfranchisement.

GLOBAL INFLUENCES ON CULTURAL EXPRESSION:

The effects of globalization have only compounded the matter in question regarding public spaces in India. On one hand, the influence of global cultural trends and ways of practice has indeed entered everyday city life and opened new avenues of cultural expression and engagement. On the other, they tend to blur the lines of local customs and traditions, undermining identity. Public spaces dedicated to purely global consumer cultures are unaware of the distinctive cultural narratives that make up the fabric of local communities. It then becomes a reconfiguration and repurpose of the public realm that hopefully incorporates these new forms of cultural expression within the meanings as well as historical and social significance attached to these traditional spaces. It involves not only inclusive design and access but also feeling of ownership and agency by the diverse community members in the spaces.

The Requirement for Inclusivity and Diversity



Figure 7. A garbage dump turned into a park in slum community in Warangal, <https://www.thehindu.com/life-and-style/how-urban-india-is-reclaiming-spaces-for-its-communities/article67060105.ece> Updated - July 09, 2023 03:18 pm IST - New Delhi

- It is well over time that a critical imperative to create inclusiveness, diversity, and community identity in the Indian urban scenario presents before this country while grappling with challenges that are basically represented by urbanization and globalization. The public realm thus needs to be reimagined in such a way as to recognize the importance of spaces where the voices and experiences of all community members are echoed. Cultural expressions should emerge from

various social, ethnic, and economic backgrounds; this way, public spaces would turn into platforms of dialogue, creativity, and teamwork.

- Vibrant and inclusive public spaces will strengthen community ties, promote social cohesion, and enhance the sense of belonging among diverse populations; they should facilitate interactions that bridge the socio-economic and cultural divide by also sharing stories, experiences, and artistic expressions.
- Let us consider this new sensibility of Indian public spaces as both a design issue but even more so, a social and cultural imperative. Recognizing the historical value of these spaces and the challenges it faces today makes India better nurture its public realm with all the apparent richness of culture and to help ingrate civic virtues while ushering in a more holistic and just future for cities.

LITERATURE REVIEW

The literature review is a comprehensive analysis of the socio-cultural functions of public spaces, contextualized in global frameworks but with an emphasis on the details of dynamics pertaining within India. It traces how public spaces have evolved from pre-colonial times through impacts of colonialism, post-independence development, and the effects of globalization up to how these forces shape public life and cultural expression.

TRADITIONAL PUBLIC SPACES IN INDIA

Traditional public spaces have been very intrinsic to the social and cultural fabric of towns and cities in India. Baolis or stepwells, temple courtyards, bazaars or local markets, and so on could assume the role of providing physical places for commerce and worship but also become spaces for social congregating and cultural expression.

- Temple Courts: In most cases, central to community living, temple courts were gathering areas for all festivals and rituals, as well as community events. Such spaces made possible social interaction aside from religious conventions due to the ties between the community and cultural identity.(fig no.1 to 7)

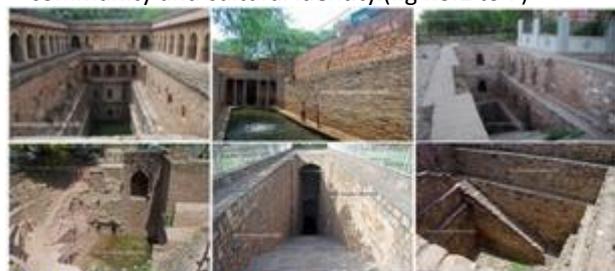


Figure 8. Baolis of Delhi. Top Left: Rajon ki Baoli, Top Centre: Gandhak ki Baoli, Top Right: Loharheri Baoli, Bottom Left: Hindu rao hospital Baoli, Bottom Centre: Purana Kella Baoli, Bottom Right: Tuglagabad Baoli

Balis or stepwells These were historically significant architectural sites in arid regions. Baolis provided the storage of water and meant access to it, but also, they used as a gathering place for people for refreshing themselves, listening to a story, and doing cultural events. Their aesthetics and architecture enhanced their aspect as common gathering halls.

- **Bazaars (local markets):** Ancient markets were always pulsating centres of trade and cultural exchange. They didn't only conduct business but represent the local culture as well, in what exactly goods traded embodied it, in performances, and in social relations among these groups. Much to many surprises, these markets often become event centers for festivals and community jubilation. These old public spaces center on local culture and communal interaction as a basis of social identity and integration. (fig no.1 & 2)

BRITISH COLONIAL INFLUENCE ON PUBLIC PLACES

Colonial British planning heavily influenced the Indian subcontinent, often in adverse ways, altering the configurations of public spaces considerably so that they often overshadowed local practices while initiating new trends in spaces.

- **Administrative Hubs:** For colonial planners, designing an urban landscape took a very different character, especially with how administrative hubs were created, as it became more functional rather than culturally important. The separated public spaces introduced only mostly served the colonial officials to the detriment of the rest of the needs of locals.
- **Modern Town Planning Schemes:** New town planning systems established in cities in India, purporting to rationally organize spaces of urbanization, could not but displace such traditional practices. Public spaces suffered the onslaughts of modern changes for the advantage of colonial administration alone and forgot the cultural goals sought to be achieved in urban space.



Figure 9 Victoria Terminus (now known as Chhatrapati Shivaji Terminus), in Mumbai, Maharashtra

Segregation and Exclusion: Colonial public spaces also reflected social stratifications, and certain parts were excluded while others availed themselves of all the benefits. This segregation did not stop with independence; instead, it continued to result in more inequalities in using public realms.

- The literature focuses much attention on how colonialism not only altered the physical context but also the social relationships that came with the public realms often developed segregation lines that remain influencing today's urban life.

Modernization and decline of traditional spaces

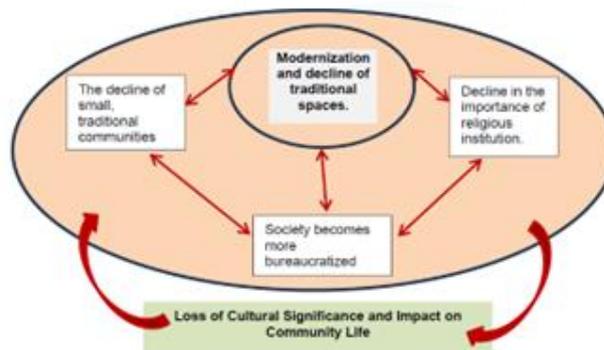


Figure 10. Modernization and decline of traditional spaces

This post-independence Indian urban planning has, therefore, focused majorly on modernization and ended up overlooking organic development of public spaces in favor of the industries and business.

- **Emphasis on Modern Infrastructure:** The emphasis on developing modern infrastructure has resulted in the degeneration of traditional cultural sites. As cities expanded, older public spaces that were once the center of community life became replaced by concrete structures meant to accommodate economic growth.
- **Loss of Cultural Significance:** This trend has, in effect, resulted in a loss of connection with cultural heritage, as most of the traditional public spaces lost or converted for use in business enterprises. The diminution of these sites decreases possibilities for potential cultural expression and social interaction.
- **Impact on Community Life:** The loss of traditional public space weakens social ties since there is less scope for people to interact and participate in cultural activities. The metropolitan landscape becomes more uniform and alienating for the residents. This section of the lit review emphasizes the grave importance of maintaining cultural heritage during public space planning despite modernization.

GLOBALIZATION AND CULTURAL HYBRIDITY

Globalization has resulted in novel paradigms of usage of public space in Indian cities, thereby overstepping traditionalism and cultural expressions.

- **Rise of New Cultural Hubs:** Malls, multiplexes, and urban parks are cropping up as new public spaces. These are often acting as an exchange hub for cultures. These modern houses are permitting global influences to get expressions but, in this manner, dilute local traditions.
- **Commodification of public space:** Consumer culture facilitates the commodification of the public, thus turning it into an area to be exploited for commercial purposes as much as possible. This tends to privilege the commercial interests over that of community concerns. In this manner, it becomes exclusive and estranges some sections of the population from using space.
- **Cultural Hybridity:** For example, globalization is both a threat and an opportunity; it fosters cultural hybridity- in brief, mixing local and global cultural practices in a beautiful hybridity. It makes public space one of the

best negotiation sites for identity within communities in an ever-changing landscape of culture.

- The literature discusses the subtleties of the way in which globalization influences public areas, and it seems to imply the fact that as much as there are benefits of expressions of culture, the protection of indigenous identity is more fundamental.

FINDINGS AND DISCUSSION

- The findings from this literature review underscore the fact that the public spaces of India take cognizance of the complex social
- hierarchies in the country and its plural culture. A few dominant themes emerge from that consideration:

Cultural Marginalization in Public Spaces

The new public spaces hardly respond to the needs and values of marginalized communities, which include women, lower castes, and informal sector workers. Where, on the one hand, ideas of democratic public realm mirror the aspirations of this new horizon, the exclusionary nature of these new public spaces utterly contradicts them.

- **Access Barriers:** For instance, safety concerns, infrastructures, and socio-economic disadvantages may hinder the deprived access of public spaces for oppressed groups. Such type of exclusion calls for the more importance of having policies that stress to be human centered in its city planning.
- **Public Spaces as Sites of Protest and Resistance:** The recent protests, for instance, Citizenship Amendment Act protest, and other environmental protection movements, emphasize public spaces as arenas of political and cultural expression.
- **History behind their Role in Activism:** Public spaces have played an important role in society for centuries in India, including gathering, organizing, and proclaiming dissent. Their role in contemporary activism portrays the significance these public spaces hold to determine the future of public discourse.
- **Cultural Identity and Resistance:** The occupation of public spaces and protests reinforces cultural identity since many different groups come to express their values and demands. This collective action is one that fosters solidarity and resilience in marginalized communities.



Figure 12 Gentrification and Privatization

https://www.tropixor.in/Attachment_Review%304551-c8642127-Review-Ambience_Mall-New_Delhi_National_Capital_Territory_of_Delhi.html

Gentrification and Privatization

Privatization and gentrification in Indian cities are the identified trends where public spaces are becoming more commodified.

- **Access Impact:** The increased gated communities, malls, and private company-managed parks reduce accessibility to the lower sections of society and create a barrier in public life participation. Such trends extend the inequality lines, thereby lessening social contacts.

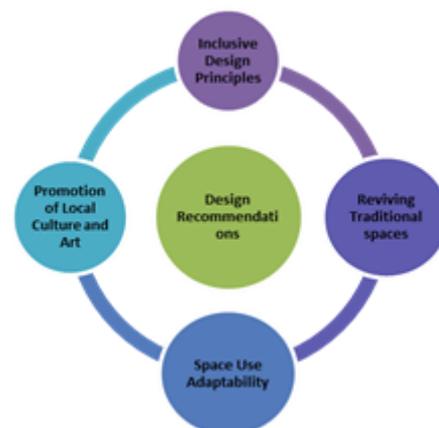
- **Community Action:** Gated communities, malls, and other privately maintained parks have created only a call from community groups and activists for the sustenance of public spaces and to take measures that put the need of the community above commercial needs.
- **New Hybrid Forms of Public Spaces:** New hybrid public spaces are appearing; despite the challenges still remaining in their goal, such as public art installations, cultural festivals, and community parks, are aiming to involve different groups and provide spaces for cultural expression.

Celebrating Diversity:



Figure13. New Hybrid Forms of Public Spaces
Great Public Spaces Toolkit

- These spaces often seek to include a range of cultures, allowing for the performance of a multiplicity of cultural identities and facilitating interaction among the different social groups; they become an important site of cultural dialogue and exchange. Innovative designs combined with creative initiatives of urban design, like participation processes in planning, ensure that public spaces reflect the needs and aspirations of local communities in designs. Efforts thereby point to a prospect for thinking of public spaces as dynamic and multifaceted.
- The results highlight the relevance of public space for the reinvention of social interactions, cultural expressions, and community identity in India. This is a challenge that calls for a concerted approach toward making cities more inclusive, equitable, and culturally vibrant. The evidence discovered through literature reviews and subsequent results show the need to



rethink public spaces: honour the historical legacies but embrace a reality that has changed – culturally.

DESIGN RECOMMENDATIONS

The design of public spaces in India should be inclusive, allowing for cultural continuity, and adaptable enough to suit different needs from the various user groups in an urban setting. Public space design recommendations the following recommendations guide the design of public spaces that inspire cultural expression, foster sociality, and make good community life possible.

Inclusive design principles: Public spaces must be accessible and welcoming to all; hence the need for principles of inclusive design, emphasizing the needs of users. Among them are:

- **Accessibility for All:** Public spaces should be designed to have universal accessibility, that is, the accessibility features of ramps, wide pathways, tactile surfaces, and clear signposting. Accessibility should also suit a person with a disability, an elderly person, and families with small children. Thoughtful placement of seating areas, restrooms, and other facilities will enhance usability for all.
- **Gender-Sensitive Design:** These spaces must be safe, comfortable, and designed without discrimination between genders. This includes proper lighting, clear sight lines, and adequate facilities. Involving women in the design process will bring a better understanding of specific needs and preferences to make the spaces feel secure and welcoming.
- **Children-Friendly Spaces:** Conceiving family-friendly public spaces is of importance when involving the design of play spaces and involving landscapes that serve as learning grounds. Children and parents or guardians will be attracted to the playgrounds, interactive installations, and shaded areas. This will foster a community of families.

REVIVING TRADITIONAL SPACES

- Retention of cultural heritage and continuity in public life would be best served by achieving an integration of the traditional Indian spaces with the current forms of design for the city. Restoration of Historic Sites
- The maintenance of the traditional areas of public spaces, including maidans and ghats, should be upgraded by the urban planners in order to use them as venues for cultural performances, festivals, and community gatherings, which will reinforce local identity and heritage.
- Adaptive reuse of structures Traditions can be adapted without totally razing historical structures. Urban designers should thus come up with plans that consider the adaptation of these structures in regard to their architectural significance while still hosting modern needs. These might include converting old markets or temples into multifunctional community centers.
- Community Participation in the Restoration: Community is more reliable while being incorporated in the redesigning to have the renewed areas reflect the community's culture, traditions, and values. Community participation can also be used to guide

designs about the aspects that facilitate maximum chances of cultural activities and socialization.

SPACE USE ADAPTABILITY

Public space design needs to accommodate different activities as the day progresses for adaptability to various uses:

- **Multi-Functional Spaces:** Those which allow easy switching between their uses are valuable, for example, markets, social meetings, performances, or protests. Such adaptability can be fostered through flexible furniture, movable partitions, and changeable landscaping. Event Programming Utilize events such as markets, cultural festivals, and workshops more frequently to program public space, activate it, and engage a variety of community members in its efforts. Make alliances with local organizations and cultural groups. This would give more ownership and encourage active participation.
- **Technology and responsive design elements:** These can enhance the adaptability of public spaces. Examples include mobile seating, temporary installations, and movable stages for a dynamic use of space, catering to changing needs and activities.

PROMOTION OF LOCAL CULTURE AND ART

It is very important for promoting regional diversity, using local as well as fostering cultural sustainability by setting up dedicated spaces for local artists and cultural practitioners.

Artist Residencies and Markets: The direct provision of areas for local artists, performers, and craftspeople allows local culture to stay alive in celebration of the community. This would involve artist residencies, performance stages, and marketplaces where all things created by locals are sold.

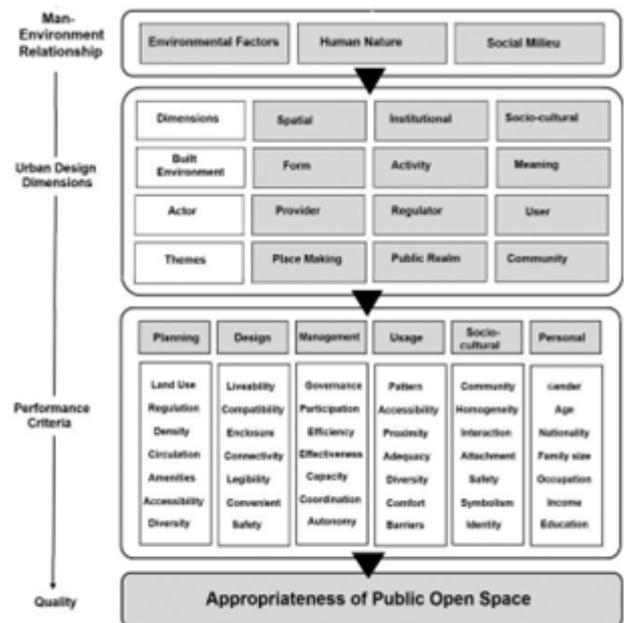


Figure 14. The research conceptual framework, Multi-dimensional urban design approach.

- **Cultural Programming and Festivals:** Cultural events and festivals may unite communities while presenting local traditions, art forms, and cuisines. It, therefore,

has the potential to strengthen social cohesion as well as improve inter-group understanding and sensitivity.

- **Public Art Initiatives:** Requests for greater public art installations which are more distinctly reflective of the culture and narratives of a community - can also stimulate the aesthetic value of the public spaces while involving.

Reimagination of the public realm in India must be a right balance of modernization and cultural heritage. The platform should rather be public spaces as a model for expressing diverse cultures to foster social cohesion, democracy, and inclusiveness. The design recommendations highlighted above emphasize inclusive practices, traditional spaces, flexibility in use, and the promotion of local culture and arts. Achieving these goals requires further research at the interface of public space design, cultural policy, and urban sociology. Such studies can uncover ways to better understand the intricacies of urban life and ensure that integrated, dynamic public realms honour the legacy and the needs of history and contemporary times. As the country continues to urbanize and globalize at a galloping pace, only by participating communities. When incorporated into city planning and policymaking, these principles will yield public space that not only reflects India's multicultural face but ultimately produces quality for all.

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IMPACT OF CLIMATE RESPONSIVE ARCHITECTURE ON URBAN COMMONS

UNDERSTANDING THE STRATEGIES TO PROTECT URBAN COMMONS

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ABSTRACT

Climate responsive architecture mitigates the need for sustainable environment challenges and has a progressive impact on urban commons. Urban areas are facing major climate changes such as intense heatwaves, urban heat island effect, increase rainfall and flooding water scarcity, air pollution etc. Climate changes are proportionally affecting the urban commons therefore climate responsive architecture plays a pivot role in shaping urban commons. As it also has impact on Urban heat island effect by the use of effective climate responsive techniques and use of appropriate material. The measures also reduce consumption and lower carbon emission. Therefore, studies explore the impact of climates responsive architecture on urban commons which are public spaces like parks, plazas and community areas that are included in the cities to foster social interaction. The research will also examine successful case studies which have a positive impact on urban commons for sustainable urban development.

KEYWORDS: public spaces, social inclusion, cultural, participatory design, sustainable development.

INTRODUCTION

The role of urban commons plays an important role in shaping social interaction, cultural identity and environmental sustainability. Urban area is under adverse climatic effect such as climate change, heatwave, UHI effect, erratic rainfalls, water scarcity, air pollution etc. which are directly affecting the urban commons which serve a space for social interaction, cultural identity, and environmental sustainability. Climate responsive architecture techniques create a bridge between the sustainable urban environment and the adverse climate effect on urban environment. The study examines the opportunities develop by climate responsive architecture for sustainable effect on urban commons to play its role for the society. The study will also focus on analysing successful urban case study and its impact on urban commons.

AIM

The aim of this research is to analyse the effect of climate responsive architecture on urban commons. Focusing on sustainable solution to overcome adverse climatic effect on urban environment.

PURPOSE

- To analyse the role of climate responsive architecture in mitigating effect on urban commons emphasizing shared public spaces.
- To study and analyse successful case studies to understand and formulate guidelines from the sustainable outcomes for the urban commons through climate responsive architecture.
- To analyse the role of climatic effect such as UHI, flooding and air pollution on urban commons.
- To examine case studies of successful public space projects that showcase effective design principles for cultural expression.

LITERATURE REVIEW

Design principles for climate responsive architecture

A climate-responsive building design reflects the weather

conditions in the precise area where the building is constructed. The goal of climate-responsive architecture is to create a comfortable built form while reducing the building's reliance on artificial energy. In urban area it important focuses on adapting to local climatic conditions to create sustainable, energy-efficient, and comfortable spaces.

THE KEY PRINCIPLES CLIMATE RESPONSIVE ARCHITECTURE IS AS FOLLOW:

- **Local Materials:** Using eco-friendly and reusable materials reduces the carbon footprint, promotes healthier living, and supports a circular economy.
- **Renewable Energy:** Integration of solar, wind, and other renewable sources minimizes pollution, mitigates urban heat islands, and conserves resources.
- **Thermal Insulation:** Insulated walls and roofs, combined with strategic massing, enhance indoor comfort and reduce energy consumption.
- **Passive Design:** Natural ventilation, shading, daylighting, and optimal building orientation lower dependency on artificial energy systems and improve air quality.
- **Green Infrastructure:** Incorporating green roofs, vertical gardens, and urban forests boosts biodiversity, manages stormwater, and reduces urban heat.
- **Water Conservation:** Rainwater harvesting and greywater recycling prevent flooding, reduce water scarcity, and recharge groundwater.

EFFECT OF CLIMATIC CHANGES ON URBAN COMMON

- Cities, even megacities, can be viewed from the meteorological point of view as small objects compared to both large-scale systems that influence the weather and climate (oceans and continents; mountain ranges; anticyclones and cyclones) and local systems (coastal areas with sea-/land-breeze systems, forests, mountain and valley features, etc.). However, their extensive modification of surface and atmospheric characteristics at local scales means that cities alter almost all atmospheric variables in their

vicinity. Cities thus influence locally the weather in a significant way, especially modifying, and most of the time enhancing, high-impact weather hazards. This is urban climate.

Urban commons affect the most due to climatic changes. As urban commons serve as the space for social interaction, environmental services and cultural identity. Effects such as rising temperature, erratic rainfall, air pollution and loss in biodiversity affects the functionality, usability and sustainability of these public spaces. The table highlights key impacts understanding the effect of climate change of urban common.

Urban Heat Island (UHI) Effect

- **Cause:** High-density infrastructure, reduced vegetation, and wetlands that limit airflow and store heat from solar energy.
- **Impact:** Warmer air and surface temperatures, reduced comfort levels, damage to vegetation, and less usability of public spaces.

Erratic Rainfall and Flooding

- **Cause:** Unpredictable and inconsistent rainfall patterns, often worsened by climate change and urbanization.
- **Impact:** Infrastructure damage, overwhelmed drainage systems, flooding of parks, plazas, and walkways, making areas unusable.

Air Pollution

- **Cause:** Emissions from household combustion devices, motor vehicles, industrial facilities, and forest fires. Major pollutants include particulate matter, carbon monoxide, ozone, nitrogen dioxide, and sulphur dioxide.
- **Impact:** Poor air quality in urban commons, adverse health effects, and reduced usability of playgrounds and open markets.

Biodiversity Loss

- **Cause:** Industrialization leading to overuse of resources and reduction of ecosystems' regulating functions like pollination and flood control.
- **Impact:** Decrease in plants and animals in green spaces, reduced ecological services (cooling, shade, and carbon sequestration), and disruption of urban commons.

THE ROLE OF SHARED SPACE IN URBAN RESILIENCE

Role of Shared Spaces in Urban Resilience

Definition and Importance:

- Shared spaces or urban commons enable adaptability, collaboration, and collective problem-solving, essential for urban resilience.
- Urban resilience involves maintaining or quickly restoring urban functions amidst disturbances.

Key Features of Urban Commons:

- Foster social capital through collective management of resources.

- Promote governance, group decision-making, and cooperative behavior.
- Enhance flexibility to address uncertainties like urban stressors and climate change.

Contributions to Resilience:

- Offer areas for care and mutual reliance, strengthening people-environment connections.
- Aid in resolving ecological crises and redesigning the environment-society relationship.
- Provide frameworks for tackling current and future challenges through collaboration.

TYPES OF URBAN COMMONS AND THEIR IMPACTS

Green Spaces:

- **Examples:** Public parks, gardens, urban forests, green belts.
- **Impact:** Reduces Urban Heat Island (UHI) effect. Improves air quality and biodiversity. Promotes mental and physical well-being.

Water Bodies:

- **Examples:** Rivers, lakes, ponds, wetlands, fountains.
- **Impact:** Manages stormwater and reduces flooding. Enhances aesthetics and wildlife habitats. Supports urban cooling.

Community Spaces:

- **Examples:** Plazas, town squares, marketplaces.
- **Impact:** Encourages social interaction and community bonding. Supports cultural and economic activities. Enhances civic identity.

Pedestrian Pathways and Streets:

- **Examples:** Walkable streets, pedestrian zones, cycling tracks.
- **Impact:** Promotes sustainable mobility and reduces emissions. Encourages active lifestyles and public interaction. Reduces traffic congestion.

Cultural Commons:

- **Examples:** Museums, libraries, heritage sites, community centers.
- **Impact:** Preserves cultural heritage and history. Fosters education and creativity. Attracts tourism and boosts the economy.

Climate-sensitive architecture is vital for improving urban commons, which encompass public areas such as parks, plazas, and community spaces. These areas often encounter challenges brought on by climate change, including urban heat islands (UHI), heightened flooding, air pollution, and water shortages. Climate-sensitive design incorporates approaches such as the use of eco-friendly materials, renewable energy sources, green infrastructure, and passive cooling methods, all of which aid in alleviating these environmental problems. For instance, the addition of green roofs, urban forests, and permeable surfaces contributes to lowering city temperatures, managing stormwater, and enhancing air quality. These elements also promote biodiversity and

lower carbon emissions, enhancing the resilience of urban commons against climate-related impacts.

Climate-responsive architecture directly contributes to the enhancement and resilience of urban commons by addressing environmental, social, and ecological challenges.

Following is a detailed breakdown of its impacts on urban commons:

- **Mitigating Urban Heat Island (UHI) Effect:** Integration of green roofs, shaded pathways, and urban vegetation reduces surface and air temperatures.
- **Improved Microclimates:** Passive design strategies like optimal orientation, shading devices, and thermal mass create comfortable spaces for social interaction.
- **Reduction in Carbon Emissions:** Use of sustainable materials and renewable energy lowers greenhouse gas emissions in urban commons.
- **Enhancing Biodiversity:** Incorporating green infrastructure such as bioswales, rain gardens, and urban forests improves ecological value.
- **Stormwater Management:** Adoption of water-sensitive strategies like permeable pavements and rainwater harvesting reduces flooding risks.
- **Improved Air Quality:** Urban forests, green walls, and natural ventilation strategies enhance air circulation and reduce pollution.
- **Energy Efficiency:** Incorporation of renewable energy sources, such as solar lighting and wind turbines, decreases energy dependency and promotes sustainability.

CASE STUDIES

Rajiv Gandhi Renewable Energy Park, New Delhi, India

- **Location:** Situated in the heart of New Delhi, India.
- **Design Objective:** To create an urban commons space integrating renewable energy technologies and sustainable practices. Raise public awareness about renewable energy while offering a recreational community space.
- **Key Features:** Solar energy installations (solar-powered lights, solar panels). Wind energy turbines for clean energy generation. Water conservation systems, including rainwater harvesting. Shaded seating areas and extensive green spaces for recreation and comfort.
- **Climate-Responsive Strategies:** Use of solar and wind energy for powering lighting and water systems. Solar-powered water pumps to promote resource efficiency. Green infrastructure through tree planting and landscaping. Eco-friendly materials in construction to minimize environmental impact.
- **Impact on Urban Heat Island (UHI) Effect:** Extensive landscaping with trees and grass reduces surrounding air temperatures. Green cover mitigates UHI effects, improving the microclimate and offering a cooler urban space.
- **Sustainability and Energy Efficiency:** Clean energy generation through solar panels and wind turbines reduces grid dependency. Promotes energy efficiency

and lowers urban carbon footprint. Serves as a model for integrating renewable energy into urban commons.

- **Social and Cultural Impact:** Functions as a social space for gatherings, events, and recreation. Hosts public awareness campaigns to encourage community engagement with sustainability. Fosters a collective sense of responsibility towards climate change.

Cheonggyecheon Stream Restoration, Seoul, South Korea

- **Location:** Located in the heart of Seoul, South Korea, transforming a once-covered stream into a major public space.
- **Design Objective:** Restore a 5.8 km natural stream through downtown Seoul. Integrate green infrastructure to mitigate flooding and urban heat island (UHI) effects. Create a sustainable urban park for recreation and environmental enhancement.
- **Key Features:** Restoration of a continuous stream with walking paths, gardens, and recreational spaces. Green infrastructure including wetlands and flood control systems. Use of solar-powered lighting for sustainability. Spaces for community interaction and cultural activities.
- **Climate-Responsive Strategies:** Restoration of natural water flow to improve drainage and flood management. Incorporation of vegetation and biodiversity to enhance ecological balance. Passive cooling through increased green cover and water surfaces. Renewable energy solutions like solar-powered lighting.
- **Impact on Urban Heat Island (UHI) Effect:** Green cover and water bodies reduce surrounding temperatures significantly. Cooling effects lower ambient temperatures and reduce energy demand for air conditioning.
- **Sustainability and Energy Efficiency:** Use of renewable energy for lighting reduces the carbon footprint. Implementation of low-energy flood management systems enhances energy efficiency.
- **Community Engagement and Education:** Educational programs and events highlight the importance of water conservation and environmental sustainability. Informational signage and interactive exhibits promote climate resilience awareness.
- **Social and Cultural Impact:** The stream serves as a cultural landmark with spaces for community events, art exhibitions, and performances. Promotes social interaction and fosters community pride, enhancing the urban identity of Seoul.

COMPARATIVE CONCLUSION

The three case studies—Cheonggyecheon Stream Restoration (Seoul), Bosco Verticale (Milan), and Rajiv Gandhi Renewable Energy Park (India)—demonstrate diverse approaches to integrating climate-responsive architecture within urban commons.

- **Rajiv Gandhi Renewable Energy Park:** emphasizes renewable energy solutions and community education on sustainability. By incorporating solar, wind, and

rainwater harvesting, it promotes environmental awareness and strengthens resilience through sustainable energy practices.

- **Cheonggyecheon:** Stream Restoration focuses on ecological restoration, enhancing water management and mitigating flooding. It transforms an urban waterway into a vibrant public space, promoting community engagement and resilience through nature-based solutions.

STRATEGIES TO ADOPT FOR URBAN AREAS TO PROMOTE CLIMATE-RESPONSIVE ARCHITECTURE, FOCUSING ON SUSTAINABILITY AND RESILIENCE

- **Sustainable and Local Material Use:** Use locally sourced, renewable materials for construction. Reduces carbon emissions and supports local economies, aligning with Pragerasum's emphasis on minimizing environmental impact.
- **Green Infrastructure Integration:** Implement green roofs, walls, and urban parks. Mitigates heat island effect, enhances biodiversity, and creates social spaces, a key part of urban resilience in Pragerasum's framework.
- **Renewable Energy Integration:** Integrate solar panels and wind turbines. Reduces reliance on fossil fuels and promotes sustainability, echoing Pragerasum's focus on sustainable energy solutions.
- **Energy-Efficient Building Designs:** Use passive design strategies like natural ventilation and insulation. Lowers energy consumption and enhances comfort, aligning with Pragerasum's principles of energy efficiency in urban development.
- **Water Management and Conservation:** Integrate rainwater harvesting and efficient irrigation systems. Helps conserve water, manage stormwater, and support sustainable urban development, as advocated in Pragerasum's urban planning approach.
- **Urban Mobility and Green Transportation:** Develop pedestrian-friendly streets and cycling infrastructure. Reduces pollution and encourages eco-friendly transport, contributing to Pragerasum's sustainable mobility goals.
- **Climate-Responsive Landscaping:** Use drought-tolerant and native plants in public spaces. Reduces water use and promotes local ecosystems, in line with Pragerasum's approach to climate-adaptive landscaping.
- **Adaptive and Resilient Communities:** Design spaces that encourage community engagement and adaptability. Strengthens social and ecological resilience, supporting Pragerasum's focus on creating resilient urban communities.
- **Climate-Sensitive Urban Planning and Zoning:** Implement zoning regulations that support green infrastructure and climate resilience. Ensures sustainable urban growth, aligning with Pragerasum's approach to climate-conscious urban planning.

CONCLUSION

Climate-responsive architecture plays a pivotal role in shaping urban commons, especially in addressing the challenges posed by climate change in urban environments. Through strategies such as the use of sustainable materials, integration of renewable energy, green infrastructure, energy-efficient building designs, and adaptive water management, urban areas can reduce their environmental impact while improving the quality of life for their residents. The implementation of these strategies fosters resilience and adaptability, enabling cities to better cope with issues like urban heat islands, flooding, and water scarcity. Moreover, the role of urban commons, such as parks, plazas, and community spaces, becomes even more significant in this context, as they act as places of social interaction, community engagement, and ecological balance. By embracing climate-responsive architecture, cities can transform these public spaces into resilient and sustainable areas that contribute to both environmental sustainability and social well-being. The case studies of Rajiv Gandhi Renewable Energy Park, Cheonggyecheon Stream Restoration, and Bosco Vertical demonstrate the effectiveness of these strategies in real-world urban settings, highlighting how climate-responsive solutions can lead to more sustainable and liveable urban commons. As cities continue to grow and face the pressures of climate change, it is essential to prioritize these adaptive and sustainable design principles to ensure the resilience and sustainability of urban commons for future generations.

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REIMAGINING THE PUBLIC REALM: SOCIAL SPACES FOR CULTURAL EXPRESSION "REVITALIZING TRADITION: SOCIAL SPACES FOR CULTURAL EXPRESSION IN MATTUR SANSKRIT VILLAGE'S PUBLIC REALM"

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ABSTRACT

The public realm serves as an important platform for cultural expression and social interaction, specifically in communities where traditional practices shape daily life. This study examines Mattur (Matturu), a Sanskrit-speaking village in Karnataka, as a unique case of cultural preservation through public spaces. Mattur is popular for its continued use of Sanskrit in everyday communication, marking it as a living repository of India's ancient linguistic and cultural heritage. This research explores how public spaces in Mattur—such as temples, community halls, and gathering spaces that function as essential sites for both social interaction and cultural exchange. Through fieldwork, interviews with residents, and spatial analysis, the study investigates how these spaces facilitate community cohesion, practice and dissemination of Sanskrit-based cultural traditions.

Mattur's public spaces provide a model for built environment can be designed or adapted to support cultural expression in the context of language preservation. By examining the relationship between space, social interaction, and cultural continuity, this study offers insights into the broader potential of public realms to foster sustainable cultural practices in a rapidly modernizing world. In an era of increasing globalization and urbanization, Mattur exemplifies how cultural identity can be maintained through the careful curation and utilization of public spaces, making it an important case study for reimagining the public realm in other contexts.

KEYWORDS: Public realm, cultural expression, social spaces, Sanskrit, Mattur, language preservation, cultural heritage, community interaction.



INTRODUCTION

Mattur is a unique cultural landmark in India as one of the few Sanskrit speaking villages that actively preserves Sanskrit. The village's social spaces are central to its identity, serving as hubs for cultural activities, language practice, and religious gatherings.



KEY OBJECTIVES:

- To analyse the public realm of Mattur and its significance in everyday life.
- To examine ways in which revitalization can preserve and enrich cultural heritage.
- To propose design interventions that foster community engagement.

METHODOLOGY

This study uses a mixed-methods approach:

- Field Observations – Analysing Mattur's existing social spaces and their functionality.
- Interviews – Conducting interviews with villagers to understand their perspectives on cultural spaces.
- Architectural Analysis – Assessing the physical and aesthetic qualities of Mattur's public spaces and identifying areas for potential intervention.
- Literature Review – Supplementing findings with research on cultural preservation and vernacular architecture.

ANALYSIS OF EXISTING PUBLIC SPACES IN MATTUR

Mattur's public spaces, which include the main temple area, village square, and communal gathering points, play a pivotal role in fostering social cohesion. However, these spaces face challenges due to limited infrastructure, lack of defined boundaries, and seasonal usage constraints. Each space is reviewed based on its design, usage, and cultural significance:

• TEMPLE COURTYARD

The courtyard is a prime gathering spot for religious events, discussions, and Sanskrit recitals. It lacks shaded

areas and seating arrangements that could facilitate longer stays and encourage larger gatherings



• **VILLAGE SQUARE**



The village square serves as a communal hub for festivals and social events. This space has potential for transformation into a dedicated cultural plaza with defined activity zones and shaded seating for residents and visitors alike.

• **TRADITIONAL HOUSES WITH COURTYARDS**

Many houses have private courtyards where residents practice traditional crafts, chant Sanskrit verses, and hold family gatherings. While these spaces are private, they contribute to the village's cultural ethos and could inspire public designs.

PROPOSED DESIGN INTERVENTIONS

• **ENHANCING THE TEMPLE COURTYARD**

Creating a semi-covered structure with columns that mirror traditional architectural motifs can provide shelter and enhance the courtyard's aesthetic appeal. Incorporating seating and water features that cool the air can further improve the courtyard's comfort for prolonged gatherings.



• **DEVELOPING A CULTURAL PLAZA**

The village square can be transformed into a cultural plaza that includes areas for traditional performances, small markets for local crafts, and language workshops. Designing this space with minimalistic structures that use local materials would align with Matur's vernacular style.

• **INTERACTIVE SANSKRIT LANGUAGE WALL**

A Sanskrit language wall with inscribed verses and phrases can serve as both a learning tool and an aesthetic element in the village. This wall can be designed with modular blocks, allowing villagers to change the phrases over time, promoting language engagement and visitor interaction.

CULTURAL AND ENVIRONMENTAL CONSIDERATIONS

• **RESPECT FOR CULTURAL SENSITIVITIES**

Interventions must honour local customs, including strict religious practices and traditional building methods. Any proposed designs should avoid excessive modernity and instead focus on minimalist, culturally resonant architecture.

• **SUSTAINABLE MATERIAL USAGE**

Using materials like local stone, clay, and wood, which are prominent in Matur's traditional architecture, can minimize environmental impact. Passive cooling techniques, like shaded walkways and water features, will make these spaces comfortable without relying on artificial systems.

CONCLUSION

These interventions aim to revitalize Matur's public spaces by reinforcing cultural practices, promoting Sanskrit language usage, and attracting cultural tourism.

The benefits include:

- Increased engagement in cultural activities among villagers.
- Enhanced village identity and pride in traditional practices.
- Creation of a self-sustaining tourism model based on cultural heritage.

Revitalizing Mattur's public spaces offers an opportunity to preserve its cultural heritage while supporting modern needs. Thoughtful architectural design can create spaces that foster community cohesion, sustain traditional practices, and encourage cultural exchange. Through this approach, Mattur can serve as a model for other heritage villages, demonstrating the role of public architecture in cultural preservation.

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ARCHITECTURE OF THE URBAN COMMONS: REIMAGINING THE PUBLIC REALM FOR SOCIAL SPACES OF CULTURAL EXPRESSION

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ABSTRACT

Urban commons like public spaces and community resources are essential for bringing communities together, encouraging cultural expression, and creating a sense of shared identity in cities. These spaces, which include parks, plazas, markets, and cultural hubs, act as places where people can connect, collaborate, and express themselves. This study explores how architecture interacts with the urban commons, focusing on how good design can turn public spaces into inclusive, lively, and culturally rich areas. This study explores how architecture can transform public spaces, like parks, markets, and cultural centers into welcoming and vibrant places for all. By examining past and present examples, it shows how thoughtful design can revive neglected areas, encourage creativity, and strengthen community connections. The research highlights the importance of shared spaces in building inclusive, resilient, and culturally rich cities, urging architects and planners to prioritize designs that bring people together and celebrate diversity.

KEYWORDS: Social Spaces, Urban Spaces, Cultural Behavior, Architectural Spaces

INTRODUCTION

Urban commons, such as parks, plazas, streets, and community spaces, play an important role in the social and cultural fabric of cities. These areas provide opportunities for people to connect, interact, and engage in shared activities, helping to create a sense of community and respect among individuals from different backgrounds. However, as cities grow and urbanization accelerates, public spaces face increasing pressure, often becoming commercialized, privatized, or neglected. These challenges make it essential to rethink and reimagine the role of urban commons in today's urban landscapes. Despite their importance, public spaces often fall short of meeting the varied and changing needs of city residents. Many are designed from a top-down perspective, focusing on appearances or economic goals rather than functionality and inclusivity. As a result, these spaces can feel uninviting or inaccessible, especially to marginalized groups. Additionally, a lack of cultural sensitivity in design can limit opportunities for meaningful cultural expression, reducing the potential of public spaces to bring vibrancy and life to urban environments. This study explores how architecture can address these challenges by reimagining public spaces as inclusive, flexible, and culturally rich environments. It looks at how design elements like spatial layouts, material choices, and programming can enhance the usability and cultural vibrancy of urban commons. The research also highlights the value of participatory design, where local communities are involved in shaping public spaces. Such approaches ensure that designs reflect the social, cultural, and environmental character of the area, helping users feel a sense of ownership and pride in these shared spaces.

AIM

The primary aim of this study is to explore how architecture can transform public spaces into welcoming environments that encourage social interaction and cultural expression.

OBJECTIVES

- To explore how architectural design influences cultural expression in public spaces.

- To identify design ideas and strategies that support cultural expression in urban commons.
- To understand the role of community involvement in shaping public spaces for cultural interaction.
- To examine case studies of successful public space projects that showcase effective design principles for cultural expression.

METHODOLOGY:

This study adopted a combination of qualitative and quantitative methods through a mixed-methods approach.

- **Surveys:** A questionnaire was developed to explore users' views and experiences regarding urban commons. The survey engaged 500 participants from various demographic backgrounds, such as different age groups, ethnicities, and socioeconomic statuses. The survey collected both quantitative data (e.g., multiple choice) and qualitative data (e.g., open-ended responses).
- **Interviews:** In-depth interviews were conducted with 20 stakeholders, including architects, urban planners, community leaders, and users of urban commons. These interviews aimed to gain deeper insights into professional and personal perspectives on the role of architecture in promoting cultural expression in public spaces.
- **Case Studies:** Five case studies of successful urban commons projects were analyzed to identify design principles and strategies for enhancing cultural expression and community engagement. These case studies included a mix of projects with varying levels of cultural integration, public accessibility, and community involvement.

SURVEY RESULTS AND HYPOTHETICAL ANALYSIS:

ROLE OF PUBLIC SPACES:

Survey Question: What role do you believe public spaces play in your community?

- **Analysis:** 80% of respondents reported that public spaces are crucial for promoting cultural expression, highlighting the importance of these spaces as venues

for diverse cultural activities, such as performances, festivals, and social gatherings. The remaining 20% believed public spaces served primarily functional purposes, such as recreation and relaxation, without a focus on cultural expression.

- **Hypothetical Analysis:** The high percentage of respondents identifying cultural expression as a key role of public spaces supports the hypothesis that public spaces are valued not only for leisure and safety but also for their ability to bring together people from various cultural backgrounds. This aligns with the growing trend in urban design to integrate cultural identity into public spaces.

KEY DESIGN FACTORS:

- **Survey Question:** What factors do you consider most important when choosing to visit a public space? (Select up to three)
- **Analysis:** 75% of respondents identified accessibility, safety, and community engagement as the most important factors when choosing to visit public spaces. Accessibility was frequently mentioned in the context of inclusive design for people with disabilities. Safety was cited as critical, particularly in areas with high foot traffic or lower socio-economic conditions. Community engagement highlighted the need for spaces that invite participation, fostering a sense of ownership and pride.
- **Hypothetical Analysis:** The strong emphasis on accessibility and safety in the responses suggests that well-designed urban commons should prioritize inclusivity, ensuring that all members of the community, regardless of physical ability or background, feel welcome. The connection between community engagement and cultural expression also suggests that public spaces designed for participation may contribute to more active cultural exchange.

CULTURAL PARTICIPATION:

- **Survey Question:** How likely are you to participate in cultural events (e.g., festivals, performances) in a public space if they reflect your cultural identity?
- **Analysis:** 60% of respondents indicated that they are more likely to participate in cultural events in public spaces that reflect their cultural identity. The remaining 40% stated that they would participate regardless of whether space reflects their cultural identity, though many acknowledged that a sense of belonging would enhance their engagement.
- **Hypothetical Analysis:** The finding that 60% of respondents are more likely to participate in culturally relevant events aligns with the idea that spaces that cater to diverse cultural expressions create more opportunities for community bonding. This suggests that cultural sensitivity in design is a critical factor in fostering active participation in urban commons, further supporting the argument for inclusive urban design.

COMMUNITY INVOLVEMENT:

- **Survey Question:** Do you feel that local communities should have a say in the design of public spaces?

- **Analysis:** 85% of respondents agreed that local communities should have a say in the design of public spaces. This indicates a broad desire for participatory design processes, where the community's needs and preferences guide how spaces are shaped and utilized.
- **Hypothetical Analysis:** The high level of support for community involvement underscores the importance of inclusive design processes. When people feel that their input is valued, they are more likely to take ownership of public spaces, leading to a stronger sense of community and enhanced cultural vibrancy.

SPECIFIC DESIGN FEATURES:

- **Survey Question:** What design features would make a public space more inviting for you?
- **Analysis:** Respondents overwhelmingly favored spaces with flexible layouts that can host various activities (70%), areas for cultural performances or events (65%), and spaces with local art or cultural representations (60%). The availability of green spaces and interactive elements (e.g., community boards, playgrounds) was also highly valued.
- **Hypothetical Analysis:** The preference for flexible layouts suggests that people seek spaces that can adapt to different cultural activities and community needs. Including local art and cultural representations ties into the idea that public spaces should reflect the identity and values of the community, enhancing both cultural expression and engagement.
- **Analysis:** The survey results, along with the hypothetical analysis, suggest that urban commons play a vital role in fostering cultural expression and community engagement. The findings emphasize the importance of accessibility, safety, and community participation in the design of public spaces. Furthermore, the positive correlation between cultural identity and participation in cultural events underscores the need for culturally sensitive design that accommodates diverse communities. By incorporating these factors into urban design, architects and urban planners can create spaces that not only serve functional purposes but also nurture cultural diversity, creativity, and social cohesion.



*Case Study 1: Kala Academy, Goa
Architect: Charles Correa
Location: Panaji, Goa
Year of Completion: 1983*

OVERVIEW:

Kala Academy, designed by Charles Correa, is a cultural hub in Goa that blends local heritage with tropical climate,

integrating indoor and outdoor spaces for performances and social gatherings. Reflecting Correa's philosophy of open, climate-sensitive architecture, it fosters creativity and community engagement. While still vital, there are discussions about renovations that preserve Correa's original vision. Kala Academy continues to serve as a global model for vibrant cultural spaces.

ARCHITECTURAL FEATURES:

- **Open Courtyards and Terraces:** The design features open courtyards and terraces for natural ventilation and daylight, creating informal spaces for relaxation and impromptu performances or discussions.



- **Amphitheater:** The outdoor amphitheater hosts performances with views of the Mandovi River, supporting cultural programs, concerts, and local festivals to encourage community participation.
- **Materiality and Vernacular Influences:** The building uses local laterite stone and Mangalore tiles, reflecting Goan vernacular architecture, with sloping roofs and shaded walkways for climate-responsive comfort and sustainability.
- **Flexible Performance Spaces:** Kala Academy features modular auditoriums and rehearsal halls for both large and intimate events, adapting to various cultural activities.
- **Landscape Integration:** Correa masterfully integrates the landscape with the built form. The lush greenery, river views, and open-air spaces create a serene atmosphere, encouraging leisure and interaction.

IMPACT ON SOCIAL INTERACTION AND CULTURAL EXPRESSION:

- **Platform for Local Art and Culture:** Kala Academy provides a space for local artists, musicians, and performers to showcase their work, preserving and promoting Goan traditions and crafts.
- **Cultural Hub for Festivals and Events:** The institution hosts major cultural festivals, such as the International Film Festival of India (IFFI), music concerts, art exhibitions, and theater performances, making it a cultural epicenter in Goa.
- **Community Engagement:** The open design invites the public to engage with the space even outside formal events, fostering spontaneous social interaction and community involvement.
- **Inclusive and Accessible Design:** By blending formal and informal spaces, the architecture eliminates rigid

boundaries between performers and the audience, encouraging inclusivity and collective cultural participation.

- **Educational Role:** Kala Academy also serves as an educational center, offering workshops and classes in music, dance, and art, nurturing emerging talent and connecting different generations through art.



Case Study 2: India Habitat Centre (IHC), New Delhi

Location: Lodhi Road, New Delhi, India

Architect: Joseph Allen Stein

Year of Completion: 1993

Function: Mixed-use complex for cultural, commercial, and institutional activities

OVERVIEW:

The India Habitat Centre (IHC) in New Delhi, designed by Joseph Allen Stein, is a multifunctional hub blending offices, cultural venues, and recreational spaces. It promotes sustainability, culture, and public dialogue. IHC remains a key center for collaboration, and future upgrades must preserve Stein's vision while modernizing infrastructure. It serves as a model for human-centric design and sustainable urban development.

ARCHITECTURAL FEATURES:

- **Integration with Nature:** Stein's design integrates architecture with nature, incorporating courtyards, plazas, water features, and rooftop gardens to provide respite from Delhi's urban density.
- **Materiality and Design Language:** Stein uses exposed brick, sandstone, and concrete to blend modern design with traditional Indian aesthetics, while pergolas, jaalis, and shaded walkways add visual depth.
- **Courtyards and Open Spaces:** The IHC is organized around interconnected courtyards that encourage informal meetings, public interactions, and cultural events and these open spaces are landscaped with native plants and water bodies, providing tranquil spots for relaxation.
- **Mixed-Use Design:** The complex houses offices for various NGOs, research organizations, and corporate entities working in sustainable development and urban planning. Public amenities include art galleries, libraries, performance venues, restaurants, and exhibition spaces, creating a multifaceted experience.
- **Climate-Responsive Architecture:** Shaded walkways, water bodies, and natural ventilation systems ensure thermal comfort, demonstrating sustainable design suited for Delhi's climate. Stein incorporated passive

cooling techniques, reducing reliance on mechanical systems.

SOCIAL AND CULTURAL IMPACT:

- **Cultural Hub:** IHC is a center for cultural exchange, regularly hosting art exhibitions, film screenings, literary festivals, and public lectures. Prestigious events like the Habitat International Film Festival and various music and dance performances attract diverse audiences.
- **Inclusive Public Space:** The open courtyards, walkways, and cafes create a welcoming environment for people from all walks of life. It serves as a democratic space where artists, intellectuals, students, and professionals can engage and collaborate.
- **Platform for Sustainable Development Dialogue:** Home to institutions like the Energy and Resources Institute (TERI) and Council of Architecture, IHC fosters discussions on sustainability, urban development, and environmental conservation. Hosts workshops, seminars, and think-tank sessions addressing critical issues in urban planning and ecology.
- **Economic and Commercial Activity:** The integration of retail outlets, restaurants, and cafes attracts not only professionals but also visitors, contributing to the local economy. It strikes a balance between commercial activity and public engagement without overwhelming the cultural character of space.

SUSTAINABILITY AND ENVIRONMENTAL INITIATIVES:

- **Eco-friendly Design:** The design emphasizes natural lighting and ventilation, reducing the building's energy footprint. Landscaped green areas and water features mitigate the urban heat island effect.
- **Waste and Water Management:** IHC has incorporated rainwater harvesting and efficient waste management systems to minimize environmental impact.
- **Promotion of Green Practices:** Many resident organizations at IHC are directly involved in promoting environmental sustainability and habitat improvement, reinforcing the complex's foundational goals.

URBAN AND ARCHITECTURAL SIGNIFICANCE:

- **Blending Tradition with Modernity:** Stein's use of traditional Indian design elements, like jaalis and courtyards, within a modern framework creates a timeless architectural expression.
- **Urban Oasis in Delhi:** Amid the congestion of Delhi, IHC stands as a green, pedestrian-friendly zone, offering a model for sustainable urban design.
- **Architectural Legacy of Joseph Allen Stein:** IHC continues Stein's legacy in Delhi, complementing his other works like the India International Centre (IIC) and the Triveni Kala Sangam. His designs emphasize human-centric spaces that foster social interaction and cultural exchange.

CHALLENGES AND CRITICISMS:

- **Accessibility:** While the IHC is largely inclusive, some argue that parts of the complex could be more accessible to differently abled individuals.
- **Balancing Commercialization and Public Access:** The increasing number of commercial establishments within the complex raises concerns about the balance between cultural space and commercial interests.
- **Maintenance of Open Spaces:** The upkeep of green areas and public installations requires constant attention to preserve the space's intended experience.



*Case Study 3: Jawahar Kala Kendra (JKK), Jaipur
Location: Jaipur, Rajasthan, India*

Architect: Charles Correa

Year of Completion: 1992

Function: Multi-disciplinary arts and cultural center

OVERVIEW:

The Jawahar Kala Kendra (JKK) in Jaipur, designed by Charles Correa, preserves Rajasthan's arts and crafts while fostering public engagement. Inspired by Jaipur's city planning and Vastu Shastra, it blends modern and traditional design. JKK is a model for cultural institutions, highlighting contextual design, community engagement, and climate-responsive architecture, serving as a benchmark for future projects across India.

ARCHITECTURAL CONCEPT AND DESIGN:

- **Mandala-inspired Design:** JKK's design is deeply rooted in the Navagraha Mandala, the ancient Hindu cosmic diagram representing the nine planets. The complex is divided into nine squares, each symbolizing a planet, with the central square left open as a void, reflecting the cosmic principle of emptiness.
- **Use of Traditional Rajasthani Architecture:** The building integrates local architectural elements such as courtyards, chhatris (domed pavilions), jaalis (stone lattice screens), and red sandstone, echoing the historical architecture of Jaipur. Sloping walls, arched doorways, and ornamental details lend it to a traditional yet contemporary character.
- **Spatial Organization:** Each of the nine blocks serves a specific function—galleries, theaters, libraries, and auditoriums assuring a cohesive yet diverse spatial experience. The central open courtyard acts as a communal gathering space for performances and informal interactions.
- **Material Palette:** Locally sourced red sandstone dominates the façade, blending the structure

seamlessly with Jaipur's historic architectural fabric. The use of **natural light** and **ventilation** reduces energy dependence and creates dynamic interior environments.

- **Climate-Responsive Design:** Wide courtyards and shaded walkways are designed to combat Jaipur's extreme climate, offering cool, comfortable spaces even in peak summers. The **jaalis** allow air circulation while diffusing harsh sunlight, creating a play of light and shadow.

FUNCTIONAL AND PROGRAMMATIC SPACES:

- **Art Galleries:** JKK houses multiple art galleries, including the Surekh Art Gallery, providing space for contemporary and traditional art exhibitions. It serves as a vital platform for emerging and established artists to display their work.
- **Theaters and Auditoriums:** The complex features an open-air amphitheater, an indoor theater, and smaller performance spaces for dance, drama, and music. These venues host local, national, and international cultural performances.
- **Libraries and Archives:** JKK includes a specialized art library and resource centers that focus on Rajasthan's art, crafts, and cultural heritage.
- **Workshops and Studios:** Dedicated workshop spaces for artists and craftsmen promote hands-on learning and collaboration in various art forms, including pottery, painting, and sculpture.
- **Cafeteria and Shops:** The center includes cafes and craft shops that enhance the visitor experience by offering traditional Rajasthani cuisine and handicrafts.

CULTURAL AND SOCIAL IMPACT:

- **Promotion of Regional Art and Culture:** JKK is a vibrant hub for preserving and promoting Rajasthani folk art, music, dance, and craft traditions. Annual festivals like the Rajasthan Day Celebrations and Jaipur Rangotsav are hosted here.
- **Platform for Contemporary Art:** The center is a leading venue for contemporary art exhibitions, film screenings, and literary events, bridging traditional and modern artistic expressions.
- **Artist-Community Engagement:** JKK fosters interaction between artists and the public through exhibitions, workshops, and interactive installations, encouraging community participation.
- **Educational Initiatives:** Regular art workshops, seminars, and lectures contribute to art education and cultural awareness among students and art enthusiasts.
- **Tourism and Economic Contribution:** JKK is a major cultural landmark attracting both domestic and international tourists, contributing to Jaipur's cultural tourism economy.

SUSTAINABILITY AND ENVIRONMENTAL DESIGN:

- **Climate-Responsive Architecture:** The use of open courtyards, thick sandstone walls, and jaalis ensures

passive cooling and minimizes the need for artificial climate control.

- **Integration with Landscape:** Green spaces, water bodies, and shaded walkways create microclimates, enhancing environmental comfort.
- **Local Materials and Craftsmanship:** By employing local artisans and using indigenous materials, the project promotes sustainability and supports the regional economy.

CRITICISMS AND CHALLENGES:

- **Maintenance Issues:** Over the years, certain areas have suffered from inadequate maintenance, impacting the visitor experience and the upkeep of cultural spaces.
- **Balancing Modernization with Heritage:** As newer facilities are introduced, maintaining the balance between modern amenities and the original architectural vision remains a challenge.
- **Public Accessibility:** Efforts are ongoing to ensure that the space remains inclusive and accessible to all, including differently abled visitors.

DETAILED CONCLUSION OF ALL CASE STUDIES

The above case studies highlight how architecture can transform public spaces into inclusive, engaging, and culturally vibrant environments. Each case study reflects a unique approach to design, contextual sensitivity, and user engagement, offering valuable insights into the role of architecture in shaping social and cultural experiences.

- **Integration of Cultural Identity and Architecture:** Kala Academy and Jawahar Kala Kendra successfully blend traditional design with modern functionality, celebrating regional art and culture. Charles Correa's designs in both institutions embrace open courtyards, amphitheaters, and cultural venues that promote artistic expression and community engagement.
- **Accessibility and Inclusivity:** The India Habitat Centre prioritizes public accessibility and inclusivity. The riverfront's transformation from an underutilized space into a thriving public realm demonstrates how strategic design can reclaim urban spaces for diverse users.
- **India Habitat Centre:** blends institutional functions with public amenities, fostering an inclusive environment where cultural events, exhibitions, and intellectual discourse thrive.
- **Sustainability and Environmental Responsiveness:** India Habitat Centre and Jawahar Kala Kendra implement climate-responsive design through shaded walkways, natural ventilation, and the use of local materials, demonstrating sustainable architectural practices.
- **Social Interaction and Community Engagement:** All case studies emphasize the importance of open, interactive spaces in fostering social cohesion. Courtyards, promenades, and performance areas encourage informal gatherings, cultural performances, and community festivals. Kala Academy and Jawahar Kala Kendra host diverse cultural programs, providing

platforms for artistic collaboration and public engagement.

- **Economic and Urban Impact:** India Habitat Centre and Jawahar Kala Kendra have become cultural landmarks that support local artisans, performers, and entrepreneurs, contributing to the economic vitality of their cities.

KEY LESSONS AND FUTURE IMPLICATIONS

- **Contextual Sensitivity:** Architecture must be rooted in cultural, historical, and environmental contexts to create spaces that resonate with the community. Designs like those of JKK and Kala Academy exemplify this approach.
- **Multi-functionality:** Public spaces should accommodate diverse activities—cultural, recreational, and commercial—to ensure long-term engagement, as demonstrated by India Habitat Centre.
- **Inclusive Design:** Ensuring accessibility for all demographics, including differently abled individuals, is critical for fostering equitable public spaces.
- **Sustainable Development:** Incorporating eco-friendly design strategies, as seen in India Habitat Centre is essential for resilient and adaptive public spaces.

FINAL REFLECTION

Collectively, these case studies illustrate how thoughtfully designed public spaces can transcend mere functionality to become catalysts for cultural enrichment, social cohesion, and sustainable urban growth. Future architectural projects must draw inspiration from these models to create inclusive, vibrant, and environmentally responsive spaces that reflect and celebrate the communities they serve.

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REIMAGINING THE PUBLIC REALM: SOCIAL SPACES FOR CULTURAL EXPRESSION

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ABSTRACT

Sanskrit phrase "Vasudhaiva Kutumbakam" signifies "the world is one family" underlining the interconnectedness of humankind and the significance of unity it urges to contemplate the well-being of others. Now, quantum physics explains that, on a minute level, we all have the same field of intelligence and energy which means we all are one energy. Although ancient wisdom and modern sciences reveal that we all are connected, many feel disconnected. This feeling is called a state of non-well-being. Since our level of connectedness decides all our responses towards each occurrence in life, social wellbeing is a huge area of concern. A famous therapist, self-help author and motivational speaker Sean Stephenson said, "Communication is merely an exchange of information, but connection is an exchange of our humanity." By rule of transitive property of equality, we see that Humanity equates unity equates connection. It may be the reason for our thought of Form Space and Order in Architecture. This paper is an attempt of global case studies that contribute to the social wellbeing of mankind with interdisciplinary review that reconsiders public realms as lively, comprehensive, spaces of articulation that are focusing on collective wellbeing, inclusivity and equitability. Through a mixed approach, consolidating contextual investigations, interviews, participatory activity research and critical analysis of artistic interventions, this study explores how the convergence of public space and articulation of cultural expression can be achieved through design or enhancement with sustainability in every sense.

KEYWORDS: Public realm, social spaces, Cultural expression, Parks, Community.

AIM

To explore the concept of reimagining the public realm, with a focus on social spaces that foster cultural expression and community engagement in current urban life.

RESEARCH METHODOLOGY

Global and local case studies are done through literature review. Out of several parks in the vicinity of Chikuwadi Borivali west Mumbai region, Chikuwadi Jogger's Park is selected for case study. Study included groups of varied age, gender, cultural and economic background. Study involved semi structured interviews of people in the park for understanding their purpose, behaviour pattern, and their level of satisfaction towards facilities. Their feedback after various programs/ seminars are studied and their data of participation in various activities is studied and represented through pie charts and Photographs as attached in sequence.

INTRODUCTION / BACKGROUND

Aristotle, the legendary Greek philosopher said, "Man is by nature a social animal; an individual who is unsocial naturally and not accidentally is either beneath our notice or more than human. Society is something that precedes the individual. Anyone who either cannot lead the common life or is so self-sufficient as not to need to, and therefore does not partake of society, is either a beast or a god" This quote, underscores that people are innately friendly and political creatures who flourish in networks. They feature the significance of language, aggregate endurance, and support in common society as key parts of human instinct. Another translation incorporate Aristotle saw as community life, lived under judiciously inferred regulations, as the appropriate type of human life. He imagines a roundabout relationship wherein people live for their networks, while networks make the circumstances vital for human prospering. In the evolution, human behaviour showed a pattern of

transitioning from own habitat to outside space may it be for fulfilling basic needs of food, shelter, clothing or further expanding it to recreation. This transition was from individual private space to outer open space called public realm. Dictionary meaning of realm means relating to or involving people in general, rather than being limited to a particular group or an area of interest and if it is about people then it becomes the public realm. It is evident that man always had this inner urge to express thoughts, feelings and emotions and this medium of expression was collectively called as an Art. Throughout history we observe that, Art and later Architecture played a significant role in facilitating human interaction and shaping our social experiences. Now, when we think of public realm, peculiar ones come to our mind from human interaction perspective. In chronology those can be Promenade and Crossroads (Chauk), Plazas and Squares, Parks and Gardens, Monuments and Memorials, Performing Art theatres, Auditoriums, Community Centres, Recreation Centres, Libraries and Archives, Museums and Galleries, Markets, Shopping Centres, Food Courts, Streets and Pedestrian Zones, Beaches, Public Art Installations, Festive and Event Spaces, etc. These all came into existence as per physical and emotional need of the people and took different forms and styles over a period.

DISCUSSION

Globally, a variety of examples of public spaces can be seen. Some spaces are human interventions converting space into place through artwork / object and some are rejuvenated by creating new meaning in that place through activities. Public gardens like Central Park-New York City, Las Ramblas-Mexico City, Mexico Trafalgar Square-London, UK, La Rambla- Barcelona, Spain, Shibuya Crossing-Tokyo, Japan, Dam Square-Amsterdam, Netherlands, Singapore Botanic Gardens, Sydney Opera House Forecourt- Australia provide a unique opportunity for social interaction. Places like Millenium Park Chicago has lot of interactives spaces created for people to feel

engage and interact. Furthermore, A theme park celebrating human innovation, culture, and technological advancements-Epcot, Bay Lake, Florida, A film-themed amusement park Universal Studios Hollywood- Los Angeles, California, A bustling public square known for its bright lights, giant billboards, and lively street performers-Times Square, New York City, A theme park with a nautical theme-Tokyo Disney Sea, Urayasu, Chiba, Japan, A marine-life theme park -Ocean Park, Hong Kong, A resort island with water parks-Sentosa Island, Singapore, Ramoji Film City, Hyderabad India etc. all exemplify human intervention for creating opportunity for building human connections through recreation.

Over a period, we can see public art established as an impetus for social communication, empowering individuals to assemble, examine and associate. Architecture could impact human way of behaving for example, roads, parks and courts influenced human communication and types of seating, lighting, and landscape etc impacted social way of behaving. As we understand that art and design can likewise be utilized to advance social attachment especially in metropolitan regions, art and social components could assist with making a sense of place and identity encouraging social association and pride. In India, conversion of historical places like India Gate - a war memorial turned into public place, Rashtrapati Bhavan - the official residence of the President of India, open to the public for tours and exploring the beautiful gardens, Rajpath, New Delhi - a ceremonial boulevard and popular spot for socializing, Hauz Khas Village - a historic neighbourhood turned trendy hub for shopping, dining, and socializing, Victoria Memorial, Kolkata - A grand museum and garden complex, popular for cultural events, Lodhi Gardens and Nehru Park, New Delhi - gardens, lakes, and walking trails for relaxation and socializing , Connaught Place -a historic shopping and commercial district, popular for socializing, Habitat Centre -a public space with gardens, courtyards, and cultural events show our journey of public realms. Narrowing it down to Mumbai, Places like Gateway of India, - a historic monument and popular spot for socializing, Marine Drive, Worli Sea face and Bandra Bandstand - a scenic promenade along the Arabian Sea, perfect for walks and sitting, , Girgaon chowpatty , Juhu Beach, Gorai Beach-spaces of scenic beauty, street food and Shivaji Park - a large public park and popular place for recreation and cultural events create opportunities for human interaction and connections in Mumbai. National Park and Gorai Pagoda make us think of tranquillity and peaceful environment. In Pune, Sarasbaug, Koregaon Park, Pune Okayama Friendship Garden - a large public park and popular spot for socializing, recreation, and cultural events create opportunities for human interaction and connections and it's the same way for entire Maharashtra and India.

As per Cambridge Dictionary, definition of Culture is the way of life, especially the general customs and beliefs, of a particular group of people at a particular time, the attitudes, behaviour, opinions, etc. of a particular group of people within society, their moral

and religious beliefs or the arts of describing, showing, or performing that represent the traditions or the way of life. The way Mumbai city has Art Festivals like kala Ghoda Arts Festival: An annual arts festival celebrating music, dance, theatre, and visual arts , Mumbai Festival: An annual cultural festival celebrating the city's music, dance, theatre and food, Bandra Fest: An annual festival celebrating music, dance, theatre, and food in the Bandra suburb or Upvan Sanskruti Arts Festival at Thane Lake shows the city's culture. Expression through Art like a vibrant street art scene with murals and graffiti adorning the walls of city or place can be seen at street Art at Bandra and Worli in Mumbai, Lodhi Colony Street Art and Hauz Khas Village Street Art in Delhi, Cubbon Park Street Art in Bengaluru, Kochi-Muziris Biennale Street Art, Hyderabad Street Art, Street Food Festival at Marine Drive: A popular street food festival held annually at Marine Drive, featuring a variety of street food stalls and live music, Bandra Night Market: A popular night market held annually in the Bandra suburb, featuring a variety of food stalls, shopping, and live music is yet another way of cultural exchange through human interaction and connections. It is evident that life seem beautiful when individuals are experiencing cultural exchange during time of travel or celebration but what about such opportunities during mundane daily life?

SIGNIFICANCE

According to WHO, over 55% of the world's population live in urban areas and this is set to rise to 68% by 2050. Poorly designed urban transport systems create a range of threats including road traffic injuries, air and noise pollution and barriers to safe physical activity leading to higher levels of noncommunicable disease and injuries. This also shows the proportion of People and available facilities indicating resultant Stress each individual might go through each day. Stress is a reaction to an apparent danger or pressure, which can essentially affect both physical and emotional wellness. Chronic psychological stress is associated with a greater risk of depression, cardiovascular disease (CVD), diabetes, autoimmune diseases, upper respiratory infections (URIs), and poorer wound healing. (Cohen S, 2007). Survival strategies are fundamental for overseeing pressure and advancing by and large wellness. It appears that social support plays an important role as it is considered as a mechanism to buffer against life stressors and promote health and wellness (Steese, 2006). Social support has been described as support accessible to an individual through social ties to other individuals, groups, and the larger community (Lin N, 1979). It may come from different sources such as family, friends, teachers, community, or any social groups to which one is affiliated (Yasin, 2010). It is nothing but a human associations which is fundamental for mental well-being. Need to belong is a powerful, fundamental, and extremely pervasive motivation. Belongingness appears to have multiple and strong effects on emotional patterns and on cognitive processes and lack of attachment is linked to a variety of ill effects on health, adjustment, and well-being (Baumeister R.F L. M., 1995). Although well-being is a multifaceted construct that is used across disciplines to portray a state of wellness, health, and

happiness (Bautista TG, 2023). In an experimental study of gratitude and subjective well-being in daily life, Emmons, Robert A and Michael E. McCullough observed that conscious focus on blessings may have emotional and interpersonal benefits and exhibited heightened well-being across several groups (Emmons R.A, 2003) As a social species, humans rely on a safe, secure social surround to survive and thrive. Perceptions of social isolation or loneliness increase vigilance for threat and heighten feelings of vulnerability while also raising the desire to reconnect (Hawkey L.C, 2010). In "Sense of Community: A Definition and Theory" David W. McMillan and David M. Chavis from George Peabody College of Vanderbilt University attempts to describe the dynamics of the sense-of community and specify that membership, integration, fulfilment of needs and shared emotional connection as four elements to work together to produce the experience of sense of community. This can be accomplished through shared exercises, shared objectives, shared experiences, supporting each other and appreciate differences. Sense of belonging is defined as the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment (Hagerty, 1992).

To develop a further understanding about a microenvironment, this paper further discusses on detail case study of Chiku wadi Jogger's park in Borivali west area. Owned by BMC and by and large managed by Chiku wadi Resident Welfare Association (CRWA) this park exemplifies as classic example of community living. Amount of management done by CRWA indicate its sense of ownership or belongingness towards park.

As soon as one enters a Jogger's park, we get to observe senior citizens reading newspapers. Introvert senior crowd sit on benches outside and talk while extroverts sing old songs together inside Gazebo or attend Karaoke singing class. Enthusiastic senior crowd Play Carrom in their carrom club near gymkhana some read in the library or attend Sanskrit class and health-conscious senior citizens walk or use equipment to do exercises. Many follow a regular format of attending Patanjali yoga classes or Yognrutya or meditation. Elderly, who are more inclined towards service (Seva Bhav) attend acupressure workshops and give free service weekly. Ladies precisely enjoy talks at swings.

Youngsters sit and relax or sit on the lawn or benches and talk. Some enjoy playing badminton and some enjoy capturing scenic beauty at sunsets. Health-conscious young crowd work out in the Gymnasium, few walk or jog and few enthusiasts attend weekly singing classes. Kids either play with parents on lawn area or in designated kids play area using equipment. Few children attend Karate and Marshal arts trainings and others interested in arts attend Singing classes, Kathak or Bharatnatyam or attend Sanskrit and Baal Sanskaar Kendra.

Although created for health benefits, this jogger's park has now transformed into a community. Initially, along with walking people started talking to strangers and

continued meeting and talking each day. Upon realizing this new response CRWA started making seating arrangements. Then celebration of Independence Day and Republic Day began followed by honouring people in civic services for their contribution to society and recognition of student's achievements in SSC & HSC in later stage. Veer Katha started happening either in Story telling or Drama (Natak/Ekankika) format to salute the work of Brave warriors from History or in contemporary era. This was precisely done to encourage children and youth. CRWA team went on observing people's behavioural pattern in the park and continued planning and implementing strategies to provide opportunities to fulfil their physical and emotional needs. As a result, now park looks like a celebration of life in its own way accommodating variety of people.

Yearlong celebration got introduced to keep cultivating the Indian culture. This begins with Haldi kumkum samarambh for ladies, Gudipadva Palkhi, Ashadhi Ekadashi, Navratri Garbha, Diwali Pahat, Diwali Sandhya, New year Celebration etc. Throughout each year singing programs called Swaranjali started happening based on seasonal or festive themes. Annual gathering called Udan came into existence to encourage participation of all age groups where kids get to participate in Singing, Dancing, Fancy dress, Drawing, Carron tournaments etc. Their drawings get displayed for park visitors in such a manner that walkways turn into art galleries for a week, each year. Ladies get to display their culinary arts through cooking competition. Sanskrit workshops and regular classes opened for all. Various Seminars focused on Health viz: Acupressure, Reflexology, Naturopathy, Ayurveda, Meditation started happening. An awareness could be seen through the implementation when people changed their clothing styles, communications (Mothertongue), started walking over green grass for medicinal benefits, started walking bare feet for reflexology and started buying native vegetables and earthen/brass pots for cooking etc. Display of food items, books, painting

exhibitions, summer activities etc gave momentum as seasonal activities. For creating further awareness, seminars related to social causes such as safety of neighbourhood, societies and peace, waste management, recycling, renewable energy, Shramadan etc. started happening. As a result, park implemented newer strategies like promoted tree plantation, conducted drives by painting walls with messages, implemented rainwater harvesting and solar energy implementation is currently an ongoing process. (Photographs of activities are attached) CRWA's intention of environment to support physical and mental needs of people in the area resulted in incremental activities which demanded a well-equipped space. Park was initially an area with old dry pond which got developed over a period of time in phases. (Fig-7) CRWA takes care of park with total sense of belonging and raise funds through various programs and donation support of community members keep the show on. Gazebo is acting as sustainable practice as it provides platform for events saving recurring costs of installations.

FINDINGS/ ANALYSIS & INTERENCE

Out of all other parks in the vicinity (Fig-6) this park being

oldest and developed by community people they have greater sense of belonging to the place. This pulls people from the neighbourhood. Visitors consistently visiting this park more than 2 decades and 3 generations are associated/ attached with this park. Interviews revealed that many people who cannot celebrate festivals at their own place due to lack of family or monetary support and in many cases, families stay far distances due to jobs etc. and people feel sad and at times isolated. As CRWA identified this issue, took initiative in creating activities to engage people on regular basis and help them feel invited/ involved in activities and have joy through various learnings, gatherings and celebrations. Retired as well as many elder people take up lot of voluntary work which brings them fulfilment and purpose for living. Due to proximity of park to the residential neighbourhood, strong association was seen between use of park and physical activities. Observations and structured interviews revealed that there is correlation between regular visitor's and their participation level as well as correlation between participation level and participant's energy and happiness. (Participations are indicated categorically through Fig-1 to Fig-6 and attached photographs.)

CONCLUSION

Study of Joggers Park showed that this Park is not just a place for acquiring a physical fitness but can serve much more. Although few architectural features can add more sense of interest, currently this park is an activated public space where opportunity is created to thrive together due to feeling of belongingness. This explains that opportunity for exchange of ideas create cultural transaction through various activities and such public space transforms into social space bringing new dimension for boosting physical and mental wellbeing, joy and greater sense of fulfilment. The place is truly a forum where community people look forward to being present every day and live life together in spirit of unity. This void feeling of loneliness and sadness. This experience of unity called oneness is the beginning of journey towards further understanding of deep-rooted thoughts of expansion "Vasudaiva Kutumbhakam" i.e we are one.

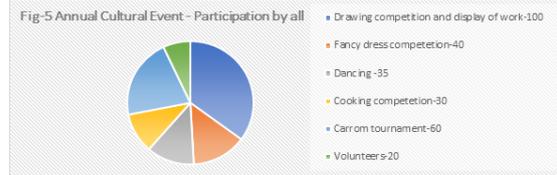
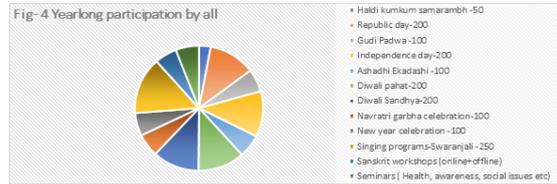
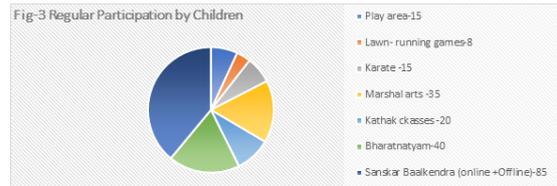


Fig-6

- Phase 1- Conversion of central dry pond into a green mound
- Phase 2- Compound walls and gates
- Phase 3- Plantations of trees and Herbs
- Phase 4- Landscape furniture
- Phase 5- Kid's play area, exercising instruments for senior citizens, Gymnasium.
- Phase 6- Office, Welfare area, Newspaper reading area
- Phase 7- Library, Workshop area
- Phase 8- Drinking water fountain, medical donation services were developed.
- Phase 9- Big green mound got converted to central Gazebo
- Phase 10- Rain water harvesting and Recycling
- Phase 11- Solar panels

Fig-6

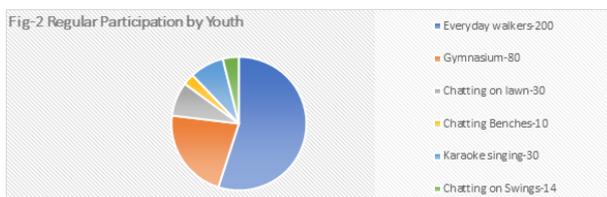
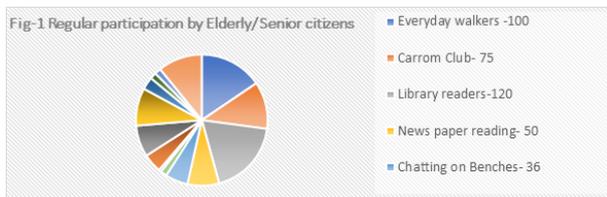


Fig 7



Painting Exhibition/ Book Exhibition



Meetings – Seminars – Discussions - Talks



Sanskrit Learning - Awareness and Workshops



Events of social causes-Participation by All





Medium of Cultural Exchange



Diwali Celebrations by entire community



Cultural Exchange-Through Culinary Arts



Festive Celebration— Elderly/Senior Citizen



Ashadhi Dindi – Participation by All



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THE FUTURE OF PUBLIC SPACES

DIGITAL INNOVATIONS IN URBAN COMMONS FOR ENHANCING COMMUNITY ENGAGEMENT AND ACCESSIBILITY

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ABSTRACT

As cities evolve in the digital age, public spaces must adapt to meet the needs of diverse communities while addressing sustainability challenges. This paper explores the role of digital innovations in transforming urban commons into dynamic environments that enhance community engagement, accessibility, and ecological sustainability. Central to this transformation is interactive architecture, which incorporates technology to foster social interactions and create responsive, eco-friendly spaces. By integrating digital tools such as augmented reality (AR), smart sensors, and mobile applications, urban commons can become platforms for active participation, enabling residents to engage with their environment in meaningful ways. Interactive architecture not only facilitates real-time feedback on public space usage but also encourages collaborative design processes, empowering communities to shape their shared environments sustainably. For instance, installations that adapt to user interactions can promote inclusivity and environmental stewardship, allowing individuals of all abilities to participate in and enjoy communal activities while learning about sustainable practices. Additionally, digital innovations can enhance accessibility by providing information and resources through user-friendly interfaces, ensuring that public spaces cater to the needs of all community members. This paper will examine case studies of urban commons that successfully incorporate digital technologies and interactive architecture, highlighting the positive impacts on community engagement, social equity, and environmental health. Ultimately, the research aims to demonstrate how embracing digital innovations in urban design can create resilient, inclusive, and vibrant public spaces that foster a sense of belonging while promoting sustainability and enhancing the quality of urban life.

KEY WORDS: Public spaces, digital, community engagement, technology, interactive architecture.

INTRODUCTION

Public spaces, often referred to as urban commons, have historically played a pivotal role in shaping urban life. From ancient Greek Agoras to modern city parks and plazas, these spaces have served as arenas for social interaction, cultural expression, and civic participation. The traditional purpose of public spaces is to create opportunities for people from diverse backgrounds to gather, fostering a sense of community and belonging. Rapid urbanization and population growth have dramatically altered the dynamics of public spaces. In 1950, less than 30% of the world's population lived in urban areas; today, over 55% reside in cities, with projections reaching 68% by 2050 (United Nations, 2018). This shift has led to both overcrowding and underutilization of public spaces, as well as increased demand for inclusive and sustainable urban environments. Traditional static designs often fail to adapt to these changing needs, leading to spaces that are either inaccessible or irrelevant to significant portions of the population.

The advent of digital technology marks a significant turning point in how urban commons are conceptualized and managed. The rise of interactive architecture further highlights the potential of digital innovation in public space design. Unlike traditional architecture, interactive systems integrate technology to make spaces dynamic and responsive. Technologies such as augmented reality (AR), Internet of Things (IoT) devices, and data-driven planning tools are opening new possibilities for designing public spaces that are more

interactive, inclusive, and sustainable. For instance, AR applications allow users to visualize historical events or ecological changes in real-time, turning public spaces into educational hubs (Carmigniani et al., 2011). IoT sensors enable cities to monitor air quality, foot traffic, and energy usage, providing valuable data to optimize public space functionality (Luo et al., 2018). Sensor-equipped installations can adapt lighting or temperature based on crowd density or environmental conditions. Such adaptability ensures that public spaces remain welcoming, comfortable, and efficient, regardless of varying circumstances (Fox & Kemp, 2009). Despite advancements, public spaces often struggle to meet the needs. Technology provides an opportunity to bridge these gaps through solutions such as multilingual apps, tactile guidance systems, and participatory design platforms. By leveraging these digital tools and interactive architecture, urban commons can evolve into spaces that reflect the aspirations and needs of diverse urban populations, making them integral to the future of sustainable and inclusive city living.

AIM:

The primary aim of this study is to explore how architecture can transform public spaces into welcoming environments that encourage social interaction and cultural expression. The aim of the paper is to explore the transformative impact of digital technologies and interactive architecture on urban commons with a focus on fostering inclusivity, community participation, and ecological sustainability.

OBJECTIVES:

- To identify the key challenges faced by urban commons in contemporary cities
- To explore the applications of digital technologies in enhancing public space functionality

RESEARCH METHODOLOGY

The research employs two primary methodologies:

- **Literature Review:** A comprehensive analysis of articles, books, and relevant documents is conducted to explore theoretical frameworks, key concepts, and existing research on urban commons, digital technology, and interactive architecture.
- **Case Study Analysis:** Detailed examinations of urban commons that integrate interactive architecture and digital tools are undertaken to evaluate their impact on social equity, user participation, and ecological sustainability.

LITERATURE REVIEW:

Evolution of Urban Spaces:

Urban commons have historically played a central role in fostering social cohesion, cultural expression, and collective identity. The traditional function of these spaces is rooted in the idea of shared resources, where accessibility and inclusivity are critical (Ostrom, 1990). As cities become denser, urban commons face overcrowding, underutilization, and inequitable access (Harvey, 2012). Additionally, the demands for sustainability and adaptability have become more pronounced, with public spaces needing to address environmental concerns and diverse user needs simultaneously. The history of urban design dates to ancient civilizations and has evolved over time to become a critical component of modern city planning. Interactive architecture represents a paradigm shift in urban and architectural design, integrating cutting-edge technology into the built environment to create spaces that dynamically respond to their surroundings and users. Unlike traditional architectural practices, which prioritize static and unchanging designs, this approach goes beyond static design to offer real-time adaptability based on user interactions or environmental data (Fox & Kemp, 2009). Such responsiveness not only enhances user comfort but also promotes energy efficiency and sustainability (Willis et al., 2016). At its core, interactive architecture leverages technologies such as sensors, actuators, and data-driven algorithms to gather and process environmental or user-specific inputs. The process is performed by the following direction:

Sensing ➡ Processing ➡ Actuation

Sensors: Sensors detect changes and data collected by sensors serves as the input for the interactive system, allowing it to respond dynamically.

Processors: Central to the system is a processing unit—such as a microcontroller or computer— that analyses sensor data and triggers appropriate responses.

Actuators: Actuators are mechanical or electronic components that execute physical changes in response to sensor inputs.

Adaptive design is a design approach that emphasizes flexibility and responsiveness, enabling spaces, systems, or objects to adjust to changing conditions, user needs, or environmental factors. It is a flexible and responsive approach that enables spaces, systems, or products to adjust to changing conditions, user needs, or environmental factors that incorporate modularity, context-awareness, and inclusivity. Adaptive design enhances functionality, usability, and sustainability. By integrating adaptive design principles, interactive architecture is redefining the way we experience built environments, making them more intuitive, sustainable, and inclusive. For example, Interactive public spaces including adapt seating arrangements to accommodate events, group activities, or individual users. This personalization fosters inclusivity and engagement, ensuring that all users feel comfortable and empowered.

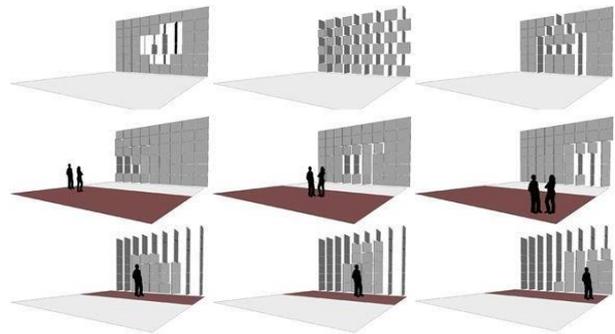


Fig 1: Adaptation of urban screen according to human interaction

Implementation of Interactive Architecture in Urban Commons:

Interactive architecture fosters community engagement and inclusivity by integrating real-time feedback mechanisms, like digital kiosks and mobile apps, allowing users to shape public spaces. This participatory approach enhances ownership and belonging, as seen in voting for installations or events (Fox & Kemp, 2009). It also supports collaborative design, where user data—e.g., foot traffic or seating preferences—guides initial designs and ongoing improvements (Willis et al., 2016). Aesthetically, interactive elements such as kinetic sculptures or LED displays create dynamic and memorable experiences, enriching the cultural and social vibrancy of urban spaces.



Fig 2: Interactive Architecture in Public Spaces
Case Studies: Case Study 1
Location: Los Angeles, California
Design Team: Foxlin Architects

“BUBBLES” is an open-air interactive urban installation featuring 16 translucent pneumatic “bubbles” that inflate and deflate in response to visitor movement. Ranging from 6 to 8 feet in diameter, the bubbles adapt dynamically, creating pathways as they deflate when occupied and reinflate when the space is empty. Made from translucent ripstop nylon, these interactive elements allow light to filter through, enhancing the atmosphere with a shifting, ethereal quality. Sensors trigger air exchange between the bubbles, blending art, architecture, and experiential design to create a visually captivating and adaptive environment. Trigger air exchange between the bubbles, blending art, architecture, and experiential design to create a visually captivating and adaptive environment. The purpose of the project was to create a vast architectural environment that dynamically responds to changing social conditions. The installation embodies emergent behavior, adapting unpredictably to visitor movements. Users engage by touching the bubbles, which then respond by creating pathways, illustrating a non-programmed interaction based on simple rules. This interaction mimics human behavior, fostering a real conversation through the exchange of information and observations.



Fig 3: “LITTLE BABYLON”

Case Study 1

Little Babylon

Location: Doha, Qatar

Architect: Kas Oosterhuis

“LITTLE BABYLON” is an innovative inflatable pavilion designed by Rezone, in collaboration with Kas Oosterhuis and Air Design Studio, as a “data parasite” that gathers and interprets urban data. Made from PVC or TPU fabric, the structure collects information from social media and environmental sensors to create interactive audio-visual displays reflecting the sentiments and dynamics of the city. By translating real-time data into movement, visuals, and sound, it adds a digital layer to urban spaces. Its modular, portable design allows deployment in various locations and festivals, making it a versatile tool for urban analysis. The pavilion’s adaptive architecture bridges the gap between art and technology, offering a sensory-rich experience for users. Ultimately, it redefines the role of architecture in fostering a deeper understanding of urban life. The pavilion connects digital and physical realms by responding in real time to social media activity through designated hashtags. It transforms user inputs, such as trending topics or sentiments, into dynamic outputs like lighting, soundscapes, and structural changes, fostering a unique and interactive experience.

This feedback loop enables visitors to influence the pavilion’s behavior, creating unpredictable, immersive environments that reflect the community’s emotional and cultural pulse. By blending adaptive architecture with digital data, the pavilion offers a dynamic, engaging, and ever-evolving space that bridges technology, art, and human interaction.

FINDINGS

The findings demonstrate the transformative potential of interactive architecture and digital tools in reshaping urban commons. By addressing challenges and leveraging these innovations, cities can create inclusive, sustainable, and vibrant spaces that adapt to the needs of diverse communities.

It includes:

COMMUNITY ENGAGEMENT

Incorporating interactive architectural elements, such as responsive installations and adaptive structures, significantly improves community engagement. These designs encourage user participation by creating environments that react to human presence, social media activity, and environmental stimuli, fostering a sense of involvement and ownership.

INCLUSIVITY AND ACCESSIBILITY

Interactive architecture in urban spaces ensures accessibility for individuals of all abilities, fostering an inclusive and engaging environment. By encouraging interaction and participation, it creates surroundings where people feel empowered to connect and contribute. The incorporation of advanced digital tools with interactive features has been pivotal in addressing diverse needs, thereby promoting social equity and inclusiveness within public spaces.

STRENGTHENED EMOTIONAL CONNECTION BETWEEN USERS AND SPACE

Urban commons have become unfriendly and inaccessible with an improper setup nowadays. But interactive architecture has become a blessing upon this setting. It is connecting people, making people active even in a busy movement and trying to enhance social interaction through digital technologies. People are getting connected emotionally and socially through a sustainable practice in an urban scenario.

CONCLUSION

As cities continue to grow and diversify, interactive architecture offers a promising solution to the challenges of adaptability, sustainability, and inclusivity in public space design. By blending technological innovation with human-centric principles, it transforms urban commons into living, responsive environments that meet the evolving needs of contemporary urban life. While interactive and adaptive designs offer numerous benefits, the study identified challenges related to scalability, cost, and long-term maintenance. Ensuring the durability and reliability of technological systems in urban environments requires careful planning and ongoing investment.

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LOSS OF PUBLIC PLACES DUE TO POLICY CASE OF ADOPTION & CARETAKER POLICY IN MUMBAI

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ABSTRACT

The paper discusses the contemporary public places in Mumbai and the rise of privatization in the neo liberal culture. With globalization and growing culture of consumerism, we have more privately owned public places like malls, clubs and cafes. The obsession of building an image of a "world class city" coupled with the development driven by real estate forces, Mumbai's poor and middleclass are deprived of the public open spaces. The paper highlights how private capital, politics and governance, driven by capitalism convert public places into consumer luxury places, like various members only clubs in Mumbai with the help of adoption policy. A thorough analysis of the adoption policy reveals that urban governance currently facilitates abuse of public places and requires a policy for open spaces to make them truly public. Creativity, and strengthen community connections. The research highlights the importance of shared spaces in building inclusive, resilient, and culturally rich cities, urging architects and planners to prioritize designs that bring people together and celebrate diversity.

KEYWORDS: Privatization, Capitalism, Public Spaces, Inequality, Policy

INTRODUCTION / BACKGROUND

Public places are the living rooms of cities. They create a sense of belonging to a collective in a city which is necessary. With the changing cultures, the characteristics of public spaces have evolved. Starting from town halls built in the ancient and medieval cities to the gardens, clubs and libraries developed by the British to the cafes, malls, resorts, amusement parks, public gardens and open maidans in contemporary times- public spaces have always been central to urban life (Singh, B. & Sethi, M., 2018). So, what is truly a public space? These are places that provide freedom to access without any discrimination or exclusion. The contemporary public spaces have started getting privatized due to the neo liberal culture creating social segregation. This is reflected even in urban governance through municipal authority guidelines for the maintenance of open spaces- specifically the adoption policy.

AIM:

The research aims to examine the privatization of public spaces in Mumbai and analyse its implications on socio-economic inclusivity under the current urban governance policies.

RESEARCH METHODOLOGY

This study employs a mixed methods approach to investigate the privatization of public spaces in Mumbai, analysing its socio-political and economic impacts. The study analyses the role of urban governance and its role in transforming public spaces through the following steps:

- Understanding the Current State of Public Spaces- The study begins with an assessment of the existing public spaces in Mumbai, examining their accessibility, usage patterns, and importance for different socio-economic groups. This initial analysis highlights the critical need to protect and preserve these spaces amidst pressures of urbanization.

- Analyzing Governance and Policy- A core focus of the study is the role of urban governance in enabling or curbing privatization. This includes an in-depth analysis of the Open Space Adoption Policy and the Caretaker Policy, examining how these frameworks have influenced the management and accessibility of public spaces.
- Case Study Approach- MCA club case study is conducted to provide concrete insights into the implications of privatization and policy interventions. This involves field observations and an evaluation of compliance with policy mandates.
- Proposing Recommendations- Based on the findings, the study formulates actionable recommendations to safeguard public spaces, promote equitable access, and reframe governance policies to prioritize inclusivity and public interest over private capital.
- This methodology ensures a comprehensive exploration of the privatization phenomenon, addressing its root causes, current impacts, and



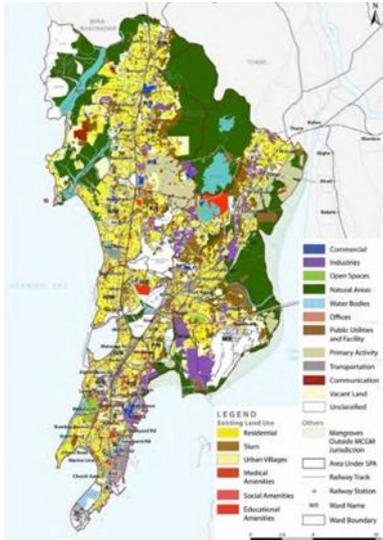
potential solutions.

Figure 1: Research Methodology. Source: Author

UNDERSTANDING THE CURRENT STATE OF PUBLIC SPACES

Due to its geographic location, lack of open space has always been a problem for Mumbai. The current Development Plan seeks to almost double the open space. This raises the question that how was the open space doubled with the same land areas? The state has kept manipulating the notion of public open space to achieve the standards. Many open spaces marked in the existing land use plan are private spaces, such as gymkhanas, club

houses and large urban greens such as Raj Bhavan, JJ College, IIT Campus, BARC and many more. It also includes parts of natural areas which were no development zones. These places have limited or no access to the public. Many open spaces are encroached. The adoption policy facilitated formal encroachment while the slums encroach informally.



With globalization and growing culture of consumerism, we have more privately owned public places like malls, clubs and cafes. They provide limited access depending on the economic status of the user. Gidwani and Bhaviskar (2011) talk about two types of commons- ecological commons (such as air, water bodies, wetlands, landfills and so on) and civic commons (such as streets and sidewalks, public spaces, public schools, public transit, etc.). Each of these is diminishing due to privatized and monitored public spaces. Article 15 of the constitution of India states that no citizen of India shall be discriminated on the basis of religion, race, caste, sex, sexual orientation or gender identity and place of birth. However, the shift from socialist state to a capitalist state has created divides in Indian cities, depriving the urban poor of the access to basic services and open public spaces. As per the World Resource Institute (WRI) India, Mumbai’s per capita accessible open space stands at 1.24 sq.m/ person which is much lower than the Urban and Regional Development Plans Formulation and Implementation norm of 10-12 sq.m/ person for Indian cities. The neo liberal city with gated communities and neighbourhood enclosures, golf courses, newly laid residential enclaves, toll roads, flyovers and bridges for the ease of flow of traffic (mostly private vehicles) is also witness to increasing privatization of urban spaces (Singh, B. & Sethi, M., 2018). The obsession of building an image of a “world class city” coupled with the development driven by real estate forces, Mumbai’s poor and middleclass are deprived of

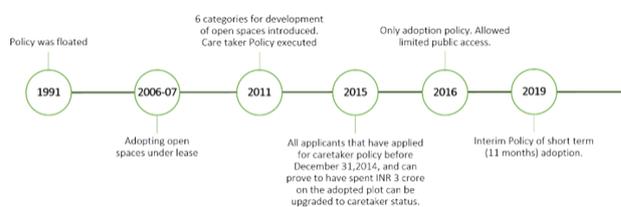


the public open spaces.

Today Mumbai is failing to have voice of its common people as the upper class has become empowered under globalization. The character of public places has witnessed a change due to increasing pressure on land and decreasing per capita space available for public places. In highly dense cities like Mumbai, these open public places are the breathers for citizens. Public space in India continues to reflect social inequities, contestations and struggle aggravated greatly in recent times (Singh, B. & Sethi, M., 2018). Mumbai’s luxury lifestyle has translated into more private spaces for consumption and leisure. Visions like having a slum free Mumbai are creating new architectural forms denying the existence of the presence of certain classes of people, leading to social insulation and segregation. The city is run by handful of industrialists and politicians, who play a major role in the kind of development that takes place, completely ignoring the common people and their gathering spaces. They also do control the making of the development plan and development control regulations as per their whims and fancies to monetise every inch of land. Out of the few open green spaces in the city, several are not accessible to common people as these are controlled by private luxury clubs and other institutions (Date, V., 2006). These stake holders come into the system through the public- private partnership for various policies or projects. One such policy is the adoption policy where the public open spaces go up for grabs and get privatized making the facility accessible only for the upper section of the society.

ANALYSING GOVERNANCE & POLICY-ADOPTION&CARETAKER POLICY

As per Development Control Rules1991, permission for the development in respect of the lands reserved for Gymnasium, Gymkhana, Club, Stadium, Swimming Pool, Recreation ground, Gardens and Playground can be given by restricting the construction on the certain portion of the total area of the land (Draft Policy,2011). The Adoption and Caretaker policy was first floated in 1991 but was never implemented. However, 13 clubs were given plots on caretaker basis. Majority of these clubs are run by politicians. This became the starting point of exclusion in open spaces. The paper further discusses the detail case of a club.



In 2006, The Brihanmumbai Municipal Corporation (BMC) proposed a policy that allowed entities to adopt open spaces under a lease agreement. The policy got sanctioned in 2006, however received a stay order from the state government in 2007. The state gave directives to the corporation for revision in the policy which led to the 2011 draft. The policy looks at development of plots under 6 categories : Plot given on lease; MCGM owned plots/ acquired plots were given on vacant land tenancy basis; The public reservation plots as per T.P Scheme directly

vested with BMC; The plots reserved for Recreation ground, playground, parks, gardens, have been given by the MCGM to different institutions on adoption/caretaker basis; Plot of Municipal Corporation reserved for Recreation ground, playground, parks, gardens, but having old structures and huts; The plots reserved for the purpose of 'Recreation ground, playground, parks and gardens, in the absolute possession of Municipal Corporation and at present being maintained by the Municipal Corporation. As per adoption policy, Institution should maintain the plot as open land. No construction other than Gardener chowky and Security Chowky as per the area under location duly marked on the plan will be allowed (Draft Policy,2011). It was proposed to allot all plots reserved for 'Recreation Ground' of the area upto 5000 sq.mtr. and reserved for Playground, Park, Gardens, etc. on adoption basis. While for plots with areas over 5000 sq.mtr, It proposed to be first taken up for adoption basis and on non-availability of taker, to be taken up on caretaker basis. The private groups that have taken up plots on adoption basis include gymkhanas, sports associations, schools, hotels, religious groups, Advanced Locality Managements (ALMs), resident associations and even builders. The main purpose of Caretaker policy is to give permission as per development control regulation to the institution to allow the development of ancillary amenities for the uses of recreation ground. These amenities can be constructed on the maximum of 25% of the plot area so that the maximum plot area i.e minimum 75% of the plot area will be made available to the public for uninterrupted use (Draft Policy,2011). In 2015, the policy declared that all applicants that have applied for caretaker policy before December 31,2014 and can prove to have spent INR 3 crore on the adopted plot can be upgraded to caretaker status. The existing caretaker plots remained status quo. With this change, more plots got the caretaker status. The public backlash led to re-introduction of the policy in 2016, purely an adoption policy. It also allowed entities to have limited or paid public access. Thus, this was also stayed by the state. Further, an interim policy was floated in 2019, stating that parks and gardens could be given to third parties for 11 months. This short-term adoption was proposed to prevent privatisation. The policy has seen several iterations, including revisions to address issues of public access, transparency, and accountability. However, the policy had negligible positive impacts on improving and managing the open spaces of the city.

CASE STUDY- MCA Club, Kandivali

Most of the plots that were given on caretaker basis have elite clubs. One such club is the MCA Club of Kandivali. The plot marked as CTS No. 128-A/59/1 in Kandivali west had been demarcated as playground (PG) in the development plan. In 2003, Sharad Pawar, the then president of MCA sought the sanction for the plot on adoption basis for organizing coaching of budding cricketers in suburban Mumbai. The adoption policy contains clauses that would give the authorities the discretion to facilitate a further land grab by vested interests, such as, if any recognized national/ state level sports association/ federation proposes to provide facilities as a special case on any

recreation ground of the municipal corporation, permission shall be granted to such association/ federation as a special case for construction subject to DCR (DNA,2015). In 2005, MCA was granted the agreement to be converted to caretaker basis and executed in 2012. This enabled them to build the club, swimming pool and much more. The caretaker clause gives an opportunity to a private entity to encroach 15% of the public land to make a recreational facility. The MCA built more than 15% as the club, charging 9 lakhs per member, making it accessible only for privileged citizens who can afford the membership fees. Through the architecture and surveillance of this swanky club, it gobbled the entire land. Rather than penalizing it, the municipal corporations have legitimized these private clubs. If these organisations have made an application on or before December 31, 2014 and if they can prove to have spent Rupees 3 crores or more towards the development/ redevelopment/ refurbishment of the plot then these applications should be considered as eligible for caretaker agreement (DNA,2015). When AAP filed a petition against MCA, the high court said the basic purpose of the ground is intact as playground, so no interference is required. The BMC gave the land on lease to MCA with a clause that it should be open for locals for two hours in the morning and evening each. It's no surprise that the ground is not available to the locals. Even if it was made available as per the clause, the very idea of having restricted visiting hours creates questions on its public character. Before the club was made, children from the neighbourhood used to play on the ground. From being an open public place which was accessible to everyone now has restricted access as per time and class. There are many such clubs in Mumbai which got formed under the caretaker basis, reducing the access and right to public open spaces for the common people. The policy facilitated "elite capture" by allowing these entities to limit public access or impose fees. The policy raised concerns about restricted access, unauthorized constructions, or commercialization under the guise of "maintenance."

FINDINGS/ ANALYSIS & INFERENCE

Clearly, Mumbai does not have enough open spaces. The adoption and caretaker policy were misused by private players leading to loss in public space. Currently, the city has no policy in place to protect or preserve the existing open public places. The public private partnership has proved to be of no benefit to the public. The lack of monitoring and loopholes in the policy has benefited the private sector. The destruction of common resources and the communities that depend upon them is a long-standing outcome of capitalist expansion (Gidwani, V. & Bhaviskar, A., 2011). With increasing pressures of privatisation, the existing places are likely to diminish further with no policy in place.

RECOMMENDATIONS

Redefine Public Accessibility: The policy must emphasize the fundamental definition of 'public' for open spaces, ensuring they are truly open and accessible to everyone, regardless of socio-economic background. Unified Policy

Framework: Introduce an overarching regulatory framework that consolidates all open spaces under one comprehensive policy to ensure consistency in management and protection. **Enhance Public Access:** Given Mumbai's inadequate per capita open space, all open spaces should be mandated to remain accessible to the public, avoiding exclusivity or privatization. **Regular Audits:** Conduct annual audits of all open spaces managed through public-private partnerships to ensure compliance with accessibility and maintenance standards. Perform yearly reviews of open spaces outlined in the development plan to measure progress and adherence to set goals. **Strategic Development Planning:** Develop a five-year strategic plan for creating new open spaces, aligned with the city's development plan. The plan should outline clear milestones and allow for phased budget allocation to streamline implementation. **Community Engagement:** Institutionalize annual consultations with experts, citizen groups, and advocacy organizations from each municipal ward. This will ensure that local perspectives and expert insights shape the development and management of open spaces. **Phase-Wise Budgeting:** Adopt yearly plans for open space initiatives to facilitate incremental budget allocation, ensuring financial feasibility and efficient implementation. These recommendations aim to make open spaces in Mumbai equitable, well-managed, and aligned with long-term urban development goals.

CONCLUSION

A congested city like Mumbai needs more open public space. Instead of planning for more, the existing open spaces have succumbed to encroachment by privatisation. Neo liberal policies of distributing or allocating public lands have now tilted the use of public spaces in favour of private or privately controlled entities (Singh, B. & Sethi, M., 2018) The paper drew attention to transformation of public places in the neo liberal culture. Further the paper highlighted how with the interplay of private capital, politics and governance, public places of the city have been eroded, producing social insulation and segregation.

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THE ROLE OF SOCIAL SPACES IN AFFORDABLE HOUSING IN URBAN INDIA

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ABSTRACT

India's affordable housing is failing to keep pace amidst the backdrop of rapid urbanization and the growing population. The inclusion of social spaces within the built form is crucial for ensuring the well-being of the community and social integration when considering urban development. This research aims at examining affordable housing projects with a special focus on the social spaces designed within them, how they are used, and how they affect the community. Specific attention is given by the study to the well-designed social spaces such as parks, playgrounds and community centers as they are essential in enhancing the quality of life of the residents. Such spaces are the places for interaction among the residents which in turn encourages feeling of attachment and social cohesion. They are also important in promoting healthier living conditions, enhancing social integration, and engaging in economic activities through informal means. However, in affordable housing projects such space provision is sidelined, which eventually leads to the development of missed opportunities for building robust and integrated societies. Combining qualitative and quantitative approaches, the research looks into case studies of social spaces and their successful integration into housing projects across Urban India. The research findings indicate that the existence of social spaces influence not only the quality of life of the residents but also the quality aspects and performance of the housing projects. Adopting a participatory planning approach, employing flexible designs, and placing social infrastructure within housing policies are among the recommendations. The report stresses on change of approach to urban housing development by looking at affordability from the socio-spatial perspective. It calls for efforts by researchers and policymakers, architects and the community to develop comprehensive housing strategies that are affordable but also not segregated within the society.

KEYWORDS: Affordable Housing, Urban India, Inclusive, social spaces, Quality Of life.

INTRODUCTION

Rapid urbanization has increased the demand for affordable housing in cities, necessitating the role of public spaces in fostering social interactivity and mediating community interactions. While some places still cater to social needs through informal and formal strategies, there are challenges facing residential development in urban India. The study aims to examine the role of social spaces in relation to affordable housing, focusing on residential development in urban India. The report documents the demand for affordable housing and explores how social spaces contribute to residential settings. It also reviews existing literature and examines case studies to better understand the link between social spaces and affordable housing.

● BACKGROUND AND CONTEXT

Rapid urbanization in India has increased the demand for affordable housing, requiring public spaces to foster social interaction. This study examines the role of social spaces in residential development, reviewing existing literature and case studies to better understand the link between social spaces and affordable housing.

● RESEARCH AIM AND OBJECTIVES

Social spaces are crucial for community interaction and strengthening, with evidence showing their positive impact on residents' mental and physical well-being. This research aims to identify the role and potential impact of social spaces on affordable housing projects and related social practices. The objectives include understanding existing social practices, building an empirical case for the benefits of providing social spaces, producing empirical evidence, and providing suggestions for further improvements in providing common spaces to homeowners in affordable housing projects.

AFFORDABLE HOUSING IN URBAN INDIA

Affordable housing refers to residential facilities in urban India that are affordable for households with limited income. Its characteristics include income levels, housing requirements, and location. The concept is viewed differently in different Indian contexts, with the poor viewing it as developmental and humanitarian, moderate or middle-income groups focusing on social integration, and affluent individuals addressing affordability while exclusion. (Sarkar & Bardhan, 2020). India's housing sector has been largely driven by corporate strategies, with no official legislation or policy defining affordable housing production and distribution. However, international funding has led to some standardization in the sector. The 2019 draft bill by MoHUA aims to provide a legal right to affordable housing, raising its share to 48%. State governments have set up task forces and regulations for informal approaches, but these are not yet available in all cities, impacting the type of affordable housing required. Three key issues in house production include demand-side concerns, supply-side production issues, and planning and construction issues related to government processes. (Coelho et al.2022)

DEFINITION AND CHARACTERISTICS

Affordable housing in urban India is a complex issue involving multiple dimensions beyond individual income and expenditure. It is a combination of individual and collective decisions made by households and the state to provide housing based on individual needs. The design features of affordable housing can range from simple to complex. (Malik et al., 2020)

- "Affordable apartments" that are low in cost and provide basic amenities, which are mainly fourth-grade urban settlements for families owning a minimum financial capital.

- "pigeonhole" two-room apartments for the homeless starting from about Rs 400/- sq ft; and
- the "single room tenements" for those with the lowest capacity to carry housing with as low as Rs 100/- sq. ft. property. (Mukherji et al.2024)

Many low-income individuals in urban areas lack access to quality housing due to privatized development patterns. They live in luxury flats, causing disproportionate household debt. Older housing remains affordable without design intervention, and in developed nations, affordable housing models are built through design interventions or subsidies. (Van Hoof et al., 2021). The study of affordable housing in India reveals a shift from men being sole breadwinners to women earning income that is just adequate to support the entire household. The lowest earners cannot afford formal housing, as their monthly income is less than Rs 1000. The fourth grade of housing stock is occupied by low-income self-employed households. Professionals advertise outside their homes and separate their office and residential identities for better security. These fourth-grade settlements are suitable for the poor, as they allow for part-time work in enclosed units without causing physical fatigue or non-conducive air. (Marutlulle, 2021)

CHALLENGES AND ISSUES

Affordable housing in urban India faces challenges such as a massive finance gap, heavily regulated policy frameworks, governance deficits, and poor infrastructure. With an estimated 17 million dwelling units, the shortage is characterized by limited resources and discerning demand due to the increasing urbanization and demand for housing. (Jain, 2021). Urban elites in India are focusing on restoring the city's aesthetics and increasing private profits, leading to marginalized groups being relocated and causing gentrification. This displacement leads to a lack of access to affordable housing and inadequate infrastructure, such as water, sanitation, and waste management. Despite planning mega-projects for the middle and upper classes, these measures have not been extended to slums, potentially disrupting the affordability of cities. Understanding socio-economic context is crucial to address urban poverty. (Singh et al., 2020) (Sarker et al)

SOCIAL SPACES IN URBAN ENVIRONMENT

Social spaces are areas within the built environment where society meets, providing a comprehensive, high-quality community. These spaces include city centers, parks, playgrounds, community centers, leisure centers, libraries, museums, historical places, open public areas, and plazas. Well-planned community architecture creates inclusive, healthy, and sustainable communities, allowing residents to regenerate, play, socialize, and concentrate. (Winston, 2022) (D'alessandro et al.2020) (Wan et al.) Urban living in residential areas is enhanced by social spaces, which encourage collaboration among neighbors and provide a comfortable house. Access to community infrastructure, such as well-designed parks, contributes to psychological, social, and quality of life benefits. These spaces provide daily needs, social capital, and cohesion, promoting participation in activities and cultural, educational, and entertainment opportunities. Overall,

these spaces foster a sense of community and community. (Askarizad & Safari, 2020) (Wan et al.)

THEORETICAL FRAMEWORK

The study aims to understand the social features that contribute to the establishment of a community in urban affordable housing. It emphasizes the importance of a socially rich environment for a successful mixed community, preventing alienation and marginalization. Inclusive affordable housing, providing pre-decided percentages for the lowest-income populations, is believed to ensure social inclusion and foster local social identity. The goal is to manage social interaction, encourage participation, and produce social capital within the housing community, ensuring connections across income and ethnicity boundaries.

• SOCIAL CAPITAL THEORY

Social capital plays a crucial role in communal life, fostering social well-being and social order. It involves individuals forming associations, interacting, and developing norms, contributing to the overall social order. However, bonding capital can create an invisible wall, hindering dialogue and opportunities. This results in an isolated culture, causing conflict of interests and a chaotic society. (Smith et al.2021) (Wang and Kanungo2020). Personal bias can be countered by bridging social capital, which connects dissimilar people and groups, providing a broader perspective. This social capital, encompassing both strong and weak networks, offers access to resources, information, and opportunities, enhancing community well-being and reducing poverty. (Gannon & Roberts, 2020)

• SENSE OF COMMUNITY THEORY

Abdul Malik and Milligan have contributed significantly to community theory, a concept widely used in the Western world. The theory explains the reasons people live in neighborhoods, the emotional experience of belonging, and the connections between individuals and the community. It focuses on membership, influence, integration, and fulfilment of needs, highlighting the importance of understanding community dynamics in urban settings. (Sheikh, 2022) (Chatterjee & Correia, 2020). The sense of community, a complex sociological concept, is closely linked to the physical place. Research has shown that physical and social interactions contribute to the positive sensory experience of belonging to a community. This relationship can be complemented by socio spatial research on functional and aesthetic experiences. The sense of community, which differentiates neo rural from urban, is influenced by the form and uses of urban spaces. Studies have shown that the predicted sense of community is significantly lower in the country, with results mainly found in collective settings, mainly in cities. (Baminiwatta & Solangarachchi, 2021)

Henri Lefebvre's "Production of Space"

Henri Lefebvre's seminal work, *The Production of Space* (1991), offers a foundational framework for understanding social spaces. Lefebvre conceptualized

space as a social product, created through the interplay of three dimensions:

- **Perceived Space (Spatial Practices):** The physical and functional aspects of space, such as layout, accessibility, and usability. In the context of affordable housing, perceived space includes parks, courtyards, and communal halls that provide tangible venues for interaction.
- **Conceived Space (Representations of Space):** The planned and designed aspect of space, shaped by urban planners, architects, and policymakers. Affordable housing often prioritizes conceived space for maximizing residential density, frequently sidelining social dimensions.
- **Lived Space (Spaces of Representation):** The subjective and experiential aspect, reflecting how residents interact with and assign meaning to spaces. In Indian affordable housing, lived space is evident in the organic adaptation of courtyards or balconies as communal meeting points. Lefebvre's framework highlights the tension between the economic drivers of urban development and the social needs of residents, a dynamic that is especially pronounced in the Indian affordable housing sector. (Lefebvre, H. (1991))
- **Jane Jacobs' "Eyes on the Street"**
Jane Jacobs, in her groundbreaking work *The Death and Life of Great American Cities* (1961), emphasized the role of social spaces in fostering community safety and vibrancy. Her concept of "eyes on the street" advocates for active, inclusive public spaces that encourage natural surveillance through community engagement. Jacobs argued that well-utilized social spaces not only enhance security but also foster a sense of belonging. In the context of affordable housing in India, Jacobs' principles underscore the importance of designing social spaces that are accessible, active, and centrally located. For example, courtyards or small parks within housing clusters can serve as hubs of activity, promoting both safety and social cohesion. (Jacobs, 1961)
- **Ray Oldenburg's "Third Place"**
Ray Oldenburg introduced the concept of the "third place" in *The Great Good Place* (1989), referring to spaces that exist outside the home (first place) and workplace (second place). These third places, such as parks, coffee shops, and community centers, serve as informal gathering points for social interaction and community building. Affordable housing developments in India often lack such third places, resulting in limited opportunities for informal interactions among residents. Incorporating elements of Oldenburg's theory, such as flexible-use spaces and inclusive design, can create environments that encourage spontaneous social connections and reduce social isolation. (Oldenburg, 1989)
- **Christopher Alexander's "Pattern Language"**
Christopher Alexander's *A Pattern Language* (1977) proposes design principles for creating livable spaces that meet human needs. Alexander emphasized patterns such as "courtyards which live," "activity

nodes," and "network of paths and squares" to create vibrant and functional communities. His work is particularly relevant to affordable housing in India, where space constraints necessitate innovative designs that maximize utility without compromising community interaction. Alexander's framework suggests that even small, well-designed spaces can become thriving hubs of social activity if they align with the cultural and behavioral patterns of the community. (Alexander, Ishikawa, & Silverstein, 1977)

SOCIAL SPACES IN AFFORDABLE HOUSING

Social spaces play a vital role in enhancing social well-being and human interaction in India. However, they are often absent in affordable housing, leading residents to resort to using public spaces as their de facto social areas. To address this, a sense of shared social space is proposed, offering diverse activity opportunities and necessary facilities. The success of this approach depends on residents' cooperation and ownership. Allowing margin within the built environment fosters a sense of ownership, making the expansion of private spaces into gardens and courtyards a meaningful strategy. This approach not only enhances residents' social lives but also benefits the urban landscape and the diverse residents in India. (Tiwari and Shukla2022) (Mahadeva2024) (Banerjee, 2021)
Affordable homes in urban environments often overlook the broader welfare of residents. Building homes is crucial for reducing poverty and tackling inequality. Shared social spaces, such as gardens or courtyards, foster meaningful interaction and connection between residents, improving the overall quality of life. This approach encourages a sense of community and belonging, enhancing the overall quality of life. (Ahmadi et al.2024)

● Definition and Types of Social Spaces

The intricate space of social life has been the focus of thought-provoking theories in recent decades. Social space is a complex dialectic that is enriched by human experiences, memories, and interactions with the world. Marxist theorists argue that social space is active in relationships between socialized beings and their interactions with these beings. It serves as a vital element of self-confidence and a manifestation of one's social status. However, the predatory and exploitative model of capitalism hinders the construction of inclusive and equitable social spaces, often at the expense of social connections and community well-being. (Beach, 2023) (Janssens & Zanoni, 2021). Social space is the location where social relationships and social activities occur, forming vital contact points or links. These contact points are formed through various activities and represent the diverse personalities involved in these relationships. The social space serves as a critical junction connecting society with individuals and reflects the overarching social environment. The nature and quality of interpersonal contacts shape the character of interactions and activities in these spaces. (Malmberg2021).

● Impact of Social Spaces on Affordable Housing

Surrounding buildings often lack social spaces, leading to social ghettoization and disintegration. In densely

populated slum areas, residents often find themselves deprived of a wide array of social spaces. Affordable housing development initiatives aim to reintegrate diverse social spaces within residential areas, ensuring vital functions and interactions have designated places to thrive. Social spaces, such as functions, festivals, and celebrations, are crucial elements in fostering meaningful community bonding among neighbors. (Moghayedi et al.2021) (Winston, 2022) Social spaces are essential for community living and social inclusivity. They facilitate interaction, improve social relations, and serve as interfaces between residents and landowners. They also provide a visual link with the built environment. Users mold social spaces, requiring developers to manage these changes and modifications. (Bricout et al.2021) (Tariq et al.2021)

- **Community Building and Cohesion**

In India, affordable housing is primarily market-driven and ownership-focused, focusing on price and loan options. This lack of community infrastructure, including social spaces, hinders the realization of the fundamental right to adequate housing for all, a constitutional commitment in the case of India. (Bhanot et al., 2020) (Malik & Bardhan, 2023). Social infrastructure, including meeting places, is crucial for areas with a high percentage of low-income families. These spaces, often labeled as fine-grain public places, are essential for weaving the social fabric and providing meeting places for working people. The lack of these spaces can lead to a negative effect, stranding people in dynamic neighborhoods. Developing solutions through urban design and socializing concepts can improve these spaces. (Nicoletti et al.2023)

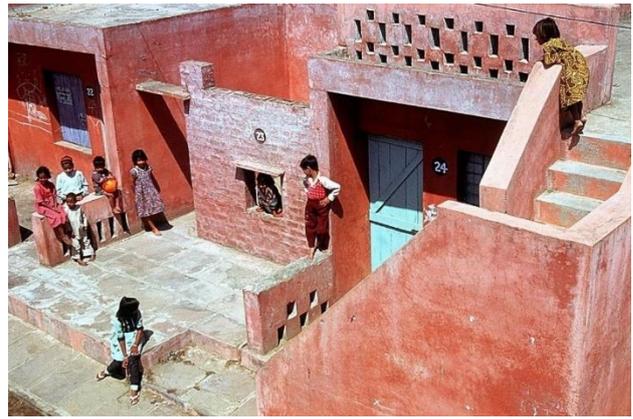
- **Fostering community communication**

Social spaces act as a catalyst for interaction by providing shared areas where residents can gather for leisure, recreation, or communal events. Informal encounters in shared spaces, such as playgrounds and gardens, contribute to building relationships that transcend cultural and economic boundaries (Gehl, 2010). For example, studies on urban housing projects show that residents with access to communal spaces report higher satisfaction with their living environments and stronger social ties.

- **Addressing cultural diversity**

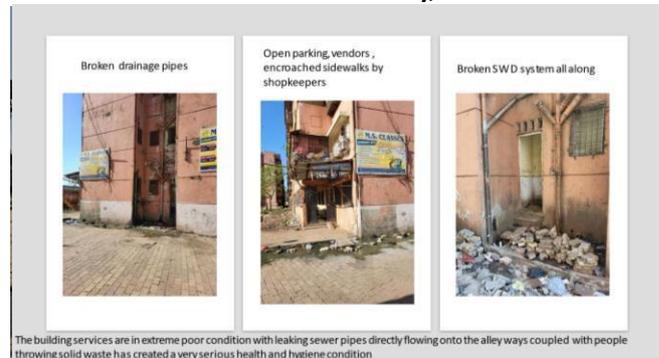
Affordable housing developments often cater to heterogeneous populations with unique cultural norms and practices. Multifunctional social spaces allow for various activities, such as religious gatherings, festivals, and sports, accommodating diverse needs. These spaces also provide opportunities for cultural exchange, enhancing mutual respect among residents (Delgado et al., 2015)

Designed by Balkrishna Doshi in the 1980s, Aranya Low-



Cost Housing is considered a landmark project for sustainable and affordable housing in India. The development incorporates interconnected streets, open courtyards, and semi-private spaces that cater to the socio-economic and cultural diversity of its residents. Social spaces within the project have become central to fostering social capital. Residents use these spaces for daily interactions, festivals, and markets, contributing to a strong sense of community. The modularity and adaptability of spaces further enable residents to participate in shaping their environments, creating a sense of ownership and belonging (Doshi, 1989; Chatterjee, 2016).

- **Savda Ghevra Resettlement Colony, Delhi**



The Savda Ghevra Resettlement Colony in Delhi, developed under resettlement programs, included minimal but crucial open spaces for community use. Despite budget constraints, the planners allocated areas for parks and small gathering spaces. Although initially criticized for poor planning, the community adapted the open spaces for local needs, including informal markets, cultural gatherings, and children's play areas. This self-organized utilization of social spaces highlights the resilience and adaptability of low-income communities in Indian cities (Bhan, 2013)

CASE STUDIES

Indian Case studies

- **Aranya Low-Cost Housing, Indore**

Source: VSF; The Pritzker Architecture Prize

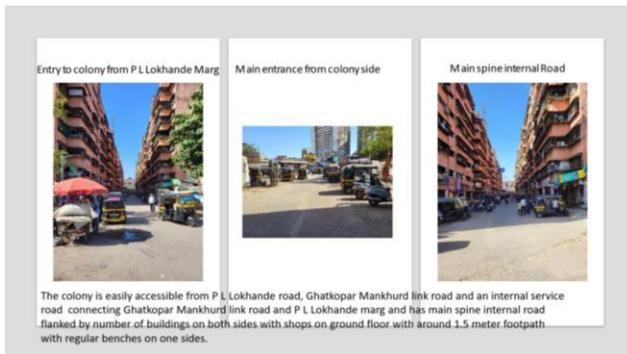
● **Gautam Nagar, Govandi, Mumbai, India**



Source: Author

Gautam Nagar is in Northeast Govandi, located in Mumbai is a resettlement and rehabilitation colony. There are 9 buildings consisting of 16 wings in the colony. There are 7 floors per buildings with 12 flats per floor. Total numbers of households are about 1300. The total approximate population is 5500, approximate density over 4500 PPH. Ghatkopar station East (6.0 Km), Santacruz station (12 kms), Govandi station (2.3 Km), Chembur Station (2.4 Km), Vashi station (11 Km) are the connecting stations to MMRDA Colony.

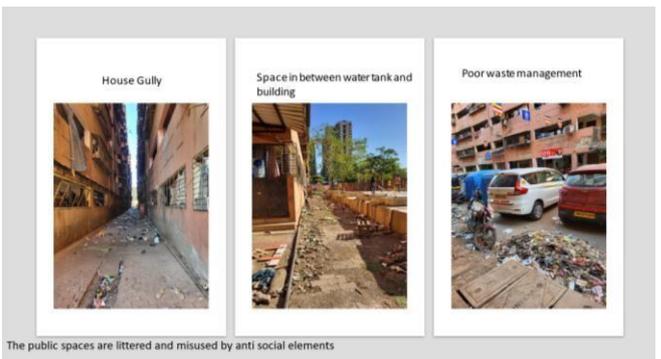
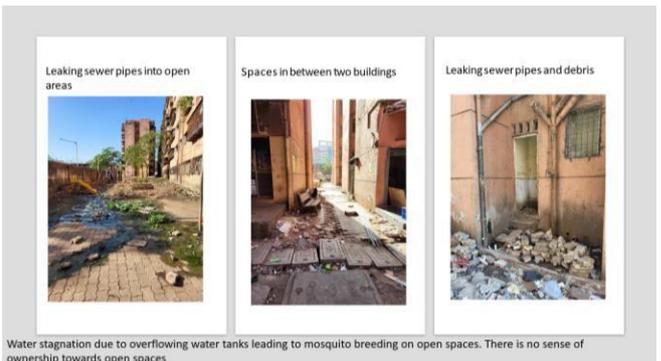
PHYSICAL OBSERVATIONS OF THE PUBLIC



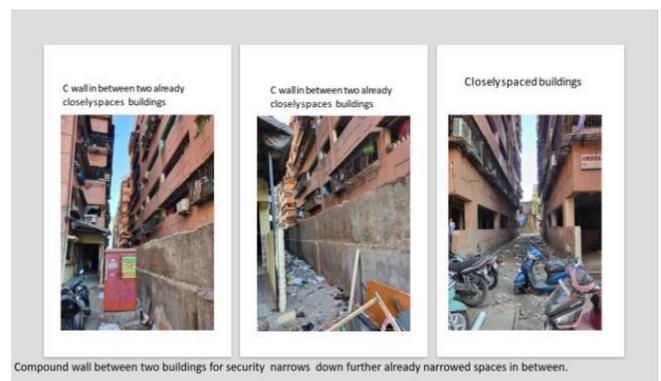
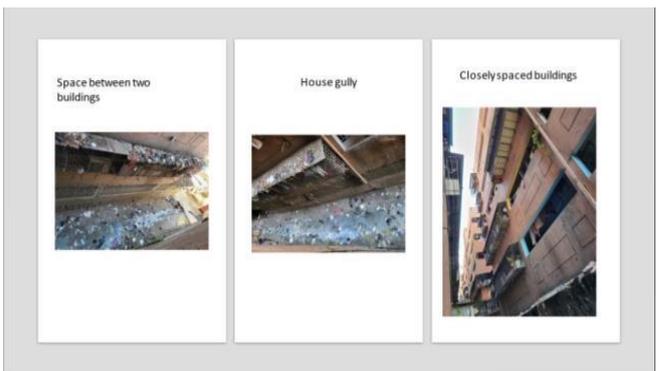
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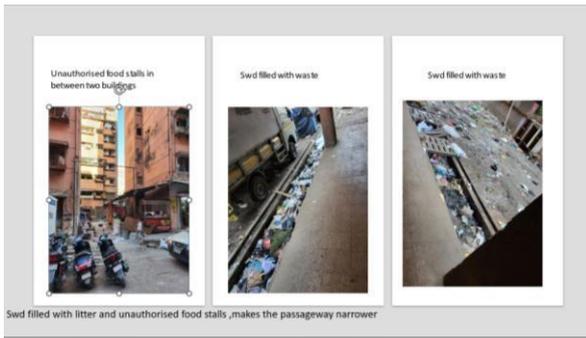
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The colony offers water, electricity, and public and private healthcare, but the internal streets and common areas are poorly maintained and littered. The federation is not involved in the celebrations of Ambedkar Jayanti, Navratri, and Ganesh, and the participation ratio is low. The lack of dedicated open spaces in the colony leads to poor light and ventilation. The federation maintains common areas and collects around 320-250 rs per tenement, while societies maintain buildings and collect 500-800 rs a month for maintenance. The open spaces are littered and inaccessible, and the big recreational ground is heavily abused by antisocial elements. The colony also has pollution from the mankhurd dumping yard, eastern free way, and Ghatkopar mankhurd link road. Most residents

wish to move out to a better neighborhood, but the sense of belonging in the earlier settlement is better than the new one.

GLOBAL CASE STUDIES

- **Quinta Monroy Housing, Chile**

source: Alejandro Aravena, Oris

The Quinta Monroy Housing project by Elemental aimed to provide expandable housing units with communal courtyards. The flexible design allowed families to modify their homes while preserving shared spaces for collective



activities. Communal courtyards have become centers for social interaction, fostering relationships and community networks. The project's success highlights the importance of adaptable designs that prioritize shared spaces even in low-budget housing (Aravena, 2013)

- **Alexandra Renewal Project, South Africa**

The Alexandra Renewal Project aimed to upgrade informal



settlements in Johannesburg by introducing planned infrastructure, including public parks, sports facilities, and community halls. The initiative sought to balance urban density with accessible social spaces. Residents reported partly enhanced safety and community pride due to the improved public spaces. These areas became venues for cultural festivals, sports, and educational programs, addressing both recreational and developmental needs (Huchzermeyer, 2003)

- **Pruitt-Igoe Housing Project, USA (Historical)**



Although a cautionary tale, the Pruitt-Igoe Housing Project in St. Louis was initially designed with communal spaces to encourage social interactions. However, poor maintenance, socio-economic neglect, and inadequate community engagement led to the failure of these spaces. The project demonstrates the importance of ongoing

investment and community participation in the planning and maintenance of social spaces. Without these, even well-designed spaces may become dysfunctional (Newman, 1996).

INSIGHTS AND LESSONS

India has Flexible and incremental designs in and Indore demonstrate the success of context-sensitive and culturally appropriate approaches. Chile has the emphasis on adaptable and expandable units highlights the value of integrating communal areas with individual housing needs. South Africa has Planned public spaces in Alexandra Renewal Project showcase the role of well-maintained social spaces in improving safety and cohesion. Spaces like courtyards and parks foster relationships and cultural cohesion (Gehl, 2010; Putnam, 2000). Informal markets and small businesses often emerge in shared spaces, as seen in Quinta Monroy (Aravena, 2013). Alexandra Renewal Project highlights the role of social spaces in enhancing urban safety and inclusivity (Huchzermeyer, 2003).

POLICY IMPLICATIONS AND RECOMMENDATIONS

There are a number of policies and initiatives in place today that directly or indirectly gear urban housing and set the course of urban planning in India. One of the programs launched during the current regime that focuses completely on housing is the PMAY – Urban. Outcomes from programs reveal the inadequacies of the programs and their underperformance to cater to the housing needs and the need to prioritize social spaces. However, the recent policies and initiatives do hold promise of looking at housing issues and planning in a more comprehensive and inclusive manner. (Verma et al.2021) (Mukhopadhyay et al.2020) India needs to integrate social spaces into its life conditions through a comprehensive HLP system. This system should provide essential social amenities like water, light, air, and work networks. This will not only improve slum dwellers' living conditions but also enhance the overall social environment. A bottom-up approach, involving various stakeholders, is needed for effective implementation. Effective Use of Resources: The urban local bodies have to work with providing the poor with the basic services of water and sanitation in a non-intrusive manner while also providing for the essential social spaces for their congregation. The bureaucrats will need to be sensitized about the methods of interweaving the urban physical and socio-political fabric. (Parish, 2020) (Sabet & Khaksar, 2024) The government and private housing providers can enhance urban development by implementing participatory planning processes for low-cost rental housing communities. This approach empowers marginalized communities, allowing them to congregate and prioritize their needs. Additionally, funding and resource allocation can be facilitated, ensuring that authorities have a greater financial stake in good practice. (Chao et al., 2021)(Cox, 2021)

- **Existing Policies and Initiatives**

The focus of this chapter is on the embeddedness of social

spaces in urban India's affordable housing, examining the practices and landscapes that facilitate social interaction. It explores how the underlying principles and objectives of affordable housing policies shape these social spaces, highlighting the importance of community-based approaches. (Sarkar & Bardhan, 2020). The Integrated Low-Cost Sanitation Demonstration Projects in India, initiated by a national estimation of slums, have been instrumental in reducing housing costs. Aganward, the first project in the country, combines low-income housing with middle-class facilities in a cooperative, participative manner. This approach has led to reduced maintenance costs and has received awards for providing land planning and architectural services. Other initiatives aim to create low-cost, self-developed, cooperatively managed settlements. (Das et al.2024)

PROPOSED STRATEGIES FOR ENHANCING SOCIAL SPACES IN AFFORDABLE HOUSING

- Housing projects should prioritize social spaces to ensure cultural compatibility, iteration of design, and community priorities. Involving potential users in the design process helps avoid inappropriate uses and activate social spaces faster. Continuous, lightweight, and safe spaces for women, men, children, and the elderly are essential. Universal design principles should be used to accommodate the needs of the elderly and persons with disabilities. Joint partnerships between public agencies, local non-profits, and developers are encouraged.
- Provide autonomy in terms of rules and regulations. Use a mix of regulations and incentives that can accommodate a range of innovative uses. Utilize technology to support access to unmetered community services and community services that are provided by third parties. Long-term evaluation of the process of establishing social spaces should be carried out to enable evidence-based policy making and project design.
- Social entrepreneurs are transforming social spaces into social businesses, fostering a network of stakeholders and enhancing safety, entertainment, cleanliness, and infrastructure, thereby enhancing social interaction and satisfaction.

CONCLUSIONS AND FUTURE DIRECTIONS

Social spaces play a crucial role in the affordability and long-term success of housing projects in urban India. These spaces facilitate social interactions, reducing transaction costs, building trust, and improving safety and security. Poorly designed spaces can lead to negative perceptions of projects, while open and well-landscaped spaces generate enthusiasm. Research on social infrastructure and individual social interactions can help foster sustainable urbanization and economic development. Social spaces for residents and slum communities can reduce transaction costs and contribute to urban welfare and sustainability. Incorporating social spaces in housing projects can contribute to urban welfare and sustainability.

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SHARED SPACES, SHARED FUTURES

URBAN COMMONS AS CATALYSTS FOR SUSTAINABLE CITY LIVING

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ABSTRACT

In contemporary cities, the urban commons, which include common areas, assets, and services are essential to promoting inclusion and improving community well-being. The idea of the urban commons provides a transformative lens to address concerns such as housing shortages, dwindling public spaces, and growing privatization that metropolitan regions face. In order to advance social justice, cultural expression, and ecological sustainability, this study investigates how architectural and urban design interventions might reinterpret the urban commons. The study places a strong emphasis on inclusive design, making sure that communal areas serve a range of demographics and promote social harmony. The research emphasizes how energy efficiency may make urban commons more environmentally friendly by fusing the concepts of renewable energy and climate resilience. In addition, it explores how community involvement, governance, and policy contribute to the co-creation and maintenance of these areas, guaranteeing that urban commons continue to be egalitarian and accessible throughout time. Additionally, by exploring how parks, plazas, and community gardens may function as lively social hubs, the study reimagines the public sphere as a venue for artistic expression. By fostering social interaction and teamwork, these common areas not only support cultural diversity but also enhance the wellbeing of city dwellers. According to this study, the urban commons are important locations for architectural and urban innovation, offering fresh chances to build inclusive, resilient, and sustainable cities in the face of environmental issues and growing urbanization.

KEYWORDS: Urban commons, public spaces, Community engagement, Sustainable architecture, Governance and policy, Environmental sustainability

INTRODUCTION

For cities around the world, urbanization has presented both opportunities and difficulties. Rapid urbanization has promoted economic expansion and cross-cultural interaction, but it has also brought about serious problems such as lack of available housing, the privatization of public areas, and environmental damage. By reframing common areas, resources, and services in cities, the idea is a viable remedy. This paper addresses major urban issues.

HYPOTHESES

This research aims to investigate the role of urban commons in fostering sustainable and inclusive cities. Specifically, it seeks to:

- Explore how architectural and urban design can enhance urban commons.
- Examine the integration of climate resilience and renewable energy in these spaces.
- Analyses governance models and community strategies for co-creating and managing urban commons.

LITERATURE REVIEW

The Concept of Urban Commons: The concept of commons has included urban public spaces, digital infrastructure, and community services that promote collective well-being. Elinor Ostrom's, *Governing the Commons* (1990) highlighted how communities can sustainably manage resources. Commons counteract privatization, address spatial inequalities, and as hubs for cultural exchange, and ecological stewardship. Community gardens exemplify their role in food security, biodiversity, and social cohesion.



Figure 1: Timeline visually tracing the evolution and development of urban commons

DESIGNING INCLUSIVITY AND SOCIAL EQUITY

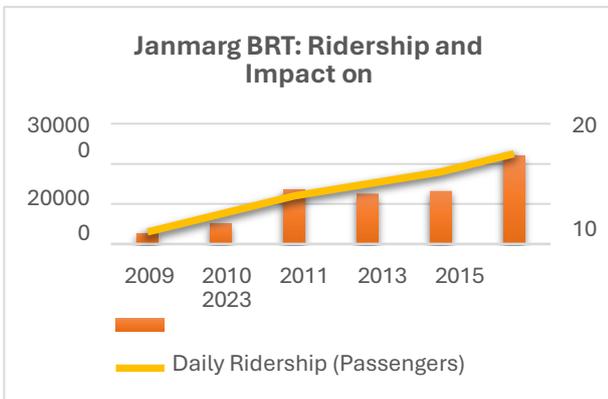
- Inclusive design ensures that urban commons cater to diverse user groups, including marginalized communities, elderly populations
- and individuals with disabilities. Universal design principles prioritize accessibility, usability, and equity. Jane Jacobs, in *The Death and Life of Great American Cities* (1961), emphasized the importance of mixed-use neighborhoods.

Case Study 1: High Line Park, New York

The High Line exemplifies adaptive reuse and urban regeneration. Originally a 1930s elevated railway, it fell into disuse by the 1980s. Instead of demolition, community advocates and Friends of the High Line repurposed it into a public park with support from the City of New York. Opened in phases from 2009 to 2014, it now stands as a celebrated urban common, integrating architecture, landscape design, and public art into a dynamic, inclusive space.

Case Study 2: Janmarg Bus Rapid Transit (BRT) System, Ahmedabad

Janmarg, meaning "The People's Way," is Ahmedabad's Bus Rapid Transit (BRT) system, launched in 2009 under the JNNURM initiative to enhance urban infrastructure and governance. Designed as an efficient, sustainable, and inclusive transit solution, it serves as a vital urban common, improving connectivity and equitable access. By establishing dedicated bus corridors, Janmarg addresses traffic congestion, air pollution, and inadequate public transport, offering a high-quality, affordable alternative to private and informal transit modes.



Climate Resilience and Energy Efficiency

Urban commons play a crucial role in enhancing a city's resilience to climate change. Green infrastructure, such as parks, wetlands, green roofs, heat island effects, reduces stormwater runoff, and improves air quality. Renewable energy installations, such as solar panels and wind turbines, can power urban commons, reducing their carbon footprint.

Case Study 1: Vauban District, Freiburg, Germany

Vauban, a model sustainable district in Freiburg, Germany, was developed in the late 1990s on a former military base. Prioritizing sustainability, energy efficiency, and social inclusivity, it was shaped through a participatory planning process involving city planners, architects, and residents, with significant contributions from Forum Vauban. This collaborative approach ensured the community's needs were central to its design.

Case Study 2: Pune Riverfront Development Project, India

Pune's Riverfront Development Project is an urban renewal initiative aimed at revitalizing the Mula-Mutha riverbanks. Once vital to the city, these rivers suffered from pollution, encroachments, and restricted public access due to urbanization. Led by the Pune Municipal Corporation (PMC) and inspired by global models like Ahmedabad's Sabarmati Riverfront, the project seeks to restore ecological health, enhance flood resilience, and create accessible public space



Figure 6: Aerial View of the Pune River

Image Credits: Pune Municipal Corporation

Governance and Community Engagement

Effective governance of urban commons relies on participatory decision-making, where communities are actively involved in the planning, design, and management of shared spaces. Participatory governance ensures that urban commons reflect the needs and aspirations of local populations, fostering a sense of ownership and accountability.

Case Study 1: Bogotá's Participatory Budgeting

Bogotá's participatory budgeting (PB), introduced in the early 2000s, empowers residents to influence public fund allocation, enhancing transparency and civic engagement. Aimed at promoting social equity and reducing urban poverty, particularly in marginalized neighborhoods, PB follows an annual cycle where citizens collaborate with local governments to propose and prioritize projects. This community-driven approach has significantly improved urban development, addressing housing, infrastructure, and public service challenges.

Case Study 2: Community-Led Projects in Dharavi, Mumbai

Dharavi, one of the world's largest informal settlements, is home to nearly a million people and serves as a hub of economic activity and resilience. Community-led initiatives, driven by local NGOs, resident associations, and informal networks, have significantly improved housing, sanitation, and livelihoods. These grassroots efforts showcase the power of collective action in addressing urban challenges and enhancing living conditions

REIMAGINING THE PUBLIC SPHERE



Urban commons provide spaces for cultural expression, social interaction, and recreation. They are essential for fostering vibrant public life and promoting cultural diversity. Public spaces such as parks, plazas, and amphitheaters serve as venues for festivals, performances, and civic gatherings, enhancing the cultural fabric of cities.

Case Study 1: Sabarmati Riverfront, Ahmedabad

The Sabarmati Riverfront project transformed a polluted riverbank into a dynamic urban common. The project includes promenades, parks, and recreational facilities, improving the city’s flood resilience while providing valuable public space for cultural activities and community gatherings.



Figure 8: River Promenade development on Sabarmati edge Image Credits: Sabarmati River Front

DATA & METHODOLOGY

This research employs a mixed-methods approach, combining quantitative and qualitative data collection and analysis to explore the role of urban commons in fostering sustainable city living.

PRIMARY DATA

Primary data is collected through structured surveys targeting stakeholders, including residents, urban planners, policymakers, and community organizers. This approach helps capture the lived experiences and perspectives of those directly involved in or affected by the design and use of urban commons.

SECONDARY DATA

- Secondary data is collected from scholarly articles, government reports, policy documents, and case studies on urban commons.
- Journal articles on urban commons, sustainability, and participatory governance.
- Official urban planning reports and municipal records from cities like Bogotá, Freiburg, and Mumbai.

- Global indices on urban sustainability (e.g., UN-Habitat reports).
- Documented case studies on projects such as Vauban District, High Line Park, and Pune’s Riverfront Project.

Data Utilization and Purpose

Data Source	Type of Data	Purpose	Application
Scholarly Articles	Theoretical & empirical insights	Understanding concepts of urban commons, sustainability, and inclusivity.	Framework for analysis; literature review synthesis.
Government Reports	Policy and planning data	Insights into regulatory frameworks and governance models.	Policy recommendations; benchmarking governance models.
Case Studies	Best practices & outcomes	Lessons from global projects.	Comparative analysis; recommendations for implementation.
Global Indices	Quantitative benchmarks	Urban sustainability and inclusivity metrics.	Contextualizing findings within global trends.
Surveys & Site investigations	Perceptions, feedback & Observant data	Gathering stakeholder insights on urban commons.	Validating and supplementing secondary data findings.

Table 1: Data Collection and Methodology of Research

ANALYTICAL FRAMEWORK

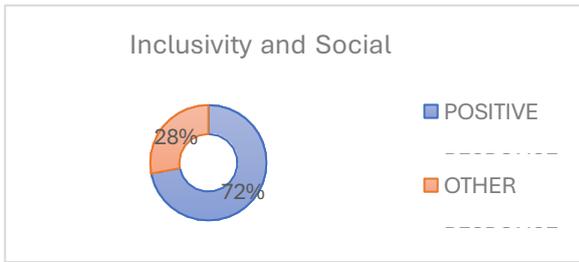
Quantitative Analysis: Survey data is statistically analyzed to identify patterns and correlations. Qualitative Analysis: Survey responses & secondary data are coded for insights into challenges and opportunities.

RESULTS AND DISCUSSION

This section presents the findings from the data analysis and discusses their implications for the design, governance, and sustainability of urban commons. The survey was conducted with a diverse group of 30 participants, comprising local stakeholders, architects, urban planners, and policymakers.

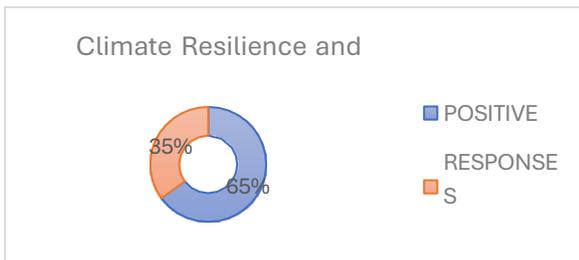
INCLUSIVITY AND SOCIAL EQUITY

Urban commons like Dharavi’s community spaces and Vauban’s green areas foster social cohesion, with 72% of survey respondents affirming their impact. However, challenges in accessibility persist, as seen in Pune’s Riverfront, where design and governance do not fully meet diverse demographic needs



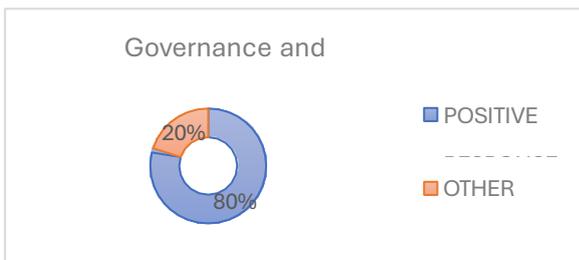
CLIMATE RESILIENCE AND SUSTAINABILITY

Vauban’s energy-efficient housing and Pune’s River restoration showcase the role of urban commons in environmental sustainability. With 65% of respondents prioritizing ecological considerations, integrating renewable energy and green infrastructure is crucial for resilient urban development.



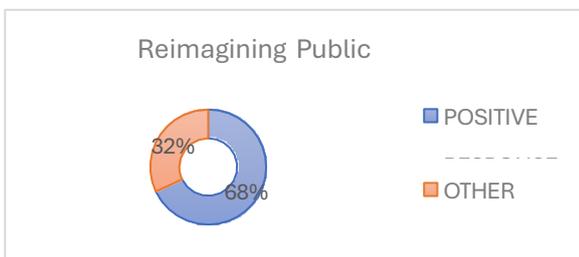
GOVERNANCE AND COMMUNITY ENGAGEMENT

Participatory governance, exemplified by Bogotá’s budgeting model and Dharavi’s community-led initiatives, enhances the relevance and sustainability of urban commons. Survey data shows 80% of respondents believe resident involvement improves the quality and accessibility of shared spaces.

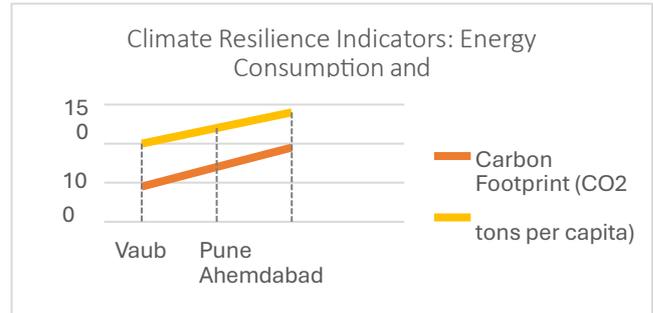


REIMAGINING PUBLIC SPACES

Projects like the High Line Park illustrate the potential of urban commons in revitalizing underutilized spaces into cultural and social hubs. With 68% of respondents valuing these spaces for cultural expression and well-being, they play a crucial role in urban identity and social interaction.



COMPARATIVE ANALYSIS TABLE



Case Study	Inclusivity & Social Equity	Climate Resilience & Sustainability	Governance & Community Engagement	Public Space & Reimagining
Vauban District, Freiburg	Designed for diverse demographics, cooperative housing.	Renewable energy, green corridors.	Strong community-driven planning.	Public squares and green spaces for leisure.
Janmarg BRT, Ahmedabad	Affordable transport for various income groups.	Affordable transport for various income groups.	Public consultations for route planning.	Reclaimed roads for mixed-use spaces.
High Line Park, New York	Accessible, free entry; diverse user groups.	Urban greening, biodiversity corridors.	Public-private partnership with community input.	Cultural events and leisure space from old rail.
Pune Riverfront Project	Access improvements; varied socio-economic use.	Flood management, riparian ecosystem restoration.	Limited but growing community engagement.	Revitalized waterfront as public recreation.
Dharavi, Mumbai	Community-led housing and sanitation projects.	Informal recycling systems, waste management.	Strong grassroots organizations and NGOs.	Parks, playgrounds as community anchors.
Bogotá Participatory Budgeting	Equitable resource allocation through public voting.	Energy-efficient, community-prioritized projects.	Institutionalized participatory process.	Creation of public amenities as per demand.



Figure 9: Radar Chart comparing inclusivity, sustainability, governance, cultural value

CLIMATE RESILIENCE INDICATORS

The graph aims to provide a comparative visualization of the climate resilience indicators, emphasizing energy efficiency and carbon reduction trends in these urban commons.

DISCUSSION

The Role of Urban Commons in Social Integration: The findings underscore that urban commons are vital for fostering social equity. Projects like Dharavi and Bogotá show that participatory approaches can effectively address the needs of marginalized communities. However, achieving inclusivity requires ongoing efforts to eliminate systemic barriers such as legal uncertainties and funding constraints.

- Sustainability and Resilience:** Vauban and Pune demonstrate how urban commons can balance ecological restoration with demands. As cities face climate challenges, integrating sustainability into every layer of urban commons is crucial.
- Governance:** Effective governance models, such as participatory budgeting in Bogotá, illustrate how involving communities in decision-making ensures that urban commons remain relevant and equitable.
- Urban Commons as Catalysts for Cultural Identity:** The transformation of spaces like the High Line and Pune Riverfront into cultural hubs highlights the potential of urban commons to enhance city dwellers' quality of life.
- Transportation and Transit Systems in Urban Commons:** Efficient transportation and transit systems are fundamental to the success of urban commons. They serve as the backbone for accessibility, enabling equitable use of shared spaces and resources. Sustainable transit systems reduce dependency on private vehicles, lowering carbon emissions and enhancing the inclusivity of urban environments. Integrating eco-friendly solutions, such as pod taxis, contributes to reducing traffic congestion, improving last-mile connectivity, and fostering a more sustainable urban future.

Case Study: Pod Taxis in London

The Personal Rapid Transit (PRT) system at London Heathrow Airport, operated by Ultra Global PRT, utilizes driverless electric pods to transport passengers between Terminal 5 and parking areas. Traveling on dedicated guideways, these automated vehicles offer a private,

efficient, and eco-friendly transit solution, reducing shuttle bus dependency and cutting emissions by 50%.



Figure 10: POD Taxi Service for shuttle transfer at Heathrow, London

Case Study: Pod Taxis in BKC, Mumbai

Mumbai's Bandra Kurla Complex (BKC) is set to introduce India's first pod taxi system, covering 3.5 km with 32 stations. Operating on elevated guideways, electric pods will enhance last-mile connectivity for office workers, visitors, and residents. The system aims to integrate seamlessly with metro and bus networks while reducing vehicular congestion in the business district.



Figure 11: Upcoming POD Taxi Service in BKC, Mumbai
Image Credits: Metro Rail Today

IMPLEMENTATION PLAN

Implementation Plan for Existing Cities to Incorporate Urban Commons

Objective: Revitalize and integrate urban commons in cities to promote inclusivity, sustainability, and equitable access.

Phase 1: Assessment and Mapping

Identify Potential Spaces: Utilize underutilized lands, abandoned lots, rooftops, and existing parks for enhancement.

- Stakeholder Engagement:** Conduct workshops with communities, planners, and policymakers to understand diverse needs.
- Urban Mapping and Surveys:** Use GIS tools and surveys to assess gaps, challenges, and opportunities in urban commons.

Phase 2: Design and Planning

- Retrofitting Existing Spaces:** Upgrade parks with accessible pathways, community gardens, and green infrastructure to address flooding and urban heat.
- Promoting Multi-functional Spaces:** Convert streets into shared spaces and test temporary installations like pop-up plazas and street markets.
- Policy Integration:** Implement zoning reforms for mixed-use development and mandate climate-responsive design in retrofitting projects.

Phase 3: Implementation and Monitoring

- **Urban Commons as a Core Principle:** Allocate 30% of urban land for public spaces and establish green corridors in city plans.
- **Integrated Master Planning:** Embed commons within residential, commercial, and industrial zones, ensuring modularity for future adaptability.
- **Digital Commons:** Provide equitable digital infrastructure, including free public Wi-Fi and smart kiosks in communal areas.

Phase 2: Development and Design

- **Inclusive Design Practices:** Ensure universal accessibility through ramps, braille signage, and multi-functional spaces for recreation, education, and commerce.
- **Sustainability at the Core:** Power public spaces with renewable energy and integrate climate-responsive features like shaded walkways and water-sensitive landscaping.
- **Mobility and Transit:** Develop sustainable transit hubs, cycle-sharing systems, pedestrian-friendly boulevards, and last-mile connectivity options like pod taxis and shuttles.

Phase 3: Governance and Maintenance

- **Participatory Governance Models:** Form cooperative committees with diverse stakeholders and utilize digital platforms for public engagement.
- **Funding Mechanisms:** Establish mixed financing models through public funds, CSR initiatives, and revenue generation from cultural and recreational activities.
- **Regular Monitoring and Adaptation:** Conduct annual impact assessments on footfall, biodiversity, and air quality, adapting designs based on technological and demographic change.

Aspect	Existing Cities	Upcoming Cities
Objective	Revitalize underutilized or poorly managed spaces, making them inclusive and sustainable.	Integrate urban commons as a core principle in city planning and development.
Land Use Planning	Reallocate existing underutilized areas (e.g., vacant lots, abandoned infrastructure) for commons.	Designate specific zones for urban commons from the outset, integrating them into land use master plans.

Public Spaces	Upgrade parks, streetscapes, and plazas for inclusivity and accessibility.	Develop multifunctional spaces prioritizing cultural expression, leisure, and ecological balance.
Transportation	Improve public transit connectivity to urban commons; include cycling lanes and pedestrian paths.	Plan integrated transportation systems (e.g., BRT, metro) with focus on accessibility to shared spaces.
Energy Optimization	Retrofit existing infrastructure with renewable energy systems (solar, wind, etc.).	Build energy-efficient infrastructure with solar panels, energy grids, and renewable technologies.
Climate Resilience	Introduce green roofs, urban forests, and water-sensitive urban designs for existing infrastructure.	Incorporate climate-responsive architecture and resilient infrastructure in initial city designs.
Community Involvement	Establish participatory governance models, such as workshops, participatory budgeting, and surveys.	Involve local stakeholders during the planning phase through charrettes and co-creation workshops.
Policy Frameworks	Create policies for equitable space management,	Develop robust policies

	reducing privatization, and ensuring accessibility.	supporting inclusivity, climate resilience, and sustainable land use from inception.
Governance Structure	Establish local management committees for each common, (e.g., public-private partnerships).	Define governance models that ensure community participation and public ownership.
Technology Integration	Implement smart technology to monitor space usage and optimize resources (e.g., lighting, irrigation).	Design smart cities with IoT-enabled management systems for urban commons.
Case Study Examples	High Line Park (NYC), Janmarg BRT (Ahmedabad), Pune Riverfront, Dharavi's community-led initiatives.	Planned cities like Masdar City (UAE) and Lavasa (India) offer insights for designing urban commons.
Financial Mechanisms	Use tax incentives, grants, and public-private partnerships to fund redevelopment projects.	Allocate budget for urban commons in city development plans; attract foreign investments and grants.

Monitoring & Evaluation	Periodic assessments of space utilization, inclusivity, and environmental impact.	Integrate KPIs (Key Performance Indicators) in management dashboards for monitoring
Challenges	Resistance to change from stakeholders; retrofitting costs; land acquisition issues.	High initial capital investment; balancing rapid urbanization with sustainability

Table 3: Tabular Analysis of the Implementation Plan

Enhancing Inclusivity and Accessibility

- Mandate universal design standards to ensure urban commons are accessible to all demographics.
- Implement zoning regulations for equitable distribution of shared spaces, focusing on underserved areas.
- Include marginalized communities in urban planning through formalized representation.

Promoting Climate Resilience and Sustainability

- Offer incentives for integrating green infrastructure like green roofs and permeable pavements.
- Require renewable energy systems, such as solar panels, in urban commons to reduce emissions.
- Protect green spaces and enhance biodiversity through urban forestry and riparian restoration.

Strengthening Governance and Community Engagement

- Institutionalize participatory budgeting to involve citizens in funding decisions for urban commons.
- Create local management bodies for community-led maintenance and programming of shared spaces.
- Ensure transparency in funding and operations to build trust among stakeholders.

Supporting Reimagined Public Spaces

- Develop policies for adaptive reuse of abandoned spaces into dynamic urban commons.
- Fund cultural activities to transform commons into hubs of cultural expression and interaction.
- Provide grants for temporary interventions like pop-up markets and art installations to test ideas.

Integrating Sustainable Mobility Solutions

- Align urban commons planning with transit hubs to promote transit-oriented development (TOD).
- Enhance last-mile connectivity with bike-sharing, e-scooters, and pod taxis.
- Introduce low-emission zones to prioritize pedestrian and cyclist access while reducing pollution.

Incentivizing Private Participation and Public-Private Partnerships (PPPs)

- Require developers to allocate a portion of project costs for nearby urban commons
- Encourage corporate funding of urban commons through CSR initiatives.
- Offer tax benefits to private entities collaborating on urban commons projects.

Strengthening Monitoring and Evaluation

- Develop an Urban Commons Index to assess quality, accessibility, and usage.
- Conduct regular audits to ensure urban commons meet inclusive and sustainability standards



Integrating Urban Commons into Long-Term Urban Policies

Draft legislation prioritizing the preservation and equitable management of urban commons.

- include urban commons as integral components in city master plans and development policies.
- Link urban commons policies with national climate action strategies for resilience.

CONCLUSION:

The study highlights the critical role of urban commons in fostering inclusive, sustainable, and equitable urban environments. Through case studies, surveys, and design analysis, it demonstrates their potential in urban challenges.

Inclusivity and Social Equity:

Urban commons, like Dharavi and Vauban, enhance social cohesion and inclusivity, benefiting marginalized groups. However, accessibility challenges persist, as seen in Pune's Riverfront, emphasizing the need for inclusive planning that reflects diverse demographic needs.

- **Climate Resilience and Sustainability:** Sustainable urban commons, such as Vauban's renewable energy initiatives and Pune's ecosystem restoration, mitigate climate change impacts. Prioritizing environmental

sustainability, integrating green infrastructure and eco-friendly transit like pod taxis, is crucial for future urban resilience.

- **Governance and Community Engagement:** Participatory models in Bogotá and Dharavi reinforce the importance of community involvement in managing urban commons. With 80% of survey participants supporting community engagement, such governance ensures equity, relevance, and long-term sustainability.
- **Reimagining Public Spaces:** Projects like the High Line Park in New York showcase the transformation of underutilized spaces into cultural and social hubs. Survey results indicate that 68% value urban commons for cultural expression and well-being, proving their impact on urban aesthetics, economy, and social interaction.
- **Transportation and Transit Systems:** Efficient mobility solutions, such as pod taxis in London and Mumbai, improve accessibility while reducing carbon footprints. Integrating sustainable transit within urban commons enhances connectivity and serves as a model for future urban planning.
- **Implementation Strategies:** For existing cities, revitalization efforts should focus on retrofitting spaces, integrating green infrastructure, and community-driven governance. In new cities, embedding urban commons in planning ensures inclusivity and resilience, with sustainability and multifunctionality as core principles.

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“(BE)LONGING” IN TRANSIT PRACTICES OF PLACE MAKING IN TRANSIT CAMPS OF MUMBAI

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ABSTRACT

Cities grow through cycles of displacements. People on margins are consistently displaced to make space for urban infrastructure, housing stock, expansions, enterprise or accommodating gentrification. The experience of shifting homes brings in a strange feeling of placelessness. The unfamiliarity of the new house, new area and new people make one feel “unhomely” when the settled social networks and memories of the place and people get ruffled. Dislocation therefore produces a feeling of being “out of place”. One of the cases in which such a phenomenon plays out is amongst people living in transit camps. Transit camps are basically homes allotted by the local government for a short period of time, ideally until their house gets built. This study looks closely at the practices of place making and (be)longing within two transit camps in Mumbai. Here the title “(be)longing” suggests the practices that help people establish belongingness and simultaneously emphasizes the longing, the hope that remains among the people living in transit camps. There have been instances in Mumbai where people have been living in transit camps for more than two decades waiting for their homes to be built. This forced waiting in an unwanted place produces a tensioned landscape of temporariness and settling. Then how does such a settle take place? The dissertation is an ethnographic approach that tries to critically investigate the ways in which people living in transit camps re-establish the sense of belonging that is essential for one to dwell. The case studies chosen for the thesis are transit camps based in Mumbai at Pratiksha Nagar, Sion and at Bimbisar Nagar, Goregaon.

The study delves into the everyday practices of people by taking interviews and documenting routines, belief systems, shared spaces in neighborhood etc. to comprehend the logic of appropriating forms by softening, corroding, overlapping, transgressing, etc. These physical alterations in forms are initiated by making micro claims, micro negotiations and creating micro public spaces. The idea of creating space is a critical finding that establishes the notion of belonging and producing a habitat. This appropriation can happen in various spaces/realms. Be it a physical space, mental space, mythical space etc. The study emphasizes some of the practices of people (in transit camps) and the spatial alterations that evoke a sense of belonging, also focusing on the narratives of transit camps and their architecture.

KEYWORDS: Belongingness, appropriations, metaphysical public

INTRODUCTION

I relocated to a new house in Borivali itself a few years back. The visual journey of packing our entire home into boxes in the old house, movers and packers carrying it to the truck and then unpacking the boxes and belongings in the new house is still unforgettable. The moment we started to arrange the furniture and set our house, all the familiar objects and furniture seemed out of place. The chair, the sofa, that photo frame had lost their contexts. We constantly had the memories of our old house, the associations with the window, with the corridors, the inevitable encounters with familiar people, the central courtyard of the building, etc. The experience of shifting homes brings in a strange feeling of placelessness and unhomeliness. Thinking critically made me realize that I missed the sense of belongingness in that place which further led me to the curiosity of understanding, what makes a house a home? What is this intangible thing holding the idea of home? The notion of home and belongingness are non-physical ideas which hold the physicality of space. Is there any higher power that drives the logic and order of people and places? The idea of a higher power holding the logics of human life led me to the term “metaphysics”. Home is a metaphysical concept i.e. it’s not bound within the four walls but goes beyond a physical space. Then how do people establish the sense of belongingness in a place? What is the idea of belongingness? What is the relationship between the idea of belongingness, place, and mind?

There exists an intangible network (of beliefs, rituals, faith, friendships, security) that operates along with the physical (tangible) realm. All these ideas of beliefs, faith, security etc happen in the mind. The human mind in itself is a mesmerizing device which can transgress all kinds of boundaries and dwell the role of urban commons plays an important role in shaping social interaction, cultural identity and environmental sustainability. Urban area is under adverse climatic effect such as climate change, heatwave, UHI effect, erratic rainfalls, water scarcity, air pollution etc. which are directly affecting the urban commons which serve a space for social interaction, cultural identity, and environmental sustainability. Climate responsive architecture techniques create a bridge between the sustainable urban environment and the adverse climate effect on urban environment. The study examines the opportunities develop by climate responsive architecture for sustainable effect on urban commons to play its role for the society. The study will also focus on analysing successful urban case study and its impact on urban commons.

WHY TRANSIT CAMPS?

Transit camps are a set of buildings generally built by the government for temporary accommodation of residents of dilapidated buildings, until their former houses get redeveloped or rebuilt. The people living in transit camps have already lost a sense of home and live in the transitory realm. They have gone through the notion of not belonging to a place and the feeling of placelessness. The

people in transit camps must re-establish the feeling of belongingness in the place. The networks, former connections, everyday practices embedded in the former neighbourhood, etc needs to be established again in the camp. They rewire the place to make it their own. Transit camps offer the conditions through which this process of rewiring can be easily extracted. Even if the people there have been changing, some traces of appropriations are always left behind which are then enhanced or dismantled. There are cases in Mumbai where people have been living in transit camps for years waiting for their homes to be built. This forced awaiting in an unwanted place force one to settle. Then how does this “settling” take place?

WAREHOUSING RESIDENTS

- **Glancing through different natures of transit camps: A Brief History of Transit Camps**

The idea of a transit camp is temporary accommodation. Historically, the term “transit camp” has always been associated with soldiers or refugees i.e. the people who have been displaced due to war, violence, or natural disasters. The Latin term “castrum (pl: castra)” is associated with the military in the Roman Republic and the Roman Empire. It means a Roman fort or a Roman camp. Herein, the camps included large legionary fortresses, smaller forts for cohorts or for auxiliary forces, temporary encampments like huts and tents, and “marching” forts. Along with camps as safe spaces for soldiers and refugees, the camps were also confined spaces for prisoners. Transit camps generally refer to: Military camp, Prisoner-of-war camp, internment camp, refugee camp, concentration camp, protest camp. The form of the camp was always imagined as a temporary structure that can be easily dismantled. Some of these camps were the size of a town, some were fenced, guarded, and highly monitored while some allowed freedom of movement. The “camp” is a complex term associated with the idea temporary accommodation. There is not a definite nature or spatial configuration to it.

- **Comprehending transit camps in the context of Mumbai:**

In the dissertation I am looking at transit camps built by the state authorities (MHADA in case of Mumbai) for temporary accommodation of residents of dilapidated buildings. The people living in the transit camp are civilians and neither refugees nor militants who have been displaced temporarily to redevelop parts of the urban fabric. The people in the camp keep on shuffling, interchanging, and emptying the transit houses as and when their former buildings get rebuilt or redeveloped. The buildings are not temporary structures but are for temporary accommodation. The residents must pay a small amount for the maintenance of the building. The areas that were chosen by the authorities for transit camp localities mostly resided in the suburban region of Mumbai like Goregaon, Sion, Ghatkopar, Mulund, etc.

AIM:

Research Concern

Along with the economic and utilitarian realm there also exists an intangible realm in which people dwell and make their own worlds. By certain practices in the tangible and material realm they are trying to connect with this invisible or the mythical realm. The thesis then tries to understand how these practices and spaces generate a landscape of belongingness.

RESEARCH QUESTION

What are the everyday practices that shape the spatiality of belongingness in transit camps of Mumbai?

Research objectives

- To explain how the sense of belongingness is established in a place in various forms.
- To study the concept of metaphysics, place, and social relationships in a localized way.
- To identify the intangible network that holds people and place together by investigating the everyday activities that are subconsciously embedded in the people’s mind and behaviour.
- To understand how spatial configurations shape and get shaped by this intangible network.

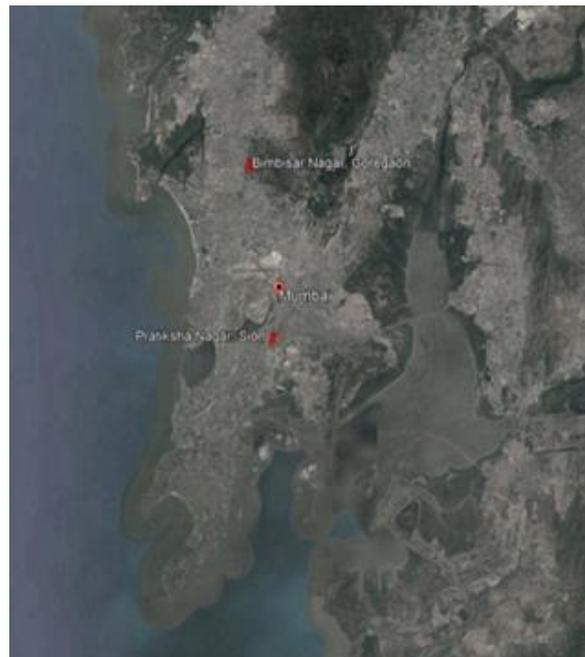


Figure 1 Mumbai earth google map

FIELD DELINEATION

To choose case studies, I began to look at neighborhoods in the city of Mumbai, where I reside. In the dissertation I have been specifically looking at transit camps for temporary accommodation for residents of dilapidated buildings and not for SRAs or rehabilitation schemes. In SRA’s when people are displaced from their former houses it’s an involuntary and irreversible dislocation. There are no hopes of going back. While transit camps offer the temporal realm and high possibility of people going back to their former

neighborhoods. The case studies chosen for the thesis are transit camps based in Mumbai at Pratiksha Nagar in Sion and at Bimbisar Nagar in Goregaon. The chosen transit camps are around 40-50 years old. In the following study I am specifically looking at people displaced far away from their initial locations to completely different neighborhoods in the city and have left behind their former networks, connections, and friendships. This would suggest the reworking of social and spatial networks that people create to produce a revised sense of belonging.

RESEARCH METHODOLOGY

- To document people's everyday routines, their associations, beliefs, friendships, different practices and the backgrounds (financial, spiritual, emotional) they come from in the form of stories.
- Identifying social spaces, threshold spaces, outdoor spaces and observing the kind of activities happening at these places.
- Navigating through the neighbourhood to analyse the material culture.
- The other ways of documenting are photo documentation, audio recordings, field notes etc.

POLITICS OF INHABITATION

This chapter includes the narratives of people, history and background of the two neighbourhoods, and talks about the life happening in the current typologies of transit camp buildings.

BIMBISAR NAGAR

Location and Setting:

Bimbisar Nagar lies along the western express highway in the northern suburb of Goregaon in Mumbai. It lies opposite to the NESCO centre and near the Mahananda Dairy Farm area. The Goregaon metro station of metro line 7 is at a walking distance from Bimbisar Nagar. Because of its vicinity to the Aarey colony the landscape of Bimbisar Nagar appears to be densely green.



Figure 2 Site Axonometric of Bimbisar Nagar

Typology

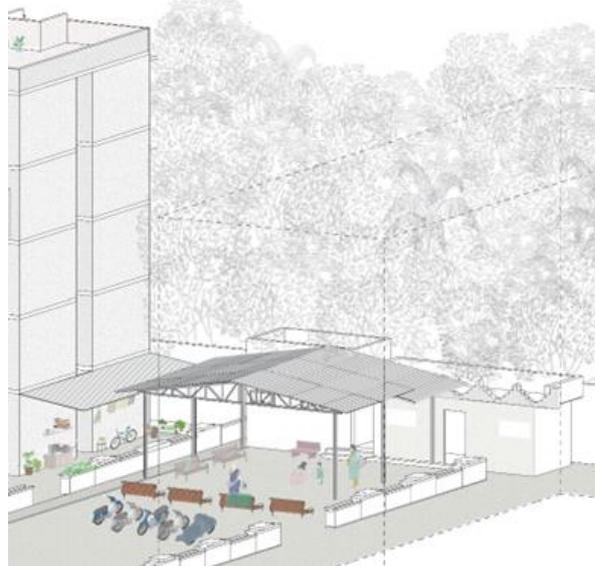


Figure 3 Building key plan Bimbisar Nagar

The transit camps have been set up somewhere around 1975 approximately. Earlier the camps were baithi chawls structures. Then after the 2000s they underwent redevelopment, and a new configuration of the camps came into being. Currently Bimbisar Nagar consists of 17 transit buildings. The other buildings are either private or houses for LIG, MIG and HIG groups. The transit camp buildings are a g+4 structure without lifts. The built forms are mostly doubly loaded with corridors with 8 households on each floor with the areas of the houses being 180 sq ft. There is approximately 6m-8m distance between transit camp buildings which forms a courtyard kind of place between buildings.

Transitory Narratives of Belonging:

- Leisure and the shed



I shifted to Bimbisar Nagar transit camp in the 1980s. I used to live in Girgaon. We were given a choice to choose any of the transit camps in Mumbai. I chose Bimbisar Nagar as my company was in Goregaon. So, me, my wife and my daughter moved here from Girgaon. During that time, we thought it's just a question of three to four years, then we will be going back. But I never thought we would end up staying here for the rest of our life. My daughter has been married off and she now has two kids. We had set up a mandap for my daughter's engagement in this courtyard space between the two buildings. Now I stay alone, as my wife passed away a few years ago. I like to spend my day here, inside the shed. There is a Lord Shiva's temple here, which brings in a lot of people. I sit here on these benches and observe people, interact with them. My day gets spent well here. And my former house has not yet been built.

- Mr Sawant

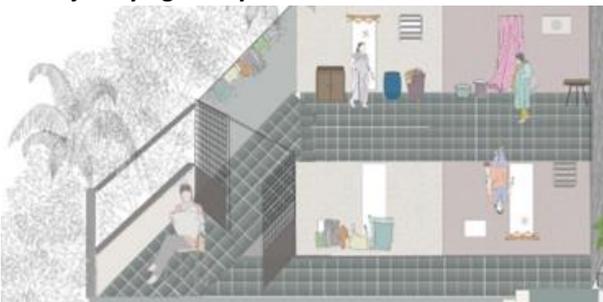


● **The Transitional Veranda**

I have spent my childhood at Bimbisar. You might have encountered the transit camp school at the entrance. I have studied there, and my cousins. We are a joint family with multiple households living in the same building. We use this building as a family bungalow. The locality is quiet, I cool and the greenscape freshens us. All the objects in the veranda belong to us. The washing machine, the morie (open bathroom), the water tank, these cabinets, are in everyday use. This verandah space brings our family together and keeps us connected. We wash the clothes of our family members in this washing machine in the veranda space. We shifted here in 1985 from Kumbharwada. Kumbharwada would never have offered us this informality. We haven't yet got the house is a different thing altogether, but I don't want to go back there. I like here only now because we have got settled here.

- Vinay

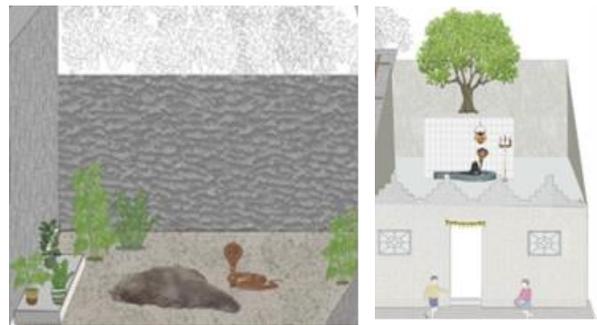
● **Objectifying Safety**



Transit camp buildings do not have watchmen or even main gates. So, we have started installing safety gates in the corridor spaces. We, four households share the keys of the gate and lock it during night or even afternoons sometimes to ensure safety. The safety gate also ensures the safety of the objects in the corridor spaces. As our houses are small, the household objects expand the peripheries of the house and spill in the corridor space. When we shifted here from Dharavi in 1998 with our two kids, I used to feel quite unsafe here. If my husband would go out for days due to work, then I used to call upon my friend from the former neighbourhood to stay with us especially during night times. I even used to lock my kids inside the house if I had to go for marketing and buying stuff. But now the locality feels safe. There are also CCTVs installed at some places in the area.

- Suman Kaki

● **The Rakhandar**



There have been instances of snakes entering the neighbourhood. They crawl through the grills, over the compound walls, on the footpath and the roads. But they have never harmed anyone. In Fact, they guard us, they guard the neighbourhood. Come here, behind this building and between the boundary wall lies a stone from where it emerges, we guess. There is Lord Shiva's mandir beside the building. There is a Shivling, behind which is a huge tree. The snakes occasionally enter the mandir space and disappear. There might be some way behind that tree is what we think. During Nagpanchami festival, we worship a photo or idol of Nag Devta. Many ladies visit the temple to worship during Nag Panchami. It feels very pleasant and sacred to have these things around.

- Smita Tai



Figure 5 Argumentative Realm drawing of Bimbisar Nagar

● **Pratiksha Nagar**



Figure 6 Building Axonometric of Pratiksha Nagar Location and Setting

Pratiksha Nagar situated in Sion has a high density and intensity of people. It lies along the sewri-chembur road with its proximity to Wadala monorail station. One side of it are Sion Koli Wada and Guru Tegh Bahadar Nagar station on the harbour line. The other side opens to a recently developed road connecting Chunabhathi highway and the Eastern Express highway. It was built on reclaimed land in the 1970s.



Figure 7 Site Axonometric of Pratiksha Nagar

TYOLOGY

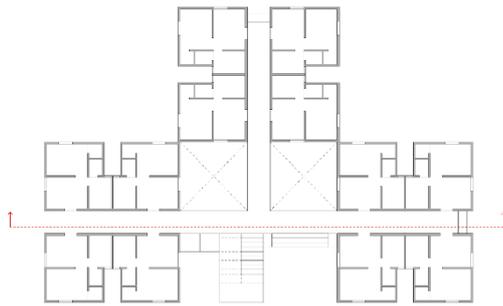


Figure 8 Building key plan of Pratiksha Nagar



Figure 9. Building Sectional Axonometric of Pratiksha Nagar

Pratiksha Nagar houses transit camp buildings, MHADA provides housing schemes for LIG, MIG and HIG groups and staff quarters for the government employees. There are two types of transit camp buildings. One is an L-shaped structure of 4 storeys with a central courtyard. This built form has a doubly loaded corridor with houses of areas 180 sq ft. This structure does not have lifts. The L-shaped buildings are placed in such a way that a courtyard gets generated between 4 buildings. The other building is a t-shaped configuration with two internal courtyards and g+7 storey structure. Each floor has 12 households with a 225 sq ft area of the house. This structure also has a doubly loaded corridor with two lifts.

Transitory Narratives of Belonging:

● The Sacred Entrance



Be careful, you might step on the rangoli. Making a rangoli outside the house in the corridor is my everyday ritual. Unless I don't make a rangoli, I don't feel good. It transforms the area in front of the door. Otherwise, the corridor feels empty. You must have seen the small mandir made from marble at the entrance. Swami Samarth's photo is worshiped in the shrine. Every Thursday we do aartis, prepare some food or get some sweets as prasad. The mandir has been made recently. But that sacredness that gets instilled is amazing. The mandir also keeps the internal courtyards clean, or else people, children keep throwing some or the other stuff down. Sometimes we ladies encounter each other and wait there chatting for hours, and sometimes we sit on the stairs or the corridor space. We have also planted a Tulas near the steps at the entrance. Tulsi plant is auspicious. It brings wealth, prosperity and peace.

- Vaidya Kaki



● The Constant Node:

I have been living here since 1997. After working here and there, I started this laundry and ironing business. I was looking for space and later found this space below the stairs. I pay a specific amount as rent. It has been almost a decade now since I am doing this. I keep this stool outside the shop. Many people come and sit here, or gather around for talks, discussions, gossip. This stool is not just a mere object, instead it invites people to me and my shop. I am always surrounded by people here. I enjoy those moments of working as well as ironing simultaneously. If anyone in this area requires a plumber, carpenter, or electrician, they call me. I connect people to these service providers. People here have changed but the networks that I hold are constant.

- Ajit bhaiya

- **In between the courtyard**



During Navratri, the idol of devi is worshiped here. This courtyard is utilized to play garba. The way the mandap gets decorated and enclosed with different fabrics and lightings, *torans*, etc. I enjoy watching the people dance below the lighting during festivals. On other days, the stage becomes a meeting and gathering space for all of us. Some people also prefer taking afternoon naps here. Children also keep running, jumping around the platform. Sometimes ladies also sit here during afternoons. This stage kind of structure was made by these Nagar sevaks. You will find them in majority of the transit buildings. Some buildings also host cultural programmes here. I shifted here in 1975 from Bhindi Bazaar but haven't yet got possession of our former house. I have got settled here now. In the neighbouring building, a veranda kind of space is made at the entrance of the building. You should see it. They have hung a swing, kept benches out there and the floor is painted in mud colour and ornamented with patterns and designs drawn in white paint. It feels like a native place.

- Pandurang Kaka



Figure 10 Argumentative Drawing of the realms of Pratiksha Nagar

- **FINDINGS/ ANALYSIS**

The dissertation began with the proposition that there exists an intangible network that operates and drives the physical realm. The emotional investment in a space, a spiritual comfort and invisible forces of social relationships configure a mental space called home. Belongingness is created by the physical acts of appropriating spaces, softening the hard edges of the built form, transgressing and overlapping the spaces, objects and boundaries. From the case studies four similar patterns have been identified among the two transit camps.

- **Myths, Beliefs and Religiosity**
- **Micro-claims, Micro Negotiations and Micro Publics**
- **Nurturing Solidarities | Home is in the People**
- **Societal Paraphernalia**

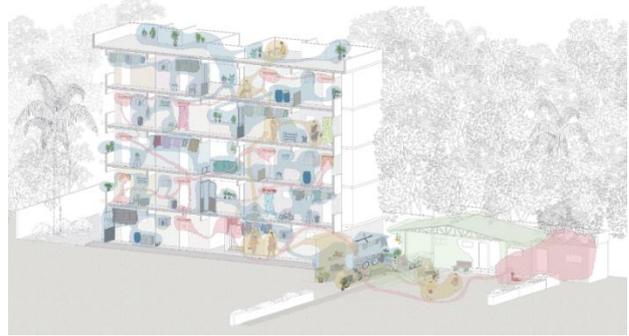


Figure 11 Bimbisar Nagar Realm drawing

MYTHS, BELIEFS AND RELIGIOSITY

This section talks about the mythical realm that associates with symbols, self and the divine. Here, the act of appropriating happens at different scales. These religious and cultural practices emerge from age-old traditions and have a relationship with various spaces like the threshold, the veranda, the entrance, and the courtyard. Along with the physical spaces these practices also inhabit a mental space of faith, trust, spirituality, and the notion of sacredness.

MICROCLAIMS, MICRO NEGOTIATIONS AND MICRO PUBLICS

A specific configuration shapes the spatiality of everyday life in that space. The following section talks about the appropriations taking place at the scale of a building and its relationship with the neighbourhood. The given configuration has several affordances with which people intervene and occupy the spaces.

NURTURING SOLIDARITIES | HOME IS IN THE PEOPLE

Human beings have always been living in groups. The idea of building friendships and solidarities is a natural trait of human beings. Friendships are about care, mental peace, and comfort. The practice of care and companionship are an important aspect to dwell.

SOCIETAL PARAPHERNALIA

When looking at a neighbourhood as whole, the public spaces for socializations and gatherings play a vital role. These spaces inculcate a sense of community and spaces for leisure. This section talks about how the society (the community) introduces and appropriates spaces to make its own places in the neighbourhood.

CONCLUSION

The life in transit camps is constantly driven by the hope of going back to the former neighbourhood in our own house. There is a longing, a temporality that is being observed in people in the transit camps. People keep on making smaller alterations and practising their beliefs systems to thrive. Some people try to escape the transit neighbourhood by constantly visiting their old neighbourhoods. They find it difficult to settle and the

sense of feeling out of place takes the front seat. There have been instances where at least one generation has passed away by waiting and longing for their homes to be built. The act of dislocation is voluntary yet involuntary, because the redeveloped building is also going to transform the meaning of the place the residents lived in. A place where people lived had shaped them and now after moving to transit homes people are trying to shape the place they live in. The transit camps become a place of frustration and a trap if the buildings don't get built or redeveloped in time. Shelter is a basic requirement of humans. The idea of owning spaces, especially houses, has taken over the idea of home. If the house does not belong to them legally then it becomes a mere box for residing. The idea of owning also mobilizes the logic of selling, renting, renovating, etc. All these are physical aspects of belonging, but it happens because of the place, physical or mental. Here, by place I mean the landscape, the environment, and the networks of people that get formed. Leaving all of it behind or experiencing the transformation takes away the place from one and hence one tries to recreate it through appropriations, friendships, belief systems, etc. This is where the thesis lies in the intangible realm that gets activated because of the physical realm or along with the physical realm. In the current times, the city of Mumbai is undergoing massive transformation through redevelopment. There might arrive a situation where the majority of the people in the city might be residing in transit camps. Then how would one re-imagine transit camps in a metropolitan city? The above study has given a lens to perceive the realms where people can dwell, then how does one approach the idea of the transit camp through the provided lens? The idea of the different realms challenges the utilitarian and monotonous logic of constructing transit camp buildings and provides with the possibility of reimagining spaces and built forms for temporary accommodations.

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REVITALIZING HAJIGANJ: STRENGTHENING URBAN GROWTH THROUGH SUSTAINABLE WASTE MANAGEMENT, POLICY AND PARTICIPATION

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ABSTRACT

The unplanned urbanization pattern in Bangladesh has been detrimental to developing urban centers as socio-economic hubs. Haji Ganj, a principal municipality in the Chandpur district and a critical economic zone in Bangladesh has been identified as a potential urban growth center by the LGED (Local Government Engineering Department). However, this significant economic hub has fallen victim to rapid urban sprawl and a disorganized waste management system in its market areas, resulting in the deterioration of its urban environment, waste-induced congestion, and exacerbation of sanitary conditions day by day. Despite these challenges, there is a significant potential for positive transformation in Haji Ganj. Thus, the aim of this paper is to assess the existing urban conditions, growth patterns, urban connectivity networks, and waste handling systems in the Haji Ganj Market Area. The benefits and shortcomings of this economic hub have been utilized to frame some urban policies to mitigate the detrimental impacts of unauthorized waste dumping sites and to incorporate urban design solutions that place community engagement at the forefront of sustainable urban development. A notable aspect of this study is the contribution of a closed-loop waste management system design which is vital for the reduction of waste generation, promotion of recycling, waste sorting from a micro level, encouraging participation and reducing landfilling. This positive transformation of the Haji Ganj Market Area into a sustainable socio-economic hub is not just a possibility but a necessity to utilize unexploited potentials and emphasizing the community to share the system for common goods rather than for private profit.

KEYWORDS: Growth Centre, Circular economy, Urban Waste Management, Urban Sustainability

INTRODUCTION

In rural and semi-rural areas of Bangladesh, marketplaces such as Haat and Bazar are recognized by the government as critical nodes for regional development. A 'Haat' is a traditional market that is usually held on a specific day of the week, often in an open space, and is a significant part of the local culture and economy. In the context of Bangladesh, these rural markets identified as growth center or intermediate urban centers that have been identified by Planning Commission based on socio-economic and administrative criteria for making development investment (LGED, 1995). According to ESCAP (1979), Growth Center is the focal point with a specific level of facilities (Khan and Akther, 2000). Recent initiatives by the government aim to enhance urbanization in these areas by improving accessibility and integrating various social and economic functions. This includes establishing stalls for vendors, designated areas for wet and dry agricultural products, clean water sources, administrative facilities for market management, and essential civic amenities such as male and female restrooms, along with other infrastructural improvements. But as economic activity picks up steam, there is a tendency towards turning these hubs into metropolitan centers, a phenomenon observed by the Local Government Engineering Department (LGED) and other development agencies. This transformation often occurs without a well-structured planning and urban design framework tailored to the specific regional context. As a result, many urbanized areas need help with issues such as insufficient public green and blue spaces, traffic congestion, and poorly coordinated infrastructure. Moreover, often overlooked in these changes are localized economic possibilities, community cultural aspirations,

preserving healthy living circumstances and environmental sustainability. This study proposes focused interventions stressing the need of sustainable waste management techniques by looking at urban growth center of Haji Ganj. Habitation patterns, socio-economic dynamics, and the flow of urban metabolism within the region acts as important derivatives. Urban metabolism flows to how resources, energy, and waste circulate in a city. The goal is to create place-specific strategies that promote sustainable waste management, circular resource use, livability, and resilience, tailored to the community's unique needs.

STUDY AREA

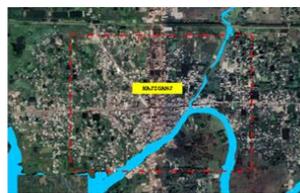


Figure no 1: Hajiganj upazila map from google map



Figure no 2: Hajiganj existing site top view drone shot provided by Rifat Bin Ali

Haji Ganj is one of the largest Pourasovas in Chandpur district. It is one of the most important economic zones in Bangladesh and marked as a growth center by LGED. The Dakatia River, a sub-river of the Meghna, flows through Chandpur. The Haji Ganj Pourashava consists of 11 wards, and the Dakatia River flows within it. The area of interest is the demarcated Growth center zoned in Haji Ganj. This area is comprised of 5 words. Survey and mapping are conducted in that area along the Dakatia River. Secondary streets, which are more minor roads branching off from the main street, play a crucial role in the urban structure.

They relate to the riverside and act as critical nodes for the transportation of goods from the river.

HISTORIC ANALYSIS

The origins of Hajiganj trace back to 1100 BS. At first, it was set up as a simple prayer house sometime during 1100 BS after renowned saint Mokimuddin (RA) along with his family members came here to preach Islam from a Arab country to a calm and quiet place in Hajiganj. He set up this prayer house with Goalpata where a small number of local devotees offered prayers. The place was named after him as Mokimabad. His grandson Monai Haji (RA) later opened a shop called Sunnate Rasul beside the mosque. Local people called it Hajir Dokan. (the financial express, Anon., 2024) This establishment was instrumental in fostering economic activities and laid the groundwork for developing a local marketplace. The weekly bazaars on Fridays and Mondays and the daily morning "Haat" markets on other weekdays became central to the settlement's economic life. Over time, the market area evolved from its initial designation as "Hajir Dokan" into what is now known as Hajiganj Bazaar. Hajiganj initially extended towards the Dakatia River, taking use of the river's extensive commercial and transit network. The settlement's early economic and spatial growth was facilitated by its proximity to the river, which allowed for the movement of products and people while also building trade links. The early 20th century saw substantial developments in Hajiganj, particularly with the establishment of the Hajiganj Boro Mosque by Haji Ahmed Ali Patwary. The construction of the Boro Mosque marked an era of increased development and expansion, strengthening the settlement's social and economic infrastructure. The main reason behind the Hajiganj's transformation to commercial hub was the development of Monai Haji's Market which caused subsequent expansion towards the main road established Hajiganj's status as a key commercial center in the region.

AIM / PURPOSE

This paper aims to generate sustainable tools and waste management practices for urban growth centers, considering all aspects of their current scenario and future vision. Moreover, it recommends waste management strategies to generate sustainable waste management on different scales inhabiting collective socio-cultural and accommodate sustainable urban growth in infrastructure, public architecture, green and blue spaces, biodiversity, etc. The study proposes tools and practices for the public domain on the micro-scale that complement economic aspirations. Maintaining a place that enhances community life, based on local culture and heritage, and promotes traditionally tested knowledge and arts that have been shaping urban areas of our time. The policy implication is that, after acknowledging the actual scenario of the Hajiganj market area alongside the river edge, we should rethink and rearrange waste management strategies with community engagement from the sustainability standpoint.

RESEARCH METHODOLOGY

Mainly, mapping, surveying, and observations are used to identify conditions, waste-related vulnerabilities, and

amenities. To come with a comprehensive decision, the following methods are-

- **Reconnaissance survey:** A general site visit to Hajiganj to gain basic information and understand the targeted area, to interpret the urban context, and identify social, environmental, political, and technological forces that shape our city and thereby inevitably influence the urban realm.
- **Site Analysis (secondary sources):** To understand the urban problem, conduct a comprehensive analysis of the Hajiganj's land use and movement patterns, socioeconomic and demographic patterns, visual environment, and spatial structure. Construct appropriate methodology for the urban process by respecting others' perspectives and diverse group opinions.
- **Literature Review:** A literature review of past (History of the Mosque), present situation of Dakatia River and Hajiganj Market, and future proposals (DAP-Detail Area Plan), and existing works, theories, and journals are studied thoroughly to acquire knowledge.
- **Expert Consultation:** Expert consultation is met to demonstrate confidence in selecting the action areas and implementing decisions for sustainable urban development in terms of human activity, livability, quality of life, and environmental impact.
- **Surveys and Mapping:** Qualitative surveys, questionnaires, interview sessions with the local people, and observation are used to collect information. The survey findings are synthesized and assembled by recognizing the human-environmental relationship, human needs, and scale in multiple dimensions.

ANALYSIS & INFERENCE

Different methods have been used to collect data. The primary data have been collected through visual observations, mapping, photographs, field surveys, and sketches. To understand the current situation of the Dakatia Riverfront, the encroached open space adjacent to the riverfront area, and to learn about the existing drainage system, waste management, and recycling amenities in the heavily commercialised area- identifying commercial cluster typology, infrastructure condition, and waste management system. Interviews and questionnaires are used to find out the measures and aspirations needed to sustain the existing growth center.

- **Land Use Pattern:** The land use pattern in the area reveals a complex set of issues, characterized by encroachments on canal and riverfront areas by commercial structures, and fragmented zoning for various market types. The prevalence of individual shop ownership contributes to this fragmentation, resulting in a disjointed organizational structure. Despite these challenges, the zone is a significant commercial hub within the Chandpur district, experiencing substantial financial activity. The high density of structures has led to a unique and varied land tenure arrangement, reflecting the intense commercial pressures and the

need for more coherent urban planning and management strategies.

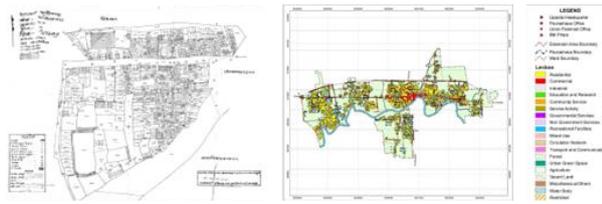


Figure no 3 : Hajiganj upazilla CS map, upazilla land office

Figure no 4: generalized land use pattern of Hajiganj

- Commercial Cluster Typology:** The area has seen the development of various commercial typologies, including specialized market sections such as vegetable potti, spice potti, wood potti, kaporiya potti, holud potti, torkari potti, tin potti, and alu potti, alongside hawkers and new market areas. Among these, the hawkers' market is notably the most congested but has evolved uncoordinatedly, lacking integration and coherence among the different commercial zones. Historically, mills were concentrated along the riverside, transporting goods via riverways. However, the current presence of mills and factories in the area is minimal and only constitutes a small industrial sector. This unexpected growth and the scattered nature of commercial establishments highlight the need for a more organized urban planning strategy to enhance functionality and connectivity. Tertiary drains often need more connections, resulting in complete drainage coverage. The system was implemented without accurate calculations for peak hour runoff discharge, leading to inefficiencies. Many drains are broken due to inadequate maintenance. Clogging occurs frequently due to the disposal of solid waste into the drains. There is significant encroachment on natural drainage channels, impeding their function. Additionally, the absence of a city sewer system means that sewage from buildings directly falls into the river. These problems collectively undermine the effectiveness of the drainage infrastructure and contribute to environmental and sanitation issues in the area (Hajiganj Pourashava Master Plan: 2011-2031).

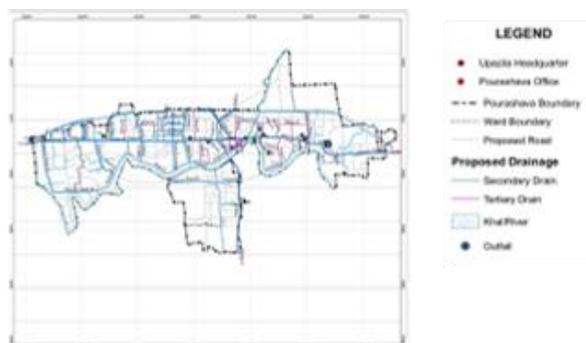


Figure no 7: Drainage Network Plan in Hajiganj Pourashava

- Existing Drainage Services:** The drainage system in the area is divided into two main categories: natural and artificial. The natural drainage system consists of canals that channel stormwater and wastewater into nearby or distant rivers, serving as primary drains for the town. In contrast, the artificial drainage system, developed by the Pourashava, is designed to manage domestic

wastewater and stormwater but operates at a lower hierarchical level (Hajiganj Pourashava Master Plan: 2011-2031) This system is plagued by several issues:

- Connectivity:** There is a well-connected highway (The Comilla-Chandpur Highway) that enhances accessibility, facilitating commerce and attracting visitors to Hajiganj, which has become a significant economic zone. However, the area faces several infrastructure issues, including insufficient space for parking, loading, and unloading, with most secondary roads being one-way. The Local Vendors occupy a substantial portion of pathways for product displays which narrow the footpath and contribute to congestion. The lack of dedicated loading and unloading areas exacerbates road and pathway congestion, particularly given the reliance on manual labor for transporting goods via waterways. Narrow entry points and waste dumping along roads compound these problems. There is no specific waste dumping zone in this market area, which made them use those mini ghats which is the connection between river and the market to dispose of waste where it already exists. As a result, the informal ghats once served as social hubs, their current use as waste dumping zones does not adequately address the community's need for social and recreational spaces.
- Infrastructure:** The intense emphasis on commercial activities in urban development often leads to an imbalance in other crucial aspects of infrastructure and environmental management. Recent economic expansion has resulted in a significant increase in the number of pucca (permanent) buildings; however, many food-related establishments continue to operate under tin sheds, which need more facilities for the collection of organic waste. Additionally, the design of these establishments often includes sloped roofs that direct rainwater directly in front of the shops. Insufficient drainage systems cause rainwater runoff to build up which causes unhygienic and unhealthy scenarios. This situation emphasizes the necessity for a comprehensive measurement to urban planning that incorporates effective waste management and improved drainage solutions. To reduce negative environmental impacts and promote overall urban health, taking such measures is essential.
- Existing Waste Related Amenities:** Commercial waste management in the area remains unstructured, with no organized system for waste collection. The scarcity of dustbins means that few people dispose of their waste correctly, and the general population is not accustomed to using the available bins. The markets generate a significant amount of solid waste, but with no industrial activities present, industrial waste is not a concern. The lack of a proper waste management system causes waste to be dumped into nearby canals, along the riverbank, in roadside drainage ditches, and even on the roadways. This leads to canal blockages, waterlogging, and occasional traffic congestion. The riverside dumping zones are heavily contaminated, with

no provision for waste collection and transfer, encouraging further dumping in these areas.



Figure 08: Irregular Waste disposal scenarios



Figure 09: Riverside domestic and commercial Waste dumping location. Drone shot provided by Rafiq Bin Ali

DISCUSSION

Findings from the survey show the current condition of the canal front along the Hazaribagh encroached area as an alarming situation-

DETRIMENTAL CONDITION OF HAJIGANJ RIVERFRONT

The current state of the Dakatia Riverfront, particularly in the Hajiganj encroached area, presents severe environmental and social concern. The river has become severely polluted due to unchecked waste disposal and inadequate management practices. It is found that chemical profiles of Dakatia River water in the present study indicate that the water is beyond the acceptable limit for fish, i.e., Dakatia River as a polluted river. DO, being the most important parameter of water for survival, distribution and growth of fish, indicates a state of unfavorable, unhealthy and polluted environment of Dakatia River due to discharges from municipal sources (Shanur J.H., et al., 2015). Waste disposal from both domestic and commercial sources has resulted in the creation of multiple unauthorized dumping sites within the river, and sewage pipes discharging waste directly into the water bodies. Consequently, rivers, canals, and ponds have been overwhelmed, impairing their ability to manage floodwater effectively during the monsoon season. The only canal that directs water flow from Chandpur's Hajiganj's eastern Dakatia river and Noakhali's Sonaimuri to the western Dakatia River is the Birendra Canal. Flowing through Ramganj upazila town, the canal has become clogged with hundreds of tonnes of garbage, preventing water from Sonaimuri from reaching the Dakatia River (Sana Ulla S., 2024). However, their current use for waste disposal has rendered most of them obsolete for their original purpose, with only two remaining functional for transportation.

ADDRESSING CHALLENGES

Several critical issues and potential solutions have emerged regarding the Dakatia River and its surrounding commercial areas, which are vital for promoting sustainable development:

- **Pollution and Encroachment:** The Dakatia River, which was once a hub of growth, has faced significant deterioration due to severe pollution and uncontrolled encroachment from the sand export point along its banks. The lack of engagement with the river edge exacerbates these problems, reducing the river's ability to function effectively as a socio-ecological resource.
- **Lack of Recreational Spaces:** The densely packed bazaar area extending from the Dakatia River to the Boro Mosque is heavily focused on commerce, leaving minimal space for recreational and communal facilities. The riverbank lacks community engagement and has no economic corridor connecting it to the market. Current

scenery is dominated by informal hallways between shops, requires defined outdoor areas with minor and large-scale initiatives in place making and community place.

- **Waste Management Issues:** Informal waste disposal practices are common, and unsorted waste from different Potti/ Market is dumped under culverts and along roads, creating extensive dumping zones. Residential garbage is also improperly disposed of in backyards and dry ponds, making these spaces unusable.
- **Insufficient STS Waste Management Points:** The number of Strategic Trash Sorting (STS) points, such as Kaporita Potty, Wood Potty, and Holud Potty, needs to be increased for the needs of the Hajiganj commercial zones. There is a need for a more organized and increased number of STS points to effectively manage waste within these zones.

PROMOTING WASTE MANAGEMENT AND SUSTAINABLE PRACTICES RECOMMENDED MEASURES:

- **Reclaim and Revitalize the River Edge:** Both experts and the community should work together to reclaim the river's edge from encroachment and enhance its socio-ecological potential. This includes developing and removing encroachment and repurposing Ghat areas as well as creating commercial corridors for both commercial and recreational purposes.
- **Increase Organized STS Points:** Establish additional STS waste management points throughout the Hajiganj commercial zones to improve waste sorting and management. This should include strategically placing new STS points and upgrading existing ones to better handle commercial and residential waste.
- **Develop Public and Recreational Spaces:** Dedicated recreational areas are needed, such as parks and playgrounds, within the bazaar area to provide relief from the commercial density and improve the quality of life for residents and visitors.
- **Formalize Waste Management Practices:** Implement a structured waste management system that involves community engagement in waste sorting and recycling. This includes repurposing current dumping zones and landfills into public spaces and integrating waste management activities into the social fabric of the community. 'It is possible to improve solid waste management service delivery through public-private partnership despite institutional and financial constraints' (Ahmed, S.A. and S.M. Ali. 2006).

A crucial factor of this strategy is the integration of advanced waste management infrastructure aimed at minimizing environmental impact and enhancing resource efficiency. This approach includes establishing a color-coded waste management system for different potties (commercial areas) to streamline waste segregation and processing. Color-coded waste bins will be deployed throughout the area to facilitate the separation of different types of waste:

- **Green bins** for organic waste, including food scraps, will be directed to composting facilities.

- **Blue bins** for recyclable materials such as paper, plastics, and metals which will be processed at recycling facilities.

Commercial cluster	Green bin	Blue bin	Red bin
Wood patti	yes	yes	yes
Alu patti	yes	no	no
Tin patti	no	yes	yes
vegetable patti	yes	no	yes
Holud patti	yes	no	yes
Kaporiya(cloth) patti	no	yes	no
Sawmill/Furniture	yes	yes	yes
Hawkers market	no	yes	yes

- **Red bins** for non-recyclable and hazardous waste, ensuring safe disposal and proper treatment of toxic substances

Household/Shop colored bins /Community Bins/ → Secondary Transfer Station (STS) → Disposal Site. The goal is to build a closed-loop mechanism. It involves the establishment of decentralized composting hubs, alongside appropriate technologies that guarantee efficient recycling. This can include vast waste generation reduction, enhanced recycling, and reuse, and overall reduced reliance on landfills and incineration. The initiative will be community-based, with education programs and workshops to raise awareness and involve the community in the color-coded waste management system to take an active role in sorting, recycling, and composting their waste, developing a culture of sustainability and environmental responsibility.

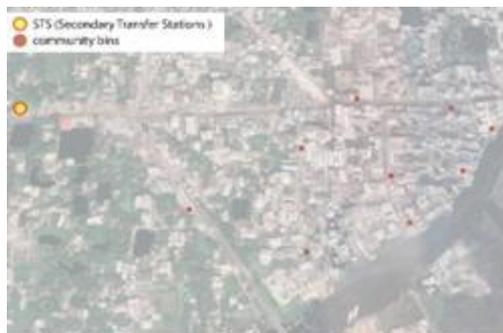


Figure no 10 : location of STS and community bins , Source Author

So, Waste management operates across three scales: micro, meso, and macro, ensuring efficient collection, transfer, and disposal. At the micro level, primary collection involves household bins for individual residences, shops, alongside community bins including three colored bins ensuring sorting shared by neighborhoods without individual collection services. Door-to-door collection further ensures waste is gathered directly from stalls of different pottis, residences and community bins by municipal or private workers. At the meso level, it encompasses secondary collection at Secondary Transfer Stations (STS), where waste from multiple primary collection points is consolidated. (Figure 10) These stations are strategically located for accessibility by larger vehicles and serve as temporary holding facilities before transferring to processing or disposal sites. Key

features of STSs include compacting equipment to reduce waste volume, segregation facilities for recyclables, and spaces for unloading and reloading waste into larger vehicles. At the macro level, final transfer involves transporting waste from STSs to designated treatment plants—such as composting or recycling centers, waste-to-energy facilities, or disposal sites ensuring comprehensive waste processing and management.

ACCESSIBILITY AND RELATIONSHIPS WITH COMMUNITY BINS, SURROUNDING AREAS, AND THE RIVER

Integration of Community Bins with Accessibility and Urban Connectivity

The strategically positioned community bins serve as nodes that enhance the urban fabric by encouraging waste sorting and fostering community participation by participating and engaging themselves in recycled craft workshops beside the major nodes of the river.

Waste Sorting by Commercial Zone: In cloth shops (Kaporiya Potti), waste such as fabric scraps and defective items is collected in blue bins and sent to local recycling cooperatives, where materials are repurposed into eco-friendly craft items or industrial-grade recycled textiles. In vegetable markets (Torkari Potti), organic waste is deposited into green bins and transported to decentralized composting facilities, with the resulting compost sold to local farmers, creating a sustainable loop. In metal and wood shops, metal scraps are sorted into blue bins and sent to recycling plants, while wood waste is processed for alternative uses, such as showpieces or furniture repair.

Community Engagement in Waste Sorting: Regular workshops and demonstrations in market zones educate vendors and residents on proper techniques for recycling, complemented by interactive signs near colored bins that display clear instructions for waste segregation.

Relationship with the River: Waste is brought to recycled craft workshops near the riverfront and incorporated into recreational areas with eco-conscious design elements. Green corridors connect the bins to river walks, enhancing the aesthetic appeal and encouraging sustainable behavior.

TO PROMOTE CIRCULAR ECONOMY IN DIFFERENT COMMERCIAL ZONES

Closed-loop waste management introduces workshops for composting, recycling, and waste-to-energy conversion while equipping community bins with partitions for efficient waste sorting and promoting circular economy.

Zone-Specific Initiatives:

Kaporiya Potti (Cloth Market):

- Collected fabric scraps can be shorted to the zone selected for the fabric-recycled craft workshop. And convert fabric waste into reusable fibers.
- The new recycled products can be exhibited to the public, enhancing public interaction and raising awareness and curiosity towards recycled goods.

- Create a crafts market where artisans sell products made from recycled fabrics, generating additional income.



Figure no 13: Process diagram of Kath potti and Sewmills. Source Author

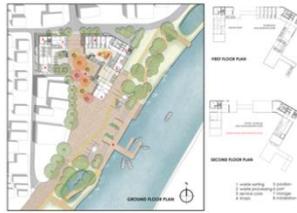
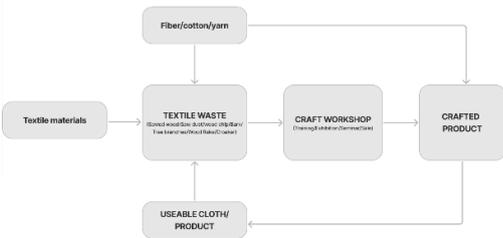


Figure no 14: Plan of wood recycled craft workshop. Source Author



Vegetable Markets:

- Deploy anaerobic digesters for organic waste to produce biogas and liquid fertilizer.
- Collaborate with urban farmers to directly apply compost in local agriculture.

Wood and Metal Markets:

- At the node of wood potti, the wood dust scraps, and metal scrapes can be partnered by shorting and partnering with furniture and metal manufacturers to source raw materials from collected waste.
- Promote upcycling initiatives where waste is transformed into high-value products.



Figure no 11: Process diagram of Kaporiya Potti. Source Author

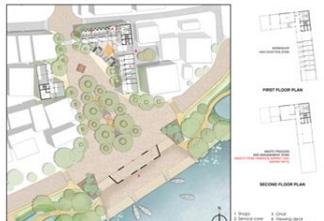


Figure no 12: Plan of fabric-recycled craft workshop. Source Author

Through the implementation of these strategies, Hajiganj's riverfront and market zones can develop into thriving examples of circular economy, promoting sustainability, economic growth, and enhanced quality of life.



Figure no 15: View of fabric recycled craft workshop. Source Author



Figure no 16: View of wood recycled craft workshop. Source Author

CONCLUSION

In the past, Hajiganj was a bustling hub for development. But it has now been overburdened by unplanned growth and urban sprawl. This sprawl led to environmental degradation and social challenges, which the paper seeks to mitigate by implementing policies. The transformation

of the Dakatia River's edge into a sustainable, multinucleate growth center exemplifies a model of urban development that harmonizes environmental and social objectives in an increasingly urbanized world. Expansion need not come at the cost of ecological integrity or increased social inequalities. By integrating policies and principles of the circular economy—such as waste reuse, advanced waste management systems, and socio-ecological innovation, this vision demonstrates how development can align with sustainability. Implementing waste sorting zones in Hajiganj Market Area with treatment and valorization processes tailored to different waste types can drive inclusive growth. The implementation of community color-coded waste bins and recycling craft workshop space into daily life and emphasizing recycling and upcycling initiatives, Hajiganj can achieve cleaner streets, a revitalized riverfront, and economic vitality. These initiatives will increase locals' incomes, improve public health, improve quality of life, and turn the area into a thriving growth center. By making the area cleaner and friendlier, it will also promote tourism and community involvement. As a result of these efforts, Hajiganj will provide a framework for sustainable urban development focused on the well-being of its citizens while promoting local prosperity.

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TITLE: "CREATIVE HORIZOZONS: 90 FEET ROAD ART HUB IN DOMBIVLI'S URBAN MAKEOVER"

Subtitle: "Wasteland to Masterpiece: Dombivli's Art Hub On 90 feet Road"

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ABSTRACT

India has a rich historical and artistic heritage, and Mumbai is globally renowned for its vibrant art culture and economic importance. This paper focuses on transforming Dombivli, an underdeveloped city near Mumbai, into a Smart City by revitalizing the wasteland near Thakuri, under Central Railway jurisdiction. The proposed redevelopment aims to convert this area, currently plagued by unauthorized stalls, encroachments, and inadequate infrastructure, into a multifunctional space that caters to community needs. The project envisions creating spaces for people of all age groups, including jogging tracks, relaxation zones, and gardens for children. Additionally, a portion of the adjoining 90-foot road could serve as an art and cultural hub, featuring open structures for fine arts exhibitions, performing arts stages, and stalls promoting art education, installations. This initiative aims to provide local artists with a platform to showcase their work, conduct demonstrations, and foster an appreciation for both traditional and contemporary art forms. Dombivli, with its high concentration of artists and strategic location connecting Dombivli and Kalyan, offers an ideal setting for this project. The research employs a mixed-method approach, utilizing primary data from questionnaires to understand community needs and secondary data from academic studies on art, architecture, and landscape design. Case studies inform the transformation of Thakuri into a sustainable art hub that preserves traditional Indian art forms while catering to modern urban requirements. This initiative represents a significant step toward creating a culturally enriched Smart City in Dombivli.

KEYWORDS: Public Awareness, Performing Arts, art and Design Studies Information, library, Installations, community engagement.

INTRODUCTION

The desire for spiritual fulfilment through art is an inherently human urge, expressed in its various interpretations, definitions and forms (Georgica 2012). Public spaces have long been seen as meeting places where art can flourish, providing a platform for contemplation, meditation and engagement. Equally important is the human tendency to gather and share creative expressions, including painting, architectural design, dance, drama, music, conceptual installations, meditation practice, exercise and sport. This dynamic relationship between art, the public and architectural spaces can be viewed as a three-variable equation: art, the people and the built environment (architecture, design and installation). This paper explores current societal challenges, where individuals are facing global and local issues. People struggle to adapt rapid industrial and social changes and to maintain meaningful communication amid technological distractions. A major concern is the growing reliance on mobile devices, which increasingly control human behavior and divide attention, leading to disconnecting society. As a result, many people feel frustrated and disheartened, often isolating themselves from community life. To address this, it is necessary to create opportunities for individuals to reconnect through art and architectural spaces. Transforming underutilized or abandoned spaces into centers of art and activity can promote social interaction and bring art closer to daily life. Activities such as engaging with the performing arts, attending creative workshops,

or simply enjoying shared spaces can help preserve cultural traditions, strengthen social values, and raise awareness about the importance of arts education. Art and architecture have the power to unite people and revitalize communities. When designed thoughtfully, these spaces can inspire creativity, encourage social engagement and foster a sense of belonging. By incorporating art into everyday life, we can help people reconnect with society, rekindle their hope and ensure the continued relevance of the arts in our collective future.

PROBLEM STATEMENT

The aim of this research is to analyse the effect of climate responsive architecture on urban commons. Focusing on sustainable solution to overcome adverse climatic effect on urban environment.

Dombivli, despite being a developing smart city, faces significant challenges in providing adequate recreational spaces. There is a lack of facilities such as playgrounds, walking and jogging tracks, parks for children, relaxation areas for the elderly, and spaces for the youth to engage in outdoor activities. Additionally, there are no nearby art exhibition centers or performing arts stages to inspire and nurture the next generation's creative and cultural growth.

To address these issues, we identified vacant land along the 90 Feet Road in Thakuri East, situated between the road and the railway track, adjacent to a large-sized Nala. This space currently falls under the jurisdiction of Central Railway. Our proposal aims to transform this wasteland

into a vibrant Art Hub. The envisioned development will include facilities for physical activities, an art exhibition center, and a performing arts stage. This Art Hub will serve as a community space where residents can engage, interact, and grow together. To support this initiative, we conducted an in-depth study of key aspects necessary for the redevelopment project, ensuring it aligns with the community's needs and aspirations. This redevelopment project aims to convert the underutilized land into a center for recreation, culture, and creativity, benefiting all age groups and fostering a stronger community spirit.

THE HISTORY AND EVOLUTION OF PUBLIC ART

Design principles for climate responsive architecture:

Mumbai hosts some of the largest multi-disciplinary street art festivals in India, such as the Kala Ghoda Art Festival, Thane Sanskruti Art Festival and Amarnath Shiv Mandir Art Festival. These festivals are organized by various organizations with the aim of promoting arts, crafts and cultural heritage. With over 300 events, including dance, music, art exhibitions and cultural handicrafts, these events celebrate creativity and bring communities together. The city is renowned for its rich concentration of heritage buildings, art galleries, museums, boutiques, restaurants and educational institutions. These events attract a diverse audience, including food connoisseurs, fashion designers, architecture enthusiasts and creative professionals. Mumbai's streets, parks and corners are transformed during these festivals, with sculptures, installations and street performances. These public art displays are often designed to convey meaningful messages or enhance the aesthetics of the city. The Jehangir Art Gallery, a cultural venue, regularly features artists painting live on the streets outside its premises. India, with its vast cultural history, has long been a hub for public art. Examples include the ancient frescoes of the Ajanta Caves, which depict the Jataka tales, and the exquisite architecture and sculpture of the Ellora Caves, including the iconic Kailash Temple. The Ashoka pillars and stupas are enduring symbols of India's open art heritage, available for all to admire and learn from them (Koma war and Rajput 2022). In modern times, the Indian government actively promotes public art through various initiatives. For example, the Ministry of Culture's Project PARI saw 150 women artists create art in public spaces that reflect India's folk art (Lok-kala) and cultural traditions (Lok Sanskriti). Public areas, such as roads, bridges and railway stations, are now adorned with graffiti and graphic designs that convey positive messages to society. Mumbai's "Chal Rang De" movement, led by an NGO, has gained prominence for using colors to address socio-economic issues. Starting with painting the slums of Asalpha Village, the initiative has spread to areas such as Khar, Bandra, Worli and Kalyan. It aims to transform

neglected neighborhoods by engaging local talent and sharing their stories, addressing issues such as poverty, education, safety and mental health. Over the past three years, Chal Rang De has transformed these communities into vibrant canvases, altering perceptions through art and inspiring change. Returning after a remarkable run in 2017, Mumbai's historic "Sassoon Dock" is once again set to host an eye-catching series of art installations. Start India Foundation and Asian Paints have joined hands to bring vibrant creativity to one of India's oldest dockyards, transforming it into a dynamic canvas (Koma war and Rajput 2022). Launching the three-month-long Mumbai Urban Art Festival (MUAF), this new edition of the renowned 'street art' festival promises to reimagine art on a grander urban scale. India's history and present-day efforts in public art showcase the enduring power of creativity to educate, inspire, and unite people across generations.

Kala Ghoda Festival, Project PARI



*Mumbai Urban Art Festival returns to the docks with Start India & Asian Paints (Koma war and Rajput 2022), **Positive Urbanism in Mumbai as "Chal Rang De" Paints***

ENVIRONMENTAL IMPACT

Parks and green spaces play a vital role in promoting biodiversity and reducing the negative impacts of urbanization, such as air and water pollution, especially in densely populated industrial areas such as MIDC zones (Sikta Singh 2024). These spaces help maintain the ecological balance of the urban environment, providing clean air, cool atmosphere and habitats for various species. The environmental significance of public spaces in the Indian context is particularly important due to rapid

urbanization, diverse ecosystems and challenges posed by climate change. Thoughtfully designed public spaces that integrate environmental considerations can positively impact ecological health, improve air quality and enhance overall sustainability. By supporting biodiversity conservation, these spaces contribute to global efforts to achieve several Sustainable Development Goals (SDGs), such as Goal 11 (Sustainable Cities and Communities), Goal 13 (Climate Action), and Goal 15 (Life on Land) (Sikta Singh 2024). Incorporating greenery, trees, and shade elements into urban designs can help reduce the urban heat island effect by providing cooling and shade. These efforts not only enhance the quality of life for urban residents but also ensure a more sustainable future for cities. Public spaces that function as art hubs serve as models for balancing cultural expression with ecological responsibility while prioritizing environmental sustainability.

ROLE OF ART HUB

Public spaces need to meet the needs of different users, such as children, the elderly, people with disabilities and people from different cultural backgrounds (Sikta Singh 2024). Designers must ensure that these spaces are accessible, safe and welcoming for everyone. In densely populated urban areas like 90 Feet Road, space is often limited. Creating an art hub in such areas requires striking a balance of green spaces, pedestrian pathways, seating areas, and facilities for art exhibitions and performances. This is particularly challenging in crowded areas, where public spaces also must handle heavy pedestrian traffic and daily community activities. Another major challenge is to blend urban development with environmental sustainability. An art hub should include eco-friendly features like trees, vertical gardens, and energy-saving lighting to enhance the aesthetics while addressing climate concerns. Managing noise and pollution from nearby traffic is also important to maintain the hub's ambiance.

Security is a major concern. The art hub should be designed to prevent crime without creating an intimidating atmosphere. Proper lighting, clear pathways and community involvement in monitoring sites can help maintain this balance. One of the biggest challenges during the rainy season is waterlogging caused by the drain, which takes up valuable space. To effectively solve this problem without wasting space, we propose transforming this area into an Art hub. To deal with waterlogging, the drain can be reconstructed underground using larger size pipes to ensure smooth flow of water and prevent flooding. This solution not only solves the problem of waterlogging but also eliminates the daily mosquito problem associated with stagnant water. Regular maintenance and cleaning of the underground drainage system will be essential to ensure its efficient functioning, creating a sustainable and mosquito-free environment for the art hub. Involving residents and businesses in the design process can be complicated, as their interests and preferences may conflict. For example, local vendors may want more stalls, while artists may prefer open space for performances or installations. It is important to resolve these differences

while maintaining the vision of the arts hub is very crucial. Maintaining space is another significant issue. Public art hubs need durable materials, low-maintenance landscaping, and efficient waste management systems to remain functional and visually appealing. The hub's activities, like live performances, workshops, and exhibitions, should be planned in a way that minimizes disruption to local life and traffic. The art hub can significantly impact on the local community. On the one hand, it can enhance the neighborhood's identity, attract tourists, and boost local businesses like food stalls and craft shops. On the other hand, the influx of visitors might increase congestion and strain local resources. Finding a balance between serving as a cultural landmark and meeting the needs of the local population is essential for the art hub's success.

PUBLIC ART IN INDIAN PERSPECTIVE

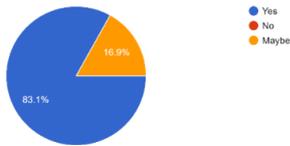
The earliest form of public art could be cave paintings done in caves like Bhimbetka, Ajanta, Bagh and Satanas'Il and the rock cut architecture found at Ellora and Badami. Rock columns of Ashoka could also be thought of public artworks made to exhibit his power. Indian festivals are more connected to public art form because festivals provide a platform to engage with large and diverse audiences. ... And festivals are also critical in providing access to the arts in local communities and a chance for the artists to meet the public, and vice versa. (dreamfair.org) Festivals are a cultural highlight in many townships, cities and countries worldwide. Celebrations of the richness and diversity of culture and creativity, they often encompass a variety of contemporary and traditional art forms — dance, music, theatre, arts and crafts. Culturally, they offer a unique snapshot of a community identity, both providing an opportunity to revitalize and preserve cultural practices and often serving as a creative laboratory for contemporary performers. Socially, they are a means of strengthening intercultural dialogue, promoting deeper.

PRIMARY DATA COLLECTION

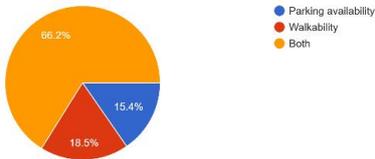
"I explored the concept of an Art Hub for Dombivli Smart City and conducted an interview with the owner of 'Gadre Bandhu' Stationery Shop, a prominent art material distributor in Dombivli. He mentioned that the city has over 1,000 artists residing in the area, making it one of the largest artist communities. The proposed Art Hub could serve as a platform to organize regular art stalls, fostering artist development and promoting creativity in the community."

"I designed a Google Form with questions to conduct a survey and gather opinions from residents living on 90 Feet Road and in the Smart City area about the idea of establishing an Art Hub. The survey aimed to understand community involvement and support for this initiative. More than 67 residents from the Dombivli area responded, showing their interest in development of an "Art Hub in the region."

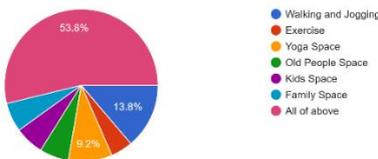
Would you be interested in visiting the art hub once it is established?
65 responses



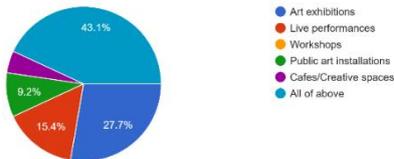
How important is accessibility to you when visiting the art hub?
65 responses



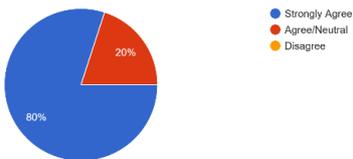
What kind of facility do you want in this project?
65 responses



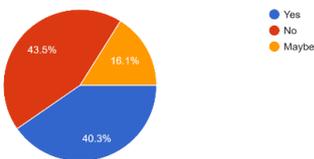
What kind of activities or attractions would you like to see in the art hub?
65 responses



Do you think the creation of the art hub aligns with the broader urban makeover of Dombivli?
65 responses



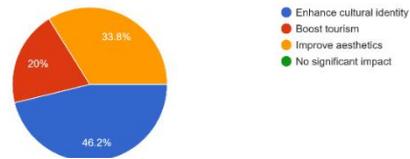
"Do you face any difficulties due to heavy traffic on the roads?"
62 responses



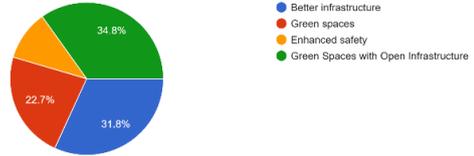
What themes or styles of art would you prefer to see featured in the hub?
66 responses



How do you think the art hub will impact Dombivli's urban environment?
65 responses



What other improvements would you like to see alongside the development of the art hub on 90 Feet Road?
66 responses



RESEARCH OBJECTIVES

- To explore strategies for transforming underutilized wasteland spaces into vibrant art hubs that foster creativity, cultural expression, and community interaction.
- To address the space requirements of smart cities by integrating multi-functional art spaces into urban planning, enhancing both functionality and aesthetics.
- To develop approaches for preserving traditional art forms while promoting awareness and interest in art, encouraging individuals to consider art as a viable and fulfilling career option.

ANALYSIS AND INTERPRETATION

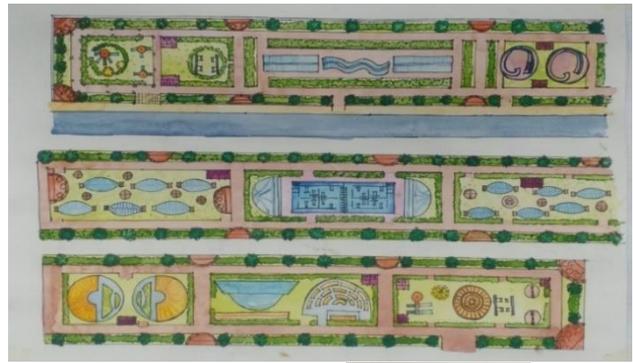
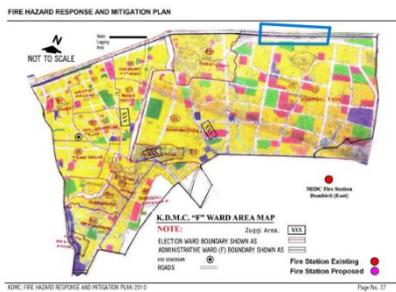
Friends and open art space urban landscape design:

The current study on urban landscape design in Mumbai highlights the development of smart cities and their effective use of wastelands to provide excellent amenities for the people. These amenities include relaxation areas like parks, entertainment areas for children, activity centers, exercise areas, sports facilities, yoga areas, and Zumba spaces. These spaces are designed to keep in mind various demographics, providing dedicated areas for young people as well as families. For example, the "Five Gardens" area in Matunga East is divided into different categories for different uses. Similarly, near the railway station in Dombivli East, the KDMC and Rotary Club provide dedicated areas for children's entertainment and activities, allowing children to enjoy themselves and explore. However, when it comes to viewing art, people in Mumbai often associate art galleries with prime areas such as CST, Kala Ghoda, Church gate and Breach Candy – all of which are located in affluent neighborhoods. While Kala Ghoda has open spaces for public art displays, and many artists use the outdoor areas of the Jehangir Art Gallery to create and display their work, access to art is limited for some people. Occasional open-air art exhibitions and festivals, such as the Kala Ghoda Arts Festival, the Thane Arts Festival and the Amarnath Shiva Mandir Arts Festival, provide opportunities for people from all walks of life with the opportunity to experience art in public spaces. These festivals often feature not only art exhibitions but also cultural events and performances,

including dance, music and drama, in open areas. Smart cities like Thakuri are now focusing on creating permanent open spaces for exhibitions and performances. These spaces are designed for activities like exercise, meditation and jogging, apart from organizing art, dance, music and drama. Such initiatives are beneficial for both physical well-being and cultural engagement, promoting a sense of community among people.

“PROPOSED TRANSFORMATION OF WASTE LAND INTO A COMMUNITY ART HUB”

We have identified a vacant plot along the 90 Feet Road in Thakuri East, located between the road and the railway track, near a large Nala. This land falls under the jurisdiction of Central Railway.

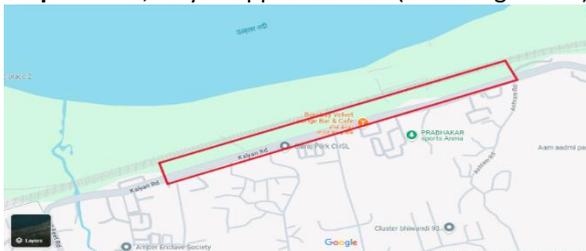


Our proposal suggests transforming this unused space into a vibrant Art Hub. The development will include facilities for art exhibitions, performing arts, and recreational activities. This Art Hub will serve as a community space for cultural engagement, creativity, and relaxation, benefiting people of all ages.

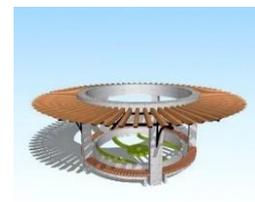
Installations Models



Architectural landscape design development
Map:1KDMC, Kalyan approved Plan (Sikta Singh 2024)



Map: 2 Art Hub Area on Location



Map:3 Final Location, between New Kalyan Dombivli, 90 feet road, and Railway Track, Waste land for Nala

ap:4, Finalize area, which use for Art Hub

Yellow line: Actual area of waste land

Red line: Actual area for Art Hub approx. 10 meters by 2000 meters

Blue Line: Water area of Nala
PROPOSED PLAN OF ART HUB





OPPORTUNITIES FOR AN ART HUB ON 90 FEET ROAD, THAKURLI EAST

Accessible Public Space:

- The art hub can provide a welcoming and accessible area for people of all ages and abilities, fostering inclusivity and community engagement.

Cultural Preservation:

- Permanent open exhibitions and performances can showcase the rich cultural heritage and local Artist of Dombivli, creating pride among residents and preserving traditions.

Permanent Open Exhibition:

- Offers a platform for local artists to display their work year-round.
- Attracts art enthusiasts, boosting foot traffic and local recognition.
- Creates a cultural identity for Thakuri and Dombivli as art destinations.

Open Performing Arts Space:

- Provides a stage for live performances, enabling performing artists to share their craft.
- Encourages community interaction and appreciation for dance, music, and theater.
- Build opportunities for collaborative art projects among local talents.

Economic Growth:

- Art-related activities can attract vendors, food stalls, and businesses, boosting local livelihoods.
- Tourists drawn by the hub can increase revenue for nearby shops and services.

Community Development:

- It brings together artists, residents, and visitors, fostering stronger social ties.
- Reduces isolation by providing a vibrant space for interaction and cultural exchange.

Environmental Benefits:

- Incorporating greenery and eco-friendly designs enhances urban aesthetics and improves air quality.
- Encourages sustainable practices, making the hub both functional and environmentally responsible.

City Branding:

- The art hub can serve as a landmark for Thakuri and Dombivli, putting the cities on the map as cultural and creative hotspots.

Educational Opportunities:

- Workshops and live demonstrations can inspire younger generations to explore art, craft, and performing arts, fostering creativity and nurturing future talent. Additionally, an educator's stall can

provide valuable information about admission opportunities in art and design colleges, guiding aspiring students toward their educational and career goals.

Urban Renewal:

- Transforming an underutilized area into an art hub revitalizes the neighborhood, attracting investments and uplifting the local urban landscape.
- The hub's development should involve local artists and residents to ensure a shared sense of ownership and long-term success.

CONCLUSION

The Importance of Open Art Hubs in the 21st Century

Open art hubs are a crucial innovation of the 21st century, fostering creativity, cultural exchange, and community engagement. These spaces go beyond physical locations, integrating planning, design, and social interaction to create dynamic environments. In India's smart city development, open art hubs play a key role in shaping vibrant urban spaces by addressing cultural, social, and environmental needs. They serve as platforms for artistic expression, performances, and public discourse, raising awareness of social and political issues while enriching daily life through music, dance, theatre, and visual arts. Additionally, these hubs contribute to economic growth and help manage challenges like urbanization and population expansion. By transforming ordinary spaces into inclusive and interactive cultural centers, open art hubs strengthen communities and promote a more connected and creative society.

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URBAN MEMORY AND SPATIAL ORDER

- ANALYZING SOCIO - SPATIAL PERSPECTIVE, DECODING THE ARCHITECTURE OF URBAN COMMONS

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ABSTRACT

BACKGROUND - In the context of a plural city like Kasargod, undergoing significant transformations, the Structuring of spatial processes is crucial, exerting profound influences on - the spatial order i.e. as a consequence of collective behaviors, thus spatializing into a form of Urban Memory - A Socio-Spatial Perspective.

CONTEXT - The interdependence between social constructs and production of space, evident in the urban layers, shaped by its existing ethnic groups and by a substantial migrating population, in a traditional agglomeration into transitioning phase. The city being strategically placed between Mangalore and Kerala, further resulting in complex spatial configuration. Despite this, historical cores persist due to communities adhering to indigenous practices, fostering a sustainable, resilient, and co-dependent organization, the notion of the Urban commons is quite segregated and forms a territorial divide. Addition to it there is a substantial migrating population to-from Dubai/UAE/Middle Eastern countries (source: local interviews), there is a clear spatial reflection on the built-environment, overriding the traditional typological configuration, amalgamating into larger land parcels. However, the city also has in-between temporal spaces that are very local to the place, as per practice and seasonal understanding by the locals - forming a Social Identity. Having the 3-processes in simultaneity – Traditional Spectrality, Transitioning Agglomeration and Sprawling Peripheries along the eco-sensitive zones.

RESEARCH PURPOSE - Here we investigate to dilute the social repulsions and help the socio-spatial neutral spaces that enhance a sense of integration through Social Equity, Inclusiveness and optimization through Community Engagement by harmonizing synergy in its space-syntax and protect the vulnerable zones from massive destruction.

CONCLUSION - In the process educate locals that encroachment leads to disaster, making it very vulnerable in losing the spatial and social integrity and loss of life - due to lack of foresight for a 'Resilient Coherent Social Structure'.

KEYWORDS: Urban Memory, Spatial Order, Socio-Spatial Perspective, Cultural Heritage.

INTRODUCTION

The urban landscape of Kasargod municipal area represents a dynamic fabric consisting of historical continuity, cultural diversity, and modern agglomerating transformation. Strategically situated between Mangalore and Kerala, the city is shaped by its diverse indigenous communities - (with 7 linguistic groups - Malayalam, Kannada, Tulu, Beary Bashe, Marathi, Konkani and Hindi and a substantial migrating population adding eventually, particularly from the Middle East, creating a complex spatial configuration.



Fig 1: Location Map – showing Kasargod between

Transition of Mangalore and Kerala, Source – 2nd Sem group work M.Arch and Authors, RVCA Bangalore 2018 Hence the social construct has a strong influence of the linguistic groups representing a mechanical solidarity (Durkheim) further identifies its indigenous nature rooted by its practices resulting as a collective behavior (derived by collective consciousness termed by Durkheim while coining the term mechanical solidarity - based on commonalities, similitude and likeness). Thus, establishing a sense of identity and cohesive behavior within their community in a rural situation. These

practices are mainly assessed based on their geographical understanding and the communities' adaptations of their social/economic activities along with lifestyle adaptations that help them to sustain within the region. It carries an immense knowledge about the environmental conditions and seasonal understanding over the years. This collective behavior thus creates a pattern that defines its social order - (within a society that maintains stability, cooperation, and predictability, enabling individuals and groups to coexist and function effectively). Into a self-organizing system that forms the social hierarchy of the region. The resistance of which causes repulsion within the groups and forms certain tensions, or it is seen as fragmentations in social or spatial structure. The urbanization process culminates in 3 major fragmentations mainly - traditional sectorial, Transitioning Agglomeration and Sprawling Peripheries. Here we research as to, how this drift the cities transition to form spatial fragmentations along its urban commons? To begin with let us understand the social construct whose pattern can be summation of the following, with a very rich traditional heritage, Kasargod culminates as a place of vibrant assortment of culture. We can break it down as follows to understand its structure and influences on its socio-spatial fabric forming a perception i.e. SSP. Some of the major influences are

COMMUNITY DIVISIONS

- Ethnic groups - as mentioned there are 7 linguistic groups

- Other than these there are tribal communities/indigenous people who are the aboriginals or indigenous people including 1. Paniyas, 2. Mala Araya's 3. Kurichiyas 4. Kattunaikkans 5. Koravans 6. Veddads and others important emphasis are needed for these as a marginal group.

Unique biocultural traits, eco-historical ties, and ethno-aesthetic traditions characterize each community. Indigenous peoples, who live in harmony with nature, possess rich oral narratives, vibrant craft practices, profound knowledge systems, and traditional rituals –Ex. Theyam that embody principles for conserving and enhancing biodiversity. Their indigenous knowledge and cultural heritage provide valuable insights into their contributions to preserving ethnoscience and promoting sustainable environmental management. This wisdom, rooted in forest and agricultural traditions, has been passed down through generations, maintaining a deep connection to their landscapes



Fig 2: Theyam - a Tradition performed by lower community people in front of temples as a mark of social inclusion in rituals and strengthening the marginal aboriginals, Source – Internet



Fig 3: Handloom small industries thriving amongst the aboriginals ex. Koravan communities which is slowly losing its existence due to no financial backing to these communities, Source – Internet

Fig 4: Traditional basket making by Aboriginals in Kasargod, Source – Internet



Fig 5: Fishing Community – Mukkavans Kasargod. Source - Internet

With the traditional background and having several tribes situated in the region with the advancement in development the tribal communities face immense marginalities of the primitive tribal groups due to

economic backwardness and exploitation

- There are religious groups that cut across linguistic based communities (based on which segregations are seen depending on behavioral patterns) for ex. Vanniya Kula who play a significant role
- Traditional Occupation and Economic Role: The Vaniya Kshatriyas are traditionally associated with the trade and distribution of oil, particularly coconut oil and sesame oil, which are integral to Kerala's culture and economy. They often operated oil mills, contributing to local agriculture and the economy by processing and marketing these essential commodities.



Fig 5: Cultural Markers showing different communities cutting across linguistic groups and ethnicity. Source - 2nd Sem group work M.Arch and Authors, RVCA Bangalore 2018

CUSTODIANS OF CULTURAL PRACTICES

The community has a deep connection to preserving traditions and rituals. Their participation in temple worship and community festivals highlights their role in sustaining cultural heritage in Kasargod.

- Economic groups - based on the occupation the practices cut religious and linguistic division
- Migrating Population - with the development of Kasargod municipal region than the rural areas bringing in opportunity for jobs that are agriculture and other economic activities

Influences of practice 1.

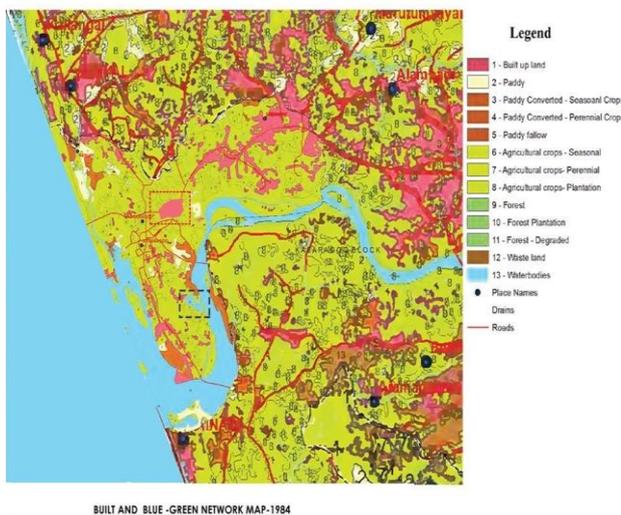
- **Cultural practices** - There is a strong identity of cultural and traditional practices which are seen as pattern formation within the region which makes it unique along the coastal and western ghats division. For example. There are koravan who are the indigenous people along Mangalore and Kasargod but the rituals like theyam (a dance performance during festivals - the dancer representing God) have similar pattern but they differ from each other, as it's called as Bhoota Kola in Mangalore, and it is called as Theyam in Kasargod. The function might be similar but differ in representation forming the region's identity.
- **Caste and Social Hierarchies:** One of the distinctive features of Theyyam in Kasargod is its inclusive nature. The performance is a space where social hierarchies and caste distinctions are temporarily dissolved. Traditionally, it is performed by members of specific castes, particularly the "Vannan" community, but the audience can belong to various castes. This unique

aspect promotes a sense of social cohesion and collective identity.

- In the tribal system of Kasaragod, the community head is often referred to as the "Mooppan" or "Karanavar", depending on the specific tribe and their traditions.
- **Mooppan:** This term is widely used among tribal communities in Kerala, including some in Kasaragod, to denote the elder or leader of the tribe. The Mooppan holds authority in decision-making, conflict resolution, and conducting rituals.
- **Karanavar:** In matrilineal systems, such as those found in certain tribal groups, the Karanavar (senior male member of the lineage) acts as the head, managing communal and family affairs.

With the traditional background and having a number of tribes situated in the region with the advancement in development the tribal communities face immense marginalities of the primitive tribal groups due to economic backwardness and exploitation due to lack of opportunities and land conflicts affecting their rights slowly disintegrating their value system and the members slowly moving out for smaller wages due to lack of education. But if there is a development backing their immense knowledge can be utilized and keep the system sustainable n participatory as default.

- **Economic practices** - geography based economic activities - With various geographical conditions the typologies of traditional economies seen in Kasargod as observed were - majorly - *Agriculture* i.e. cashew, paddy, coconut, spices, arecanut, vegetables, banana, jute, bamboo, rubber, pulses, ginger, tapioca etc



INFERENCE: MAP SHOWING BUILT AND GREEN NETWORK OF THE CITY WHERE MAJORITY OF THE PLACE IS COVERED BY VEGETATION. WHERE MORE BUILT IS SEEN NEAR MALIK DEENAR MOSQUE, CBD AREA AND AT NEW ADMINISTRATION AREA.

Fig6. Source – 2nd Sem group work M.Arch and Authors, RVCA Bangalore 2018

- **Fishing** activity along the coastal area,
- **Plantations** – coconut, banana, Bamboo, cane, jute

ENVIRONMENTAL AND GEOGRAPHY-BASED KNOWLEDGE

INFLUENCE OF AYURVEDA AND ITS PRACTICES IN KASARAGOD WITH COMMUNITY PRACTICES

Kasaragod is deeply influenced by Ayurveda, an ancient system of holistic healing. This traditional medicinal

practice, interwoven with the cultural and ecological heritage of the region, has significantly shaped the lifestyle and healthcare approaches of the local communities.

COMMUNITY PRACTICES AND AYURVEDA

1.Sacred Groves and Conservation:

Communities in Kasaragod maintain sacred groves (kavus) with a safeguarding temple which is the kavu temples, serving as reservoirs of medicinal plants. Ritualistic and spiritual practices ensure the conservation of these groves and biodiversity of species ex. snakes (with dedicated temples as known as Sarpa Kavu), indirectly supporting Ayurvedic traditions. Theyam are performed along the grove temples and open grounds by the tribal community as a ritual that projects their rights on the forest portion and land, where ritual in front of the deity is performed. Lot of conflicts are sorted here, and it is considered as final word, and no violations are tolerated by the other hierarchy of the society. The violations will be considered as rejecting the final words of God inculcating a fear of DeVine violation.



Fig 7: Representation of sacred graves - Kavu and Kavv temples. Source: Author

Other festivals that are safeguarding the species are Kumbala festival devoted towards the domestic animal's-like bulls, where the villagers have an annual event of the Bull race, Fights by cock, goat fight etc. as entertainment in the annual fairs during harvest festivals.

Theyyam is an important factor of Muchilot Kavv. All activities involve community members and others. Muchilot Bhagavathi has great influence in the community, central part of their cultural life. The deity is an inseparable part of the community.

Folk Medicine and Rituals:

Indigenous communities like the Mavilans and Koragas have their own versions of folk medicine, closely aligned with Ayurvedic principles. Rituals for healing, involving herbal concoctions and prayers, are common among these groups.

Seasonal and Dietary Practices:

The local population follows Ayurvedic seasonal regimens (Ritucharya), adjusting their diet and lifestyle to maintain balance and prevent diseases. For instance, monsoon is considered a prime season for Ayurvedic treatments to enhance immunity.

Integration in Festivals:

Many traditional festivals in Kasaragod involve the use of Ayurvedic preparations. Rituals like Karkidaka Kanji (medicated rice porridge consumed during monsoon) and herbal baths during festivals highlight Ayurveda’s influence in cultural practices.

Many of the seasonal events are operated as rituals and community members gather as a participatory event which are slowly vanishing as an ancient knowledge. There is a need for policies that safeguard the specific species and support the tribal group from falling forms the perils of developmental rapid urbanization rampaging the value of co-dependent life with the environment. Technological advancement helps in economic boost, but it has to coexist with the geographical cohesiveness for a self-sustaining resilient system.

Key Contributions of Ayurveda

- Promoting Preventive Healthcare: Ayurvedic practices in Kasaragod emphasize prevention through balanced living, diet, and seasonal practices.
- Sustainable Use of Resources: Community reliance on locally available medicinal plants reflects a sustainable approach to healthcare.
- Cultural Identity: Ayurveda is not merely a healthcare system but a part of the cultural identity of Kasaragod, connecting its people to their heritage and environment.
- Spatial identity - Provide a territorial influence on the preserved regions through mechanism of preservation - sacred groves, and biodiversity - preservation of forest animals like snakes
- Water infrastructure - the formation of the Surangas an ancient water system that acts as an ancient technique as shown in diagram to drain excess water in the terrain land having immense vegetation prone to excessive rains. This prevents torrential flooding and a system for harnessing the water for domestic and irrigation purposes.

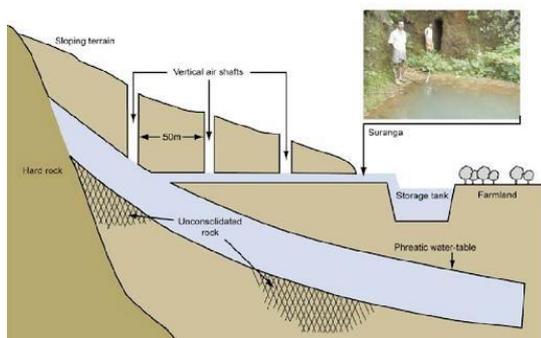


Fig 8: Section of a Suranga as a water drainage system. Source: Internet



Fig 9. Ancient Map with Spatial understanding of the landcover with infrastructure. Source: Author

- Political scenario - communism in nature and a basic tribal insecurity leading to lands issues and a sort of territorial tensions
- Social Hierarchy - Tharavad - Kasaragod social structure is represented by the classic system of Tharavad a pattern defining its social hierarchy

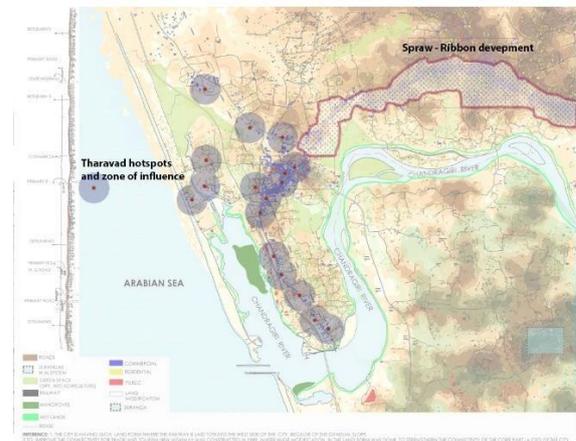


Fig 10. – Image showing Tharavad system Influence on regional level, Source – Author



Figure 11: Illustration of Tharavad system for a kadapuram cluster, source – Lavanya M. Arch 2019
 Fig 12. Plan to show Tharavad House. Source: Internet: <https://www.re-thinkingthefuture.com/case-studies/a4616-tharavadu-housing-of-kerala-a-royal-heritage/>

Significance of Tharavad system a primitive state of territoriality and sectoral behaviour There is a tendency of territoriality where the different communities adhere to rituals - practices forming an identity of their own that crosscuts economic classes within the community yet having a hierarchy that occupies the different classes with different responsibilities. As a mechanism to safeguard the rights of each class. One such system is the Tharavad system. It is prominent among Malayalis, Tulu speaking communities In Kasargod, the Tharavad system was most prominent among certain Malayali and Tulu speaking communities. The region's diverse ethnic and cultural makeup, with influences from both Kerala and Karnataka, meant that the matrilineal inheritance system existed alongside other kinship structures.

- Among Tulu-speaking communities in Kasargod, such as the Bunts and Billavas, a patrilineal system generally predominated. However, among Mappilas (Muslim communities) and some Hindu communities, the matrilineal system persisted for a longer period.
- The Mappilas also had a form of matrilineal organization, where property was often inherited through the mother's side, although this practice has been largely replaced by patrilineal inheritance due to social and legal changes.
- While the Tharavad system was historically important in shaping family dynamics in Kasargod, the changes in society over the past century have led to a more widespread shift toward patrilineal inheritance and nuclear family structures, in line with broader national trends. Nonetheless, the cultural influence of the Tharavad system continues to be felt in Kasargod, especially in the values of family cohesion and respect for elder - this is at an individual level
- At a social level - there community hierarchy has a group head called as Moppan or Karavan– who heads the ancestral house is a place of all family gathering and rituals, major decisions and conflicts are sorted and most of the rituals are began with the members of the Tharavad gathering here and moving towards the respected temples.



Fig 13. Showing Bharani Mahotsav as anchor of the fishing community where the edge and open space acts as a space for community festival celebrations for a cultural participation, source: Fig1. Source – 2nd Sem group work M.Arch and Authors, RVCA Bangalore 2018

There have been tremendous changes over time due to modernization seen by the Tharavad system, urbanization, and legal reforms (such as the Kerala Joint Family System (Abolition) Act 1976), the cultural and historical significance of these family estates remains in many parts of Kasargod and Kerala. Other territorial divisions based on economic activities occurring are observed with the geography based economic zonal patterns - fishermen community - the fishing grounds, their residential spaces which become part of their activities - for supporting fishing activity like drying area, cold storage, net making, boat making, transport and processing the seasonal catches. Agricultural zones sector wise - cash small scale industries supporting from farmlands to processing - separation - burning the nuts, deseeding, sorting and packaging.

Likewise - coffee, pepper etc

Certain parts of the city also see historic zones like the old fort - along the city centre and along the coastal zone is the Bekal zone - which is currently part of the tourism zone

ie 8: Section of a Suranga as a water drainage system. Source: Inte

Some redundant places like the old municipal corporation zones and the wholesale market zones sees a potential for new development having the abandoned spaces apt for a retrofitting with function All of these formations creating a backdrop for a urban memory that are very specific to the space whose spatial characters are prominent as a dynamic spaces with cultural practices that could be temporal in activity yet functioning as a socio spatial process. Having a very rich cultural heritage, the city is slowly transitioning towards urbanization with the municipal area having a Transitioning Agglomeration pattern.

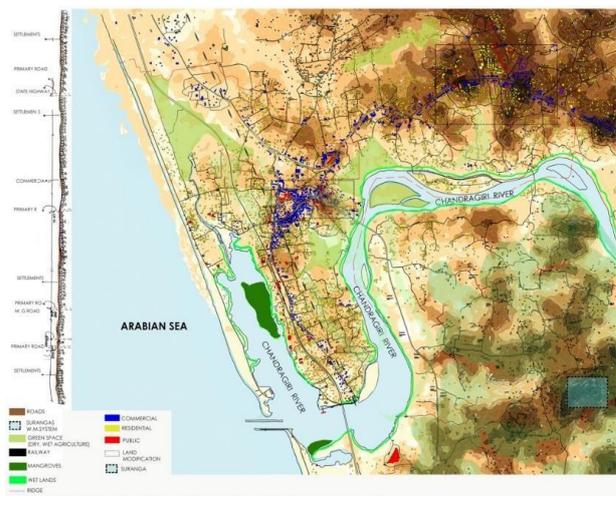


Fig 14 show spatial configuration of the city development clearly showing a ribbon development shifting from spatial understanding towards infrastructure development. Source: Author

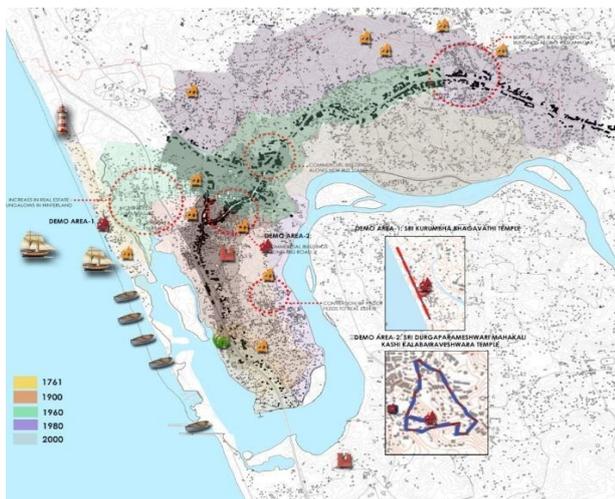


Fig 15 Spatial configuration shows some major Markers that anchor collective activities forming a spatial memory.

Illustration- demo of the procession paths as a zoomed area along temple, Source – Author

New development zones as part of agglomerating zones are observed mainly -

Kasargod fabric resembles Indian map having a peninsular feature with payasvini river on its 3 sides the heart of the city formed by main CBD - having commercial complexes adjacent to sees the street vendors occupying accommodating vegetable market, MG having large commercial built complexes stretching towards the main bus station. Fish market towards still primitive in nature occupied as street vendors.

Here we observe that the morphology of each sector has larger parcels of land with typologies



Fig 16 Spatial configuration showing some major Markers that anchor collective activities, here we demonstrate temporal activities highlighted in different colors areas that becomes a spatial Illustration anchoring the markers, Source – Author

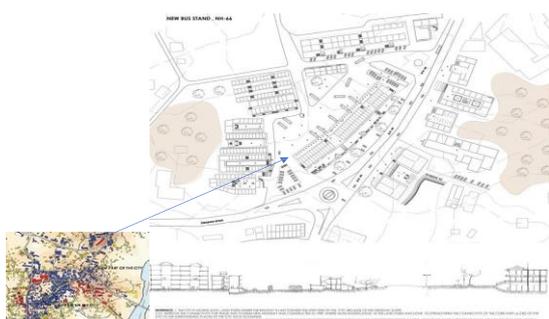
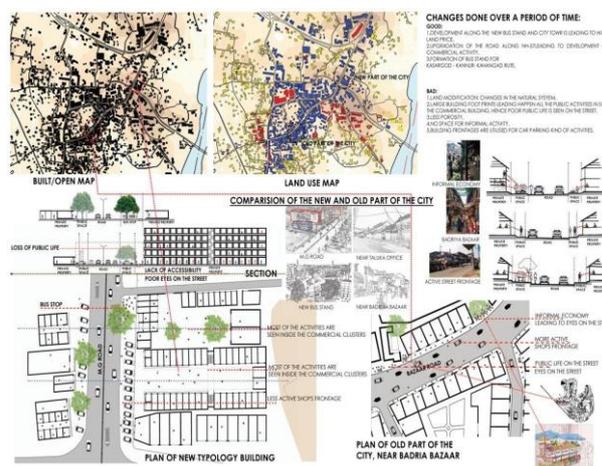


Fig 16. - showing large scale typologies along the new bus stand area. Source Author



Ex - A case study of Kasargod reveals significant transformations in its urban landscape, particularly in the transition from the old town area to the new bus stand region. These changes in spatial form, along with typological differences, provide varied experiences for users interacting with urban space. The development of these areas reflects shifts in the economic structure, influencing the built environment and creating new dynamics in how space is experienced. This evolution showcases how urban development is intricately linked to the economic order, shaping both the physical and social fabric of Kasargod.

Fig 17: showing morphological changes with capital investment where there is amalgamation of plots are seen and slowly causing redundancy of the older areas, Source: Author

City grains showing morphological changes with time

Chandragiri bridge is seen as a new addition connecting to Kanhangad - Kasargod Kanhangad highway - the new infrastructure spatially divides the zones forming a spatial fragmentation that isolates land parcels and The newer part of the city is observed as the sprawling extension

Sprawling region - since Kasargod municipal region is peninsular in nature the norther parts morph into new sprawling extension along the NH region zones forming a ribbon development with parcels of land which are devoid of the traditional aspects of the city and so we see a type of fragmentation that is losing the cultural characteristics harmonizing the spaces to resemble to any urbanizing town in the process the spatial characters slowly engulf the city impacting the traditional economies and fragment city structure and cohesiveness. This leads to Major marginalization of communities.

How to tackle these transitioning fragmentations? From Lefebvre theory of production of space - perceived space, lived space, conceived space here we see that the lived space seen in the city are not only spatial in nature but also social, environmental and geographical that makes the city sustainable. With time the gap of knowledge from traditional development to new age development puts the environment in a compromised situation and causes vulnerability to the people, its infrastructure and economy in the larger picture as seen along the eco sensitive zones in the recent flood plains.

How do we tackle it? Here we investigate to dilute the social repulsions and help the socio-spatial neutral spaces that enhance a sense of integration through Social Equity, Inclusiveness and optimization through Community Engagement by harmonizing synergy in its space-syntax and protect the vulnerable zones from massive destruction.

How do we plan to do it? In order to achieve it we have to achieve - the 2 requisites as mentioned above Social Equity, Inclusiveness and optimization through Community Engagement in 3 main ways for inculcating and synergizing production of spaces through

Conserve - the urban memory brings in a lot of spatial understanding and values of space which are tangible and intangible associations already strategies of environmental conversations firstly these zones have to be identified as eco sensitive zones and alterations have to be limited or the regions should observe a no urbanization zone into zones 1 to 3 as per its vulnerable conditions.

Under conservation strategy there is the requirement of policies like the land modification policies that safeguard the zone that fall into eco sensitive zones, land flattening has to be avoided for parceling, safeguard the water infrastructure like the Surangas, safeguard the social spaces of that are temporal in nature for a more coherent community life.

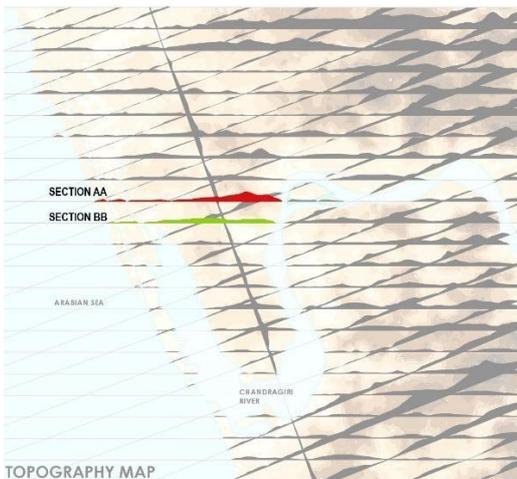


Fig 18. Topographical understanding of the city to understand the relation between the land and being built. Source: Author



Fig 19: Section AA showing the spatial location of different activities based on geography – Plantations along slope, residential along more flatter areas, low lying areas and flood plains resilient to seasonal changes, source – Author



Fig 20: Section BB showing the spatial location of different activities based on geography – Plantations along slope, residential along more flatter areas, low lying areas and flood plains resilient to seasonal changes, Source – Author

A detailed topographical understanding will give an idea of lowlands and high lands where more flood plains can be identified. Community mapping along these, some have to be identified and marginalities that lead to social repulsive zones should not be ignored while taking new decisions as in many urbanizing cities like Mangalore. Leading to the eviction of the marginal groups. This provides a sense of equitable rights to the population and also helps to preserve the environment from becoming the prey to new developmental woes.

Ex the sacred groves, kavus, and the temporal nature of the festivals should be enhanced so that it can see a developmental backing for the communities. Ayurvedic enhancement to preserve species for alternative medicine, and folklore practices have become part or the spatial temporal activity for a better urban space making it a coherent cohesive socio-spatial structure not becoming only as a part of tourism and commodifying the space into non- identifiable cottages and resorts. For ex Udaipur has a number of old havelies that form as a backdrop as a built heritage.

Modify - new modifying connecting spaces should include the flavor of place by providing opportunities for the communities for ex the Chandragiri bridge - the formation of tunnel fragments the space and creating isolated spaces. Temporal activities have to be enhanced in these vulnerable spaces where community engagement can be seen as eyes on the street for surveillance and provide new spaces for the communities as common rights

Change - there is necessity for new policies that strengthen tribal communities and vulnerable communities as the development does not include them to make rights more inclusive and equitable to vulnerable communities and look for lack of socio spatial rights

There are cultural and traditional practices which are seen as strong pattern formation within the region with a tendency to territorial behavior where the different communities identify themselves

Social order Over a period of time forms the morphological configuration along with behavioral patterns identified as memory.

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INFORMAL ECONOMIES FORM URBAN IDENTITIES UNDERSTANDING STREET VENDING AS AN EXPRESSION OF URBAN ARTIFACTS AND UNITARY URBANISM

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ABSTRACT

Urban Artifacts, as defined by Aldo Rossi, are important markers of a city's history and impart a collective identity of the city to its inhabitants. As physical manifestations of the collective experiences shared by the city's inhabitants, they contribute richly to the urban commons (Rossi, 1982). But we often prioritize the morphological dimension of such spaces over their perceptual dimension (Carmona, 2021) when determining their importance as urban commons, thus predominantly focusing on monumental buildings or large structures due to their morphological prominence. While these structures do fulfil the definition of an urban artifact, the process excludes other urban spaces of a public nature that often have significantly higher value as urban commons, as places of collective identity derived from shared experiences. A suitable set of tools to help identify these spaces is offered by the Situationist theory of Unitary Urbanism. It allows for a deeper analysis of urban commons through the concepts of Situations, Derives, Detournement, and Psychogeography, which emphasise on the individual relationships formed by citizens with their cities, and the collective experiences that these create among the citizens (Debord, 1995).

This paper uses a comparative approach to create a theoretical framework that helps broaden the understanding of urban artifacts, from static edifices to ephemeral activities, in the cities of the global south. This framework helps identify the dynamic informal economies of Street Vending as important forms of the urban commons that are not only ubiquitous in these cities but also shape some of the most identifiable places and memorable experiences of these cities.

KEYWORDS: Urban Artifacts, Psychogeography, Informal Economies, Street Vending, Collective Identities.

BACKGROUND

Aldo Rossi, in his seminal book, *The Architecture of the City*, defines an Urban Artifact as a built form that has the quality of becoming a shared and collective identity of the city. He primarily considers historic edifices and monuments as such artifacts, provided they impart a collective identity to the city. This approach helps determine the role that such urban artifacts play in our understanding of the cities that we inhabit, but it also confines the definition of urban artifacts to only large urban edifices and built structures.

Our cities on the other hand, comprise of dynamic environments that include as part of their physical form and morphology, not only built spaces but also ephemeral activities. And while these activities are fundamentally excluded from the definition of the Urban Artifact due to their transitory nature, they also often create shared experiences that due to their repetitive occurrence transcend time and remain consistent over generations.

Do such activities then become collective identities of a place?

Do they therefore also contribute to the landscape of Urban Artifacts in a city?

The answers to these questions may be elusive, but it would be prudent to consider the possibilities that they would present us in arriving at a deeper, more nuanced understanding of how we read our urban environments

and form long lasting and deeply personal relationships with our cities.

To explore this perspective further the theory of Unitary Urbanism, as outlined by the French Marxist theorist and philosopher Guy Debord, gives us a suitable set of tools. The ideas of *The Situation*, *The Derive*, *Detournement*, and *Psychogeography* put forth by Debord and his fellow theorists and philosophers of the Situationist International are useful in analysing the city in terms of the experiences that it offers to people and the intrinsically personal relationships that people form with places based on their own experiences. It is informative to observe at this point that most experiences, while personal, also involve other people and are thus shared experiences that when shared by a large number of citizens, become collective in nature and are often consistent over extended periods of time, even across generations.

These experiences are necessarily unique to individuals, but also vary for different groups of people, as they may make a person feel a range of emotions, from affirmative to contradictory to even perplexing. They may offer the perception of belonging, safety and opportunity or that of exclusion, vulnerability and persecution. These widely varied experiences may be associated with the same spaces and hence the same spaces may also be perceived conflictingly by different groups of people. The groups most significantly affected by this are also the ones that are socially most vulnerable.

Public spaces such as city streets that offer the feeling of belonging and inclusion, safety and comfort, opportunity and agency to even the city's most vulnerable citizens usually support a diversity of activities shared between equally diverse groups of people and are therefore places that form a collective identity of the city. The informal economies of any city comprise of some of these shared activities and involve some of the most vulnerable inhabitants, among them the most visible being the Street Vendors (Recchi, 2021).

Street Vendors utilise public spaces such as the city's streets as dynamic places of enterprise and in doing so enrich the quality of experiences that these otherwise static spaces offer. In doing so, they are a unique set of the city's inhabitants who contribute to creating a collective identity of the city.

This is a crucial aspect of studying public space since it highlights a gap that prevails within the current systems of thought that inform the planning of our public spaces, especially our streets.



AIM:

The research aims to illuminate the role played by street vendors in creating visually distinct and perceptually relatable urban identities of the public spaces they occupy, identities that resonate with the citizens and hence contribute richly to the culture and ethos of the city.

RESEARCH METHODOLOGY:

Theoretical Framework:

The research is informed by the theory of Urban Artifacts proposed by Aldo Rossi as an approach to understand the collective urban identities that people form of individual places within a city, as well as the theory of Unitary Urbanism elucidated by Guy Debord to identify the collective experiences that urban spaces create for people through deeply personal interactions with those spaces.

The research synthesizes these theories into a framework that is applied to three urban public spaces in Mumbai to

evaluate the magnitude of the collective urban identity that each place derives from the informal economic activities contained within it.

The research also uses the method of comparative analysis of key premises of the two theories and supplies it to Street Vending to establish the role that street vending plays in creating a collective urban identity of the places where it is practiced, by comparing examples of public spaces in other cities that have traditionally hosted street vending activities.

ANALYSIS:

This research compares four fundamental ideas of the theory of Urban Artifacts with the four key principles of Unitary Urbanism, drawing parallels between these two urban theories that were contemporaneous to each other, in period of history, the latter half of the 1960's; geographic region, western Europe, specifically Italy and France respectively; and social context, countries that had rapidly modernized after the second world war, as capitalistic economies that became consumerist societies.

The findings of these comparisons help create of a theoretical framework to study and understand cities of the Global South in the present context, since several of them are experiencing similar economic growth and social transformation, while also continuing to have a large informal urban dynamic. The research specifically focuses on the city of Mumbai and one of its most visual forms of informal economies, the Street Vendors (Recchi, 2021).

Comparing the Theory of the City and The Situation:

The concept of an Urban Artifact as described by Aldo Rossi primarily concerns itself with the form of the city, represented predominantly through its architecture. He emphasises that architecture and the built environment forms collective, universal and permanent associations with the people of the city and creates a continuity across generations due to various functional adaptations and transformations that built environment goes through, becoming a representation of the history of the city across generations.

The concept of The Situation is defined in the first edition of the journal of the Situationists International (published in 1958) as "a moment of life concretely and deliberately constructed by the collective organization of a unitary ambience and a game of events". It suggests that urban life can be enriched by the creation of deliberate instances where people collectively contribute to the experience of a moment, wherein the urban space is as much a participant in the creation of the moment as the people themselves.

These two concepts, while unique in their perspective of reading urban space, are aligned in the core understanding of the city as an entity that is significantly defined by the collective perceptions of its inhabitants. Both theories acknowledge the vital role that people play

in creating a perceived identity of a city, through their active engagement in shaping the physical form of the spaces they inhabit and in doing so, giving meaning to those spaces through the activities performed within them.

This understanding of the city and its identity is observable in the myriad associations we form with it and is especially evident in the relationships we form with its public spaces, the urban commons. In the cities of the Global South, one such key association arises from the presence of informality in our public spaces, most noticeably in the form of Street Vending (Recchi, 2021).

Public places such as transportation terminals (railway, metro and bus stations) streets having high volumes of pedestrian movement (residential streets), natural markets (central business districts) and open spaces (that serve as public recreation areas), see some of the highest footfalls of people and thus naturally attract street vendors to ply their trade in and around these spaces, with numerous vendors collectively creating Street Markets that are a ubiquitous form of the informal urban commons, particularly in the cities of the Global South. Such markets often endow a unique identity to the place itself, either through the typological associations that people form with the goods and services being traded or with the time and duration of the market activities or by virtue of the location of the place itself. An example of each scenario will be explored further to identify the specific aspects of these associations.

Comparing The Complexity of Urban Artifacts and The Derive:

To read the city in terms of urban artifacts, it is necessary to recognize that the city is constructed as a whole made of its many parts, as a gestalt that has a significance larger than the sum of its parts, where an individual component (built form) may behave as an urban artifact and have a significance of its own, it is the contributions of these individual urban artifacts that together make a larger more complex and collective identity of the city as a place. This larger identity is necessarily a collective one shared by many people, but it is also a collection of the many individual Identities of different individual urban artifacts, and in effect allows for a reading of the city as both a collective common identity and a collection of individual Identities that are concurrent and simultaneous in their existence.

Rossi insists that "...it must be understood that the city represents the progress of human reason, is a human creation par excellence; and this statement has meaning only when the fundamental point is emphasized that the city and every urban artifact are by nature collective." This is a position that is echoed by Edward Glaeser in his book "Triumph of the City" where he considers cities to be mankind's greatest invention, emphasizing on the collective a diverse nature of cities as the key factor that

affects the dynamism and vitality of urban life (Glaeser, 2011).

Thus, to have a more nuanced understanding of a city it is imperative to have ways of reading this diverse and collective character of cities at large. A method that acknowledges and establishes familiarity but also allows for discovery by encouraging an exploration of the unfamiliar.

The Situationists International offer a suitable tool to achieve this in the concept of the Derive, an unintentional and spontaneous exploration of unfamiliar parts of the city that one is drawn to and thus discover new impressions of the city within its larger identity. Guy Debord defines the derive as "a mode of experimental behaviour linked to the conditions of urban society: a technique of rapid passage through varied ambiances."

Urban street markets such as the ones observed in Bandra West along Linking Road, Hill Road and Bandra Station, or those in the Island City around the Colaba Causeway, M G Road and D N Road; while having a distinct character in terms of the goods primarily associated with them, also allow shoppers and passersby to spontaneously experience a rich diversity of shopping experiences in the form of dynamic product displays, peripatetic food vendors and seasonal variations in both the products as well as arrangement of the space.

Comparing Urban Artifacts as Art and Detournement:

The built forms that constitute the city, are also essentially a form of art at the scale of the city. This is a view put forth by the Viennese architect Camillo Sitte in his book *City Planning According to Artistic Principles* and is explored by Aldo Rossi to determine the role that urban artifacts play in the artistic value of urban spaces. While Sitte maintains that "...Only that which a spectator can hold in view, what can be seen, is of artistic importance: for instance, the single street or the individual plaza." (Sitte, 1965), Rossi counters this to emphasize that it is the form of the city in its entirety that is the urban artifact, his argument encapsulated as "We believe...that the whole is more important than the single parts, and that only the urban artifact in its totality, from street system and urban topography down to the things that can be perceived in strolling up and down a street, constitutes its totality." (Rossi, 1982)

The Situationists International define the term Detournement as "the integration of present or past artistic productions into a superior construction of a milieu." Guy Debord argues that Detournement is a means of assigning a new, contrasting meaning to an original work particularly one that has a visual nature, in essence inverting the meaning of a particular visual perception of the urban environment.

By applying the principle of *Detournement* to the definition of an urban artifact which Rossi defines in essence as a piece of art for the city itself, we are able to assign the same artistic value that Rossi associates with architecture and buildings (often of monumental scale in context to the urban space within which they exist), to much smaller forms such as the displays of wares arranged by a street vendor, and perceive these visually vibrant arrangements as art and hence as urban artifacts as well.

Using these two arguments and applying them to our study of street vending activities such as the Dadar Flower market, we clearly identify the art (its conventional meaning being inverted) in the vibrant and visually attractive display that flower vendors put up through their wares, as individual instances of artistic importance according to Sitte's argument of things that hold a spectator's attention.

On the other hand, we also realise that while individual vendors' displays of flowers attract attention, it is the collective experience of a multitude of these flower displays coming together as bursts of colour forming a dynamic collage of activity which imparts the quality of an urban artifact.

The idea of *Detournement* applied to the Dadar Flower market, helps shift the perspective of identifying urban artifacts from architecture to activities and from buildings to the spaces between them, while retaining the focus on art and the experience of art within the urban environment.

Comparing the Critique of Naïve Functionalism and Psychogeography:

To consciously look beyond the functional purpose of all urban public space and instead focus on understanding the space through exploration of the interpersonal connections made with the elements that make the space.

As Aldo Rossi elucidates in his critique of naïve functionalism in the architecture of the city focusing on the functional aspect of a space or an urban artefact impedes a deeper study of the artifact as a form.

Rossi critiques naïve functionalism classifications and argues that they "... presuppose that all urban artifacts are created to serve particular functions in a static way and that their structure precisely coincides with the function they perform at a certain moment."

He goes on to argue that instead "...the city is something that persists through its transformations and that the complex or simple transformations or function that it gradually undergoes are moments in the reality of its structure" (Rossi, 1982)

Applying the principle of psychogeography to the above argument it is clear, that when analysing the Urban Commons an overemphasis on the function of the space impedes the attempts to understand the space for the collective experiences that it offers to different individuals because it does not allow a study of the range of other activities that are also concurrently contained within the same space.

Most public spaces that constitute the urban commons within our cities do not acknowledge street vending as a function of the space and often consciously exclude it from the space by regulating against it. But the observed reality is that street vending is a direct function of the large footfalls that these spaces are designed for. Since street vending is not included as a function of such spaces, street vendors tend to be neglected in the design of such spaces. As a direct consequence, they always occupy a contested presence in these spaces, despite offering one of the most vibrant and dynamic activities performed there while contributing substantially to the individual experiences that become the collective identity of the spaces. Public spaces such as streets in residential and commercial neighbourhoods, intersections on arterial and sub-arterial roads, recreational open spaces and public transit hubs such as bus terminals and train/metro stations, all attract street vending due to the high footfall they experience, and the street vending in turn imparts a dynamic and vibrant collective character to these public spaces.

CONCLUSION

Inferences:

Andy Warhol's most well-known painting is the Campbell's soup can series, where he takes a mundane object from everyday life of an average American and places it on the venerated centre stage of the most glamorous galleries of the greatest cities, presenting it as high art. He inverted the idea of art as a unique expression of an artist's thought into an image that can form a visual relationship with its viewer simply due to its familiarity. While this was indeed an inversion of the conventional idea of art and led to the emergence of the entirely new movement of Pop art, it also commodified art into a product that had a defined monetary value that was superior to all its other values. This understanding aligns with Warhol's belief that making money was art (Warhol, 2010), and hence also completely contrarian to the idea of art as a public good that was put forth by the Situationists.

Guy Debord proclaimed that art should be brought out from the galleries and into public spaces, thus helping art realise its true value as a public good, and making it a pure expression of the urban commons. This idea of art is an inversion of the commodification of art in a consumerist society and hence rejects such commodified representations as Spectacles that do not have any inherent artistic value but rather are only a carefully cultivated but equally illusory image of society. He

therefore suggests the methods of The Situation, The Derive, Detournement and Psychogeography discussed above as ways of resisting this commodification and promoting an antagonistic new definition of art within the urban environment, by perceiving the public spaces and activities within them as the collective expressions of a shared urban identity that can only be expressed as the urban commons.

As demonstrated earlier, this idea closely aligns with the theory of Urban Artifacts propounded by Aldo Rossi, since an urban artifact is defined by the collective identity that it creates for the city through the shared perceptions of its citizens. While it does concern itself predominantly with the form of the city, this emphasis on form is due to the distinctly visual nature of the form that allows a person to intuitively relate to it and thus create a collective identity over time. The theory also intentionally refrains from over emphasizing on the role of function in defining an urban artifact as well as the urge to identify urban artifacts in isolation of the larger context of the city itself as an urban artifact. This approach ensures that the whole city is always read as an urban artifact and includes within it all the myriad spaces that contribute to the shared common experiences of its inhabitants and therefore its collective identity.

Recommendations:

This research further proffers a theoretical framework structured from both of these theories and applied to the city of Mumbai to study the it and identify those spaces within it that exemplify the characteristics of the urban commons, both in terms of the shared spaces that are accessible to all inhabitants as well as in terms of the shared activities that are intrinsic to the lives of all inhabitants.

In doing so, the research specifically identifies the activity of Street Vending as an urban activity that embodies all these characteristics, to emerge as one of the purest forms of an urban commons, in terms of the public spaces that it occupies within the most varied geographies of the city, as well as the shared activities that it offers to the most diverse range of the city's inhabitants. It is also observed to manifest in certain distinct zones of Convergence or Divergence and discernible patterns of Networks or Circuits that are intrinsically connected to and a result of the spaces where it occurs and their morphological character (Dave, 2024). These characteristics together lend street vending a high degree of readability that can be instrumental in developing a broad set of controls that can effectively regulate vending activity in a nuanced manner that is specific to the location and the type of vending as well as the needs of the people.

The research argues that since these street vending activities contribute substantially not only to the informal urban economies but also to the social vitality of the urban spaces where they are conducted, they also directly

influence the quality of urban life in terms of creating a collective urban identity that is consistent over generations and yet dynamic from day to day (Dave, 2024).

Finally the research recommends that it is favorable for cities to acknowledge street vending not only as a legitimate means of livelihood (assured by the Street Vendors, Act 2014, and supported financially by schemes such as the PM SVANidhi) but also as one of the most vibrant forms of the Urban Commons and to invest in studying street vending in greater detail using the theoretical frameworks suggested, in order to achieve a more inclusive plan for the public spaces that constitute the urban commons.

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INTERNATIONAL DESIGN COMPETITION 2025



ACA'S 11TH INTERNATIONAL DESIGN COMPETITION

ARCHITECTURE OF THE URBAN COMMONS:

Throughout the modern era, since the early 20th century, cities have been variously perceived as,

engines of economic growth “...the locus of productive economic activities and hope for the future” (M A Cohen & K S Lee, World Bank, 1991),

compared to living organisms “...as things which are born and which develop, disintegrate and die.” (J L. Sert, Can Our cities Survive? CIAM 1942),

and even been imagined as utopias composed of standardized systems and uniform patterns that “...would automatically end unemployment and all its evils” (F L. Wright, Broadacre City: A New Community Plan, Architectural Record, 1935).

These perceptions capture some essential aspects of urban life such as the economic opportunities that cities offer, the morphological growth that cities undergo, or the complex spatial patterns that cities embody. They reveal the dynamic nature of urbanism, its intricate textures and incessant evolution, driven by the vibrant variety of activities and people that create, regulate, and perpetuate the city. It is this rich urban diversity within which we situate the “urban commons”, those spaces and buildings within the city that can be shared by all its inhabitants, can accommodate all forms of social interactions, and can exemplify the city’s collective identity.

The architecture that epitomizes this quality has been described as “Urban Artifacts” by Aldo Rossi in his book “The Architecture of the City”. The quality of becoming an identity that not only resides in the minds of the people in the present but also transcends time to create an unbroken continuity through the history of the city as a definitive descriptor of the physical space itself.

The global urban context today offers numerous examples of such spaces that are open, accessible, and expressive of the city’s public values, through community insight, citizen initiative and collective identity. The designs of these spaces, while highlighting the rich diversity of the people they represent, also uniformly demonstrate the designer’s conscious restraint and sensitivity.

From the Therme Vals in Switzerland, commissioned by the village council of Vals as a hydrotherapy center and built in 1996; to the urban marketplace of Dilli Haat in New Delhi, built in 1994 to empower the craftspeople of rural India; to the Freedom Park in Pretoria, designed in 2006 to commemorate the collective history of the struggle against apartheid; examples of urban commons can be found across the world in every country.

As the world rapidly transforms and witnesses an emergent global urban identity, it is also faced with challenges, both cultural and climatic. The United Nations also recognizes these and has designed the Sustainable Development Goals framework to address the vulnerabilities faced by cities across the world.

INTRODUCTION

The 11th IDC 2024 invites the participants to analyze the city through this framework and identify an urban space that is potentially accessible to all and can support public functions beyond its intended use. These spaces then become the urban canvas onto which the participants must envision a design intervention that while remaining sensitive to the local context by forming an indelible association with the users, also creates a larger urban identity that would define the shared collective history of the city.

The competition lays strong emphasis on the need for a rigorous analysis of the selected site/area in terms of its accessibility, inclusivity, plurality, multiplicity, and resilience to climate induced vulnerability; as well as on creative design interventions that are citizen driven initiatives that create a collective urban identity.

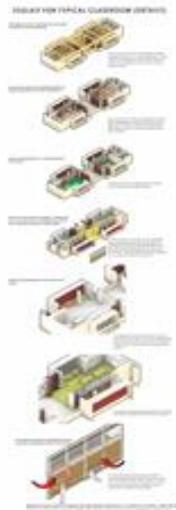
ELIGIBILITY OF PARTICIPANTS:

The competition is open to architecture students from undergraduate and postgraduate streams as well as recently graduated architects.

Internet of Things (IoT) devices, and data-driven planning tools are opening new possibilities for designing public spaces that are more interactive, inclusive, and sustainable.

JURY

- **Ar. Sanjay Mohe**
(Principal, Mindspace Architects, Bengaluru)
- **Ar. Manas Vanwari**
(Director, Vanwari Architects, Mumbai)
- **Prof. Andre Da Silva Mano**
(Lecturer on Geoinformatics, ITC, University of Twente, Netherlands)



IDC WINNING ENTRIES – 3rd PRIZE

2024 IDC2595

Tejas Aruna Bilay

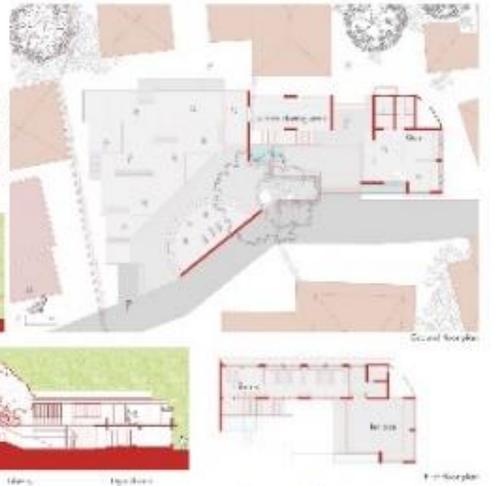
INDIA



Site 2
public and outdoor : Denaor

GYMNASIA | LIBRARY
| AMPHITHEATRE | SUNBATHING

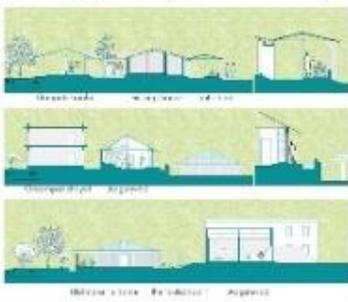
The existing dilapidated multipurpose space, previously serving as a library and gym, was renovated and redesigned to serve the community needs. History & public-amenities were preserved, parking is dedicated near the Dashaorin (ward) to which all sectors of the same town belong. In order to provide the daily activities of people, this space could be used for sun-bathing and parking - mainly occupation in Denaor.



Site 3
public and outdoor : Denaor and nearby

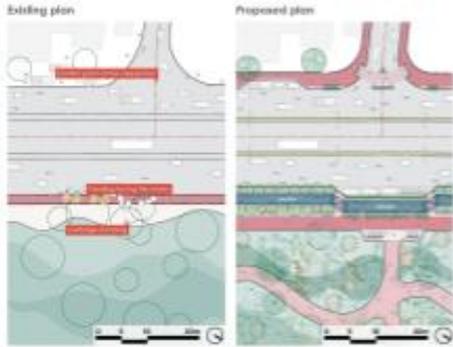
IDL SHABER'S HOUSE | THE OLD SCHOOL | ANGAWADI

The final site frame of the village's only school. The most best circumstances has provided the interaction between the old and new people. The design intent is to bring back the connection. The existing house of the old makes to extend a critical structure of which are colored to make the ground level. The design covers the pastiche and the old make a curtain to integrate the structure, giving the relationship between the existing and school site. The built area shows the space and looks the importance of this central practice. The physical is redesigned to accommodate these changes.



Port Plan B

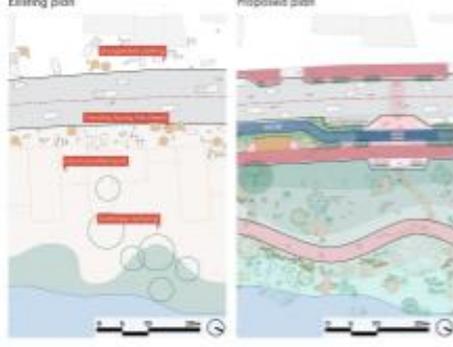
Proposed design for the Phase 2 with wide winding streets existing trees on the site and greenery. (Inlets of being water view due to elevated terrain)



Existing Situation
Viewing on building's back side and street existing tree preservation map.

Port Plan E

Proposed design for the Phase 3 with green houses retaining existing topography after the fall of the sloped settlement.



Existing Situation
Historical commercial on the edge of the lake, with shops on most street and a playground on the...



IDC WINNING ENTRIES – Commendation

2024_IDC2325

Sumuditha Premachandra

SRILANKA

Identity Oasis for Slave Island

A multi-level urban hub dedicated to nurturing the individual, cultural, and collective identity of Slave Island, bridging the artist community with the local public.

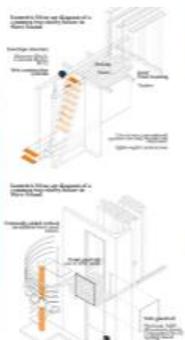
Urban redevelopment projects are a part of evolving city. In Sri Lanka these interventions are driven by nearly two main objectives. One is beautification of the city second one is to attract more investors to the urban projects. This has led to a city with deteriorating character and identity, which later leads to erasure within a society.

When it comes to Colombo East and its related developments as a hub happened in Slave Island. Creative life, diverse retail, and housing projects are few of them. And also, these recent developments has led to the diminishing Collective Identity in Slave Island's people. One of the reasons for this deteriorating identity is destruction of urban landmarks, such urban artifacts which were demolished by the sake of new developments are, De-Corps building.

As we plan urban renewal in Slave Island, we must cherish its memories. Like our personal stories, the buildings and streets hold our past. Rusted development for looks or function can erase what makes us unique. The same places stamped in our community's history to revive Slave Island's spirit for the future.

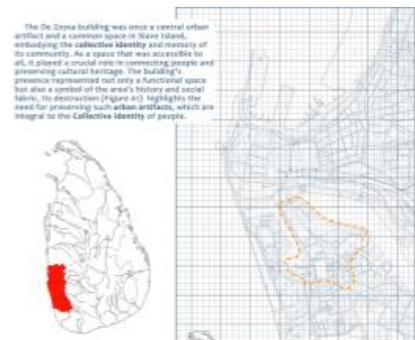


Figure 10 (Continuation of Site Study)



To retain Urban Identity and Collective memory

- 01 Organic expansion principle: Importance of considering existing patterns, historical context, functional gaps, and environmental characteristics when redefining city.
- 02 Integration of memory and identity: The memory is not merely a building, it's also as a way to tell the stories of the place of the experience to create a sense of belonging.
- 03 Heritage Preservation: Recognizing the value of architecturally significant buildings and urban heritage sites and strategies for their restoration and adaptive reuse.
- 04 Principle of Commemorative: Design spaces that celebrate the community's significant events, stories, and cultural heritage through public art, murals, and landmarks.
- 05 Linking Urban Morphology and Connectivity: Study and integration of urban morphology, street networks, and connectivity to enhance the urban fabric.
- 06 Memory Investment Strategy: To create investment areas as a statement against erasure and to encourage residents to invest in their community's identity.
- 07 Adopting "Creating Character" of Urban Memory: Study and integration of urban morphology, street networks, and connectivity to enhance the urban fabric.



Map of Slave Island, Slave Island context

Battling to save Urban Identity

Keeping Slave Island's spirit alive



Figure 11 (Images of Slave Island)

In Slave Island, an has become a powerful tool for asserting and promoting the neighborhood's identity. Amidst these unprecedented challenges, a set of social workers / artists based on Slave Island has taken necessary steps as a coping mechanism to reduce further deterioration of its character. Artists like the tattooist, a prominent figure in the community, have played a crucial role in shaping the area's cultural landscape. Through their works, they not only reflect the rich heritage of Slave Island but also foster a sense of belonging and pride among its residents (Figure 11).



Figure 12 (Images of Slave Island)



Selected site/ Area Slave-island as a whole

Site/ Area Analysis



Figure 13 (Images of Slave Island)

Much like the demolished De-Corps building, this site stands as a threatened yet vital urban artifact. Once a busy center for community interaction, it now sits abandoned, overshadowed by the expanding suburbanization in Slave Island. Positioned at a critical edge of these changes, it holds immense potential to preserve the area's collective identity while addressing modern urban needs. This project seeks to reimagine and revitalize the Slave Island's spirit.



Figure 14 (Images of Slave Island)



Figure 15 (Images of Slave Island)

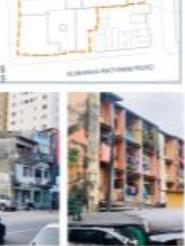


Figure 16 (Images of Slave Island)



Figure 17 (Images of Slave Island)

RECLAIMING बावखळ

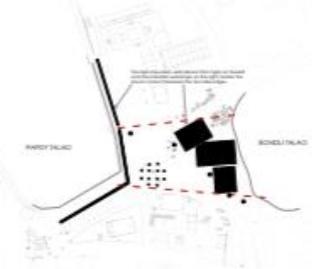
Grishma Karle & Deep Desai

Water bodies have always been the landscapes for civilizations to emerge. With life, space making, trade and agriculture happening around, dense communities grow. The Vasai-Virar district in the north of Mumbai has a history of numerous such sprouts of water bodies; natural as well as artificial.

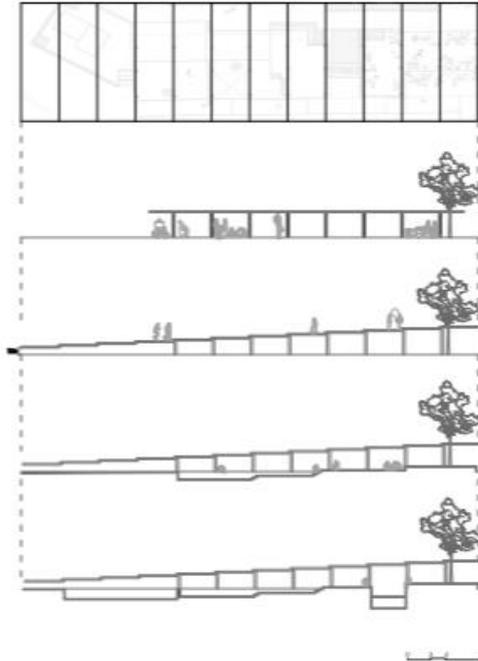
One of these lakes; Paddy Talao (or Hanuman Talao) in Vasai West was the chosen site of research and intervention. With a dense settlement around consisting of one of Vasai's largest local market, a Ram mandir and its trust, a market building that was turned into a shelter for the homeless, etc the site offered one a pause to halt and observe how communities work and claim public spaces around. An attempt to intervene was made, thinking through one of the observations and was developed into a suggestive design. The intervention as a landscaper tries to merge the water bodies and the existing landmass. The accessible roof and the step down of the kundis create palette of scales, allowing a larger span of visual connect with both the lakes.



A tall boundary wall visually integrates the site with the adjacent area.



WATER FLOW DIAGRAM (POST-DESIGN)



STRUCTURAL GRID
The spaces on site are systematically divided into smaller planes of uniform distance of 5m.

STRUCTURAL GRID | COLUMNS
The spaces are well defined from within the column placement to ensure structural stability.

GROWING ROOTS
The roots gradually start to step up towards the center of the space (the water tank), making the earth an equally habitable space.

RESOLVING PLINTE
The plinths respond to the shift, submerging in the ground creating habitable spaces underneath while also creating a visual distribution of any point on site to other.

STEPPING IN | BAWNDI, KUNDI & CHANNELS
Plinths double (deeper) at some points on site creating naturalistic channels. With water raised well above the site as a gesture of welcoming the fact connection between the two lakes.

2024_IDC2596



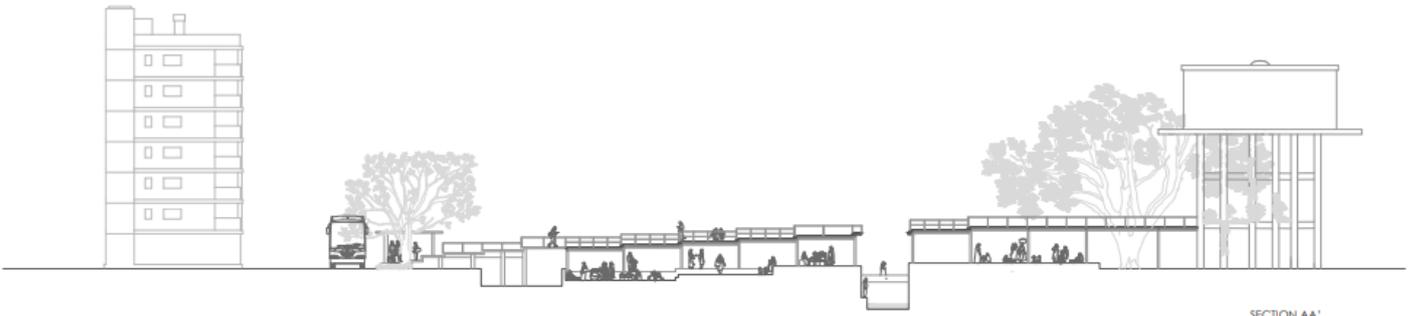
DESIGN INTENT:
Oral histories of the site, Paddy Talao in Vasai West reveal to one a thought that occurred in 1972 which prompted the local government to (re)claim land and create a bazaar, in order to provide space for infrastructural growth to happen. In this process one sees the Paddy Talao, which historically was a large water reservoir that provided for the paddy farms around, disintegrate into two parts: Paddy Talao and Bhandi Talao. The site of intervention is this very narrow stretch of land or the bazaar which in present day caters to a varied community of people who make a livelihood from in and around. As one moves across the site, the presence of water bodies on either edge can be felt but seldom seen as a high boundary wall and a series of industrial workshops hinder the flow. This is from where the concept emerges, that how can a gesture strengthen this full sense of two water bodies through a crafted visual connect. With the idea of dissolving what was claimed and softening the harsh edge condition in created times, the design uses plinths, roofs and the introduction of bawndi/kundi, as an architectural response to establish a sense of connection and visual porosity across. A conscious design move is made of submerging built heights to merely 3.5m above the ground in order to let the space breathe. This move then informs the plinths below as the ground starts submerging on the edges eventually forming bawndi/kundi, that let the water claim back what it now lost.

- LEGEND**
1. Kull and tower market
 2. Public space
 3. Public space
 4. Ram Mandir
 5. Ram Mandir
 6. Community garden
 7. Community garden
 8. Market space
 9. Market space
 10. Market space
 11. Shelter for homeless
 12. Shelter for homeless
 13. School
 14. Community gathering space
 15. Ground water use
 16. Bawndi/kundi
 17. Community lot
 18. Market
 19. Public space
 20. Market lot office

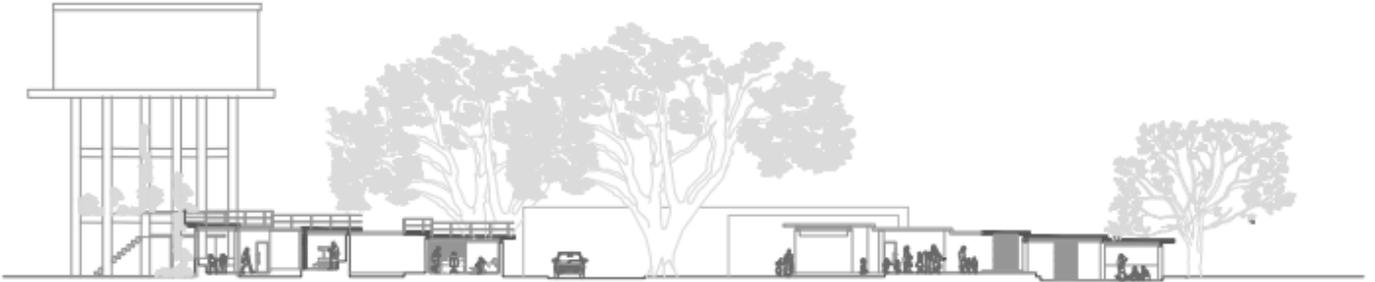
GROUND FLOOR PLAN

0 5 10 15 20

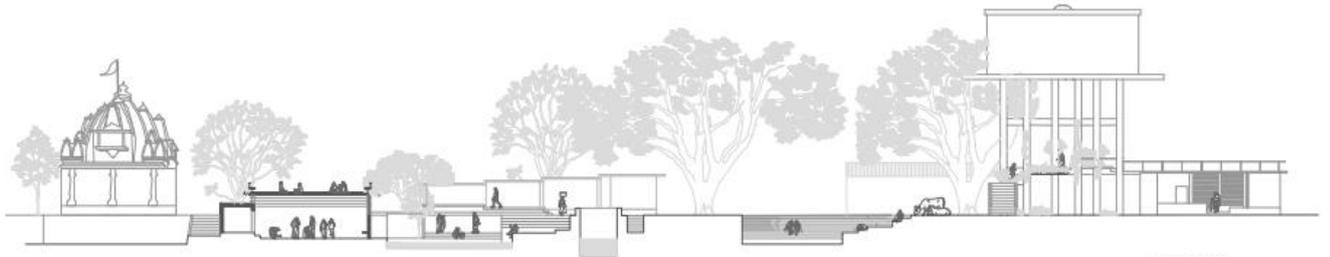
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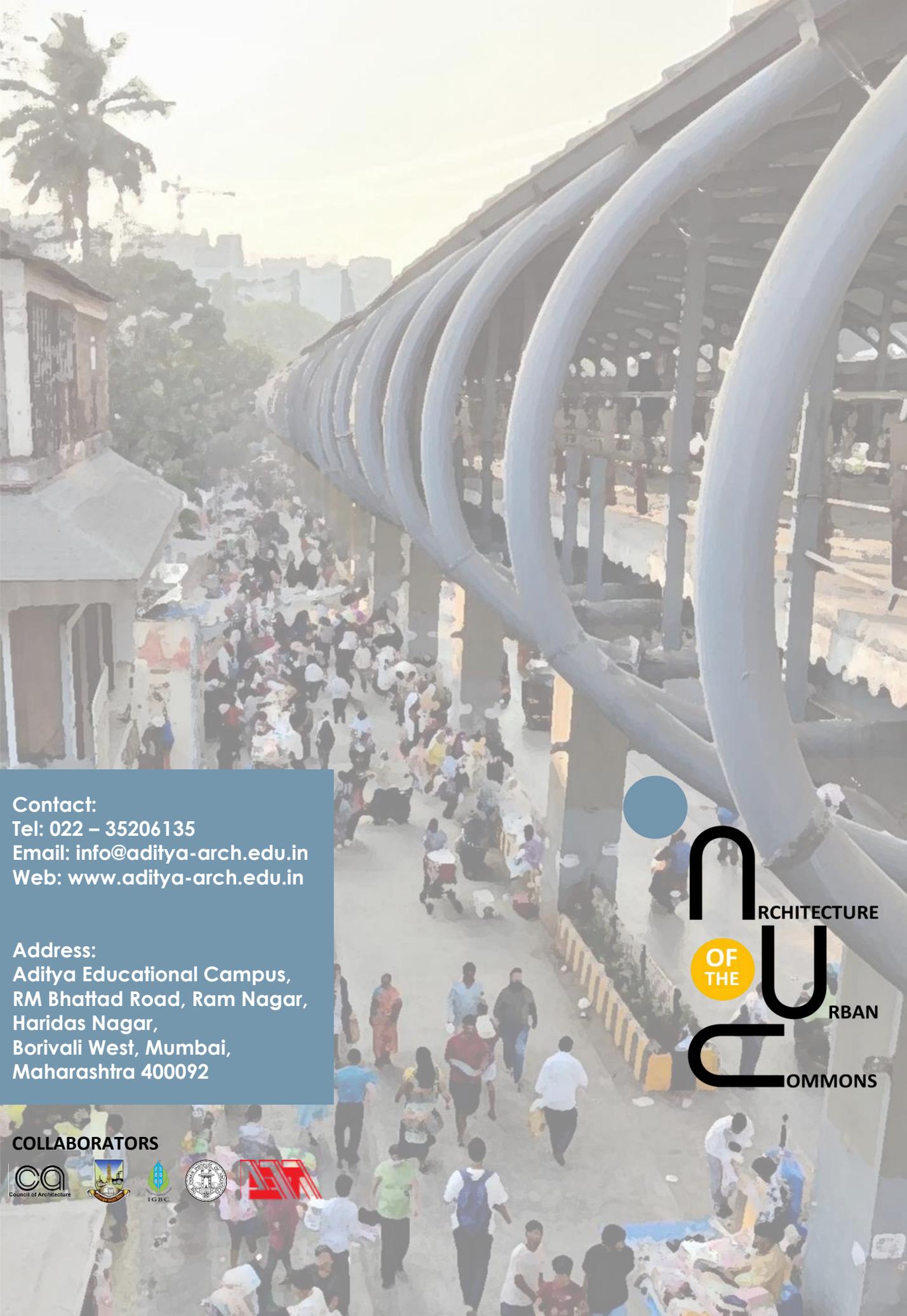
SECTION AA'



SECTION CC'



SECTION BB'



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