# Co-Designing Public Spaces: The Role of Community Engagement in Shaping Urban Landscapes in Nigeria

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*Abstract: Public spaces are major subsets of an anthropological settlement, which provide vistas for social interaction, cultural transmission, and economic enterprise. In Nigeria's rapid infrastructural development, the planning of public spaces seems to overlook the various needs of the communities that will use such spaces. This study focuses on communities' involvement in the birthing of public spaces through participatory design in Nigeria. It focuses on how these participatory processes can influence the urban landscape towards creating a more inclusive, culturally sensitive, and ecologically sound human habitat. A mixed-methods research design deployed a combination of case studies approach, surveys, closed-ended interview sessions and a participatory workshop at the Co-Designing Publics International Symposium. The qualitative component provided in-depth insights into the experiences, perceptions and cultural contexts of community engagement in public space design while the quantitative components offered measurable data on the impact of community involvement on the functionality, accessibility and cultural relevance of these spaces. Part of the findings identified the need for communities to play active roles in the design process of public spaces as they will ensure that public spaces will better express local cultural identities, cater to users' social and economic needs, and advance a sense of ownership and responsibility among residents. The research identified major hindrances to community involvement such as power differentials, lack of resources, and cultural heterogeneity, which could hamper the prospects of a participatory design dispensation. Recommendations for improving community participation in public space design in Nigeria identified strategies, such as capacity building, inclusive decision-making, and the incorporation of culturally appropriate techniques. Through better participatory processes, Nigerian cities can create urban environments that are not only utilitarian but project an expression of the rich, interwoven cultural tapestry of its people.*

**Keywords:** Anthropological Settlement, Cultural Tapestry, Human Habitat, Participatory Design, Urban Landscape

## 1. Introduction

Public spaces are the epicentre of any anthropological settlement's social, cultural and economic dispensation (Joan & Julián, 2016). Vahid Bigdeli Rad et al (2013) posit that they are the zones where community life unfolds. They serve as lines of force for social interaction, societal expression, profitable engagements, and leisure. In Nigeria, where urban developments are expanding rapidly due to population growth and rural-urban migration, the design and management of public spaces have become increasingly necessary. However, the progressive mutation of these spaces often fails to adequately take cognizance of the diverse needs and aspirations of the residents (Tim, Taner, & Steve, 2011). This oversight leads to the creation of untapped, poorly maintained, or disconnected

spaces. In most cases, these spaces are alienated from the communities they are meant to serve.

In response to these challenges, the concept of community engagement in the design process has gained attention towards creating more inclusive and contextually relevant public spaces (Deep, 2023); (Anthony, 2023). According to Mark Evans et al (2016) participatory or co-design approaches and community engagement must involve the joint partnership of proximal settlers, stakeholders and users in the design and planning of public spaces. This process, not only helps to ensure that the resulting spaces meet the needs of immediate users but also fosters a sense of ownership and stewardship among community members, thus, contributing to the long-term sustainability of the built-up space.

Nigeria presents a unique context for exploring the role of community engagement in urban design. The country's significant cultural diversity, economic disparities, and varying levels of citification are unique across its regions (Raheem, Oyeleye, Adeniji, & Aladekoyi, 2014). These factors pose both challenges and opportunities for implementing participatory design processes. For instance, traditional forms of community governance and local knowledge can be powerful assets in the design process. These may, however, conflict with formal urban planning frameworks or be sidelined by top-down decision-making practices. Furthermore, vulnerable groups, whose concerns are critical in shaping equitable and inclusive public spaces could be disparaged due to the rapid pace of urban sprawl (Obinna, et al., 2021).

These daunting challenges are what this study is designed to proffer solutions. This will be done by exploring the extent to which the role of community engagement will go, towards re-orientating urban landscapes in the country, focusing on co-designed public spaces. It examines how participatory processes influence the creation, use, and sustainability of public

schemes in selected Nigerian cities, vis-a-vis emphasis on the challenges and opportunities presented by the local context. By analysing case studies from selected Nigerian cities, the paper seeks to understand how community engagement can lead to more inclusive, culturally relevant, adaptable and sustainable urban niches. Furthermore, the study highlights the barriers to effective participation and offers recommendations for enhancing participatory practices in the Nigerian built-up space.

By doing so, this paper will contribute to the broader discourse on participatory urban design, offering insights that are relevant, not only to Nigeria, but also to other rapidly developing settlements across the globe. As the world's cities grapple with the challenges of urban growth, the lessons from Nigeria's experiences with community engagement in public space design can inform efforts to create more just and livable urban environments.

**a. Problem Statement, Aim and Objectives**

The creation and development of public spaces in the country often overlook the input of residents, resulting in spaces that, most times, fail to meet the needs and preferences of their users (Simon, John, & Mattias, 2020). This severance leads to underutilized and neglected urban lines of force, contributing to social and environmental upheavals. This study aims to probe the role of community engagement in the co-design process, exploring how inclusive practices can augment the functionality, accessibility and cultural relevance of public spaces in selected Nigerian cities.

The aim focuses on exploring the impact of community engagement on the co-design of public spaces in Nigerian cities, with a bullseye on how inclusive design practices can enhance the usability, accessibility and cultural significance of urban environments.

The objectives include:

a. Analyse the current operations of community engagement in the design and development of public spaces in Nigerian cities,

b. Assess the effect of community input on the functionality and accessibility of public spaces,

c. Evaluate how co-design processes can amplify the cultural relevance and social inclusivity of urban landscapes,

d. Propose blueprints for integrating community engagement into the planning and design of public spaces in the country.

## 2. Co-design Policies in the Nigerian Built Space

In Nigeria, co-design is a developing practice (Rob R. , 2020). While working blueprints and strategies exist to support community involvement in urban planning and development, the ratification of co-design principles is still nonage. This study provides an outline of the current policies related to community engagement.

The National Urban Development Policy (NUDP) promotes sustainable urban growth and highlights participant involvement. (Salisu, 2019). It recommends integrating local community viewpoints into urban planning and development procedures. Although the NUDP encourages community input, it lacks specific mandates for co-design (UN Habitat, 2024). The policy sets a robust structure for commonality engagement but does not delineate the processes required for collaborative project participation and decision-making.

The Urban and Regional Planning Act (URPA), was established by Decree No. 88 of 1992 (Sani, 2022). It furnishes the legal basis for urban planning in Nigeria. It mandates public dialogue during the planning of citified projects, requiring that communities should partake in the planning process (Alshahibi, 2005). While URPA supports public consultations, it does not require active community involvement in the co-design of spaces (Kayom, Sengendo, & Mukiibi, 2015). The focus is on discourse rather than ensuring that community feedback impacts design outcomes.

The Lagos State Urban and Regional Planning Law (2010) mandates public discussion for notable urban projects (Adeyemi, 2010). It includes provisions for community study sessions and meetings to gather input on planning inventiveness. This law facilitates community input through consultations but does not explicitly require co-design (Heinrich, 2024). The extent of community influence on design varies, and the law does not uniformly enforce collaborative design practices across all projects.

The Sustainable Cities Program, initiated by UN-Habitat, centres on participatory urban planning in Nigeria (UN Habitat, 2005). It supports projects in pilot cities that incorporate community feedback into the design process. The program has introduced co-design principles in specific projects, such as informal settlement upgrades. However, these enactments are not yet part of a national policy framework and are restricted to project-specific initiatives.

Local Community-Based Organizations (CBOs) and Non-Governmental Organizations (NGOs) are central to facilitating community participation in urban planning (Gabriel, 2003). They often collaborate with government bodies to incorporate community input into public space projects (Udeuhele & Offor, 2022). These organisations are crucial in advancing co-design practices by engaging communities in the design process. Their work varies in impact and scope, highlighting a grassroots approach to co-design that complements formal policies.

While these policies may seem impactful on co-design, Nigeria still lacks comprehensive national policies that mandate co-design (Elem, 2016).

Existing frameworks primarily focus on consultation rather than ensuring active community involvement in all phases of design delivery. The application of community engagement policies varies across different states and local governments. Patricia Aelbrecht et al (Patricia & Quentin, 2018) posit that this inconsistency can lead to variable outcomes in public space design and limits the effectiveness of engagement efforts. Local governments often face resource limitations that hinder effective community engagement and the implementation of co-design practices (Obiomah, 2023). This includes financial, technical, and capacity-related challenges.

Formalizing co-design policies offers significant potential for creating more inclusive and responsive public spaces (Errin, 2024). By building on existing frameworks, learning from successful initiatives, and leveraging the role of civil society, Nigeria can advance community engagement in urban design and improve the quality of public spaces across the country.

## 3. Theoretical Framework

The theoretical framework for this research on co-designing public spaces through community engagement in Nigeria draws upon several key postulations and notions, including Participatory Design Theory, Social Capital Theory, Place Attachment Theory, and Urban Governance Theory. These architectures provide a foundation for understanding how communal design processes and community involvement can shape more inclusive, functional, and culturally resonant urban terrain.

### a. Participatory Design Theory

Participatory Design Theory forms the cornerstone of this research. Emerging in the Nordic countries during the 1970s, this postulation advocates for the active involvement of all stakeholders—especially end users—in the planning process (Interaction Design Foundation, 2024). In the context of communal spaces, participatory design highlights that local communities, as the primary users of these areas, should have a significant role in shaping their abode (Shahab, Hossein, & Hamid, 2022). This approach, not only communizes the design process, but also guarantees that the results are more disposed to the needs, values, and proclivity of the end users. Participatory Design Theory objects to the traditional top-down approach to urban planning, advocating instead for a bottom-up process where community voices are central to decision-making (Teodoro, Nicola, Alejandro, Francesco, & Roberta, 2020).

### b. Social Capital Theory

Social Capital Theory contributes to understanding the role of community engagement in the co-design process (Interaction Design Foundation, 2024). Social capital refers to the nexus, connection, and confidence that exist within a community, enabling collective action and collaboration (Claridge, 2018). When applied to the design of public zones, this theory suggests that spaces co-created with commonality input are more likely to foster social interplay, build stronger community ligature, and enhance a sense of belonging among users. Social capital generated through these interactions can lead to more resilient and vibrant urban communities (Nyamari, 2024). This theory underscores the importance of building trust and collaboration between urban planners, designers, and the community to achieve successful outcomes in public space design (Jacinta, Billie, Lisa, & matthew, 2012).

### c. Place Attachment Theory

Place Attachment Theory explores the emotional bonds between people and specific places (University of Washington, 2024). This theory is particularly relevant in the context of public spaces, as it posits that when individuals or communities are involved in the design process, they develop a stronger attachment to the place of the space (I, W, & D, 2017). Such attachment is crucial for the long-term sustainability and maintenance of public spaces, as engaged and

invested communities are more likely to take ownership and care for these areas. Peter Ellery et al (2019) posit that by involving communities in the co-design process, urban planners can create spaces that resonate more deeply with the cultural and historical identities of the users, fostering a sense of pride and connection.

### d. Urban Governance Theory
Urban Governance Theory inspects the processes and fabric through which built-up spaces are managed and regulated (Abdel-Razek, 2021). It underscores the importance of inclusive governance operations that involve multiple stakeholders, including local communities, in decision-making procedures. In the context of public space design in Nigeria, Sean Patrick Braley et al (2022) posits that this postulation harps on the need for a communal governance approach where communities are not merely passive beneficiaries of urban design but active partakers. This involves shifting from an amalgamated, government-led planning model to one that is more decentralized and participatory, allowing for diverse voices to shape urban landscapes (kai, Yue, Yongbiao, & Ye, 2023).

### e. Integration of Theories
By integrating these theories, this research aims to develop a comprehensive understanding of how community engagement in the co-design of public spaces can lead to more functional, accessible, and culturally relevant urban landscapes in Nigeria. Participatory Design Theory provides the methodological framework, while Social Capital and Place Attachment theories explain the social and emotional benefits of community involvement. Urban Governance Theory, on the other hand, offers insights into the structural and institutional changes necessary to facilitate effective community participation.



**Figure 1**: Effective Community Participation. Source: Authors' Fieldwork; 4th September, 2024.

Together, these theories create a robust framework for analysing the role of community engagement in shaping urban public spaces and offer practical strategies for integrating these insights into urban planning practices in Nigeria.

### 4. Methodology
The methodology employed a mixed-methods approach, combining qualitative and quantitative research techniques. This was necessary to appreciate the nexus between community involvement and the design and effectiveness of public spaces in urban Nigerian landscapes.

## a. Research Design:

The research design adopted featured a combination of case studies, surveys, interviews, and participatory workshops. The qualitative components provided in-depth insights into the experiences, perceptions, and cultural contexts of community engagement in public space design, while the quantitative components offered measurable data on the impact of community involvement on the functionality, accessibility, and cultural relevance of these spaces.

## b. Case Studies:

Case studies herein reported were culled from four geopolitical zones of the country – southeast (SE), southwest (SW), south (SS) and northeast (NE). This was aimed to determine the nexus of the performance of public space projects and community engagement.

## Case Study 1: Aladinma Shopping Mall, Owerri, Imo State.

Location: Plot 1-3, Lake Nwaebere Street, Aladinma Housing Estate, Owerri, Imo State.

Concessionaire: Arc. Victor Onukwugha (Bauhaus).

Building Type: Retail (non-freestanding) (Longstreth, 1997).

Area: 26,533.477m$^2$

Narration: Aladinma Shopping Mall is a commercial hub located in Owerri, the capital city of Imo State, Nigeria. Commissioned by the former governor of Imo State, Ikedi Ohakim, it serves as a prominent shopping and business destination in the city, providing a range of retail, dining, and entertainment options. The mall's central location in Aladinma makes it easily accessible to residents and visitors. It offers a variety of stores, from fashion outlets to grocery stores, and catering to the community's needs. The shopping mall is moribund at the moment.



**Figure 2**: Satellite map of Aladinma Shopping Mall. Source: https://earth.google.com/web/search/aladinma+shopping+mall/@5.49798929,7.04645626,69.612107a,494.21590479d,35y,0h,0t,0r/data=CiwiJgokCSC4ZllpBRZAEUH2hauu5RVAGeyIYjb7OxxAIWiwuk2WJRxAQgIIAToDCgEw
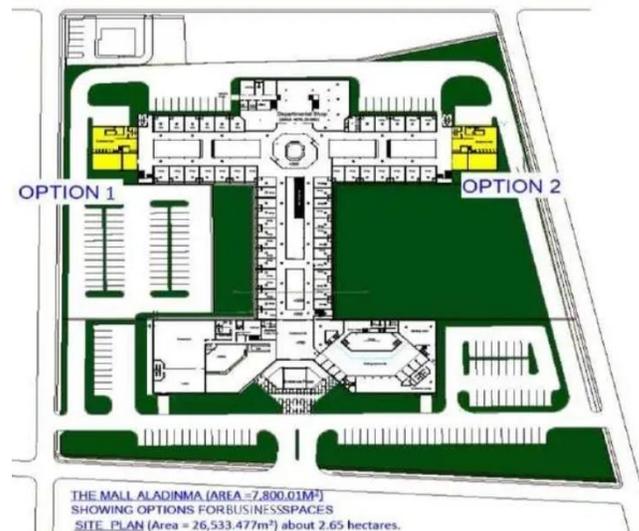


**Figure 3**: Ground floor plan of Aladinma Shopping Mall. Source: Archival Records of Concessionaire.



**Figure 4**: Aerial perspectives of Aladinma Shopping Mall. Source: Archival Records of Concessionaire.

**Figure 5**: Approach view of Aladinma Shopping Mall. Source: Archival Records of Concessionaire.



**Figure 6**: Atrium concourse of Aladinma Shopping Mall. Source: Archival Records of Concessionaire.



**Figure 7**: Deplorable state of Aladinma Shopping Mall. Source: Authors' fieldwork; 5th September 2024.



**Figure 8**: Current status of the entrance and wall finishes of Aladinma Shopping Mall. Source: Authors' fieldwork; 11th July 2024.



**Figure 9**: Current state of the general scenery. Source: Authors' fieldwork; 6th September, 2024.

## Case Study 2: Millennium Park, Abuja
Location: 5 Usuma St, Three Arms Zone, Abuja 900103, Federal Capital Territory

Design Team: Arc. Manfredi Nicoletti.

Building Type: Special-purpose

Area: 601,367.23m$^2$

Narration: Located near the Presidential Palace and other key landmarks, Millennium Park covers an expansive area, featuring lush greenery, well-manicured lawns, and winding pathways (Sabi, 2024). The park is divided by the Wupa River, with one side designed to showcase Nigeria's natural ecosystems, including its savannah and rainforest environments, while the other side emphasizes a more formal and geometric layout. The combination of natural and man-made elements reflects the balance between urban life and nature, making it a popular spot for relaxation, picnics, outdoor activities, and public events.



**Figure 10**: Satellite map of Millenium Park, Abuja. Source: https://earth.google.com/web/@9.07297469,7.5010082 9,485.30182107a,1746.75418768d,35y,285.15764822h,0t,0 r/data=CgRCAggBOgMKATA



**Figure 11**: Entrance from Standard Car Wash and POS axis. Source: Authors' fieldwork; 5th September 2024.



**Figure 12**: 4th December 2003 - Commissioning of the Millenium Park by Her Royal Highness, Queen Elizabeth II of England under the then president, Olusegun Obasanjo. Source: Authors' fieldwork; 5th September 2024.

**Figure 13**: Proximal unplanned settlement at the entrance from Shehu Shagari Way. Source: Authors' fieldwork; 5th September 2024.



**Figure 14**: Concrete concourse with low-level reservoirs: Authors' fieldwork; 5th September 2024.



**Figure 15**: Tourists enjoying the scenic views of the park. Source: Authors' fieldwork; 5th September 2024.



**Figure 16**: The Millenium Park, Abuja showing planned and unplanned settlements. Source: Authors' Fieldwork; 6th September, 2024.

## Case Study 3: Unity Housing Estate, Bauchi Town, Nigeria

Location: Dungel 740110, Bauchi.

Design Team: Terraquest Development Company Limited

Building Type: Residential

Area: 306,288.79m$^2$

Narration: Bauchi state government partnered with a private company called Terraquest Development Company Limited to deliver 1,000 units of low-cost housing intended for civil servants in three phases. The first phase consisted of 288 housing units, the second phase consisted of 171 housing units, and the third phase consisted of 112 housing units (Sanda, Natalia, & Maren, 2016). The project was based on a design-build-finance (DBF) model. Terraquest would be responsible for designing, financing, and constructing the project. The state government would provide the land, payment for the final works completed, and enabling infrastructure and serve as a guarantor for the financing acquired by Terraquest. The state government would also assume ownership of the housing units upon completion of the construction. Federal Mortgage Bank of Nigeria (FMBN) sponsored the project (World Bank Group, 2024).
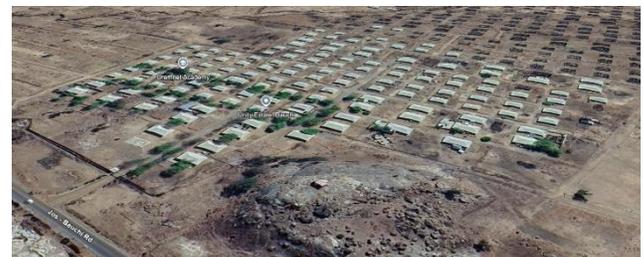


**Figure 17**: Unity Housing Estate, Bauchi Town, Nigeria. Source: https://earth.google.com/web/search/unity+housing+estate+bauchi/@10.26896683,9.6983671,653.23901677a,916.97768123d,35y,104.88470452h,0t,0r/data=CiwiJgokCf1q_hJ9JCJAEf3tJ9TaEiJAGRwYsl5uHx5AlQbTpxXA-x1A

**Figure 18**: Entrance to the Unity Housing Estate, Bauchi Town, Nigeria. Source: Authors' Fieldwork.



**Figure 20**: 3-bedroom detached units of the Unity Housing Estate, Bauchi. Source: Authors' Fieldwork.
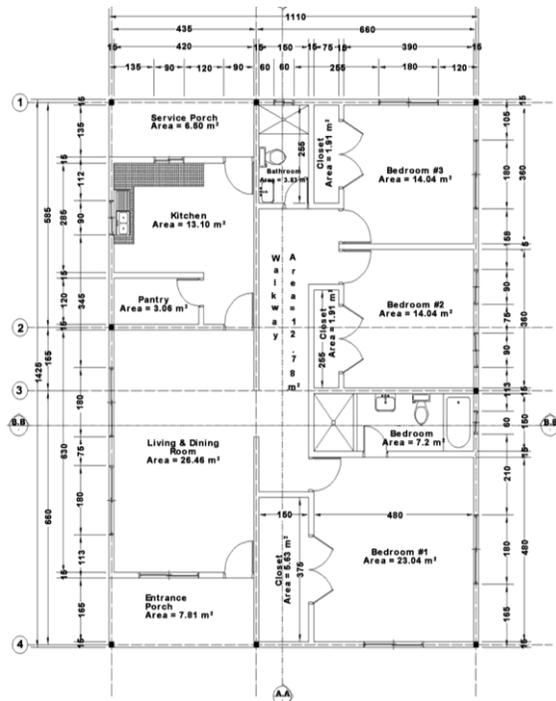


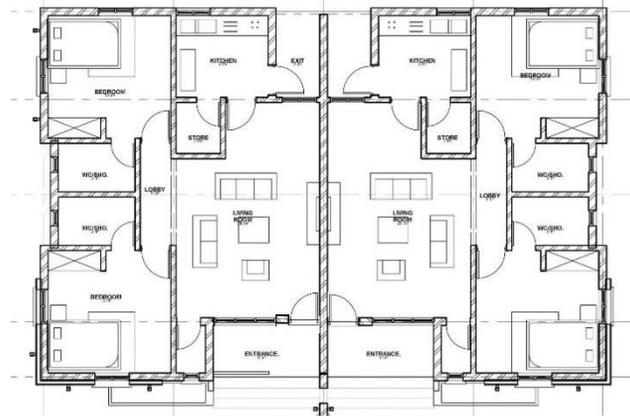**Figure 19**: 3-bedroom detached units of the Unity Housing Estate, Bauchi. Source: Authors' Fieldwork.



**Figure 21**: Floor plan of 2-bedroom semi-detached units of the Unity Housing Estate, Bauchi. Source: Authors' Fieldwork



**Figure 22**: 2-bedroom semi-detached units of the Unity Housing Estate, Bauchi. Source: Authors' Fieldwork.

**Case Study 4: Ogheye Floating Market.**
Location: Warri North Local Government Area, Delta State.

Design Team: Maybedik Nigeria Limited.

Building Type: Commercial

Area: 11,023.55m$^2$

Narration: The Ogheye Floating Market in Delta State, Nigeria, is a traditional floating market located within the Niger Delta region, where communities heavily rely on waterways for transportation and commerce. Like many floating markets in riverine areas, the Ogheye Floating Market evolved organically to meet the unique geographic and economic needs of the local population. The market operates on water, with traders selling various goods, including food, crafts, and household items, from canoes and small boats.



**Figure 23**: Satellite Map of Ogheye Floating Market. Source: https://earth.google.com/web/search/ogheye+floating+market/@5.7810941,5.07239877,0.69054125a,617.1432 1665d,35y,45.66889917h,0.25457777t,0r/data=CiwiJgok CRSdg7mBkiRAEZqQTurZgCRAGVroEy29ayNAIYrvZ4TlXy NAQgI



**Figure 24**: Aerial view of the Ogheye Floating Market, Delta State. Source: Authors' Fieldwork.



**Figure 25**: Approaching the docks of the Ogheye Floating Market, Delta State. Source: Authors' Fieldwork.
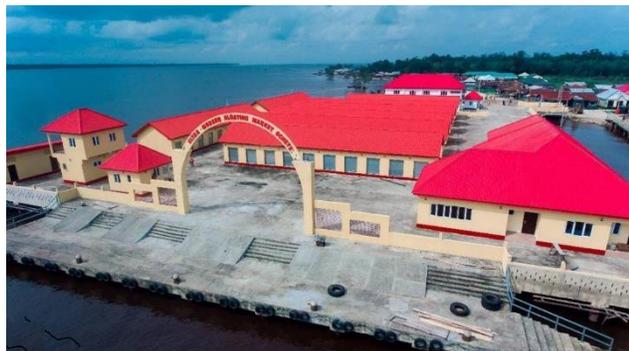


**Figure 26**: Panoramic view of the Ogheye Floating Market, Delta State. Source: Authors' Fieldwork.



**Figure 27**: Areas around the market master's office. Source: Authors' Fieldwork.

**Figure 28**: The Ogheye riverine community is close to the Ogheye Floating Market, Delta State. Note the sub-structural piers supporting the main deck of the market. Source: Authors' Fieldwork.

## c. Surveys and sample size:

Surveys were administered to fifty (50) potential respondents during case studies of the selected public spaces, including community members, residents, business owners, and frequent visitors. These surveys featured posers that elicited responses on:

i. Demographics,
ii. Awareness and understanding of public space designs,
iii. Community engagement,
iv. Satisfaction with existing public spaces,
v. Challenges and barriers and
vi. Recommendations and future involvement.

Finite population correction was adopted to calculate the adjusted sample size which will inform the number of surveys that will be collated for assessment (Jeff & Jim, 2023).

Initial sample size calculation:

Z = 1.96 (for 95% confidence)

p = 0.5 (on the assumption of maximum variability)

E = 0.05 (5% margin of error)

$$n = \frac{(1.96^2).\,0.5.\,(1 - 0.5)}{(0.05^2)}$$

$$n = \frac{(3.8416).\,0.25}{0.0025} = \frac{0.9604}{0.0025} = 384.16.$$

Therefore, the required sample size is approximately 384.

To calculate the adjusted sample size:

$$n_{adj} = \frac{384}{1 + (\frac{384 - 1}{50})}$$

$$n_{adj} = \frac{384}{1 + (\frac{383}{50})} = \frac{383}{8.66} = 44.22.$$

To this end, 44 completed surveys were retrieved for collation and analysis for each case study. Collated responses are shown in Tables 1-4. %R = Percentage Response.

**Table 1**: Analysis of responses collated during case study 1 - Aladinma Shopping Mall, Owerri, Imo State.

**Table 2**: Analysis of responses collated during Case Study 2 - Millennium Park, Abuja.

**CASE STUDY 1 – Aladinma Shopping Mall**

*Demographics*

| Question | Response categories |
|---|---|
| Age | 18-30; 31-45; 46 and above |
| Gender | Female; Male |
| Do you reside in or around Aladinma? | Yes; No |
| Duration of residency in Owerri | 10-30; 31-50; 50 & above |

*Awareness and Understanding of Public Space Design*

| Question | Response categories |
|---|---|
| How familiar are you with the concept of co-design in public spaces? | Not familiar at all; Somewhat familiar; Very familiar |
| Have you participated in any community discussions or projects related to public space design? | No; Yes |
| Do you think public spaces in your community reflect the needs and desires of the local population? | No; Yes |

*Community Engagement*

| Question | Response categories |
|---|---|
| In your opinion, how important is community involvement in the design of public spaces? | Very important; Somewhat important; Not important |
| Have you ever been consulted by the local government or developers on how public spaces should be designed or improved? | No; Yes |
| What method of participation would you prefer when engaging in the design of public spaces? | Digital Platforms; Community Meetings; Focus Groups; Workshop; Surveys |

*Satisfaction with Existing Public Spaces*

| Question | Response categories |
|---|---|
| How satisfied are you with the current public spaces in your community (e.g., parks, open areas)? | Dissatisfied; Very Dissatisfied; Satisfied; Very Satisfied; Neutral |
| What aspects of public spaces in your area need improvement? | Safety; Amenities; Maintenance; Community activities; Accessibility |

*Challenges and Barriers*

| Question | Response categories |
|---|---|
| What do you think are the biggest challenges to community engagement in the design of public spaces in Nigeria? | Lack of awareness; Lack of government interest; Communication Barriers; Financial Constraints; Others |

*Recommendations and Future Involvement*

| Question | Response categories |
|---|---|
| What features would you like to see in future public spaces in your community? | Green Areas; Playgrounds; Sporting Facilities; Seating Areas; Markets; Cultural Spaces |
| How likely are you to participate in future community engagement initiatives related to public space design? | Neutral; Likely; Very Likely; Unlikely; Very unlikely |

*Source: Authors' Fieldwork.*

**CASE STUDY 2 – Millennium Park, Abuja**

*Demographics*

| Question | Response categories |
|---|---|
| Age | 18-30; 31-45; 46 and above |
| Gender | Female; Male |
| Do you reside in or around 3 Arms Zone, Abuja? | Yes; No |
| Duration of residency in Abuja | 10-30; 31-50; 50 & above |

*Awareness and Understanding of Public Space Design*

| Question | Response categories |
|---|---|
| How familiar are you with the concept of co-design in public spaces? | Not familiar at all; Somewhat familiar; Very familiar |
| Have you participated in any community discussions or projects related to public space design? | No; Yes |
| Do you think public spaces in your community reflect the needs and desires of the local population? | Yes; No |

*Community Engagement*

| Question | Response categories |
|---|---|
| In your opinion, how important is community involvement in the design of public spaces? | Very important; Somewhat important; Not important |
| Have you ever been consulted by the local government or developers on how public spaces should be designed or improved? | No; Yes |
| What method of participation would you prefer when engaging in the design of public spaces? | Digital Platforms; Community Meetings; Focus Groups; Surveys; Workshop |

*Satisfaction with Existing Public Spaces*

| Question | Response categories |
|---|---|
| How satisfied are you with the current public spaces in your community (e.g., parks, open areas)? | Very Satisfied; Satisfied; Neutral; Dissatisfied; Very Dissatisfied; Accessibility |
| What aspects of public spaces in your area need improvement? | Safety; Maintenance; Amenities; Community activities |

*Challenges and Barriers*

| Question | Response categories |
|---|---|
| What do you think are the biggest challenges to community engagement in the design of public spaces in Nigeria? | Lack of government interest; Lack of awareness; Financial Constraints; Communication Barriers |

*Recommendations and Future Involvement*

| Question | Response categories |
|---|---|
| What features would you like to see in future public spaces in your community? | Green Areas; Sporting Facilities; Playgrounds; Cultural Spaces; Markets |
| How likely are you to participate in future community engagement initiatives related to public space design? | Likely; Very Likely; Neutral; Unlikely; Very unlikely |

*Source: Authors' Fieldwork.*

**Table 3**: Analysis of responses collated during Case Study 3 - Unity Housing Estate, Bauchi - Jos Road, 15 Km from Bauchi Town.

**CASE STUDY 3 – Unity Housing Estate, Bauchi**

**Demographics**

| Question | Response categories |
|---|---|
| Age | 31-45; 18-30; 46 and above |
| Gender | Male |
| Do you reside in or around Unity Housing Estate, Bauchi? | Yes; No |
| Duration of residency in Unity Housing Estate, Bauchi | 10-30 |

**Awareness and Understanding of Public Space Design**

| Question | Response categories |
|---|---|
| How familiar are you with the concept of co-design in public spaces? | Not familiar at all; Somewhat familiar |
| Have you participated in any community discussions or projects related to public space design? | No |
| Do you think public spaces in your community reflect the needs and desires of the local population? | No |

**Community Engagement**

| Question | Response categories |
|---|---|
| In your opinion, how important is community involvement in the design of public spaces? | Very important; Somewhat important |
| Have you ever been consulted by the local government or developers on how public spaces should be designed or improved? | No |
| What method of participation would you prefer when engaging in the design of public spaces? | Community Meetings; Focus Groups; Digital Platforms |

**Satisfaction with Existing Public Spaces**

| Question | Response categories |
|---|---|
| How satisfied are you with the current public spaces in your community (e.g., parks, open areas)? | Very Dissatisfied; Dissatisfied; Neutral |
| What aspects of public spaces in your area need improvement? | Safety; Amenities; Maintenance |

**Challenges and Barriers**

| Question | Response categories |
|---|---|
| What do you think are the biggest challenges to community engagement in the design of public spaces in Nigeria? | Lack of awareness; Lack of government interest; Financial Constraints; Communication Barriers |

**Recommendations and Future Involvement**

| Question | Response categories |
|---|---|
| What features would you like to see in future public spaces in your community? | Green Areas; Markets; Cultural Spaces; Playgrounds; Sporting Facilities |
| How likely are you to participate in future community engagement initiatives related to public space design? | Very Likely; Likely; Neutral |

*Source: Authors' Fieldwork.*

**Table 4**: Analysis of responses collated during Case Study 4 - Ogheye Floating Market, Warri-North, Delta State.

**CASE STUDY 4 - Ogheye Floating Market, Warri-North L.G.A., Delta State**

**Demographics**

| Question | Response categories |
|---|---|
| Age | 31-45; 18-30; 46 and above |
| Gender | Male; Female |
| Do you reside in or around Ogheye Floating Market? | Yes; No |
| Duration of residency in Warri-North L.G.A., Delta State | 31-50; 50 & above; 10-30 |

**Awareness and Understanding of Public Space Design**

| Question | Response categories |
|---|---|
| How familiar are you with the concept of co-design in public spaces? | Somewhat familiar; Not familiar at all; Very familiar |
| Have you participated in any community discussions or projects related to public space design? | No; Yes |
| Do you think public spaces in your community reflect the needs and desires of the local population? | No; Yes |

**Community Engagement**

| Question | Response categories |
|---|---|
| In your opinion, how important is community involvement in the design of public spaces? | Very important; Not important; Somewhat important |
| Have you ever been consulted by the local government or developers on how public spaces should be designed or improved? | No; Yes |
| What method of participation would you prefer when engaging in the design of public spaces? | Community Meetings; Digital Platforms; Focus Groups; Surveys; Workshops |

**Satisfaction with Existing Public Spaces**

| Question | Response categories |
|---|---|
| How satisfied are you with the current public spaces in your community (e.g., parks, open areas)? | Satisfied; Neutral; Very Dissatisfied; Dissatisfied; Very satisfied |
| What aspects of public spaces in your area need improvement? | Accessibility; Safety; Community activities; Amenities; Maintenance |

**Challenges and Barriers**

| Question | Response categories |
|---|---|
| What do you think are the biggest challenges to community engagement in the design of public spaces in Nigeria? | Lack of awareness; Lack of government interest; Financial Constraints; Communication Barriers; Others |

**Recommendations and Future Involvement**

| Question | Response categories |
|---|---|
| What features would you like to see in future public spaces in your community? | Cultural Spaces; Schools; Seating Areas; Others |
| How likely are you to participate in future community engagement initiatives related to public space design? | Very Likely; Likely; Neutral; Unlikely |

*Source: Authors' Fieldwork.*

### d. Interviews:

This study deployed closed-ended questions that are structured for ease of data analysis. Respondents answered with 'Yes/No' answers, multiple-choice, or on a rating scale. Catchment

pools comprised, Urban Planners, Architects, and government officials. %R = Percentage Response.

**Table 5**: Analysis of responses collated from interview sessions with Urban Planners and Registered Architects.



**INTERVIEW SESSION 1 – Urban Planners and Architects**

| # | Question | Options |
|---|----------|---------|
| 1 | Do you actively engage community members when designing public spaces? | Yes; No |
| 2 | Do you believe that community engagement improves the overall design of public spaces? | Yes; No |
| 3 | Which of the following methods do you use to engage the community in the design process? | Surveys; Workshops; Public meetings; Social media engagement; Digital Platforms |
| 4 | How often do community members' inputs significantly alter your original design plans? | Always; Frequently; Sometimes; Rarely; Never |
| 5 | On a scale of 1 to 5, how challenging is it to integrate community feedback into your designs? | 1 (Not challenging); 2; 3; 4; 5 (Very challenging) |
| 6 | Do you feel that the tools available for community engagement in Nigeria are sufficient? | Yes; No |

*Source: Authors' Fieldwork.*

**Table 6**: Analysis of responses collated from interview sessions with Government Officials attached to relevant planning authorities, ministries and parastatals.



**INTERVIEW SESSION 2 – Government Officials**

| # | Question | Options |
|---|----------|---------|
| 1 | Are there policies in place that require community engagement in public space design? | Yes; No |
| 2 | Do you think the government provides enough resources to support community engagement in urban planning? | Yes; No |
| 3 | How effective is community engagement in creating public spaces that meet long-term goals? | Very effective; Effective; Somewhat effective; Not Effective |
| 4 | How often are community suggestions implemented in urban development projects? | Always; Frequently; Sometimes; Rarely; Never |
| 5 | Does the government have dedicated programs to maintain community-designed public spaces after their completion? | Yes; No |
| 6 | On a scale of 1 to 5, how important do you believe community engagement is in shaping public spaces? | 1 (Not important at all); 2 (Slightly important); 3 (Moderately important); 4 (Very important); 5 (Extremely important) |

*Source: Authors' Fieldwork*

### e. Participatory Workshop:

The Co-Designing Publics International Symposium was an online convention targeted at exploring collaborative approaches to urban design,

bringing together diverse stakeholders, including academics, architects, urban planners, and community members. The participatory workshops during the symposium focused on co-designing public spaces through collaborative discussions, hands-on activities, and digital tools. These authors participated in the online breakroom discussions held between the 16th and 17th of September, 2021.



**Figure 29**: Attended participatory workshop - *Co-Designing Publics International Symposium (online)* held between the 16th and 17th of September, 2021.

Crucial findings, extracted from the workshop are presented as themes, observations and concomitant impact.

**Table 7**: Extracts from the Co-Designing Publics International Symposium (online)

| S/n | Theme | Observation | Impact |
|---|---|---|---|
| 1 | Fostering Collaborative Dialogue | The workshops created an environment conducive to open dialogue among participants from varied backgrounds. Academics, designers, and community representatives actively shared their insights, experiences, and challenges regarding public space development. | The exchange of ideas helped break down silos between experts and community members, enabling a more democratic process where all voices were valued equally. This fostered a deeper understanding of the local context and a holistic approach to public space design. |
| 2 | Co-Creation of Context-Specific Design Solutions | Participants collaborated to develop context-specific solutions to urban design challenges. By integrating local knowledge and professional expertise, the co-design process led to innovative concepts that addressed both social and environmental needs. | The final design proposals reflected a balanced approach to public space development, with solutions that were both practical and culturally sensitive. This included the creation of multifunctional spaces for recreation, commerce, and social interaction, with an emphasis on inclusivity and sustainability. |
| 3 | Increased Awareness of Inclusivity and Accessibility | Inclusivity and accessibility emerged as central themes in the workshop discussions. Participants identified barriers that marginalized groups, such as people with disabilities, women, and the elderly, face in accessing public spaces. | As a result, the co-designed public spaces incorporated features such as wheelchair ramps, gender-sensitive facilities, and shaded seating areas for the elderly. These design elements ensured that the public spaces would be accessible to all, reflecting the core principles of inclusive urban design. |
| 4 | Innovative Use of Digital Tools for Visualization | Digital tools were utilized throughout the workshop to help participants visualize design ideas in real-time. Tools such as 3D modeling software and augmented reality (AR) platforms allowed participants to experiment with different design concepts and see their potential impact on the urban landscape. | The use of digital tools enhanced participants' ability to communicate their ideas and understand complex spatial relationships. This led to more refined and visually cohesive design proposals, making it easier for the community and stakeholders to provide feedback. |
| 5 | Empowerment Through Skill Development | Participants, particularly community members, were introduced to new design and planning skills. Workshops provided hands-on experience with tools and methodologies that are essential for urban design, such as participatory mapping, digital sketching, and scenario planning. | The empowerment of local participants through skill-building exercises enhanced their capacity to contribute to future co-design processes. This knowledge transfer also promotes sustained community engagement in the development of public spaces beyond the symposium. |
| 6 | Sustainability and Climate Resilience Emphasized | Environmental sustainability was a recurring theme during the workshops, with participants proposing solutions to address issues like urban heat islands, flooding, and pollution. The designs incorporated green infrastructure elements, such as permeable surfaces, tree planting, and rainwater harvesting systems. | These environmentally friendly design elements ensured that the public spaces would be resilient to climate change while contributing to urban sustainability. The integration of natural features not only enhanced aesthetics but also improved ecological balance within urban environments. |
| 7 | Challenges in Bridging Diverse Perspectives | While the participatory approach encouraged diverse input, there were challenges in reconciling the different priorities of stakeholders. For example, community members prioritized immediate needs, such as safety and sanitation, while designers focused on aesthetic and long-term planning. | Facilitators played a crucial role in balancing these perspectives and mediating discussions. Although compromises were made, the process underscored the importance of clear communication and flexibility in co-design initiatives to accommodate varied interests. |
| 8 | Strengthened Community-Designer Relationships | The workshops helped strengthen the relationship between designers, urban planners, and local communities. Participants expressed increased trust in the design process, knowing that their input was genuinely considered and reflected in the outcomes. | This strengthened relationship is likely to have a lasting effect, promoting ongoing collaboration between professionals and community members in urban development projects. Trust-building between stakeholders is a key factor in the successful implementation of co-designed public spaces. |

*Source: Authors' Fieldwork*

## f. Ethical Considerations:

Ethical considerations for the study were critical towards ensuring a respectful and responsible process. First, informed consent was essential, meaning that participants must fully understand the study objectives, how their input will be used, and their rights, including the ability to withdraw without penalty. Voluntary participation was equally important, ensuring voluntary participation. The privacy and confidentiality of interviewees were protected by de-identifying data and securely storing information to prevent unapproved obtainment. This is crucial to strengthen trust with participants. Additionally, inclusivity was a key consideration. This study ensured that vulnerable groups, including women, people living with disabilities, and low-income populations, were involved in the study.

Researchers were conscious of power dynamics within communities. This is to ensure that no single group dominates the process. Cultural sensitivity guided this study, respecting local traditions, customs, and hierarchies while ensuring the research did not impose external biases. Fair distribution of benefits was prioritized by ensuring the community gained tangible benefits from their participation, whether through improved public spaces or enhanced capacity to engage in urban planning.

Maintaining accountability and transparency throughout the research process was crucial. Researchers provided regular updates to participants, shared outcomes, and were honest about the limitations of the project to avoid raising unrealistic expectations. This ensured that the research was not only ethical but also community-centred.

## 5. Findings
The following are the pivotal findings from all methods deployed in this study.

### a. Case Studies
Comparative case study analysis (Frances & Lesley, 2022) showed the following:

i.  The study noted an interesting pattern that played out during the conduct of case studies. It was observed that case studies 1 and 3 exhibited more challenges in deteriorating infrastructure, lack of maintenance and measurable level of decay of their superstructures. This trend could be linked to the user satisfaction appraisal ratings of these envelopes - 65% total dissatisfaction rating by respondents for case study 1 and 95% total dissatisfaction rating by respondents for case study 3. This is a pointer to the success or failure of projects that are bereft of any community engagement strategies.

ii.  Surroundings of the immediate locale of case studies 1 and 3 showed palpable signs of disrepair and abandonment. Residents exhibited a minimal measure of ownership and responsibility towards maintaining them.

### b. Surveys
Surveys were subjected to thematic and data visualization (charts and dashboards) analysis (Jörg & Neringa, 2024); (Adam, 2024). These advanced the following:

iii.  Surveys revealed that a total of 325% of responses from all four case studies agreed that there is currently a dearth of synergy between the local communities and the government in co-designing public spaces. With an average of 81.25% assertion to this fact, it can be rightly argued that community engagement processes are a near failure. This fact sufficiently offers closure to the first objective of this study.

iv.  As a multifaceted society, permutations of the Nigerian built-up space oscillate around the cultural and social affiliations of its people. This study observed that localities in the riverine areas gave more consideration to spaces that identify their culture and way of life. Settlements in the northern part of the country advocated for a 45% reflection of their culture and social milieu in co-designed spaces like markets and cultural centres. Their southern counterparts did not bother about cultural perspicacity of co-designed spaces. The location of Abuja offered data that can be adjudged to be outliers. The explanation could be from the heterogeneous makeup of the metropolis, which is presently housing different ethnic groups from every part of the country. This observation advances ample resolution of the 3rd objective.

v. It was observed that case studies 2 and 4 enjoyed moderate community engagement at 50% each. This had a positive effect on the functionality, purpose and accessibility of the schemes. The schemes had relatively good scenery, aesthetics and drive for commerce. To date, case studies 2 and 4 are veritable landmarks in their various domains. This observation conclusively caps on the second objective.

## c. Interviews

Bar charts and concept mapping (rev, 2024); (Lewis, 2024) of interviews revealed the following:

vi. Structured interviews revealed that 80% of respondents agreed that effective community engagement is necessary to create public spaces that meet long-term goals. This observation lends support towards the resolution of the second objective.

vii. Ensuring that all parts of the community, including disparaged groups, are represented in the design process is essential.

viii. Community members have specific needs and preferences that are not always apparent to professionals in housing delivery.

## d. Participatory Workshop

ix. One strong finding from the thematic analysis of the Co-Designing Publics International Symposium was the role of co-design as a tool for contesting power structure in urban environments. This theme emerged prominently through discussions on how co-design could empower disparaged communities to participate actively in shaping public spaces.

## 6. Recommendations

Based on the insights gathered from case studies, interviews, surveys, and participatory workshops in this study, the following recommendations are suggested:

i. Establishing a structured process that includes community input from the earliest conceptual phases (Susan, et al., 2018). Engaging residents, business owners, and local leaders early on improve the alignment of project goals with community aspirations (Rijal, 2023).

ii. Establishing a Community Empowerment and Adopt-a-Space Program would go a long way toward bolstering neglected surroundings and fostering a strong sense of ownership and responsibility among residents (Anlı, Z. Ezgi, & Sevin, 2022). This program would encourage individuals, local groups, and businesses to "adopt" specific areas around the public spaces, providing them with the resources, support, and recognition needed to maintain and enhance these locales.

iii. Floating a Collaborative Public Space Task Force would serve as a legal platform for ongoing partnership and dialogue (UN, 2008). This task force will ensure that the community and government actively participate in the design, planning, and management of public spaces, thereby fostering a more cohesive and inclusive approach.

iv. To effectively integrate the diverse cultural and social dynamics of Nigerian communities into the design of public spaces, establishing a Context-Sensitive Design Framework would guide the co-design process (Chidi, et al., 2015). This will ensure that public spaces resonate with the unique cultural identities, preferences, and ways of life of different regions, from

riverine areas to northern and southern communities, while accommodating the diverse population of cities like Abuja.

v. Implementation of a Community Engagement Enhancement Program would improve community participation levels beyond the current 50% by creating more inclusive, diverse, and structured engagement opportunities (Roxann, Alexandra, & Casey, 2021). Enhanced community involvement will lead to better-aligned public spaces that meet the needs of their users and foster a stronger sense of ownership and stewardship.

vi. Establishing an Inclusive Design Policy will mandate the active participation and representation of all community groups, including disparaged populations, throughout the design process (Abdullahi, Usman, & Ibrahim, 2024). This policy will create a structured framework to engage diverse voices, ensuring that under-represented groups' needs, preferences, and aspirations are integrated into the final design outcomes.

vii. Involving a wide range of stakeholders, including residents from different demographic backgrounds, local groups, and community leaders, in the co-design assessment processes will help capture diverse perspectives and ensure no group is overlooked (Jeffery, 2009).

viii. Involving local communities in decision-making processes will help in dislodging traditional top-down project approaches and create more inclusive and equitable urban development (Daniel & X, 2017). This approach not only liberalizes collaborative design but also addresses systemic inequalities by giving voice to those often excluded from planning processes.

## 7. Conclusion

This study underscored the critical role community engagement plays in shaping burghal landscapes towards reflecting the needs, values, and ambitions of the people they serve. Community-inclusive strategies encourage a sense of control, social solidarity, and sustainability in public space evolution. By involving local groups, professionals in the Built Environment can birth areas that are not only practical but also culturally and contextually important, thus improving the all-inclusive viability of urban enclaves.

Key findings from methods adopted during the study show that when individuals in a local settlement partake in design processes, they utilise, maintain, and respect such public spaces better. These areas become spirited hubs of social synergy, economic activity, and cultural interplay. Conversely, the absence of neighbourhood input often results in decrepit spaces, neglected, or mismatched with the community's needs, leading to wasted assets and opportunities.

The study also emphasized the importance of conquering barriers to community participation, such as power disparities, lack of resources, and limited awareness of collaborative processes. Empowering disparaged groups and ensuring equitable participation in decision-making are crucial for non-discriminatory urban development.

Finally, adopting a co-design route in public space development offers an avenue toward more inclusive, sustainable, and effective urban landscapes in Nigeria. Moving forward, it is important to formalize community engagement as a standard prerequisite in urban planning and to promote methods that boost partnerships between local stakeholders and design experts. This shift not only strengthens the urban fabric but also encourages democratic governance, social incorporation, and flexibility in Nigerian cities.

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