

# Community Engagement and the Sustainability of Innovation Hubs for Poverty Reduction in Urban Slum Settlements

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## ABSTRACT

Innovation hubs are increasingly promoted as tools for inclusive urban development and poverty reduction, yet their sustainability in informal urban contexts remains uncertain. This article examines the role of community engagement in shaping the sustainability and poverty reduction potential of innovation hubs in urban slum settlements. Using a qualitative research design, the study draws on data from two focus group discussions conducted with residents of Tudun Wada, an informal settlement in Abuja, Nigeria. The discussions explored community perceptions of innovation hubs, forms of local involvement, and factors influencing long term relevance and impact. The findings show that community engagement is central to the success of innovation hubs, influencing local ownership, trust, participation, and collective action. Innovation hubs that are co developed with communities and embedded within existing social structures are more likely to remain relevant, accessible, and responsive to the livelihood realities of slum residents. In contrast, externally driven initiatives with limited community involvement tend to experience weak participation and reduced sustainability. The study demonstrates that community engagement enhances poverty reduction potential by aligning hub services with informal economic practices and strengthening social cohesion. The article concludes that innovation hubs in slum settlements must prioritise participatory governance, local leadership, and community driven decision making to achieve sustained and inclusive development outcomes. These findings contribute to debates on inclusive innovation and provide practical insights for policymakers and practitioners working in informal urban contexts.

**Keywords:** Community engagement; Innovation hubs; Urban slums; Poverty reduction; Sustainability; Inclusive innovation; Informal settlements

## INTRODUCTION

Urbanisation has become one of the defining global trends of the twenty first century, reshaping economic structures, social relations, and spatial development across cities worldwide. While cities are often portrayed as engines of innovation and economic opportunity, rapid and unplanned urban growth has also intensified urban poverty and expanded informal settlements, particularly in low- and middle-income countries (Essien and Jesse, 2024; Olaniran and Aule, 2025). Urban slums are characterised by inadequate housing, insecure tenure, limited access to basic services, and high levels of economic vulnerability, making poverty both persistent and multidimensional within these spaces (Li et al., 2025). As digital economies expand and innovation driven development becomes central to urban policy agendas, questions increasingly arise about who benefits from these transformations and whether marginalised urban populations are meaningfully included.

Innovation hubs have emerged globally as strategic spaces designed to foster entrepreneurship, digital skills development, collaboration, and access to markets. These hubs are often promoted as instruments for inclusive growth, capable of generating employment opportunities, supporting small enterprises, and catalysing local economic development (Friederici et al., 2017). In many cities of the Global South, innovation hubs have been positioned as potential solutions to youth unemployment and urban poverty, particularly in contexts where

formal labour markets are constrained (Littlewood & Kiyumbu, 2017). However, despite their promise, evidence increasingly suggests that innovation hubs often remain socially and spatially disconnected from informal settlements, limiting their poverty reduction impact among slum populations (Mshelia & Eke, 2025).

One critical factor shaping the long-term effectiveness of innovation hubs in marginalised urban settings is sustainability. Sustainability in this context extends beyond financial viability to include social embeddedness, local ownership, and continued relevance to community needs over time (Anthony, 2023). Innovation hubs that operate as externally driven or elite oriented spaces frequently struggle to maintain participation, trust, and impact within low-income communities. As a result, scholars and development practitioners have begun to emphasise the importance of community engagement as a foundational condition for sustaining innovation initiatives in informal settlements (Caprotti et al., 2025).

Community engagement refers to the active involvement of local residents, leaders, and organisations in the design, governance, and implementation of development interventions. In slum contexts, where social networks and informal institutions play a central role in daily survival, community engagement is particularly critical for legitimacy and uptake (Terdo, 2024). Participatory approaches can strengthen trust, align innovation hub activities with lived realities, and foster a sense of collective ownership that supports long term continuity (Wang, 2025). Without such engagement, innovation hubs risk being perceived as irrelevant, exclusionary, or misaligned with local priorities, undermining their poverty reduction potential.

Despite growing recognition of the role of community engagement, empirical research examining how engagement shapes the sustainability of innovation hubs in urban slum settlements remains limited, especially within African cities. Existing studies often focus on economic outputs such as start up formation or digital skills acquisition, while paying less attention to social processes that enable or constrain sustained impact in informal settings (Caprotti et al., 2025; Züfle & Bickenbach, 2025). Moreover, many analyses treat slum communities as passive beneficiaries rather than active agents capable of shaping innovation ecosystems through local knowledge, leadership, and collective action (Terdo, 2024). This gap limits understanding of why some innovation hubs fail to endure or deliver meaningful poverty reduction outcomes despite significant investment.

In Nigeria, rapid urbanisation has produced extensive informal settlements alongside expanding digital and innovation landscapes. Cities such as Abuja illustrate sharp contrasts between planned urban districts and densely populated slum communities, where poverty, unemployment, and digital exclusion remain (Essien & Jesse, 2024). While innovation hubs have proliferated in Nigerian cities, their integration into slum communities has been uneven, raising concerns about sustainability and inclusivity. Slum residents often face barriers related to trust, cultural norms, affordability, and exclusion from decision making processes, all of which influence their willingness and ability to engage with innovation hubs (Mshelia & Eke, 2025).

Against this backdrop, this article focuses on community engagement as a critical mechanism linking innovation hub sustainability and poverty reduction in urban slum settlements. Drawing on qualitative evidence from focus group discussions conducted within a slum community, the article explores how trust, participation, local leadership, and perceived ownership shape the long term viability and social impact of innovation hubs. In doing so, it seeks to advance understanding of how innovation driven poverty reduction strategies can be more effectively embedded within informal urban contexts.

## LITERATURE REVIEW

### Community Engagement as Social Infrastructure for Sustainable Innovation Hubs

Community engagement has increasingly been conceptualised as a form of social infrastructure that underpins the sustainability of development interventions in marginalised urban contexts (Akondeng et al., 2022). Unlike physical infrastructure, social infrastructure refers to the networks of trust, norms, relationships, and participatory mechanisms that enable collective action and long term institutional stability (Adegun, 2021). In the context of innovation hubs operating in urban slum settlements, community engagement functions as a critical foundation upon which sustainability is built, shaping legitimacy, utilisation, and resilience over time.

Innovation hubs are often introduced into slum environments through externally driven initiatives led by governments, donors, or private actors. While such interventions may initially provide technological resources and training, their long term sustainability frequently depends on whether local communities perceive them as relevant, trustworthy, and responsive to their lived realities (Mshelia & Eke, 2025). Community engagement facilitates this alignment by embedding innovation hubs within existing social structures, allowing residents to participate in decision making processes related to hub design, governance, and programming. This participatory involvement enhances trust and reduces perceptions of exclusion, which are common barriers to adoption in informal settlements (Anthony, 2023).

From a sustainability perspective, engagement strengthens innovation hubs by fostering collective ownership. When community members contribute to shaping objectives and operational practices, innovation hubs are more likely to reflect local priorities such as income generation, skills relevant to informal economies, and flexible participation models (Flego & Tei, 2025). This sense of ownership encourages sustained participation, volunteerism, and informal monitoring, reducing dependence on external funding and managerial oversight. In contrast, hubs that operate without meaningful engagement often experience declining participation once initial incentives or funding diminish (Mshelia & Eke, 2025).

Community engagement also enhances the adaptive capacity of innovation hubs. Slum environments are characterised by economic volatility, infrastructural insecurity, and social heterogeneity (Kemarau & Nor, 2025). Engaged communities provide continuous feedback that allows hubs to adapt services and programmes to changing conditions, thereby improving resilience (Terdoo, 2024). This adaptability is particularly important for sustaining innovation hubs in contexts where rigid institutional models are ill suited to informal urban realities.

Moreover, social trust generated through engagement plays a decisive role in sustaining innovation hubs. Trust influences whether residents are willing to invest time, share ideas, and take risks associated with innovation and entrepreneurship (Züfle & Bickenbach, 2025). In many slum communities, distrust of external actors is rooted in histories of displacement, exclusion, and failed development interventions (Moleka, 2024). Participatory engagement, especially when mediated through respected local leaders or organisations, helps to rebuild confidence and legitimise innovation hubs as community assets rather than imposed projects.

Conceptualising community engagement as social infrastructure shifts the analytical focus from short term outputs to long term institutional embeddedness. It highlights that sustainability is not achieved solely through financial viability or technological sophistication, but through sustained social relationships that anchor innovation hubs within everyday community life. This perspective is essential for understanding why some innovation hubs endure and contribute to poverty reduction in slum settlements, while others fail to achieve lasting impact

### **Innovation Hubs, Local Ownership, and Pathways to Urban Poverty Reduction**

Innovation hubs are increasingly promoted as intermediary spaces that support entrepreneurship, skills acquisition, networking, and access to resources, particularly in fast urbanising contexts where formal employment is limited. Yet, evidence from African hub ecosystems shows that “hubs” are not a single organisational model, and their development outcomes depend heavily on governance arrangements, embeddedness, and how well hub services align with local livelihood realities (Friederici et al., 2017; Littlewood & Kiyumbu, 2017; Atiase et al., 2020). This matters acutely in slum settlements where poverty is not only an income deficit but also a condition shaped by insecurity, limited protections, and exclusion from urban opportunity structures.

Urban poverty in informal settlements is multidimensional and often characterised by overlapping vulnerabilities, including insecure livelihoods, weak social protection, and social spatial fragmentation. Such conditions affect not just the capacity of residents to participate in innovation programmes, but also whether participation can translate into sustained poverty reduction outcomes (Rath, 2022). In these contexts, innovation hubs can plausibly contribute to poverty reduction by strengthening capabilities and widening access to opportunities, but only when they are organised in ways that respond to the informal and survival oriented nature of many slum livelihoods. Research on innovation and informality in the Global South

highlights that innovation processes in informal economies are shaped by barriers to learning, uneven access to technology, gendered constraints, and the need to navigate relationships with formal institutions, all of which influence who can benefit from innovation support spaces (Sharma & Dahlstrand, 2023).

Local ownership becomes central here because it shapes whether hubs function as externally designed entrepreneurship pipelines or as locally grounded platforms that reflect residents' priorities. Studies of hubs in Africa show that hub communities, boundaries, and cultures often require continual negotiation, and that the realities of hub implementation can diverge from idealised narratives of seamless inclusion and opportunity (Friederici et al., 2017). Where local ownership is weak, hub programming can over privilege "high growth" models that fit better with formal startup ecosystems than with informal settlement economies. Conversely, stronger local ownership can enable hubs to prioritise more accessible pathways such as micro enterprise support, cooperative or collective models, and skills that improve productivity within informal markets. This aligns with wider ecosystem perspectives that caution against treating entrepreneurship support as a one size fits all intervention, emphasising instead the systemic conditions and relational structures that shape value creation and distribution (Stam, 2015).

Local ownership is also important for equity and redistribution within communities. Even when programmes are labelled participatory, benefits can be captured by better connected groups, producing unequal access and undermining poverty reduction impacts. Evidence from participatory governance research shows that "elite capture" can distort development initiatives and weaken genuine citizen engagement, especially where accountability and representation are limited (Waheduzzaman et al., 2018). For innovation hubs in slum settlements, inclusive governance mechanisms, transparent selection processes, and deliberate strategies to include marginalised groups (women, youth, migrants, persons with disabilities) are therefore not add ons. They are part of the causal pathway that determines whether hubs reduce poverty broadly or concentrate benefits narrowly.

Finally, local ownership strengthens sustainability by linking benefits to collective responsibility and continued participation, rather than short project cycles. This is consistent with broader evidence from participatory approaches in informal settlement interventions, where meaningful participation and co governance can improve legitimacy and continuity of initiatives over time (Terdo, 2024). Overall, the poverty reduction potential of innovation hubs in slum settlements is mediated by social and institutional processes: who defines hub goals, who governs participation and resources, and how hub offerings are adapted to informal livelihood realities. Local ownership is therefore a key mechanism through which innovation hubs can move from symbolic inclusion toward sustained, locally embedded poverty reduction.

## **Empirical Review**

Empirical research consistently demonstrates that urban slum settlements are shaped by deep and persistent inequalities that constrain livelihood opportunities and limit the effectiveness of development interventions. Large scale spatial and socioeconomic analyses show that slum residents experience significantly lower wealth levels and poorer access to essential services than non-slum urban populations, with inequalities often intensifying even where overall slum proportions decline (Li et al., 2025). These patterns reflect broader dynamics of urban poverty that extend beyond income deprivation to include vulnerability, social fragmentation, and limited social protection, particularly in rapidly urbanising regions of the Global South (Rath, 2022). Such structural conditions provide a critical backdrop for assessing the poverty reduction potential of innovation hubs, as they shape residents' capacity to participate in and benefit from innovation-oriented interventions.

Studies examining informal settlement formation and living conditions further illuminate the everyday constraints faced by slum residents. Evidence from mid-sized Nigerian cities shows that informal housing arrangements are closely linked to economic hardship, migration pressures, and prolonged waiting periods for stable urban employment, with squatting systems serving both as coping mechanisms and sources of vulnerability (Essien & Jesse, 2024). Complementary reviews of informal settlement vulnerability highlight how inadequate infrastructure, weak urban planning, and limited institutional support heighten exposure to environmental and economic shocks (Kemarau & Nor, 2025). Together, these findings suggest that innovation

initiatives introduced into slum settlements operate within contexts of high risk and limited flexibility, underscoring the need for locally grounded approaches that align with residents' lived realities.

Across diverse empirical settings, community engagement emerges as a central mechanism through which interventions become socially embedded and sustainable. Adegun (2021) demonstrates that participatory and low-cost approaches to green infrastructure development in African informal settlements enhance livelihood and environmental outcomes by enabling local appropriation and collective stewardship. Although focused on greening rather than innovation hubs, this evidence reinforces the broader principle that interventions which integrate local knowledge and participation are more likely to generate durable benefits. This conclusion is echoed in Terdoo's (2024) review of informal settlement upgrading projects, which shows that initiatives characterised by high levels of resident decision-making produce more sustainable and resilient outcomes than top down models with limited community input. These studies collectively indicate that sustainability in informal settlements is closely tied to the depth of participation and the extent to which communities exercise meaningful influence over intervention processes.

Empirical research on community engagement in urban innovation and planning contexts further strengthens this argument. Anthony (2023) synthesises evidence on community engagement in smart city initiatives and identifies co-creation, stakeholder interaction, and inclusive governance as key drivers of socially sustainable urban innovation. While this work is not confined to slum environments, it provides empirical support for the proposition that engagement enhances the relevance and legitimacy of innovation initiatives. Similarly, research on community engagement in urban redevelopment contexts shows that grassroots participation improves transparency, equity, and alignment between planning interventions and local economic needs (Wang, 2025). These findings suggest that innovation-oriented interventions, including hubs, are more likely to achieve sustainable outcomes when engagement extends beyond consultation to active co production.

Empirical studies that integrate innovation, infrastructure, and community engagement in informal settlements offer particularly relevant insights. Caprotti et al. (2025) document how co-produced solar energy systems combined with entrepreneurship training in a South African informal settlement created interconnected economic and infrastructural benefits. By applying systems thinking and expanding systems thinking across energy provision, entrepreneurship, and digital services, the study illustrates how community co production can transform infrastructure access into a foundation for broader socioeconomic development. This evidence is important because it shows that sustainability and poverty reduction are strengthened when innovation related interventions address multiple, interlinked constraints rather than operating as isolated programmes. It also highlights how community engagement contributes not only to social acceptance, but to the design of integrated solutions that reflect local priorities and capacities.

Research specifically focused on innovation hubs in African contexts further clarifies the conditions under which hubs can support inclusive development. Littlewood and Kiyumbu (2017) analyse innovation hubs in Kenya and describe them as hybrid intermediary organisations that operate within institutional voids, brokering relationships between entrepreneurs, markets, and support actors. While these hubs demonstrate potential to promote entrepreneurship and social change, the study also identifies limitations related to uneven access, resource constraints, and the challenge of aligning hub activities with local socioeconomic realities. This evidence underscores that the presence of an innovation hub alone does not guarantee poverty reduction, particularly in informal settlements where exclusionary dynamics may persist.

Complementary empirical work addresses the growing diversity and conceptual ambiguity surrounding innovation hubs. Züfle and Bickenbach (2025) show that the rapid proliferation of hubs across Africa has produced a wide range of organisational forms, complicating efforts to assess their impact and sustainability. This diversity means that outcomes depend heavily on governance models, stakeholder relationships, and the extent to which hubs are embedded in local contexts. Flego and Tei (2025), through an examination of leading international hub networks, identify key drivers, core activities, and sustainability practices that support long term operation. However, their findings also imply that sustainability frameworks developed in more formal or well-resourced settings may require significant adaptation to be effective in informal urban environments.

Collectively, the empirical literature reveals both convergence and contrast. Studies on informal settlements, poverty, and vulnerability consistently emphasise structural constraints that limit residents' capacity to engage with innovation initiatives. In contrast, research on participatory planning, co production, and community engagement demonstrates that interventions grounded in local ownership and decision making are more likely to achieve sustained outcomes. Evidence from innovation hub research bridges these perspectives by showing that hubs function as intermediaries whose inclusivity and impact depend on how they negotiate local conditions and power relations. Collectively, these findings indicate that community engagement plays a critical role in shaping the sustainability and poverty reduction potential of innovation hubs in slum settlements. Engagement influences not only participation levels, but also governance arrangements, relevance of services, and the ability of hubs to remain responsive to the complex realities of informal urban life.

## METHODOLOGY

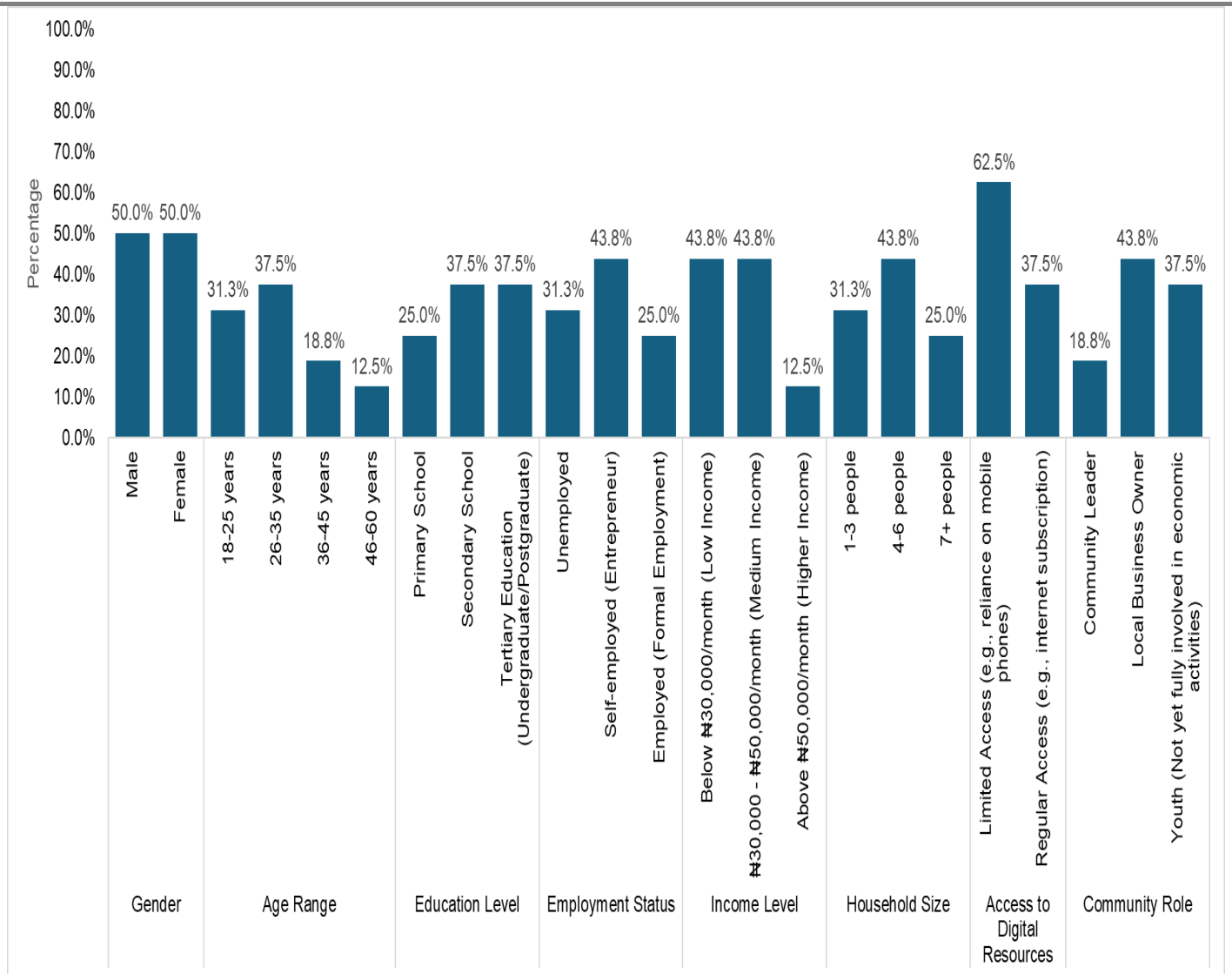
This article adopts a qualitative research design to examine how community engagement shapes the sustainability and poverty reduction potential of innovation hubs in urban slum settlements. Although the wider doctoral study employed a convergent parallel mixed methods approach, the present article draws exclusively on qualitative data to generate in depth, context specific insights into community perceptions and experiences. The study was conducted in Tudun Wada, an informal settlement located in FHA Lugbe within the Abuja Municipal Area Council, Nigeria. Abuja, as Nigeria's federal capital, is characterised by rapid urbanisation alongside stark socio spatial inequalities, with informal settlements such as Tudun Wada developing in response to housing shortages and economic pressures. Tudun Wada is densely populated, marked by limited access to basic services, and sustained largely through informal economic activities, making it an appropriate site for exploring community driven perspectives on innovation, entrepreneurship, and poverty reduction.

Qualitative data were collected through two focus group discussions conducted with residents of Tudun Wada. One group comprised ten participants and the other six, with participants purposively selected to ensure diversity in age, gender, occupation, education level, and familiarity with digital tools and innovation hubs. Focus group discussions were chosen because they encourage interactive dialogue, allowing participants to reflect collectively on shared experiences and social dynamics that influence engagement with innovation initiatives. The discussions explored awareness of innovation hubs, forms of community involvement, perceived economic benefits, barriers to participation, and factors affecting long term sustainability and poverty reduction. All discussions were audio recorded with informed consent, transcribed verbatim, and analysed using thematic analysis. This approach enabled the identification of recurring patterns and meanings across participants' narratives, providing rich insights into how community engagement influences the relevance, continuity, and perceived impact of innovation hubs within a slum context.

## FINDINGS

### Demographic Profile of Focus Group Participants

Figure 1 presents the demographic characteristics of participants involved in the focus group discussions, reflecting deliberate efforts to ensure diversity across gender, age, education, livelihood status, income, and levels of digital access. Gender representation was balanced, with males and females each accounting for 50 percent of participants, allowing for gender inclusive perspectives on community engagement and innovation hub participation.



**Fig. 1 – Demographic Characteristics of Participants**

Participants were predominantly young adults, with 31.3 percent aged 18–25 years and 37.5 percent aged 26–35 years, indicating that nearly seventy percent of participants were within the economically active and innovation relevant age bracket. Smaller proportions fell within the 36–45 years (18.8 percent) and 46–60 years (12.5 percent) categories, ensuring the inclusion of older voices with longer community experience. Educational attainment varied, with 25 percent having primary education, while 37.5 percent each had secondary and tertiary education. This spread reflects the mixed educational landscape typical of informal settlements and provided a range of perspectives on skill acquisition, digital literacy, and access to innovation opportunities.

Employment status further illustrated the economic precarity of the community. While 43.8 percent of participants were self employed, largely operating small informal businesses, 31.3 percent were unemployed, and only 25 percent were engaged in formal employment. Income levels reinforced this vulnerability, with 87.6 percent of participants earning ₦50,000 or less per month, divided equally between low income and medium income categories. Only 12.5 percent reported earnings above ₦50,000 per month, underscoring the limited financial capacity of most participants to independently access innovation infrastructure without support.

Household composition revealed significant dependency pressures, as 43.8 percent of participants lived in households of four to six people, and 25 percent in households of seven or more. Such household sizes place additional strain on income and time, factors that directly influence participation in training and entrepreneurship initiatives. Access to digital resources was also constrained, with 62.5 percent of participants reporting limited access, often relying solely on mobile phones, while only 37.5 percent had regular internet

subscriptions. Finally, participants occupied diverse social roles within the community, including community leaders (18.8 percent), local business owners (43.8 percent), and youth not yet fully engaged in economic activities (37.5 percent). This mix ensured that the discussions captured perspectives from those involved in leadership, livelihood generation, and emerging workforce participation.

### **Community Engagement and Innovation Hub Sustainability**

Findings from the focus group discussions indicate that community engagement is not a peripheral consideration but a foundational condition that shapes whether innovation hubs are trusted, utilised, and sustained over time. Participants consistently framed engagement as the difference between innovation hubs that merely exist within slum spaces and those that become embedded within community life. When engagement is weak or absent, innovation hubs are perceived as external projects with limited relevance. When engagement is strong, hubs are viewed as shared assets capable of supporting livelihoods and collective advancement.

Across both FGDs, four interrelated themes emerged: local ownership and buy-in, social capital and trust, community-led decision-making, and collective action and solidarity. These themes reveal that community engagement operates simultaneously at social, institutional, and relational levels, shaping both participation patterns and perceptions of long-term impact.

#### **Theme 1: Local Ownership and Buy-in**

Local ownership emerged as the most dominant and consistently articulated theme across the discussions. Participants repeatedly stressed that innovation hubs are more likely to survive and contribute to poverty reduction when residents feel a sense of ownership over their establishment and operation. Many participants described past experiences with development projects that were introduced without consultation and later abandoned, contributing to skepticism toward new initiatives.

A male participant in the second FGD, aged 26–35, reflected on this pattern:

*“Most times, things are just brought here without asking us. One day you hear there is a program, another day it disappears. That is why people don’t take these hubs seriously.”*

This perception of external imposition was widely shared. Participants explained that when hubs are introduced without community input, they are often poorly aligned with residents’ priorities, schedules, and economic realities. A female participant in the first FGD, aged 36–45, noted:

*“Some of us are traders, some are artisans. If the hub doesn’t consider how we survive daily, people will not come. But if we help plan it, we can say what will work for us.”*

Ownership was not discussed only in symbolic terms but as a practical mechanism for sustainability. Participants argued that community involvement in planning and management would motivate residents to protect, promote, and sustain the hub. A male participant in the first FGD, aged 46–60, explained:

*“If it is ours, we will defend it. We will tell our children to go there, and we will not allow it to spoil. But if it belongs to outsiders, people don’t care what happens to it.”*

Several participants suggested that innovation hubs should include community representatives in management committees or advisory roles. Such arrangements were viewed as a way of ensuring continuity even when external funding or partners withdraw.

#### **Theme 2: Social Capital and Trust**

Social capital and trust were repeatedly identified as critical factors influencing participation in innovation hub activities. Participants described Tudun Wada as a community where decisions are strongly influenced by interpersonal relationships, informal networks, and shared histories. In this context, trust functions as a gatekeeper that determines whether new initiatives gain acceptance.

A male participant in the first FGD, aged 26–35, stated:

*“Here, people don’t just join anything. They will first ask who is behind it, who is benefiting, and whether it is safe.”*

Participants explained that trust spreads primarily through word of mouth rather than formal publicity. When respected community members endorse an initiative, participation increases rapidly. Conversely, distrust can spread just as quickly. A female participant in the second FGD, aged 18–25, remarked:

*“If one person has a bad experience, everyone will hear about it. That is why trust is very important.”*

Trust was closely linked to who manages the innovation hub. Several participants expressed discomfort with hubs run entirely by external actors who have limited presence in the community. A male participant in the second FGD, aged 36–45, observed:

*“Sometimes the people running these places don’t understand how we live here. They come and go. If there are local people involved, we will feel more confident.”*

This sentiment was echoed by a female participant in the first FGD, aged 36–45:

*“We trust people we see every day. If familiar faces are part of the hub, people will not be afraid to enter or ask questions.”*

Participants suggested that employing local residents, involving community leaders, and maintaining a consistent presence within the settlement could strengthen trust and increase long-term engagement.

### **Theme 3: Community-Led Decision-Making**

Community-led decision-making emerged as a crucial mechanism for aligning innovation hub services with local needs. Participants consistently argued that slum residents are best positioned to identify the types of skills, services, and support that would genuinely improve their livelihoods.

A male participant in the first FGD, aged 46–60, stated:

*“We know our problems better than anyone. If they ask us, we can tell them what kind of training or support we really need.”*

Younger participants also emphasised the motivational effect of being consulted. A female participant in the second FGD, aged 18–25, noted:

*“If they ask us what we want to learn, people will be excited. It makes you feel important.”*

Participants linked decision-making power to accountability and commitment. When residents are involved in shaping programs, they are more likely to attend consistently and apply acquired skills. A female participant in the first FGD, aged 36–45, explained:

*“When we help decide, we feel responsible. It is not just something done for us. We will try to make it work.”*

Suggested mechanisms for community-led decision-making included regular community forums, feedback sessions, and representation on hub governance structures. Participants emphasised that consultation should be continuous rather than a one-time exercise at project inception.

### **Theme 4: Fostering Collective Action and Solidarity**

Beyond individual benefits, participants viewed innovation hubs as potential spaces for strengthening

collective action and social solidarity. Many described the hubs as platforms that could bring residents together to share ideas, pool resources, and collaborate on income-generating projects.

A male participant in the first FGD, aged 18–25, remarked:

*“If people meet regularly in the hub, they will start helping each other. Someone may have an idea, another person may have skills.”*

Older participants highlighted the potential for group-based initiatives to reduce risk and increase impact. A male participant in the second FGD, aged 46–60, stated:

*“Not everyone can succeed alone. But when people form groups, they can support each other and grow together.”*

Participants also stressed the importance of linking innovation hubs to existing community institutions such as religious centres, youth associations, and savings groups. A female participant in the second FGD, aged 46–60, explained:

*“If they work with our churches, mosques, and associations, people will understand and trust them more.”*

This integration was seen as a way of embedding innovation hubs within established social structures rather than positioning them as isolated or unfamiliar spaces. Participants believed that such embeddedness would enhance both participation and sustainability.

Overall, the findings indicate that community engagement shapes the sustainability and poverty reduction potential of innovation hubs through interconnected processes of ownership, trust, participation, and collective action. Innovation hubs that recognise and build upon existing social relationships and community capacities are more likely to remain relevant, inclusive, and impactful within slum settlements.

## CONCLUSION

This study examined the role of community engagement in shaping the sustainability and poverty reduction potential of innovation hubs in urban slum settlements, drawing on qualitative evidence from focus group discussions conducted in Tudun Wada, Abuja. By foregrounding community perspectives, the study demonstrated that innovation hubs are most effective when they are socially embedded within the communities they seek to serve. Findings revealed that local ownership, trust, participatory decision making, and collective action are not secondary considerations but central mechanisms through which innovation hubs gain legitimacy, sustained use, and relevance to slum residents' livelihood realities.

The study shows that innovation hubs introduced without meaningful community involvement risk low participation and limited impact, particularly in contexts marked by economic precarity, constrained digital access, and high dependency pressures. Conversely, when communities are involved in planning, governance, and implementation, innovation hubs are more likely to reflect local needs, adapt to informal economic conditions, and foster both individual and collective livelihood opportunities. Community engagement therefore strengthens sustainability not only by increasing utilisation but also by enabling hubs to evolve as shared community assets that support longer term poverty reduction.

Based on these findings, the study recommends that policymakers, development practitioners, and hub operators prioritise community engagement as a core design principle rather than a post implementation activity. Innovation hubs in slum settlements should adopt participatory planning processes, include community representatives in governance structures, and actively build trust through the involvement of local actors and institutions. Integrating innovation hubs into existing social networks and supporting collaborative, group based economic activities can further enhance sustainability and poverty reduction outcomes. Such approaches are essential for ensuring that innovation driven development initiatives move beyond symbolic inclusion toward meaningful, lasting impact in informal urban contexts.

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