JCBM (2025) 8(S1) 111-124

University of Cape Town

Journal of Construction Business and Management

http://journals.uct.ac.za/index.php/jcbm

Constraining Sustainability: A Critical Examination of Construction Policy and Practice in Nigeria

Nishani Harinarain[1] and Ayotunde Babalola[2]

[1&2]School of Engineering, University of KwaZulu-Natal, South Africa

Received 11 October 2025; received in revised form 14 October 2025, 19 December 2025; accepted 28 December 2025
https://doi.org/10.15641/jcbm.8.S1.1938

Abstract

This paper examines the policy-related challenges faced by stakeholders in promoting sustainable construction practices within Nigeria's construction sector. The research objective was pursued through a comprehensive literature review and semi-structured interviews with eleven built environment professionals based in Lagos and Abuja. Using NVivo 14, a thematic analysis was conducted, yielding seven key themes. Among these, the most significant were the weak enforcement of the Nigerian building code, limited public and professional awareness of sustainable construction, and insufficient municipal capacity to support implementation at the local government level. The findings underscore the need for stronger regulatory frameworks, clearer enforcement mechanisms, and a coordinated awareness strategy to support policy adoption and compliance. The study also highlights the need for active political will, alongside stakeholder collaboration, to ensure policy continuity and mitigate the effects of changing government administrations. Government agencies, policymakers, and industry professionals must therefore collaborate more strategically to drive innovation and strengthen policy adaptation mechanisms. Overall, this study advances knowledge of sustainable construction policy in developing economies by presenting practitioner-based evidence on Nigeria's specific challenges in policy implementation and political will, from the perspective of senior construction industry professionals.

Keywords: Building code, Nigeria, policy implementation, professionals, stakeholders, and sustainable construction

1. Introduction

Sustainable construction has become a core global priority as nations seek to balance economic development with environmental protection and social well-being. Policy frameworks play a critical role in guiding this transition by shaping regulatory expectations, setting performance standards, and defining accountability mechanisms within the construction sector (Babalola & Harinarain, 2024; Hudson, Hunter, & Peckham, 2019). In contexts where government regulation is weak or inconsistently enforced, sustainability outcomes are often compromised (Isang, 2023).

Nigeria's construction industry illustrates this challenge. Despite increasing discourse on sustainability, the sector continues to face persistent structural and policy-related challenges, including recurring building collapses, limited uptake of sustainable technologies, and poor compliance with environmental standards (Babalola & Harinarain, 2024). Stakeholders cite weaknesses in policy formulation, enforcement capacity, political will, and municipal-level implementation as core barriers to sectoral transformation (Akadiri, Chinyio, & Olomolaiye, 2012).

This study is guided by a policy implementation gap and institutional governance lens, recognising that policies often fail not at the design stage but during execution, due to weak institutions, fragmented accountability, and low political commitment (Isang, 2023). These ideas shaped the development of the interview guide, which focused on regulatory enforcement, municipal responsibility, rating systems, and capacity constraints.

Accordingly, this study aims to examine the policy challenges stakeholders face in implementing

[1] Corresponding Author
Email address: harinarain@ukzn.ac.za

sustainable construction practices in Nigeria, acknowledging that policy instruments can institutionalise sustainability as an industry standard rather than an individual preference. Two research questions guide this study:
RQ1: What institutional and policy implementation barriers hinder the effective adoption of sustainable construction practices in Nigeria?
RQ2: How do practitioners perceive the current level of regulatory enforcement, political will, and municipal capacity within the Nigerian construction sector?

Compared to other developed nations, several countries, including the United Kingdom, Australia, South Korea, China, and Japan, have made substantial progress in integrating sustainability into their construction sectors. Through comprehensive policy frameworks and both regulatory and non-regulatory measures, these countries have successfully addressed key sustainability concerns, such as material consumption, waste reduction, and resource management, while ensuring social equity and environmental protection (Solanke & Fapohunda, 2016). In the UK, for example, strong central government leadership, mandatory performance standards, and cross-sector coordination have supported efforts to enhance material efficiency, improve waste management, and reduce carbon emissions (Heijden & Bueren, 2013). These international achievements served as sensitising concepts for this research, guiding expectations around what effective sustainability governance might require in Nigeria—such as strengthened enforcement, locally relevant rating systems, and improved municipal oversight.

However, Nigeria remains constrained by fragmented institutional arrangements, weak monitoring systems, and limited collaboration among public agencies, practitioners, and local governments. Understanding these policy challenges is critical for developing strategies that align the country's construction sector with global sustainability ambitions and ensure that public policies translate into measurable outcomes rather than aspirational statements.

2. Sustainable Construction in Nigeria

Nigeria, a federal nation of 36 states and 774 local government areas, faces significant coordination and institutional challenges in implementing national development policies (Federal Republic of Nigeria, 2006). These administrative complexities affect the construction sector, where fragmented authority contributes to inconsistent interpretation and enforcement of regulations.

The Nigerian construction industry policy development initiatives are still at a very early stage and are evolving more slowly than in other developed nations such as the United Kingdom and Australia (Oyewobi & Jimoh, 2022; Onuoha et al., 2017). While research on green building is expanding, scholars observe that policy formulation and institutional capacity-building have not progressed at the same pace (Onuoha et al., 2017). Sustainable building practices, skills development, and environmental performance frameworks remain weak, primarily due to inadequate legislation, low political prioritisation of sustainability, and fragmented institutional structures (Oribuyaku, 2015).

Sustainable construction implementation challenges in Nigeria align with findings from governance and policy implementation theory, particularly the "implementation gap" model, which argues that policy failure often stems from weak administrative capacity, lack of clarity, fragmented authority, and insufficient resources (Hill & Hupe, 2014). These conceptual ideas underpin the literature reporting that Nigeria's sustainable construction efforts have been constrained not simply by absent policies but by weak enforcement, low state capacity, and inconsistent political will (Isang, 2023; Oyewobi & Jimoh, 2022).

2.1. Policy barriers to sustainable construction in Nigeria

Multiple studies emphasise that the absence of a coherent sustainability framework is a significant barrier to policy implementation within Nigeria's construction sector (Davies & Davies, 2017; Isang, 2023). Government policies should generally favour sustainable construction and energy savings, given their impacts on the quality of life of the citizenry (Isang, 2023). Usually, when implemented, these policies should help the built environment become safer to work in, more efficient through the presence of frameworks and a desired strategy, and sustainable in terms of efficient service delivery to its clients (Akadiri et al., 2012).

Currently, there are no established policies, regulations, professional councils, or bodies to enhance knowledge in the sustainable construction domain and promote socio-economic and environmental sustainability (Isang, 2023). Although initiatives such as the 2011 Global Environment Facility programme and the Building Energy Efficiency Code (BEEC) introduced in 2018 demonstrate government awareness (Atanda & Olukoya, 2019; Geissler et al., 2018), these reforms have not translated into widespread sectoral change. The literature links this gap to limited government capacity, weak monitoring structures, and inadequate political commitment to sustainability agendas.

Regarding existing environmental protection laws and the need for new laws, Nwokoro and Onukwube (2015) noted that the advancement and strengthening of municipal by-laws for major urban communities in Nigeria should be supported and encouraged, given their significant improvements. While Governments

are responsible for nurturing the economy, they must drive corporate sustainability through legislation and benefits/penalties (Isang, 2023).

Teething problems associated with implementing new initiatives in an existing industry, such as the need to improve technical know-how and skills on sustainable construction, low awareness and insistence on sustainable construction techniques on sites and during construction processes by clients and enlightened professionals and lack of adequate expertise are perceived as barriers to adequate implementation of sustainable construction from the industry stakeholders' perspective (Bungwon, et al., 2016), these can be controlled with adequate policies being implemented as argued by (Goh et al., 2020). Most of these barriers are believed to be adequately overcome by adequate policies.

Policies, regulations, and professional guidelines on sustainable construction and development should be taken very seriously by the government, as the consequences of inaction in this regard are dire (Davies & Davies, 2017). In Nigeria, the lack of sustainability in construction projects is evident, with apparent deviations from ideal sustainability principles. Infusing these principles is crucial to enhancing the construction environment in Nigeria, thereby preventing further building collapses and promoting capital and economic growth (Isang, 2023).

2.2. Status of the Nigerian Building Code

Building codes establish the fundamental regulations for construction quality, with area-specific bylaws strengthening requirements in urban centres. Such codes form the foundation for all construction policies in developed nations, such as the United Kingdom (Gibbs & O'Neill, 2015) and Denmark (Drysdale, Mathiesen, & Paardekooper, 2019). However, the building code in Nigeria lacks regulatory backing and is rarely implemented in practice (Geissler et al., 2018).

There is an urgent need to revise and strengthen the Nigerian Building Code to support sustainable construction. Critics argue that the code lacks enforcement power and has low implementation rates (Ogunbiyi, 2014). While the code sets minimum construction standards, its application begins at the local government level through the Building Code Advisory Committee (BCAC) (Federal Republic of Nigeria, 2006). Some scholars propose that sustainable construction should be driven at the municipal level (Babalola & Harinarain, 2024); however, the Nigerian building code has not been adequately empowered to establish minimum infrastructure requirements for sustainable construction. Moreover, inconsistent professional adoption has led to uneven implementation across the industry (Isang, 2023).

Nigeria was registered as a prospective member of the World Green Building Council in 2014 (WGBC, 2020). There is no active Green Building Council to further these interests and advise construction clients appropriately on sustainable construction (Babalola & Harinarain, 2024). The lack of an active green building council has adversely affected the growth of sustainable construction practices in the Nigerian construction environment. Nigeria currently lacks a construction strategy/ agenda. Firms and professional institutions only work according to client requirements and organisational preferences.

2.3. Green Building Council in Nigeria

Nigeria has been registered as a prospective member of the World Green Building Council (WGBC) since 2014 (WGBC, 2020). However, this affiliation has had minimal impact on advancing sustainable construction practices in the country (Akinyemi, Adekunle, Joseph, Anthony, & Dabara, 2019). Despite its membership status, Nigeria lacks an active Green Building Council capable of promoting sustainability initiatives or providing informed guidance to construction clients on environmentally responsible building practices. The absence of such an institutional body has significantly constrained the growth and mainstream adoption of sustainable construction principles within the Nigerian built environment. More broadly, the absence of an integrated national construction strategy or sustainability roadmap has been documented by Nigerian planning research, which notes that sector outcomes are left to project-level decisions rather than coordinated state priorities (Babalola & Harinarain, 2024). This aligns with institutional theory, which suggests that without a strategic centre, industries default to path dependency, informal practices, and short-term client-driven decision making (Scott, 2014).

3. Research Methodology

This study adopted an interpretive qualitative approach to explore the policy challenges associated with implementing sustainable construction practices in Nigeria. The interpretive paradigm was appropriate for this research because it seeks to understand how individuals construct meaning from their professional experiences and social contexts. Data were collected through semi-structured interviews with professionals in the Nigerian construction industry, allowing for in-depth exploration of personal insights, institutional dynamics, and contextual realities that shape policy formulation and implementation.

The target population consisted of construction industry professionals, including architects, quantity surveyors, builders, civil engineers, and urban planners. These categories were purposefully selected to ensure a broad representation of the built environment professions, as each discipline contributes distinct perspectives to the discourse on sustainable construction. Diversity of professional backgrounds

was crucial for capturing a holistic understanding of the industry's challenges and opportunities in embedding sustainability principles.

3.1. Sampling and Participants

A purposive sampling strategy was employed to identify individuals with substantial experience and influence within the construction sector. The inclusion criteria focused on years of professional practice, familiarity with sustainability-related projects, and participation in policy or regulatory processes. These criteria ensured that participants could provide rich, informed reflections on both policy development and its practical implications.

Fifteen potential participants were compiled from professional associations and networks in Abuja and Lagos, Nigeria's administrative and commercial capitals. These two cities were chosen for their high concentration of construction activity, the presence of major policy institutions, and the diversity of professional expertise. Invitations were distributed via email and followed up with by phone calls. Eleven participants agreed to participate, which falls within the suitable range proposed for interpretive qualitative studies of this nature (Creswell & Poth, 2018; Tracy, 2012). Saturation was reached when no new substantive codes or insights emerged after the ninth and tenth interviews, supporting the adequacy of the final sample size.

Data saturation was used to validate the adequacy of the final sample size. Saturation was assessed continuously throughout coding and transcript comparison. Following the ninth and tenth interviews, no new substantive codes, perspectives, or conceptual categories emerged, indicating that core patterns were sufficiently captured across participant groups. This aligns with Hennink and Kaiser's (2022) argument that saturation in homogenous qualitative samples is often reached within the first 6–12 interviews. Consequently, the eleventh interview confirmed rather than extended the identified thematic boundaries, supporting the credibility and completeness of the final dataset.

While the qualitative sample does not support statistical generalisation, the depth, relevance, and professional seniority of participants offer strong analytical insights into Nigeria's policy implementation environment for sustainable construction.

3.2. Ethical Considerations

Ethical approval for the study was obtained from the institutional research ethics committee (Clearance Number: HSSREC/00000537/2019). All participants received written and verbal information explaining the project aims, the interview format, voluntary participation, and their right to withdraw at any time without consequences. Informed consent was obtained prior to participation. Confidentiality and anonymity were strictly maintained. Given the sensitivity of discussions involving political decision-making, enforcement failures and institutional corruption, particular care was taken to ensure that quotations could not be traced to identifiable individuals or organisations.

3.3. Data Collection

The semi-structured interviews were conducted face-to-face in participants' offices or open professional environments during working hours, as indicated in Table 1 (See Appendix 1). Each session lasted approximately 45 minutes. An interview guide was used to maintain consistency across discussions while allowing flexibility for participants to elaborate on emerging issues. All interviews were audio-recorded with participants' consent and subsequently transcribed verbatim for analysis. Field notes were also taken to capture nonverbal cues and contextual details that informed the interpretation.

3.4. Data Analysis and Coding

The data analysis followed a systematic, iterative approach consistent with the principles of thematic analysis. NVivo 14 software was used to assist in managing and organising the data. Analysis began with the preparation phase, where all recorded interviews were transcribed and verified against the audio files to ensure accuracy.

In the coding phase, the transcripts were read multiple times to familiarise the researcher with the content. Codes were assigned to meaningful units of text that captured key ideas, issues, or patterns related to the research questions. These initial codes were primarily descriptive, focusing on policy-related challenges, institutional roles, and implementation barriers.

During categorisation, related codes were grouped to identify emerging patterns and relationships within the data. Broader categories began to emerge around recurring issues, including weak regulatory frameworks, a lack of awareness, fragmented institutional coordination, and limited professional engagement in policy formulation.

The structuring stage involved refining these categories into coherent themes and sub-themes that encapsulated the core dimensions of the participants' experiences. Representative quotes were selected to support each theme, ensuring that participants' voices were authentically reflected in the findings.

Finally, the interpretation stage entailed synthesising the themes in light of existing literature and the study's conceptual framework. The researcher drew on professional experience and theoretical understanding to make sense of how the identified themes reveal systemic barriers to the implementation of sustainable construction policy in Nigeria.

4. Findings and Discussion

The results were transcribed and coded according to likely themes. Seven themes emerged, namely: the perception of professionals on sustainable construction practice in their location and the country generally, the significant challenges observed to the complete uptake of sustainable construction in the Nigerian construction industry, the interviewee's perception of the usage of the Nigerian building code, their ideas on improving sustainable construction practice through a policy, the need for strict policies and implementation mechanisms, stakeholder's inputs to improve sustainable construction practice and the possibility and capacity of the local government in the implementation and enforcement of sustainable construction policy. These are discussed below.

4.1. Perception of sustainable construction practice

Across the interviews, respondents consistently highlighted that sustainable construction in Nigeria remains at a rudimentary stage, with visible activities concentrated primarily in Lagos and Abuja. Outside these major urban centres, sustainable construction practices were described as virtually non-existent. As one participant explained, *"Being a new concept, the level of practice is very low; in Lagos, for example, you can count the number of houses built with sustainable materials"* (Participant 10). This statement highlights a growing awareness that, while sustainability principles are gaining recognition, their practical application remains limited to a small segment of projects and professionals.

Participants attributed this slow uptake largely to the absence of strong policy frameworks and weak regulatory enforcement. As noted by one respondent, *"More needs to be done about sustainable construction on the level of policies and adequate implementation"* (Participant 2).

The lack of coherent policy direction has, in effect, left the promotion and adoption of sustainable practices to individual or corporate discretion rather than institutional mandate. This aligns with earlier studies such as Ogunbiyi (2014) and Onuoha et al. (2017), who similarly observed that the sustainable construction agenda in Nigeria suffers from inadequate government commitment and fragmented policy implementation.

Several participants also identified the lack of political will as a critical barrier. Participant 8 observed that *"The level of sustainable construction practice is very low even in Lagos, which hosts most construction activities in the country."* This reflects a broader concern that, despite Nigeria's growing construction market, environmental sustainability remains peripheral in nationaldevelopment strategies.

The interviews further revealed a mixed understanding of sustainable construction among professionals. Some acknowledged that the concept is gradually gaining traction within industry discourse.

Participant 1 remarked that *"Sustainable construction practice is at an evolutionary stage. The knowledge base necessary for implementation is increasing."*

Similarly, others recognised isolated advancements in Abuja, noting that *"It is averagely practiced in this location as this is a capital city (Abuja) but low in other parts of the country"* (Participant 4).

However, these comments were often accompanied by concerns about limited awareness and capacity-building efforts. As Participant 5 succinctly put it, *"Practice level is very low; awareness is also low."*

Collectively, these responses portray sustainable construction in Nigeria as being in its formative phase, characterised by low awareness, weak institutional support, and sporadic practice.

The findings suggest that while the discourse around sustainability is emerging, it lacks the systemic reinforcement necessary for large-scale adoption. This interpretation aligns with existing literature (Ogunbiyi, 2014), which emphasises that without robust policy support and coordinated stakeholder engagement, sustainable construction will continue to evolve slowly and unevenly across the country.

4.2. Major challenges to the complete uptake of sustainable construction

Respondents were then asked to identify the perceived significant challenges in implementing sustainable construction in the Nigerian construction industry, particularly in their local area. Results were categorised into four sub-themes: inadequate awareness and training; policy and educational issues; the absence of a building code; and the lack of political will to implement sustainable construction, as shown in Figure 1 and discussed below.

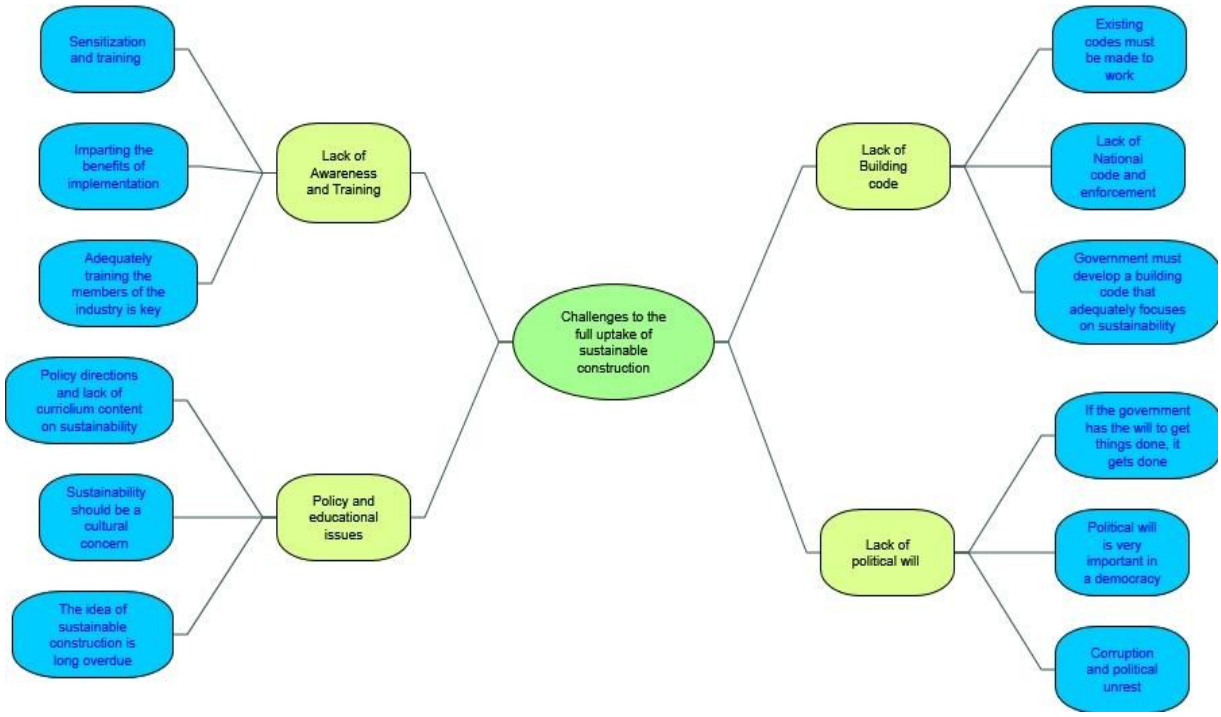

Figure 1: Sub-themes on challenges to the complete uptake of sustainable construction

Bungwon et al. (2016) identified a **lack of awareness and adequate training** as part of cultural enshrinements that are expected to improve industry knowledge of sustainable construction. The lack of adequate awareness was also confirmed in this study. Sensitisation and training were advocated to introduce people within and outside the industry to the basic knowledge and benefits of sustainable construction practices.

Davies and Davies (2017) highlighted the lack of policy enforcement and educational issues as key challenges in the literature. Participant 7 indicated that the absence of a government-laid-down plan or strategy for stakeholders to follow is challenging. The Nigerian construction industry lacks strategic short- and long-term goals for sustainable construction. Hence, there is a gap as knowledge of sustainable construction is not even taught to incoming professionals. The incoming professionals need to start learning experientially as it relates to the organisational ethos of the individual companies they work with; this is not ideal. The lack of current policy enforcement was a common comment from participants 2, 5, and 11, and it is a key barrier. It was noted that although the industry currently lacks an enforcement mechanism, no practising professional wants to be seen as on the wrong side of the law. Therefore, if the policy is actively implemented with necessary enforcement mechanisms, the likelihood of success is high.

The lack of adequate and sustainable building codes emerged as a challenge. There are problems with enforcing the existing building code, as stated by Participant 1, and formulating a new sustainable building code is not exactly forthcoming unless underlying issues with the non-performing building code are resolved (Participant 10). These underlying issues include the lack of teamwork and harmony among professional institutions in the country, the lack of a coordinating agency/board for all professional institutions, and the lack of monitoring and regulatory agencies for contractors and subcontractors within the industry. Oribuyaku (2015) and Ogunbiyi (2014) mentioned the lack of enforcement of the code in the literature.

Lack of 'Political will' by the government

A recurring issue emerging from the interviews was the perceived lack of political will on the part of the government to drive meaningful change within the Nigerian construction industry and the broader economy. While this concern is not prominently discussed in existing literature, it featured strongly in participants' narratives. Respondents emphasised that the absence of firm governmental commitment undermines policy implementation and contributes to systemic inertia. As one participant observed, *"It is the lack of political will to get things done that encourages corruption and a lukewarm attitude within the industry"* (Participant 2). Another noted that *"If the government wants something implemented, it gets implemented, and political will is essential to implementing policies in a democracy"* (Participant 6). These perspectives underscore the belief that the state's capacity to effect change is not limited by resources or technical constraints, but rather by a lack of sufficient resolve and continuity in governance.

The absence of sustained political will manifests in two critical ways for the construction sector. First, frequent changes in government officials and policy directions after election cycles often lead to the discontinuation or abandonment of existing plans and strategies. Consequently, initiatives related to sustainable construction rarely progress beyond the initial stages, as succeeding administrations may not share their predecessors' vision or priorities. This lack of continuity renders previous efforts moribund and interrupts long-term developmental agendas. Second, the findings underscore the importance of stronger industry–government collaboration in mitigating the effects of political transitions. Respondents suggested that collective industry action through professional bodies, councils, and advocacy platforms could help sustain policy momentum and ensure that sustainability goals outlive the typical four-year political cycle. Such collaboration could also foster accountability and policy consistency, both of which are essential for embedding sustainable practices within Nigeria's construction landscape.

4.3. Status of the building code

The interviews revealed a shared perception among participants that Nigeria's National Building Code is inactive and is applied inconsistently across the country. Respondents described the code as being in a "comatose state," with implementation limited primarily to a few urban centres such as Lagos and Abuja. This finding corroborates Ogunbiyi's (2014) observation that despite the existence of the code, its operationalisation remains weak due to inadequate enforcement mechanisms and institutional apathy.

Participants emphasised that while the building code exists in principle, its influence in regulating construction practice is negligible. As Participant 8 remarked, *"There may be Building Codes in Nigeria, but implementation is limited only to major projects and urban developments."* Similarly, Participant 4 noted that *"[It is] not adhered to because it is not a law. Resistance [exists] even from other relevant bodies within the industry (Planners and Architects)."* These insights underscore the perception that the code functions more as a guiding document than a binding legal instrument, which significantly limits its authority.

Several respondents attributed the code's poor implementation to its ambiguous legal standing and the lack of penalties for non-compliance. Participant 9 observed that *"The Nigerian Building Code is not actively implemented as projects are being constructed without approval and people tend to build anyhow and offenders go unpunished."* This lack of accountability reinforces a culture of impunity within the construction industry, where adherence to regulations becomes optional rather than mandatory. Echoing this sentiment, Participant 2 explained, *"Not many people know much about the building code until things happen, [then] people refer to it. Some think it is a guide, some think it is a law."* This confusion reflects both inadequate public awareness and weak institutional communication about the code's purpose and enforcement procedures.

Some respondents maintained that the code's introduction was a positive step but stressed that it remains at an early or "embryonic" stage of effectiveness. Participant 1 commented that it is *"At an embryo stage, as lack of legislation hinders [its implementation]. Not yet effective, but having it is a good step in the right direction."* Others expressed frustration that personal, professional, and institutional interests continue to hinder collective progress. As Participant 5 stated, *"The code is good but theoretical without the ability to act. Also, personal and professional interests hinder the implementation."* Participant 11 further expanded on this challenge, noting that *"As of now, the building code has many lapses. Some professionals (especially engineers) in the construction industry refused to adopt it because they felt they did not contribute to its content."*

These reflections highlight a critical issue in the construction industry: stakeholder disunity. Resistance among professional bodies—often rooted in jurisdictional disputes or feelings of exclusion from policy formulation—has impeded the development of a cohesive implementation strategy. As participants 4, 5, and 11 collectively implied, internal divisions and lack of synergy among architects, planners, engineers, and other professionals have weakened the code's legitimacy and enforceability. The findings therefore suggest that the challenge is not merely legislative but also relational, requiring improved inter-professional collaboration and participatory policy processes.

Therefore, while the existence of the Nigerian Building Code represents progress toward standardising construction practices, its limited enforcement, ambiguous legal status, and internal professional resistance have rendered it largely ineffective. Addressing these issues requires stronger legislative backing, public awareness campaigns, and coordinated stakeholder engagement to turn the code into an actionable framework that guides sustainable construction in Nigeria.

4.4. Improving sustainability in the Nigerian construction practice

The theme of improving sustainability in Nigerian construction practice was categorised into **governmental** and **professional** inputs, highlighting the shared responsibility of policymakers and practitioners in promoting sustainable construction. Participants collectively emphasised that achieving sustainability requires systemic reforms, consistent policy direction, professional competence, and the

cultural integration of sustainability values.

Government inputs: The government's focus on sustainable construction must be clear and consistent, not subject to change with power shifts. Additionally, policies regarding tax subsidies, cost reduction, and import discouragement are primarily within the government's purview. "*Subsidies and reduced costs, discouraging importation and allowing local research and production to grow. Research aimed at commercial production by the Government.*" Participant 1. The government must also facilitate the growth of local research and production through commercialisation and promote cultural sustainability, which requires a serious, consistent approach. Awareness, training, and retraining of policy implementers within the industry, as well as a general orientation, are also needed on the part of the government to ensure sustainability is 'homegrown' within the industry.

Furthermore, sustainability must be embedded in cultural and educational frameworks. Participant 2 advocated that *"we need to make sustainability a way of life, culturally, teach it in schools. It requires a lot of seriousness and consistency."* This highlights the role of civic education in fostering long-term behavioural change.

Governmental efforts should also target education, awareness, and policy dissemination. Participants lamented the low public and professional awareness of sustainability-related policies, with Participant 4 observing that *"the publication of the existing policies [is limited]; most people do not know them—[there is a need for] general orientation."* This gap highlights the need for clear, accessible communication of government policies and for ongoing public engagement.

Professionals' inputs: While the government fosters an enabling environment, professionals and their institutions share equal responsibility for integrating sustainability into their daily practices. Participants emphasised that sustainable construction must begin at the design stage, integrating both passive and active design components. As Participant 1 explained, *"From design, active and passive components must be incorporated. Specifications and materials usage must be improved once the knowledge base of the professional increases."* This suggests that education and continuous professional development are prerequisites for sustainable design practice.

Concerns were also raised regarding the current level of professional competence in the industry. Participant 5 stated that *"the level of professionals in practice cannot lead us to sustainable construction because of inadequate training." At the same time,* Participant 3 reinforced that *"improvement in professional practice and artisanal training and improvement in material usage"* are needed. This reflects a skill gap not only among professionals but also within the artisanal workforce, as Participant 5 further asserted, *"Artisanal skills must be prioritised."* Strengthening vocational training would therefore enhance the quality and sustainability of construction output.

Moreover, participants called for stronger professional leadership and advocacy in the policy formulation process. As Participant 8 articulated, *"Professionals in the built industry should come up with appropriate laws and professionals should be trained on the benefits of inputting such."* This underscores the importance of co-producing regulatory frameworks that reflect both technical realities and sustainability imperatives.

Consistent with Bungwon et al.'s (2016) argument, participants highlighted local research and innovation as critical enablers of sustainability. Participant 1's call for *"Research and Development on improved and enhanced alternative building materials and development generally"* reflects a growing recognition that sustainable practices must be locally contextualised and grounded in indigenous knowledge systems.

4.5. The need for strict regulations and policies for SC practice

The participants were unanimous in affirming that strict regulations and enforceable policies are essential to drive sustainable construction (SC) practices within the Nigerian construction industry. The prevailing view was that without regulatory discipline and clearly defined consequences, efforts toward sustainability would remain ineffective. As Participant 2 emphasised, *"Yes, people must know there are consequences for their actions and inactions. People do things because they know they will get away with it. We need to be consistently strict."* This sentiment reflects a general perception that the lack of enforcement and accountability has long hindered the achievement of sustainability objectives in the sector.

Participants agreed that enforcement must be strengthened, not only to deter non-compliance but also to improve the overall quality of construction output. Participant 10 asserted, *"Yes, enforcement must be strict,"* while Participant 7 added that stricter regulatory controls *"will improve the quality of output in the industry."* Similarly, Participant 9 observed that *"People fear the law and only tend to respect the authority,"* suggesting that consistent, transparent law enforcement could serve as an effective behavioural driver of compliance. This corroborates earlier observations by Ogunbiyi (2014), who linked regulatory weaknesses and poor enforcement mechanisms to the prevalence of substandard practices in the Nigerian construction sector.

However, participants also cautioned that strict

regulations should be implemented in a phased, inclusive manner. Participant 1 suggested that *"Before we get to strict policy, we need to teach. It is a process,"* highlighting the need for preparatory capacity-building and stakeholder sensitisation before enforcement begins. Similarly, Participant 8 supported this position by stating, *"Yes, but there is a need for stakeholders to be educated,"* reinforcing the importance of public and professional education as a foundation for policy legitimacy and effective implementation. This aligns with the argument by Bungwon et al. (2016), who noted that sustainable policy outcomes depend on the extent to which affected stakeholders are informed and aligned with policy objectives.

Overall, the data suggest that regulatory reform must strike a balance between firmness and fairness, ensuring that rules are not only punitive but also educative and enabling. Participants consistently called for clear, consistent, and enforceable frameworks that would compel compliance across all levels of practice while maintaining fairness and transparency. As Participant 9 succinctly remarked, *"Very well, that is the key,"* underscoring the consensus that robust and well-enforced regulations are fundamental to achieving a more sustainable and accountable construction industry.

The findings from this theme suggest that stringent regulations and policies are essential for promoting sustainable construction practices in Nigeria. However, their success depends on complementary measures such as stakeholder education, phased implementation, and institutional support. The participants' views highlight an urgent need for a well-coordinated regulatory framework—one that enforces compliance while promoting understanding, capacity development, and cultural acceptance of sustainability principles within the construction ecosystem.

4.6. Input of stakeholders to drive sustainability

The contributions expected from stakeholders to drive sustainability in the Nigerian construction industry are depicted in Figure 2.

Professional Institutes and Professionals

Professionals must uphold high standards in their practices and provide clients with well-informed advice. Additionally, interdisciplinary research within the industry and firmer collaboration among professionals are encouraged. Professional institutes must take greater responsibility by engaging in research, increasing public awareness, and fostering synergy among fellow professional bodies.

Government as a Stakeholder

The government plays a critical role in shaping industry policy, as emphasised in the literature (Akadiri et al., 2012; Ojo et al., 2014). Raising awareness and

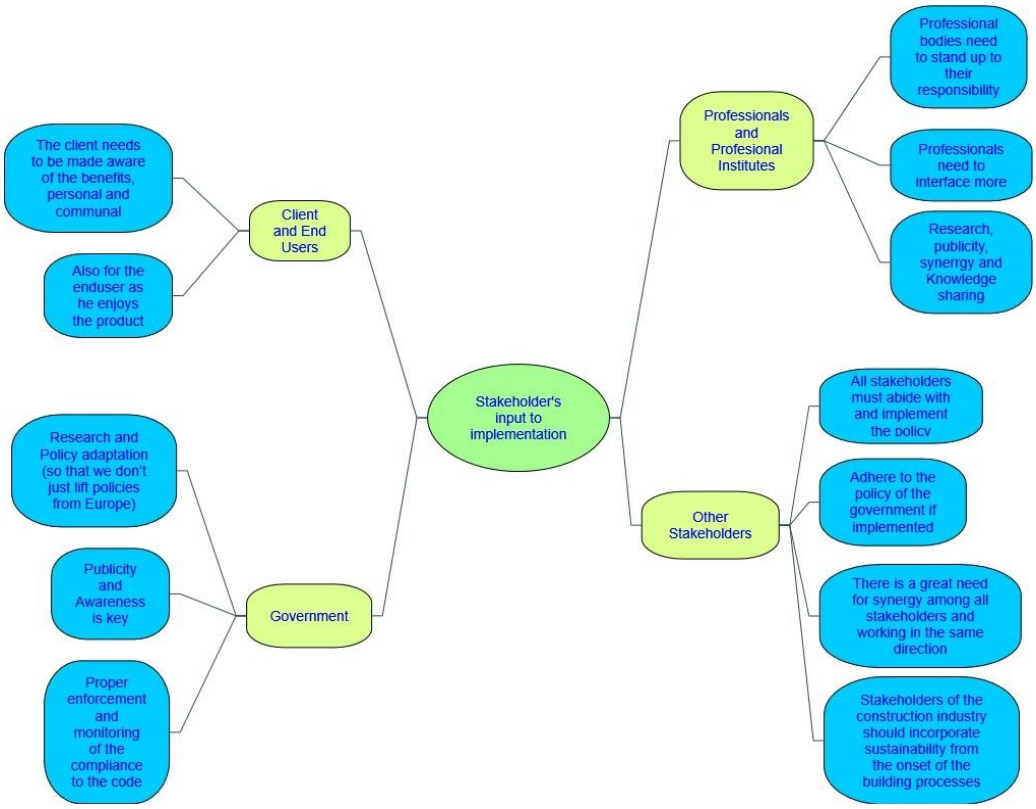

Figure 2: Sub-theme on stakeholders' input to sustainable construction implementation

increasing publicity efforts are essential, as contractors and other industry practitioners look to the government for guidance and patronage. Furthermore, investment in research and development is necessary to ensure effective policy adaptation. As noted *by Participant 4, this will prevent situations in which "policies are not just lifted from Europe and other developed nations*" without proper consideration of Nigeria's unique context.

Clients and End-Users

Clients must be informed about the benefits of sustainable construction, specifically how it affects their quality of life and overall comfort. Greater awareness is expected to influence client demands, which, in turn, will shape construction outputs.

Other Stakeholders

Actors such as developers must comply with industry minimum standards and regulations throughout all stages of construction. Coordination among all industry players is crucial to achieving sustainability goals. However, as Participant 6 observed, "*Developers in the Nigerian construction industry are mostly profit-driven and, as such, have reserved regard for quality delivery*."

4.7. Implementation of Sustainable construction through the municipality

Participants widely acknowledged the role of local government in advancing sustainable construction (SC) as both strategic and necessary. Consistent with Davies and Davies (2017), respondents agreed that local governments are best positioned as the starting point for implementing sustainable construction policies because they are geographically closer to the people and operate across all regions of the country. Participant 4 emphasised this proximity advantage by stating that *"They are not active. The LG should be as they are closer to the people,"* while Participant 3 similarly observed that *"They have not been active, and more can be done… They can be the needed agent as they are closer to the people."* This perspective aligns with Nwokoro and Onukwube (2015) and Tunji-Olayeni et al. (2018), who argue that, if empowered, local authorities can play a pivotal role in ensuring the enforcement of sustainability standards within the built environment.

However, participants raised serious concerns regarding the capacity and integrity of local governments to take on this role effectively. Many respondents noted that local authorities currently lack the institutional strength, manpower, and motivation to drive sustainable construction initiatives. As Participant 1 remarked, *"The local government is best suited, but the capacity could be a challenge right now." At the same time,* Participant 2 added, *"Yes, if the local level can be active, it will greatly reduce the negative effects at the federal level, but it is currently the weakest unit of government."* This sentiment reflects widespread scepticism about the local government's readiness to lead implementation efforts, given its existing inefficiencies.

Beyond capacity issues, corruption and weak accountability were repeatedly cited as significant impediments. Participant 11 commented that *"They are corrupt; they compromise easily. They are also not adequately motivated to carry out the enforcement. They are poorly remunerated, so they are exposed to the temptation of bribery and corruption."* Similarly, Participant 8 noted, *"Yes. The LG is not empowered, though,"* implying that without greater institutional support and oversight, local governments are unlikely to execute sustainability policies effectively. These concerns echo earlier findings by Ogunbiyi (2014), who identified systemic corruption and lack of enforcement as significant barriers to construction reform in Nigeria.

Despite these challenges, respondents maintained that empowering municipalities remains a viable pathway for improving sustainable construction, provided that institutional reforms and capacity-building measures are prioritised. Participant 7 encapsulated this by stating, *"They need more improvement. Government must ensure their active participation, compliance being at the grassroots."* This reflects the belief that the success of sustainability initiatives depends on grassroots enforcement, where local governments act as the interface between policy and practice. Strengthening their administrative and technical capacity through training, resource allocation, and improved remuneration was identified as a critical step towards achieving this goal.

While participants recognised the municipality as an essential platform for implementing sustainable construction, they stressed that its effectiveness is currently undermined by inadequate capacity, corruption, and a lack of empowerment. To address these limitations, national and state governments must invest in institutional reforms that enable local authorities to operate transparently and efficiently. Only through such deliberate empowerment can municipalities transform from passive entities into active agents of sustainable construction, capable of translating policy intentions into tangible environmental and social outcomes.

5. Conclusion and Recommendations

This study examined the policy challenges hindering the implementation of sustainable construction (SC) in the Nigerian construction industry. Drawing on perspectives from experienced professionals across multiple built-environment disciplines, the study found that sustainability practice remains weak, fragmented, and inconsistent across the sector. The findings confirm

a persistent policy implementation gap driven by weak regulatory enforcement, an inactive national building code, insufficient inter-professional collaboration, a lack of local institutional capacity, and insufficient political will at different levels of government.

A key implication of these findings is that sustainable construction will not become mainstream in Nigeria without stronger state leadership. Government, as both regulator and major client, occupies a central role in shaping industry behaviour and signalling national priorities. Participants consistently noted that the lack of enforcement mechanisms has allowed widespread non-compliance to continue unchecked, particularly at the local government level. Policy discontinuity linked to political transitions further disrupts momentum, weakening confidence in long-term sustainability reforms.

A related insight concerns the need for stronger institutional collaboration. The study highlights that professional bodies and regulatory institutions currently act in silos, limiting their influence on policy design and implementation. The absence of a unified technical voice has also slowed the development of coherent sustainability standards, rating systems, and skills development pathways. Strengthening cross-disciplinary collaboration—especially among architects, engineers, quantity surveyors and builders—is therefore critical for embedding sustainability practices at the project and policy level.

Prioritised Practical Recommendations

Based on the findings, four priority actions are recommended:

1. Legal empowerment and enforcement of the Nigerian Building Code.

2. The code should be fully legislated, regularly updated, and supported by compulsory compliance checks. Statutory sanctions for non-compliance are essential to reduce building failures and incentivise sustainable practices.

3. Capacity-building and anti-corruption mechanisms at the municipal level.

4. Local governments require targeted training programmes, staffing upgrades, monitoring systems, and transparent enforcement procedures to reduce corruption and improve planning control—especially since SC implementation occurs at project approval and inspection stages.

5. Institutionalised interdisciplinary collaboration. Professional bodies should create a unified sustainability platform that aligns technical standards, skill development, and advisory roles. Joint advocacy and shared agendas will enhance industry influence in national policy and foster stronger public–private cooperation.

6. Strategic awareness and education programmes. Professional training, public sensitisation, and media campaigns are needed to build a shared understanding of sustainable construction, improve acceptance of new regulations, and support the long-term cultural shift required for SC adoption.

Collectively, these recommendations provide a realistic pathway for embedding sustainability into Nigeria's construction environment and align with the research aim of identifying policy conditions necessary for effective SC implementation.

Limitations of the Study

This research is geographically limited to Abuja and Lagos—two major urban centres with high concentrations of professionals. These contexts may not fully represent the experiences of practitioners in other regions with different institutional and economic conditions. Furthermore, the purposive sampling strategy, which targeted professionals experienced in sustainability and policy environments, restricts generalisability. Nevertheless, these samples enabled the study to capture rich expert insight into the core research problem, supporting analytical rather than statistical generalisation.

Contribution to Knowledge

This study contributes to knowledge by advancing empirical understanding of why sustainable construction policy has struggled to gain traction in Nigeria. It provides evidence from industry practitioners that reinforces the conceptual argument introduced in the paper: institutional weaknesses, enforcement failures, and governance constraints—not merely technical barriers—constitute the most significant obstacles to SC adoption.

The study also fills a regional knowledge gap by connecting sustainability debates to real policy processes rather than conceptual ideals. It demonstrates that stronger inter-professional collaboration, political commitment, and municipal empowerment are critical determinants of implementation success in developing-country contexts. These insights extend the literature beyond Nigeria, offering a transferable framework for other emerging economies facing similar policy and governance limitations.

Sustainable construction in Nigeria will only advance through coordinated, long-term commitment built on strong regulatory authority, empowered local enforcement structures, and a cohesive professional

community. By illustrating how political will, implementation capacity, and institutional cooperation shape sustainability outcomes, this study provides a platform for future research and policymaking to transition Nigeria's built environment toward global best practices.

References

Akinyemi, A. P., Adekunle, A. O., Joseph, O. O., Anthony, A. I., & Dabara, D. I. (2017). The need for green building rating systems development in Nigeria: The process, progress, and prospects. *Academic Journal of Science, 9*(2), 35–44.

Akadiri, P. O., Chinyio, E. A., & Olomolaiye, P. O. (2012). Design of a sustainable building: A conceptual framework for implementing sustainability in the building sector. *Buildings, 2*(2), 126–152.

Atanda, J. O., & Olukoya, O. A. (2019). Green building standards: Opportunities for Nigeria. *Journal of Cleaner Production, 227*, 366–377.

Babalola, A., & Harinarain, N. (2024). Policy barriers to sustainable construction practice in the Nigerian construction industry: An exploratory factor analysis. *Journal of Engineering, Design and Technology, 22*(1), 214–234. https://doi.org/10.1108/JEDT-07-2021-0375

Bungwon, H. D., Dabo, D. I., & Ishaya, D. A. (2016). A study of the awareness of property managers and other built environment professionals on sustainable buildings in Kaduna, Nigeria. *International Journal of Research in Chemical, Metallurgical and Civil Engineering, 3*, 94–96.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE

Davies, O., & Davies, I. (2017). Barriers to implementation of sustainable construction techniques. *Journal of Environmental Science, 2*, 1–9.

Drysdale, D., Mathiesen, B. V., & Paardekooper, S. (2019). Transitioning to a 100% renewable energy system in Denmark by 2050: assessing the impact from expanding the building stock at the same time. *Energy Efficiency*, *12*(1), 37-55. https://doi.org/10.1007/s12053-018-9649-1

Federal Republic of Nigeria. (2006). *The Nigerian building code*. Alexis Nexus, Butterworths Publications.

Geissler, S., Österreicher, D., & Macharm, E. (2018). Transition towards energy efficiency: Developing the Nigerian building energy efficiency code. *Sustainability, 10*(8), 2620.

Gibbs, D., & O'Neill, K. (2015). Building a green economy? Sustainability transitions in the UK building sector. *Geoforum, 59*, 133–141.

Goh, C. S., Jack, L., & Bajracharya, A. (2020). Qualitative study of sustainability policies and guidelines in the built environment. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 12*(2). https://doi.org/10.1061/(ASCE)LA.1943-4170.000039

Heijden, J. & Bueren, E. (2013). Regulating Sustainable Construction in Europe: An Inquiry into the European Commission's Harmonisation Attempts (July 17, 2013). The International Journal of Law in the Built Environment, 5(1). http://dx.doi.org/10.2139/ssrn.2294820.

Hennink, M. & Kaiser, B.N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. Social Science & Medicine, 292, 114523. https://doi.org/10.1016/j.socscimed.2021.114523.

Hill, M. J., & Hupe, P. L. (2014). *Implementing public policy: An introduction to the study of operational governance* (3rd ed.). Sage.

Hudson, B., Hunter, D., & Peckham, S. (2019). Policy failure and the policy–implementation gap: Can policy support programs help? *Policy Design and Practice, 2*(1), 1–14.

Isang, I. W. (2023). A historical review of sustainable construction in Nigeria: A decade of development and progression. *Frontiers in Engineering and Built Environment, 3*(3), 206–218. https://doi.org/10.1108/FEBE-02-2023-0010

Nwokoro, I., & Onukwube, H. (2015). Understanding green and sustainable construction in Lagos, Nigeria: Principles, attributes and framework. *Ethiopian Journal of Environmental Studies and Management, 8*(1), 57–68.

Ogunbiyi, M. A. (2014). The National Building Code and construction industry professionals in Nigeria. *International Journal of Social Sciences and Entrepreneurship, 1*(12), 937–948.

Ojo, E., Mbowa, C., & Akinlabi, E. T. (2014). Barriers to implementing green supply chain management in the construction industry. In the *International Conference on Industrial Engineering and Operations Management*.

Onuoha, I. J., Kamarudin, N., Aliagha, G. U., Okeahialam, S. A., Atilola, M. I., & Atamamen, F. O. (2017). Developing policies and programmes for green buildings: What can Nigeria learn from Malaysia's experience? *International Journal of Real Estate Studies, 11*(2), 50–58.

Oribuyaku, D. (2015). Code for a sustainable built environment in Nigeria: A proposed high-level vision of a policy framework. *Construction Management and Economics*, 2–10.

Oyewobi, L. O., & Jimoh, R. A. (2022). Barriers to the adoption of sustainable procurement in the Nigerian public construction sector. *Sustainability, 14*(22), 14832. https://doi.org/10.3390/su142214832

Scott, W. R. (2014). Institutions and Organisations: Ideas, Interests, and Identities (4th ed.). Thousand Oaks, CA: Sage Publishing.

Solanke, B., & Fapohunda, J. A. (2016). Strategies for effective materials management in sustainable construction enhancement. In *CIDB Postgraduate Conference* (Vol. 3, pp. 496–505). Cape Town, South Africa.

Tracy, S. J. (2012). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. John Wiley & Sons.

Tunji-Olayeni, P. F., Mosaku, T. O., Oyeyipo, O. O., & Afolabi, A. O. (2018, May). Sustainability strategies in the construction industry: Implications for green growth in Nigeria. In *IOP Conference Series: Earth and Environmental Science* (Vol. 146, No. 1, Article 012004).

World Green Building Council. (2020). *Our green building councils*. https://www.worldgbc.org/member-directory.

Appendix 1

Table 1: The demographic details of the participants

Interviewee	Profession	Age	Gender	Qualification	Years of Experience	Place of work
Participant 1	Architect	>50	Male	Masters, PMP, FNIA	30	Federal Govt. Agency, Abuja
Participant 2	Architect	>50	Male	Masters, MBA, FNIA	25	Private Practice, Abuja
Participant 3	Civil Engineer	45 -50	Male	MSc, MNSE	30	Govt. Agency
Participant 4	Builder	45- 50	Male	MSc, FNIOB	30	Building Control Agency, Abuja
Participant 5	Quantity Surveyor	40-45	Male	MSc, FNIQS	20	Govt Agency, Abuja
Participant 6	Quantity Surveyor	40-45	Male	MSc, MNIQS	15	Private Practice, Abuja
Participant 7	Builder	35-40	Male	MSc, MNIOB	13	Private Practice, Lagos
Participant 8	Civil Engineer	45-50	Male	BSc, MNSE,	20	Private Practice, Lagos
Participant 9	Urban Planner	35-40	Female	BSc, MNITP	15	Local Govt. Municipal office in Lagos
Participant 10	Quantity Surveyor & Lecturer	50-55	Male	PhD, MNIQS	21	Private Practice & Academic
Participant 11	Quantity Surveyor	45-50	Female	MSc, MNIQS, PMP	24	Project Mgt Firm

- FNIA - Fellow of the Nigerian Institute of Architects.
- MNIOB - Member, Nigerian Institute of Building,
- MNIQS - Nigerian Institute of Quantity Surveyors for the quantity surveyors.
- MNSE - Nigerian Society of Engineers,
- MNITP - Nigerian Society of Urban (town) planners.