RELATIONSHIPS AMONG BUILDING PERMIT APPROVAL PROCESSES, QUALITY OF BUILDING PLANS AND PREVENTION OF ILLEGAL DEVELOPMENT IN SOKOTO STATE

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Abstract
This study investigated the relationship between building permit approval processes and development control outcomes in Sokoto State, Nigeria. A correlational survey design was employed. The study population comprised 35 Building Technology lecturers from Colleges of Education and town planners in Sokoto State. Data were collected using a structured questionnaire, which was validated by three experts: two from Building Technology Education, Federal College of Education (Technical), Bichi, Kano State, and one from Measurement and Evaluation, Federal College of Education, Gidan-madi, Sokoto State. The instrument, titled Building Permit Approval and Development Control Questionnaire (BPADCQ), encompassed permit approval processes, prevention of illegal development, and quality of building plans. Reliability was established through a pilot test involving 15 lecturers in Zamfara State, resulting in a Cronbach's alpha coefficient of 0.81. Data analysis utilized Pearson Product-Moment Correlation to determine the extent and direction of relationships, while hypotheses were tested using simple linear regression at the 0.05 level of significance. The findings indicated that building permit approval processes were weakly related to both the prevention of illegal development and the quality of building plans; however, the relationships were not consistently strong. The study concludes that enhancing institutional capacity, enforcement mechanisms, and professional practices is essential for permit approval systems to effectively promote sustainable urban development.

Keywords: Building Permit, Illegal Development, Quality of Building Plans, Development Control, Technical Education

Introduction

A Building Control System refers to a set of regulations, procedures, and mechanisms established by government or local authorities to ensure that building construction, alteration, and demolition works comply with approved standards of safety, health, functionality, and

environmental sustainability. According to Ogunseye (2023), these systems encompass permit approvals, inspections, and enforcement measures designed to regulate the planning, design, and execution of buildings in Nigeria. The framework serves as a critical instrument prescribing minimum standards for construction practices, materials, and procedures to safeguard lives and property. As emphasized by Ajayi (2022), this is necessary to ensure that buildings are designed and constructed according to approved plans, use appropriate materials, and meet the standards set by relevant building codes and planning authorities. It also ensures that buildings are structurally sound and safe for occupancy, promotes the use of standard materials and approved construction methods, curbs unauthorized or unsafe building projects, and helps property owners and developers adhere to building laws and codes. Despite these regulatory frameworks, the construction industry continues to face compliance challenges, including illegal developments, substandard workmanship, and recurring building collapses (Okonta, Okeke, Oluigbo, & Mgbemena, 2025). These persistent issues underscore the disparity between regulatory provisions and actual on-the-ground practices. Hence, the Building Control System serves as a regulatory framework that ensures all building design, construction, and maintenance activities comply with approved safety, health, and environmental standards. To better understand how these frameworks operate, it is essential to examine permit approvals, which form the backbone of building control systems in ensuring compliance before construction begins.

Permit approvals constitute a central component of building control, serving as official authorization for construction activities. They are intended to ensure that proposed projects conform to planning and safety requirements before work commences. As emphasized by Mrabure and Awhefeada (2021), effective permit systems can significantly reduce incidences of structural failure and unsafe construction. Where permit processes are weak, compromised, or bypassed, developments often proceed without adequate oversight, increasing the risk of hazards to occupants and the public. Arimah and Adeagbo (2000) stated that permit approvals are the official authorization, preparation, and execution of the plan to reflect public participation. The planner's role is to coordinate, collect data, and help clarify policies and proposals rather than impose plans on the people. It is rooted in the need to regulate and control development activities to ensure safety, orderliness, and compliance with urban planning laws (Umeokafor, Evangelinos, & Windapo, 2022). Before any construction begins, developers must submit building plans and related documents for review by the approving authorities, such as a town planning or building control agency. Thus, permit approvals act as a preventive

regulatory measure, ensuring that only compliant and safe building projects are executed, thereby supporting sustainable urban development and public safety. However, lapses in enforcement and bureaucratic bottlenecks have limited the effectiveness of permit approvals, allowing non-compliant structures to emerge in both urban and peri-urban areas. These weaknesses often give rise to illegal developments, which present some of the greatest threats to urban safety and order.

Illegal developments are construction or land-use activities carried out without obtaining the necessary permits from the relevant building control authorities or in violation of approved plans, laws, or building regulations. According to Badiora (2020), such developments often occur when individuals or organizations build without approved plans, encroach on restricted areas, or alter approved structures without official consent. Illegal developments, whether undertaken without approvals or in violation of plans, undermine urban order, strain infrastructure, and compromise public safety through structural failures, building collapses, inadequate sanitation, traffic congestion, and land-use conflicts. Fakunle, Opiti, Sheikh, and Fashina (2020) observed that these developments deviate from the conditions of an approved building or planning permit, thereby violating established planning and building regulations. Such practices undermine urban order, strain infrastructure, and compromise public safety. Unegbua, Yawasa, Dan-Asabe, and Alabi (2024) reported that a significant proportion of the urban housing stock has been developed without proper approvals, reflecting not only institutional weaknesses but also limited public awareness of building regulations. Thus, illegal developments represent non-compliance with statutory building and planning laws, undermining sustainable urban development and public safety. Illegal development often leads to building quality issues, as unapproved or poorly regulated projects frequently result in structural defects and safety risks. The connection between illegal development and poor construction outcomes highlights the need to evaluate the quality of building plans.

A quality building plan is a professionally prepared architectural and engineering design that meets regulatory standards, ensures structural stability, and provides clear specifications for safe and functional construction. The plans are accurate, detailed, and technically sound; they include structural, electrical, plumbing, and other services, dimensions, material specifications, site-adjusted details, and orientation to soil conditions. Mba, Okeke, Igwe, Ebohon, and Awe (2025) stated that those standards aim to ensure that construction projects meet essential safety, environmental, and performance requirements throughout their life cycle. Non-adherence to these provisions has resulted in numerous building collapses. Mba, Okeke,

Igwe, Ozigbo, Oforji, and Ozigbo (2024) emphasized that quality building plans revolve around creating accurate, compliant, and functional designs that guide construction and ensure the safety, efficiency, and sustainability of buildings. It serves as a foundation for proper construction management, providing all technical details such as layout, structural components, electrical and plumbing systems, and materials to prevent construction errors and enhance performance. Abisuga and Okuntade (2019) stated that a quality building plan is an approved construction blueprint that integrates safety, functionality, and aesthetics while adhering to technical, legal, and environmental standards set by relevant authorities. Therefore, a quality building plan represents the blueprint of excellence in construction, to balance design creativity with regulatory and technical precision for safe and sustainable development. The continued presence of unapproved and low-quality structures highlights weaknesses in the building control system's capacity to prevent and rectify such violations. Addressing these weaknesses also requires strengthening education, particularly through the roles of Building Technology teachers in shaping future practitioners.

In this regard, the role of Building Technology lecturers and Town Planners becomes crucial. As educators responsible for preparing future builders, artisans, and technical professionals, lecturers are strategically positioned to transmit knowledge of building regulations, permit processes, and quality control practices to their students. Building control principles into classroom instruction, laboratory practice, and fieldwork fosters a new generation of practitioners who are not only technically competent but also conscious of regulatory compliance and safety standards. Babalola and Harinarain (2024) observed that integration of professional ethics and regulatory awareness into technical education contributes significantly to sustainable construction practices. Similarly, Wafudu and Bin Kamin (2024) emphasized that technical educators instill professional standards that enhance construction quality, while Olugboyega, Ojo, and Olanipekun (2024) showed that real-life application of building codes in teaching improves safety competence. Furthermore, Ardo, Bass, and Gaber (2023) stressed that curriculum gaps often lead to unsafe practices in the field, highlighting the importance of integrating regulatory content. Sustainable outcomes in Nigeria require synergy between regulatory town planners and education, with lecturers serving as the bridge between policy and practice. This makes it imperative to explore how both educators and town planners perceive the role of permit approvals in promoting compliance and construction quality.

Town planners are positioned for the effective implementation of quality building plans within the built environment. Serving as regulators and coordinators of urban development,

they function as the interface between planning policy, design approval, and construction oversight, ensuring that all proposed building plans adhere to development control standards and national building codes. Town planners systematically evaluate submitted building plans for compliance with land-use zoning, accessibility criteria, and requirements for environmental sustainability. This evaluative process mitigates the risk of approving substandard or unsafe designs, thereby fostering the development of structurally robust and functionally efficient buildings. Okeke, Sam-Amobi, and Okeke (2020) observed that the involvement of professional planners in the scrutiny of building plans significantly reduces instances of structural failure by enforcing conformity with planning and design standards. In a similar vein, Adebisi, Ojo, and Alao (2018) contended that the efficacy of quality building plan implementation is largely contingent upon planners' capacity to coordinate with architects, engineers, and building control officers to ensure design precision and site compliance. Ebekozien, Aigbavboa, and Samsurijan (2023) further emphasized that collaboration between planning authorities and construction professionals guarantees that approved plans are not only compliant in documentation but are also faithfully executed during the construction phase. Additionally, town planners conduct monitoring and post-approval inspections to ensure adherence to the approved quality building plan throughout the construction process. These responsibilities include periodic site visits to identify deviations and enforcement notices to maintain standards. As highlighted by Igwe (2024), planners act as stewards of development integrity, mediating the interests of developers, the public, and environmental safety. In light of ongoing challenges, it is imperative to explore how town planners and educators, particularly Building Technology lecturers in Technical Colleges and Colleges of Education, perceive the interrelationship between quality building plans and permit approvals in ensuring regulatory compliance and construction quality. Their perspectives offer a critical framework for understanding how educational initiatives can complement regulatory mechanisms to enhance construction quality and safety in Sokoto State.

Statement of the Problem

Ideally, a building control system should function as a comprehensive regulatory mechanism that ensures all construction activities conform to approved building plans, established safety standards, and urban development policies. Through efficient permit approvals, effective development control, and strict enforcement of building codes, such a system guarantees the structural integrity, functionality, and sustainability of the built environment. When properly implemented, it prevents illegal developments, minimizes

construction-related hazards, and promotes orderly urban growth. An ideal system integrates the efforts of architects, engineers, town planners, and building control officers to maintain design quality and public safety. It also relies on transparent permit processes, timely inspections, and accountability mechanisms that ensure compliance. Ultimately, a functional building control system strengthens institutional capacity, fosters public confidence, and supports the sustainable development goals of safety, resilience, and environmental stewardship within urban and peri-urban communities.

In reality, Sokoto State's building control system faces persistent challenges that undermine its effectiveness. Illegal developments are increasingly widespread, and many construction projects are scaled without proper permits or adherence to approved plans. The permit approval process is often marred by procedural delays, weak enforcement, and limited institutional capacity. Building control agencies struggle with inadequate manpower, insufficient funding, and the absence of modern monitoring tools. Political interference and corruption further weaken regulatory authority, allowing non-compliant structures to persist. The disconnect between policy and practice reflects not only systemic inefficiency but also weak collaboration between regulatory agencies and educational institutions responsible for professional training.

This study, therefore, focuses on the relationships among building permit approval processes, quality of building plans and prevention of illegal development in Sokoto State.

Purpose of the Study

The purpose of this study is to examine the relationships among building permit approval processes, quality of building plans and prevention of illegal development in Sokoto State, Nigeria. Specifically, the study seeks:

1. To determine the relationship between building permit approval processes and the prevention of illegal development in Sokoto State.
2. To determine the relationship between building permit approval processes and the quality of building plans in Sokoto State.

Research Questions

1. What is the relationship between building permit approval processes and illegal development prevention in Sokoto State?
2. What is the relationship between building permit approval processes and the quality of building plans in Sokoto State?

Hypotheses

The following null hypotheses are formulated to guide the study:

H_{01}: There is no significant relationship between building permit approval processes and the prevention of illegal development as perceived by Technical College and College of Education teachers.

H_{02}: There is no significant relationship between building permit approval processes and the quality of building plans as perceived by Technical College and College of Education teachers.

Methodology

The design of this study was correlational survey research. This design was considered appropriate because it enabled the researcher to determine the extent and direction of the relationship between building permit approval processes and two outcome variables: prevention of illegal development and the quality of building plans in Sokoto State, Nigeria. The population of the study comprised 35 Building Technology lectures in Federal Colleges of Education Gidan-Madi and regulatory Town planners all in Sokoto State. These lecturers were considered relevant because of their expertise in building regulations, construction practices, and classroom integration of National Building Code provisions. Given the small population, all 35 lecturers and Town planners' team were included; hence, no sampling was required. The instrument for data collection was a structured questionnaire developed by the researcher, titled Building Permit Approval and Development Control Questionnaire (BPADCQ). Section A captured demographic characteristics of building technology lecturers and town planners to examine how their experience and qualifications influence perceptions of permit approvals and building plan quality. Sections B–D were structured on a five-point Likert scale ranging from Very Low Extent (1) to Very High Extent (5). The instrument was subjected to face validation by three experts: two from Building Technology Education Federal College of Education (T) Bichi, Kano State and one from Measurement and Evaluation, Federal College of Education, Gidan-Madi Sokoto State. Their suggestions were incorporated into the final draft of the questionnaire. A pilot test with 5 Building Technology lecturers in Zamfara State yielded a Cronbach Alpha of 0.81. Copies of the questionnaire were personally administered by the researcher to the respondents in their institutions, ensuring a high retrieval rate. Research questions were answered using Pearson Product Moment Correlation (r) to determine the extent and strength of the relationship between building permit approval processes and the two outcome variables. The responses to the items were interpreted by describing the strength of the correlation using the guide suggested by Agbo (2010) for the absolute value of r as slated

below; Very Weak Relationship = 0.00 – 0.19, Weak Relationship = 0.20 – 0.39, Moderate relationship = 0.40 – 0.59, Strong Relationship = 0.60 – 0.79, Very Strong Relationship = 0.80 – 1.00. Regression analysis was used to test the null hypotheses at 0.05 level of significance to determine whether a significant relationship exists between building permit approval processes, the prevention of illegal development, and the quality of building plans.

Results

Research Question 1

What is the relationship between building permit approval processes and the prevention of illegal development in Sokoto State?

Hypotheses 1

There is no significant relationship between building permit approval processes and the prevention of illegal development as perceived by Technical College and College of Education teachers in Sokoto State.

Table 1: Pearson Product Moment Correlation of Building Permit Approval Processes and Prevention of Illegal Development

Variables	Mean	SD	N	rppmc	Remarks	Sig.	Decision
1.BPAP	40.571	5.2034	35	.372	Weak Relationship	.028	S
2. PID	40.457	4.3137					

Key: BPAP = Building Permit Approval Processes, PID = Prevention of Illegal Development, SD = Standard Deviation; N = Number of respondents; rppmc = Pearson Product Moment correlation coefficient; S = Significant

Result in Table 1 indicates that there is a weak relationship (rppmc = 0.372) between building permit approval processes and prevention of illegal development. This finding shows that building permit approval processes are weakly related to the prevention of illegal development. Results in Table 1 further revealed the probability value (p = 0.028), which is less than the 0.05 level of significance, leading to the conclusion that there is a significant relationship between building permit approval processes and prevention of illegal development in Sokoto State. Hence, hypothesis one is rejected.

Research Question 2

What is the relationship between building permit approval processes and the quality of building plans in Sokoto State?

Hypotheses 2

There is no significant relationship between building permit approval processes and the quality of building plans as perceived by Technical College and College of Education teachers in Sokoto State.

Table 2: Pearson Product Moment Correlation of Building Permit Approval Processes and Quality of Building Plans

Variables	Mean	SD	N	rppmc	Remarks	Sig.	Decision
1.BPAP	40.571	5.2034	35	.244	Weak Relationship	.158	NS
2. QBP	38.742	5.9177					

Key: BPAP = Building Permit Approval Processes, QBP = Quality of Building Plans, SD = Standard Deviation; N = Number of respondents; rppmc = Pearson Product Moment correlation coefficient; NS = Not Significant

Result in Table 2 indicates that there is a weak relationship (rppmc = 0.244) between building permit approval processes and quality of building plans. This finding shows that building permit approval processes are weakly related to the quality of building plans. Results in Table 2 further revealed the probability value (p = 0.158), which is greater than the 0.05 level of significance, leading to the conclusion that there is no significant relationship between building permit approval processes and quality of building plans in Sokoto State. Hence, hypothesis two is accepted.

Findings of the Study

1. A weak relationship was found between building permit approval processes and the prevention of illegal development.
2. A weak relationship also existed between building permit approval processes and the quality of building plans submitted for approval.

Discussion of Findings

The findings from Research Question One indicate that building permit approval processes in Sokoto State show a weak relationship with the prevention of illegal development (r = 0.372, p = 0.028). This suggests that as the rigor and relationship of permit approval improve, there is a corresponding though, limited reduction in illegal building practices. Although the

relationship is significant at the 0.05 level, the strength of the relationship indicates that permit approval alone may not fully deter unauthorized construction. This finding aligns with the observations of Obahor & Asibor (2025), who emphasized that weak enforcement mechanisms in Nigeria often allow illegal structures to proliferate despite existing regulatory frameworks. Similarly, Thompson, & George-Ibikiri, (2024) reported that development control remains largely ineffective in many Nigerian cities due to political interference and poor monitoring. Badiora & Bako (2023) further noted that compliance with urban planning regulations is often compromised by corruption, delayed approvals, and lack of awareness among developers. Comparable studies, such as Odusote, & Bello (2024) in Nigeria, revealed that weak institutional capacity and non-transparent processes fuel illegal developments despite the existence of formal approval procedures. Therefore, while permit approval is a necessary tool for urban control, the findings of this study suggest it must be reinforced with effective monitoring, strong institutional enforcement, and public awareness campaigns.

With respect to Research Question Two, the findings revealed a weak and non-significant relationship ($r = 0.244$, $p = 0.158$) between building permit approval processes and the quality of building plans. This implies that although approval processes are established, they do not necessarily translate into improved design quality. In many cases, building plans may pass approval with only superficial scrutiny, weakening the expected link between regulatory checks and construction quality. Mba, Okeke, Igwe, Ebohon, and Awe (2025) highlighted that 88% of architects attribute clients' undervaluation of services to the belief in cheaper alternatives, while 85.5% perceived lack of professional competency as influencing payment willingness. while Ebekozien & Aigbavboa (2023) emphasized that the quality of building plans depends more on the professional competence of architects and engineers than on administrative approval. Okeke Sam-Amobi & Okeke (2020) also stressed that inadequate technical expertise within planning offices undermines the effective vetting of plans. Beyond Nigeria, Umeokafor, Okoro, Diugwu & Umar (2023) argued that in developing countries, building approval systems often focus more on revenue generation than on ensuring quality design standards, a situation that resonates with the current findings.

Conclusion

The study concludes that while building permit approval processes are designed to regulate orderly development in Sokoto State, their current implementation does not adequately ensure compliance with quality standards or effectively deter illegal construction. Findings revealed weaknesses in enforcement, administrative inefficiencies, and limited institutional

capacity, which undermine the objectives of safety and sustainability in the built environment. Sustainable improvement requires streamlined approval procedures, stronger regulatory institutions, enhanced professional ethics, and increased public awareness. In addition, consistent and impartial enforcement mechanisms are critical for restoring public confidence and ensuring that permits serve their intended purpose. If effectively reformed and implemented, building permit approval processes can become powerful tools for promoting quality, legality, and sustainable housing in Sokoto State and Nigeria at large.

Recommendations

Based on the findings and conclusion of this study, the following recommendations are made:

1. Government at state and local levels should strengthen regulatory frameworks for building permit approval processes by aligning them more closely with the provisions of the National Building Code (NBC).
2. Building Technology lecturers should integrate practical exercises on permit processes, development control, and plan vetting into classroom instruction, using case studies and simulation projects.
3. Town planners should prioritize capacity building for professionals through continuous training on new building codes, quality assurance, and innovative construction practices.

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