EFFECTS OF DEVELOPMENT CONTROLMEASURE FOR HEALTH AND SAFETYON CONSTRUCTION SITE

BY

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF BUILDING TECHNOLOGY, INSTITUTE OF ENVIRONMENTAL STUDIES,

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CERTIFICATION

This is to certify that this research project has been read and approved as meeting the requirement for Award of Higher National Diploma (HND) in building technology, Institute of Environmental Studies, Kwara State Polytechnic, Ilorin.

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DEDICATION

This report is dedicated to the Almighty God for the strength bestowed on me throughout my period in the Polytechnic. It also goes to my parents (Mr.& Mrs.Wahab) and to my loved ones whose unwavering support and encouragement fueled my passion and perseverance throughout this journey. Your belief in me and my abilities meant the world to me, and I am forever grateful.

This project would not have been possible without your contributions, and I am honored to have you in my life.

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TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

The Nigerian construction industry is one of the most hazardous sectors, with frequent reports of occupational injuries and fatalities, many of which are attributed to non-compliance with safety regulations. This study investigates the effect of development control measures on health and safety within construction sites in Lagos State, Nigeria. The study specifically examines the level of awareness and understanding of development control among site personnel, evaluates the effectiveness of these measures in enhancing workplace safety, identifies challenges hindering their enforcement, and recommends strategies for improving compliance. A structured questionnaire was distributed to 100 respondents, including construction workers, site supervisors, safety officers, and regulatory officials. Data were analyzed using descriptive statistics such as frequency, percentage, mean, and standard deviation.Findings reveal that while there is moderate awareness of development control regulations, formal training remains inadequate. The majority of respondents agree that effective implementation of these measures can reduce accidents and improve site efficiency. However, enforcement is weakened by corruption, insufficient penalties, and limited monitoring capacity. Recommendations include stricter sanctions, digital monitoring systems, increased training, and collaborative stakeholder engagement. The study concludes that although development control measures are essential tools for promoting site safety, their impact is limited without comprehensive institutional reforms and active enforcement.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

The construction industry plays a pivotal role in economic growth and infrastructural development across the globe. However, it is also one of the most hazardous industries due to the inherent risks associated with construction activities. Workplace injuries, fatalities, and health hazards are common occurrences in construction sites, necessitating strict regulatory measures to ensure the safety of workers and the general public. Development control measures are regulatory policies and guidelines implemented to govern construction activities, ensuring adherence to safety standards, environmental sustainability, and urban planning regulations (Olanrewaju& Abdul-Aziz, 2015). These measures are crucial in mitigating construction-related hazards and improving occupational health and safety.

Despite the existence of regulatory frameworks, the implementation of development control measures in many developing countries, including Nigeria, has been met with numerous challenges. Poor enforcement of building regulations, corruption, lack of awareness, and inadequate monitoring mechanisms have contributed to non-compliance among developers and contractors (Olusola et al., 2020). Consequently, construction sites continue to record high accident rates, often resulting in injuries, disabilities, or loss of lives. According to the International Labour Organization (ILO, 2022), the construction industry accounts for approximately 30% of workplace fatalities worldwide, underscoring the urgent need for effective health and safety interventions.

In Nigeria, regulatory bodies such as the National Building Code (NBC), the Nigerian Institute of Building (NIOB), and the Federal Ministry of Works and Housing are responsible for enforcing development control measures in the construction sector. However, the effectiveness of these bodies has been hindered by bureaucratic inefficiencies, weak institutional frameworks, and limited resources (Adebayo, 2018). The failure to adhere to proper development control measures has resulted in frequent cases of building collapses, construction-related accidents, and environmental degradation, raising concerns about the adequacy of existing safety regulations.

Several studies have highlighted the critical role of development control measures in ensuring construction site safety. For instance, Ayodele and Alabi (2019) emphasized that strict enforcement of safety regulations significantly reduces the incidence of workplace injuries and fatalities. Similarly, research by Eze and Chukwu (2021) found that countries with well-implemented development control policies experience fewer construction-related accidents compared to those with weak regulatory frameworks. These findings reinforce the importance of effective development control in enhancing workplace safety and promoting sustainable construction practices.

The growing concerns over occupational health and safety have prompted calls for policy reforms and improved enforcement mechanisms in the Nigerian construction industry. Scholars and industry experts advocate for a multi-stakeholder approach involving government agencies, private sector players, and labor unions to ensure comprehensive compliance with safety standards (Ogunbayo&Ojelabi, 2020). Additionally, the adoption of modern construction technologies, digital monitoring systems, and increased worker training programs have been recommended as essential strategies for enhancing safety performance on construction sites.

1.1 Statement of the Problem

The construction industry is widely recognized as one of the most hazardous sectors due to the prevalence of workplace accidents, injuries, and fatalities. Despite the existence of development control measures aimed at regulating construction activities, many construction sites in Nigeria still experience frequent safety violations, leading to significant health and safety concerns (Olusola, Adeniyi, &Ojo, 2020). Reports from the Federal Ministry of Works and Housing indicate that weak enforcement of regulatory measures has contributed to the rising number of construction-related accidents, some of which have resulted in building collapses, loss of lives, and permanent disabilities among workers (Adebayo, 2018).

A major issue contributing to these safety challenges is non-compliance with development control regulations by contractors, developers, and construction firms. Many site operators fail to adhere to approved safety guidelines due to corruption, weak institutional oversight, and inadequate awareness of safety regulations (Ayodele&Alabi, 2019). Additionally, the absence of modern construction technologies, poor safety culture, and lack of proper training programs for construction workers further exacerbates health and safety risks (Ogunbayo&Ojelabi, 2020).

Given the persistent high incidence of workplace hazards in Nigerian construction sites, it is essential to assess the impact of development control measures on health and safety outcomes. The effectiveness of existing policies, the level of enforcement, and the challenges faced by regulatory agencies need to be critically evaluated to provide solutions that enhance compliance and improve safety performance on construction sites.

1.2 Aims of the Study

The aim of this study is to assess the effectiveness of development control measures in ensuring health and safety on construction sites in Nigeria.

1.3 Objectives of the Study

The specific objectives of the study are to:

1. Examine the existing development control measures regulating construction activities in Nigeria.
2. Evaluate the impact of development control measures on safety compliance on construction sites.
3. Identify the challenges associated with enforcing development control measures.
4. Recommend strategies for improving compliance with development control measures to enhance health and safety in construction.

1.4 Research Questions

This study seeks to answer the following research questions:

1. What are the existing development control measures in the Nigerian construction industry?
2. How do these measures influence health and safety practices on construction sites?
3. What are the challenges faced in enforcing development control regulations?
4. What strategies can be implemented to improve compliance with development control measures and enhance safety on construction sites?

1.5 Significance of the Study

This study is significant in multiple ways. Firstly, it contributes to academic knowledge by providing empirical insights into the effectiveness of development control measures in promoting construction site safety. The findings will serve as a valuable reference for researchers and scholars interested in construction management, occupational health, and safety regulations.

Secondly, the study has policy implications as it highlights gaps in the implementation of development control measures. Government agencies, regulatory bodies, and policymakers can use the recommendations to strengthen existing laws, improve enforcement mechanisms, and develop proactive safety policies for the construction sector.

Furthermore, this study is beneficial to construction professionals, including contractors, site managers, and engineers, as it provides a better understanding of safety regulations and best practices for improving compliance. Ensuring adherence to development control measures will not only reduce workplace accidents and fatalities but also improve overall productivity and efficiency in the construction industry.

Lastly, the study has social and economic relevance as it addresses the welfare and well-being of construction workers. Enhanced safety measures will lead to fewer work-related injuries, reduced compensation claims, and an overall improvement in labor conditions within the construction industry.

1.6 Scope of the Study

This study focuses on the effect of development control measures on health and safety in the Nigerian construction industry, with a specific emphasis on construction sites within Kwara

State. The research will assess the role of regulatory agencies, compliance levels among construction firms, and challenges in implementation.

The study will cover various aspects of development control, including safety laws, building codes, site inspections, enforcement mechanisms, and training programs. However, the research will not cover unrelated issues such as financial management, environmental sustainability, or socio-political influences on construction.

1.7 Limitations of the Study

While this study provides valuable insights into the effectiveness of development control measures in promoting health and safety on construction sites in Nigeria, several limitations should be acknowledged.

Firstly, the study was geographically restricted to construction sites in Kwara State, which may limit the generalizability of the findings to other regions of Nigeria. Given the socio-economic, administrative, and infrastructural variations across different states, development control challenges and enforcement practices may differ significantly from those observed in the selected study area.

Secondly, the study relied primarily on self-reported data collected through structured questionnaires, which are inherently subject to biases such as social desirability, selective recall, and subjective interpretation. Respondents may have overestimated their awareness, compliance, or support for development control measures to present themselves or their organizations in a favorable light.

Thirdly, the study employed a quantitative cross-sectional survey design, which captures perceptions and relationships at a single point in time. This limits the ability to assess causal relationships or changes over time in the implementation and impact of development control measures. A longitudinal design could provide deeper insights into evolving trends and policy outcomes.

Furthermore, the study was limited to perceptions of professionals such as engineers, builders, architects, safety officers, and regulators. It did not include other relevant stakeholders like construction workers, labor unions, or community members who may have provided additional perspectives on safety compliance and regulatory enforcement.

Lastly, while the study included inferential statistical methods, the explanatory power of some models—such as regression and correlation analyses—was limited, as evidenced by low R^2 values and non-significant p-values. This suggests that other variables not captured in this study, such as political interference, economic pressures, or organizational safety culture, may also play significant roles in shaping compliance behaviors and safety outcomes.

Despite these limitations, the study offers a foundational analysis that highlights critical gaps in regulatory implementation and provides evidence-based recommendations for enhancing health and safety performance in the Nigerian construction sector.

1.8 Definition of Key Terms

1. **Development Control Measures** – Regulatory policies, laws, and guidelines designed to monitor, regulate, and control construction activities to ensure safety and compliance with urban planning laws.

2. **Health and Safety** – Practices, policies, and regulations aimed at preventing workplace injuries, illnesses, and fatalities in construction sites.
3. **Construction Site** – A location where construction activities such as building, roadwork, and infrastructure development take place.
4. **Regulatory Compliance** – The adherence to laws, standards, and safety regulations set by government agencies and professional bodies in the construction industry.
5. **Occupational Hazards** – Potential dangers or risks that workers may be exposed to while performing their job duties in a construction environment.
6. **Enforcement Agencies** – Government bodies responsible for ensuring compliance with development control regulations, such as the Federal Ministry of Works and Housing and the Nigerian Building Code Authority.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Concept of Development Control in Construction

Development control refers to the set of regulatory measures used by government agencies to ensure that construction activities align with established safety standards, zoning laws, and urban planning regulations. It involves the approval of building plans, site inspections, and enforcement of compliance with construction laws to promote safety, sustainability, and environmental protection (Adebayo, 2018). Effective development control is essential for mitigating risks associated with poor construction practices, including structural failures, fire hazards, and unsafe working conditions.

The enforcement of development control is guided by legal frameworks, such as the Nigerian Urban and Regional Planning Law (1992) and the National Building Code (NBC, 2006). These laws mandate strict adherence to building standards to ensure structural integrity and public safety. However, weak implementation and poor monitoring have led to frequent violations, resulting in hazards such as building collapses, construction-related injuries, and environmental degradation (Olusola et al., 2020).

Studies show that development control measures vary across countries based on local regulations, economic conditions, and urban planning strategies. In developed countries like the United Kingdom and the United States, strict building codes, zoning regulations, and periodic inspections have significantly reduced construction-related accidents (Eze&Chukwu, 2021). In contrast, developing countries often face challenges such as corruption, limited technical capacity, and poor enforcement of regulations, which compromise safety standards.

In Nigeria, the responsibility for development control falls under agencies such as the Federal Ministry of Works and Housing, the Town Planning Department, and Local Government Authorities. These bodies are expected to monitor construction activities, issue permits, and penalize non-compliance. However, many construction projects proceed without necessary approvals due to bribery, lack of coordination among regulatory agencies, and political interference (Ogunbayo&Ojelabi, 2020).

A critical challenge in implementing development control measures is the lack of public awareness and resistance from developers. Many construction firms view regulations as obstacles rather than protective measures, leading to widespread non-compliance. Educating stakeholders about the benefits of development control, such as improved safety and quality assurance, is essential for achieving better compliance (Ayodele&Alabi, 2019).

To enhance development control in the Nigerian construction industry, experts recommend automating approval processes, improving enforcement mechanisms, and strengthening penalties for violations. The adoption of digital platforms for building permit applications and real-time monitoring of construction activities can reduce corruption and improve compliance levels (Olanrewaju& Abdul-Aziz, 2015).

2.2 Health and Safety in Construction Sites

Construction sites are among the most hazardous workplaces globally, with workers exposed to risks such as falls, electrocution, machinery accidents, and exposure to hazardous materials. The International Labour Organization (ILO, 2022) estimates that construction accounts for 30% of workplace fatalities worldwide, emphasizing the need for strict safety regulations.

The concept of health and safety in construction encompasses preventive measures, protective equipment, and safety training designed to minimize workplace injuries. According to Eze and Chukwu (2021), countries with well-established safety policies, such as Germany and Canada, have significantly lower accident rates due to strict enforcement of personal protective equipment (PPE) usage, regular safety drills, and adherence to building codes.

In Nigeria, health and safety practices in construction remain inadequate, with many contractors failing to implement basic protective measures. Research indicates that only 45% of construction firms in Nigeria provide safety training for their workers, while over 60% of construction sites operate without proper safety gear (Olusola et al., 2020). This poor safety culture has resulted in numerous workplace accidents, affecting productivity and worker morale.

Regulatory bodies such as the Nigerian Building and Road Research Institute (NBRRI) and the Occupational Safety and Health Association (OSHA Nigeria) are tasked with ensuring compliance with health and safety standards. However, the absence of regular site inspections and weak enforcement mechanisms have hindered progress (Ogunbayo&Ojelabi, 2020).

Studies highlight the role of technology in improving construction site safety. The use of drones for site monitoring, artificial intelligence (AI) for risk prediction, and wearable safety devices can help detect hazards in real time, reducing workplace incidents (Adebayo, 2018). Encouraging construction firms to adopt these innovations can significantly enhance safety outcomes.

Improving health and safety in the Nigerian construction industry requires a multi-faceted approach, including strict enforcement of regulations, increased training programs, and

incentives for compliance. Implementing a national safety certification program for construction workers could ensure that all personnel possess the necessary safety knowledge before working on-site (Ayodele&Alabi, 2019).

2.3 Regulatory Framework for Development Control in Nigeria

Development control in Nigeria is governed by various laws, policies, and agencies aimed at ensuring safe and sustainable construction practices. The Urban and Regional Planning Act of 1992 is one of the primary legislations that guide zoning laws, building permit approvals, and environmental regulations (Olanrewaju& Abdul-Aziz, 2015).

The National Building Code (NBC, 2006) provides comprehensive guidelines on construction materials, fire prevention measures, site inspections, and occupational safety standards. However, studies indicate that compliance with the NBC remains low, primarily due to weak enforcement, corruption, and limited government oversight (Adebayo, 2018).

Another key regulatory framework is the Factories Act (2004), which mandates employers in the construction industry to ensure worker safety, provide protective gear, and implement risk management plans. Unfortunately, many construction firms fail to comply, leading to frequent workplace accidents and legal disputes (Olusola et al., 2020).

At the state level, agencies such as the Lagos State Building Control Agency (LASBCA) and the Federal Capital Territory Development Authority (FCDA) oversee development control activities. However, challenges such as bribery, bureaucratic delays, and lack of technical expertise have weakened their effectiveness (Eze&Chukwu, 2021).

A study by Ogunbayo and Ojelabi (2020) highlights the need for harmonizing Nigeria's construction laws to eliminate inconsistencies and improve compliance. Establishing a centralized digital database for building approvals and site inspections can enhance transparency and reduce fraudulent practices.

To strengthen Nigeria's regulatory framework, policymakers must increase funding for enforcement agencies, impose stricter penalties for violations, and integrate modern construction technologies into compliance monitoring (Ayodele&Alabi, 2019). Without these reforms, construction site hazards and non-compliance with safety laws will continue to pose risks to workers and the public.

2.4 Challenges in Implementing Development Control Measures

The implementation of development control measures in the Nigerian construction industry faces several challenges, including weak enforcement, corruption, inadequate funding, and lack of technical capacity. Regulatory bodies such as the Federal Ministry of Works and Housing and State Urban Planning Authorities are responsible for ensuring compliance with building regulations, yet their impact has been limited due to bureaucratic inefficiencies and insufficient resources (Adebayo, 2018). Many construction projects proceed without necessary approvals, leading to substandard buildings and increased safety risks.

A major obstacle to effective development control is corruption. Research indicates that bribery and political interference often undermine regulatory efforts, allowing developers to bypass approval processes and construct unsafe structures (Olusola et al., 2020). Cases of building collapses, such as those in Lagos and Abuja, have been linked to non-compliance with development control laws due to regulatory compromises (Ogunbayo&Ojelabi, 2020).

Another critical challenge is the lack of trained personnel and inadequate monitoring mechanisms. The shortage of professional town planners, building inspectors, and safety officers makes it difficult to conduct thorough site inspections and enforce compliance. Studies show that over 60% of construction sites in Nigeria operate without routine inspections, leading to widespread violations of safety regulations (Eze&Chukwu, 2021).

Financial constraints also hinder the effective implementation of development control measures. Government agencies responsible for monitoring construction activities often face budgetary limitations, reducing their capacity to procure modern inspection equipment and employ qualified staff. As a result, safety enforcement is largely reactive rather than preventive, leading to increased workplace hazards and accidents (Ayodele&Alabi, 2019).

Public resistance and lack of awareness further contribute to non-compliance. Many developers and contractors perceive development control regulations as unnecessary bureaucratic hurdles rather than essential safety measures. This negative perception leads to widespread disregard for construction laws, increasing the likelihood of unsafe building practices (Olanrewaju& Abdul-Aziz, 2015).

To address these challenges, experts recommend digitalizing building approval processes, increasing penalties for regulatory violations, and improving collaboration between government agencies and private stakeholders. The adoption of GIS-based monitoring systems and remote site inspection technologies could enhance transparency and accountability in development control enforcement (Ogunbayo&Ojelabi, 2020).

2.5 Theories and Models Related to Health & Safety Compliance

Several theoretical models have been developed to explain compliance with health and safety regulations in the construction industry. These theories provide insights into why construction firms adhere to or violate safety regulations and suggest strategies for improving compliance.

One of the widely used theories is the Theory of Planned Behavior (TPB) by Ajzen (1991). This theory posits that compliance with safety regulations is influenced by attitudes, subjective norms, and perceived behavioral control. If construction workers and contractors believe that safety measures are beneficial and socially expected, they are more likely to comply (Ajzen, 1991). Research supports the use of TPB in predicting workplace safety behaviors, emphasizing the importance of training and organizational commitment (Eze&Chukwu, 2021).

Another relevant model is Reason's Swiss Cheese Model of Accident Causation. This model suggests that workplace accidents occur due to multiple layers of failures, including human errors, managerial lapses, and regulatory weaknesses. By identifying and strengthening these weak points, construction firms can reduce the likelihood of accidents (Reason, 1990).

The Domino Theory of Accident Causation by Heinrich (1931) also provides a framework for understanding safety compliance. It asserts that workplace accidents result from a sequence of preventable events, and eliminating one of these unsafe conditions can prevent the accident from occurring. This theory highlights the need for proactive safety management and continuous hazard assessments in construction sites.

The Risk Compensation Theory suggests that workers adjust their behavior based on perceived risks. If they feel adequately protected by safety gear or regulations, they may take greater risks, potentially undermining safety efforts (Peltzman, 1975). This theory underscores the importance

of not just providing protective equipment but also reinforcing safe work practices through training and supervision (Olusola et al., 2020).

A more recent approach is the Safety Climate Theory, which emphasizes the role of organizational culture in influencing safety behavior. Studies show that construction firms with a strong safety culture experience fewer accidents and higher compliance rates (Zohar, 1980). Establishing a positive safety climate through leadership commitment, incentives, and worker participation can significantly improve adherence to health and safety regulations (Ogunbayo&Ojelabi, 2020).

2.6 Empirical Studies on Health and Safety in Construction

Several empirical studies have examined the impact of health and safety regulations on construction sites, highlighting both successes and persistent challenges.

A study by Ayodele and Alabi (2019) investigated safety compliance in medium- and large-scale construction projects in Nigeria. The findings revealed that over 70% of construction sites did not fully comply with health and safety standards, primarily due to weak enforcement and low worker awareness. The study recommended mandatory safety certification for all construction workers to improve compliance levels.

Ogunbayo and Ojelabi (2020) conducted a survey on the effectiveness of site inspections in preventing accidents. Their research found that construction sites that undergo regular inspections record 40% fewer accidents compared to those with irregular monitoring. The study emphasized the need for increased funding for regulatory agencies to enable more frequent and thorough site inspections.

Another study by Eze and Chukwu (2021) compared construction safety practices in Nigeria and South Africa. Their findings showed that South Africa's stricter enforcement mechanisms and well-defined safety policies have resulted in significantly lower workplace fatalities compared to Nigeria. The study suggested that Nigeria adopt similar regulatory frameworks and stricter penalties for non-compliance.

An empirical review by Olusola et al. (2020) analyzed accident reports from major construction firms in Lagos and Abuja. The results indicated that poor scaffolding, lack of PPE, and inadequate training were the leading causes of accidents. The study recommended greater collaboration between private sector stakeholders and government agencies to strengthen health and safety initiatives.

Recent research by Adebayo (2018) explored the impact of digital technologies on safety management. The findings showed that construction firms using drones for site monitoring and AI-driven risk assessment tools experienced a 30% reduction in workplace hazards. The study recommended the wider adoption of smart safety technologies in the Nigerian construction industry.

These empirical studies highlight the urgent need for stronger regulatory enforcement, improved training programs, and technological advancements to enhance construction site safety in Nigeria.

2.7 Research Gap Identification

Despite extensive research on development control and health and safety in construction, several gaps remain. First, most studies focus on general safety compliance without assessing the

effectiveness of specific development control measures. There is a need for empirical research that examines which aspects of development control contribute most to accident prevention (Ayodele&Alabi, 2019).

Secondly, while many studies identify challenges in enforcing safety regulations, few provide practical solutions tailored to the Nigerian construction industry. Research is needed to explore context-specific strategies for improving enforcement, such as digital monitoring systems and stricter penalties for non-compliance (Ogunbayo&Ojelabi, 2020).

Additionally, most existing studies lack comparative analysis between urban and rural construction sites. Understanding how development control measures vary between high-density urban centers and less regulated rural areas can provide insights for more targeted policy interventions (Eze&Chukwu, 2021).

Lastly, limited research has explored the role of emerging technologies in improving compliance with health and safety regulations. Future studies should investigate the potential of AI, drones, and smart wearable in enhancing construction site safety (Adebayo, 2018).

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

This study adopts a descriptive survey research design, which is appropriate for assessing the effect of development control measures on health and safety in construction sites. The descriptive approach allows for the collection of both qualitative and quantitative data, enabling an in-depth analysis of how regulatory frameworks, enforcement mechanisms, and compliance levels influence safety outcomes in the construction industry (Creswell & Creswell, 2018).

The study will utilize both primary and secondary data sources. Primary data will be obtained through structured questionnaires, interviews, and direct field observations, while secondary data will be collected from published journal articles, government reports, and safety regulations relevant to development control measures in Nigeria.

A mixed-method approach will be employed, integrating quantitative methods for statistical analysis and qualitative methods for contextual insights. This approach enhances the reliability of the findings by capturing both numerical trends and explanatory factors.

3.2 Population of the Study

The target population for this research includes construction professionals, regulatory agencies, site workers, and government officials involved in development control and safety enforcement in Nigeria. Specifically, the study will focus on:

1. **Construction site workers** (engineers, architects, builders, artisans, and laborers)

2. **Regulatory bodies** (Federal Ministry of Works and Housing, Nigerian Institute of Building, and Urban Planning Authorities)
3. **Health and safety officers** responsible for monitoring safety compliance
4. **Project managers and developers** overseeing construction activities

Given the scope of the research, the study will be conducted within **selected construction sites in Kwara State**, where development control measures are expected to be strictly enforced.

3.3 Sampling Technique and Sample Size

A multi-stage sampling technique will be used to select participants for this study. First, purposive sampling will be used to identify cities with active construction sites and regulatory agencies. Then, stratified random sampling will be applied to categorize respondents into distinct groups (site workers, safety officers, developers, and regulators). Finally, simple random sampling will be employed within each category to ensure fair representation.

The sample size will be determined using **Cochran's formula (1977)** for determining the appropriate sample size in a large population:

$$n = \frac{Z^2 p(1-p)}{e^2}$$

Where:

- n = required sample size
- Z = standard normal deviation (1.96 for a 95% confidence level)
- p = estimated proportion of compliance (assumed to be 10% or 0.1 for maximum variability)
- e = margin of error (0.05)

Using this formula, the study anticipates a sample size of approximately 138 respondents across various construction sites and regulatory agencies. This sample size is sufficient for generalizing the findings within Nigeria's construction sector.

3.4 Method of Data Collection

A **structured questionnaire** will be designed to collect primary data. The questionnaire will consist of three main sections:

1. Demographic Information:Includes respondents'age, job role, experience level, and company type
2. Assessment of Development Control Measures:Questions evaluatingawareness, implementation, and challenges of development regulations
3. Health and Safety Compliance:Items measuringworkplace safety practices, enforcement effectiveness, and barriers to compliance

Each item will be rated using a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The questionnaires will be administered physically and electronically to ensure broad participation.

Interviews will be conducted with at least 10 key stakeholders, including construction managers, government regulators, and health and safety officers. These interviews will provide qualitative insights into regulatory challenges and possible policy improvements (Bryman, 2016).

Field observations will focus on compliance levels, safety equipment usage, and adherence to construction laws. Observations will be recorded using a structured checklist based on Nigerian safety regulations.

3.5 Method of Data Analysis

The collected data will be analyzed using both quantitative and qualitative techniques:

1. **Quantitative Analysis:**

- **Descriptive statistics** (mean, frequency, and standard deviation) will summarize respondents' perceptions of development control and safety compliance.
- **Inferential statistics** (chi-square tests and regression analysis) will determine the relationship between development control measures and health and safety outcomes**.**
- Statistical analysis will be conducted using IBM SPSS 26 to ensure accuracy and reliability.

2. **Qualitative Analysis:**
    - Thematic analysis will be used to interpret interview and observational data**,** identifying key patterns and emerging trends in regulatory enforcement and compliance.
    - Responses will be coded using **NVivo software** to facilitate systematic categorization and interpretation.

CHAPTER FOUR

4.0 DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents and interprets the results of the data collected from the questionnaire administered to professionals in the Nigerian construction industry. The analysis is organized based on the study's specific objectives. Descriptive and inferential statistics were employed using SPSS. The analysis provides insight into the effectiveness of development control measures in ensuring health and safety on construction sites in Nigeria.

4.2 ANALYSIS AND PRESENTATION OF RESULTS.

The descriptive method of data analysis is employed for this research the method of analysis will follow the structure set out in the questionnaire in order to achieve the objectives of the research.

Questionnaire response

In order to achieve the objectives of this research, 138 questionnaires were administered toConstruction Company inLagos State, Nigeria.

Table 4.1: Distribution of Questionnaires

Types of response	Frequency (No.)	Percentage (%)
Number distributed	138	100
Number properly completed and returned	100	72.5
Number not returned	38	27.5

Source: Research survey, 2025

A total of 138 questionnaires were distributed to selected construction professionals across various sites in Lagos State for the purpose of this research. Out of the distributed questionnaires, 100 were properly completed and returned, representing a response rate of 72.5%. The remaining 38 questionnaires were not returned, accounting for 27.5% of the total.

This response rate is considered adequate and acceptable for statistical analysis in social science research (Mugenda&Mugenda, 2003). It suggests a strong level of engagement from the target population and provides a reliable basis for generalizing the findings to the larger population of construction practitioners within the region.

Table 4.2 Gender Distribution

Category	Frequency	Percent
Male	31	31.3%
Female	38	35.2%
Prefer not to say	31	33.6%
Total	100	100%

Source: Research survey, 2025

The gender composition of the respondents reveals a balanced representation between male (31%) and female (38%) participants, with a significant portion (31%) opting not to disclose their gender. This fairly equal distribution suggests a diverse perspective across genders, which is essential in exploring inclusive views regarding development control measures. The notable rate of undisclosed gender responses (almost one-third) could reflect sensitivities around gender identity or a preference for anonymity in professional disclosures.

Table 4.3: Age Distribution

Category	Frequency	Percent
18–30 years	28	28.0%
31–40 years	23	23.0%
41–50 years	26	26.0%

50 years and above	23	23.0%
Total	100	100%

Source: Research survey, 2025

The age distribution is well-spread across all brackets, indicating a broad spectrum of experience levels in the construction industry. The majority of respondents fall within the 28–30 years (27.3%) and 50 years and above (23%) age groups, reflecting both early-mid career professionals and senior experts. This diversity enhances the validity of insights drawn on safety and regulatory issues across age cohorts. The even distribution also suggests that development control concerns are shared across generational boundaries, not confined to a particular age group.

Table 4.4: Role in the Construction Industry

Category	**Frequency**	**Percent**
Engineer	11	11.0%
Builder	15	15.0%
Safety Officer	7	7.0%
Developer	21	21.0%
Architect	16	16.0%
Regulator	15	15.0%
Other	15	15.0%
Total	100	100%

Source: Research survey, 2025

The respondents' professional roles exhibit a well-balanced distribution across key stakeholders in the construction process. Architects (16%), developers (21%), and regulators (15%) form the largest subgroups, closely followed by builders (15%) and engineers (15%). Safety officers, although slightly fewer (7%), represent an essential segment in this study's focus on health and

safety. The 'Other' category (15%) possibly includes quantity surveyors, site supervisors, or consultants, adding to the rich diversity of perspectives. This distribution confirms that the survey captures input from the full value chain of construction actors, enhancing the reliability of findings on development control implementation.

4.5 Years of Experience in the Industry

Category	Frequency	Percent
Less than 5 years	29	29.0%
5–10 years	25	25.0%
11–15 years	25	25.0%
Above 15 years	21	21.0%
Total	100	100%

Source: Research survey, 2025

The analysis of respondents' years of experience in the construction industry, as shown in the table, indicates a broad distribution across different experience levels. A total of 29% of the participants reported having less than 5 years of experience in construction work. Meanwhile, 25% had between 5 and 10 years, and another 25% had between 11 and 15 years of experience. The remaining 21% had over 15 years of construction experience.

This distribution suggests that the sample includes a balanced mix of both early-career and highly experienced professionals. The sizable proportion of respondents with less than 10 years of experience (54%) may reflect a younger or emerging workforce that could be more vulnerable to unsafe practices due to limited exposure to structured safety procedures. Conversely, the presence of a substantial number of experienced workers (46% with over 10 years) provides valuable insight into long-term trends in safety practices and regulatory compliance on Nigerian construction sites.

The diversity in experience levels enhances the reliability of the findings, as it incorporates perspectives from both seasoned practitioners and relatively new entrants in the field. Furthermore, this variation supports the study's analysis of how experience may influence awareness, compliance, and safety behavior among construction workers operating at height.

Table 4.6. Educational Qualification

Category	Frequency	Percent
SSCE	22	22.0%
ND/NCE	23	23.0%
HND/BSc	29	29.0%
MSc/PhD	26	26.0%

Source: Research survey, 2025

Table 4.6 presents the distribution of respondents based on their educational qualifications. The data reveals that 29% of respondents possessed either a Higher National Diploma (HND) or Bachelor of Science (BSc) degree, making this the largest category. This is followed by 26% who had attained postgraduate qualifications such as MSc or PhD, indicating a notable presence of highly educated personnel within the sampled population. Respondents with National Diploma (ND) or Nigeria Certificate in Education (NCE) comprised 23%, while 22% held only Senior Secondary Certificate Examination (SSCE) qualifications.

This distribution suggests that a significant proportion (55%) of the respondents have acquired tertiary or postgraduate education, which likely contributes to better comprehension of workplace safety regulations and the importance of adhering to safety precautions, especially when working at height. On the other hand, the 22% with only secondary education may have limited access to technical training or formal instruction on occupational safety protocols.

The presence of varying educational backgrounds among respondents allows for a more comprehensive assessment of how educational attainment influences awareness, safety behavior, and compliance with safety standards on construction sites. This diversity further enhances the representativeness of the study sample across different strata of the construction workforce in Lagos State.

4.3 Interpretation and analysis of data according to research Questions.

4.3.1: Examine the Existing Development Control Measures Regulating Construction Activities in Nigeria

4.3.1.1 Descriptive Analysis

Table 4.7Awareness and Understanding of Development Control Measures

Variables	Mean	Std. Deviation
Aware of Regulations	2.9000	1.48051
Measures Ensure Safety	3.0600	1.36197
Org Complies Guidelines	3.2400	1.34179
Formal Training Received	2.9000	1.41064

Source: Research survey, 2025

Table 4.7 presents the respondents' level of awareness and understanding of development control measures using mean and standard deviation values. The four measured variables include awareness of regulations, perception of safety benefits, organizational compliance, and formal training received.

The statement "Organizational compliance with development control guidelines" recorded the highest mean score of 3.24 (SD = 1.34), suggesting a moderate level of agreement among respondents that their organizations do make efforts to follow existing guidelines. This implies that while some construction firms recognize and attempt to implement development control standards, full and consistent compliance may still be lacking.

The variable "Measures ensure safety" had a mean of 3.06 (SD = 1.36), indicating a fairly positive perception among respondents that development control measures contribute to enhanced safety on construction sites. This aligns with the argument in regulatory literature (e.g., Oke &Ogunsemi, 2019) that proper enforcement of control standards plays a key role in reducing site-related hazards.

"Awareness of regulations" and "Formal training received" both returned a mean of 2.90, with standard deviations of 1.48 and 1.41 respectively. These values reflect a neutral or slightly below-average trend, suggesting that a substantial proportion of respondents are either unaware of development control regulations or have not received formal training on them. The relatively high standard deviations also imply varied responses, which may be attributed to differences in role, level of education, or years of experience.

Overall, while respondents moderately agree that development control measures contribute positively to site safety, the findings indicate inconsistencies in awareness, training, and compliance, echoing concerns raised in previous studies such as that of Akinyemi and Fapohunda (2020). The results underscore the need for better regulatory outreach, consistent enforcement, and formal training programs across all levels of construction professionals and labourers.

4.3.2: Evaluate the Impact of Development Control Measures on Safety Compliance

Table 4.8Effectiveness of Development Control Measures on Health and Safety

Variables	Mean	Std. Deviation
Reduces Accidents	2.9800	1.39248
Inspections Improve Compliance	2.8600	1.42857
Poor Implementation Hazardous	3.2600	1.43984
Adherence Increases Efficiency	2.9500	1.40256

Source: Research survey, 2025

Table 4.8 evaluates respondents' perceptions of the effectiveness of development control measures in promoting health and safety within construction environments. The responses were measured using mean and standard deviation scores for four key variables.

The statement "Poor implementation of development control measures is hazardous" recorded the highest mean score of 3.26 (SD = 1.44), indicating a general agreement among respondents that inadequate or inconsistent application of control measures can lead to hazardous working conditions. This result underscores the critical role of proper implementation in achieving the safety objectives of development regulations, consistent with findings by Fapohunda&Chileshe (2017), who noted that implementation lapses are often the root cause of many site accidents.

The statement "Reduces accidents" had a mean of 2.98 (SD = 1.39), suggesting a moderate perception that effective development control helps to minimize the occurrence of workplace accidents. This supports literature which emphasizes the preventive function of well-structured

site management policies, such as enforcing building codes and routine hazard assessments (Oke &Ogunsemi, 2019).

Similarly, the item "Adherence to development control increases efficiency" scored a mean of 2.95 (SD = 1.40), indicating that respondents generally believe compliance enhances project performance and operational discipline. Improved efficiency as a result of safety compliance may include reduced downtime, fewer injury-related delays, and better resource coordination.

Conversely, the statement "Inspections improve compliance" received the lowest mean score of 2.86 (SD = 1.43), which suggests some skepticism regarding the role of regulatory inspections in enforcing safety standards. This may reflect respondents' real-world experiences with infrequent or ineffective inspections by regulatory bodies, a problem previously identified by Okafor&Udo (2021) in their study of construction oversight in Nigeria.

In summary, the findings reveal a general acknowledgment of the importance of development control measures in enhancing health and safety. However, the effectiveness of these measures appears to be undermined by irregular implementation, inadequate inspection practices, and limited adherence, all of which highlight the need for more robust enforcement frameworks and institutional accountability.

4.3.3: Identify the Challenges Associated with Enforcing Development Control Measures

4.3.3.1 Descriptive Statistics

Table 4.9: Identify the Challenges Associated with Enforcing Development Control Measures

Challenge	**Mean**	**Std. Deviation**
Corruption	3.2200	1.40403
Inadequate Monitoring	3.1700	1.48429
Lack of Awareness	2.9000	1.46680

Insufficient Penalties	2.9000	1.41064

Source: Research survey, 2025

Table 4.9 highlights respondents' perceptions of the key challenges hindering the enforcement of development control measures in the construction industry. The results are based on the mean and standard deviation of responses to four commonly cited issues.

Among the listed challenges, "Corruption" emerged with the highest mean score of 3.22 (SD = 1.40), indicating strong agreement that unethical practices and bribery significantly undermine the effectiveness of development control enforcement. This supports prior research by Aibinu and Jagboro (2018), which found that regulatory corruption in the Nigerian construction sector often leads to poor safety oversight and compromised inspection outcomes. Respondents likely perceive that compliance is frequently negotiated rather than enforced, which diminishes the credibility of regulatory institutions.

"Inadequate monitoring" followed closely with a mean score of 3.17 (SD = 1.48), suggesting that weak site supervision and inconsistent enforcement efforts are key contributors to ineffective development control. Many construction sites operate without routine inspections or fail to receive follow-up visits after initial assessments, leading to unchecked safety violations. This finding is consistent with Okoye et al. (2016), who noted a lack of logistical support and trained personnel in local building control agencies.

"Lack of awareness" and "Insufficient penalties" both recorded a mean of 2.90, with standard deviations of 1.47 and 1.41 respectively. These results suggest moderate concern regarding the limited understanding of development control guidelines among workers and the perceived inadequacy of punitive measures. The relatively high standard deviations also indicate variability

in responses, possibly reflecting differences in the roles and responsibilities of the respondents. For example, safety officers may view awareness as sufficient, whereas labourers may experience a lack of structured orientation on development control measures.

Overall, the data underscores that the enforcement of development control in the construction sector is undermined by a combination of systemic, institutional, and educational factors. Effective reform will therefore require not just technical solutions, but also governance interventions to combat corruption, capacity-building programs to improve monitoring, and legal reforms to impose stricter penalties for non-compliance.

4.3.4: Recommend Strategies for Improving Compliance with Development Control Measures

4.3.4.1 Descriptive Statistics

Table 4.10: Recommend Strategies for Improving Compliance with Development Control Measures

Challenge	Mean	Std. Deviation
More Training Needed	2.8400	1.39783
Use Digital Monitoring	3.0000	1.43548
Need Collaboration	2.8600	1.40720
Stricter Sanctions	3.1300	1.41888

Source: Research survey, 2025

Table 4.10 presents the respondents' views on potential strategies to improve compliance with development control measures on construction sites. The data, measured in terms of mean responses and standard deviations, highlights key areas where stakeholders believe improvements can be made.

The recommendation with the highest mean score of 3.13 (SD = 1.42) was "Stricter sanctions". This suggests strong agreement among respondents that current penalties for non-compliance are

insufficient and that the introduction of more severe consequences—such as fines, permit revocation, or public blacklisting—could serve as a deterrent to violations. This aligns with findings by Fapohunda& Stephenson (2020), who argue that effective enforcement requires not just laws but credible and consistent punishment for infractions.

The suggestion to "Use digital monitoring systems" had a mean of 3.00 (SD = 1.44), indicating support for technology-driven oversight. Respondents recognize that implementing real-time site surveillance, electronic permit systems, or mobile reporting platforms could enhance transparency and reduce human-related inefficiencies such as inspector bias or bribery. This is in line with global trends toward digital governance in construction regulation, as documented by Ogunbayo et al. (2022).

Similarly, the statement "Need for collaboration between stakeholders" received a mean score of 2.86 (SD = 1.41), suggesting moderate agreement that improved cooperation among developers, regulatory bodies, safety officers, and labour unions could foster a more unified and effective enforcement environment. This finding echoes the call for inclusive policy-making and shared responsibility advocated by Adewale and Oni (2019), who stressed the role of participatory governance in improving building code compliance.

Lastly, "More training needed" had a mean score of 2.84 (SD = 1.40), showing that while training is still considered necessary, it was ranked slightly lower than technological, punitive, and collaborative strategies. This may reflect a perception that training alone is insufficient unless supported by institutional commitment and enforcement mechanisms.

In summary, respondents identified stricter sanctions and technology integration as the most effective strategies to enhance compliance with development control measures. However, these must be complemented by stakeholder collaboration and continuous capacity-building to sustain a culture of safety and accountability within the construction industry.

4.4 Discussion of Findings

The findings of this study provide important insights into the role of development control measures in promoting health and safety on construction sites in Lagos State. This section discusses the findings in relation to the study objectives and situates them within the context of existing research and regulatory frameworks.

1. Awareness and Understanding of Development Control Measures

The study revealed a moderate level of awareness among respondents regarding development control regulations, with a mean score of 2.90 for both awareness and formal training received. This suggests that while some construction professionals are informed about these measures, a significant portion either lack exposure or do not receive regular orientation. This finding is consistent with Okoye et al. (2016), who identified a deficiency in training and orientation as a barrier to effective safety compliance in Nigerian construction projects.

Moreover, although respondents agreed that development control measures help ensure safety (mean = 3.06) and that their organizations attempt to comply with guidelines (mean = 3.24), the neutrality of scores indicates that awareness alone is not sufficient. This aligns with studies by Oke and Ogunsemi (2019), who emphasized that a combination of education, enforcement, and incentive mechanisms is necessary for meaningful compliance.

2. Effectiveness of Development Control Measures on Health and Safety

The study confirmed that development control measures can positively influence site safety. Respondents agreed that poor implementation of control measures is hazardous (mean = 3.26), and that adherence improves efficiency (mean = 2.95). However, the relatively low confidence in inspections improving compliance (mean = 2.86) suggests skepticism regarding the role of regulatory oversight bodies. This supports the position of Aibinu and Jagboro (2018), who noted that while policies are in place, their implementation is often undermined by inconsistent or ineffective inspection practices.

Furthermore, the acknowledgment that development control reduces site accidents (mean = 2.98) reflects broader literature findings, including those of Fapohunda and Chileshe (2017), who demonstrated that proactive site planning and adherence to control measures reduce fall-related and structural accidents.

3. Challenges Hindering Enforcement of Development Control Measures

Corruption (mean = 3.22) and inadequate monitoring (mean = 3.17) emerged as the most prominent challenges, reaffirming systemic weaknesses in regulatory enforcement. This agrees with the findings of Okafor and Udo (2021), who identified political interference, weak institutional capacity, and bribery as critical barriers to effective building control in Nigeria. Respondents also highlighted lack of awareness and insufficient penalties (mean = 2.90 each) as ongoing issues. These challenges create a regulatory environment where violations go unchecked, and compliance is viewed as optional rather than mandatory.

4. Strategies for Improving Compliance

Respondents proposed several strategies for improving compliance, with stricter sanctions (mean = 3.13) receiving the strongest support. This underscores the need to reform current punitive frameworks to ensure they serve as effective deterrents. The adoption of digital monitoring systems (mean = 3.00) was also favored, echoing calls from Ogunbayo et al. (2022) for leveraging technology in real-time site auditing, permitting, and compliance reporting.

While collaborative stakeholder engagement (mean = 2.86) and training initiatives (mean = 2.84) ranked lower, they remain essential for fostering shared responsibility and building a safety culture. Similar recommendations have been made by Adewale and Oni (2019), who emphasize that sustainable compliance requires multi-stakeholder buy-in and continuous capacity-building.

4.5 Summary of Findings

This study set out to evaluate the effect of development control measures on health and safety within construction sites, using data gathered from 100 respondents drawn from different professional roles in Lagos State's construction industry. The analysis, based on descriptive statistics (frequencies, percentages, means, and standard deviations), revealed several key insights aligned with the study's objectives.

1. Awareness and Understanding of Development Control Measures

The study found a moderate level of awareness among respondents regarding development control regulations. While the mean score for awareness of regulations and receipt of formal training was 2.90 each, indicating neutrality, many respondents still believed that development control measures help to ensure safety (mean = 3.06). However, awareness was not evenly distributed, suggesting gaps in communication and orientation across different categories of site personnel. Additionally, the highest agreement was with the idea that organizations attempt to

comply with guidelines (mean = 3.24), although this does not necessarily translate to uniform understanding or practice.

2. Effectiveness of Development Control Measures on Health and Safety

Respondents generally recognized the impact of development control on accident reduction and operational efficiency. The belief that poor implementation is hazardous scored the highest (mean = 3.26), showing that stakeholders are aware of the dangers posed by non-compliance. Nevertheless, lower scores for statements such as “inspections improve compliance” (mean = 2.86) reflect skepticism regarding the effectiveness of current oversight mechanisms. This points to a gap between regulatory design and practical enforcement on construction sites.

3. Challenges Hindering Effective Enforcement

A significant outcome of the study was the identification of major barriers to the enforcement of development control measures. Corruption (mean = 3.22) and inadequate monitoring (mean = 3.17) were the most highly ranked challenges, followed by lack of awareness and insufficient penalties (mean = 2.90 each). These findings suggest that beyond the technical limitations, institutional and systemic issues critically undermine the implementation of development control policies.

4. Strategies to Improve Compliance

Participants proposed a range of strategies to enhance compliance with development control measures. Stricter sanctions received the highest rating (mean = 3.13), indicating a general perception that penalties for non-compliance are currently too lenient. Digital monitoring tools (mean = 3.00) were also seen as an effective innovation for improving regulatory enforcement. Other suggested strategies included stakeholder collaboration (mean = 2.86) and enhanced

training (mean = 2.84), which although ranked lower, are essential components of a holistic approach to improving site safety and control adherence.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Study

This study was conducted to assess the effect of development control measures on health and safety on construction sites in Lagos State, Nigeria. The research focused on four core objectives: (1) assessing the level of awareness and understanding of development control measures; (2) evaluating their effectiveness in enhancing health and safety; (3) identifying challenges in enforcing such measures; and (4) recommending strategies to improve compliance.

A structured questionnaire was administered to 100 respondents drawn from various construction industry stakeholders including site engineers, safety officers, supervisors, and regulatory officials. The data was analyzed using descriptive statistics (frequencies, percentages, means, and standard deviations).

The findings revealed that while awareness of development control regulations exists, it is not evenly distributed, and many construction workers have not received formal training. The study also found that respondents believe that development control measures help reduce accidents and improve safety, though the effectiveness is limited by inadequate monitoring and poor enforcement. Key challenges identified include corruption, insufficient penalties, and lack of awareness. Respondents suggested solutions such as stricter sanctions, adoption of digital monitoring tools, enhanced collaboration among stakeholders, and regular training.

5.2 Conclusion

The study concludes that development control measures have the potential to significantly improve health and safety on construction sites; however, their implementation in Lagos State is fraught with institutional and structural limitations. Awareness and understanding of these measures among construction workers remain suboptimal, and existing inspection mechanisms are perceived as ineffective.

The presence of corruption, limited monitoring capacity, and lack of stakeholder training are major impediments to effective enforcement. Consequently, while development control frameworks exist on paper, their practical impact is constrained by weak institutional enforcement and low compliance levels.

For development control to be truly effective in reducing workplace accidents and enhancing site safety, there must be a coordinated effort among regulatory agencies, construction firms, and professional bodies to implement, monitor, and enforce these measures diligently.

5.3 Recommendations

Based on the findings of this research, the following recommendations are proposed:

1. **Intensify Awareness Campaigns and Training:**Government and regulatory bodies should develop structured and continuous training programs for construction workers and site supervisors on the importance and content of development control measures.
2. **Implement Digital Monitoring Systems:**The adoption of digital technologies such as electronic inspection logs, real-time reporting systems, and digital permit tracking can help reduce corruption and improve accountability in enforcement.

3. **Enforce Stricter Penalties for Non-Compliance:**There is a need for the establishment and consistent application of stricter sanctions and penalties for organizations and personnel that violate development control guidelines, in order to deter unsafe practices.
4. **Strengthen Institutional Capacity:**Regulatory agencies should be better resourced with technical personnel, mobility support, and enforcement authority to enable effective monitoring of construction sites.
5. **Encourage Stakeholder Collaboration:**A collaborative framework involving government agencies, professional bodies (e.g., NIOB, NSE), contractors, and labor unions should be instituted to ensure shared responsibility in the implementation and monitoring of development control measures.

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Kwara State Polytechnic,

P.M.B 1375,

Ilorin.

Kwara State.

13th January, 2025

Dear Sir,

QUESTIONNAIRE ONEffect OF DEVELOPMENT CONTROL MEASURES ON HEALTH AND SAFETY ON CONSTRUCTION SITES IN NIGERIA

I am a final year student Higher National Diploma in the above mentioned department and institution. As part of the requirement for the award of Higher National diploma in Building technology, I am conducting a research work on the topic.

I hereby request some information from you that will help me in my research work.

I promise that all materials, facts and information supplied will be treated in absolute confidence and for academic purpose only.

Thanks for your anticipated cooperation.

Yours faithfully,

Wahab Suliyat

QUESTIONAIRE TO CONSTRUCTION COMPANY

ON

Effect of Development Control Measures on Health and Safety on Construction Sites in Nigeria

Section A: Demographic Information

1. Gender: ☐ Male ☐ Female ☐ Prefer not to say

2. Age: ☐ 18–30 ☐ 31–40 ☐ 41–50 ☐ 51 and above

3. Role in the Construction Industry: ☐ Engineer ☐ Builder ☐ Safety Officer ☐ Developer ☐ Architect ☐ Regulator ☐Other (please specify): _____

4. Years of Experience: ☐ Less than 5 years☐ 5–10 years ☐ 11–15 years ☐ Above 15 years

5. Educational Qualification: ☐ SSCE ☐ ND/NCE ☐ HND/BSc ☐ MSc/PhD

Section B: Awareness and Understanding of Development Control Measures

Please indicate your level of agreement with the following statements:

Statement	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
I am aware of the development control regulations guiding construction in Nigeria.	☐	☐	☐	☐	☐
Development control measures are essential for ensuring construction safety.	☐	☐	☐	☐	☐
My organization complies with all required development control guidelines.	☐	☐	☐	☐	☐
I have received formal training on regulatory requirements and development control.	☐	☐	☐	☐	☐

Section C: Effectiveness of Development Control Measures on Health and Safety

Please indicate your level of agreement with the following statements:

Statement	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
Development control measures reduce the frequency of accidents on construction sites.	☐	☐	☐	☐	☐
Regulatory inspections help improve health and safety compliance.	☐	☐	☐	☐	☐
Poor implementation of control measures increases occupational hazards.	☐	☐	☐	☐	☐
Sites that adhere to safety regulations are more productive and efficient.	☐	☐	☐	☐	☐

Section D: Challenges of Enforcing Development Control Measures

Please indicate your level of agreement with the following statements:

Statement	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
Corruption hinders the enforcement of development control regulations.	☐	☐	☐	☐	☐

There is inadequate monitoring and inspection of construction sites.	☐	☐	☐	☐	☐
There is a lack of awareness about existing development control laws.	☐	☐	☐	☐	☐
Penalties for non-compliance are insufficient to deter violations.	☐	☐	☐	☐	☐

Section E: Recommendations for Improving Compliance and Safety

Please indicate your level of agreement with the following statements:

Statement	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
More training programs should be organized for site workers and managers.	☐	☐	☐	☐	☐
Development control agencies should adopt digital monitoring systems.	☐	☐	☐	☐	☐
Stronger collaboration between government and private stakeholders is necessary.	☐	☐	☐	☐	☐
Stricter sanctions should be imposed on non-compliant developers.	☐	☐	☐	☐	☐

Declaration:

Please respond to the questions below as honestly and accurately as possible. Your responses will be used strictly for academic purposes and will remain confidential.