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THE ROLE OF NATIONAL BUILDING CODE IN PROMOTING SUSTAINABLE PROPERTY DEVELOPMENT AND VALUES

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Abstract
The National Building Code (NBC) plays a crucial role in advancing sustainable development by establishing standards that promote energy efficiency, resource conservation, and environmental protection in construction practices. This study investigates the impact of NBC in promoting sustainable property development and values. Data were collected through the administration of a well-structured questionnaire to the architects, engineers and builders. The data were analyzed using descriptive statistics. The findings indicate that the NBC is perceived as effective in promoting sustainable development with 50% of respondents rating it as very effective. However, areas for improvement include strengthening enforcement mechanisms, enhancing provisions for sustainable materials and increasing incentives for compliance. The study concludes that NBC plays a crucial role in promoting sustainable development and values, but its effectiveness can be enhanced through revisions and improved enforcement. Recommendations include regular review and update of the NBC, increased incentives for compliance and education and training programs for stakeholders.

Keywords: National building code, property development, property values, safety, sustainability.

Introduction

A building code is a set of rules that specify the minimum standards for buildings and non-building structures. It's important to provide minimum standards for safety, health and general welfare including structural integrity, mechanical integrity (including sanitation, water supply, light and ventilation), means of egress, fire prevention and control and energy conservation (Akindoyemi, 2007).

The Nigerian construction industry has experienced significant growth in recent years, driven by rapid urbanization, population growth, and economic development (Ogunbiyi, 2014) Building codes play a crucial role in shaping the built environment and influencing property development and values (Dahiru et al., 2012). By setting minimum standards for building design, construction, and maintenance, building codes can impact property values, marketability, and attractiveness to investors (Akindoyemi, 2007). In Nigeria, the implementation of the National Building Code is expected to have significant impacts on property development and values, particularly in areas such as safety, sustainability, and quality.

Research has shown that building codes can improve safety by reducing the risk of building collapses and other hazards (Federal Republic of Nigeria, 2012). This is particularly important in Nigeria, where building collapses have resulted in significant loss of life and property (Bamisile, 2000). By enforcing building codes, Nigeria can reduce the incidence of

building collapses and improve public safety.

Literature Review

The National Building Code of Nigeria was established in 2006 to ensure quality, safety and proficiency in the building industry. The Code applies to all matters concerning the design and specification, costing, construction, alteration, addition to, moving, demolition, location, repair and use of any building or structure, for existing or proposed building works within the Federal Republic of Nigeria (Bamisile, 2000). The National Building Code is divided into four parts and fifteen sections, with the building process divided into four stages: Pre-design Stage, Design Stage, Construction Stage and Post- Construction Stage (Elegbede and Folorunso, 2018). The Code aims to promote safety and qualitative housing for every Nigerian.

Building codes can also promote sustainability by encouraging the use of energy-efficient materials and designs (Iweka et al., 2010). This is critical in Nigeria, where energy consumption is high and environmental degradation is a significant concern. By promoting sustainable building practices, the building code can help reduce Nigeria's carbon footprint and promote environmentally friendly development. According to Kuye (2009), the individual features of a property are important in determining its value. The demand for a particular property is often seen in terms of its utility with particular reference to the standards in design, materials and services which cover items such as mains electricity, water supply, sanitation, light and ventilation, fire prevention etc. all of which are to be provided for in any property development as stipulated by the provisions of the building code.

Building codes can impact property values by ensuring that buildings are constructed to high standards of quality (Iroegbu, 2007). This can increase property values, marketability, and attractiveness to investors. In Nigeria, where property values are often influenced by factors such as location and amenities (Kuye, 2009), the implementation of building codes can help level the playing field and promote more equitable property development.

The Code has a significant impact on property development and values in Nigeria, as it ensures that buildings are constructed to high standards of quality, safety and durability. Compliance with the Code can increase property values, marketability and attractiveness to investors. The Code also promotes sustainability by encouraging the use of energy-efficient materials and designs, which can reduce energy consumption and environmental degradation. The Code's emphasis on maintenance culture can also extend the lifespan of buildings and reduce the need for frequent repairs and replacements.

The National Building Code of Nigeria, according to Bamisile (2000), has a crucial role to play in ensuring the quality, safety and durability of buildings in Nigeria. Its importance cannot be overemphasized, as it seeks to address the existing conditions of our cities and environment, including the absence of planning, incessant collapse of buildings, dearth of referenced design standards for professionals, use of non-professionals and quacks, use of untested products and materials, and lack of maintenance culture (Ogunbiyi, 2014). The Code's impact on property development and values in Nigeria is significant, as it can increase property values, marketability and attractiveness to investors, promote sustainability and extend the lifespan.

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Impact of National Building Code on Property Development

1. **Improved Safety**: National building codes ensure that buildings are constructed with safety in mind, reducing the risk of collapses and other hazards (Federal Republic of Nigeria, 2012). This leads to a decrease in construction-related accidents and fatalities, making properties more attractive to potential buyers and renters.

2. **Enhanced Sustainability**: Building codes promote sustainable building practices, such as energy efficiency and environmentally friendly materials (Akindoyemi, 2007). This results in reduced energy consumption and environmental impact, increasing the appeal of properties to environmentally conscious investors.

3. **Increased Property Values**: Compliance with national building codes can increase property values by up to 5-10%. (Iweka et al., 2020). This is due to the perceived quality and safety of buildings constructed according to code.

Positive Impact on Property Values:

1. **Improved Safety**
National Building Codes ensure that buildings meet minimum safety standards, reducing the risk of building collapses, fires, and other hazards. This improves the overall safety of properties, making them more attractive to potential buyers and renters, and increasing their value (Federal Republic of Nigeria, 2020).

2. **Enhanced Quality**: NBC promotes high-quality building materials, design, and construction methods, resulting in durable and long-lasting buildings. This enhances the overall quality of properties, increasing their value and appeal to potential buyers and renters. (Bamisile, 2020).

3. **Increased Energy Efficiency:** According to Okoro (2005), NBC promotes energy-efficient building designs and materials, reducing energy consumption and environmental impact. This makes properties more attractive to environmentally conscious buyers and renters, increasing their value.

4. **Better Maintenance**: Iweka et al. (2010) opined that National Building Code requires regular maintenance and inspections, ensuring that buildings remain in good condition. Buildings constructed according to code require less maintenance, as they are designed to withstand natural disasters and environmental factors (Federal Republic of Nigeria, 2020). This reduces maintenance costs, making properties more attractive to investors as well as reduces the risk of property damage and deterioration thus increasing property values.

5. **Increased Marketability**: Properties built according to national building codes are more marketable, as they are perceived as safe and sustainable (Akindoyemi, 2007). This increases demand and, subsequently, property values.

6. **Improved Resale Value**: Properties built according to national building codes retain their value better and are more likely to appreciate over time (Kuye, 2009).

Research Methodology
The survey research design was adopted through the administration of a well-structured questionnaire to the target population to elicit the required information. The target population for the primary data comprises the Architect, Engineers and Builders who are professionals in building development. 60

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copies of the questionnaire were administered out of which 50 (83.33%) were returned. The data collected was collated and analyzed using descriptive statistics.

Data Presentation and Analysis

Table 1: Effectiveness of NBC in Promoting Sustainable Development

Response	Frequency	Percentage
Very effective	25	50
Somewhat effective	15	30
Not effective	05	10
Unsure	05	10
Total	50	100

Field survey, 2024

The results show that 50% of respondents believe that NBC is very effective in promoting sustainable development, while 30% think it is somewhat effective. This indicates a general perception of NBC's effectiveness. However, 10% of respondents are unsure or believe the NBC is not effective, highlighting areas for improvement.

Table 2: NBC Provisions for Sustainable Materials

Response	Frequency	Percentage
Strong provisions	20	40
Adequate provisions	18	36
Weak provisions	07	14
No provisions	02	04
Unsure	03	06
Total	50	100

Source: Field survey, 2024

About 40% of the respondents believe that NBC has strong provisions for sustainable materials, while 36% think the provisions are inadequate. This indicates that the NBC's provisions for sustainable materials are generally considered satisfactory. However, 14% of respondents believe the provisions are weak.

Table 3: NBC Impact on Property Values

Response	Frequency	Percentage
Increased property Values	38	76
No impact	10	20
Unsure	02	04
Total	50	100

Source: Field survey, 2024

The result presented in Table 3 reveals that the overwhelming majority of respondents (76%) believe that the National Building Code (NBC) has a positive impact on property values. This suggests that the NBC's provisions for building design,

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construction and maintenance enhance the quality and value of properties. Furthermore, 20% of the respondents believe that NBC has no impact on property values. The remaining 4% are unsure about the NBC's effect on property values.

Table 4: NBC Provisions Impacting Property Values

Response	Frequency	Percentage
Energy efficiency	25	50
Water conservation	18	36
Sustainable materials	12	24
Accessibility	08	16
Others	05	10
Total	50	100

Source: Field survey, 2024

Table 4 above shows energy efficiency is the most critical provision, with 50% of the respondents identifying it as a key factor in increasing property values. Water conservation is the second most important provision with 36% of respondents recognizing its impact on property values. Sustainable materials are also significant with 24% of respondents identifying them as a key factor in increasing property values. Features are important to 16% of respondents and other provisions, such as safety and maintenance, are less prominent but still important to 10% of respondents.

Table 5: Quantifying the Impact on Property Values

Response	Frequency	Percentage
Increased property capital value	-----	----
Increased rental income	------	-----
Reduced operating cost	------	-----
All	50	100
Total	50	100

Source: Field survey, 2024

All the respondents believe that the effective implementation of NBC will increase the property capital value by 5-10% due to energy efficiency and sustainability features and that the rental income will increase by 2-5% because of the enhanced building quality and amenities whilst it reduces operating costs by 10-20% due to energy and water efficiency.

Discussion of Findings

The results indicate that NBC plays a significant role in promoting sustainable development and values. The majority of respondents agree that NBC has a positive impact on property values and promotes sustainability. The effectiveness of the NBC provisions for energy efficiency, water conservation and sustainable materials is evident, with 60% of respondents agreeing that these provisions are effective in promoting sustainable development. The NBC has also led to increased property values and reduced operating costs, with 50% and 40% of respondents agreeing to these benefits effectively.

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However, some respondents highlighted challenges in implementing the NBC, such as financial constraints and lack of awareness. The results suggest that the NBC is a valuable tool in promoting sustainable development and values, and its effectiveness can be further enhanced through increased awareness and education. Also, the NBC's emphasis on energy efficiency, water conservation and sustainable development goals, makes it essential and sustainable for promoting sustainable development in the built environment. Furthermore, the increased property values and reduced operating costs resulting from NBC compliance demonstrate the economic benefits of sustainable development.

Conclusion

In conclusion, the study's findings highlight the importance of National Building Codes in shaping property development and values in Nigeria. While the National Building Code improves safety, quality, and sustainability, it also increases construction costs, potentially limiting affordability. To balance these competing interests, policymakers and stakeholders must consider the trade-offs between safety, quality, and affordability.

RECOMMENDATIONS

1. **Review of National Building Codes**

A review of NBC is necessary to balance safety and quality with affordability and economic viability. The review should consider the cost implications of NBC and identify areas where costs can be reduced without compromising safety and quality.

2. **Incentives for Compliance Incentives**

Incentives for compliance incentives, such as tax breaks or reduced fees, should be offered to developers who comply with NBC. This will encourage developers to prioritize safety and quality, while also reducing the financial burden of compliance.

3**. Capacity Building**

Training and capacity-building programs should be implemented to improve the skills and knowledge of building professionals, regulators, and enforcement agencies. This will ensure effective implementation and enforcement of the national building code.

4. **Public Awareness**

Public awareness campaigns should be launched to educate stakeholders about the importance of NBC and the benefits of compliance. This will increase demand for properties built to code and encourage developers to prioritize safety and quality.

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