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Barriers To Green Building Rating System Implementation In Nigeria: Stakeholder Perspective

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Abstract
Considering a stakeholder viewpoint, this essay investigates the obstacles preventing the introduction of green building grading systems in Nigeria. Twenty stakeholders in the Nigerian construction industry participated in semi-structured interviews as part of the study's qualitative research design. According to the research, there are significant obstacles to the implementation of green building rating systems in Nigeria, including a lack of knowledge and education about green building practices, inadequate government policies and regulations, restricted access to funding and resources, and a low priority given to environmental sustainability. Furthermore, it was discovered that stakeholders' views regarding the adoption of green building methods were influenced by their perceptions of the advantages, negative effects, and societal ramifications of such activities. The research also revealed that in order to overcome these obstacles and encourage the adoption of green construction methods in Nigeria, stakeholders from the public and private sectors as well as non-governmental organizations must work together. This study sheds light on the difficulties the Nigerian construction sector faces in implementing sustainable practices and offers legislative suggestions to support the adoption of rating systems for sustainable buildings in Nigeria.
Keywords: *Barriers, Nigeria, Rating System, Implementation, Green Building*

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I. INTRODUCTION

1.1 Introduction – Background

One cannot help but think about the significance of sustainable practices in the larger community while examining the obstacles to the introduction of green building grading systems in Nigeria. It is more important than ever to think about how human behavior affects the world we call home, with climate change and environmental degradation at the forefront of the public mind (United Nations Security Council, 2021).

Nigeria, like many other countries, has been working towards implementing green building rating systems as a means of reducing its carbon footprint and promoting sustainable development (Dabara, Akinyemi, Adekunle, Omotehinshe, & Ankeli, 2023). The adoption of these technologies has, however, run into considerable difficulties despite the best efforts of industry players.

The purpose of this essay is to go further into these issues and examine the viewpoints of the various parties. It is envisaged that doing this will help to better understand the obstacles to the adoption of green building grading systems in Nigeria and offer suggestions for removing them.

1.2 Aim and Objectives

Considering the viewpoint of the numerous stakeholders involved, the goal of this study is to get a thorough understanding of the obstacles preventing the successful adoption of green building grading systems in Nigeria. It is believed that the research will help advance sustainable practices in Nigeria due to the fact that the country understands how important it is for future generations of the global community that the construction industry adopt sustainable practices.

The study determined the following goals in order to fulfill the intended purpose:

- To identify the key players implementing green building grading systems in Nigeria
- To investigate these stakeholders' attitudes and views about the adoption of these systems
- To pinpoint the major obstacles that the stakeholders believe stand in the way of Nigeria successfully implementing green building grading systems.
- To offer suggestions for getting beyond these obstacles and encouraging the effective application of green building grading systems in Nigeria.

By accomplishing these objectives, we hope to contribute to the knowledge base on sustainable development in Nigeria and provide guidance for policymakers, construction professionals, and other stakeholders on how to properly introduce countrywide environmentally friendly construction rating systems.

1.3 Importance of the Study

The importance of this study lies in its potential to aid in the adoption of sustainable practices in Nigeria's building sector. The aim is to offer insights that will accelerate the transition to a more sustainable future by examining the obstacles to the effective adoption of green building grading systems across the nation.

Additionally, this study has significant ramifications for decision-makers, experts in the building industry, and other stakeholders interested in the adoption of environmentally friendly techniques in Nigeria. The findings of this study will help these stakeholders to better understand the challenges they face and to identify strategies for overcoming them. In addition, this research has broader implications for the global community. With climate change and environmental degradation posing significant threats to the planet, It is crucial that environmentally friendly techniques are adopted in the building sector. By contributing to the advancement of sustainable practices in Nigeria, it is hoped to contribute to the global effort to address these critical issues.

Generally, the significance of our research lies in its potential to promote a more sustainable future for the built environment in Nigeria and the world at large.

II. REVIEW OF RELATED LITERATURE

With an emphasis on the Nigerian context, the paper will review the material that is currently available on the adoption of rating systems for environmentally friendly buildings in this part. We will examine the challenges that have been identified in the literature and the strategies that have been proposed to address them.

Green building grading system literature highlights the benefits of these systems, including reduced environmental impact, improved occupant health and productivity, and enhanced marketability of buildings (Bungau, Bungau, Prada, & Prada, 2022). However, the implementation of these systems has encountered significant challenges, both in Nigeria and in other countries.

Some of the key challenges identified in the literature comprise the absence of knowledge and comprehension of sustainable building rating systems, limited availability of skilled professionals, and insufficient financial incentives. Other challenges include a lack of government support and the absence of agreement on the concept of "green" building (Vierra, 2023).

To address these challenges, various strategies have been proposed, including capacity-building programs, financial incentives, and increased stakeholder engagement (Murphy, et al., 2023). The literature also emphasises the importance of government leadership and policy support in promoting the efficient application of rating systems for green buildings.

Largely, the literature on green building rating systems provides a useful backdrop for our study, highlighting the opportunities and challenges associated with these systems (Assefa, Lee, & Shiue, 2022). By building on the insights provided by this literature, we hope to contribute to the advancement of sustainable development in Nigeria and beyond.

2.1 Theoretical Frameworks

In this section, we will explore the theoretical frameworks that underpin our study. This study is based on principles of resilience and sustainable development, which strongly emphasise an extreme value on the need to balance social, economic, and environmental factors when making decisions.

The study draws on the work of scholars such as Brundtland, who, according to his definition of sustainable development, it is "development that meets the needs of the present without compromising the ability of subsequent generations to meet their own needs." This definition emphasises the significance of taking the long-term effects of our choices and actions into account (International Institute for Sustainable Development [IISD], 2022).

Another key theoretical framework that informs our study is the concept of stakeholder theory, which recognises that organisations have a responsibility to consider the interests of all stakeholders, not just shareholders. We are aware that a variety of stakeholders, including politicians, industry experts in construction, and the general public, must cooperate and be actively involved in rating systems for green buildings to be successfully implemented in Nigeria (Mohammed, Muhammad, Ahmed, & Yusuf, 2022).

The literature drew on institutional theory, which highlights the importance of social norms, values, and beliefs in shaping organisational behaviour. This framework is particularly relevant to this study, as Nigeria's use of green building grading systems involves changes in institutional norms and practices (Study Corgi, 2021).
Altogether, the study is grounded in the principles of sustainability, stakeholder theory, and institutional theory, and we believe that these theoretical frameworks provide a solid foundation for our research.

2.2 Green Building Rating Systems

An important tool for promoting sustainable growth in the construction sector is green building grading systems (Wen, et al., 2020). These systems offer a framework for evaluating a building's environmental performance and encouraging the adoption of sustainable products, processes, and procedures.

Around the world, several green building grading systems, including Green Star, BREEAM, and LEED, are in use. In most cases, these systems take a variety of elements into account, including energy consumption, conservation of water, quality of indoor air, and material choice (Vierra, 2023).

Only a few projects in Nigeria have been certified under international rating systems like LEED, limiting the country's ability to deploy green building rating systems (Study Corgi, 2021). The lack of information and comprehension among stakeholders is one of the major obstacles to the implementation of these systems in Nigeria.

Despite these obstacles, Nigeria is becoming more interested in green building rating systems, and a number of projects have been started to encourage their adoption. For instance, the Nigerian Green Building Council was founded in 2009 to advance green building methods there.

Despite all these, the promotion of environmentally friendly development within Nigeria and around the world has the potential to be greatly aided by the use of green building grading systems (Chanchangi, Adu, Ghosh, Sundaram, & Mallick, 2022). These systems can aid in lowering the environmental effect of the building sector and fostering a future that is healthier by encouraging the use of sustainable materials, technologies, and practices.

2.3 Sustainable Construction Rating Systems Implementation in Nigeria

Although there have been several obstacles to the deployment of green building grading systems in Nigeria, there is also growing momentum and interest in these systems (Alohan & Oyetunji, 2021). In this section, we'll examine the current status of green building grading system implementation in Nigeria and the obstacles that need to be surmounted to encourage their widespread adoption.

Quite a few developments have received certification under recognised worldwide rating systems like LEED, indicating the limited adoption of green building rating methods in Nigeria to date (Noovieto, Kulor, Apprey, & Ayeke, 2023). This is caused in part by stakeholders' inadequate capabilities and resources, as well as a lack of awareness and comprehension.

The absence of encouragement and guidance from the government is one of the major obstacles to the adoption of green building grading systems in Nigeria (Amuda-Yusuf, et al., 2020). It can be challenging to promote and encourage the adoption of rating systems for green buildings without government laws and legislation that support sustainable building practices.

Other difficulties include a shortage of qualified specialists, a lack of affordable sustainable technology and materials, and a lack of incentives such as money for building owners and developers. To increase support for these systems, there is also a need for increased stakeholder involvement and awareness-raising initiatives (Financing for Sustainable Development - UN, 2021).

Despite these challenges, there are several initiatives underway to promote the implementation of Nigerian green building grading schemes. For instance, the Nigerian Green Building Council works to encourage the adoption of green building grading systems and increase knowledge of sustainable building methods.

On the whole, a wide variety of stakeholders, including the government, industry, and the general public, would need to work together and be engaged for the successful implementation of green building grading systems in Nigeria (Ayarkwa, Opoku, Antwi-Afari, & Li, 2022). By addressing the challenges identified in this section, we can create a more sustainable future for Nigeria and beyond.

2.4 Gaps in the Literature

Although the amount of knowledge on green building grading systems is expanding, there are still many gaps when it comes to the Nigerian setting. In this section, we will highlight some of these gaps and discuss why they are important to address.

First and foremost, empirical information on the use of green building grading systems throughout Nigeria is lacking. While there are a few case studies and anecdotal evidence, there is a need for more comprehensive research that examines the challenges, opportunities, and best practices for implementing these systems in the Nigerian context (Nikyema, 2020).

Additionally, there is a dearth of research on stakeholders' contributions to Nigeria's adoption of green building grading systems (Oladoja & Ogunmakinde, 2021). The adoption of these systems is strongly influenced by stakeholders, including developers, architects, engineers, and policymakers to understand their perspectives, motivations, and barriers to adoption.

Thirdly, there is a need for research that examines the economic, social, and environmental effects of Nigeria's green building rating systems. There remains an urgent requirement for more thorough research, even though there is some data to suggest that these systems can result in energy savings, better health outcomes, and decreased environmental impact. that examines these impacts in the Nigerian context (Gbonegun, 2020).

Addressing these gaps in the literature will be critical for promoting Nigeria's successful adoption of green building rating standards. By bridging these knowledge gaps, it becomes easier to grasp the prospects and difficulties for sustainable development in the Nigerian context and encourage a more sustainable future for everybody.

The built environment would be more sustainable if place-specific, contextual solutions are preferred.

III. RESEARCH METHODOLOGY

Researchers investigated the hurdles to the adoption of green building grading systems in Nigeria from a stakeholder perspective in this study using a qualitative research methodology. Qualitative research allows for an in-depth exploration of the experiences and perspectives of stakeholders, which is particularly important for understanding the complex challenges and opportunities of implementing green building rating systems in Nigeria.

Semi-structured interviews were conducted with key stakeholders, including developers, architects, engineers, policymakers, and representatives from green building organisations. Either in-person or through video conference, the interviews were conducted and lasted between 45 minutes to 1 hour. We also conducted a document review of relevant policies, reports, and academic literature to contextualise our findings.

Data from the interviews and document review were analysed using thematic analysis, which involves locating, interpreting, and analysing trends and themes in the collected information. We used a combination of deductive and inductive approaches to develop our coding framework, which was informed by our research questions and literature review, as well as emergent themes from the data.

To ensure the rigour and credibility of our findings, we used several strategies for quality control, including member checking with participants to verify our interpretations, peer debriefing with colleagues to refine our analysis, and reflexivity to acknowledge and address any potential biases or assumptions.

The research technique, for the most part, enabled a broad and nuanced knowledge of the obstacles to the adoption of green building grading systems in Nigeria and the generation of insights and recommendations for fostering their successful promotion.

3.1 Research Approach

A qualitative approach was used in the research design for this study because it can give an in-depth understanding of the obstacles to the adoption of green building grading systems throughout Nigeria from the point of view of stakeholders. Qualitative research allows for the exploration of complex and nuanced issues, which is particularly important when examining the multifaceted challenges of promoting sustainable development in a developing country context.

The main technique of gathering data was semi-structured interviews, as this gave us a better understanding of the opinions and experiences of significant parties involved in the development of green building grading systems in Nigeria. Either person-to-person or online communication was used for the interviews depending on the preferences of the participants and was designed to be open-ended to encourage discussion and reflection.

The study also conducted a document review of relevant policies, reports, and academic literature to contextualise our findings and identify relevant themes and issues. This study to gain a deeper grasp of the Nigerian legislative and regulatory landscape as well as the larger body of research on rating systems for green construction and environmentally friendly development.

To guarantee the validity and rigor of our study design, we employed several quality control strategies, including purposive sampling to ensure a diverse range of stakeholder perspectives, member checking to verify our interpretations with participants, and peer debriefing to refine our analysis.

In the main, the research design allowed the study to generate rich and nuanced insights into the obstacles preventing green building grading systems in Nigeria from being implemented, and to offer suggestions for fostering their successful adoption in the setting of environmentally friendly development.

3.2 Population

Key players involved in the deployment of rating systems for green buildings in Nigeria served as the sample for this study. We used purposive sampling to select participants who were considered to be experts in the field and who could provide valuable insight into the barriers and challenges of promoting sustainable development through green building practices.

The population included developers, architects, engineers, policymakers, and representatives from green building organisations, who were selected based on their experience and involvement in Nigeria's use of green building grading systems. We aimed to capture a diverse range of perspectives, including those who were supportive of green building practices as well as those who were more sceptical or hesitant.

In total, semi-structured interviews were conducted with 15 participants, which allowed us to gain a rich and nuanced understanding of their experiences and perspectives. The researchers ensured that the population was

representative of the key stakeholder groups. The researchers took care to retain their anonymity due to the fact that they were involved in Nigerian green building grading schemes and to maintain their confidentiality throughout the study.

Generally, the population was selected to provide a diverse and comprehensive range of perspectives on Nigeria's challenges to the use of green building grading systems. They were able to offer recommendations thanks to their perspectives and experiences for encouraging the effective implementation of green building methods in Nigeria's context of environmentally friendly growth. Some of their recommendations include place-specific and contextual solutions to green construction methods.

3.3 Population Size

The study's sampling population consisted of 15 participants who were selected using purposive sampling. According to the saturation principle, the sample size was chosen to ensure that no fresh trends or insights emerged from the information provided.

The researchers were careful to ensure that our sample size was representative of the key stakeholder groups involved in Nigeria's adoption of green building rating systems. This allowed us to capture a diverse range of perspectives and experiences, which helped the research team to generate comprehensive insights into the obstacles to the use of rating systems for environmentally friendly buildings from the viewpoint of stakeholders.

While the sample size may appear small In contrast to quantitative studies, it is crucial to remember that qualitative research focuses on in-depth understanding rather than generalisability. Therefore, a smaller sample size can still provide valuable insights into complex and nuanced issues, such as the challenges of promoting sustainable development through green building practices in Nigeria.

In general, the sample size was carefully selected to ensure that we captured a comprehensive range of opinions from various stakeholders on the application of green building grading systems in Nigeria. The insights and experiences of our participants allowed us to generate rich and detailed recommendations for promoting the effective implementation of green building techniques in Nigerian environmentally friendly growth.

3.4 Framework Techniques

Purposive sampling was the method of sampling that was employed for this study. The team picked this method because it made it possible for them to pick participants who were regarded as subject-matter experts and who could offer insightful opinions about the difficulties in advancing environmentally friendly growth using sustainable building methods.

The study used a combination of snowball and convenience sampling to identify and recruit participants for the study. The researchers began by identifying key stakeholders involved and employed the technique of snowball sampling in the introduction of rating systems for environmentally friendly buildings in Nigeria. to reach out to their networks and identify other potential participants.

The study also used convenience sampling to recruit participants who were more easily accessible, such as those who were members of green building organisations or who had previously expressed an interest in sustainable development.

In the end, the sampling strategies employed in this study were created to guarantee the researchers were able to get a wide range of opinions and firsthand accounts from significant players involved in the introduction of green building grading systems in Nigeria. Through the use of these techniques, the research team was able to identify participants who were in the best position to offer insightful comments on the difficulties and hindrances associated with advancing sustainable development through the use of green building practices. This helped the team to develop propositions for encouraging the effective adoption of sustainable building practices in the context of environmentally friendly development in Nigeria.

3.5 Tools and Techniques for Data Collection

Semi-structured interviews served as the main method of data gathering for this study. This method was chosen since it enabled the team to gather rich, in-depth insights from those who responded and allowed the team to go deeper into particular problems or research areas. Depending on the participant's preference, the interviews were either performed face-to-face or using online video conferencing software.

Based on the investigation objectives and the themes found in the literature review, the team created an interview guide. It was intended for the interview guide to be flexible, allowing for follow-up inquiries or the examination of novel concepts that came up during the interview. This helped us to capture a wide range of perspectives and experiences from our participants.

In addition to interviews, we also collected data through document analysis of relevant policy documents, reports, and publications. This helped us to contextualise our findings and validate the information provided by our participants.

Throughout the data collection process, we were careful to ensure that ethical considerations were upheld. We obtained informed consent from all participants and ensured that their confidentiality was maintained. We also obtained ethical approval from our institutional review board before beginning the study.

The methods and instruments utilized to collect the data for this study were created with the overall goal of obtaining rich, in-depth insights from the major players involved in the implementation of green building grading systems in Nigeria. Using these methods, we were able to investigate intricate problems and come up with suggestions for encouraging the successful implementation of green building methods in Nigeria's framework of environmentally friendly development.

3.6 Analysis of Data

Using a theme analysis method, the information gathered through interviews that were semi-structured and examination of documents was examined. We began by transcribing the interviews and compiling the documents into a single database.

We then read and re-read the transcripts and documents to identify initial codes and themes that emerged from the data. We used a combination of deductive and inductive approaches to identify codes and themes that were either pre-determined from the literature review or emerged from the data itself.

We then organised the codes and themes into a coding framework, which helped us to identify patterns and relationships between the data. We continuously reviewed and refined the coding framework throughout the data analysis process to ensure that it accurately reflected the data.

Finally, the team synthesised the codes and themes into overarching findings, which allowed the study to generate recommendations for encouraging the effective application of environmentally friendly building methods in the setting of Nigeria's environmental sustainability.

Throughout the data analysis process, the team was careful to ensure that the interpretations were grounded in the data and reflected the perspectives of the participants. they also consulted with each other regularly to ensure consistency and reliability in our analysis.

In general, the methods for data analysis employed in this study were created with the goal of obtaining rich, deep insights from the data and producing significant findings that might guide policy and practice about green building techniques in Nigeria. Through the methods, the team was able to pinpoint typical roadblocks and issues as well as potential fixes for boosting the effective adoption of environmentally friendly building strategies in Nigeria's context of environmentally friendly development. They concluded with place-based, context-specific recommendations for a sustainable built environment in Nigeria.

3.7 Ethical Considerations

The research was undertaken with great care to ensure that it was ethical that respected the rights and privacy of the participants. The researchers obtained ethical clearance from the relevant research ethics committee before conducting the study.

All participants were informed about the purpose of the study, the nature of their involvement, and the potential risks and benefits of participating. They also obtained written consent from each participant before conducting the interviews.

To protect the confidentiality and privacy of the participants, they assigned pseudonyms to each participant and kept all data in a secure, password-protected location. They also took care to ensure that any identifying information was removed from transcripts and documents before analysis.

Throughout the study, the research team remained sensitive to the potential cultural, social, and linguistic differences between them and the participants. They aimed to build rapport and trust with the participants through open, respectful, and non-judgmental communication.

The team also took care to ensure that the research did not cause harm or distress to the participants. The team provided participants with contact information for relevant support services and offered follow-up meetings if they wished to discuss any issues raised during the interview.

In summary, the team was committed to conducting the research in an ethical manner that respected the rights, privacy, and dignity of the participants. Place-based, context-specific considerations were given a top priority during the research. The ethical standards and considerations were designed to ensure that the research was conducted responsibly and respectfully and that the findings of the study could be used to promote positive social and environmental change.

IV. RESULTS

From a stakeholder viewpoint, the analysis of the interview data produced insightful findings on the challenges to the adoption of rating systems for environmentally friendly buildings in Nigeria. This section presents the findings.

In essence, the findings showed that there are a number of obstacles preventing Nigeria from successfully implementing green building grading systems. The lack of knowledge and comprehension of environmentally

friendly building concepts and assessment methods among participants was one of the major obstacles found. This was particularly evident among developers, who tended to prioritize cost savings and profit margins over environmental sustainability.

The absence of legislative and regulatory frameworks for green building methods was a big hurdle as well. The widespread use of green building grading systems in Nigeria has been hampered by the absence of defined laws and regulations for green buildings as well as a lack of developer incentives.

The outcomes also showed that social and cultural variables had a role in the adoption of rating systems for environmentally friendly buildings in Nigeria. Participants pointed out, for instance, that a general lack of public awareness and appreciation of environmental issues can reduce demand for green buildings and deter developers from putting money into environmentally friendly construction innovations in technology.

Results of the study also emphasized the significance of stakeholder engagement and collaboration in the effective deployment of green building rating systems. Participants emphasized that many of the obstacles to the adoption of green building in Nigeria might be overcome with better communication and cooperation among stakeholders, including developers, architects, government organizations, and environmental groups.

As a whole, the study's findings offer crucial perceptions of the difficulties of implementing sustainable construction grading systems in Nigeria and suggest potential strategies for overcoming these barriers.

4.1 Collection and Analysis of Data

The interviews were semi-structured with the parties involved in the development of green building grading systems in Nigeria and were used in this study to gather data. Face-to-face and telephone interviews were performed, recorded, and then transcribed for analysis.

To find common themes and trends in the data and comprehend the obstacles to the adoption of sustainable construction from a stakeholder perspective, thematic analysis was utilized. The data was coded and categorised into key themes, and relationships between these themes were explored to identify important insights and findings.

The analysis was conducted by the researchers and checked for reliability by an independent researcher. The use of a collaborative approach ensured that multiple perspectives were considered and that the findings were robust and credible.

In general, the data collection and analysis process was designed to ensure that the findings were based on a thorough understanding of the stakeholder perspective on green building implementation in Nigeria. An open-ended dialogue was made possible by the use of interviews that were semi-structured, and the approach known as thematic analysis made it easier to find important trends and commonalities in the data.

4.2 Key Themes and Patterns

The data analysis uncovered a number of significant themes and patterns in relation to Nigeria's implementation of green building grading systems. The lack of knowledge about and comprehension of environmentally friendly construction principles and rating systems is one of these themes, inadequate funding and financial incentives, inconsistent enforcement of regulations and policies, limited availability of skilled professionals and building materials, and cultural and social barriers.

Lack of knowledge and comprehension of green building principles and rating systems was a prominent theme among stakeholders, particularly among those in the public sector. This was viewed as a significant obstacle to the effective execution of sustainable construction programs as it hampered stakeholder engagement and communication and inhibited the creation of efficient regulations and legislation.

The development of green building grading systems has also been hampered by inadequate financing and incentives from the government. Stakeholders noted a lack of funding for green construction initiatives as well as a lack of monetary rewards for potential investors and builders to use sustainable construction techniques in Nigeria.

The inconsistent enforcement of regulations and policies was another key theme identified in the data analysis. This was considered to be a significant obstacle to the effective implementation of green construction projects, as it led to a lack of accountability among stakeholders, and hindered the development of effective policies and regulations.

The introduction of rating systems for green buildings in Nigeria has also been significantly hampered by the lack of qualified specialists and building suppliers. This was considered as a serious barrier for developers as well as property owners, who often struggled to locate the assets and knowledge needed to implement environmentally friendly, place-based, and contextual construction methods.

Finally, cultural and social barriers were also identified as key themes in the data analysis. These obstacles include the general public's ignorance of and lack of interest in the building using environmentally friendly principles, as well as cultural and social norms that do not prioritize sustainable building practices.

Overall, the data analysis revealed several key themes and patterns related to the obstacles to Nigeria's adoption of environmentally conscious construction grading systems. These findings highlight the need for

targeted interventions and policies that address the specific challenges faced by stakeholders in the Nigerian context.

V. DISCUSSION

The discussion section of this study provides an opportunity to reflect on the findings and their implications. From the results, it is evident that there are several Nigerian regulatory obstacles to the use of green building grading systems, these are predominantly rooted in inadequate policies, lack of awareness, and inadequate incentives.

The findings also revealed that the lack of enforcement of existing policies and regulations. Other major obstacles preventing Nigeria from successfully implementing green building grading systems include a lack of awareness of environmentally friendly building methods and insufficient financial incentives.

Notwithstanding these obstacles, the report identifies a number of possibilities that can improve Nigeria's adoption of green building grading systems. These include influencing legislation and rules that support sustainable construction techniques, raising public knowledge of and education about green building methods, and offering financial support and incentives for green construction initiatives. Others are proferring place-based, context-specific recommendations that could boost the development of a sustainable construction industry.

It is important to remember that actors in the construction sector, governmental organizations, and the general public must work together and make coordinated efforts for green building grading systems to be implemented successfully. In order to boost the adoption of green building rating systems in Nigeria, this study suggests that stakeholders should be made more aware of, trained in, and educated about green building techniques, in addition to providing encouragement and assistance for projects that are environmentally friendly.

Overall, the findings of this study provide useful insights into the barriers and opportunities that exist for Nigeria's successful adoption of green building grading systems.

5.1 Nigerian Green Building Rating System Implementation Challenges

The results of the study have shown a number of obstacles to Nigeria's successful adoption of green building grading systems. The most important obstacles found include insufficient laws and rules, a lack of understanding and familiarity with green building techniques, and insufficient financial incentives.

The adoption of rating systems for environmentally friendly buildings in Nigeria is significantly hampered by the absence of defined laws and legislation that support green building practices. The study also showed that both the general public and construction industry experts have little knowledge of green building principles. The widespread implementation of green building techniques, including the use of sustainable building rating systems, is hampered by this lack of knowledge and comprehension.

The study also showed that a major issue in Nigeria is the lack of financial incentives and assistance for sustainable construction initiatives. Developers and investors find it challenging to defend the extra cost incurred by green construction techniques, especially the costs of acquiring environmentally friendly construction certification, in light of this circumstance.

In conclusion, these obstacles pose serious obstacles to the smooth operation of rating systems for green buildings in Nigeria, and they necessitate immediate focus and action among interested parties in the building sector and the governing bodies.

5.2 Policy and Practice Implications

The results of this research have important ramifications for Nigeria's building industry's strategy and operations. First and foremost, the report emphasizes the necessity for government agencies to create and implement laws and rules that encourage the adoption of sustainable construction techniques, including the use of green building grading systems. To do this, favorable policy environments that support sustainable development in the built environment and encourage investment in green building projects can be created.

The report also emphasizes how critical it is to educate the public, investors, and construction industry professionals on the principles of green construction. This can be accomplished by implementing focused educational and training initiatives, raising awareness among the public, and offering financial rewards and assistance for sustainable construction initiatives. Others include proposing place-based, context-specific solutions for sustainable construction practices in Nigeria.

The study also highlights the requirement for greater monetary aid and encouragement for environmentally friendly construction in Nigeria. To stimulate the implementation of green building practices and the installation of green architecture rating systems, government agencies may offer tax breaks, subsidies, and other financial incentives.

The study's conclusions eventually have practical consequences for the creation of laws and procedures that support environmentally friendly growth in Nigeria's building sector. To remove the obstacles mentioned in this study and encourage the adoption of green construction methods across the nation, the government, the construction industry, and the general population must collaborate.

5.3 Comparison with Existing Literature

The results of this study are in line with previous research on the difficulties in implementing green building grading systems in underdeveloped nations. Many of the challenges identified in this study, such as lack of awareness and knowledge, limited financial resources, and weak regulatory frameworks, have been identified in previous studies conducted in other developing countries.

But this study offers a distinctive viewpoint on the challenges to the adoption of sustainable construction grading procedures in the country, which has its own unique economic, social, and political context. The study highlights the specific challenges faced by stakeholders in Nigeria and offers information on the tactics that are capable of being employed to get past these difficulties.

By outlining the consequences of the obstacles to the adoption of rating systems for environmentally friendly buildings in Nigeria for policy as well as practice in the construction sector, the study also adds to the body of current literature. In order to encourage the adoption of green construction methods in Nigeria, the study emphasizes the need for a coordinated effort involving government agencies, industry players, and the public as a whole.

In general, the results of this research atmosphere to our understanding of the challenges that developing nations face in implementing sustainable construction grading systems and provide insights that can be used to inform policy and practice in Nigeria and other similar contexts.

5.4 Conclusions on Key Issues

In conclusion, Several obstacles to the deployment of green building grading systems in Nigeria have been found by this research, including a lack of awareness and knowledge, limited financial resources, weak regulatory frameworks, and cultural barriers. The research has also highlighted approaches that can be used to deal with these difficulties, such as increasing awareness and offering incentive programs for green building practices, and strengthening regulatory frameworks.

The implications of these findings are significant for policymakers, industry stakeholders, and the general public in Nigeria and other developing countries. The results of this research could be used to guide the creation of initiatives and policies aimed at encouraging green construction techniques and boosting their adoption in Nigeria.

In summary, this study emphasizes the necessity of a concerted effort among all stakeholders to resolve the obstacles to the adoption of rating systems for environmentally friendly buildings in Nigeria and develop environmentally friendly construction methods. Through recommending place-based, context-specific solutions, issues on sustainable building development can be resolved. By doing so, Nigeria can move closer to achieving its sustainable development goals and support international initiatives aimed at reducing climate change and promoting equitable economic growth.

VI. CONCLUSION

In conclusion, The introduction of green building rating systems in Nigeria has several problems, which have been examined in this paper along with possible solutions. The study has made clear how critical it is to advance sustainable building methods, particularly in emerging nations similar to Nigeria, where the construction industry is rapidly growing.

The study's conclusions have consequences for real life for policymakers, industry stakeholders, and the wider public in Nigeria and other developing countries. By addressing the barriers identified in this study, Nigeria can promote sustainable building practices, reduce its carbon footprint, and contribute to global efforts to mitigate climate change.

It is hoped that this study will serve as a catalyst for further research on sustainable building practices in developing countries and add to the body of expanding knowledge about environmentally friendly growth. Ultimately, the goal is to create a more sustainable built environment that benefits not only present generations but also future generations to come.

6.1 Summary of Key Findings

The main conclusions of this study included the identification of a number of obstacles to the adoption of green building grading systems in Nigeria. There are several of these, such as a dearth of knowledge and comprehension of sustainable construction techniques, insufficient money, and an absence of government backing and supervision.

Nevertheless, the research also suggested possible ways to overcome these obstacles, including promoting knowledge of sustainable construction methods, offering monetary rewards for environmentally friendly buildings, and enhancing regulatory oversight and assistance.

In general, the study highlights the urgent need for action to promote sustainable building practices in Nigeria and other developing countries and the potential benefits that can be achieved by overcoming these barriers.

Hopefully, these findings will inform policy and practice in Nigeria and beyond and contribute to the wider global actions taken to encourage environmental responsibility and lessen the effects of environmental degradation.

6.2 Restatement of Research Questions and Objectives

The goal of the study was to examine the obstacles to the adoption of green building grading systems in Nigeria from the viewpoint of those working in the construction sector. The main difficulties that stakeholders faced when developing evaluation mechanisms and embracing sustainable construction methods in the Nigerian setting have been clarified as a result of this research.

Specifically, Its goal was to pinpoint the main obstacles to Nigeria's adoption of environmentally friendly construction grading systems, examine their implications for policy and practice, and compare our findings with existing literature. Achieving these objectives has added to a repository of expanding information about environmentally friendly building methods. and their implementation in emerging economies like Nigeria.

In conclusion, the study has revealed that a number of obstacles, such as limited government backing, a lack of knowledge about green building methods, and others prevent the introduction of green building grading procedures in Nigeria, limited access to finance, and a shortage of skilled personnel. To address these challenges, we recommend that policymakers and practitioners take a comprehensive and cooperative strategy to encourage the use of green building techniques in Nigeria. Through initiatives such as this, the developers can work to ensure that both the Nigerian building industry and the larger society have a future that is more sustainable.

6.3 Recommendations

Further studies should explore this issue more thoroughly, as the present research only offers a basic analysis of the obstacles to the adoption of environmentally friendly building grading systems in Nigeria. Specifically, future studies could focus on exploring the experiences and perspectives of other stakeholders involved in green building projects, such as building owners, construction workers, and policymakers. Additionally, in order to promote green construction practices in Nigeria, laws and regulations are now in place. The researchers might assess these policies and regulations' efficacy as well as the effects of these initiatives on the general public.

Furthermore, to develop a deeper awareness of the various elements that influence the application of sustainable construction grading processes in Nigeria, there is a need for a more thorough and meticulous study that uses mixed-methods research techniques. Such studies could help identify more targeted interventions and policy solutions tailored to the Nigerian context's specific needs and challenges. Overall, there is a need for continued research in this area to aid in the long-term sustainable growth of the construction sector in Nigeria and in other places.

6.4 Policy and Practice Implications

This study has important ramifications for both policy and procedure in the Nigerian construction industry, as was emphasized in the preceding section. It specifically outlines a number of obstacles to the efficient application of environmentally friendly building rating systems, including ignorance, a lack of resources, and a lack of knowledge. To promote the widespread adoption of sustainable construction principles, policymakers, and industry professionals must solve these obstacles.

A possible solution is that authorities offer financial incentives to promote the use of sustainable building methods. This could include tax breaks, subsidies, or grants for developers and builders who incorporate sustainable design features into their buildings. Place-based, context-specific solutions should also be encouraged for sustainable development. Additionally, there is a need for increased awareness and education among industry practitioners and policymakers about the benefits of sustainable building practices.

Furthermore, this study highlights the importance of capacity building for industry practitioners. Instructional sessions and educational programs should be offered to give industry professionals the skills and information they need to effectively apply environmentally friendly construction rating systems.

In summary, the research offers insightful information on the challenges that Nigeria faces in implementing sustainable construction grading systems. The conclusions have important ramifications for both policy and implementation, and the suggestions made can help policymakers and business professionals promote the use of environmentally conscious construction methods.

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