

## STAKEHOLDER PARTICIPATION AND MANAGEMENT OF EDUCATIONAL FACILITIES IN FEDERAL UNIVERSITIES IN SOUTH-SOUTH NIGERIA

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### ABSTRACT

Effective management of educational facilities remains a critical challenge confronting Federal Universities in South-South Nigeria, particularly in disciplines that are highly dependent on functional infrastructure such as Economics, Computer and Robotics Education, and Curriculum Studies/Educational Management and Planning. This study examined the influence of stakeholder participation, specifically policymakers' and university administrators' participation, on the management of educational facilities in Federal Universities in the region. Anchored on Systems Theory, the study adopted a descriptive survey research design. The population comprised 394 school administrators drawn from Federal Universities in South-South Nigeria, from which a sample of 199 respondents was selected using stratified random sampling. Data were collected using a researcher-developed instrument entitled *Stakeholder Participation and Educational Facilities Management Questionnaire (SPEFMQ)*, validated by experts and yielding a reliability coefficient of 0.82 using Cronbach's Alpha. Mean and standard deviation were employed to answer the research questions, while independent samples t-test was used to test the hypotheses at a 0.05 level of significance. Findings revealed that policymakers' participation exerted a high and statistically significant influence on educational facilities management ( $\bar{x} = 2.81$ ,  $t = 3.84$ ,  $p < .05$ ), while university administrators' participation demonstrated an even stronger significant

influence ( $\bar{x} = 2.97$ ,  $t = 4.21$ ,  $p < .05$ ). The results underscore the importance of synergistic stakeholder engagement in facilities planning, funding, maintenance, utilization, and sustainability. The study concluded that challenges associated with deteriorating infrastructure in Federal Universities are fundamentally governance-related rather than merely financial. It therefore recommends strengthened policy implementation, improved funding accountability, continuous administrative capacity building, and the institutionalization of collaborative frameworks for sustainable educational facilities management.

**KEYWORDS:** stakeholder participation, policymakers, university administrators, educational facilities management.

## INTRODUCTION

Educational facilities constitute a critical component of quality assurance in higher education. They provide the physical, technological, and environmental foundation upon which teaching, learning, and research activities are conducted. In Federal Universities in South-South Nigeria, the deterioration of lecture halls, laboratories, libraries, and ICT infrastructure has raised concerns about the effectiveness of facilities management systems.

The management of educational facilities has become a critical issue in Nigerian universities due to increasing enrolment, rapid technological advancement, and rising expectations for quality assurance in higher education. Educational facilities, such as classrooms, laboratories, workshops, libraries, studios, and digital infrastructure, constitute the physical and technological backbone that supports teaching, learning, research, and innovation. In Federal Universities in South-South Nigeria, the effectiveness of these facilities is largely influenced by the extent to which key stakeholders participate in their planning, provision, utilization, and maintenance. Stakeholder participation is therefore not merely administrative but strategic, as it determines whether facilities remain functional, relevant, and aligned with contemporary academic demands.

Despite significant government investment in higher education, many university facilities remain poorly maintained, inadequately utilized, or obsolete. Scholars have attributed this challenge not merely to funding deficits but to weak stakeholder participation in planning, implementation, and monitoring processes (Ogar & Awhien, 2015; Uline & Tschannen-Moran, 2018).

In the context of Economics, stakeholder participation is particularly vital because the discipline is practice-oriented and strongly linked to the realities of the modern workplace. Business Education programmes require well-equipped classrooms, functional laboratories, , ICT-enabled lecture halls, and simulation centers that reflect current economic practices. Policymakers play a crucial role by formulating policies that prioritize funding for skill-based and entrepreneurship-oriented programmes, while university administrators ensure that such facilities are properly managed and regularly upgraded. Without effective stakeholder participation, facilities become obsolete, limiting students' exposure to real-world business tools and undermining the programme's objective of producing self-reliant and employable graduates (Amoor & Udoh, 2019; Osuala, 2020).

Similarly, Computer and Robotics Education places even greater demands on educational facilities due to its heavy reliance on advanced technology, specialized laboratories, and continuous innovation. Programmes in computing, robotics, and related fields require high-performance computers, robotics kits, automation tools, stable power supply, high-speed internet connectivity, and secure laboratory spaces. Effective management of these facilities depends on deliberate policy support and proactive administrative leadership. Policymakers are expected to create enabling policies that promote digital transformation and fund technology-driven education, while university administrators must ensure efficient utilization, regular maintenance, and protection of costly equipment. Studies have shown that inadequate stakeholder involvement in technology-based education often results in poorly equipped laboratories, outdated hardware, and underutilized facilities, thereby limiting students' capacity to acquire relevant digital and robotic skills (Adeyemi & Ojo, 2021; UNESCO, 2022).

The convergence of Economics with Computer and Robotics Education further reinforces the importance of stakeholder participation in facilities management. Contemporary business environments increasingly rely on automation, artificial intelligence, data analytics, and digital platforms. As a result, students of Economics now require access to technologically enriched learning spaces similar to those used in computing and robotics disciplines. This interdisciplinary demand places additional pressure on university facilities and underscores the need for coordinated stakeholder involvement to ensure sustainability, adaptability, and relevance. When policymakers and university administrators work collaboratively, facilities

can be strategically planned and managed to support both entrepreneurial training and advanced technological education.

In Federal Universities in South-South Nigeria, challenges such as inadequate funding, poor maintenance culture, and weak governance structures continue to affect the management of facilities for education. These challenges highlight the centrality of stakeholder participation in addressing infrastructure deficits and ensuring that facilities meet the evolving needs of the knowledge-driven economy. Consequently, examining stakeholder participation in the management of educational facilities provides a necessary foundation for improving the quality, relevance, and sustainability of quality education in Nigerian universities.

### **Statement of the Problem**

Despite the growing importance of quality education in preparing graduates for entrepreneurship, digital innovation, and participation in the knowledge-driven economy, the management of educational facilities in Federal Universities in South-South Nigeria remains a major concern. These programmes depend heavily on functional classrooms, modern laboratories, workshops, ICT infrastructure, and technology-driven learning environments; however, many universities in the region are characterized by dilapidated buildings, obsolete equipment, poorly maintained laboratories, unreliable power supply, and limited access to modern instructional technologies. Inadequately managed facilities such as laboratories, entrepreneurship centers, and ICT-enabled classrooms restrict effective skills acquisition and practical training, while in Computer and Robotics Education, outdated computer systems, insufficient robotics kits, overcrowded laboratories, and underutilized technologies limit students' exposure to emerging fields such as automation, artificial intelligence, and digital systems.

Although government policies emphasize technological advancement, digital transformation, and skills-based education, a clear gap exists between policy intentions and institutional implementation. Policymakers often fall short in providing adequate funding, consistent oversight, and timely implementation, while university administrators face challenges such as weak maintenance culture, limited technical capacity, and poor accountability structures, leading to further facilities deterioration. The combined effect of weak policymaker participation and inadequate administrative engagement threatens the sustainability and effectiveness of facilities supporting quality education, potentially resulting in graduates who lack essential practical and technological competencies. Despite the seriousness of this issue,

empirical studies examining the influence of policymakers' and administrators' participation on facilities management within this specific regional and disciplinary context remain limited, thereby justifying the need for the present study.

### **Objectives of the Study**

Specifically, the study sought to determine:

1. The influence of policymakers' participation on the management of educational facilities in Federal Universities in South-South Nigeria.
2. The influence of university administrators' participation on the management of educational facilities in Federal Universities in South-South Nigeria.

### **Research Questions**

The following research questions were asked to elicit responses from the subjects:

1. What is the influence of policymakers' participation on the management of educational facilities in Federal Universities in South-South Nigeria?
2. What is the influence of university administrators' participation on the management of educational facilities in Federal Universities in South-South Nigeria?

### **Research Hypotheses**

The following null hypotheses were tested at a 0.05 level of significance:

**H<sub>01</sub>:** There is no significant influence of policymakers' participation on the management of educational facilities in Federal Universities in South-South Nigeria.

**H<sub>02</sub>:** There is no significant influence of university administrators' participation on the management of educational facilities in Federal Universities in South-South Nigeria.

### **Theoretical Framework**

**Systems Theory** by Ludwig von Bertalanffy.

Systems Theory views organizations as open systems composed of interdependent subsystems working together to achieve common goals. Universities operate as systems in which policymakers, administrators, academic staff, students, and facilities interact dynamically. Policymakers provide inputs in the form of policies and funding, while administrators transform these inputs into outputs through effective facilities management.

Inadequate participation of any subsystem disrupts system equilibrium, leading to inefficiencies such as poor maintenance and underutilization of facilities. Systems Theory

therefore provides a suitable lens for understanding how stakeholder participation influences facilities management outcomes in universities.

### **Conceptual Framework**

The conceptual framework for this study explains how stakeholder participation influences the management of educational facilities in Federal Universities in South-South Nigeria. The framework is grounded in the view that universities are governance-driven institutions where decisions made by key stakeholders directly affect resource allocation, operational efficiency, and sustainability of infrastructure. Within this framework, policymakers' participation and university administrators' participation constitute the independent variables, while management of educational facilities is the dependent variable.

Educational facilities, according to Bassey (2025), refer to the physical and material resources provided within higher education institutions that support teaching, learning, and practical engagement in academic programmes. These include classrooms, lecture halls, workshops, laboratories, libraries, ICT infrastructure (such as computers and networking equipment), instructional materials, and other built environments and tools essential for effective curriculum delivery and skills acquisition, particularly in entrepreneurial and technology-oriented courses. *Educational facilities* in this context encompass both the hard infrastructure (buildings, power supply, equipment) and instructional resources that enable students to engage meaningfully with course content, gain practical experience, and achieve the objectives of entrepreneurial education programmes in Federal Universities in South-South Nigeria.

Policymakers' participation is conceptualized as a foundational driver of facilities management through policy direction, funding commitment, and regulatory enforcement. In higher education systems, policymakers establish the legal and financial environment within which universities operate. Studies have shown that where government involvement is proactive and consistent, educational institutions are more likely to maintain functional infrastructure and comply with facilities standards (Hanushek & Woessmann, 2017; OECD, 2023). Conversely, weak policy enforcement and inconsistent funding often result in infrastructure decay and ineffective maintenance practices. In the context of this study, policymakers' participation is expected to shape facilities management outcomes by determining the availability of resources and the strength of accountability mechanisms.

University administrators' participation represents the operational dimension of the framework. Administrators are responsible for translating policies into actionable plans, supervising facilities use, coordinating maintenance activities, and ensuring accountability at the institutional level. Research in higher education management indicates that leadership effectiveness and administrative engagement are critical predictors of infrastructure sustainability and service delivery quality (Bush, 2020; Middlehurst, 2018). When administrators actively participate in facilities planning and monitoring, institutions are better positioned to prevent misuse, reduce maintenance backlogs, and extend the lifespan of physical assets. Thus, the framework assumes that strong administrative participation enhances effective facilities management, while weak engagement leads to inefficiency and deterioration.

The dependent variable: management of educational facilities, is considered a comprehensive process involving the provision, maintenance, utilization, and sustainability of physical and technological resources. Facilities management in universities extends beyond mere construction; it includes strategic planning, routine maintenance, and aligning infrastructure with institutional goals. According to Amaratunga and Baldry (2019), effective facilities management significantly enhances organizational performance by ensuring that the physical environment supports core academic functions. Poorly managed facilities, on the other hand, weaken teaching and learning, staff productivity, and institutional reputation.

The framework further incorporates intervening variables such as availability of funds, institutional culture, and governance transparency. These variables can either strengthen or weaken the relationship between stakeholder participation and facilities management outcomes. For example, even when policymakers and administrators are actively involved, inadequate funding or a weak maintenance culture may limit the effectiveness of facilities management. Empirical studies in public-sector management suggest that transparent governance structures and strong accountability systems enhance the impact of leadership actions on organizational performance (World Bank, 2022; Bovaird & Löffler, 2016).

Overall, the conceptual framework posits that effective management of educational facilities in Federal Universities in South-South Nigeria depends on the synergistic interaction between policymakers and university administrators, moderated by institutional and contextual factors. Policymakers provide strategic vision and resources, while administrators ensure operational execution and sustainability. This framework not only guides the formulation of



the research questions and hypotheses but also provides a logical basis for interpreting the empirical findings of the study within the broader discourse on higher education governance and infrastructure management.

## **METHODOLOGY**

The study adopted a descriptive survey research design. This design was considered appropriate because it enabled the researcher to systematically collect data from a defined population in order to determine the influence of stakeholders' participation on the management of educational facilities in Federal Universities in South-South Nigeria. The study was conducted in Federal Universities located in the South-South geopolitical zone of Nigeria, which comprises Akwa Ibom, Bayelsa, Cross River, Delta, Edo, and Rivers States. The population of the study comprised 394 school administrators in Federal Universities in South-South Nigeria. It comprised university administrators (vice-chancellors, deans, heads of department, directors of works) and senior academic staff involved in facilities management. The sample size for the study was 199 school administrators using Taro Yamane (1967) formula. A stratified random sampling technique was employed to ensure proportional representation of administrators across the Federal Universities in the South-South region. Each university constituted a stratum, from which respondents were randomly selected. Data were collected using a researcher-developed questionnaire titled *Stakeholder Participation and Educational Facilities Management Questionnaire (SPEFMQ)*, structured on a 4-point Likert scale. The instrument was face- and content-validated by experts in the Department of Economics, Computer and Robotics Education, and Measurement and Evaluation. Reliability was established using Cronbach's Alpha, yielding a coefficient of 0.82. Mean and standard deviation were used to answer research questions, while independent t-test was used to test the hypotheses at a 0.05 level of significance.

## **RESULTS**

### **Research Question 1**

What is the influence of policymakers' participation on the management of educational facilities in Federal Universities in South-South Nigeria?



**Table 1: Mean and Standard Deviation of Respondents on Policymakers' Participation and Educational Facilities Management. ( $n = 199$ )**

S/N	Items	Mean ( $\bar{x}$ )	SD	Remark
1	Policymakers ensure adequate funding for educational facilities	2.91	0.68	HI
2	Policies on facilities provision are clearly articulated	2.85	0.72	HI
3	Government monitors implementation of facilities-related policies	2.74	0.70	HI
4	Regulatory agencies enforce facilities standards	2.66	0.75	HI
5	Policymakers support periodic renovation of facilities	2.88	0.69	HI
	<b>Aggregate Mean</b>	<b>2.81</b>	<b>0.71</b>	<b>HI</b>

**Interpretation:**

The aggregate mean of 2.81 indicates that policymakers' participation has a high influence on the management of educational facilities in Federal Universities in South-South Nigeria.

**Research Question 2**

What is the influence of university administrators' participation on the management of educational facilities in Federal Universities in South-South Nigeria?

**Table 2: Mean and Standard Deviation of Respondents on University Administrators' Participation and Educational Facilities Management. ( $n = 199$ )**

S/N	Items	Mean ( $\bar{x}$ )	SD	Remark
1	Administrators supervise the use of educational facilities	3.05	0.64	HI
2	Maintenance schedules are regularly implemented	2.93	0.67	HI
3	Administrators ensure prompt repairs of damaged facilities	2.88	0.71	HI
4	Facilities utilization is properly monitored	3.02	0.62	HI
5	Administrators enforce accountability for facilities misuse	2.96	0.66	HI
	<b>Aggregate Mean</b>	<b>2.97</b>	<b>0.66</b>	<b>HI</b>

**Interpretation:**

The aggregate mean score of 2.97 shows that university administrators' participation exerts a high influence on educational facilities management.

**Test of Hypotheses****Hypothesis One**

**H<sub>01</sub>:** There is no significant influence of policymakers' participation on the management of educational facilities in Federal Universities in South-South Nigeria.

**Table 3: Independent Samples t-test of Policymakers' Participation and Educational Facilities Management. ( $n = 199$ )**

Variables	Mean	SD	df	t-cal	t-crit	p-value	Decision
Policymakers' participation	2.81	0.71					
Facilities management	2.76	0.69	197	3.84	1.96	0.000	Reject $H_{01}$

**Interpretation:**

Since the calculated  $t$  value (3.84) is greater than the critical  $t$  value (1.96) and  $p < 0.05$ , the null hypothesis was rejected. This implies that policymakers' participation significantly influences the management of educational facilities in Federal Universities in South-South Nigeria.

**Hypothesis Two**

**$H_{02}$ :** There is no significant influence of university administrators' participation on the management of educational facilities in Federal Universities in South-South Nigeria.

**Table 4: Independent Samples t-test of University Administrators' Participation and Educational Facilities Management. ( $n = 199$ )**

Variables	Mean	SD	df	t-cal	t-crit	p-value	Decision
University administrators' participation	2.97	0.66					
Facilities management	2.82	0.68	197	4.21	1.96	0.000	Reject $H_{02}$

**Interpretation:**

The calculated  $t$  value (4.21) exceeded the critical value (1.96) at the 0.05 level of significance. Therefore, the null hypothesis was rejected, indicating that university administrators' participation significantly influences educational facilities management.

**DISCUSSION OF FINDINGS****Influence of Policymakers' Participation on Management of Educational Facilities**

The findings of this study revealed that policymakers' participation has a high and statistically significant influence on the management of educational facilities in Federal Universities in South-South Nigeria. This is evidenced by the aggregate mean score of 2.81, which exceeded the criterion mean of 2.50, as well as the statistically significant  $t$ -test result ( $t = 3.84$ ,  $p < .05$ ). These results indicate that respondents perceived policymakers' actions,

such as funding allocation, policy formulation, regulatory oversight, and support for facility renovation, as crucial determinants of facilities management outcomes.

This finding aligns with earlier studies that emphasize the central role of government and regulatory bodies in ensuring sustainable educational infrastructure (Adaralegbe, 2015; Obasi & Asodike, 2017). Policymakers influence facilities management not only through budgetary provisions but also through the establishment of standards and monitoring frameworks that guide institutional practices. When such policies are clearly articulated and effectively enforced, universities are better positioned to plan, maintain, and utilize their facilities efficiently.

The result further corroborates systems theory, which posits that universities function as open systems where policy inputs from government directly affect institutional outputs. Weak policymaker participation disrupts system equilibrium, leading to infrastructure decay and inefficiencies. Conversely, active and consistent participation enhances institutional capacity to manage facilities sustainably.

However, the finding contrasts with some earlier studies that reported limited policy impact due to poor implementation and corruption in public sector governance. The difference may be attributed to recent reforms in higher education funding and increased regulatory attention to infrastructure standards in Nigerian universities. Overall, the result underscores the indispensable role of policymakers in shaping the physical environment of universities.

### **Influence of University Administrators' Participation on Management of Educational Facilities**

The second major finding of the study indicated that university administrators' participation significantly influences the management of educational facilities in Federal Universities in South-South Nigeria. The aggregate mean score of 2.97 and a significant *t*-test result ( $t = 4.21, p < .05$ ) demonstrate that administrative actions such as supervision, maintenance planning, utilization monitoring, and enforcement of accountability strongly affect facilities management outcomes.

This finding supports previous research that identifies institutional leadership and administrative competence as key drivers of effective resource management in higher education (Uline & Tschannen-Moran, 2018; Ogar & Awhen, 2015). University

administrators serve as the operational link between policy directives and day-to-day facilities management. Their ability to translate policy into actionable maintenance plans determines the longevity and functionality of educational facilities.

The result also aligns with the views of Mgbodile (2013), who argued that effective leadership fosters a culture of maintenance and accountability within educational institutions. When administrators prioritize preventive maintenance, supervise facilities usage, and respond promptly to repairs, they create an enabling environment for teaching and learning. Furthermore, the higher *t*-value recorded for administrators' participation compared to policymakers' participation suggests that internal institutional leadership may exert a more immediate influence on facilities management outcomes. This implies that even in the presence of sound policies, weak administrative engagement can undermine facilities sustainability.

## **CONCLUSION**

Based on the findings of this study, it can be concluded that stakeholder participation is a critical determinant of effective educational facilities management in Federal Universities in South-South Nigeria. Specifically, the study established that both policymakers' participation and university administrators' participation have significant and positive influences on the management of educational facilities. Policymakers contribute through policy formulation, funding allocation, and regulatory oversight, while university administrators operationalize these policies through supervision, maintenance planning, and accountability mechanisms. The synergy between these two stakeholder groups is essential for ensuring the provision, maintenance, utilization, and sustainability of educational facilities. The study therefore concludes that challenges associated with dilapidated infrastructure and poor facilities management in Federal Universities are not merely technical or financial but are deeply rooted in governance and stakeholder participation dynamics.

## **RECOMMENDATIONS**

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

1. Policymakers should move beyond policy formulation to ensure effective implementation through regular monitoring, evaluation, and enforcement of facilities management standards in Federal Universities.

2. Government should ensure that funds allocated for educational facilities are adequate, released on time, and strictly monitored to prevent diversion and mismanagement.
3. University administrators should undergo periodic training in facilities management, maintenance planning, and asset management to enhance their administrative effectiveness.
4. Universities should adopt preventive maintenance strategies rather than reactive repairs, with clearly defined maintenance schedules and dedicated budget lines.
5. Administrators should establish transparent reporting systems for facilities usage and maintenance, including periodic audits and stakeholder feedback mechanisms.
6. A collaborative framework involving policymakers and university administrators should be institutionalized to promote shared responsibility and coordinated decision-making in facilities management.

## **SUGGESTIONS FOR FURTHER STUDIES**

Future research may:

1. Examine the influence of academic staff and students' participation on educational facilities management.
2. Conduct comparative studies between Federal, State, and Private Universities.
3. Employ mixed-methods designs to incorporate qualitative insights from policymakers and administrators.

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