

Assessing the Effect of Revitalization Programs on Improper Settlement in Enugu State, Nigeria

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Abstract

The study assesses the effect of revitalization programs on improper settlement in Enugu State, Nigeria. The specific objectives were to: examine the effect of Infrastructure Development on improper settlement and evaluate the effect of Public Space Improvement on improper settlement in Enugu State, Nigeria. A *descriptive cross-sectional research design* was adopted for the study. Data were collected using a structured questionnaire design with a five-point Likert scale and analyzed using SPSS version 26.0. Simple linear regression analysis was employed to test the study's hypotheses. The result revealed that Infrastructure Development has a significant effect on improper settlement with a *p-value* of $(0.019 < 0.05)$, and Public Space Improvement has a significant effect on improper settlement with a *p-value* of $(0.024 < 0.05)$, in Enugu State, Nigeria. The study concluded that revitalization programs have a significant positive effect on improper settlement in Enugu State, Nigeria. The study recommended that the Enugu State government should intensify investment in comprehensive infrastructure development across both urban and peri-urban areas. This includes the provision of essential services such as roads, electricity, potable water, waste management systems, and drainage networks.

Keywords: Effect, Improper, Programs, Revitalization, Settlement.

1. Introduction

The challenges of rapid urbanization and the proliferation of improper or informal settlements have become pressing concerns in many developing countries, particularly in sub-Saharan Africa. Nigeria, the most populous nation on the continent, continues to experience accelerated urban growth without proportionate improvements in housing infrastructure, land management, or service delivery (Adebayo & Olayiwola, 2021). Enugu State, known as the "Coal City State," has not been immune to these challenges. The state's capital, Enugu metropolis, and satellite towns like Nsukka and Abakpa increasingly face unplanned expansion, characterized by irregular housing structures, poor sanitation, and inadequate access to social amenities (Okeke, 2020; Obi & Eze, 2023). To address such spatial and social imbalances, the state government, often in collaboration with federal agencies and development partners, has initiated revitalization programs aimed at upgrading, redeveloping, and integrating improper settlements into the urban fabric. These programs include infrastructural renewal, urban resettlement, waste

management reforms, and community-based upgrading initiatives (Enugu State Urban Renewal Authority [ESURA], 2023). However, the effectiveness of these revitalization efforts in improving living conditions and reducing the spread of improper settlements remains a subject of debate and ongoing assessment (Ikechukwu & Nnamani, 2022).

Improper or informal settlements in Enugu State are often the result of rapid population growth, migration, and the high cost of formal housing. The post-industrial decline following the collapse of coal mining activities in the late 20th century led to unemployment and rural-urban migration, increasing the pressure on housing and urban land (Chukwu & Okoro, 2021). Many low-income residents resorted to building without official permits on marginal lands such as flood plains, hill slopes, and drainage corridors, creating densely populated neighborhoods like Ugbene, Ugbo-Odogwu, and parts of Abakpa Nike (Nnamani & Uche, 2022). These settlements are typified by substandard housing, the absence of proper drainage, limited water supply, inadequate road networks, and exposure to environmental health risks (World Bank, 2023). The

proliferation of such areas undermines the objectives of the National Urban Development Policy (NUDP, 2012) and conflicts with the state's aspirations for sustainable city development and compliance with Sustainable Development Goal 11, sustainable cities and communities (UN-Habitat, 2020). Revitalization programs refer to coordinated efforts aimed at renewing deteriorating urban areas, upgrading infrastructure, and improving the socio-economic conditions of residents (Adejumo & Agboola, 2021).

In Enugu State, these programs take various forms ranging from physical infrastructure improvements (road paving, drainage rehabilitation, and waste disposal facilities) to socio-economic empowerment initiatives (skills development, microfinance access, and community participation schemes). Prevent further slum proliferation by improving existing urban environments. Enhance the quality of life for residents of improper settlements, foster community engagement in sustainable land management, and integrate informal areas into formal city planning through participatory mechanisms (Enugu State Ministry of Housing and Urban Development, 2022). However, program success often depends on consistent political will, stakeholder commitment, funding adequacy, and local participation factors that vary significantly across regions and administrations (Ikechukwu & Nnamani, 2022; Okeke, 2020).

Empirical studies indicate that revitalization programs can positively influence the structure and sustainability of urban communities when effectively implemented (Adebayo & Olayiwola, 2021). In cities such as Lagos, Ibadan, and Port Harcourt, upgrading initiatives have led to improvements in housing quality, sanitation, and access to public facilities (Uchenna & Eze, 2022).

In the case of Enugu State, projects such as the Enugu Urban Renewal Project and localized efforts under the Sustainable Cities Initiative (SCI) have recorded varying levels of success. For instance, the upgrade of Obiagu and Coal Camp communities improved road connectivity and drainage, yet challenges in waste management, population pressure, and maintenance culture have persisted (ESURA, 2023). Assessing the effect of revitalization programs on improper settlements in Enugu State is critical for several reasons. First, it provides evidence-based insight into which program components (e.g., infrastructure development, social inclusion, governance reforms) produce meaningful and lasting outcomes. Second, it

helps policymakers understand how revitalization strategies can be scaled or redesigned to prevent further informal settlement expansion. Third, such assessment guides sustainable urban planning by identifying best practices, gaps in implementation, and opportunities for participatory development. As Nigeria strives to achieve the Sustainable Development Goals (SDGs) and implement the National Housing and Urban Development Policy (2021), Enugu State serves as a microcosm for understanding the broader implications of revitalization in mid-sized African cities. Rigorous evaluation of these interventions will enhance accountability, institutional learning, and the pursuit of equitable urban development (UN-Habitat, 2020; World Bank, 2023).

1.1 Statement of the Problem

Rapid urbanization in Enugu State has led to the emergence and persistence of numerous **improper settlements**, characterized by inadequate infrastructure, irregular building patterns, and limited access to social amenities. Despite repeated interventions, the incidence of informal and unplanned housing areas remains high, suggesting that existing revitalization initiatives are not achieving their intended transformative impact (Enugu State Urban Renewal Authority [ESURA], 2023; Nnamani & Uche, 2022). The Enugu Urban Renewal Program, alongside complementary projects supported by the Enugu State Ministry of Housing and Urban Development, was designed to improve living conditions and promote sustainable city growth. These programs aim to redevelop slums, enhance public infrastructure, and integrate low-income communities into formal city structures (Enugu State Ministry of Housing and Urban Development, 2022). However, research and field assessments indicate that many of these programs have produced uneven outcomes some areas benefit from renewed infrastructure, while others face persistent issues of overpopulation, poor sanitation, and insecure land tenure (Ikechukwu & Nnamani, 2022; Iloh, 2023).

A key problem underlying these inconsistencies is the limited evaluation of effectiveness. Few empirical studies have systematically assessed the extent to which revitalization programs contribute to reducing the spread of improper settlements in Enugu State. Most government reports focus on completed infrastructure rather than measuring long-term social and environmental outcomes (Okeke, 2020; Adebayo &

Olayiwola, 2021). Without such assessment, policymakers lack the evidence needed to refine strategies, prioritize interventions, and ensure that revitalization efforts achieve their sustainability goals.

Furthermore, the persistence of informal settlements points to broader socio-economic dimensions that revitalization programs often overlook, such as poverty reduction, citizen participation, and affordable housing access. In many communities, displacement or partial relocation resulting from urban renewal projects has produced new informal clusters elsewhere, effectively shifting the problem rather than resolving it (Uchenna & Eze, 2022). Therefore, there is an urgent need to critically assess the effect of revitalization programs on improper settlements in Enugu State, specifically, to evaluate how these interventions influence spatial organization, infrastructure development, and socio-economic inclusion. Such an assessment will provide an empirical foundation for improving urban development policies and promoting sustainable city planning across southeastern Nigeria.

1.2 Objective of the Study

The main objective of this study is to assess the effect of revitalization programs on improper settlement in Enugu State, Nigeria. The specific objectives were to;

- i. Examine the effect of Infrastructure Development on improper settlement in Enugu State, Nigeria.
- ii. Evaluate the effect of Public Space Improvement on improper settlement in Enugu State, Nigeria.

1.3 Hypotheses of the Study

- i. Infrastructure Development has no significant effect on improper settlement in Enugu State, Nigeria.
- ii. Public Space Improvement has no significant effect on improper settlement in Enugu State, Nigeria.

2. Review of Related Literature

2.1. Revitalization Program

Urban revitalization involves transforming declining city districts into dynamic, sustainable communities through comprehensive economic, social, and infrastructural efforts. According to Ramlee (2015), revitalization encompasses initiatives aimed at improving neighborhoods, such as slum clearance, rehabilitation, and community development, carried

out by both public and private sectors. It is a process where areas experiencing social, physical, or economic crises undergo a transformation to reverse decline. Norris (2022) describes revitalization as the redevelopment of blighted urban zones for new uses. Downtown revitalization specifically refers to the physical and economic renewal of the central business district. The aim is to restore underutilized assets and redistribute opportunities to enhance urban prosperity and quality of life, particularly in areas experiencing decline. Urban revitalization also involves reversing environmental decline through significant transformations in response to social, urban, or economic challenges (Lu and Junxi 2023). These programs focus on restructuring specific areas of the city, particularly those that are deteriorating due to social or economic factors. The ultimate goal is to support urban growth and balance the expanding population.

Infrastructure Development

Overall, infrastructure development plays a crucial role in Nigeria's Vision 20:2020 and requires private sector investment. A 1% increase in infrastructure investments in key sectors like electricity can potentially raise GDP growth by up to 1% (AFDB, 2015). The United Nations (2016) describes infrastructure as a comprehensive system that includes urban physical structures, mostly underground. Improving road infrastructure is often seen as a catalyst for economic growth, with road construction being a key strategy to reduce poverty in developing countries and among major donor populations. The OECD (2017) defines infrastructure development as the creation and enhancement of critical facilities and processes that support economic growth and improve living standards. This includes transportation, communication, sewage, water, and power systems—critical but often capital-intensive investments. Infrastructure spans various systems and structures applicable to both large and small organizations, such as a city's electrical grid, which provides essential services based on the involved equipment and purpose. The World Bank (2019) notes that infrastructure development involves building and improving physical systems vital for a functional economy, including energy, water, telecommunications, and transportation, with the Bank supporting developing countries in this effort to enable sustainable growth, unlock new markets, and create jobs.

Public Space Improvement

In urban environments, public spaces are open and accessible areas such as waterfronts, streets, parks, and plazas (Izadi 2015). Each type of public space serves a unique role and enhances the overall urban experience. These public areas shape the social fabric of cities and provide a geographical connection to residents' identities. Improving these spaces involves not only physical changes but also the influence of social, cultural, and economic factors (Mohammadpour et al, 2016). Such improvements mirror broader processes like cultural shifts, infrastructure development, and urban redevelopment efforts. Local governments often play a key role in reactivating public spaces to meet societal needs. As Fakoohi and Ohadi (2016) note, the main goal of these transformations is to support both individual needs and the sustainable development of cities.

Improper Settlement

Slums, squats, shantytowns, spontaneous settlements, unregulated or unplanned areas, clandestine sites, and subnormal or spontaneous communities (Stacey and Lund, 2015) are all included in the concept of inappropriate settlements, making a single definition very difficult. The 2009 National Housing Code defines improper settlements as areas characterized by "illegality and informality, inappropriate locations, limited public and private sector investment, poverty, vulnerability, and social stress" (Cole, 2015). Brown-Luthango et al. (2017) state that residents living in unsuitable settlements are disproportionately affected by violence, poor health, and various other socioeconomic problems due to the hazardous physical conditions in which they live. Improper settlements are residential communities, often called squatter camps, where residents lack essential utilities, do not have security of tenure, and may not meet current construction and planning standards. Zerbo et al. (2020) note that these settlements are frequently situated in dangerous geographic and environmental zones. Mugudamani et al. (2022) describe improper settlements as unplanned communities on land that has not been surveyed or officially designated as residential. They are mainly composed of informal homes or shacks temporary structures not authorized by local authorities and not intended to be permanent dwellings. The Cities Alliance Action Plan describes improper settlements as a neglected area of urban centers, ranging from high-density residential areas in

city cores to spontaneous squatter colonies, all lacking legal support and with living and housing conditions that are extremely poor.

2.2. Theoretical Framework

Endogenous Growth Theory

The efficiency school of thought was promoted by Mills and Bricks in 1988, which is cited by Mackenzie in 1964. They contend that to provide services to the local population is the primary goal of local government. According to Sharpe, local governments are the most effective means of delivering the fundamental services required to enhance the social and economic well-being of the rural population. The local government should be able to coordinate state and federal actions so that the benefits of decentralized government are distributed to rural areas. Therefore, the primary functional obligation of local governments is to carry out the local tasks assigned to them as effectively as possible. Rural development is facilitated by the local government. It has developed into "a strategy intended to enhance the economic, social, and cultural life of a particular group of people, as well as those living in rural areas. The primary goals of rural development include ensuring that there are minimum acceptable levels of food, clothes, shelter, education, and health, as well as increasing employment, productivity, and income. Thus, the local government must be efficient in the provision of these services in the nation.

2.3. Empirical Review

Shaibu (2019) explored the Sustainable Infrastructural Development in Africa. The study aims to interrogate the existing electricity infrastructure in Nigeria and advocate for a form of private investment model. Using qualitative methods and documentary evidence to predict the public-private partnership model, the study found that the electricity infrastructure in Nigeria is obsolete and inadequate. Power generation in Nigeria, compared to other leading economies in Africa, is abysmally low due to a lack of adequate investment in the sector.

Ameh and Oladejo (2023) conducted a study on the effect of the availability of public infrastructure on Residential Real Estate Development in Enugu. The study aims to identify the infrastructural facilities that affect Housing development in Golf Estate, Old GRA, New Haven, Trans-Ekulu, Emene, and Abakpa in Enugu. Data were collected and analyzed using descriptive statistics, Analysis of Variance (ANOVA), and T-test

tools. The study revealed that there is a significant impact of the availability of public infrastructure on residential housing development in the different residential property types.

Edanur and Tugce (2025) conducted a study on the investigation of the effect of public space transformations on the users' perception of Space and its Relationship with Local Government. The study aims to examine how spatial perception guides individuals' public space use preferences. The study utilized qualitative approaches such as thematic analysis, content analysis, or narrative analysis. The study revealed that public space has significantly influenced participants' spatial perceptions and expectations.

Annet (2025) conducted a study on the role of public spaces in fostering community engagement in Uganda. The study aims to examine the vital role that public spaces play in fostering community engagement, focusing on how these spaces function as social devices to promote interaction, a sense of belonging, and citizenship. The study employed a descriptive and quantitative research design. The results revealed that public spaces are integral to the development of vibrant, engaged communities.

3. Research Design and Methods

A descriptive cross-sectional research design was adopted for this study. Respondents were randomly selected from areas across Enugu State where revitalization programs have been implemented, including relevant government agencies such as the Enugu State Urban Renewal Authority and the Ministry of Housing and Urban Development. A simple random sampling technique was employed to select respondents and locations. Data were collected using structured questionnaires and analyzed using SPSS version 26.0. Simple linear regression analysis was employed to test the study's hypotheses. The purpose of this study was to examine the effect of infrastructure development and public space improvement on improper settlements in Enugu State, Nigeria.

3.1. Model Specification

Based on the link between predictors and dependent variables, simple linear regression analysis is the model specification employed in this study endeavor.

$$Y = \alpha_0 + \alpha_1x_1 + \alpha_2x_2 + \mu \tag{1}$$

$$Y = f(X)$$

Where

Y = Dependent variable represented by Improper Settlement

x_1 = Predictor variable (Infrastructure Development)

x_2 = Predictor variable (Public Space Improvement)

α_0 = Slope or intercept

α_1 = Regression coefficients

μ = Error term

3.2. Data Analysis and Interpretation

The data collected from respondents in the various firms under study are presented, analyzed, and interpreted in this part. To meet our goal for this study, the replies were categorized by categorizing them using a Likert scale approach. A study of the structured questionnaire was conducted utilizing social science statistical software (SPSS version 26.0).

Table 1: Response Rate

	Frequency	Percentage	Cumulative Percent
Returned	151	86.29	86.29
Unreturned	24	13.71	100
Total	175	100	

Source: Field Work 2025

One hundred seventy-five (175 copies) of the questionnaires were distributed, but only one hundred and fifty-one (151) of them were returned, and the remaining copies were not. There were 24 unreturned items (24). The following are some of the causes for the unreturned.

- A few respondents lost the questionnaire given to them.
- A few respondents reluctantly did not respond to the questionnaire and lastly few others ticked two answers for a question, and this was recorded as a void to avoid in corrected interpretations.

3.2.1. Infrastructure Development

The instrument sought to find out about Infrastructure Development.

Table 2: Infrastructure Development

Statement	Strongly Agree	Agree	Neutral	Strongly Disagree
Roads across Enugu State have improved movement.	47(30.9%)	69(45.4%)	24(15.8%)	12(7.2%)
I have noticed that drainage systems in my area reduce flooding.	55(36.2%)	63(41.4%)	14(14.5%)	10(6.6%)
Access to electricity and water in the state has become more reliable.	53(34.9%)	64(42.1%)	23(15.1%)	12(7.8%)
The environment in most areas of Enugu has become cleaner and safer after upgrades.	41(26.9%)	66(43.4%)	31(20.4%)	14(9.2%)

Source: Field work 2025

The study sought to determine the impact of infrastructure development on settlement patterns in Enugu State. According to Table 2, 30.9% of respondents strongly agreed and 45.4% agreed that roads across Enugu State have improved movement. Because a greater percentage of respondents agreed, this implies that there is clear evidence that road construction and rehabilitation have enhanced accessibility in the state. The study further examined whether drainage systems in respondents' areas reduce flooding. As shown in Table 2, 36.2% strongly agreed and 41.4% agreed, while 14.5% were neutral and 6.6% strongly disagreed. This suggests that improved drainage is recognized by the majority as an effective measure for controlling flooding in their areas. The study also investigated the reliability of electricity and water supply in the state. Table 2 indicates that

34.9% strongly agreed and 42.1% agreed that access to electricity and water has become more reliable, with 15.1% neutral and 7.8% strongly disagreeing. This finding implies that utility infrastructure upgrades have positively affected daily living conditions in Enugu State. Finally, the study assessed whether infrastructure development has contributed to a cleaner and safer environment. According to Table 2, 26.9% strongly agreed and 43.4% agreed, while 20.4% were neutral and 9.2% strongly disagreed. This shows that most respondents perceive infrastructure improvements as enhancing environmental quality and safety.

3.2.2. Public Space Improvement

This instrument seeks to find out about the Public Space Improvement.

Table 3: Public Space Improvement

Statement	Strongly Agree	Agree	Neutral	Strongly Disagree
Parks and open spaces in Enugu State enhance the visual appeal.	73(48%)	62(40.8)	11(7.2%)	6(3.9%)
I have observed that renovated markets reduce crowding and street trading in my area.	55(36.2)	61(40.1)	16(10.5)	20(13.2%)
Playgrounds and public squares provide safe spaces for children and families.	66(43.3%)	60(39.5)	17(11.2%)	9(5.9%)
Public spaces across the state are maintained in a clean and orderly manner.	55(36.2%)	32(21.1%)	26(17.1%)	39(25.7%)

Source: Field work 2025

According to the findings, 48% of respondents strongly agreed, 40.8% agreed, 7.2% were neutral, and 3.9% strongly disagreed that parks and open spaces in Enugu State enhance the visual appeal. The results indicate 36.2% of the participants strongly agreed, 40.1%

agreed, 10.5% were neutral, and 13.2% strongly disagreed that renovated markets reduce crowding and street trading in their area. Table 3 shows 43.3% of respondents strongly agreed, 39.5% agreed, 11.2% were neutral, and 5.9% strongly disagreed that

playgrounds and public squares provide safe spaces for children and families. From the study, 36.2% of participants strongly agreed, 21.1% agreed, 17.1% were neutral, and 25.7% strongly disagreed that public spaces across the state are maintained in a clean and orderly manner.

3.2.3. Improper Settlement

This instrument seeks to find out about the Improper Settlement.

Table 3: Improper Settlement

Statement	Strongly Agree	Agree	Neutral	Strongly Disagree
Several houses across Enugu State are built without proper planning.	73(48%)	62(40.8%)	11(7.2%)	6(3.9%)
I have noticed that some areas still lack proper roads and drainage systems.	20(13.2%)	16(10.5%)	61(40%)	55(36.2%)
Poor waste disposal contributes to dirt and flooding in many areas.	9(5.9%)	17(11.2%)	66(43.3%)	60(39.5%)
Upgraded areas in the state are preferred for housing compared to unplanned settlements.	55(36.2%)	32(21.1%)	26(17.1%)	39(25.7%)

Source: Field work 2025

According to the findings, 48% of respondents strongly agreed, 40.8% agreed, 7.2% were neutral, and 3.9% strongly disagreed that several houses across Enugu State are built without proper planning. The results indicate 13.2% of participants strongly agreed, 10.5% agreed, 40% were neutral, and 36.2% strongly disagreed that some areas still lack proper roads and drainage systems. Table 3 shows 5.9% of respondents strongly agreed, 11.2% agreed, 43.3% were neutral, and 39.5% strongly disagreed that poor waste disposal contributes to dirt and flooding in many areas. From the study, 36.2% of participants strongly agreed, 21.1% agreed, 17.1% were neutral, and 25.7% strongly disagreed that upgraded areas in the state are preferred for housing compared to unplanned settlements.

3.3. Hypothesis Testing

Decision Rule: Accept the null hypothesis if the probability value >0.05; otherwise, accept the alternative hypothesis.

3.3.1. Hypothesis One

Ho₁: Infrastructure development has no significant effect on improper settlement in Enugu State.

3.3.2. Hypothesis Two

Ho₁: Public space improvement has no significant effect on improper settlement in Enugu State.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.494 ^a	.722	.689	3.08124
a. Predictors: (Constant), Infrastructure development; Public space improvement				

3.3.3. Model Testing and Interpretation

The model summary above explains the percentage of the dependent variable (improper settlement in Enugu State) that can be determined by the independent variables (infrastructure development and public space improvement). According to this Table, the independent variables account for 72.2% (R Square = 0.722) of the variation in the dependent variable, while the remaining 27.8% can be explained by other factors outside the scope of this model. This implies that infrastructure development and public space improvement have a direct influence on improper settlement in Enugu State. The Pearson correlation coefficient (R) result also showed a positive value of 0.494, which further confirms that the predictor variables have a direct relationship with the dependent variable.

Table 5: ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	129.014	1	129.014	4.860	.001 ^a
	Residual	3982.249	151	26.548		
	Total	4111.263	152			
a. Dependent Variable: improper settlement.						
b. Predictors: (Constant): Infrastructure development; Public space improvement						

The study also analyzed variance to determine the extent to which the independent and dependent variables relate to each other, and the result showed that the P-value obtained (0.001) was lower than the 5% level of significance specified in SPSS software for this analysis. Therefore, according to the decision rule,

the alternative hypothesis will be accepted, while the null hypothesis will be rejected. This implies that infrastructure development and public space improvement have a significant influence on improper settlement in Enugu State.

Table 6: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.968	2.415		7.855	.000
	Infrastructure Development	0.318	0.104	0.177	3.057	.019
	Public Space Improvement	0.098	0.061	0.005	1.606	.024
a. Dependent Variable: improper settlement						

Simple linear regression analysis was also conducted to determine if the result established by the ANOVA statistic is similar to that of the regression coefficients. The result shows that the P-value obtained (0.019) for the regression coefficient of infrastructure development was lower than the alpha level of significance of 5% specified in SPSS for this analysis. Therefore, it can be inferred from this result that the ANOVA statistic is similar to that of the regression coefficient. Thus, the alternate hypothesis will be accepted while the null hypothesis will be rejected, which means that infrastructure development has a significant positive effect on improper settlement in Enugu State. Also, the result shows that the P-value obtained (0.024) for the regression coefficient of public space improvement was lower than the alpha level of significance of 5% specified in SPSS for this analysis. Therefore, it can be inferred from this result that the ANOVA statistic is similar to that of the regression coefficient. Thus, the alternate hypothesis will be accepted while the null hypothesis will be rejected, which means that public space improvement has a

significant positive effect on improper settlement in Enugu State.

4. Discussion of Results

The result of this study indicates that infrastructure development will significantly reduce improper settlement in Enugu State. This was confirmed by the result of the statistical analysis, which shows that the P-value obtained (0.019) was lower than the significance value of 5% specified in SPSS for this analysis. Similarly, the result of this study indicates that public space improvement will significantly reduce improper settlement in Enugu State. This was confirmed by the result of the statistical analysis, which shows that the P-value obtained (0.024) was lower than the significance value of 5% specified in SPSS for this analysis.

5. Conclusion

The study has established that revitalization programs play a crucial role in mitigating the challenges associated with improper settlements in Enugu State, Nigeria. Empirical findings revealed that Infrastructure

Development has a significant effect on the reduction of improper settlements. This underscores the importance of providing adequate basic facilities such as roads, water supply, drainage systems, electricity, and sanitation as foundational measures in addressing the proliferation of unplanned and informal housing areas. When infrastructural services are effectively expanded and equitably distributed, the pressures that drive rural–urban migration and the emergence of slums are significantly minimized.

Similarly, the study found that Public Space Improvement exerts a significant positive effect on curbing improper settlement patterns in Enugu State. The enhancement of public spaces through improved urban layouts, green areas, recreational facilities, and community-friendly designs encourages organized settlement behaviors, fosters social inclusion, and elevates the overall livability of urban neighborhoods. These interventions help restore environmental balance, promote spatial order, and reduce the vulnerability of informal dwellers to hazards and poor living conditions.

Together, these findings demonstrate that revitalization programs anchored on infrastructure development and public space improvement are effective tools for promoting sustainable urban growth and reducing the incidence of improper settlements in Enugu State. By addressing both the physical and social dimensions of urban development, such programs contribute to the creation of inclusive, resilient, and environmentally sound communities. In conclusion, the study emphasizes the need for policymakers, urban planners, and development agencies in Enugu State to prioritize revitalization programs that combine infrastructural expansion with the rehabilitation of public spaces. Doing so will not only improve settlement patterns but also support the realization of the United Nations Sustainable Development Goals (particularly SDG 11 Sustainable Cities and Communities). A sustained commitment to these strategies will enhance urban order, promote equitable access to resources, and ultimately foster a more sustainable and livable Enugu State.

Recommendations

Based on the findings of this study, which established that revitalization programs, particularly infrastructure development and public space improvement, have significant positive effects on mitigating improper

settlements in Enugu State, the following recommendations are proposed to strengthen urban renewal and sustainable development efforts:

- i. The Enugu State government should intensify investment in comprehensive infrastructure development across both urban and peri-urban areas. This includes the provision of essential services such as roads, electricity, potable water, waste management systems, and drainage networks. Expanding infrastructure evenly across communities will discourage the growth of informal settlements caused by unequal access to urban facilities.
- ii. Urban planning authorities should adopt integrated land-use policies that blend social, environmental, and economic considerations. Urban revitalization should prioritize formalizing existing informal settlements through participatory planning, upgrading, and re-zoning that recognize residents' rights while improving livability and safety.

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