



## ABSTRACT

In many cities, vacant and abandoned properties make up a substantial portion of the urban environment. However, these property types have been identified with negative stigmas thus necessitating a review of the potentials of such properties in the context of achieving a sustainable environment. As a result, the potentials of vacant/abandoned properties for

# EXPLOITING THE POTENTIALS OF VACANT AND ABANDONED PROPERTIES FOR SUSTAINABLE DEVELOPMENT: THE CASE OF NASARAWA, NIGERIA.

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## Introduction

On a walkthrough of key many metropolitan areas and urban centers, undeveloped/vacant lands are highly noticeable. Weed lots, garbage-strewn undeveloped spaces, and high-crime areas describe undeveloped/vacant properties, which most urban dwellers regard as blights on the community. In some situations, communities and neighbourhoods have banded together to turn vacant sites into communal amenities like shared garden spaces, utility centers amongst others; but these lots are all too often overlooked as chances for urban betterment and the achievement of sustainable development goal No 11.

Setterfield (1997); Cohen (2001); Mallach (2004) and Akindele (2013) noted that there is a high occurrence of undeveloped landed property all over the world; nonetheless, these studies noted that there are latent values in vacant and abandoned properties. Unoccupied and



*sustainable development in Nasarawa was investigated in this study. The study's sampled populations were the owners/occupants of residential properties in Nasarawa. Data was gathered using structured questionnaires and analyzed using descriptive statistics, weighted mean score and Factor Analysis. The research found that inaccurate estimates; inadequate funding allocation; current economic situation; rising cost of construction/ building materials and unstable Government Policies are the major factors influencing undeveloped / vacant and abandoned properties. Furthermore, the research revealed that the major potentials of vacant/abandoned properties include utilization of the land resources; re-compliance with adequate building bye-laws and planning standards; ensure proper development and smart city creation; enhance real estate development in the society and availability of land for housing construction. The results of the factor analysis show a KMO of 0.713 which is significant at  $p$  value  $\leq 0.005$ . Furthermore, the potentials of vacant/abandoned properties in Nasarawa were suppressed into four (4) components with a cumulative percentage of 68.359%. The study concluded that Proper policy adoption and execution will undoubtedly secure and improve the management of vacant/abandoned properties with a view to ensuring a sustainable environment.*

**Keywords:** *Vacant, Abandoned, Undeveloped, Properties, Sustainable Development*

abandoned properties have several features; however, the land market and the interaction of the forces of demand and supply are a major element influencing vacant and abandoned properties. The supply side was defined as the amount of land zoned for development, land costs, building permits issued, and home starts made. On the other hand, population, income, the number and size of households, median age, and the availability of jobs in the area all influence demand. With the current economic climate, rising building material prices, and decreasing purchasing power, there is a steady growth in the number of



underdeveloped and abandoned properties with hidden value thus necessitating the exploitation of the untapped potentials of vacant/undeveloped properties.

In Nigeria, despite the rising importance of land and property, there is no doubt that the country is inclusive and has remained one of the countries with the greatest difficulty in unceasing undeveloped and abandoned properties (Kotangora, 1993; Ayodele and Alabi, 2011; Ihua & Benebo, 2014). Vacant and abandoned properties have a variety of repercussions on real estate, its values, and the economy in general; however, some of the vacant and abandoned properties could provide complementary services in the future, ensuring the locality's development and the achievement of sustainable development. It thus suffices to note that vacant and abandoned houses have both beneficial and bad effects. While Michael and Ann (2000) believe that vacant/undeveloped lands are a valuable resource for the implementation of a variety of economic development initiatives, other researchers such as Andrews (2010), Akindele (2013), Ihua and Benebo (2014), and Michelle, Danya, Bernadette, John, and Charles (2015) believe that undeveloped/vacant lands have a negative impact on the neighborhood, individual crime, and overall property values.

For example, according to the Philadelphia Association of Community Development Corporations (2010), vacant properties in Philadelphia have been shown to reduce property values by 6.5 percent (an average of \$8,100) citywide and up to 20 percent in some neighborhoods, totaling \$3.6 billion in lost wealth. Also, the United States Government Accountability Office (2011) noted that empty properties cost towns a significant amount of money in terms of missed tax income and costs associated with maintenance, remediation and police. Yet, vacant and abandoned dwellings have long been a concern in urban areas (Andrew, 2010). Exploiting the potentials of vacant/abandoned properties is further necessitated as a result of the rising urban populations, housing market difficulties, and the necessity for optimal land utilization. Ihua and Benebo (2014) also stated that the widespread and constant abandonment of development projects is related to negative consequences for real estate values, owners /residents, the built



environment and the economy as a whole with great concern for the various causes towards ensuring effective utilization of such vacant/abandoned land.

Several studies have identified several elements that influence non-development and abandonment of land (Arsen, 1992; Bright, 1995; Scafidi, Schill, Watcher and Culhane, 1998 and Accordino & Johnson2000). Accordino and Johnson (2000); Akindele (2013); Ihua and Benebo (2014) amongst others highlighted such factors as the cost of development, land speculation, increased cost of building materials, economic situation, governmental policies, leadership instability, inconsistent government policies, land or legal problems, inadequate and increased cost of building materials, among other things as contributing to undeveloped and abandoned properties. Furthermore, vacant and abandoned buildings, according to Skogan (1992) and Ross (1999), reduce the number of people and dwellings in a neighborhood. As a result, the occupation and development of such areas is reduced. More so, vacant and abandoned properties can create an environment that undermines trust, inhibits investment, pushes homeowners to flee the area and also serve as both staging grounds and hives for criminal activity as well as crime scenes (Spelman, 1993; Kraut, 1999; and Mallach, 2006). In addition, vacant/abandoned properties have become crime magnets, increasing the danger of vandalism and arson in urban settings which might erode nearby property owners' confidence, discourage investment (Immergluck, 2006).

Although there has been a renaissance of interest in the regeneration of center cities, a number of issues such as criminality, social and physical degradation have kept potential buyers away from the enormous real estate potential of vacant and abandoned areas. Redevelopment of such sites would not only rejuvenate the social fabric of inner-city districts, but will also generate much-needed income for the city and pave the way for increasing regional corporate activity. For more than half a century, Bacon (1940); Berkman, (1956); Bowman and Pagano (2000); Brophy and Vey (2002) noted that urban experts have battled to find a solution to the dilemma of how to best manage vacant/abandoned properties



On average, 15% of a city's land is considered vacant. This total includes a wide range of land types, from undeveloped open space to abandoned land and buildings. The reuse of unoccupied land and abandoned structures can provide an opportunity for a variety of metropolitan regions to grow and recover economically. According to Michael and Ann (2000), vacant land continues to be a valuable competitive advantage for a variety of economic development measures, including job creation, increased tax income, improved transit infrastructure, attracting new inhabitants and the achievement of a sustainable environment. The planned reuse of urban vacant land and abandoned structures can represent a crucial potential for supporting higher density and minimizing the desire to create suburban residential development and sustainable cities as encouraged by the sustainable development goals. It is the light of the foregoing that this paper tends to examine the exploitation of the potentials of vacant/abandoned properties for sustainable development using Nasarawa town as a case study.

## **Literature Review**

### **The Concept of Undeveloped, Vacant and Abandoned Properties**

There is no common definition of "undeveloped/vacant/abandoned property." A vacant property, according to the US Census Bureau (2010) includes freshly constructed units that have not been occupied, but not abandoned buildings exposed to the elements if they are due for demolition. This Census definition may result in an undercount of properties in a community suffering from disinvestment and an overcount in areas where development and building are occurring at a rapid pace.

The National Unoccupied Properties Campaign (2012) which preceded the Center for Community Progress defined abandoned properties as vacant residential, commercial, and industrial structures and lots that exhibit one or both of the following characteristics:

- i. The site poses a threat to public safety (meeting the definition of a public nuisance), or



- ii. The owners or managers neglect the fundamental duties of property ownership (e.g., they fail to pay taxes or utility bills, default on mortgages, or carry liens against the property.)

In another perspective, undeveloped/vacant property is described as land, property, unused rural land. The kind of land considered is characterized by the fact that it is not put to any utilitarian use as at the date of valuation. Two subclasses of this kind of unused land may be distinguished:

- i. Land/property with no foreseeable future utilitarian use, that is, land whose potential future use is so unclear, distant, and speculative that no value can be assigned to it.
- ii. Land/property that, while now undeveloped, has a future utilitarian use that may be predicted with some accuracy.

According to Michael and Ann (2000), the term "vacant land" can refer to a variety of undeveloped, underutilized, or abandoned parcels, including perimeter agricultural or uncultivated land, recently razed land, derelict land, land with abandoned buildings and structures, brownfields, and greenfields. Researchers and Government Authorities sometimes struggle to precisely assess the amount of unoccupied land due to this broad and varying definition. As a result, data on the amount of undeveloped and vacant plots is difficult to come by in most nations.

As earlier stated, there is no uniform definition of abandoned structures, and municipal definitions vary widely. For example, some cities claim that a structure is abandoned (and thus poses a "imminent risk" to the community or threatens the city's "health and safety") if it has been uninhabited for 60 days; others claim that it has been unoccupied for 120 days or more. Vacant / Abandoned properties comprises not just publicly owned and privately owned underused or abandoned land or land that had had structures on it, but also ground that supports abandoned, derelict, boarded up, partially demolished, or razed structures."

Northam (1971) described five types of vacant/abandoned properties:

- i. Relict parcels, which are typically small in size, often irregular in shape, and have never been developed;



- ii. Parcels with physical limitations, such as steep slope or flood hazard, and thus unbuildable;
- iii. Corporate reserve parcels held for future expansion or relocation;
- iv. Parcels held for speculation, which are frequently found in transitional areas; and
- v. Institutional reserve parcels designated for public or private institutions.

### **Effects of Undeveloped/Vacant and Abandoned Properties**

Several studies on the influence of underdeveloped and abandoned properties have been conducted. According to certain studies, vacant and undeveloped properties are a valuable competitive advantage for executing a variety of economic development strategies. Others, like Andrews (2010), Akindele (2013), Ihua and Benebo (2014), and Michelle, Danya, Bernadette, John, and Charles (2015), have claimed that vacant/undeveloped lands have a detrimental impact on the neighborhood, individuals, crime, and total property values. However, the majority of studies find that undeveloped and abandoned sites have a negative impact. Thus, it is imperative to study the potentials of the vacant/abandoned properties.

Andrew (2010) investigated the effects of unoccupied and abandoned house destruction on neighboring property conditions and assessed values. It was demonstrated that there is a link between the condition and assessed value of adjacent properties. The effects of Fort Wayne's complaint-driven demolition program on the condition and assessed values of neighboring homes were found to be mixed in this study. According to the study, removing a derelict and abandoned house makes a neighborhood healthier and safer, removes surplus housing, protects property values, is portrayed as an early stage in a revitalization or redevelopment plan, and can placate constituents.

A study on abandoned properties and neighborhood violence was undertaken by Charles, David, and Wensheng (2012). The study's goal was to see if urban unoccupied properties were linked to an increased risk of assaultive violence, and if this link was influenced by major local



institutions (such as schools, parks/playgrounds, police stations, and liquor stores). According to the findings, 84 percent of all block groups had at least one vacant property, 89 percent had at least one aggravated assault, and 64 percent had at least one gun assault.

Megan and Jeremy (2012) also conducted a geographical difference-in-differences analysis on the economic benefit of greening urban unoccupied space. The study examined the influence of Philadelphia's innovative empty land greening program on neighboring residential property values using a geographical difference-in-differences technique. The research revealed that property values increased throughout the city during the study period, but properties surrounding greened vacant lots increased in value more than properties surrounding non-greened vacant lots.

Akindele (2013) conducted research in Ogbomosho and Osogbo on the environmental effects of abandoned houses. The target populations were given standardized questionnaires in which they were asked questions about each of the observed effects. Descriptive and inferential statistics were used to analyze the data. ANOVA and chi-square tests were used to explain the variance in the incidence of environmental impacts among residential densities, while correlation analysis was used to explain the relationship between the incidence of abandonment and environmental variables. Pollution, health issues, financial loss to the city, obscenity, crime, property value reduction, development control issues, resource waste, poisonous reptiles, accidents, and vagrancy are all repercussions of project abandonment, according to the study. The research therefore revealed that abandonment/vacancy is reported to be more prevalent in areas with a medium residential density.

According to Ihua and Benebo (2014), undeveloped and abandoned projects entail complete abandonment of the project's goals. As a result, all social, environmental, and economic activities that the new products and services were intended to contribute are affected. According to Efendu (2010), the overall repercussions are expected to include resource waste, property value decline, and a loss of community and local aesthetic qualities. In the instance of depreciating real estate and



its value, Efenudu (2010) proposed that project abandonment has a negative impact on property values within a neighborhood.

Michelle, Danya, Bernadette, John, and Charles (2015) also conducted research on the effects of a new abandoned building cleanup technique on safety. Using a difference-in-differences technique, the researchers looked at the impact of the new ordinance on the prevalence of crime around abandoned buildings from January 2011 to April 2013. For buildings that were remediated as a result of the ordinance, Poisson regression models were used to assess changes in pre- and post-treatment indices of crime. As a result, building remediations were found to be strongly associated with reductions in overall crimes, total assaults, gun assaults, and nuisance crimes across the city ( $p < 0.001$ ).

Corinne and Erica (2016) also performed research for the city of Topeka on the effects of abandoned housing on communities. Two analyses, a time series analysis and a point in time analysis, were used to investigate the effects abandoned properties have on the property values of adjacent properties and properties on the same city block. The time series analysis found that, historically, before abandonment, the properties investigated saw an average of twelve (12) percent valuation growth during a five-year period. The abandoned properties experienced a 10% decline in property valuation over the 5 year period following their entry, and the historically expected increases in valuation on adjacent properties fell by nearly ten percent, resulting in only a four percent increase in valuation over the 5 year period immediately following the entry of an abandoned property. On the other hand, a point in time analysis found that in 2015, houses on city blocks without abandoned housing were valued seven percent (7%) higher than properties on city blocks with abandoned housing.

In all of the reviewed literatures, there is obviously a dearth of literatures on the exploitation of the positive effects of vacant/abandoned properties. Therefore, the importance of this study cannot be over-emphasized.

### **Study Area**

Nasarawa is a Local Government Area in Nasarawa State, Nigeria, with its headquarters in Nasarawa ( $8^{\circ}32'N$   $7^{\circ}42'E$ ). The local government area encompasses 5,704 km<sup>2</sup> and has a population of 189,835 people,



according to the 2006 census. The postal code for the area is 962. The settlement is situated on a tributary of the Benue River, the Okwa River. Umaru, a rebel official from the neighbouring town of Keffi who hailed from Ruma in Katsina State, established Nasarawa as the seat of the new emirate of Nassarawa in the Afo (Afo) tribe territory in 1835. The inhabitants of Nasarawa State are industrious, as seen by the variety of occupations they engage in.

### Research Methods

The study's research approach is survey and the target audience are the occupants/owners of residential properties in Nasarawa Town. According to Nasarawa Bureau of Statistics (2020), Nasarawa has an estimated population of 343,176 residential units. The sample size was calculated using Yamane's (1967) demographic formular for calculating sample sizes. A total of 400 structured questionnaires were distributed to occupants' per residential unit while 320 were retrieved and analyzed using descriptive statistics, weighted mean score and Factor Analysis.

### Data Analysis and Discussions

**Table 1: Factors Influencing Undeveloped/Vacant and Abandoned Properties in Nasarawa**

Factors Influencing Undeveloped / Vacant and Abandoned Properties in Nasarawa	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean	Std. Dev	Rank
Estimates for projects that aren't accurate	288(90.0)	32(10.0)	-	-	-	4.9000	.30047	1 <sup>st</sup>
Inadequate funding allocation	256(80.0)	64(20.0)	-	-	-	4.8000	.40063	2 <sup>nd</sup>



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Economic situation at the moment	255(79.7)	65(20.3)	-	-	-	4.7969	.40295	3 <sup>rd</sup>
Rising Cost of construction materials	262(81.9)	39(12.2)	19(5.9)	-	-	4.7594	.54993	4 <sup>th</sup>
Unstable Government Policies	222(69.4)	98(30.6)	-	-	-	4.6938	.46166	5 <sup>th</sup>
Budgeting for Projects Is Inadequate	179(55.9)	141(44.1)	-	-	-	4.5594	.49724	6 <sup>th</sup>
Changes in the investment goal	157(49.1)	163(50.9)	-	-	-	4.4906	.50070	7 <sup>th</sup>
Characteristics of the Land Market	157(49.1)	163(50.9)	-	-	-	4.4906	.50070	8 <sup>th</sup>
Changes in Occupants' Preferences	189(59.1)	80(25.0)	23(7.2)	28(8.8)	-	4.3438	.94717	9 <sup>th</sup>
Interference from the community	62(19.4)	242(75.6)	16(5.0)	-	-	4.1438	.47306	10 <sup>th</sup>
Neighbourhood Change Models	64(20.0)	208(65.0)	48(15.0)	-	-	4.0500	.59041	11 <sup>th</sup>
Land Values	64(20.0)	216(67.5)	12(3.8)	20(6.3)	8(2.5)	3.9625	.84458	12 <sup>th</sup>
Payment deferrals	80(25.0)	163(50.9)	61(19.1)	16(5.0)	-	3.9594	.80061	13 <sup>th</sup>
Laws governing state and	211(65.9)	109(34.1)	-	-	-	3.6594	.47466	14 <sup>th</sup>



local governments								
Growing population	-	48(15.0)	208(65.0)	64(20.0)	-	2.9500	.5904	15 <sup>th</sup>

**Source: Authors Field Survey, 2022.**

The various factors influencing undeveloped/vacant and abandoned properties in Nasarawa were examined and the results showed that most of the respondents which consists of the owners/occupants of residential properties in Nasarawa opined to the major factors influencing undeveloped / vacant and abandoned properties to include inaccurate estimates (4.9000); inadequate funding allocation (4.8000); current economic situation(4.7969); rising cost of construction/ building materials(4.7594) and unstable Government Policies (4.6938) which have been ranked 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> respectively. On a general note the various factors influencing the proliferation of undeveloped/vacant and abandoned properties are general which further indicates that this urban scenario and problem cannot be completely mitigated. What is rather imperative is the exploitation of the effects of such properties towards ensuring a sustainable environment.

**Table 2: Potentials of Vacant/Abandoned Properties in Nasarawa**

Potentials of Vacant/Abandoned Properties In Nasarawa	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean	Std. Dev	Rank
Utilization of the land resources that are available	223(69.7)	95(29.7)	1(0.3)	1(0.3)	-	4.6875	.49051	1 <sup>st</sup>
Recompliance with Adequate building Bye-	204(63.8)	79(24.7)	27(8.4)	10(3.1)	-	4.4906	.77978	2 <sup>nd</sup>



laws and Planning Standards								
Ensure proper development and smart city creation.	211(65.9)	48(15.0)	46(14.4)	14(4.4)	1(0.3)	4.4188	.91296	3 <sup>rd</sup>
Enhance Real estate development in the society.	202(63.1)	58(18.1)	36(11.3)	21(6.6)	3(0.9)	4.3594	.98208	4 <sup>th</sup>
Makes land available for home construction.	144(45.0)	143(44.7)	29(9.1)	4(1.3)	-	4.3344	.69305	5 <sup>th</sup>
Enhances esthetic and sustainable environment	114(35.6)	177(55.3)	25(7.8)	4(1.3)	-	4.2531	.64932	6 <sup>th</sup>
Vacant and abandoned land offer redevelopment opportunities.	127(39.7)	149(46.6)	28(8.8)	16(5.0)	-	4.2094	.80159	7 <sup>th</sup>
Establishes a path for better land use planning and design.	121(37.8)	129(40.3)	67(20.9)	1(0.3)	2(0.6)	4.1438	.79849	8 <sup>th</sup>
Get rid of the neighborhood's bad/eye sores.	113(35.3)	126(39.4)	73(22.8)	8(2.5)	-	4.0750	.82325	9 <sup>th</sup>
Demolition is necessary to maintain a safe and	120(37.5)	118(36.9)	58(18.1)	19(5.9)	5(1.6)	4.0281	.96773	10 <sup>th</sup>



healthy environment.								
Provision of Future Complementary Services in the Neighbourhood	107(33.4)	82(25.6)	119(37.2)	8(2.5)	4(1.3)	3.8750	.95182	11 <sup>th</sup>
Economic developments most valuable competitive asset	114(35.6)	97(30.3)	48(15.0)	49(15.3)	12(3.8)	3.7875	1.1898	12 <sup>th</sup>
Long-term effect on property prices	158(49.4)	24(7.5)	43(13.4)	83(25.9)	12(3.8)	3.7281	1.3911	13 <sup>th</sup>

**Source: Authors Field Survey, 2022.**

Regardless of the negative effects of vacant/abandoned properties, such properties have great latent value. Therefore, in achieving a sustainable environment, it is imperative that the potentials of these properties are considered and exploited. In view of this, the findings of the research on the potentials of vacant/abandoned properties showed that the major potentials include utilization of the land resources that are available (4.6875); recompliance with adequate building bye-laws and planning standards (4.4906); ensure proper development and smart city creation (4.4188); enhance real estate development in the society (4.3594) and makes land available for home construction (4.3344) which were ranked 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> respectively. The potential of vacant/abandoned properties was further analyzed using Factor Analysis and the results are as presented in the table below.



**Table 3: KMO and Bartlett's Test on the Potentials of Vacant/Abandoned Properties in Nasarawa**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.713
Bartlett's Test of Sphericity	Approx. Chi-Square	1999.476
	Df	78
	Sig.	.000

*Source: Authors Field Survey, 2022.*

Table 3 reveals that the chi-square of 1999.476 is significant at  $p=0.000$ , showing that the sample utilized is appropriate, according to Bartlett's test of sphericity and sampling adequacy. The KMO is 0.713, indicating that the sample utilized is good and falls within the range of a great value, as well as that the correlations are not too compact.

**Table 4: Total Variance Explained on the Potentials of Vacant/Abandoned Properties in Nasarawa**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Vacant and abandoned land offer redevelopment opportunities.	4.755	36.579	36.579	4.755	36.579	36.579	3.523	27.103	27.103
Ensure proper development and smart city creation.	1.524	11.721	48.300	1.524	11.721	48.300	1.865	14.345	41.448



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Get rid of the neighborhood's bad/eye sores.	1.457	11.211	59.511	1.457	11.211	59.511	1.759	13.532	54.981
Enhances esthetics and sustainable environment	1.150	8.848	68.359	1.150	8.848	68.359	1.739	13.378	68.359
long-term effect on property prices	.955	7.347	75.705						
Utilization of the land resources that are available	.838	6.445	82.150						
Establishes a path for better land use planning and design.	.573	4.408	86.558						
Economic development's most valuable competitive asset	.489	3.759	90.317						



Demolition is necessary to maintain a safe and healthy environment.	.416	3.200	93.517						
Makes land available for home construction.	.306	2.353	95.870						
Re-compliance with Adequate building Bye-laws and Planning Standards	.252	1.940	97.809						
Enhance Real estate development in the society.	.169	1.297	99.106						
Provision of Future Complementary Services in the Neighborhood	.116	.894	100.000						



Extraction Method: Principal Component Analysis.

**Source: Authors Field Survey, 2022.**

Before extraction, after extraction, and after rotation, Table 4 displays the eigen values associated with each linear component (potentials of vacant/abandoned properties). Within the data collection, 13 linear components were detected prior to extraction. The variation explained by each linear component is represented by the eigen value associated with each factor, which is shown in the table as a percentage of variance explained. The table also reveals that under the 8.848 eigenvalue minimum, four (4) components were retrieved. Within the four (4) components, the clustering of factors determining the potentials of vacant/abandoned properties in Nasarawa produced normalized cumulative sums of squared loading of 68.359 percent.

**Table 4: Rotated Component Matrix<sup>a</sup> on the Potentials of Vacant/Abandoned Properties in Nasarawa**

Potentials of Vacant/Abandoned Properties in Nasarawa	Components			
	1	2	3	4
Vacant and abandoned land offer redevelopment opportunities.	.521		.490	
Ensure proper development and smart city creation.				.856
Get rid of the neighborhood's bad/eye sores.		.808		
Enhances esthetics and sustainable environment		.732	.436	
long-term effect on property prices			.715	
Utilization of the land resources that are available				.678
Establishes a path for better land use planning and design.	.710			
Economic development's most valuable competitive asset	.903			



Demolition is necessary to maintain a safe and healthy environment.			.539	
Makes land available for home construction.	.766			
Re-compliance with Adequate building Bye-laws and Planning Standards	.550		.474	
Enhance Real estate development in the society.		.489		
Provision of Future Complementary Services in the Neighborhood	.821			
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 10 iterations.				

**Source: Authors Field Survey, 2022.**

The rotated component matrix indicates sufficient loading on four components. The dominant variables on the first component are economic development's most valuable competitive asset; provision of future complementary services in the neighbourhood, makes land available for home construction, establishes a path for better land use planning and design amongst others. These have a common theme centered around economic development, complementary services, availability of land for development and land use planning related potentials. The second component centers on “Enhancing aesthetics, sustainable environment and increased real estate development” while the third and fourth components were related to “Effects on values, re-compliance and re-development potentials” and “Smart Development and effective utilization of land potentials”.

### **Conclusion and Recommendations**

Despite the limited and scarce nature of land, pockets of undeveloped/abandoned landed properties can be found in most Nigerian cities. Without any doubt, undeveloped and abandoned properties have a negative impact on a community's, individuals, economic development, and the real estate market in general. However,



there is no denying that undeveloped and abandoned properties have great latent potentials for real estate growth, development and the achievement of a sustainable environment. This study examined the potentials of vacant/abandoned properties for sustainable development in Nasarawa. Proper policy adoption and execution will undoubtedly secure and improve the management of vacant/abandoned properties with a view to ensuring a sustainable environment.

The following recommendations were made as a result of the research:

- i. The Government should consider the implementation of developmental programmes and policies aimed at rehabilitating and developing vacant/abandoned properties.
- ii. To avoid project abandonment, realistic implementation plans, timely monitoring, evaluation, and reporting on project activities should be ensured by relevant stakeholders in the construction sector.
- iii. The Government should use its escheat jurisdiction to ensure that such undeveloped and abandoned lands are properly utilized.
- iv. Estate Surveyors and Valuers should effectively discharge their duties in project planning and development.
- v. It is imperative that redevelopment and re-planning policies be looked into towards ensuring sustainable environment.

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