

Public Infrastructural and Informal Sector Activities in Anambra State

Ezenwegbu Nchedochukwu Chinwendu, Anazodo Rosemary O. (Ph.D), Umeokafor Chibuike Christ, Chukwurah D.C.J (PhD)

Public Administration Department Nnamdi Azikiwe University, Awka, Anambra State, Nigeria Professor of Public Administration Odimegwu Ojukwu, University Igbariam, Anambra State

Submitted: 01-05-2021	Revised: 09-05-2021	Accepted: 10-05-2021

ABSTRACT: In Anambra state, a large proportion of the population is engaged in informal sector activities, ranging from petty-trading to food processing for many years. Although the operators have been trading for long, they are 'stuck' on the fringes of the main economy; they are not graduating to the formal level, partly because of the infrastructural challenges militating against them on their attempts to grow. Against this backdrop, the study tends to investigate the effect of infrastructural challenges such as road, transport system, electricity and market system, on the activities of informal sectors in Anambra state. The study adopted survey design. Both primary and secondary sources of data were used to generate the data for this study. Quantitative data collected using questionnaire was analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) and presented through correlation and simple regression analysis. The study revealed that adequate infrastructural facilities in the state can significantly influence the informal sector activities in the state, especially the small business in the rural area whose income are no longer reflective of current economic realities in the State. the study recommend that Government should endeavour to provide the citizen with adequate infrastructure to facilitate the achievement of desired high productivity in the informal sector. Keywords: Public Infrastructure, Informal Sector

I. INTRODUCTION

China's impressive economic development with per capita income quadrupling and poverty falling significantly since the 1980s is the result of many factors, including promotion of private initiative, investment in infrastructure and opening to the outside world(Chukwurah, Ezenwegbu and Anazodo, 2020). In reducing poverty and increasing the activities of informal sectors in the hinterlands, China embarked on a "go west" strategy, part of which involves construction of a 625 kilometre railway from Chongqing to Huaihua, thereby increasing access to the Red Basin and its 120 million inhabitants(Chukwurah, Ezenwegbu and Anazodo, 2020).

According to Chukwurah et al (2020)the new railway was a good example of a transport project that aims to reduce poverty by increasing transport efficiency and economic growth. The railway reduces the average distance travelled along the corridor by 275 kilometres, to 370 kilometres, saving money and time. The resulting effects through growth increased trade, productivity and division of labour benefited the poor and the informal sector economy(Chukwurah et al, 2020). Apart from impacts on the national economy, regional poverty impacts can be expected from the transport opportunities created in very poor areas. Residents of these areas should benefit from increased trade, market integration, urbanization, mining, agricultural production and processing, tourism and new businesses(Chukwurah et al, 2020).

The recent down turn in the price of the crude oils in the global market coupled with, COVID-19 pandemic, in addition to the high rate of inflation, disruption of global supply chains, business downturn and liquidation, international and local trade restriction, and poor infrastructure, all these created a gap in the activities of informal sector in Nigeria.

Yusuf (2014)described informal sector as the large number of small-scale production and service activities that are individually, familyowned and use simple labour intensive technology which tends to operate like monopolistically competitive firms with ease of entry, excess capacity and competition driven-profits or income. The players in this sector have little or no formal education, hence are generally unskilled and there is dearth of access to financial capacity.Michael &



Stephen (2006) as cited in Yusuf (2014) documented that the sector is unorganised, unregulated and mostly legal but unregistered. The productivity and income in this sector are lower compare to the formal sector. The large participants in the informal sector do not enjoy the measure of protection afforded by the formal modern sector in term of job security, adequate work conditions (Yusuf, 2014).

The contributions of the informal sector to the development of the Nigerian economy cannot be over emphasized in terms of employment generation, capital savings and mobilization, efficiency, strong linkages with other sectors, utilization of local technology training ground for entrepreneurs and self-reliance (Ismail and Adegbemi, 2012). Despite the numerous contributions of the activities of informal sector in Nigeria, the sector still lacks proper attention in the area of infrastructural facilities.

Infrastructures including power, transport, telecommunications, provision of water and sanitation, and safe disposal of wastes are central to the activities of informal sectors and to economic development of Nigeria. Infrastructural facilities refer to those basic services without which primary, secondary and tertiary productive activities cannot function. In its wider sense, it embraces all public services from law and order through education and public health to transportation, communications and water supply (Mabogunje, 1976, Ojeifo, 2012, Shehu et al, 2015, Chukwurah et al, 2020).

Providing infrastructure services to meet the demands of businesses, households, and other users is one of the major challenges of economic development, the availability of infrastructure has decreased significantly in Nigeria over the past decade. In many cases, however, the full benefits of past investments on infrastructures are not being realized, resulting in a serious waste of resources and lost economic opportunities. This outcome is frequently caused by poor governance and inadequate incentives embodied in the institutional arrangements for providing infrastructural services. While the special technical and economic characteristics of infrastructure give government an essential role in its provision, dominant and pervasive intervention by governments has in many cases failed to promote efficient or responsive delivery of infrastructural services.

In Anambra state, a large proportion of the populationis engaged in informal sector activities, ranging from petty-trading to food processing for many years. Although the operators have been trading for long, they are 'stuck' on the fringes of the main economy; they are not graduating to the formal level, partly because of the infrastructural challengesmilitating against themon their attempts to grow. These challenges inhibit the capital accumulation, physical expansion and employment potentials of the informal sector and their likelihood to move to the formal sector. If the linkages between the informal sector and formal sector are positive and complementary, then the growth of the latter can induce growth in the informal sector (Valodia 2007as cited in Darma and Luther-King, 2018). Some of the constraints are internal to the firm, that is, within the control of its owner-operator, and others are external, beyond the control of the owner (Parsons 2013 as cited in Darma and Luther-King, 2018). Empirical studies in various countries have identified numerous growths limiting factors, such as capital, lack of relevant skills, excessive regulations and security concerns but none have identifiedroad, transport system, electricity and market system as a limiting factor.

Against the above backdrop, the study tends to investigate the effect of infrastructural challenges such as road, transport system, electricity and market system, on the activities of informal sectors in Anambra state.

II. CONCEPT OF CLARIFICATION Infrastructure

Infrastructural facilities refer to those basic services without which primary, secondary and tertiary productive activities cannot function. In its wider sense, it embraces all public services from law and order through education and public health to transportation, communications and water supply. (Mabogunje, 1976,Ojeifo, 2012, Shehu, Ezenwegbu, &Sheshi 2015).

Informal Sector

According to Samson, Emmanuel, Peter, and Albert (2006) The informal sector of an economy can be defined in terms of lack of governmental regulation or lack of institutions that provide job security and benefits. Comprising the largest part of the economies of developing countries, the sector depends on small scale individual entrepreneurship, almost always without the benefit of official support or services.

III. EMPIRICAL REVIEW

Chukwurah, Ezenwegbu&Anazodo, (2020) in their study on 'Public infrastructure a panacea towards Poverty Reduction in Anyamelum Local Government of Anambra State', tends to establish a relationship between public infrastructure and poverty reduction and also to



examine the impact of public infrastructure on economic development and growth in the rural areas of Ayamelum local government area, in Anambra state. The study adopted descriptive survey design in examining the relationship between public infrastructure and poverty reduction in Anyamelum local government areas. The tools used for data collection from primary sources were questionnaires, interviews and personal observation and Questionnaire was analyzed using Statistical package for social science. A modified five (5) point's likert scale designed was used in collecting the data from the respondents. The study revealed that, the level of poverty in Anyamelum local government rural area tend to be high because of the poor and inadequate public infrastructures in the area, such as roads, pipe borne water, well equipped hospital, market facilities and well equipped basic education, skill acquisition centers and so on; The study also revealed that, the poor and inadequate power supply plus the poor road condition in the study area have discourage the growth and development of small and medium scale business or enterprise (SME) in the area. The made study therefore the following recommendations; For poverty to be reduced to its minimum in rural areas of Anyamelum LG, there is need for government to focus the provision or building of public infrastructures in the rural areas than the urban areas. Finally, Anambra state Government should set up or establish a Modern Agency that will undertake the provision and maintenance of infrastructural facilities in rural areas. This agency will articulate all the rural development plans and come out with a more viable and formidable programmes which will entertain the entire needs of the rural people.

Sulaimon (2014) examines the Informal Sector and Employment Generation in Nigeria. The study takes a quantitative dimension and employed pure descriptive statistics for its analysis. The study developed the appropriate theoretical framework for the discourse. There is finding that the informal sector plays significant role not only in employment generation but as well as contributing immensely to economic growth. The low skills and low level of education that characterize the informal sector due to their inability to benefit from modern education and skill development is a matter of concerns. This also denied them the ability to cope with modern technology that can improve their productivity, hence, increase their ability to engage more hands. The study further recommends that; Government should through reliable policies protect this feeble sector from the parasitic influence of dumping the product of advanced

nations with very low cost of production.Promotion of inter linkage effects between agriculture and other sectors of the economy. This will have the ultimate effect of the formal sectors or industrialized sectors to rely on the small scale enterprises for sourcing their input. This will generally create expansion of output and promote employment generation.

Ismail and Adegbemi (2012)examines the impact of informal sector on employment generation in Nigeria during the period 1970 to 2010 making use of annual time series data. The empirical analysis rests on the augmented Solow growth analytical framework. Our findings show that informal sector activities have significant impact on absorbing the large pool of labour force in Nigeria. The study contends that human capital formation is positively related to unemployment rate which reflects the dearth of government expenditure on education in the country. Therefore, there is an urgent need for the government to reexamine its policies on informal sector.

Abinotam (2018) in his study on the Institutional and Social Factors Influencing Informal Sector Activity in Sub-Saharan Africa: A Nigerian Case Study, seeks to clarify the domain of Informal Sector (IS) from a Sub-Sahara Africa(SSA) viewpoint, and through this pave the way for a more holistic understanding of the behavioural tendencies and motivations of IS operators in SSA. Specifically relying on the institutional, social exclusion, and personality trait theoretical frameworks, the study demonstrates how a combination of separate yet related phenomena of personality traits, institutional factors, and more importantly, situational factors that manifest as perceptions of social exclusion serve as the incentives and the motivations to engage in informal economic activity in SSA. To achieve its goal, qualitative primary data obtained through thirty-eight semistructured interviews were transcribed verbatim and analysed using Nvivo. Firstly, the study found that institutional ambiguity, institutional delinquency, institutional passivity, and institutional incongruence are sources of voids in Nigeria's institutional framework that influence an individual to enter the IS. Secondly, social exclusion regarding lack of access to requirements such as finance and formal education to start and sustainably operate a business influences people to enter into the IS. Lastly, the findings indicate that personality traits' influence regarding the decision to engage in informal economic activities is dependent on individual circumstances. These are valuable contributions to the stock of knowledge about the IS. Particularly, the identification and



categorization of four specific institutional voids and partitioning of the sources of exclusion; the finding that in adverse economic circumstances personality traits could influence potential opportunity entrepreneurs to start-up in the IS; the finding about the role of trade associations; and the understanding about the collaborative new dimension of corruption in the context of IS practice, represent a significant contribution of this study. These contributions are valuable not just in terms of creating new windows of research opportunities, but also for evidencebased policy relating to the IS that is appropriately targeted at relevant groups. This is in addition to facilitating collaborations for business support, enlightenment, improved business practice, and inclusive growth.

Mahadea, &Zogli(2018) in their study on the Constraints to growth in informal sector activities and formalization: A case study of Ghanaian slums, investigated the constraints that hinder the development of slum activities in Accra and Kumasi, two cities in Ghana, and examined the informal operators' subjective wellbeing and their willingness to graduate to the formal sector, should the constraints be addressed. Data were collected by means of a questionnaire, administered to a random sample of 342 informal slum operators. Enterprise constraints are examined by using the principal component analysis (PCA) method and the likelihood of the informal operators' graduating the formal sector by using logistic to regression. The PCA identified six clusters as limitations, explaining about 77% of the variation in constraints. These related to a lack of business knowledge, credit access, tools and materials, security and social networking. The logistic regression results reflect that, of all the constraints, it is only when access to capital is addressed, that slum operators will move into formal activities. The concluded by stating thatwhen people are happy in what they are doing, they are reluctant to move to the formal sector, despite incentives or interventions that address their enterprise constraints. Hence, slum operators and informal activities are unlikely to disappear. Nevertheless, policymakers have to devise appropriate financing strategies for slum operators to help in their formalisation and growth pathways.

In a study conducted by Nurul (2005), 'The Informal Sector's Role in Urban Environmental Management', started by tracing the origin of the informal sector and urban environmental management (UEM) paradigms. Their points of intersection in solid waste management and in the provision of water supply and sanitation are investigated based on a large number of published and unpublished studies. In addition to identifying the supply- and demand-side factors, the underlying economic and financial fundamentals and socio-political causes of involvement informal-sector in urban explored. environmental provision are The informal sector's contributions to urban environmental management are highlighted for: the mutually reinforcing roles of the informal sector and UEM, the pioneering role of the informal sector in stimulating private investment in urban environmental infrastructure, the socially crucial of informal-sector transitional function involvement in UEM, and the role of the informal sector in stimulating competition in UEM. The paper proposes two strategies to strengthen the beneficial role of the informal sector in urban environmental management. One strategy seeks to alleviate health hazards associated with the informal sector's involvement in urban environmental service provision. The other seeks to overcome the polarized viewpoints as to suitable institutional options for this provision. A matrix for distribution of responsibility among the competing stakeholders is presented to facilitate finding the optimal role for the informal sector in urban environmental management.

Ernest and Olawande (2020), assessed the Informal Sector and Economic Growth of SouthAfrica and Nigeria: Α ComparativeSystematic Review. This article used a comparative systematic review to explore the factors that act as drivers to informality in South Africa (SA) and Nigeria, the challenges that impede the growth dynamics of the informal sector, the dominant subsectors, and policy initiatives targeting informal sector providers. A systematic search of Google Scholar, Scopus, ResearchGate was performed together with secondary data collated from grey literature. Using Boolean string search protocols facilitated the elucidation of research questions (RQs) raised in this study. An inclusion and exclusion criteria became necessary for rigour, comprehensiveness and limitation of publication bias. The data collated from thirty-one (31) primary studies (17 for SA and 14 for Nigeria) revealed that unemployment, income disparity among citizens, excessive tax burdens, excessive bureaucratic hurdles from government, inflationary tendencies, poor corruption control, GDP per capita, and lack of social protection survival tendencies all act as drivers to the informal sector in SA and Nigeria. Several challenges are given for both economies and policy incentives that might



help sustain and improve the informal sector in these two countries.

Adesoji(2009) in his on the"Assessment of Infrastructure Development in Nigeria; a Strategy for Improving the Investment Climate", stated that One of the major reasons why the Nigerian economy has failed to be competitive is the dearth of basic infrastructure. This is evident in the power sector, with the production of less than 2,000 megawatts of electricity in a nation which requires up to 20,000 megawatts. The deficiency in the production of electric power in the country is more apparent when the average power outage occurs for more than eight hours on a daily basis. The transportation sector also has its challenges as there are no new roads to add to the existing networks which are poorly maintained. The railway is at best, comatose, while the plan for an efficient intermodal transport system is at best on paper.

This study assesses the infrastructural development in Nigeria and tries to show that the development of critical infrastructure such as power, roads, railways, ports and telecommunications will lead to an improved investment climate and make the Nigerian economy more competitive as well as encourage the inflow of much needed Foreign Direct Investment, which will inevitably lead to economic growth.

Samson, Emmanuel, Peter, and Albert (2006)in their studyon "Evaluation of Informal Sector Activities and Urban Land Use Management in South Western Nigeria", examined the land use implications of the informal sector activities in a planned residential district in south western part of Nigeria. The objective of the study is to examine the pattern of distribution of informal sector activities and their socio-economic effects on the residents of Festac Town in Lagos. Data were collected from primary and secondary sources. A total number of 200 questionnaires were administered on 140 households, 55 operators of informal sector activities and 5 to the staff of the Federal Housing Authority but only 195 were retrieved for the analysis. Research findings revealed that about 77% of the residents within the age brackets of 20 - 39 years were engaged in the activities of which about 32.3% were self employed. Also about 43.0% of the respondents earned between N10, 000.00 and N20, 000.00 (US\$76 - \$153) monthly from the activities. The bulk of the activities involved were categorized into three namely; commercial, light industrial and tertiary services using kiosks, garages, corner

shops, open spaces and temporary structures for these activities. The paper notes some of the land use implications like filtration, illegal change of use, pollution and high rental values among others due to the activities' potential to generate land uses. The paper concluded by calling on policy makers and physical planning agencies to evolve more pragmatic strategies to urban development matters whereby such activities could be integrated into urban development plans. This will ensure a more efficient and effective control of such activities to enhance their better performance.

Umar,Ogbu and Ereke (2019), assessed the Challenges of Infrastructural Development in Nigeria: An Assessment of The Pains And The Gains. The paper is an effort geared towards the examination of the pains and gains of infrastructural development in Nigeria. Relying heavily on secondary sources of data, the paper utilizes the descriptive method and concludes that state of infrastructure in Nigeria is a function of perpetual neglect by state actors. It thus recommends that Government needs to steer economic diversification & structural changes as an alternative means of creating revenue to defray the cost of building infrastructures. The state can also dare a synergy between Public and Private sector in other to ease the speedy availability of infrastructures in the country.

To Umar, Ogbu and Ereke (2019), the development of infrastructure world over is a fundamental precursor to economic growth and development. Most developing countries with infrastructural deficit can hardly create a reliable path to national development as the flow of foreign direct investment and advancement of critical and noncritical sectors of the economy are nearimpossible. Nigeria is caught-up in this regrettable state. Over the years, the development of key infrastructure has not been prioritized by successive regimes. The budgeting process has often placed recurrent expenditures far and above the building of infrastructures and hence, the country suffers scornful and deplorable state of infrastructure presence.

Recognizing the activities of these informal sectors as one of the important underlying factor for economic development and employment generation, calls for legal and institutional frameworks that are effective for the sound infrastructural facilities if cities and towns are to remain both economically and environmentally sustainable.



International Journal of Advances in Engineering and Management (IJAEM) Volume 3, Issue 5 May 2021, pp: 406-415 www.ijaem.net ISSN: 2395-5252

IV. THEORETICAL FRAMEWORK

study adopts This the Structural Functionalist Theory as developed by Emile Durkeim, Talcott Person and Robert Merton as theoretical framework of analysis. The theory is chosen because it serves as a means of explaining the functions performed by the structures in a system. The theory suggests that every system (Society) has various departmental structures that perform certain functions for the utmost survival of the whole system. It argues that every system has structures that must function to remain in balance; if one structure of the political system changes, equilibrium or balance is temporarily disrupted until other structures change to create a new equilibrium otherwise the entire system may go dysfunctional. It focuses on social integration, stability and co-operation (Umar, Ogbu&Ereke, 2019).

According to Merton (1990) as cited in Umar et al (2019), some functions are manifest functions and they are intended and recognized but latent functions are unintended and unrecognized. These social patterns that contribute to the maintenance of a political system are regarded as functional while those that have negative consequences are considered dysfunctional. Talcott person observed the structural functionalist theory as a political system made of different but interrelated parts. These parts are supposed to work harmoniously to ensure the survival of the whole system.

However, when related to society, structural functionalism can be described as a means of explaining basic functions of societal structures in the economic and political system and it also serves as a tool of investigation. Since the society is made up of parts, structural-functional approach explains the relationship between the parts (structures) on one hand and the relationship between the parts and the whole (economic and political system) on the other hand. The structures are many and they can take any form. It is the contribution of each part (structure) that sustains the economic and political system (whole).

Relating the structural functional theory to this study, an infrastructure is the structural, functional and basic element needed for economic development of the State to take place. For a political system to be effective, every facility including the social and physical must be made available and functional. Hence, it is important to recognize the fact that infrastructural facilities like power, transport, telecommunication, roads, healthcare system, educational system, governance process amongst several others must be put in place and adequately developed to suite the societal need of the people. When not made available, a society may suffer incomprehensible level of institutional decay and backwardness as the above instances of infrastructures are necessary condiments for the survival of the society. Therefore, the theory provides basic tool for understanding the nature and character of the Anambra state status when infrastructural development forms a discourse.

Drawing from the above, Clinton (1993) as cited in Umar et al (2019) apparently relating infrastructure from the point of view of the structural-functional perspective, submitted that it is the framework of interrelated and interdependent networks and systems comprising identifiable industries, and institutions including people and procedures, cap distribution abilities that provide reliable flow of product and services essential to the economy, and the defense of United State. Hence. the interrelated and interdependent functioning of the various institutional compartment of any society, rest solely on the viability of infrastructural facilities.

V. METHODOLOGY

The study adopted survey design. Both primary and secondary sources of data were used to generate the data for this study. Quantitative data collected using questionnaire was analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) and presented through correlation and simple regression analysis.

VI. DATA PRESENTATION AND ANALYSIS

Here, attempt was made to find out the Pearson correlation between Informal sector activities in Anambra state and good road, electricity, transportation system and market system.

Table 1:	Correlation	Matrix	Correlations
Lanc L.	Contraction	TTAULIA	Contrations

		good road	Informal sector activities	electricity	transportation system	market system
good road	Pearson	1	**	**	**	**

DOI: 10.35629/5252-0305406415

Impact Factor value 7.429 | ISO 9001: 2008 Certified Journal Page 411



International Journal of Advances in Engineering and Management (IJAEM) Volume 3, Issue 5 May 2021, pp: 406-415 www.ijaem.net ISSN: 2395-5252

	Correlation		.817	.437	.709	.449
	sig.(2.tailed)			.00	.000	.000
			.000			
	Ν	612	612	612	612	612
Informal	Pearson	**	1	**	**	**
sector	Correlation	.817		.485	.657	.481
activities						
	sig.(2.tailed)	.000		.000	.000	.000
	Ν	612	612	612	612	612
electricity	Pearson	**	**	1 **	**	**
5	Correlation	437	.485		.332	.171
	sig.(2.tailed)	.000	.000		.000	.000
	Ν	612	612	612	612	612
transportation	Pearson	**	**	**	1	**
system	Correlation	.709	.657	.332		.378
	sig.(2.tailed)	.000	.000	.000		.000
	Ν	612	612	612	612	612
market	Pearson	**	**	**	**	1
system	Correlation	.449	.481	.171	.378	
	sig.(2.tailed)	.000	.000	017	.000	
	Ν	612	612	612	612	612

** Correlation is significant at 0.01 level (2-tailed).

* Correlation is significant at 0.05 level (2-tailed).

Table 1 shows the Correlation Matrix of Informal sector activities, good road, electricity, transportation system, conducive and market system. The analysis shows that there is strong positive significant correlation between the dependent variable and the independent variables at 0.01 and 0.05 levels.

 Table 2: Model Summary of Informal sector activities, good road, electricity, transportation system, conducive and market system.

ANOVA^b

Source of variation	df	Sum of squares	Mean square	Fraction	Sig.
Regression Residual Total	4 15 612	25.851 106.730 366.581	64.63 0.547	118.762	.000 ^a

a. Predictor: (Constant),good road, electricity, transportation system, conducive and market system.

b. Dependent Variable: Informal sector activities From Table 2, it could be seen that the F

value is 118.762 and it is significant because the significance level is =.000 which is less than $p \le$

0.05. This result implies that overall, regression model is statistically significant, valid and fit. This suggests implicitly that all independent variables are explaining that there is a positive and significant relationship between dependent and independent variables.



	Table 5. Summary of Regression Results							
Model	R	R. Square	Adjusted R. Square	Standard Error of the estimate				
1	0.845 ^a	0.713	0.711	0.73153				

Table 3: Summary of Regression Results

a. Predictor (Constant), good road, electricity, transportation system, conducive and market system.

From Table 3, regression coefficient represented by 'R', show that 84.5 percent relationship exists

between dependent variable and independent variables. The coefficient of determination, $R^2 = 0.713$ shows that 71.3 percent of variation in informal sector activities is explained by the independent variables.

Table 4: Summary of Coefficients of Good road, Constant electricity, Good transportation system and market system

Coefficie	ents ^a					
	Model	Unstandardiz Coefficients	zed	Standardized Coefficients	t	Sig
		В	Std. Error	Beta		
	1 (constant)	175	.203		867	.379
	Good road	.617	.058	.623	10.497	.000
	Electricity	.175	.051	.453	3.567	.000
	Good transportation	.169	.049	.651	3.098	.003
	Market system	.113	.059	.514	1.951	.050

a. Dependent Variable: Informal sector activities

Interpretation of results

We interpreted the regression results in this section as follows: In the above table, regression for pay reward $(\alpha_1) = .623$ which means that one percent increase in pay reward will increase informal sector activities by 62.3 percent if other variables are held constant. The t value is 10.497 which is significant at 0.000 because significance level is less than $p \le 0.05$. Hence the alternative hypothesis which suggests that infrastructure affects informal sector activities significantly was accepted.

The regression coefficient (α_2) = .453 which implies that one percent increase in good road will increase informal sector activities in Anambra state by 45.3 percent if other variables are held constant. The t value is 3.567 which is significant at 0.000 because significance level is less than p \leq 0.05. Hence the alternative hypothesis which suggests that good road is positively and significantly related to informal sector activities was accepted.

The regression coefficient $(\alpha_3) = .651$ which means that one unit increase in conducive

constant electricity will increase informal sector activities by 65.1 percent if other factors are held constant. Also, the t value is 3.098 which is significant at .003 because the significance level is less than $p \le 0.05$. Consequently, the alternative hypothesis which suggests that positive and significant relationship exists between constant electricity and informal sector activities was accepted.

The regression coefficient (α_4) = .514 and this implies that one unit increase in good transportation system will increase informal sector activities by 51.4 percent if other factors are held constant. Also, the t value is 1.951 which is significant at .050 because the significant level is less than $p \le 0.05$. Consequently, the alternative hypothesis which suggests that there is a significant relationship between good transportation system and informal sector activities was accepted while the null hypothesis which suggest otherwise was rejected.

It is also worthy of note that all signing for the coefficients agreed with the prior expectations of $\alpha_{is} \ge 0$.



Multicollinearity Diagnostic between Dependent and Independent variable Collinearity Statistics

Variables	Tolerance	VIF
(Constant)		
Good road	.423	2.357
constant electricity	.817	1.228
Good transportation system	.491	2.047
Market system	.797	1.255

The above table shows the multicollinearity statistics. The tolerance value less than 0.20 or 0.10 indicate there is a multicollinearity problem (O'Brien and Robert, 2007). In the above table, the tolerance values of all (IV's) are: .423, .817, .491 and .797 which shows that the tolerance level is moderate and good. The

reciprocal of the tolerance is known as the variance Inflation Factor (VIF). The VIF 5 or 10 and above indicates there is multicollinearity problem (O'Brien and Robert, 2007). In the above table, VIF values of (1.V's) are: 2.357, 1.228, 2.047 and 1.255, which shows there is no problem of multicollinearity in the model.

	Table 0. 1	ngen var	ues, conunion	mues an	u variance i	Toportions	,
Model	Eigen value	Conditio	on Index				
			Constant	GR	ELEC	TS	STD
1	4.716	1.001	.00	.00	.00	.00	.00
2	.108	6.567	.12	.07	.19	.31	.03
3	.091	7.158	.03	.02	.44	.02	.51
4	.044	10.101	.69	.17	.18	.23	.32
5	.035	11.234	.21	.78	.22	.47	.19

 Table 6: Eigen Values, Condition Index and Variance Proportions

a. Department Variable: Informal sector activities

Eigen values close to 0 indicate dimensions which explain little variance. In the above table, values of 2, 3, 4 and 5 are near to zero which shows little variance in these variables. The condition index summaries the findings as follows: over 15 indicate a possibility of multicollinearity problem and a condition index of over 30 suggests a serious multicollinearity problem. In the above table, values of condition index are in the range of 1.000 to 11.234 which indicate there is an insignificant level of multicollinearity between dependent and independent variables.

VII. SUMMARY OF FINDINGS

The result of **hypothesis one** show that adequate infrastructural facilities in the state can significantly influence the informal sector activities in the state, especially the small business in the rural area whose income are no longer reflective of current economic realities in the State. Notably in the study result is that the dysfunctional Anambra state that has characterized Nigeria's informal sector is principally caused by poor or lack of adequate infrastructural policies from the government to take care of small business in the state.

In the same vein, the result of **hypothesis two** shows that significant relationship exists between good road and better performance of informal sector activities in Anambra state. The implication of this is that good road network enhances the connection between the informal sector and the formal sector. That is closeness to market and raw materials.

The regression result for **hypothesis three** and four suggests that the provision of constant electricity such as good transformer, stable voltage, low tariff and other power services including adequate distribution of electric metres, is likely to positively influence informal sector activities in Anambra state. Therefore, the null hypothesis was rejected while the alternative which suggests



significant and positive relationship between the two variables was accepted.

Increase in electric tariff per unit by the government has worsened the problem of poor productivity confronting the informal economic sector. Therefore, it only the provision of constant electricity that can ameliorate pocket droppings for small business owners in the state.

VIII. RECOMMENDATION

Infrastructural facilities have been found to be very potent in improving the profitability and activities of informal sector in any developing economy. Government should endeavour to provide the citizen with adequate infrastructure to facilitate the achievement of desired high productivity in the informal sector.

It is the duty of government at all levels to finds out the necessary infrastructure needed for the growth of small business both in the rural and urban areas, so that efficient infrastructural policies can be effectively applied to achieved enhanced performance of informal sectors in Nigeria.

REFERENCE

- [1]. Abinotam J. A. (2018)Institutional and Social Factors Influencing Informal Sector Activity in Sub-Saharan Africa: A Nigerian Case Study: A thesis submitted in partial fulfilment of the requirements of the University of Wolverhampton for the Degree of Doctor of Philosophy. , https://www.wlv.ac.uk/research/theresearch-hub/the-research-policyunitrpu/ethics-guidance/
- [2]. Adesoji O. A (2009), An Assessment of Infrastructure Development in Nigeria; a Strategy for Improving the Investment Climate: Thesis submitted in partial fulfillment of the degree of Master of Science in Investment Promotion and Economic Development; Edinburgh Napier University Business School.
- Chukwurah D.C.J. [3]. Ezenwegbu N.C&Anazodo Public (2020),R Infrastructure A Panacea towards Poverty Reduction Anyamelum in Local Government of Anambra State, Nigeria: International Journal of Innovative Research & Development, vol9, issue 12, ISSN 2278-

0211 (Online)DOI :10.24940/ijird/2020/v9/i12/DEC20002.

- [4]. Ernest E.&Olawande D. (2020), The Informal Sector and Economic Growth of SouthAfrica and Nigeria: A ComparativeSystematic Review: Journal of Open Innovation:Technology, Market, and Complexity. vol 6, p134
- [5]. Ismail O. F. and Adegbemi B.O. O.(2012) Informal Sector and Employment Generation in Nigeria: An Error Correction Model: Research on Humanities and Social Sciences. ISSN 2222-1719 (Paper) ISSN 2222-2863. Vol2, No.7. www.iiste.org
- [6]. Nurul A. T. M (2005), The Informal Sector's Role in Urban Environmental Management:International Review for Environmental Strategies Vol. 5, No. 2, pp. 511 – 530
- [7]. Mahadea, D. &Zogli, L-K.J. (2018), 'Constraints to growth in informal sector activities and formalisation: A case study of Ghanaian slums', Southern African Journal of Entrepreneurship and Small Business Management 10(1), a130. https://doi.org/ 10.4102/sajesbm.v10i1.130
- [8]. Sulaimon A. Y. (2014), Informal Sector and EmploymentGeneration in Nigeria: Munich Personal RePEc Archive; University of Lagos. MPRA Paper No. 55538: <u>http://mpra.ub.uni-muenchen.de/55538/</u>
- [9]. Shehu A.A., Ezenwegbu N.C., &Sheshi S. (2015). Public Infrastructure and Poverty Reduction in Edati Local Government Areas of Niger State. Environmental Watch; A Journal Of The School Of Environmental Studies, The Federal Polytechnic, Bida, Vol8, No.2.p246, ISSN 1597-1759
- [10]. Samson .A. Adeyinka, Emmanuel O. Omisore, Peter O. Olawuni and Albert A. Abegunde(2006), An Evaluation of Informal Sector Activities and Urban Land Use Management in South Western Nigeria. Shaping the Change XXIII FIG Congress Munich, Germany.
- [11]. Umar K., Ogbu C. and Ereke E. (2019), The Challenges of Infrastructural Development in Nigeria:An Assessment of The Pains And The Gains: International Journal of Political Science and Development. ISSN: 2360-784XVol. 7(4), pp. 101-108. DOI: 10.14662/IJPSD2019.065