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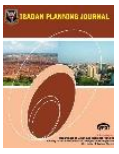

Institutional Challenges Inhibiting Public Infrastructure Maintenance in the Residential Core of Akure, Nigeria

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Abstract

This study examined institutional challenges inhibiting public infrastructure maintenance in the residential core of Akure, Nigeria. In the course of this study, 425 copies of the questionnaire were administered on a household basis in the residential core of Akure. Data collected were analysed using descriptive statistics of average mean weight value (AMWV)and Likert scale measurement to determine the causes of poor maintenance of public infrastructure in the study area. Inferential statistics was used to analyse the factors inhibiting the maintenance of public infrastructural facilities as well as other information derived from stakeholders of different institutional agencies saddled with infrastructure maintenance roles in the area. People's indifferent attitude, poor maintenance culture, aging facilities, poor response to maintenance requests, and political instability were observable potent catalytic factors inhibiting facility maintenance in the Akure core area. Pearson product-moment correlation was used to divulge the strength of association among these variables. In combating the challenges, the study recommends aggressive public enlightenment programs for residents on the need to make sustainable use of infrastructural facilities in their domain. It also suggests synergy among government ministries, corporate organizations, and residents in the form of public-private-partnership (PPP) to garner more funds for infrastructure provision and prompt repairs or replacement of faulty and aging facilities in the study area. This is considered necessary to enhance the adequate functionality of basic facilities that will make life better for the residents.

Keywords
Institutional challenges, Public infrastructure, Maintenance culture, Residential core

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1. Introduction

Cities in developing countries have been witnessing rapid and spontaneous growth in recent times resulting in myriad problems. The menace of infrastructure maintenance in Nigeria has inevitably culminated in urban sprawl and deteriorating environment, housing shortages, unemployment, and other socioeconomic and environmental issues (Aribigbola, 2011). The situation in the core of Akure is not different. It is predominantly made up of old structures predating European colonization (Akinbamijo, 2006). The buildings here are typically old; typifying local values, preferences, and Indigenous urban traditions (Ogunleye, 2013). No doubt, degraded infrastructural facilities vis-a-vis crowding index in this part of the city are usually very high. Corroborating this view, Owoeye and Sogbon (2012) established that these areas are slum environments characterized by uncollected refuse and infrastructural facilities decadence.

The core of Akure has a serious dearth of essential infrastructure like drinking water, hygienic sewerage facilities for human waste disposal, drainage systems, and garbage and refuse disposal facilities (Omole, 2010). Access roads in places like Isolo and Odo-Ikoyi quarters are so critical with their unkempt physical environments. Owoeye (2013) reported that educational facilities were limited to preliminary nursery and primary school as there was no single public secondary school within this locale. The area exhibits high population density when compared to other parts of the city.

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It does not only provide abodes for the poor natives who hold tight to their extended family properties but also provides locations of relatively high accessibility for businesses and services to immigrants. As a result of the influx of urban poor to this area, existing infrastructural facilities become overstretched by the teeming population.

Studies revealed that inhabitants in this part of the city are people of low capital base who are characterized by unstable employment, low job status, poor housing conditions, lack of basic infrastructural facilities, and constant struggle for survival (Omole, 2010; Owoeye & Sogbon, 2012). Thus, residents are not financially capable of making urban environmental services available for comfortable living. The problem of low per capita income of residents in the core of Akure has in no small measure constrained them from having enough resources to utilize for proper maintenance of these essential facilities as well as improving and face-lifting the environment for comfortable human habitation (Owoeye, 2013; Olasemojo and Owoeye, 2020).

It is poignant to note that the agencies of government saddled with the responsibility of infrastructural facilities maintenance in these residential districts are not on their toes. The primary responsibilities of institutions like Ondo State Water Corporation, Waste Management Authority, and Ministry of Works and Housing are to provide pipe-borne water, collect and dispose of solid waste, and rehabilitate deteriorated road networks respectively. Unfortunately, the questions of why and when these facilities will be provided in these districts have continued to be mere rhetoric. A thorough field survey and literature documentation on the study area revealed that the research locale is a typical slum environment characteristically typified by a haphazard arrangement of structures, lack of or poor road network, lack or inadequate air space between buildings, irregular land sub-division pattern, high building densities, small building sizes, and extensive deterioration of critical infrastructural facilities necessary for comfortable living. Because of the foregoing, this paper is set to examine the institutional challenges inhibiting infrastructural maintenance in Nigerian urban centres with particular reference to the core of Akure.

2. Literature Appraisal

Infrastructure is an essential ingredient for productivity and growth (Srinivasu & Rao, 2013). In its overall importance, it promotes the social and economic life of people in the built environment (Ihuah, Ekenta & Nwokorie, 2014). Oyedele (2012) described it as the set of interconnected structural elements that provide a framework supporting an entire structure of development. It is a system of resources that can be harnessed for the development of a society which essentially includes telecommunication, energy, transportation, governance, and other public utilities (Frischmann, 2007; Onolememen, 2015).

Public infrastructure, according to the Organization of Economic Co-operation and Development (OECD, 2015), is known as facility, structure, network, system, plant, property, equipment, or physical assets, and the enterprises employed to provide public goods or meet a politically fundamental need. They are basic facilities and services essential to both rural and urban societies, for their economic and social development (Aluko & Olanibi, 2016). The purpose of public infrastructure is to satisfy social and administrative needs as a means to fulfil economic responsibilities for the general public (Nkrumah, Stephen & Anaba, 2017).

The quality of infrastructure existing in a region has a significant impact on the technological attainment, standard of living, and socio-economic well-being of the inhabitants (Fagbohunka, 2016). According to Kayoza (2012), quality of life demands the reliability of infrastructure systems and safety, and it is a basis for public well-being. The critical role of infrastructure in the industrial development of any nation cannot be relegated; hence, the main reason why many developed countries of the world flourish is through the provision of necessary infrastructure to drive their economies (Fagbohunka, 2016). According to Ogunlana, Yaqub & Alhassan (2016), most infrastructures in Nigeria are in a poor state owing to various factors like poor maintenance culture, poor or inadequate funding system, and, of course, neglect over a long time by the government and its different agencies that are to provide and maintain public infrastructure. This issue of inadequate infrastructure provision is responsible for why Nigeria, as a nation, is experiencing sluggish and stunted growth in its developmental process (Ogunlana, Yaqub & Alhassan, 2016).

Nkrumah *et al* (2017) were of the view that infrastructure maintenance practices in developing countries like Nigeria are on a low ebb. Maintenance which encompasses provision for adequate care of

the hard-earned infrastructure has not gained ground in the consciousness of resource managers in the country over the years. It is worrisome, however, to see government buildings most times on the verge of collapsing, abandoned factory plants and machinery, dilapidated school buildings, pot-holes and chasms on constructed highway roads, deserted vehicles with minor problems, moribund industries, and a host of other properties belonging to the government with little or insignificant problem been abandoned (Umar, Obidike & Ihezukwu, 2014). All these actions have resulted in serious economic waste that hitherto ravages and undermines the developing countries; especially, Nigeria (Uma *et al.,* 2014; Ugwu, Okafor, & Nwoji, 2018). Nkrumah *et al*, (2017) further stressed that the desire for improved maintenance practices is often expressed by activists, unionists, political leaders, and the populace, but the appetite to execute is very low. A study of a similar scenario experienced in the core of Akure is the thrust of this paper to provide useful information that will aid policy formulation towards effective maintenance of public facilities in the study area.

3. Research Methods

3.1 The Research Locale

Akure lies within latitudes 7^0 15^1 and 7^0 28^1 North of the equator and longitudes 5^o 6^1 and 5^o 21^1 East of the Greenwich meridian (Adegbehingbe, 2016). The city is the capital of Ondo State which was created on the 3rd of February, 1976. It is located approximately 700 kilometres southwest of Abuja, the Federal Capital Territory of Nigeria, and about 350 kilometres from Lagos, the former capital of Nigeria (Aribigbola, 2011; Owoeye, 2013). It is bounded in the North by Ekiti and Kogi States, in the East by Edo State, in the West by Osun and Ogun States, and in the South by Atlantic Oceans (Bello & Nwosu, 2011). The city is located within the tropical rainforest region of Nigeria where rainfall is high throughout the year. The climate is hot and humid, influenced by rain-bearing southwest monsoon winds from the ocean and dry northwest winds from the Sahara Desert (Rotowa, Olujimi, Omole & Olajuyigbe, 2015). Figures 1A, 1B and 2 explicate the study area in both national and local contexts.

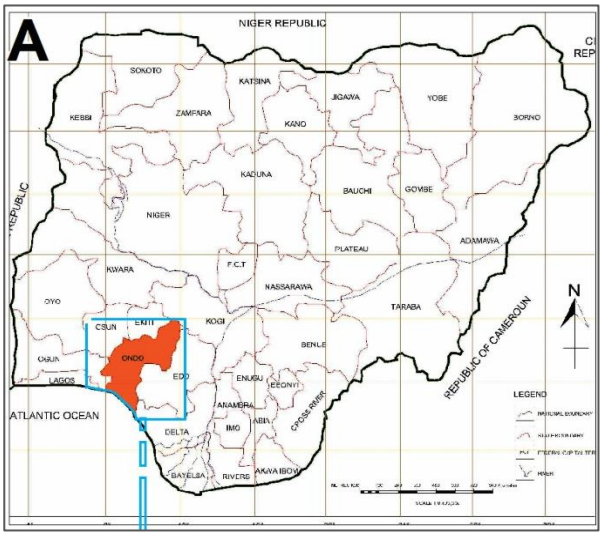

Figure 1A: Ondo State in the National Setting
Source: Ondo State MPPUD (2019)

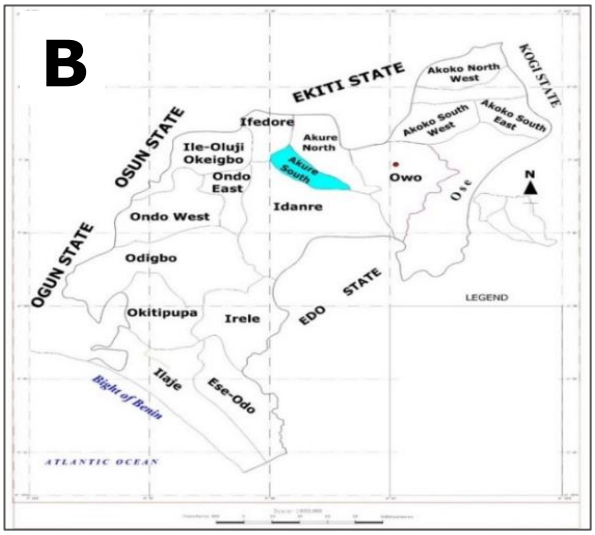

Figure 1B: Akure South LGA in the State context
Source: Ondo State MPPUD (2019)

3.2 Research Databank

It is imperative to note that the population of the study area was unknown since population censuses conducted in Nigeria were not disaggregated into neighbourhoods. Thus, to collect data scientifically from the research locale, a building demographic survey was carried out using Google Earth and ArcGIS to arrive at 1,696. The average household size in Akure City, according to the Ondo State Bureau of Statistics (ODSBS, 2012), was put at five persons per family (5ppf) and five households per building (5hpb). Therefore, the estimated population of the research locale for 2019 was computed at 42,400 persons. To achieve the focus of this paper, three government agencies and one corporate organization saddled with the role of public facilities administration in Akure were engaged in interview conversations. Their submissions were transcribed, processed, and analysed via content analysis to provide findings for the study.

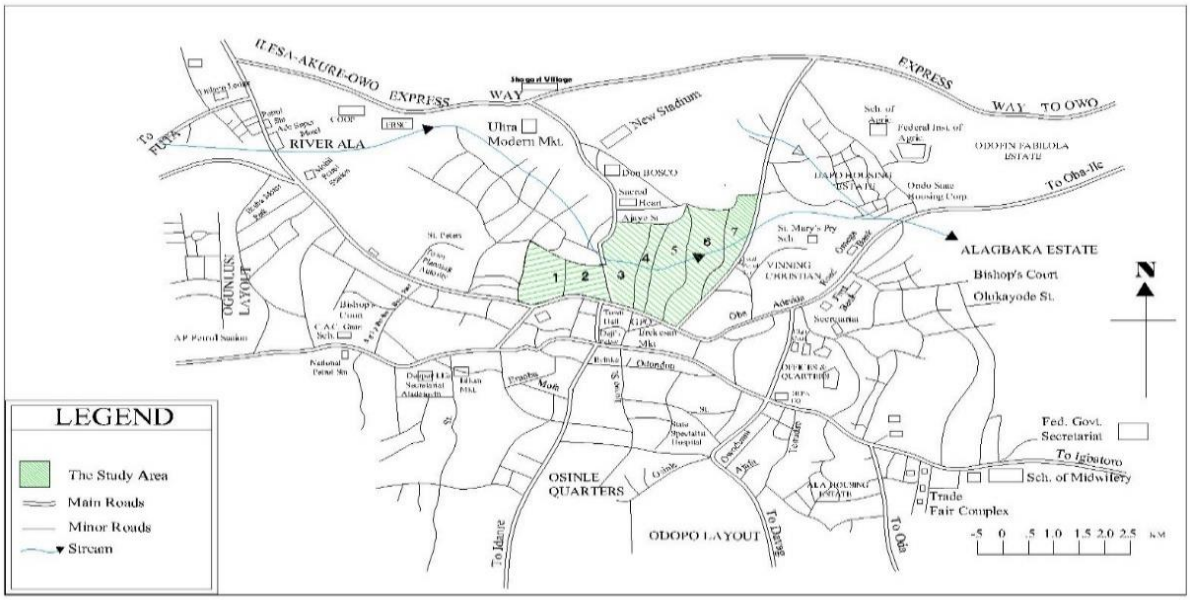

Figure 2: Locational Map of the Study Area Showing the Seven Selected Streets in the Core of Akure
Source: Olasemojo and Owoeye (2020)

Meanwhile, a 1% sample size (424) of the estimated research population was taken for questionnaire administration using Likert scale measurement and descriptive statistics tool to unravel the causes of maintenance challenges experienced in the study area and, as well, determine the average mean weight value (AMWV) of variables examined. The cross-tabulation technique was employed to unveil the interactions among a set of variables that played a prominent role in determining the level of maintenance challenges such as insufficient funds versus response to maintenance requests and residents' attitudes against misuse of facilities. These variables are invariably dependent on one another. The study area was grouped area into seven streets for data gathering on a household basis using stratified sampling techniques. A systematic random sampling technique was employed to extrapolate data from each selected stratum while Pearson product-moment correlation was used to reveal the strength of association between these sets of variables.

4. Results and Discussion of Findings

The thrust of this paper is to investigate institutional challenges inhibiting infrastructural maintenance in Nigeria with a particular reference to the core of Akure. To accomplish this, three government ministries and one corporate organization saddled with the responsibility were interviewed and their submissions were transcribed and processed. Meanwhile, causes of maintenance challenges were obtained on a household basis and discussed in sub-section 4.1.

4.1 Causes of Infrastructural Challenges in the Core of Akure

The precision for judgment on this subject matter is predicated on the rating extent of agreement, or vice-versa, where: Strongly Agree (SA) = 5; Agreed (A) = 4; Undecided (UND) = 3; Disagree (D) = 2; Strongly Disagree (SD) =1. This is illustrated in Table 1.

Findings from data obtained in the field showed that the attitude of users and misuse of facilities in this part of the city was directly associated with the problems arising from infrastructure maintenance. This is evident with a high mean of 4.35 signifying agreement. This finding is in tandem with the submissions of Olasemojo and Owoeye (2020) that the attitudinal behaviour of users and ill-use of infrastructural facilities is one of the exogenous factors militating against infrastructural facilities maintenance in Akure's inner heartland. This statistical discovery on this element of discourse could be ascribed to the erroneous consensus where people believed that government facilities belong to nobody and so the issue of the carefree attitude of users to facilities maintenance in these environs could be said to be extricable rife.

Table 1: Causes of Infrastructural Facilities Maintenance Challenges in Akure City Core

Causes of Facilities Maintenance Challenges	The population of Residents that Strongly Agreed and Agreed	%	Means	Std.	Ranks
Attitude of users/misuse of facilities	370	87.1	4.35	1.237	1st
Persistent breakdown through indiscipline/ignorance of facilities users	363	85.4	4.27	1.057	2nd
Insufficient funds for facilities maintenance	345	81.2	4.06	1.279	7th
Natural deterioration due to age and environment	347	81.6	4.08	1.151	6th
Bureaucratic reporting process	362	85.2	4.26	1.279	3rd
Lack of discernible maintenance culture	352	82.8	4.14	1.241	5th
Poor response to maintenance request	360	84.7	4.24	1.261	4th

Source: Field Survey (2019)

Issues relating to the persistent breakdown of facilities in the study area as a result of ignorance and indiscipline were major subject matter calling for serious concern when it comes to infrastructural facilities maintenance. Observed data from Table 1 revealed that this causative variable has a high mean of 4.27 corroborating agreement with the matter under investigation. This statistical discovery is consistent with the work of Yusuf (2023) that the lack of discipline as well as ignorance of maintenance personnel in managing several infrastructural facilities installations resulted in their recurrent breakdown. This was further justified by the fact that people in this area were people of low educational attainment requiring aggressive public awareness and enlightenment on the need to maintain public infrastructural facilities in their domain. Data presented in Table 1 equally showed that the mean value for insufficient funds as a factor hindering effective infrastructural facilities is 4.06. This implied that the issue of funds was a principal factor affecting efficient infrastructural facilities maintenance in Akure core. This is in tandem with previous empirical investigations like Omole (2010), Bello & Nwosu (2011), Owoeye & Sogbon, (2012), Ogunleye (2013), Owoeye & Olasemojo (2020) among others; residents in the core of Akure were people of low per capita base; hence, provision and maintenance of infrastructural facilities in the area hinge heavily on the government. However, the current economic crisis ravaging the nation has made governments at all levels in Nigeria abdicate their responsibility of providing and maintaining public facilities. This was evident in the capital expenditure of various institutions of government handling public infrastructure provision and maintenance in Ondo State, as shown in Table 2.

The implication of budgetary allocations from 2019 to 2023 shown in Table 2 rested on the need to express how practically difficult to finance the provision and maintenance of road infrastructure, water facilities, and waste management activities with such paltry allocation. This is obvious, especially, when viewed from the perspective that the scope of work of these agencies cut across the length and breadth of the state. It is even essential to note why the Ondo State Water Corporation (OSWC) and the Ondo State Waste Management Authority (OSWMA) witnessed little increase in their budgetary provisions from 2021 to 2023, little or no attention is given to the Ondo State Agency for Road Maintenance and Construction (OSARMCO). No capital budgetary allocation is provided for OSARMCO in 2023. No wonder existing roads in the core of Akure and even in the state at large are degraded and continue to worsen by the day. Consequently, with the present state of the economy, it has become an economically cancerous challenge that requires financial surgery from both the government and the governed through the public-private partnership (PPP) initiative.

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Table 2: Budgetary Allocation for Selected Government Agencies for the Year 2019 to 2023

S/N	Govt. Agencies	Yearly Budgetary Allocation for 2019 – 2023 in Naira (₦)				
		2019	2020	2021	2022	2023
1	OSARMCO	450,000,000.00	300,000,000.00	100,000,000.00	50,000,000.00	Nil
2	OSWC	3,309,039,360.00	2,458,000,000.00	3,187,006,988.96	11,265,325,000.00	16,020,500,000.00
3	OSWMA	370,000,000.00	480,000,000.00	515,000,000.00	579,000,000.00	808,000,000.00

Source: http://www.ondobudget.org/download_budget.php

However, from the perspective of natural deterioration as a result of age; most of the electrical and pipe-borne water facilities installed in the 80s, 90s, and early 2000 in this locale have become deteriorated and are already in a state of comatose due to the law of diminishing returns. This is statistically verifiable with a high mean value of 4.08 obtained from the analysis.

Data retrieved from respondents indicated that the procedure for reporting the state of facilities to the appropriate institutions of government was too cumbersome with a high mean value of 4.26. Respondents interviewed were even aggrieved in their submissions that accessibility to these officials of government was always a serious task. It was equally worrisome to observe from the information extrapolated from respondents that residents were in a state of dismay as their memos and petitions regarding the condition of facilities in their localities hardly saw the light of the day. Respondents were asked whether lack of maintenance culture could be part of the factors responsible for facilities maintenance challenges in the core of Akure and the answer was in the affirmative with a high mean score of 4.14. This is in line with the finding of Adedokun (2011) that Nigeria was littered with laudable but failed infrastructural projects due to a lack of maintenance culture. As shown in Table 1, poor response to maintenance requests was one of the principal causes of facility maintenance challenges in the core of Akure with a high mean score of 4.24. Field report shows that agencies of government did promptly accede to their clarion call. Politicians and administrators in these agencies only show up during the electioneering period with a variety of campaign promises to score cheap political points but often go off the scene after elections. On the part of residents, as earlier reiterated in this study, they were often constrained by financial resources taking into consideration the huge amount of money required for facilities maintenance.

It is necessary to emphasize that the standard deviation on causes of infrastructural facilities ranking among the variables ranges from 1.279 - 1.151 which significantly indicates relative consistency in responses among the sampled respondents. The cross-tabulation technique was further employed to unveil the connections among these sets of variables as they are invariably dependent on one another. The results are shown in Tables 3 and 4.

Table 3: Nexus between Insufficient Funds and Poor Response to Maintenance Request

Nexus between the Two Variables		Poor Response to Maintenance Request					
		SA	**A**	**UND**	**D**	**SD**	**Total**
Insufficient Funds	Strongly Agreed (SA)	101	40	30	10	0	**181**
	Agreed (A)	30	71	10	30	10	**151**
	Undecided (UND)	0	10	10	0	0	**20**
	Disagreed (D)	0	10	10	11	0	**31**
	Strongly Disagreed (SD)	20	0	0	0	21	**41**
	Total	**151**	**131**	**60**	**61**	**31**	**424**

Source: Field Survey (2019)

Table 4: Nexus between ignorance/indiscipline and attitude of users/misuse of facilities

Variable		Misuse of Facilities					
		SA	**A**	**UND**	**D**	**SD**	**Total**
Ignorance/ Indiscipline	Strongly Agreed (SA)	50	11	20	0	0	90
	Agreed (A)	61	100	30	1	20	212
	Undecided (UND)	0	40	0	10	10	60
	Disagreed (D)	10	20	0	11	0	41
	Strongly Disagreed (SD)	10	0	0	0	11	21
	Total	**131**	**171**	**50**	**31**	**41**	**424**

Source: Field Survey (2019)

The juxtaposition between insufficient funds and poor response to maintenance requests as elicited in Table 3, strongly agrees that the first is responsible for the latter. This showed that if the institution in charge of facility maintenance were not constrained by financial resources, it would not abdicate her responsibility. This submission is grounded on the premise that these agencies stand to struggle to fulfil their infrastructural maintenance responsibilities without adequate funding, leading to challenges in upkeep and potential neglect. Likewise, the residents who are the direct beneficiaries of these facilities, if they were not low-income earners as earlier disclosed, would not wait endlessly for the

government to fix the facilities for them which they could have done by themselves.

Table 4 was emphatic about the association between the ignorance/indiscipline of residents and the attitude of users coupled with misuse of facilities in the core of Akure. Empirical data obtained, as shown in the table, revealed agreement between these variables as causes of facility maintenance challenges in these environments. This association is emphasized in the literature, highlighting the impact of resident's behaviour on the overall maintenance and usage of facilities within a given community (Jandali, Sweis & Alawneh, 2018; Nkrumah *et al*., 2017). The issue of negative attitudinal behaviour typified by misuse of infrastructural facilities in Akure core was further aggravated by the fact that residents in this part of the city were people of low educational status requiring massive enlightenment campaigns on the need to maintain public facilities in their domain.

4.2 Condition of Facilities and Resident's Disposition to Maintenance Culture

Exploring the nexus between the condition of facilities and resident's disposition to maintenance culture in the core of Akure; variables which include maintenance culture, cost incurred on facilities maintenance, and states of facilities maintenance were investigated. These variables were designed using a Likert scale of 'Undecided', 'Strongly Disagreed', 'Disagreed', 'Agreed', and 'Strongly Agreed' respectively. Since this scale of measurement will violate assumptions of multiple regression analysis necessary for predicting the implications of the subject-matter; hence, the need to transform the data by recoding into different variables. This was done by ranking the variables in percentages of 0, 25, 50, 75, and 100 respectively to achieve a ratio scale that is good and acceptable for parametric statistics.

To establish that a relationship exists between residents' disposition to maintenance and the condition of facilities, the Pearson product-moment correlation coefficient (r) was used to reveal the strength of association between these elements of a discourse. The predictor variables for this test include the level of maintenance culture and cost of maintenance while the outcome variable is the state of infrastructure maintenance. They are illustrated using a correlation matrix in Table 5. The table shows that the predictor variables investigated revealed an association between one another at 0.05 significant levels; thus, they were all included in the analysis. The result shows a weak negative relationship between the level of maintenance culture and the state of facility maintenance with a correlation coefficient of -0.133. This simply implies that as the resident population fails to imbibe a good maintenance culture; then, the issue of facilities maintenance challenges will be on the increase. Likewise, there was a strong positive relationship between the cost of maintenance and the state of facilities maintenance. This implied that as more funds are expended on facilities management, their level of functionality would be optimally guaranteed. This statistical correlation is predicated on the fact that residents of Akure Core were people of a low per capita base who could hardly provide for their families let alone incur costs on facility maintenance without government support.

Having established a relationship between residents' disposition to facilities and the state of maintenance, multiple regression analysis was employed to predict the percentage implicational effect of this subject matter as it affects the deterioration and functionality of the utilities in the core of Akure. The result is shown in Table 6.

From the table, the correlation coefficient (r) is 0.968 and the coefficient of determination (R^2) is 0.936. This signifies that this model widely accounts for 93.6% of the variance that can be explained with regard to the state of maintenance in the core of Akure. This model explicitly showed that maintenance culture and cost of maintenance are key variables influencing infrastructure maintenance challenges in the core of Akure.

Table 5: Condition of Infrastructure Maintenance

	Level of Maintenance Culture	Cost of Maintenance	State of Infrastructure Maintenance
Level of Maintenance Culture	1.000		
Cost of Maintenance	-0.169	1.000	
	(P = 0.000)		
State of Infrastructure Maintenance	-0.133	0.967	1.000
	(P = 0.006)	(P = 0.000)	

Source: Field Survey (2019)

Table 6: Multiple Regression Model Summaries

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.968	0.936	0.936	0.314

Source: Computer Print-out (2019)

4.3 Institutional Challenges Inhibiting Public Infrastructure Maintenance in the Study Area

This section unravelled factors influencing facilities maintenance challenges in the core of Akure as obtained via an interview with the key officials from the three government ministries and one corporate organization saddled with the responsibility of managing infrastructure, as shown in Table 7. The reports of the interview were transcribed and processed using content analysis.

As seen in the table, the primary responsibility of road infrastructure management in the study area was anchored by the Ministry of Works and Infrastructure. Regrettably, this institution of government had not been able to satisfactorily discharge her primary mandate of road infrastructure provision and maintenance in the core of Akure and the entire city at large. In the course of personal interface with the Deputy Coordinator, Direct Labour Unit in the ministry, his submission is documented as follows:

> "One of the catalytic factors influencing road infrastructure maintenance challenge is paucity of funds. Another serious impediment is the issue of overwhelming demands for road rehabilitation and intervention which had out-skipped supply thereby leading to a road infrastructure gap. Similarly, people's indifferent attitude to public facilities is another major challenge as road infrastructure is often subject to abuse with carefree attitudes" (ODSMWI)

The submission of this agency of government concerning the element of discourse was quite categorical, resounding, and clear-cut. It was indeed ominous to note as earlier emphasized in this study that the budgetary allocation for capital expenditure to OSARMCO, an appendage of this ministry, was a paltry sum of ₦450,000,000 in 2019, ₦300,000,000 in 2020, ₦100,000,000 in 2021, ₦50,000,000 in 2022 and no capital budgetary appropriation for this agency in 2023. The issue that resonates in one's mind is the reason why road infrastructure maintenance becomes a major challenge in the state and Akure City in particular. The reason is the government's inability to adequately finance this institution to carry out its statutory responsibility. Unfortunately, this institution of government should have been at the forefront in terms of public enlightenment programs through mass media, workshops, town hall meetings, as well as, monitoring and inspection but the reverse was the case simply because of financial constraint.

Table 7: Details of Government Institutions and Corporate Organizations Interviewed

S/n	Government Institutions/ Agencies	Infrastructure Managed	Department/Unit	Officers Interviewed
1	Ondo State Ministry of Works & Housing, Akure	Road	Direct Labour	Deputy Coordinator (DC)
2	Ondo State Water Corporation, Akure	Water	Department of Planning & Statistics	Health and Safety Officer (HSO)
3	Ondo State Waste Management Board, Akure	Waste Management	Planning, Research & Strategy	Director (DR)
4	Benin Electricity Distribution Company, Akure Office	Electricity	Business & Distribution	Business Head of Distribution (BHD)

Source: Authors' Compilation (2019)

Concerning the water infrastructure sector, the policy decision-making institution is Ondo State Water Corporation. Unfortunately, it is neither a criticism nor an overstatement to say that the portable water supply in the core of Akure was in a state of comatose. This is consistent with the literature that water system infrastructure in Nigeria is notorious for its widespread deterioration and inadequate use of its current capacities, which are caused by poor maintenance and a dearth of funding for operations (Ibrahim *et al*., 2018; Owolabi, 2020). Hence, this agency of government was interviewed to obtain information on why the government abdicated its responsibility of providing and maintaining functional portable water infrastructural facilities in the core of Akure. The submission of the health and safety officer, Planning and Statistics

Department of this government institution is presented thus:

> "The use of hand-dug well and rainwater as an alternative source of water was a common phenomenon in the core of Akure. Lack of synergy among service providers was a contributory factor influencing water infrastructural facilities maintenance challenges in this locale. Lack of political-will and policy continuity coupled with low revenue generation were principal issues with regards to effective water infrastructure maintenance" (ODSWC).

The submission of this government institution was quite emphatic and straight to the point. Questions on every lip of residents in the core of Akure and the city at large were:

> "What happened to the water pipe running through the streets of Akure in the 70s, 80s, and 90s? Why has it suddenly gone dry? Where is the Owena multipurpose dam project designed to supply water to the entire residents of Akure?" It is a pity that these policies had been relegated to archives and dustbins of these agencies as a result of political instability and policy discontinuity."

As a result of this, residents with low incomes in the core of Akure were constrained by financial resources to make use of hand-dug wells as alternative sources of water supply which has been scientifically proven unhealthy for human consumption.

A significant improvement was noted in waste management activities compared to what they used to experience previously in the study area. Thus, the Director of Planning, Research, and Strategy of Ondo State Waste Management Authority was interviewed to know the secret behind the impressive turnaround improvement, and his response was hereby documented:

> "Waste Management Activities has been ceded to Zoom Lion Alliance, a private company, which is directly responsible for all waste management activities in the state while the authority is left to her primary regulatory roles, involving monitoring and enforcement" (ODSWA).

It could be deduced from the assertion of this government agency that the strategy of public-private partnership (PPP) initiative adopted has turned out to be a game-changer in the efficient management of waste-related activities in the state. The only challenge confronting this institution of government was compliance with waste management rules and regulations by the corporate organization responsible for waste management and control in the core of Akure and the city at large.

It was incontrovertible to posit that electricity facilities and power supply situation in the core of Akure was in a worrisome state. This led to the interview of the Business Head of Distribution Unit, Benin Electricity Distribution Company (BEDC), Akure office. The outcome of the discussion is herewith documented as follows:

> "Limitation of energy generated from the national grid was a serious impediment to regular electricity supply. The aging of electricity facilities requiring total overhauling in terms of replacement was another impediment considering the financial implication of such action. Vandalism of electricity cables was also antithetical to electricity provision and maintenance in this part of the city. Lackadaisical attitude to energy revenue payment and unlawful encroachment to rights-of-way of the power line was equally inimical to electricity infrastructure maintenance and supply" (BEDC).

Arising from this submission, it was discovered that the aging nature of facilities was a critical factor constituting maintenance challenges in the study area. These facilities were installed in the early 70s and 80s; hence, their level of functionality has seriously degraded and output become extremely poor. The unscrupulous attitude of electricity facilities theft in the study area is equally a serious concern. These factors have inevitably culminated in frequent power outages leaving traders and artisan enterprises to source for their energy supply. This is unhealthy for economic development; especially, knowing fully well that the study area is the economic heartbeat of the city.

5. Conclusion and Policy Recommendations

Infrastructure is no doubt a set of resources that can be harnessed for the benefit of mankind. It is the pillar of wealth, the lifeblood of economic prosperity, and the engine that drives the economy of a nation. It is quite unfortunate to note that this catalyst for development is in pitiable conditions in the core of Akure. Factors at play that affect this enigma of development have not been successfully addressed. Residents are constrained by financial resources to maintain existing public facilities on the ground. Government on their part is overwhelmed by increasing demand for infrastructural facilities provision and maintenance thereby creating a gap for infrastructural facilities need. Hence, all hands are required on deck to jointly address the menace.

Collaborative measures to revitalize the existing non-functioning facilities by the government and the governed should be embraced.

The residents should not renege from fulfilling their obligations by paying necessary dues expected of them while the government must not abdicate from its core responsibility of infrastructure provision and maintenance. This will, to a large extent, relieve the residents of the current challenges they are going through; especially, as this locality is the economic heartbeat of the city. However, some policy recommendations are hereby proffered:

Maintenance of existing public utilities should be accorded the utmost sense of priority to reduce incidences of facility deterioration. Aging facilities should be promptly replaced or repaired to ensure their continuing functionality. Aggressive public enlightenment programs for residents in the study area on how to make judicious use of public infrastructural facilities domiciled in their environs should be taken with utmost priority. This can be done through town hall meetings, workshops, and mass media to ensure the functionality and sustainability of the facilities. This will, to a large extent, tackle the problem of ignorance and misuse of public facilities installed in their domains and, as well, correct the erroneous belief of some of the residents that *"government facilities belong to no one and their maintenance is nobody's business".*

It was discovered that paucity of funds is the principal factor militating against prompt maintenance of public facilities in the core of Akure. Hence, there should be synergy between institutions of government, corporate organizations, and residents' population under a public-private partnership (PPP) scheme which will substantially serve as a veritable instrument to garner sufficient funds for facilities provision and maintenance in these environs. Take a clue from the words of J.F. Kenedy who said: *"Ask not what your country can do for you; ask what you can do for your country."* Residents should be willing to fulfill their obligations by paying their utility bills when due; especially, water and electricity bills. They should also pay their taxes regularly to enjoy more infrastructural facilities projects while managers of these facilities should be alive to their core responsibility of initiating, executing, and maintaining public projects. The need to be proactive in ensuring strict monitoring and enforcement of infrastructure-enabling laws should be taken with all seriousness and utmost concern.

Concession of some of these facilities to private organizations will go a long way to improve the efficiency of their management. A good example is the waste management-related activities ceded to Zoom Lion Alliance Company which, in a short time, has changed the face of Akure core from a refuse dump site to an area striving towards achieving some practicable degree of environmental cleanliness. Power generation companies need to be more proactive in adding more megawatts to the national grids. The nation's continued fluctuations around 3000 to 4000 megawatts is untenable and needs to be improved upon. Community policing should be put in place and galvanized with adequate tools to arrest the activities of electrical cable vandals and the frequent power outages that result from them. These and many more possible strategies are required to be devoted to addressing the menace.

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