THE SOCIO-ECONOMIC IMPLICATIONS OF THE CONDITIONS OF PAPALANTO-SAGAMU ROAD IN OGUN STATE.

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ABSTRACT

The role of Papalanto- Sagamu road in the socio-economic growth and development of Ogun State, and Nigeria at large, cannot be over emphasized. However, the deplorable condition of the road in terms of the pilled off of the paved surface, leading to wearing of the road surface and lack of road furniture have undermined the optimum performance of the road. An on-spot assessment was carried out on the condition of the road, while a traffic survey was conducted. The assessment of the effects of the road was done on the basis of the classification of the effects into three (3) classes. A purposive sampling method was adopted, and an Origin and Destination Survey was conducted for traffic count, while a structure questionnaire was used to collect data on the effects of the condition of road on 140 respondents based on the types of vehicle used on the road. Findings revealed that motorcycle has the highest frequency of 535 on daily average (57%) on Papalanto Intersection-Sagamu Interchange, and 46 on daily average (61%) on Sagamu Interchange-Papalanto Intersection. However, averages of 1700 vehicles ply the road on daily average. Delay in the movement of vehicle has the highest frequency of the effect of the condition of the road with 91 respondents out of 140 respondents, representing 65%, identified it as a major effect. The analysis has shown that the road has been underutilized as a result of its condition. The rehabilitation of the road is therefore recommended, with proper monitoring in order to achieve an international standard. Construction of tollgate at both end of the road is recommended, with the collection and utilization of tollgate fee for proper maintenance of the road.

KEYWORDS: ***Road development, road rehabilitation, socio-economy, road condition.***

1.0 INTRODUCTION

Efficient transportation is a significant factor essential for human activities and one of the solutions to economic development of any nation. Nworji and Oluwalaiye (2012) noted that efficient movement of people, goods and services are important engines capable of achieving a sustainable economy, owing to the fact that the prosperity of any nation is rested on efficient mobility, either by road, air, rail, underground pipes, and water. It is on this, that transportation is identified to perform an economic function, which is required for all the factors of production.

Delaney (2008) cited by Nworji and Oluwalaiye (2012) observed that infrastructure is one of the twelve pillars that is basic in global competitive, while the 2006/7 Global Competitiveness Report ranked Nigeria 95th in the world, behind countries as Botswana and Namibia, and on good road infrastructure, which is considered as second pillar, ranked Nigeria 114 out of 141 countries of the world.

According to CBN (2003) cited by Enwerem and Ali (2016), the total road network of Nigeria is 194,000 kilometers, and 17% of the road network belongs to Federal Government (Trunk A road), 16% owned by the State Governments (Trunk B), and 67% of the road networks are owned by the Local Governments(Trunk C). However, Nwogwugwu et al (2015) noted that Ogun State is among the fast growing industrial state in Nigeria with over eighty-seven (87) industries in the state, and that the need to have a good transportation system is undebatable, owing to the fact that good transportation facilitate socio-economic development.

It is therefore worrisome to note that the poor conditions of first tier roads (Trunk A road) in Ogun State, makes transporting of goods expensive and risky, and that the roads have been left to dilapidate despite the huge financial investment by companies within the axis of the roads. The focus of this research is the assessment of the implications of the conditions of Papalanto- Sagamu road (Iro Road) in Ogun State.

2.0 STATEMENT OF PROBLEM

Problems associated with road development are increasing on daily basis despite the huge fund that has invested in road construction, expansion, and rehabilitation in the last three decades. Wasike (2000) cited by Nworji and Oluwalaiye (2012) observed that non adherence or compliance to road construction standards has been a major problem, which results into failed roads in Nigeria, while Eboh (2005) cited by Nworji and Oluwalaiye(2012) identified the consequences of noncompliance to road construction standard to include; poor drainage, lack of adequate road furniture, inadequate road width, use of substandard road construction material, and poor road design.

However, the structure failures of roads is due to some or all of the following reason carefully structured in figure 1.

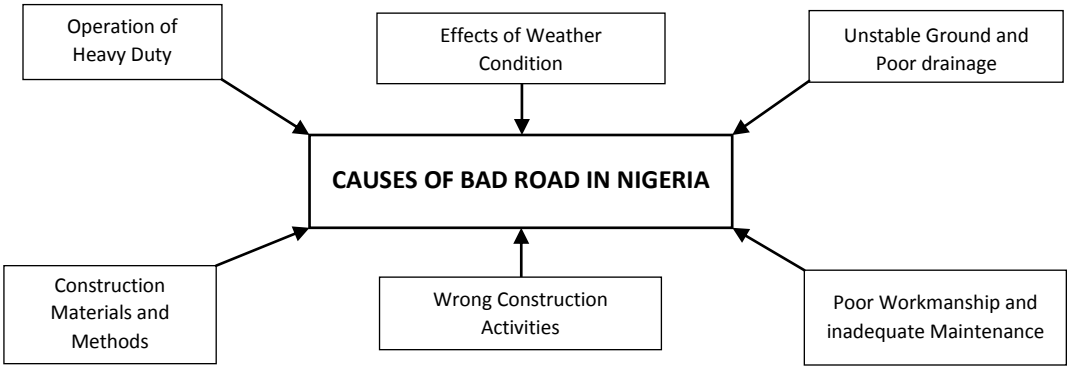

Figure 1: Causes of Bad Roads in Nigeria (Enwerem and Ali, 2016).

During the survey exercise, problems identified on the road understudy include;

a. Pilled off of significant portion of the paved surface, which has resulted into erosion, thereby creating gullies of significant sizes on the road.
b. lack of drainage along the corridor has resulted into over flow of storm water, which manifest itself in the form of flood when a torrential down pour occurs.
c. The pilled off surfaces of the road increases the level of dust during the harmattan, and this often result into poor visibility for motorists and passengers.
d. Damage of vehicle (particularly heavy duty vehicle) along the corridor limit space for vehicular movement, and poses a great danger at night which may result into collision.

3.0 LITERATURE REVIEW

Enwerem and Ali (2016) identified road as a thorough fare route on the land between two places, which has been paved or otherwise improved to allow travel by some conveyance, including a horse, cart, or motor vehicle, and could be referred to as facility for the movement of people, goods and services. Road way is therefore identified as a means of transportation on land, which is not only limited to modern highway system, but also to the city street, feeder roads and village roads. However, Gupta (2009) cited by Enwerem and Ali (2016) observed that road transportation is unique in the sense that, it offers maximum service to one and all the means of transportation, and very flexible in nature with respect to route, direction, time and speed of travel.

Enwerem and Ali (2016) identified different types of roads to include; driveway, arterial road, highway and expressway, and street, and that the benefits of a good road transportation system include speedy and quick movement of people, goods and services for socio-economic growth and development, while Anyanwu et al (2003) cited by Nworji and Oluwalaiye (2012) noted that an efficient road network reduces the time and cost spent on transportation within a country and equally facilitate connection among the different parts of the country, thereby enhancing social interaction.

Aigbokhan (1999) opined that infrastructure variables have positive association with private investment and economic growth, and that promoting investment led-growth requires adequate funding on infrastructure to create new capacities, and equally maintaining the existing ones. On this premise, Aghadiaye *et al* (2013) noted that the Nigeria economy is developing one, and that the inter-connection between her road transport system and her local economy has long been recognized to have a great influence on its socio-economic sustainability. However, Ighodaro (2008) cited by Aghadiaye *et al* affirm that the importance of road transportation for investment, trade, growth, and poverty alleviation has been recognized to facilitate direct provision of services to consumers, and inputs into the production of goods to the ever increasing population.

Litman (2010) cited by Aghadiaye et al (2013) identified road transportation as key to economic development, while economic development is expressed as the progress towards community's economic goal, which include an increased employment, income, productivity, property values and tax revenue. However, this expression of

economic development is anchored on the importance of economic growth which is a component of increase in quantity of goods and services produced in a nation which is expected to raise her national income, resulting into the maturity of the quality and quantity of goods and services produced in the country.

4.0 RESEARCH METHODOLOGY

The Papalanto – Sagamu Road is an eighty-five kilometers road (85km) extending from Papalanto intersection to Sagamu interchange. It is a federal road that creates access to Lagos, Ijebu region, part of Ondo State, and the eastern part of the country from the Papalanto axis and access point to Ilaro, Oja-Odan, Sango Ota and Republic of Benin from the Sagamu interchange.

The research employed investigative and empirical methods to assess the socio-economic implications of the conditions of the road. On- Spot assessment of the road was carried out through the use of a structured assessment chart, while a structured questionnaire was used to collect data from selected respondents. A random sampling method was adopted for the selection of respondents, while the respondents are comprised of commercial motor drivers, commercial motor cycle riders, and private motor drivers. A purposive sampling method was adopted in the selection of the numbers of respondents, hence, sixty (60) commercial motor drivers, twenty five (25) commercial motor cycle riders, thirty five (35) private motor drivers and twenty (20) heavy duty vehicledrivers were selected, making a total of one hundred and forty (140) respondents. A traffic counts survey was conducted in order to assess the traffic intensity of the road, through the origin and destination survey (ODS).

Secondary data on the road was collected from relevant publications in order to understand the trend of development of the road, and its management. A descriptive statistical analysis was adopted in the research while data are presented in ideographic form.

5.0 DATA PRESENTATION AND ANALYSIS

Data on the traffic survey of the corridor understudy is presented in table 1 as the summary of traffic survey outcome.

Table 1: Summary of Traffic Outcome. Location A – Location A- Papalanto Intersection to Sagamu Interchange

Date	Cars	Mini Bus	Motor Cycle	Heavy Duty	Total
Passenger Car Unit	1.00	1.5	0.7		
Monday, 20th Jan, 2020	102	112	544	217	975
Wednesday, 22nd Jan, 2020	85	105	498	198	886
Saturday 25th Jan, 2020	89	137	561	153	940
Total	276	354	1603	568	2801
Daily Average	92	118	535	189	934

Source: Researcher's Field Survey, January, 2020

Table 2: Summary of Traffic Outcome. Location B – Location A - Sagamu Interchange to Papalanto Intersection.

Date	Cars	Mini Bus	Motor Cycle	Heavy Duty	Total
Passenger Car Unit	1.00	1.5	0.7		
Monday, 20th Jan, 2020	74	68	484	195	821
Wednesday, 22nd Jan, 2020	63	59	402	177	701
Saturday 25th Jan, 2020	71	65	507	132	775
Total	208	192	1393	504	2297
Daily Average	70	64	464	168	766

Source: Researcher's Field Survey, January, 2020

Motor Cycle has the highest frequency of vehicle with 535 motor cycle on the daily average, representing 57% of the total number of vehicle plying Papalanto Intersection to Sagamu Interchange, as shown in table 1, and 464 motor cycle on the daily average, representing 61% of the total number of vehicle plying Sagamu Interchange to Papalanto Intersection, as shown table 2.

However, car has the lowest frequency of vehicle plying Papalanto Intersection to Sagamu Interchange with 92 cars on the daily average, representing 10% of the total number of vehicle, as shown in table 1, while bus has the lowest frequency of vehicle plying Sagamu Interchange to Papalanto Intersection, with 64 buses on the daily average, representing 8% of the total number of vehicle, as shown in table 2.

Data on the effects of the road on transportation of people, goods and services are presented in table 3.

Table 3: The effects of the road on transportation of people, goods and services

Respondents	Damage of Vehicle	Delay in the Movement of Vehicle	Vehicle Accidents	Total freq. of Occurrence
Commercial Motor Drivers	9 (15%)	49 (82%)	2 (3%)	60 (100%)
Commercial Motor Cycle Riders	16 (64%)	8 (32%)	1 (4%)	25 (100%)
Private Motor Drivers	10 (29%)	21 (60%)	4 (11%)	35 (100%)
Heavy Duty Vehicle Drivers	5 (25%)	13 (65%)	2 (10%)	20 (100%)
Total	40 (29%)	91 (65%)	9 (6%)	140 (100%)

Source: Researcher's Field Survey, January, 2020

On the effect of the bad road on the transportation of people, goods and services, three (3) classes of effects were identified, with data collected. These classes are; damage of vehicle, delay in the movement of vehicle, and vehicle accident. Delay in the movement of vehicle has the highest frequency of the effects with 91 respondents out of 140 respondents, representing 65% haven experienced it on the road, while vehicle accidents has the lowest frequency of the effect with 9 respondents out of 140 respondents, representing 6% haven experienced road crashes on the road.

6.0 DISCUSSION AND FINDINGS

Papalanto – Sagamu road is a major road of 24meters, which serves as link between Ogun State and Lagos at national level, and between Nigeria and Benin Republic at international level. A critical examination of the roles of the road revealed its importance as a corridor of multipurpose, hence, the need to ensure its optimum functionality cannot be over emphasized.

An assessment of the condition of the road revealed a very poor condition of the road, which is expressed interms of the pilled off of the paved surface, eroded of significant parts of the road due to flooding, and lack of road furniture. It is important to note that the condition of the road has made it not motorable, and consequently, has undermined the socio-economic importance of the road as an investment to facilitate growth and development. The undermining of the road with respect to its socio-economic importance is shown in the summary of the traffic count as indicated in both tables 1 and 2. Motorcycle having the highest frequency of the type of vehicle plying the road, with an average total of 1700 vehicle plying the road, have shown clearly that the road is in high deplorable condition, and its functionality is highly undermined. It is expected that the vehicle in the categories of cars, buses, and heavy duty vehicle should have high frequency of vehicle plying the road.

Assessment of the effects of the road on the transportation of people, goods, and services revealed that the poor condition of the road has resulted into delay in the movement of vehicle, which can also be expressed as add-travel time. With 65% of respondents to have identified delay in the movement of vehicle has a major effect, it therefore implies that alternative routes are taken due to the poor condition of the road, although, the alternative routes are longer in terms of distance, but faster when compared to the add- travel time on the Papalanto – Sagamu road, and also with low tendency of damage of vehicle at the end of the trip.

However, it is important to note that for the research, the delay in the movement of vehicle is a component of both the damage of vehicle and add-travel time, while the damage of vehicle is the significant damage done on the vehicle after a trip on the road. The low level of road crashes, as indicated in the analysis of table 3, is as a result of the very low frequency of vehicle plying the road, and the category of vehicle plying the road (that is, motorcycle). Road crashes on the road are inform of the collision of vehicle in the course of maneuvering due to the poor condition of the road, and not interms of high speed. Lack of road furniture, such as street light has made the road dangerous at night for users in the course of making trips at night.

On the issue of delay in the movement of vehicle, the consequences of add-travel time due to the poor condition of road is difficult to quantify in monetary term, as business transaction either on individual basis or corporate organization may collapse. Goods

deliveries are important functions expected of the road, as it serves as link to industrial outlets both at the micro and macro levels.

7.0 CONCLUSION AND RECOMMENDATIONS

The importance of road development/improvement in socio-economic development cannot be over emphasized. The road understudied is a major road of great significance, hence, the need to improve its present condition is imperative. Issues relating to road rehabilitation, provision of road furniture, and periodic maintenance are to be considered in order to make the road fulfil its expected function as a major corridor at both the national and international levels.

On this premise, a rehabilitation of the road is recommended, with high level of compliance to road construction standards. The rehabilitation of the road should consider adequate provision of road furniture of acceptable international standards, while proper monitoring of the project at the execution level should be given utmost priority. Road is a capital intensive project, but an infrastructure that can pay for itself if proper management is put in place. Hence, the construction of tollgate at the both end of the road will facilitate the introduction of the collection of toll fee, which its proper management will be a major financial source for the road maintenance.

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