



The Impact of Tricycle Operations as Public Transport in Ijede Area of Ikorodu, Lagos State, Nigeria

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ABSTRACT

This study examined the impact of tricycle operations as public transport in Ijede area of Ikorodu, Lagos State. To achieve this, the socio-economic characteristics of respondents within the study area, the operational characteristics of tricycle as an informal public transport, the service demand characterized of tricycle, and safety concern were examined. Analysis from the study revealed that majority of the tricycle operators were engaged in tricycle operation as a result of unemployment and meeting of family needs. The study further revealed that the deplorable and inadequate access road within the study area, and the activities of law enforcement agencies are major challenges confronted during operations due to extortion. Also, the problem of reckless driving of tricycle operators trying to evade arrest from union and governmental officials which mostly result to accidents was a major challenge. These result to high operational cost most visible in maintenance cost, dues paid to task force from local government, unions, touts and enforcement agencies. The inferential statistical result using Pearson correlation value is 0.721 while N which is the number of operators interviewed is 80. The significant value is 0.000, which is less than 0.05 the level at which we are testing the hypothesis. Therefore, we reject the null hypothesis and concluded that there is significant relationship between the number of days operators work per week and their involvement in accident. Finally, taking cognizance of the human, mechanical and environmental problems attributed to tricycle operations as public transport, the tricycle business has contributed positively to the society as its helps to reduce unemployment rate, crime reduction, safety and save travel time of the citizen from origin to destination and also contribute to the Nigerian Economy.

Keywords: Public Transport, Tricycle, Operators, Employment, Ikorodu.

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1. INTRODUCTION

Transportation can be described as a process of movement of people, goods and services from a point of origin to another point of destination (Okoko, 2006). Transport determines the structure and patterns of development, economic viability, environmental impacts, and maintenance of socially acceptable levels of quality of life. The importance of transportation in development cannot be over emphasized. Public transport can be defined as a system in which passenger or goods are been moved from one location in space to another be it private or public transport with the aim of monetary compensation. Public transport as an integral back bone of urban life is one of the factors which determine the form and socio-economic development of a city (Raji, 2012)



The importance of public transport stemmed from the fact that it provides mobility for those who cannot afford to buy a car and helps in creating and maintaining livable communities by relieving highway congestion and assuring long term sustainability in terms of resource consumption and the environment (Paul, 2001). Public modes of transportation are provided by either the Federal, State, Local government or Private. The first generation of public transport operators in Lagos came into existence shortly after Nigeria's political independence. These include the Isale Eko Bus services, which collapsed in 1976. Many more transport operators sprang up between 1970 and 1980. They include Mainlanders Transport Corporation, Alimosho Line and Ikeja Transport Corporation, which also collapsed because of: inadequate government financial support and qualified staff to manage their operations, political interference and uncontrolled competition with para-transit operators.

Predominately tricycle or three-wheeler or Napeb as popularly called is the major mode of public transportation used within Ijede Ikorodu. Its operation as a mode of public transport is faced with diverse problems which include inadequate and poor quality of infrastructures, mismatch between demand and supply to increased rate of accident. The problems are triggered by interrelated trends such as urban population growth; rapid, unplanned and uncoordinated growth of cities. Ijede, Lagos state has been experiencing huge population increase in the past four decades. This is due to increase in rural-urban migration and galloping urbanization in most developing countries. To this end, the paper tends to adopt the following objectives; examine the operational characteristics of tricycle as an informal public transport, assess the service demand characterized of tricycle as an informal public transport and finally to examine the safety concern and opinion of respondents on tricycle operation as a public transport in Ijede area of Ikorodu.

2. Tricycle in Context

One of the most viable modes of public transport in developing countries such as Nigeria is the three-wheeler. Three Wheelers are low horse-powered 2 or 4 stroke machines, which are approved to carry two adults in addition to the driver. They have a frame covered by canvas with a rear mounted engine and a motor cycle type of control. Three-Wheeler are seen in several Asian countries and are called by different names e.g., Auto-Rickshaws in India; Tuk-Tuks in Thailand and Trishaws or Three-Wheelers in Sri Lanka. In Nigeria, it is called Keke NAPEP or Keke Marwa because it was designed by the then Lagos State Military Administrator, Buba Marwa, as Poverty Alleviation Programme or Strategy for job creation particularly for unemployed youths in 2001 and this has made the name of the mode acceptable to members of the public.

The modal share of IPT varies across cities in Asia ranging from between 20% and 70% of the total public transport demand. The estimate for Manila (Philippines) was 70%, Jakarta (Indonesia) 50%, Kuala Lumpur (Malaysia) 40% and Bangkok (Thailand) 21% (Shimazaki & Rahman, 1996). In Buenos Aires, Microbus, a form of informal public transport mode is used for 54% of all trips and 75% of public transport trips (Dike, 2012). Barret (1985) reported that 50% of the trips made in Calcutta, 41% in Sao Paulo, 23% in Rio de Janeiro in 1980 were made through informal public transport. More specifically, in Sri Lanka, tricycle fleet comprises of an estimated 342,286 vehicles accounting for 15% of the active motor vehicle fleet and represented around 6% of the country's passengers' kilometers (Amal, Mahinda & Darshini, 2010).

Furthermore, India produces around 500,000 tricycles in a year and about 80,000 auto-rickshaws operate as public transportation in New Delhi, 250,000 in Mumbai and more than 100,000 in Ahmedabad (AEI, 2014). About one fifth of personal daily trips in India appear to use auto-rickshaws. In terms of transport demand for Tricycle, about 250,000 people use tricycles in their daily trips to work in Japan while around 8 million tricycles and other forms of cycles are used for public transport in Bangladesh (Replogle, 2004; Saleh, 2011).



In Nigeria, tricycle still accounts for a small proportion of daily trips. However, this means of transport is becoming a potential mode of transport in urban centres. Tricycles are taxi-like modes that rely on comparatively slow, light-weight vehicles that provide lower quality services than exclusive-ride taxis, albeit at considerably cheaper fares. In contrast to large vehicle services, they generally complement rather than compete with formal bus and rail systems (Cervero, 2000). Other certain attributes such as entrepreneurialism, small or ageing vehicles usage for operation, low performance service and high level of competition typical of para-transit modes are also peculiar to tricycle.

3. METHODOLOGY AND STUDY AREA (IJEDE, IKORODU)

3.1 Methodology

The methodology adopted for this study is both qualitative and quantitative statistical methods and were sourced from primary and secondary data. The study was carried out to examine the use of tricycle as a mode of public transportation in Ijede area of Ikorodu Lagos State. A total of 80 operators of tricycle respondents were sampled through questionnaires administration. Samples were chosen based on the four (4) (table 3.1) recognized registered tricycle parks (table 3.1) in Ijede. Each of the parks was given twenty (20) questionnaires each. Data were analyzed using descriptive statistics and Pearson Correlation was used to establish the relationship between number of days operators work per week, their involvement in accident and safety.

Table 3.1: Distribution of Questionnaire

	Operators
Itamaga Bus Stop	20
Gbaga junction	20
Elepe junction	20
Ijede Bus Stop	20
Total	80

Source: Authors Field Survey, (2019)

3.2 Study Area (Ijede, Ikorodu)

Lagos State is located in the south western geopolitical zone of Nigeria. It has five (5) divisions which are often called IBILE (Ikeja, Badagry, Ikorodu, Lagos Island and Epe). These are the zones which make up 20 local governments and 37 local council development areas. Ikorodu is one of the fastest growing areas in Lagos State. It is located in the north east of the State. It is also located along Lagos Lagoon and shares a boundary with Ogun State. It is situated approximately 36km north of Lagos. Ikorodu is bounded to the south by the Lagos lagoon, to the north by a boundary with Ogun State and to the east by Agbowa-Ikosi a town in Ikorodu division of Lagos State.

One of the major towns in Ikorodu is Ijede. Ijede as a community first had a taste of what it meant to be autonomous in modern administration in 1937 known as Ijede Native Authority with a District officer as the executive head. In 1952 under the defunct western region administration of late Chief Obafemi Awolowo, Ijede Local Council was deservedly gazetted. The situation remained until 1976 as Ijede Local Council which was merged with Ikorodu Local Government under the Military Government of General Olusegun Obasanjo. In 1980 during the administration of Governor of Lagos State, Chief Lateef Kayode Jakande, Ijede was carved out of Ikorodu as Ikorodu constituency II into Irepodun Local Government headed by Chief Amusa. It was during the administration of Gen. Ibrahim Babangida in 1985 that Irepodun Local Government was re-merged to Ikorodu Local Government.



However in 2003, Lagos State Governments under Senator Bola Ahmed Tinubu created additional 37 Local Council Development Area (LCDA) in addition to the existing 20 Local Government area in which Ijede LCDA is one. Ijede was carved out from the old Ikorodu Local Government. The Ijede LCDA consists of the following communities: Ijede, Egbin, Oke-Eletu, Ginti, Igbodu, Abule Eko, Igbopa, Ilupeju, Igbe Kapo, Igbe Ogunro, Igbe Oloja, Ayetoro, Ipankan, Iponmi, Ewu Owa, etc. Ijede LCDA is bounded in the East by Imota Local Development Council and in the North by Ikorodu North LCDA and in the West Ikorodu Central and Igbobo Bayakun Local Governments.

Presently, Ijede LCDA has 4 political wards namely Ward A, B, C and D. Ward A consists of Egbin, Ipankan, Ebute Olowo, while Ward B consists of Aledo, Oju Ayeye, Ayegbami, Etita, Oju Ogun, Itundesan, Oko Mabude. Ward C consists of Oke Oyinbo, Madan, Pacific, Welcome, Oko Ope, Igbe, While Ward D consist of Abule Eko, Igbopa, Oke Eletu, Gbodu, Igbodo Jabe, Ilupeju. Also, the population of Ijede Local Council Area is around 1,600,000 according to the 2006 census.

The people of Ijede are predominantly Ijebus but with other tribes like Igbo, Hausa and others residing in the community. Ijede Local Council Development Area has a lot of Tourist attractions, such as Odoro Spring Water, Lagos Lagoon. Ijede can also boast of many hotels and relaxation centers. In addition, there are 4 public primary schools and 1 secondary school with more than 80 private primary and secondary schools in Ijede as at today. Also, there exist public health centres (such as Ijede General hospital, Primary health centres at Oke-Eletu and Abule-Eko) and numerous privately owned hospital in the LCDA.

The Ijede people are traditionally into agriculture. Ijede LCDA could also boast of the biggest Power Station (Egbin Power Station) in the West African Sub region. The LCDA had been administered by the elected Chairmen, Executive Secretaries as well as Sole Administrator since its inception 14 years ago. In addition, Ijede has good arable land fertile enough to engage in massive mechanized farming as well as agricultural and agro allied businesses. For a serene environment, Ijede is one of the best places to look for comfort after a long busy and tedious working day to cool ones down. Also, relaxation centers within Ijede LCDA will be a memorable experience that will not be forgotten in a hurry. There is peace and tranquility in and around Ijede and the people are very accommodating.

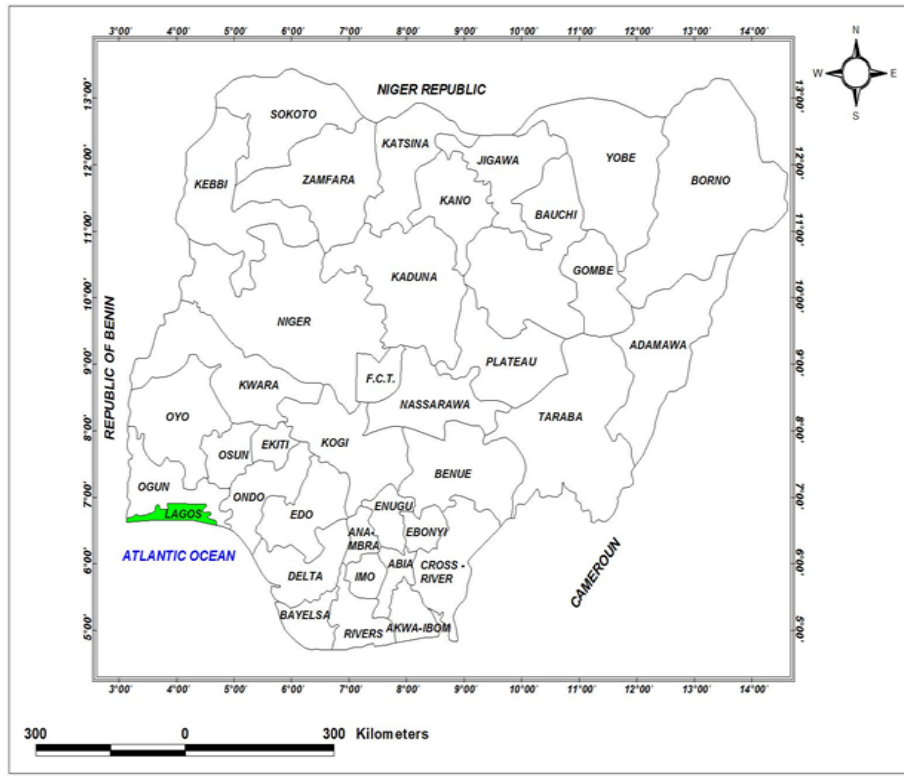


Figure 1: Map of Nigeria Showing Lagos State.



Figure 2: Map of Ikorodu showing Ijede
 Source: Google Map, 2019



4. RESULTS AND DISCUSSION

4.1 Demographic and Operational activities of Respondents

Analysis on the gender distribution in table 4.1 shows that out of 80 operators of tricycle, there is high proportion of male with 92.5% while 7.5% of the operators were female. The age distribution of respondents revealed that 2.5% is below 18 years old; 67.5% is between 18 years and 40 years old; 21.3% are between 41 and 60 years old; while 8.7% are above 61 years old. Significantly, majority of the operators of commercial tricycle services are between the age of 18 and 40 years old. Analysis of the education status of the respondent's shows that majority of the respondents possess secondary education status. That is, 52.5% of the commercial tricycle riders are secondary school graduate; the analysis further shows that 16.3% of the tricycle riders are tertiary education graduate, Furthermore, 13.7% of the commuters have no formal education; while 17.5% have primary education.

In addition, the study found out that majority of the tricycle rider in the study area own the tricycle which they are riding. 78.7% owns the tricycle they are riding while 21.3% responded that they are not the owner of the tricycle. Also, the study revealed that personal savings is the main source of fund used by the tricyclist to buy their tricycle; that is 47.5% of the respondents bought their tricycle from personal savings; 32.5% raised their finances from cooperative, 16.3% got their finances from loan, while 3.7% got their finances from other means such as gift from politicians and friends.

Again, the study shows that 58.7% of the respondents got their tricycles on hire purchase; while 41.3% are on daily, weekly or monthly repayment plan. Also, majority of the commercial tricyclist have acquired one skill or the other before joining the transport business. As shown in the table below, 52.5% of the riders had skilled occupation; 21.2% were unemployed; 3.8% were civil servant; while 1.3% were retrenched or retired. The table below also revealed that bad road is a major problem affecting the operation of tricycle within the study area with 97.5% of the respondents agreeing with the problem while 2.5% of the respondents stated that bad road is not really a problem. The respondents also acknowledged that the situation is worse off during rainy season.

Moreover, the study revealed that extortion from governmental agency is a major problem to contend with as they have to settle / give bribe to enhance and give them the opportunity to operate freely without disturbance on daily basis as each rider has a particular official he or she has to bribe on daily basis. All respondents (100%) agreed to this. Again, the study revealed that enforcement from government is not really a major problem to them but can only reduce the numbers of trips they make on daily basis. 66.8% of respondents had no problem with the government enforcement strategies while 33.2% of the operators disagreed stating that the enforcement is a problem to their operations within the study area.



Table 4.1: Demographic and Operational activities of Respondents

	Description		Freq.	%
1	Gender	Male	74	92.5
		Female	6	7.5
		Total	80	100.0
2	Age Distribution	Below 18	2	2.5
		18 years- 40 years	54	67.5
		41 years – 60 years	17	21.3
		61 years and above	7	8.7
		Total	80	100.0
3	Education Status	No Formal Education	11	13.7
		Primary Education	14	17.5
		Secondary Education	42	52.5
		Tertiary Education	13	16.3
		Total	80	100.0
4	Commercial Tricycle Ownership	Yes	63	78.7
		No	17	21.3
		Total	80	100.0
5	Main Sources of Finances used in acquiring the Tricycles	Personal Savings	38	47.5
		Co-operative	26	32.5
		Loan	13	16.3
		Other (Gift)	3	3.7
		Total	80	100.0
6	Agreement on the payment of tricycles by the commercial tricyclist	Hire Purchase	47	58.7
		Daily, Weekly, Monthly Balance	26	32.5
		No Response	7	8.8
		Total	80	100.0
7	Commercial Tricyclists' Previous Occupation before Joining the Business	Unemployed	34	42.5
		Skilled Acquired Job	42	52.5
		Civil Servant	3	3.8
		Retrenched/Retired	1	1.2
		Total	80	100.0
8	Bad Road	Yes	78	97.5
		No	2	2.5
		Total	80	100.0
9	Extortion by Police Officers	Yes	80	100
		No	0	0
		Total	80	100.0
10	Enforcement by government officials	Yes	55	66.8
		No	25	33.2
		Total	80	100.0
11	Union members harassment	Yes	80	100
		No	0	0
		Total	80	100.0
12	Operators' Involvement in Tricycle Accident	Yes	33	41.3
		No	47	58.7
		Total	80	100.0
13	Causes of Accident for Tricyclists Who Have Been Involved in Accident	Collided with a Vehicle	16	48.5
		Hit a Pedestrian	8	24.2
		Crash Alone	5	15.2
		Hit an Object	4	12.1
		Total	33	100.0
14	Number of Hours Commercial Tricycle Riders work in a Day	1-4 Hours	3	3.7
		5-8 Hours	28	35.0
		9-12 Hours	43	53.8
		13-16 Hours	5	6.2
		Above 17 Hours	1	1.3
		Total	80	100.0

Source: Authors Field Survey, (2019)



Furthermore, the study carried out shows that the union harassment is at the increase and it is a major problem stating that most of the union can just wake up and do whatever they want without anybody checkmating them. For example increasing ticketing fee and union leader's tricycle making several trips without queue. The respondents (100%) agreed on the subject matters. This study also found out that 41.3% of commercial tricycle riders have been involved in accident while 58.7% have not been involved in tricycle accident within the study area. Moreover, out of the 80 respondents only 33 tricyclists claimed to have been involved in a form of accident or the other. Collision with other vehicles is the main causes of accident for tricycle riders in the study area. As shown in the study, 48.5% of the respondents who were involved in accident collided with other vehicles; 24.2% hit pedestrians; 15.2% crashed alone, while 12.1% hit an object (s).

Meanwhile, to understand the factors that the determine the level of acceptance of tricycle as means of transportation in the study area, the number of hours commercial tricyclist work in a day was examined. Also, this helps to understand the availability as well as the reliability of the mode of transportation. As shown in the table 4.1, 53.8% of the commercial tricycle operators work between 9 and 12 hours in a day; 35% work between 5 and 8 hours in a day; 6.2% work between 13 and 16 hours; 3.7% works between 1 and 4 hours in a day; while 1.3% works above 17 hours. By implication, the level of time commercial tricycle riders are in operation in the study area, revealed that it is most likely that commercial tricycle will be available all day round.

4.2 Test of Hypothesis: An Examination of the Relationship between Number of Days Operators Work Per Week and Operators Involvement In Accident

In this section, the relationship between number of days operators work per week and their involvement in accident is examined. Pearson Correlation analysis is used to test the hypothesis which is formulated below. The results of the correlation is shown in table 4.2

Hypothesis One: There is no significant relationship between number of days operators work per week and their involvement in accident

Table 4.2 Correlations between number of days operators work per week and operators involvement in tricycle accident

		Number of days operators work per week	Operator's involvement in accident
Number of days operators work per week	Pearson Correlation	1	.721
	Sig. (2-tailed)		.000
	N	80	80
Operator's involvement in accident	Pearson Correlation	.721	1
	Sig. (2-tailed)	.000	
	N	80	80

Source: Author's Field Survey, 2019



From the tables above, we can see the results of the correlation analysis between number of days operators work per week and their involvement in accident. The Pearson correlation value is 0.721 while N which is the number of operators interviewed is 80. The significant value is 0.000, which is less than 0.05 the level at which we are testing the hypothesis. Therefore, we reject the null hypothesis and conclude that there is significant relationship between the number of days operators work per week and their involvement in accident.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

The desire of people to move between activity areas either regularly or occasionally at reasonable costs and time as well as with some assured level of safety and comfort makes transport one of the most pervasive activities in any society. Transportation is a key instrument for rapid national development. In Nigeria, the dwindling economic fortunes have affected virtually every sector of the economy including urban public transportation. In the study it was found out that most operators of tricycle business started as a last result because they do not have other opportunity so they are not well trained in the operation of the tricycle. Unemployment happen to be the major reason resolve by some operators to get into the tricycle business of which if there are other opportunity they would have long left the business.

Moreover, the bad road in the area is one of the major problems encountered by operators most especially during the rainy season in which other modes of transportation will avoid plying through the route, at this instance the users are left with no other alternative than to make use of tricycle which is safer and affordable for them. The reckless attitude of some tricycle rider is also a discouraging factor as well safety measure that is highly abused, but unfortunately the tricycle is the only readily available mode of public transportation in Ijede.

Based on the major findings in the study, the following recommendations are provided. Napeb or tricycle rider should endeavour to have their entire document in order to avoid police extortion and union official harassment, Operators should be guided to adhere to the required speed limit. Lastly, government needs to take a serious look at the deeper economic implications of the business with a view to ensuring that the country does not just become a dumping ground for Tricycle manufacturers in Asia but that the indigenous Nigerian economy makes the best of the international trade relationship.



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