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# **STREET TRADING ACTIVITIES AND ITS EFFECTS ON TRAFFIC FLOW: A STUDY OF IGANDO BUS-STOP IN LAGOS STATE**

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#### Abstract

Street trading activities provide daily service for the smooth functioning of a city which includes provision of jobs and reduction of unemployment. Although, the money generated from street trading is low and safety is generally poor. The problem arises when these activities tend to affect or even dictate the pattern of traffic flow. The street trading activities greatly affects the efficiency of traffic flow in the area. People display their goods along sensitive and busy routes. These in return, have several effects on the efficient movement of people and goods, trips take longer time, people often becomes victims of preventable accidents, pollution caused by noise generated by advertisement and traffic diversion. Igando bus stop, is located in Alimosho LCDA of Lagos. Therefore the objective of this paper was done carrying out a traffic count survey on the flow of traffic during the period of less street trading activities and vice-visa. Two basic types of data sources were used for the realization of the objectives of this paper. Purposive random sampling technique was used to collect the required information from the respondents in the study area. Findings derived from the study shows that activities of the traders have adverse effects on traffic flow in the study area and lack of car parking spaces within the market area and shopping centres have affected the flow of smooth traffic in that corridor.

Keywords: hawkers, infrastructure, market, pedestrian, traffic flow.

JEL Classification: R4

# I. Introduction

Market activities provide daily service for the smooth functioning of a city which includes provision of jobs and reduction of unemployment. Although, the money

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generated from this market is low bur generally reduce poverty level. The market activities greatly affects the efficiency of traffic flow in the area, people display their goods along sensitive and busy routes these in return, have several effects on the efficient movement of people and goods, trips take longer time, people often becomes victims of preventable accidents, pollution caused by noise generated by advertisement and traffic diversion. Particularly in Africa where the problem of market activities is relatively new unlike the situation in Asia, the presence of large number of street trading has now become a major issue (Kopoka, 2000; Menta, 2000).

### I.1 Aim

The aim of this research is to assess market activities and the challenges on traffic flow in Igando Bus-stop.

### I.2 Research objectives

- 1. To determine the relationship between patronage and traffic volume
- 2. To what extend those the loading /offloading contribute to Traffic volume
- 3. Is there is any relation nship between loading /offloading and speed

# I.3 Study Area

Igando is situated along Lasu-Iba expressway, located within Alimosho local government area. It is a place with very small population in the state. Towns and places near Igando include Ikotun, Akesan, Ewedogbon, Obadore, Lagos state university and Iyana Iba. Akesan.

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Figure 1- Map of the study Area

Source: Lagos state handbook 2016





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### I.4 Scope of study

The study focused on the study of market activities and traffic flow within the Igando bus stop of the Igando local council development area.

# II. Relationship between Market Activities and Traffic Flow

Traffic flow in urban centres is greatly affected by market activities. This resonates with the classical model of the informal sector which states that when the formal sector shrinks, the informal sector expands (Gibson & Kelley 1994). Commuters have developed incidental informal bus stops as exemplified in roads and streets across urban centres. Formal and semi-formal transport operators have become inefficient in terms of travel time and routing owing largely to the activities of the street traders. In most urban centres, there exists the police "euphoria" wherein police with their vans have embarked on a beast-like crackdown marauding on all roads market to enforce operational permits and other regulations.



Plate 1 showing a street hawker in the study area



Plate 2 Traffic build up as a result of Market



Plate 3 showing displays of food items very close the road



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# **III.** Research Methods

Primary data were used for this research. Data were obtained directly from sample population which is done by the administering of questionnaires and oral interviews. Sample size of Ninety questionnaires were administered to the market woman and the operator on that route in the study area in a purposive sampling technique used. Purposive sampling is a type of non- probability technique where the unit that are investigated are based on the judgement of the researchers.

# IV. Data analysis and presentation method

Descriptive analytical statistics techniques were used, regression was used to know the relationship of the first hypothesis, correlation was also used to determine he extend of the relationship while T- test analysis methods was use to know if there is a link among the indictors. Traffic count analysis was done to show the level at which street trading affects traffic flow in the study area.

S/N	Questions	SA	Α	U	D	SD
1.	Buyers buying goods at the market especially where traders display their wares at the major roads causes traffic delay.	51(57.3%)	24(26.9%)	3(3.4%)	7(7.9%)	4(4.5%)
2.	On-street trading reduces the width/carriage capacity of the road, which consequently impedes traffic flow.	38(42.7%)	30(33.7%)	3(3.4%)	11(12.4%)	7(7.9%)
3.	Lack of enough space at the market causes traders to seek customers at side of the road and as such causing traffic volume.	38(42.7%)	30(33.7%)	-	10(11.2%)	8(8.9%)
4.	Buyers buying goods mostly parked at the road side to acquire their goods.	43(48.3%)	31(34.8%)	3(3.4%)	5(5.6%)	7(7.9%)

**Table 1-** Responses on patronage (i.e. buyers purchasing goods)

Source: Researcher, field survey (2018)

The table 1 revealed that 84.2% agreed that buyers buying goods at the market especially where traders display their wares at the major roads causes traffic delay while



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12.4% disagreed. 76.4% of the respondents agreed that on-street trading reduces the width/carriage capacity of the road, which consequently impedes traffic flow while 20.3% disagreed. 76.4% of the respondents agreed that lack of enough space at the market causes traders to seek customers at side of the road and as such causing traffic volume while 20.1% disagreed. 83.1% of the respondents agreed that buyers buying goods mostly parked at the road side to acquire their goods while 13.5% disagreed. The least of the respondents could not decide.

S/N	Questions	SA	Α	U	D	SD
1.	Lack of enough parking space causes drivers to alight passengers at available space and this	37(41.6%)	35(39.3%)	3(3.4%)	9(10.1%)	5(5.6%)
2.	enhance traffic volume. Having no proper parking space at a market arena causes traffic delay (hold- up).	47(52.8%)	25(28.1%)	3(3.4%)	8(8.9%)	6(6.7%)
3.	Delay in loading and offloading of goods increases traffic volume	51(57.3%)	27(30.3%)	-	7(7.9%)	4(4.5%)
4.	There is no road pavement at most market places for pedestrian and such creates heavy traffic delay.	43(48.3%)	31(34.8%)	3(3.4%)	6(6.7%)	6(6.7%)
5.	Traffic volume increases due to unorganized market places.	31(34.8%)	34(38.2%)	3(3.4%)	15(16.8%)	6(6.7%)

Table 2- Responses on Traffic volume

Source: Researcher, field survey (2018)

The table revealed that 80.9% agreed that lack of enough parking space causes drivers to alight passengers at available space and this enhance traffic volume while 15.7% disagreed. 80.9% of the respondents agreed that having no proper parking space at a market arena causes traffic delay (hold-up) while 15.6% disagreed. 87.6% of the respondents agreed that delay in loading and offloading of goods increases traffic volume while 12.4% disagreed. 83.1% of the respondents agreed that there is no road pavement at most market places for pedestrian and such creates heavy traffic delay while 13.4%



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disagreed. 73% of the respondents agreed that traffic volume increases due to unorganized market places while 23.5% disagreed. The least of the respondents could not decide.

<b>S</b> /	Questions	SA	Α	U	D	SD
Ν						
1.	Loading and offloading of	40(44.9	35(39.3	-	9(10.1%)	5(5.6%)
	goods by trucks at the market place causes traffic delay.	%)	%)			
2.	Lack of parking lots has led to	40(44.9	34(38.2	2(2.2%)	7(7.9%)	6(6.7%)
	on-street loading and offloading of goods as well as	%)	%)			
	discharging of cargo and					
	passengers.					
3.	Lack of proper traffic control	49(55.1	27(30.3	-	9(10.1%)	4(4.5%)
	managementcausestruck/lorry drivers to load and	%)	%)			
	offload goods at any available					
	space and this causes heavy traffic volume.					
4.	Loading and offloading of	43(48.3	31(34.8	3(3.4%)	6(6.7%)	6(6.7%)
	goods by trucks at the market place affects the movement of	%)	%)			
	people.					
5.	Delay in loading and off-	31(34.8	30(33.7	3(3.4%)	15(16.8	10(11.2
	loading of goods increase traffic volume	%)	%)		%)	%)

Table 3 -	Responses	on Loading	and Offloading
I able 3 -	Responses	Ull Loaung	and Onloading

Source: Researcher, field survey (2018)

The table 3 revealed that 84.2% agreed that Loading and offloading of goods by trucks at the market place causes traffic delay while 15.7% disagreed. 83.1% of the respondents agreed that lack of parking lots has led to on-street loading and offloading of goods as well as discharging of cargo and passengers while 14.6% disagreed. 85.4% of the respondents agreed that lack of proper traffic control management causes truck/lorry drivers to load and offload goods at any available space and this causes heavy traffic volume while 14.6% disagreed. 83.1% of the respondents agreed that loading and offloading of goods by trucks at the market place affects the movement of people while 13.4% disagreed. 68.5% of the respondents agreed that Delay in loading and off-loading of



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goods increase traffic volume while 28% disagreed. The least of the respondents could not decide.

The table above shows that 84.2% agreed that lack of proper parking space at the market arena causes delay in loading and offloading of goods while 15.7% disagreed. 68.5% of the respondents agreed that the rate at which trucks/lorries load and offload goods is very slow while 28% disagreed. 85.4% of the respondents agreed that lack of proper traffic control management encourages illegal parking of trucks and as such affects traffic flow while 15.6% disagreed. 86.5% of the respondents agreed that the speed rate of loading and offloading of goods is very slow because there is no proper monitoring of trucks/cargo arriving at the market while 13.4% disagreed. The least of the respondents could not decide.

S/N	Questions	SA	Α	U	D	SD
1.	Lack of proper parking	40(44.9%)	35(39.3%)	-	9(10.1%)	5(5.6%)
	space at the market arena					
	causes delay in loading and					
	offloading of goods.					
2.	The rate at which	31(34.8%)	30(33.7%)	3(3.4%)	15(16.8%)	10(11.2%)
	trucks/lorries load and					
	offload goods is very slow.					
3.	Lack of proper traffic	48(55.1%)	27(30.3%)	-	9(10.1%)	5(5.6%)
	control management					
	encourages illegal parking					
	of trucks and as such					
	affects traffic flow.					
4.	The speed rate of loading	46(51.7%)	31(34.8%)	-	6(6.7%)	6(6.7%)
	and offloading of goods is					
	very slow because there is					
	no proper monitoring of					
	trucks/cargo arriving at the					
	market.					

<b>Table 4</b> - Responses on Speed rate	Table 4	-Responses	on Speed rate
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Source: Researcher, field survey, (2018)

## V. Hypothesis Testing

*H1:* There is no significant relationship between patronage (i.e. buyers purchasing goods) and traffic volume.

The Table 5 shows the correlation result between patronage (i.e. buyers purchasing goods) and traffic volume.



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		Patronage	Traffic volume
Patronage	Pearson Correlation	1	.803
	Sig. (2-tailed)		.001
	Ν	89	89
Traffic volume	Pearson Correlation	.803	1
	Sig. (2-tailed)	.001	
	Ν	89	89

Table 5- Correlations

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

The result of (r = .803) indicated that there is a high and positive correlation between buyers purchasing goods at the road side and traffic volume which is also significant because the p-value of 0.001 is lesser than the level of significant of 0.05. Therefore the null hypothesis is rejected and the alternative is accepted. This signifies that there is a significant relationship between patronage and traffic volume.

H2: Loading and offloading of goods have no effect on traffic volume.

М	lodel	R	R Square		Adjusted R Square	Std. Error of the Estimate	
1		$.709^{*}$		.502	.252		.44326
M	odel		Sum of Squares	df	Mean Square	F	Sig.
1	Re	gression	3.770	1	3.770	19.188	.000**
	Re	sidual	13.557	87	.196		
	To	tal	17.327	88			

Table 6- Model Summary

\*Dependent Variable: traffic volume\*\*Predictors: (Constant), loading and offloading

The model summary shows the extent to which loading and offloading enhanced traffic volume. The coefficient of determination (R2 = 0.502) shows that 50.2% of the variance recorded in traffic volume is contributed by loading and offloading of goods. This result is statistically significant because the p-value of the result (0.000) is less than 0.05 level of significance used for the study. This indicates that loading and offloading of goods has a significant impact on traffic volume. It indicates that loading and offloading of goods by truck /lorry drivers causes traffic volume in Lagos.



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		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2.358	.367		6.418	.000
	loading and offloading	.401	.092	.709	4.380	.000

\* Dependent Variable: traffic volume

The model signifies that a unit change in loading and offloading of goods increases traffic volume at the rate of 0.401. Therefore the null hypothesis was rejected while alternative hypothesis was accepted.

*H3:* There is no significant difference between loading and offloading of goods and the speed rate of doing so.

	Ν		Mean	Std. Deviation	Std.	Error Mean	
Loading & Offloading	88		2.5833	.26913		.03474	
Speed rate	88		2.6083	.19467		.02513	
			1	Test Value $= 0$			
						fidence Interval Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper	
Loading & Offloading	74.353	88	.000	2.58333	2.5138	2.6529	
Speed rate	103.787	88	.000	2.60833	2.5580	2.6586	

Table 8- One-Sample Test

The result of hypothesis one showed the mean difference of 2.583 (loading & offloading) and 2.608 (Speed rate) which signifies that there is a little difference between loading & offloading and the speed rate of doing so. The significance level of p value (0.000) which is lesser that p- value (0.05) used for this study indicated that there is a significant difference between loading & offloading and the speed rate of doing so.



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## VI. Conclusion

The existence of market activities should not only be viewed I n negative light but also seen as an integral part of the overall economic system and as such, an employment generator. Therefore in formulating policies to deal with informal sector market activities. much attention should be given to the future needs of the existing business as well as increasing demands of entirely new forms of activities. Planners and decision makers seem to be ill equipped with lack of adequate information and framework to express how the explanation of the past processes as well as current location patterns can be linked through to the provision of future controls. Readjustment of the existing situation is needed for effective implementation of any commercial planning policies. Based on the conclusion of this study, the following points are made: The government through the Lagos State Ministry of Physical Planning and Development authority should embark on structure planning for the study area within the context of the Lagos metropolitan plan .This action oriented plan will address the externalities of the poor agglomeration of markets as well as accessibility and traffic related problems including Socio-economic problems associated with it .Also effective policies should be made by the government to regulate all forms of street trading activities along Lagos roads for instance, compliance with the set back and marketing level should be regulated and controlled but hawking on the highway should be banned due to the risk hawkers are subjected to and the negative roles it play in traffic delay.

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