

Analysis of the Impact of Religious Activities on Traffic Flow along Mowe-Ibafo Axis of Lagos – Ibadan Expressway

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Abstract

The increase in the number of religious centres as well as that of worshippers in Nigeria is alarming and unprecedented and it has also come with attendant problems; part of which is the degradation of the environment and more importantly traffic congestion. This paper examines the impact of religious activities on traffic flow and the implication for environmental sustainability along Mowe-Ibafo axis of Lagos – Ibadan Expressway. Using perceptual view of respondents generated through primary data of structured questionnaires as well as traffic count along the route, findings emanating from the study show that religious activities along this route have had adverse effects on the area with severe negative effect on traffic flow pattern as well as sustainable development. Empirical result generated also shows that the volume of traffic is a major factor along the axis but type of vehicle is not a major determinant of traffic flow in the study area. The study observed non-existing abatement strategies for curbing and coping with the problems and thus suggest solutions towards ameliorating traffic flow which include strict enforcement of traffic rules and regulations in the area which would involve law enforcement agents as well as collaboration with the religious organization along the axis in maintaining traffic flow and preventing congestion.

Keywords: Religious Activities, Environment, Traffic Flow, Sustainable Development.

1.0 Introduction

It is commonly agreed by researchers that unlike many other problems, urban transportation problems promptly manifest in the form of traffic congestion, delay, accidents, parking difficulties and environmental pollution (Aderamo, 2012). As traffic volumes and congestion grows on highway and urban roadway, freight and delivery service operators become increasingly challenged to maintain dependable and reliable schedules. This affects supply chain and truck dependent business, both of which are increasingly important for both public policy and private sector operator. Many scholars who worked on urban transport problems in Nigeria have identified congestion as the most serious. Cities are locations having a high level of accommodation and concentration of economic activities and are complex spatial structures that are supported by transport systems (Rodrigue, 2009). The most important urban transport problems take place when transport systems for a variety of reasons cannot satisfy the numerous requirements of urban mobility. All these result in congestion and environmental problems. Among the most notable urban transport problems are traffic congestion and parking difficulties; longer commuting; public transport inadequacy; difficulties for non-motorised transport, less of public space, environmental impacts, energy consumption and accident dynamics. Ogunsanya, (2006) opined that factors working against free flow of traffic in metropolis can be categorized into physical, human and institutional matrix. He also observed that increasing use of automobiles at a proportion, which clearly exceeds the capacity of existing road network, makes traffic congestion a prevalent experience of road users. He therefore concluded that the hidden cost of traffic congestion manifest in form of environmental pollution, accidents etc. The proliferation of religious centres along Mowe_Ibafo Axis of Lagos –Ibadan expressway is alarming and their activities have had adverse effects on traffic flow in the area. This study however, examines the activities of main religious centres on the axis which are The Redeemed Christian Church of God (RCCG), Deeper Life Bible Church, Nasrul Llahi-il Fathi Society of Nigeria (NASFAT) and Mountain of Fire and Miracles Ministry (MFM).

Kalland (2002) assert that some religions have no relation with environmentally ethical behaviour and go on to suggest that some religions actually encourage humans towards environmental destruction while Fowler (2003) believe that it is the interpretation of religions that causes environmental behaviour to be positive or negative towards the environment. However, majority of religious institutions are not fully aware of the environmental problems inherent in their activities hence this is the cause of traffic congestions in our society nowadays.

The environmental effects of proliferation of churches continued to be a major concern to all and particularly those in the mainstream of environmental protection. So disturbing has it become that analysts begin to think of the need for a legal framework to tackle the menace, (Adesanya 2011). Usually at the programmes of the religious organisation along this axis, congestion is always tensed and traffic flow is always impeded and has actually caused a lot of nightmares to motorists and passengers. Not many studies have used quantitative method

in explaining the relationship between religions and environmental behaviour. The reason is probably due to religions being seen as providing concerns towards nature generally but not in terms of specific behaviour and in Nigeria case so much importance is attached to religion.

According to Ogidi (1997), Nigeria is a country with easily the largest number of churches per capital in the world while Fayomi (1993) also described Nigeria as a fertile soil for the growth of independent churches. Studies such as Mainieri et. al.,(1997); Oom Do Valle et. al., (2005); Thogersen, (2000) show generally that environmental attitudes or concerns do not highly correlated with specific environmentally ethical behaviour while Shrum et.al., 1994 shows that only specific environmental attitudes or concerns are highly correlated with specific environmentally ethical behaviour.

2.0 THE STUDY AREA

The study was carried out along Lagos-Ibadan Expressway which runs in a north-west direction from Lagos State towards Ogun State having a distance of 32km stretching towards Ibadan, Oyo State and ending at Sagamu interchange in Ogun State. The study area is located between latitude 60 44' north and longitude 30 25' east of Isheri in Lagos State and latitude 60 54' north and 30 7' east of Sagamu interchange. The major flashpoints of the study i.e Redemption camp is located at Mowe a peri urban area; Mountain of Fire and Miracle Ministry camp is located at km12 at Ibafo axis; Deeper Life Bible Ministry camp is located at km 15 and NASFAT camp is located at km 16 at Ibafo which is also a peri urban area along the axis.

3.0 Materials and Methods

This study was conducted empirically using a combination of both primary and secondary data. Primary data were collected through the use of questionnaires which was administered on the commuters during the programmes of the four religious centres earlier identified i.e The Redeemed Christian Church of God (RCCG), Deeper Life Bible Church, Nasrul Llahi-il Fathi Society of Nigeria (NASFAT) and Mountain of Fire and Miracles Ministry (MFM) in order to solicit their opinion on problems encountered during their programmes which have impact on traffic flow along this axis, a total of two hundred (200) questionnaires were administered in all. Traffic count/survey which was done with the assistance of 4 field officers who had earlier been trained about the task was also carried out to obtain information on the volume of traffic and types of vehicles at interval of 1 hour during the different programmes of these organizations i.e 5-6pm, 6-7pm, 7-8pm and 8-9pm on both sides of the road. Data collected were analyzed using basically descriptive statistical technique. An in-depth review of relevant literatures on the subject of impact of effect of religious activities on the environment and traffic flow in particular was carried out, information from previous research and extraction from published and unpublished text book, journal articles and internet materials were carried out. Information obtained from these exercises was treated as secondary information.

4.1 Respondents' View on impact of Religious Activities on Traffic flow

4.1.1 Gender distribution of Respondents

Table 1 shows that majority of the respondents are male

Table 1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	64	80.0	80.0	80.0
	Female	16	20.0	20.0	100.0
	Total	80	100.0	100.0	

Source: Field Survey, 2014

4.1.2 Marital Status of Respondents

Table 2 shows that majority of the respondents are married while another major category are single.

Table 2: Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	39	48.8	48.8	48.8
	Single	30	37.5	37.5	86.3
	Divorced	6	7.5	7.5	93.8
	Widowed	5	6.3	6.3	100.0
	Total	80	100.0	100.0	

Source: Field Survey, 2014

4.1.3 Educational Qualification of Respondents

Table 3 shows that majority of the respondents have tertiary education and have acquired one form of education or the other.

Table 3: Educational Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary Education	11	13.8	13.8	13.8
	Secondary Education	13	16.3	16.3	30.0
	Tertiary Education	34	42.5	42.5	72.5
	Vocational	22	27.5	27.5	100.0
	Total	80	100.0	100.0	

Source: Field Survey, 2014

4.1.4 Age Bracket of Respondents

Table shows that respondents of different age grade took part in the survey

Table 4: Age Bracket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 20 years	19	23.8	23.8	23.8
	Between 21-40 years	21	26.3	26.3	50.0
	Between 41-50 years	20	25.0	25.0	75.0
	Over 60 years	20	25.0	25.0	100.0
	Total	80	100.0	100.0	

Source: Field Survey, 2014

4.1.5 Frequency of plying the Mowe –Ibafo Axis

Most of Respondents ply the axis more often

Table 5: Frequency of plying the road

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Often	28	35.0	35.0	35.0
	Very Often	30	37.5	37.5	72.5
	Less Often	22	27.5	27.5	100.0
	Total	80	100.0	100.0	

Source: Field Survey, 2014

4.1.6 Types of Vehicles plying the axis

Table 6 shows that various type of vehicles ply the axis

Table 6: Type of vehicles

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Car	30	37.5	37.5	37.5
	Bus	15	18.8	18.8	56.3
	Truck	12	15.0	15.0	71.3
	Lorry	8	10.0	10.0	81.3
	Van	6	7.5	7.5	88.8
	Tanker	4	5.0	5.0	93.8
	Container	5	6.3	6.3	100.0
	Total	80	100.0	100.0	

Source: Field Survey, 2014

4.1.7: Respondents' opinion about traffic

Majority of the respondents were of the opinion that they experience traffic on this axis during religious activities

Table 7: Respondents' opinion about traffic

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	74	92.5	92.5	92.5
	No	6	7.5	7.5	100.0
	Total	80	100.0	100.0	

Source: Field Survey, 2014

4.1.8 Respondents' opinion on major cause of traffic congestion along the axis

Respondents' opinion about the cause of traffic congestion in the area differs and it ranges from bad road, the ongoing road construction, religious activities. Other opinions according the respondents include poor traffic management, impatient on the part of drivers amongst others.

Table 8: Major cause of traffic congestion along this road

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bad Road	10	12.5	12.5	12.5
	Road Construction	21	26.3	26.3	38.8
	Heavy Vehicles	17	21.3	21.3	60.0
	Programmes of Religious organisations	24	30.0	30.0	90.0
	Others	8	10.0	10.0	100.0
	Total	80	100.0	100.0	

Source: Field Survey, 2014

4.2 Hourly Traffic Count along the axis during religious programmes

Traffic count along the axis was done to know the number of vehicles plying the road during any religious activities of these organisations, the study shows that the Redeemed Christian Church of God generate more traffic during their programmes more than any other religious organisations under study contributing 50% of the total traffic generated with other organisations, Mountain of Fire and Miracle Ministry contributing 39%, Nasrul Llahi-il Fathi Society of Nigeria (NASFAT) contributed 7% while Deeper Life Bible Church contributed 4%. The study further shows that Cars had greater volume of 51% amongst other vehicles plying the road; buses had 46%; Lorries generated 2%; Tankers had 0.6% and Containers generated 0.2%. So also, the hourly traffic shows that traffic is higher between the hours of 7-8pm during these religious organisations programmes accounting for 36% of the total traffic generated, the hour between 6-7pm also account for 28% and between 8-9pm 20% traffic

was generate while the hour between 5-6pm account for 16% of the total traffic generated.

4.2.1 Total Hourly traffic count along Mowe – Ibafo during Redeemed Christian Church of God (RCCG) Programme

Table 9 shows the total hourly traffic count along Mowe –Ibafo axis of Lagos-Ibadan expressway during Redeemed Christian Church of God (RCCG) Programme, it shows vividly that cars generate the highest volume of traffic more than all other vehicles and that traffic is more pronounced between 7-8pm

Table 9: Total Hourly traffic count along Mowe – Ibafo during Redeemed Christian Church of God (RCCG) Programme

Period	Cars	Buses	Lorries	Vans	Tankers	Containers	Total
5-6pm	1718	1678	107	66	122	56	3747
6-7pm	3436	3356	86	58	76	65	7077
7-8pm	4295	4195	78	12	77	106	8763
8-9pm	2577	2517	42	9	32	45	5222
Total	12026	11746	313	145	307	272	24809

Source: Field Survey, 2014

4.2.2 Total Hourly traffic count along Mowe – Ibafo during Mountain of Fire and Miracle Ministry (MFM) Programme

Table 10 shows the total hourly traffic count along Mowe –Ibafo axis of Lagos-Ibadan expressway during Mountain of Fire and Miracle Ministry (MFM) Programme, it shows vividly that cars generate the highest volume of traffic more than all other vehicles and that traffic is more pronounced between 6-7pm

Table 10: Total Hourly traffic count along Mowe – Ibafo during Mountain of Fire and Miracle Ministry (MFM) Programme

Period	Cars	Buses	Lorries	Tankers	Containers	Total
5-6pm	1586	1277	89	28	16	2996
6-7pm	2478	2456	66	33	23	5056
7-8pm	3766	3601	19	23	19	7428
8-9pm	1622	1817	4	10	8	3461
Total	9452	9151	178	94	66	18941

Source: Field Survey, 2014

4.2.3 Total Hourly traffic count along Mowe – Ibafo during Nasrul Llahi-il Fathi Society of Nigeria (NASFAT) Programme

Table 11 shows the total hourly traffic count along Mowe –Ibafo axis of Lagos-Ibadan expressway during Nasrul Llahi-il Fathi Society of Nigeria (NASFAT) Programme, it shows vividly that cars generate the highest volume of traffic more than all other vehicles and that traffic is more pronounced between 6-7pm

Table 11: Total Hourly traffic count along Mowe – Ibafo during Nasrul Llahi-il Fathi Society of Nigeria (NASFAT) Programme

Period	Cars	Buses	Lorries	Tankers	Containers	Total
5-6pm	478	211	76	12	9	786
6-7pm	809	123	53	16	12	1013
7-8pm	753	201	12	3	6	975
8-9pm	372	69	23	4	2	470
Total	2412	604	164	35	29	3244

Source: Field Survey, 2014

4.2.4 Total Hourly traffic count along Mowe – Ibafo during Deeper Life Bible Church Programme

Table 12 shows the total hourly traffic count along Mowe –Ibafo axis of Lagos-Ibadan expressway during Deeper Life Bible Church Programme, it shows vividly that cars generate the highest volume of traffic more than all other vehicles and that traffic is more pronounced between 5-6pm

Table 12: Total Hourly traffic count along Mowe – Ibafo during Deeper Life Bible Church Programme

Period	Cars	Buses	Lorries	Tankers	Containers	Total
5-6pm	342	157	99	29	19	646
6-7pm	234	189	123	33	12	591
7-8pm	129	111	114	12	9	375
8-9pm	99	210	108	9	6	432
Total	804	667	444	83	46	2044

Source: Field Survey, 2014

Empirically, the study shows that there is significant relationship between the volume of traffic and location; in addition, there the study also shows that there is significant relationship between type of vehicles and volume of traffic but the relationship between location and type of vehicles is insignificant at 0.05% level of

significance. This connotes that the volume of traffic is a major factor along the axis but type of vehicle is not a major determinant of traffic flow in the study area as shown in table 13 below.

Table 13: Correlation Analysis of relationship between Volume of Traffic, Location and Type of Vehicles

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Location & Traffic Count	20	-.442	.051
Pair 2 Type of Vehicle & Traffic Count	20	-.603	.005
Pair 3 Location & Type of Vehicle	20	.000	1.000

Source: Field Survey
 Tested at 0.05 level of significance

5.0 Conclusion and Recommendation

Emanating from the study are the fact that traffic generated during the Redeemed Christian Church of God (RCCG) programme is more pronounced than other religious organisations examined in the course of this study, this may be due partly to the fact it has more followership than any other religious organization in Nigeria (Adesanya, 2011), so also the volume of cars plying this route during religious programmes is much higher than other vehicles, this is due to the fact that most people wants to enjoy comfortability when coming for the programme and that people come directly from their various places of work whenever there is programme and that traffic is always very high between 7-8pm during the programmes of these religious organisations also partly due to the closing hour of most people coming for the programme.

The study however recommends joint collaborative efforts between these religious organisations and traffic enforcement agencies to ensure free flow of traffic during these programmes, so also, these organisations should be compelled to construct parking spaces for their members, provision of parking guidance system that will also cater for effective parking of vehicle during the programmes. They should also be encouraged to make available mass transit buses for their members to reduce too much vehicles on the road. However, Strict enforcement of traffic rules and regulations in the area which would involves law enforcement agent to be compelled to do the works and more elements of efficiency and submissiveness in which vehicle found on illegal traffic routes should be punished according to the rules of law is highly recommended.

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APPENDIX

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Location	2.5000	20	1.14708	.25649
	Traffic Count	2421.7000	20	4267.63037	954.27116
Pair 2	Type of Vehicle	3.0000	20	1.45095	.32444
	Traffic Count	2421.7000	20	4267.63037	954.27116
Pair 3	Location	2.5000	20	1.14708	.25649
	Type of Vehicle	3.0000	20	1.45095	.32444

Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Location - Traffic Count	-2419.20	4268.13724	954.38450	-4416.75	-421.650	-2.535	19	.020
Pair 2	Type of Vehicle - Traffic Count	-2418.70	4268.50473	954.46667	-4416.42	-420.978	-2.534	19	.020
Pair 3	Location - Type of Vehicle	-.50000	1.84961	.41359	-1.36564	.36564	-1.209	19	.242