

CONTRIBUTION OF ROAD TRANSPORTATION TO ENVIRONMENTAL DEGRADATION IN NIGERIAN URBAN CENTERS : A CRITICAL ANALYSIS

BY

PROF (MRS) P.C. ONOKALA
Department of Geography,
University of Nigeria, Nsukka.

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I INTRODUCTION

- Increasing population growth and rapid urbanization in major cities of the world and in Nigeria in particular
- Increased road construction activities in Nigeria
- Many urban roads were constructed during the colonial era

I INTRODUCTION (Cont'd)

- Increased use of road transportation since railway and roads are facing various problems
- Rising car population in Nigerian cities
- Increased environmental degradation in Nigerian
- Therefore, rising problem of environmental degradation contributed by road transportation in Nigeria, especially in the urban centers

Population of Major Urban Centers in Nigeria

CITY	POPULATION
Lagos	7,937,932
Kano	3,848,885
Ibadan	3,078,400
Kaduna	1,652,844
Port Harcourt	1,320,214
Benin City	1,051,600
Maiduguri	1,044,497
Zaria	1,018,827

Source : Nigeria in Wikipedia, the free encyclopedia (2008).

Also available at en.wikipedia.org as at 6th April, 2008.

II. GENERAL OVERVIEW ON TRANSPORTATION AND ENVIRONMENTAL DEGRADATION

- Road transport is the largest source of pollution from transportation
- Land use effect of the road network infrastructure
- WHO and UNEP have tried to alert both developed and developing countries about the environmental issues associated with the development of the road transport industry
- Various responses at different levels so Nigeria needs to respond to UNCED's Agenda 21

III ROAD TRANSPORTATION AND ENVIRONMENTAL DEGRADATION IN DEVELOPING COUNTRIES WITH SPECIAL EMPHASIS ON NIGERIA

- Developing countries, like Nigeria, do not have well articulated National Transport Policy
- Developing countries, especially their cities, face acute problem of air pollution
- Atmospheric lead levels had risen more in Nigeria than in other African countries, in the last 5 years
- Nigeria has not tried to strike a healthy balance between her development objectives and a wholesome environment
- Former FEPA and the current Federal Ministry of Environment have not made any significant impact on the environmental degradation attributed to road transport in Nigerian cities

IV POSITIVE IMPACT OF ROAD TRANSPORTATION ON THE ENVIRONMENT ON NIGERIAN CITIES

- Mobility of the urban dwellers would have been impossible without road transportation
- Commodity movement within the cities
- Opportunity for waste disposal
- Aesthetic Effects

V NEGATIVE IMPACT OF ROAD TRANSPORTATION ON THE ENVIRONMENT IN NIGERIAN CITIES

- Road construction
- Urban land use severance
- Traffic congestion
- Air Pollution
- Noise Pollution
- Water Pollution
- Parking Problems
- Road Traffic Accidents
- Abandoned Scrap Vehicles

Percentage Contributions of the Transport Sector to Man-made Emission in Nigeria by 1998.

	NIGERIA	LAGOS STATE	U.K.	THE NETHERLANDS
CO ₂	40.81	45.65	N/A	N/A
CO	82.80	86.58	85	70
NOX	58.60	61.31	45	54
SO ₂	97.74	26.91	5	N/A
VOC	21.97	98.77	N/A	N/A
N ₂ O	77.06	40.40	N/A	N/A
PM	77.02	83.41	N/A	N/A
Pb	97.76	100.00	N/A	N/A

Source: Ogunbodede, F. (2004) "Urban Transport and the Environment" in Perspectives on Urban Transportation in Nigeria, Published by NITT, Zaria. P.110

VI SUGGESTIONS FOR REDUCING THE NEGATIVE EFFECTS OF ROAD TRANSPORTATION ON ENVIRONMENTAL DEGRADATION IN NIGERIAN CITIES

- Mandatory EIA
- Intermodal Coordination
- Use of Non-Motorized Transport
- Telecommunication
- Regulation of imported vehicles
- Traffic Restraint Methods

VI SUGGESTIONS FOR REDUCING THE NEGATIVE EFFECTS OF ROAD TRANSPORTATION ON ENVIRONMENTAL DEGRADATION IN NIGERIAN CITIES (Cont'd)

- Use of Transport Infrastructure
- Use of Mass Transit
- Bus Priority
- Traffic Education
- Regular post-project monitoring of road projects
- Rehabilitating of borrow pits from road construction
- Implementation and Enforcement of the National Policy on the Environment

VII

CONCLUSION

- Urban centers in Nigeria should be made more livable by reducing that adverse effects of road transportation on the environment in the cities
- More research is needed in this direction

End of Presentation

- Thank you for listening