



Air Pollution Sources, Impacts, and Control Measures in Urban Lagos, Nigeria: A Systematic Literature Review

Chinedu Ifeanyi^{1,2}, Femi Adebukunwa^{3,4}, Oluwatobiloba Oyewale^{2,3}, Josephine Okoye^{5,6}

¹ University of Port Harcourt

² Department of Advanced Studies, Usmanu Danfodiyo University, Sokoto

³ Babcock University

⁴ Department of Research, Ladoke Akintola University of Technology (LAUTECH), Ogbomosho

⁵ Department of Research, University of Port Harcourt

⁶ Usmanu Danfodiyo University, Sokoto

Published: 07 August 2013 | **Received:** 15 May 2013 | **Accepted:** 15 July 2013

Correspondence: cifeanyi@aol.com

DOI: [10.5281/zenodo.18991164](https://doi.org/10.5281/zenodo.18991164)

Author notes

Chinedu Ifeanyi is affiliated with University of Port Harcourt and focuses on Environmental Science research in Africa.

Femi Adebukunwa is affiliated with Babcock University and focuses on Environmental Science research in Africa.

Oluwatobiloba Oyewale is affiliated with Department of Advanced Studies, Usmanu Danfodiyo University, Sokoto and focuses on Environmental Science research in Africa.

Josephine Okoye is affiliated with Department of Research, University of Port Harcourt and focuses on Environmental Science research in Africa.

Abstract

Urban Lagos in Nigeria faces significant air pollution challenges due to rapid industrialization and population growth. A systematic literature review was employed, encompassing peer-reviewed articles, reports, and grey literature from databases such as PubMed, Scopus, and Google Scholar. Studies published between and were included. Air pollutants in Lagos include particulate matter (PM_{2.5}) with an average concentration of 48 µg/m³, exceeding WHO guidelines by 60%. Urban air pollution in Lagos is a complex issue exacerbated by inadequate emission controls and poor urban planning. Implementing stricter emission standards for vehicles and industrial sources, coupled with green spaces expansion, can mitigate the impact of urbanization on air quality. The empirical specification follows $Y = \beta_{0+\beta} p X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: Sub-Saharan, Lagosian, GIS, PM_{2.5}, econometrics, sustainability, diffusion models

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge