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Oluwabusolami Ojo, Victor Sokari

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Oluwabusolami Ojo & Victor Sokari

**ENVIRONMENTAL NON-
GOVERNMENTAL
ORGANISATIONS, RESPONSE
ACTIONS AND SOOT
POLLUTION CONUNDRUM
IN PORT HARCOURT,
RIVERS STATE**



IFRA-Nigeria

WORKING PAPERS SERIES

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This paper is part of a **publication series of 4 IFRA-Nigeria working papers (86, 87, 88, 89)** resulting from the one-day roundtable “Urban Lives & Environmental Changes” organized *by and for* early-career researchers, held at the University of Lagos on May 10th, 2022. This event was co-organized by IFRA-Nigeria and the Center for Housing and Sustainable Development at the University of Lagos.

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Ọlúwàtóbílobá Adéwùnmí (PhD Student in Sustainable Urbanization, Centre for Housing and Sustainable Development, University of Lagos),

Rémi Jenvrin (PhD Student in Geography, UMR 8586-Prodig, Université Paris 1 Panthéon-Sorbonne, CNRS),

Damilola Odekunle (PhD Student and Lecturer, Department of Urban and Regional Planning, University of Lagos) and,

Juliette Reflé (Research Associate and Research Project Manager, IFRA-Nigeria, University of Ibadan)

supervised by

Dr Vincent Hiribarren (Director, IFRA-Nigeria, University of Ibadan) and,

Prof. Taibat Lawanson (Department of Urban and Regional Planning, Co-Director Centre for Housing and Sustainable Development, University of Lagos).



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Environmental Non-Governmental Organisations, Response Actions And Soot Pollution Conundrum In Port Harcourt, Rivers State

Authors

Oluwabusolami Ojo, M.Sc. in Political Science from Obafemi Awolowo University, Ile Ife, Nigeria.

ORCID ID: <https://orcid.org/0000-0003-1629-195X>

Email: oluwabusolamiojo@gmail.com

Victor Sokari, Lecturer, Department of Political Science, Niger Delta University, Wilberforce Island, Nigeria.

ORCID ID: <https://orcid.org/0000-0001-9013-9361>

Email: sokarivictor777@gmail.com

Abstract

Environmental Non-Governmental Organisations (ENGOS) in contemporary global formation have gradually developed into an important force in promoting quality environmental governance and advocacy. This has been linked to their growth, broad range of experience, expertise, and influence on issues of public concern. However, how this narrative has affected the emergence of pervasive soot pollution in Port Harcourt, Nigeria, needs proper documentation. This study examines the response of ENGOS to mitigation-adaptation awareness advocacy for urban dwellers amidst soot pollution conundrum in Port Harcourt, Nigeria. In the context of urban collectives and their interaction with a changing environment, the study explores ENGOS' response to mitigation-adaptation awareness designs and implementation in Port Harcourt. A concurrent mixed-method design using questionnaires and key informant interviewees

(KIIs) was employed to collect relevant data from seven purposively selected ENGOs in Port Harcourt, and six officials from the Rivers State Ministry of Environment, Rivers State Environmental Sanitation Authority, and the River State Ministry of Health. Findings suggest that, as a result of the permeating condition of soot pollution in Port Harcourt, ENGOs made efforts to design and implement different advocacy strategies including collaborations with media outfits, international organisations, and government institutions. However, these mechanisms are not effective enough, given their narrow scope in design and implementation. The study concluded that defectiveness is caused by inadequate government/public support which appears in the areas of security, knowledge sharing, and research. Other challenges include inadequate funding, a poor trust system, and excessive bureaucratic bottlenecks in accessing foreign assistance.

Keywords: ENGOs Soot Pollution Urban Dwellers Mitigation-Adaptation Port Harcourt

Introduction

Air pollution has over the years emerged as a major environmental and health threat to people around the world with more than 80% of urban dwellers exposed to air quality levels that exceed the World Health Organisation's (WHO) guidelines, at 94%. This number is above the 72% Sub-Saharan Average (Ewubare, Agbugba, and Kpaden, 2021; Quarmby, Santos, and Mathias 2019). Poor air quality caused by pollution of the atmosphere has been linked to environmental degradation and a worsening of climate change's harmful effects (Gemmer and Bo, 2013). As a result, epidemiological studies (Heft-Neal, et al 2018; Brainard, 2018; Payne-Sturges et al 2019; and Lelieveld, et al 2018), have found links between poor air quality and a plausible increase in the burden of cardiopulmonary dysfunctions, increased hospitalisation, cancers, and other systemic and reproductive morbidity and mortality, as well as a reduction in life expectancy in both children and adults, with air pollution accounting for over 7 million annual deaths worldwide (World Health Organisation 2016).

Disproportionately, because of rapid urbanisation and weak pollution control mechanisms developing countries have been highly affected by air pollution (Jack and Zibima, 2020). In Nigeria, this situation also characterise Port Harcourt, the capital of Rivers State. Port Harcourt has an estimated population of 1,148,665

people and occupies an area of 21,850 sq. km (Worldometer 2022, and Okonkwo, Okpala, and Opara, 2014). Its industrial hub characterisation and rapid population growth, caused by rural-urban migration as well as its host to different oil and gas multinational firms make it susceptible to different forms of air pollution. According to Ewubare, Agbugba, and Kpaden, (2021:82), since the fourth quarter of 2016 the heavy emission of soot pollution containing Particulate Matter (PM_{2.5}) has plagued the city of Port Harcourt with its corollary adverse health consequences on most especially children (due to their premature respiratory organs) and the elderly. Aside from the negative intricate health effect and carcinogenicity of the soot, its economic impacts have caused relative hardship to residents of Port Harcourt.

While the adverse effect of soot pollution has been averred to be widespread across Port Harcourt and its environs (Yakubu, 2017), the pertinent questions raised are what responses have non-state actors such as Environmental Non-Governmental Organisations (ENGOS) made in terms of mitigation-adaptation advocacy as urban dwellers interact with a soot polluted environment in Port Harcourt? What challenges do they face while performing their roles? The activities of ENGOS just like other Civil Society Organisations (CSOs) and Grassroot Support Groups (GSGs) are similar, given, their general objective of advocating for the benefit of human welfare and the betterment of society, however, they are of particular relevance to this study as supported by Liu *et al* (2018), that ENGOS have become local and global think tanks that offer ecological footprint accounting tools to guide policy decisions in a world with limited resources.

The extant literature on soot pollution in Port Harcourt and its environs exhaustively examines environmental public health impacts and coping strategies (Jack and Zibima, 2020), awareness and impact of black soot on selected food vendors (Ewubare, Agbugba, and Kpede, 2021), government's interventions towards air quality using air pollution policy accountability framework (Kane et al, 2021) and preliminary air quality index estimates of particulates concentration in Port Harcourt during soot incidents (Edokpa and Ede, 2019). However documented studies on the mitigation-adaptation actions of ENGOS to soot pollution in Port Harcourt remain inadequate. This study intends to expand on these ENGOS actions and document the challenges ENGOS are facing.

This is aimed at contributing to the body of research on the critical role expected of ENGOS in mitigation-adaptation imperatives amidst environmental change

and unsettlement and how underlying mechanisms for strengthening their activities could be integrated into different public policy sectors.

Literature Review

Public Health and Socio-economic Impact of Soot Pollution

An extensive literature has proved that the population of Port Harcourt is armed by soot pollution (Whyte, Numbere & Sam, 2020; Jack & Zibima, 2020; Yakubu 2017; Adoki; 2012). A haze of soot that contains particulate matter (PM_{2.5}) has since the last quarter of 2016 (Jack and Zibima, 2020) covered most parts of the city of Port Harcourt. Visibility impairment by PM_{2.5}, soil, and water deposition, resulting in a change of chemical composition of the affected media and staining of materials, are some of the environmental consequences (Yakubu, 2017:22). The overall result includes more acidic lakes and streams; alterations in nutrient equilibrium in rivers and coastal waters; soil nutrient depletion; and disruption in ecosystem diversity. Particle pollution also contributes significantly to the impact of acid rain (US EPA, 2017). As it enters the deepest part of the lungs, inhaled soot poses serious risks to public health by causing a variety of serious health outcomes, such as heart attacks, strokes, coronary artery disease, congestive heart failure, bronchiolitis, lung damage in young people, congestive heart failure, and respiratory problems (Peel *et al.*, 2007; Bateson and Schwartz, 2004).

For Nrior and Adiele (2015) soot pollution occurs in different degrees and is majorly caused by illegal oil refining, gas flaring, fumes from generators and automobiles, burning of vehicle tyres, burning of oil spills, and bush burning. In recent years, studies carried out to assess the levels of criteria soot pollutants in Port Harcourt, and their probable association with airborne diseases, provide evidence of correlation (Yakubu, 2017:2).

Figure 1. An illegal oil refining site in Rivers State



Source: Adapted from the Nation Newspaper of 23rd January 2022.

In their attempt to assess the effects of industrial air pollutants on the respiratory health of children, Nwokocha et al. (2008) 18 months prospective study, provided a strong correlation between exposures to four criteria air pollutants, namely CO, NO₂, SO₂, and PM_{2.5}, and the incidence of bronchitis, cold, cough, phlegm, and sinusitis. Children less than two years of age, living in the populated area, were 3.5 times more susceptible to the pollutants than were those in the less polluted zone.

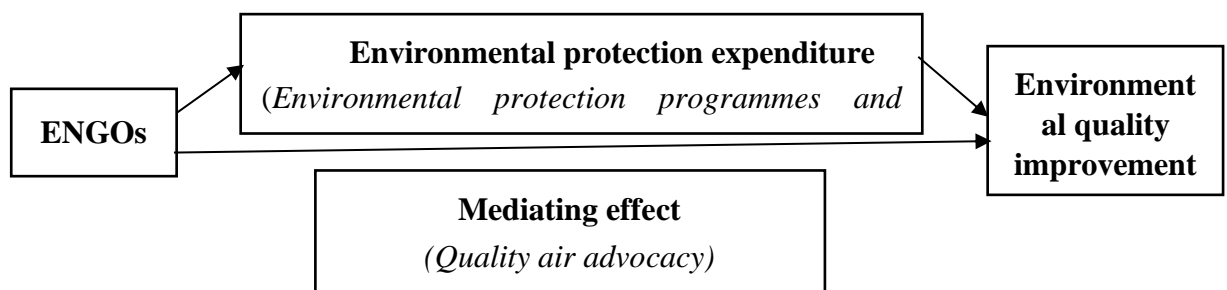
Nwachukwu et al. (2012) in their survey of 5-year (2003-2007) epidemiological data discovered that the levels of all the criteria air pollutants in Rivers State were significantly higher than the World Health Organisation's (WHO) guidelines of 72% of Sub-Saharan Average. They asserted that air pollution was associated with air-related morbidities and mortalities in the state. The air-related morbidity assessed, included cerebrospinal meningitis (CSM), chronic bronchitis, measles, pertussis, pulmonary tuberculosis, pneumonia, and upper respiratory tract infection (URTI).

Environmental Non-Governmental Organisations and Mitigation-Adaptation Roles

ENGOS are becoming more influential in the development and implementation of environmental policies, awareness, and adaptation mechanisms the world over. Their continual growth, broad range of experience, expertise, and influence on environmental governance have created

platforms for extensive advocacy and practice (Bernauer and Betzold, 2012). They have often raised environmental awareness on mitigation-adaptation by holding environmental campaigns and taking initiatives to establish interactive relations with enterprises and the government so as to promote the realisation of quality air. They have also been seen to cooperate with media organisations in transmitting environmental information to the public for improved urban dwellers' interaction with their environment (Slavi'kova', 2017; Saleh and Saifudin, 2017; Cheung, 2007; Riker, 1994). Generally, ENGO shave made significant impact in molding public views and developing narratives and attitudes around the environment (Azis, 2022).

Figure 2. Conceptual Framework of ENGOs' Impact Mechanism on Environmental Quality



Source: Adapted from Li et al. (2021)

According to Li et al (2021:17), ENGOs involved in various environmental quality improvement advocacies mediate by expending resources on different environmental protection and programmes. NGOs among other factors have also emerged as key driving forces for vigilance and advocacy of environmental issues (Selden and Song 1994). Since the 1950s, ENGOs have evolved from being organisers of environmental movements to becoming a vital role in environmental litigation and governance. For example, they are observed to play key roles in the passage and enforcement of the Clean Air Act in the United States (Melnick 2010; Doh and Guay 2004).

Worldwide empirical evidence suggests that ENGOs have consistently raised environmental policies; organise boycotts to change environmentally harmful business practices; and contribute to global environmental negotiations (Betsill Dan and Corel 2001). For example, Azis (2022) compared the involvement of ENGOs at international fora in promoting changes to global environmental standards and regimes at the domestic environmental policy-making level. The study revealed and concluded by suggesting the importance of ENGO advocacy, claiming that they are important not only in promoting a shift in public

perceptions of environmental challenges, but also to assist in the formation of government policy. Bernauer and Betzold (2012) examined the role of civil society organisation in global governance and suggested that ENGOs have emerged as key actors and have become service providers in specific areas of environmental policy implementation. The authors concluded that ENGOs are not only making efforts to strengthen advocacy in biodiversity conservation but also carbon emission reduction in return for certified carbon credits.

According to Nulman (2022) climate change movements in Global North and South are mostly driven by ENGOs who campaign for greater efforts to be made in curbing climate change. Diani (2022) opined that from environment movements to the organising of environmental collective actions, ENGOs have contributed to shaping different policy spaces across the world. The role of ENGOs in environmental health delivery in South-Eastern Nigeria was examined by Ozioma and Opara (2016) with results showing that despite how the activities of ENGOs in providing environmental health care services were hampered by the adverse effects of climate change-induced flooding, they were able to contribute to providing health aid, rehabilitate flood-affected victims and as well provide food and drugs to vulnerable groups.

Theoretical Support

The relevance of ENGOs in air quality advocacy can be supported using Hovland-Yale's Communication and Persuasive Theory. According to Ata-Awaji and Ikot-Osin, (2021), the theory which is also referred to as the Yale attitude change approach is a social psychological model adopted by Carl Hovland in the 1940s and 1950s to explain the conditions under which people are most likely to change their attitude in response to persuasive communications. For Asemah *et al.* (2016) such change is influenced by three main factors namely, the credibility of the source of the message sent, the content of the message, and the audience who receives the message. Cook (2012) averred that such communication or advocacy can cause the desired change of attitude if the group or individual who serves as the source of advocacy is credible in its operations; if the content of the message sent is valid; and if the audience is cooperative, intelligent and willing to accept change.

The reviewed empirical literature supports the opinion that ENGOs have over the years emerged as credible stakeholders of quality environment advocacy. The aims, goals, and philosophies that informed their different environmental quality campaigns, according to Bernauer and Betzold (2012) have positioned them as

reliable collaborators with both individuals and government agencies in institutionalising environmental governance. Primarily, there are two components to the classic ENGOs environmental governance process. First, ENGOs improve environmental quality through information sharing and education (Li *et al.* 2018). As public awareness of environmental issues grows, they pressure the government to boost spending on environmental initiatives. Second, ENGOs also improve environmental quality by influencing government spending on environmental protection. Although unlike their exploits in the international fora, ENGOs role in environmental quality changes and policy making in local space is still very much contested (Azis 2021).

Soot pollution as established in the literature is an outcome of poorly coordinated economic activities of people. The case of the malignance of soot Port Harcourt suggests that public attitude to quality environment is influenced and coordinated to recreate a healthy atmosphere. Therefore, attitudinal change to poor air quality can be achieved if ENGOs through well-designed mitigation-adaptation advocacies, persuade state actors and urban dwellers on the need to curb and cope with the scourge. To this end, Ukala (2010) contends that quality environment advocacies should be designed to educate, warn, persuade, and assist in resolving established and emerging environmental challenges.

Methodology

The study was conducted in Port Harcourt metropolis given its current pervasiveness of soot pollution. It employed a concurrent mixed method design where both quantitative questionnaire survey and qualitative key informant interviews were carried out simultaneously. In this theoretical context, the methodology according to Leavy (2017), essentially measures, describes and make objective inferences to meanings, contexts and intentions contained in the multiple data. Although, it has been criticised by Rudd and Johnson (2010) and Hurmerinta-Peltomäki and Nummela (2006) for its contradictions or difficulty in reconciling instances where the data sets do not fully reflect each other: theoretically determining which data were weighted more heavily, the quantitative or qualitative data. However, it is found useful for its ability to limit the weaknesses of a single method with the strength of a mixed method via triangulation.

A total of 200 participants with twenty (20) each, randomly selected from ten (10) different locations observed to have severe cases of soot pollution. These include:

Rumuolumeni, Abuloma, Rumueme, Trans-Amadi, Choba, Elekahia, Borokiri, Ogbunabali, Rumuodumaya, and Mgbuoba. The choice for 200 participants was to triangulate the data sourced from semi-structured key informant interviews conducted with ten (10) members of five (5) different ENGOs that play active roles in climate change mitigation and adaptation, including environmental quality protection advocacy. These ENGOs include Environmental Right Action (ERA), Water and Environmental Hygiene Awareness Africa (WEHAA), Youth and Environmental Advocacy Centre (YEAC), Manpower Development and Environmental Protection Initiative (MDEPI), and Community Resource Development Foundation (CRDF).

In addition, key informant interviews were conducted with policy actors on different issues of environmental and public health concerns in Rivers State. These include two officials each from the Rivers State Ministry of Environment, Rivers State Environmental Sanitation Authority (RSESA), and the Rivers State Ministry of Health. Similarly, some journalists that provide coverage on the activities of ENGOs in Port Harcourt from media houses such as Wazobia FM and Naija Info FM were also interviewed. The interviews were transcribed and thematically analysed using content, while responses from questionnaires were analysed using simple frequency and percentage techniques with the aid of descriptive statistical tools such as tables and charts. When conducting the research, the responses from participants were treated with utmost confidentiality which also served as measures to preserve users' privacy and mitigate any risk.

Discussion of Findings

Socio-demographic characteristics of the study area

A total of 200 participants as shown in *table 1* completed the distributed questionnaire. The age of participants ranged between 15 years and above. More than half 57.0% of the participants were between 26 and 40 years. Both males and females were equally represented 50.0%. The participants were of varying occupations, but the three most common groups were entrepreneurs 33.0%, students 21.0%, and public servants 18.0%. 50.0% of participants were married and 60.5% had HND/B.Sc as their educational qualification. The result showed that 99.0% of participants live in Port-Harcourt with 79.0% as people who had lived there for more than 10 years.

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency (N=200)	Percentage
Age group		
15 – 25	76	38.0
26 – 40	114	57.0
41 – 40	10	5.0
Gender		
Male	100	50.0
Female	100	50.0
Occupation		
Trading	11	5.5
Student	42	21.0
Entrepreneur	66	33.0
Public Servant	36	18.0
Legal Practitioner	8	4.0
Data Analyst	5	2.5
Civil Engineer	7	3.5
Corper	9	4.5
Researcher	5	2.5
Health Worker	11	5.5
Marital Status		
Single	99	49.5
Married	101	50.5
Educational Qualification		
SSCE	24	12.0
OND/NCE	23	11.5

HND/B.Sc	121	60.5
M.Sc	27	13.5
Ph.D	5	2.5
Living in Port Harcourt		
No	2	1.0
Yes	198	99.0
Years lived in Port Harcourt		
A year or less	11	5.5
2-5 years	12	6.0
5-10 years	17	8.5
More than 10 years	158	79.0

Source: authors' field work

Non-Governmental Organisations and Mitigation-Adaptation Response to Soot Pollution in Port Harcourt

Expectations and Impressions of ENGOs activities in Port Harcourt

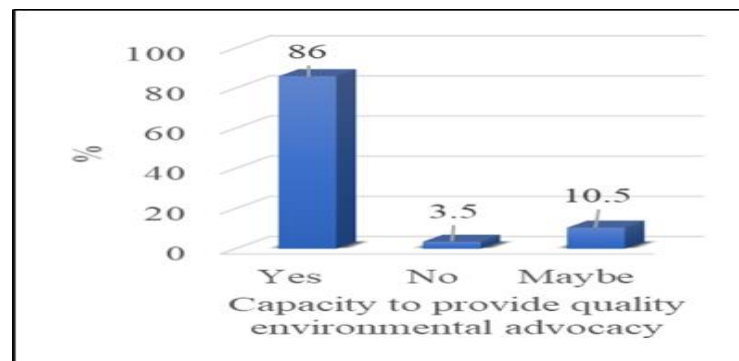
Soot pollution was confirmed by 89.0% of participants as the most prevalent form of environmental pollution in Port-Harcourt while a majority 91.5% and 98.5% affirmed that it was caused by illegal oil refining with attendant negative public health effects. Its prevailing negative impact has been attributed to the increase in reported cases of lungs and chest infections among residents of Port Harcourt.¹ To Peel et al, (2007) and Bateson and Schwartz, (2004) the PM_{2.5} components can cause public health challenges including cardiovascular disease, coronary artery disease, congestive heart failure, chronic obstructive pulmonary disease, acute bronchitis, and aggravated asthma among children. Results also showed that residents of Port Harcourt discovered a plethora of ways to cope with the effects of soot pollution with 45.0% of participants considering the closing of doors and windows, 26.0% inclining nose mask usage, 11.5% engaging in safe household

¹ Interview with an official of the Rivers State Primary Health Care Board, Ministry of Health on the 13th of April 2022

hygiene, 6.0% regular washing of hands, 5.0% use of air purifiers, and 4.5% staying indoors as safety measures. Jack and Zibima (2020) corroborated these views when they averred that as coping mechanisms, residents of Port Harcourt improvised different means of keeping safe from the effects of soot pollution; prominent among which was the constant closing of doors and windows.

The survey in *figure 3* shows that 86% of the participants expect ENGOs to play mitigation-adaptation roles amidst soot pollution in Port Harcourt, which answers the question whether ENGOs have the capacity to provide environmental quality advocacy.

Figure 3. Capacity of ENGOs to provide environmental quality advocacy

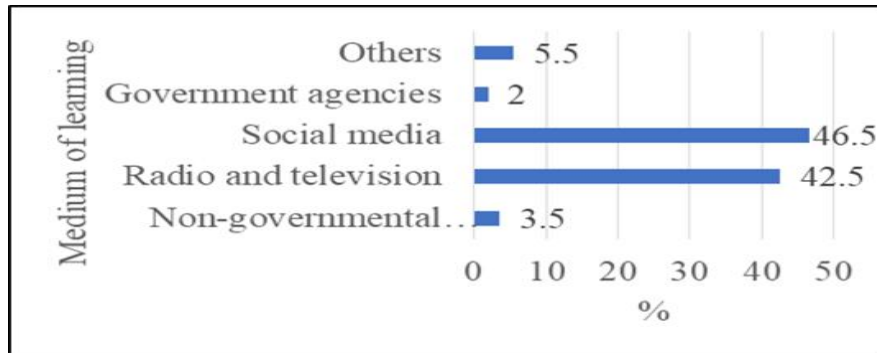


Such capacity would be expected of ENGOs in educating urban dwellers on mitigation-adaptation strategies amidst soot pollution as well social service provision in the form of medical interventions, donation of nose masks, air purifiers, hand sanitisers, food items, etc.² This also reflect on the credibility of ENGOs' advocacies to cause the desired change of behaviour towards achieving quality environment (see Bernauer and Betzold, 2012, and Cook, 2012).

Even though there is an expectation towards ENGOs, *figure 4* shows that only 3.5% of the participants attribute their awareness of soot pollution and its effect to roles played by ENGOs. 46.5% and 42.5% consider social media and radio/television respectively as the most common medium through which they learn about the effects of soot pollution.

² Interview with an official in the Human Resource Unit, Rivers State Environmental Sanitation Authority, Port Harcourt, on the 23rd of March, 2022

Figure 4. Medium of awareness of soot pollution effects



However, this does not signify the total absence of other mediums of sensitisation/enlightenment such as road walks and street campaigns on the scourge of soot pollution by ENGOs, it only suggests its low usage.³ The Manpower Development and Environmental Protection Initiative’s weekly radio programme known as “Eco-friendly network” is regularly hosted by Naija Info 92.3 FM Port Harcourt, and this substantiates the argument that more radio platforms have been engaged by ENGOs than other traditional mediums such as street/road walk campaigns, symposiums, and town hall meetings.⁴ Social media handles such as Facebook and Twitter are also noted for their broad use as commonly found with the activities of the Youth and Environmental Advocacy Centre (YEAC) Port Harcourt.⁵ To Stone and Lukaszewski (2009), the quality of communication tools (type of appeal, explicitness of appeal and order of arguments) as explained by the persuasion theory could affect the degree of effectiveness of air quality mitigation-adaptation mechanisms by ENGOs.

The argument on the deliberateness of ENGOs to create mitigation-adaptation awareness strategies amidst soot pollution shows few trusts from the

³ Interview with a Radio presenter from 94.1 Wazobia FM, Port Harcourt, on the 16th of April, 2022

⁴ Interview with a member of the Manpower Development and Environmental Protection Initiative, Port Harcourt, on the 29th of April, 2022.

⁵ Interview with a member of the Youth and Environmental Advocacy Centre, Port Harcourt, on the 12th of April, 2022

participants, as 62.5% shown in *figure 5* seem not to believe in the ability of ENGOs to play a significant role in mitigation-adaptation strategies to soot pollution in Port Harcourt. Apart from awareness creation, *figure 6* shows that 62.0% of the participants assert that ENGOs in Port Harcourt did not provide other forms of assistance to urban dwellers. 20% averred that ENGOs have been involved in the distribution of items such as nose masks, air purifiers, hand sanitisers, food items, and other medical services. While these expectations and impressions of ENGOs' roles by the populace has certain shortcomings, it underscores how they have significantly enhanced service provision within their immediate environment over the years. For Batley and McLoughlin (2010) non-state service provision relatively takes a fairer method of resource and service distribution than state-driven actions which accounts for their wide growth and popularity across different social formations of the world.

Figure 5. Deliberate awareness on mitigation-adaptation strategies on soot pollution by ENGOs

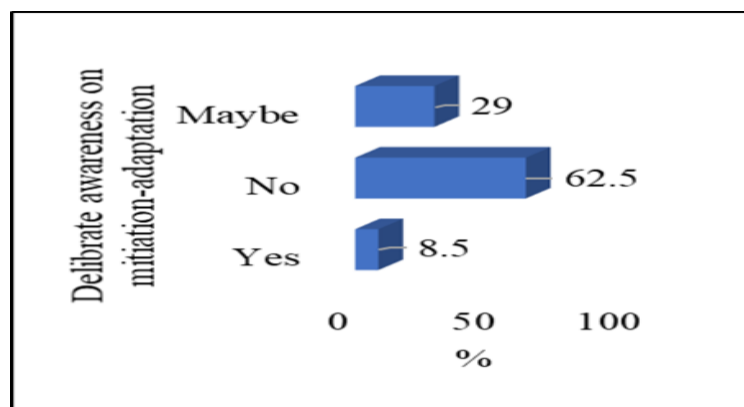
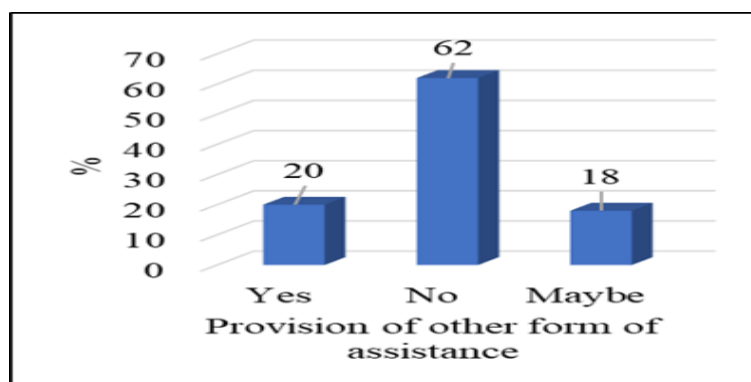


Figure 6. Provision of other forms of assistance by NGOs



Diversities of ENGOs activities on Soot Pollution

The activities of the Community Resource Development Foundation when probed negates these statistical claims as it has over the years engaged different forms of environmental protection advocacy which targets policy makers and the general populace.⁶ The Environmental Right Action like other ENGOs have been involved in international environmental policy initiatives in several different ways. It has worked to increase public awareness of environmental issues, put pressure on governments to change domestic and foreign environmental laws, and participate in international environmental negotiations.⁷ A similar claim was also made by Water and Environmental Hygiene Awareness Africa, Port Harcourt, that its group activities are defined by a wide range of political contexts, strategies, and dynamics in awareness creation.⁸ However, how these efforts are supported by other traditional mechanisms such as road walks, street-to-street campaigns, and individual engagement remains unclear.⁹ As an integral part of ENGOs response to mitigation-adaptation to associated soot pollution challenges, is their contribution or provision of relief materials and other medical assistance to victims of environmental challenges.¹⁰ In contrast, the Environmental Right Action supported an earlier statistical claim that as an ENGO, it has not engaged a wide material support system like the provision of relief materials to victims of soot problems, however, its major effort is visible with the collection of data on the level of pollution which aims at sharing such data with policy actors.¹¹

⁶ Interview with a member of the Community Resource Development Foundation, Port Harcourt, on the 29th of April, 2022

⁷ Interview with a member of the Environmental Right Action in Port Harcourt, on the 19th of April, 2022

⁸ Interview with a member of Water and Environmental Hygiene Awareness Africa, Port Harcourt, on the 19th of April, 2022

⁹ Interview with an official of the Human Resource Department, Rivers State Ministry of Environment, Port Harcourt, on the 12th of April, 2022

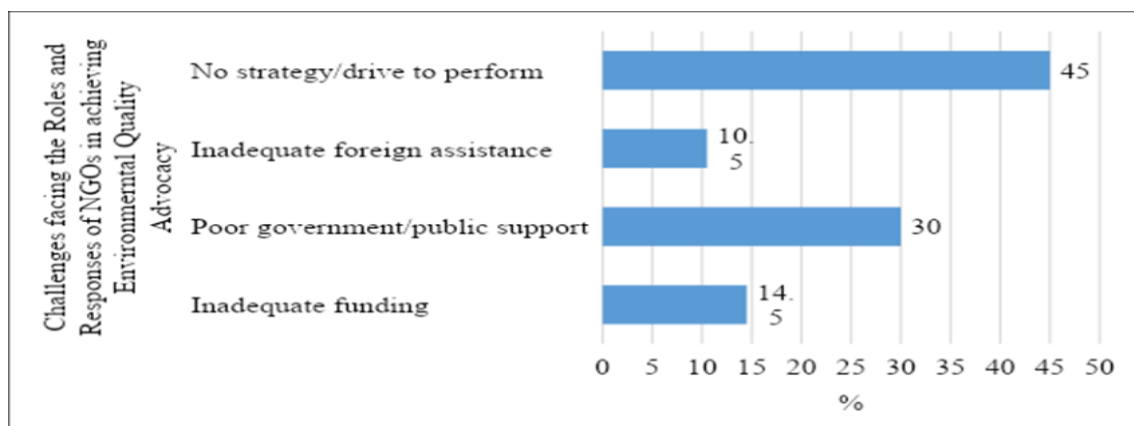
¹⁰ Interview with a member of the Manpower Development and Environmental Protection Initiative, Port Harcourt.

¹¹ Interview with a member of the Environmental Right Action in Port Harcourt.

Challenges of ENGOs on Mitigation-Adaptation Response to Urban Dwellers amidst Soot Pollution in Port Harcourt

The perceived incapacitation of ENGOs to respond to the challenges of soot pollution as revealed by the study is aggravated by a lopsided public policy framework which is further compounded by factors such as low literacy rates, little knowledge, passive public attitude to poor air quality.¹² While interrogating how ENGOs in Port Harcourt respond to mitigation-adaptation imperatives, 45.0% of the participants in *figure 7* aver that ENGOs in Port Harcourt are challenged by lack of strategy and drive to engage in different mediums that improve mitigation-adaptation responses to harmful soot pollution. While 30.0% identify poor government/public support as a challenge facing the activities of ENGOs in Port Harcourt, 14.5% and 10.5% establish other issues such as inadequate funding and foreign assistance respectively.

Figure 7. Challenges facing response actions of ENGOs to Soot Pollution in Port Harcourt



The emergence and operations of ENGOs in context and practice have been questioned to ascertain their roles, purpose and relevance to critical concerns on air quality. How mitigation-adaptation responses shape urban dwellers' lived experience from a normative position requires that such roles connect with

¹² Interview with a member of the Manpower Development and Environmental Protection Initiative, Port Harcourt.

popular expectations.¹³ To allay such concerns would need proper clarification of the motive of key actors in the civil society space (Page, 2022). The majority of these organisations are unregistered with no apparent track record. They typically make few appearances before disappearing. This gap creates lack of strategy and drive and further weakens normative ENGOs communication/persuasive power and accentuate poor trust system in a triangular process (relationships between ENGOs, policy actors and the public).¹⁴ The Environmental Right Action's attempt to increase capacity building through its periodic technical training for members could incentivise strategic purposes, however, the extent to which such an aim is approached reveals that much still needs to be done.¹⁵

The changes around non-state service provisions in societies have questioned the character of the relationship between ENGOs and the government.¹⁶ Brass (2021) asseverate that such feature can shape collaborative governance, co-production and synergy between ENGOs, government and the public space. The visibility of such dynamics amidst soot pollution in Port Harcourt, ERA claimed, has not experienced government and public support which affects effective mitigation-adaptation responses to environmental quality pitfalls. Rather than explore collaborative advantages, the government and certain individuals perceive some activities of ENGOs as confrontational.¹⁷

The government in most cases trivialise serious environmental issues and this is adduced to why in most cases the locals or residents trust ENGOs to cover up for the weakness of the state. This also accounts for why ENGOs have approached fund sourcing from outside the confines of the state. This is with the aim of strengthening neutrality and constructive criticisms when necessary.¹⁸ Given the sensitivity of its environmental quality advocacies, the Youth Environmental

¹³ Interview with an official of the Research, Planning and Statistics Department of the Rivers State Ministry of Environment on the 12th of April, 2022.

¹⁴ Interview with a member of Water and Environmental Hygiene Awareness Africa, Port Harcourt.

¹⁵ Interview with a member of the Environmental Right Action in Port Harcourt.

¹⁶ Interview with an official of the Research, Planning and Statistics, Rivers State Ministry of Health, Port Harcourt, on the 20th of April, 2022.

¹⁷ Interview with a member of the Environmental Rights Action, Port Harcourt.

¹⁸ Interview with a member of the Manpower Development and Environmental Protection Initiative, Port Harcourt.

Advocacy Centre identifies security challenges as an integral component of poor government/public support. For example, the several attempts to communicate and persuade artisanal oil refining operators on the adverse environmental effects of unprofessional oil refining are countered with brutal attacks and this is encouraged by a non-strategic security system that cannot protect the civil activities of ENGOs.¹⁹

The declining rate of air quality research is also not unconnected to poor government/public support. The increasing blurring line with service provision by both government and ENGOs has created spaces for mistrust and suspicion. This view could buttress Fernando and Heston (2011:8) claim that ENGOs' operations depict critical challenges to the imperativeness of statehood in the realms of territorial integrity, security, autonomy and revenue. This, however, did not obviate public perception of ENGOs as readily tools to drive political motives by the elite class.²⁰ According to Ikelegbe (2001:1), this explains a typical plural Nigerian society and how civil societies have become parochial and divisive which pose threats to democratic consolidation in Nigeria.

How ENGOs fund their advocacies have often raised critical concern within the civil society space.²¹ Page (2021) links the opaque nature of funding of pro-government civil societies to why international donors are sceptical about providing financial assistance to ENGOs. In contrast, the Manpower Development and Environmental Protection Initiative talked about the general implications of sourcing funds from state actors and how such can cripple the objective posture of ENGOs' activities. To this end, ENGOs have continued to suffer financial challenges in executing critical projects and programmes. Although, the role of foreign donors in different forms tends to bridge this gap. For example, groups from Norway, the Netherlands, the United Nation Development Programme (UNDP), and the European Union (EU) have invested in different ENGOs in Port Harcourt. However, the deepening gap lies in how quick and accessible these funds could appear.²² The Youth and Environmental Advocacy Centre in its part has leveraged its collaborative posture to attract

¹⁹ Interview with a member of the Youth Environmental Advocacy Centre, Port Harcourt.

²⁰ Interview with an official of the Field Operation Unit, Rivers State Environmental Sanitation Authority, Port Harcourt, on the 25th of March, 2022.

²¹ Interview with a member of the Environmental Rights Action, Port Harcourt.

²² Interview with a member of the Manpower Development and Environmental Protection Initiative, Port Harcourt.

funding for its different advocacies. The rigours and complexities in accessing financial assistance from foreign bodies have caused many ENGOs to abandon or opt for less costly advocacy. This is because in most cases, proposals for funding are not easily granted due to serious bureaucratic bottlenecks.²³ To strengthen ENGOs mitigation-adaptation responses to soot pollution, the place of consistent and effective collaboration with policy-makers,²⁴ foreign organisations, media houses, and the public in the areas of knowledge sharing, human capacity development and funding cannot be glossed over.²⁵

Conclusion

This study set out to investigate the responses of ENGOs to soot pollution in Port Harcourt which is one of the most prevalent causes of environmental despoliation in the city. The activities of artisanal oil refining have consistently aggravated its spread with attendant public health challenges. However, given the capacity, influence and roles of ENGOs; even though with little knowledge of such roles by residents of Port Harcourt, are expected to play key mitigation-adaptation roles in cases of poor air quality in Port Harcourt. As shown in the study, challenges such as poor strategy/drive to perform, poor government/public support system, inadequate funding and limited foreign assistance have impeded ENGOs' chances of providing effective and sustainable quality environment advocacy.

²³ Interview with a member of the Youth and Environmental Advocacy Centre, Port Harcourt.

²⁴ Interview with an official of the Field Operation Unit, Rivers State Environmental and Sanitation Authority, Port Harcourt.

²⁵ Interview with a member of the Environmental Right Action, Port Harcourt.

Policy Recommendations

Following the results from this study, we put forward the following recommendations for policy purposes:

- i. ENGOs' broad range of activities, expertise, and professionalism should be effectively harnessed not only by the government but also by the public in addressing environmental challenges. This could be in the form of collaboration and support in the areas of policy-making, funding, security, knowledge sharing, and research.
- ii. ENGOs should consciously build capacity and strategies in employing different advocacy mechanisms so as to play qualitative mitigation-adaptation roles. This can be achieved by engaging in rigorous research and other human capacity development platforms.
- iii. ENGOs' advocacies can be more persuasive if compliance with quality environmental practices is enforced. Most times quality environmental advocacies are not adhered to because compliance is often politicised.
- iv. ENGOs should be as professional and objective as possible. This helps to create a strong system trust and support from both the government, the public and international donors.

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