

Climate Change Policy and Environmental Degradation in Calabar Metropolis, Cross River State, Nigeria

Ekunke, Paulinus Agabi¹

Email: ekunkeignatius@gmail.com (Corresponding Author)

John, Utibe Monday²

Email: kingjohnbliss@gmail.com

Fajobi, Babatunde Oludare³

Email: fajobibabatunde@yahoo.com

Brown, Sunday Ndim⁴

Email: Sundaybrown14@gmail.com

Ambulife, Joseph Akwujiobe⁵

Email: ambulifejoseph@gmail.com

Etta, Peter Eban⁶

Email: ebanetta@yahoo.com

^{1,2,3,4,5&6}Department of Public Administration, Faculty of Management Sciences, University of Calabar,
Calabar, Nigeria

Abstract

Climate change policy is one of the critical areas that the various stakeholders should focus their attention and concentrate more of their energy, because it is one of the important aspects of climate change that have been ignored. Descriptive Research Design was adopted for the study and questionnaire was the instrument used for data collection. Data from both primary and secondary sources were utilized. 120 respondents were randomly selected using Purposive Random Sampling Technique. With the aid of SPSS, two hypotheses were formulated and tested using descriptive statistical tools. The data analysis revealed that climate change policy has significant impact on environmental degradation and also that in Calabar Metropolis, there have been no adequate policy frameworks in place to mitigate climate change effects and vulnerability. It was concluded that adequate policy frameworks have not been put in place to checkmate climate change effects and vulnerability in Calabar Metropolis, Cross River State, Nigeria. The issue of climate change should not be left in the hands of government alone but the private sector should equally be given collaborative opportunity as partners, was the policy recommendation. This is because corruption in public office has become a norm and can affect the aggressive pursuit of climate change to a manageable end.

Keywords: *Climate change, policy, environmental degradation, Calabar Metropolis, Cross River State, Nigeria*

INTRODUCTION

It is a truism that the issue of climate change challenge has become monumental as man has had to face in his daily existence. It is also unarguably fundamental to say that the issue of climate change is now attracting interests at both national and global discourses due to its debilitating effects. In Nigeria, climate change policies are yet to be taken as part of the political landmarks and a critical outcome of the political process (Robert, 2017). Sustainable climate change policies are sine qua non to a strong adaptive capacity which goes a long way in mitigating climate change impacts and

vulnerability in the country and particularly in Calabar Metropolis. In a similar view, Okechukwu, (2020) says, Nigeria's policy response to climate change challenges is still much to be desired. To this end, the existing policies on environmental related areas scattered across the country and particularly in Calabar Metropolis, if implemented and enforced have the potential to mitigate the effects of climate change and vulnerability in the country and particularly in Calabar Metropolis. The global politics and negotiations will determine the success so far recorded in trying to reduce greenhouse gases emission built to maintain a clean environment for sustainable development (James, 2019). Environmental degradation the world over is monumental in its evidential impacts on the economy of nations, states and the lives of the people, hence, the imperativeness of a policy framework as a response to this debilitating phenomenon.

PROBLEM STATEMENT

The fact that, mankind at pre-industrial and pre-technological era lived a life full of peace, tranquility; devoid of crisis is a phenomenal truth. A life characterized as stone-age; where there was no quest to amass the whole world for self. However, man's excessive quests and desires with his studded exploitation into excessive materialistic environment; lured mankind into the swift and accommodating hands of science and technology, hence catapulted him into limbo of obscurity. That is to say, with the advents of technology coupled with emerging industrial layouts; inventions of locomotives, automobiles, heavy-duty equipment and machines with high caliber elements and viscosity culminated into colossal human activities with its attendant consequences thereby creating unbearable and undesirable pressure on man and his existence. These pressures are what scientists referred to as greenhouse gases which result likewise into global warming. Emphatically, there is no scintilla of doubt that climate change is one of the challenges facing mankind in the 21st century. This is so, due to its debilitating effects on the life of man cum its exerting influence on his existence. Climate change has become topical at global and national discourses without desirable efforts to reduce and/or mitigate the problem. The issue of corruption is one of the factors that are militating against the efforts particularly of the federal government of Nigeria in mitigating the impacts of climate change in the country; with state governments diverting funds allocated to them from a dedicated federal account called "ecological funds" for personal gains thereby putting the lives of the people and their property in jeopardy. Evidential are the various gully erosion areas in Calabar Metropolis, where many residents of the state have lost property to ravine, gully erosion and landslides. Weather is no longer correctly predictable. People now live at the mercy of rain and its accompanying consequences. Against this backdrop therefore, this study attempts to investigate climate change policy and environmental degradation in Calabar Metropolis, Cross River State, Nigeria.

PURPOSE OF THE STUDY

Specifically, this study aims at achieving the following:

- a. To examine whether climate change policy has significant impact on environmental degradation in Calabar Metropolis
- b. To investigate if adequate climate change policy frameworks have been put in place to mitigate environmental degradation in Calabar Metropolis

HYPOTHESES

The following hypotheses are formulated to guide the study:

- I. There is no significant relationship between climate change policy and environmental degradation

- II. There have been no adequate climate change policy frameworks in place to mitigate environmental degradation in Calabar Metropolis

GLOBAL APPROACH IN ADDRESSING CLIMATE CHANGE CHALLENGES

Despite all of the global efforts to tackle the issue of climate change, there are still no meaningful regulations that are consistent enough to provide consistent guidance on how nations should address the long-term problems associated with climate change (Giddens, 2018). Because of the aforementioned, Oyeshola (2018) claims that there has been a massive lack of understanding and collaboration between Developed and Developing nations on environmental degradation as a result of Earth Summit politics. Stockholm said, "Both the 1997 Kyoto conference and the 2000 Copenhagen conference had equally accepted that as the truth," to support this claim. Nevertheless, since the climate change conference took effect on March 24, 2019, the parties have been gathering yearly in Conferences of Parties (COP) to evaluate the state of climate change mitigation with the United Nations. In 1995, the parties met for the first time in Berlin, Germany, and expressed concerns about the insufficiency of nations' capacities to fulfill their obligations under the convention.

CLIMATE CHANGE POLICY DEVELOPMENT IN NIGERIA

Nigeria joined the League of Nations and signed the United Nations Framework Convention on Climate Change Conference in 1992 as part of its efforts to address the issue of climate change. Nigeria is permitted to manage four main national communications as a signatory, which consist of a progress report, a national adaptation program of action, a global climate observation system report, and four in-depth review summaries. The Federal Ministry of Environment was tasked with carrying out the country's obligations under the Kyoto Protocol and the United Nations Framework Convention on Climate Change. A distinct division within the Federal Ministry of Environment was tasked with creating a long-term national framework that would allow Nigeria to fulfill its obligations under the Kyoto Protocol and the UNFCCC while also managing the Inter-Ministerial Committee on Climate Change and its activities (FRN), 2020).

Scattered across the country and particularly, Calabar Metropolis are the dominant policy frameworks that if properly implemented and enforced will breach the lacuna that has long been created in this critical area of climate change challenges (Okechuwku, 2020). These policies are hereby discussed:

- The Nigerian government formed the National Environmental Policy in 1989 to address significant environmental issues, including land degradation, air and water pollution, urban deterioration, municipal waste, and the combined threats of drought, coastal surges, floods, and erosion. The strategy was reevaluated in 1999 to take evolving environmental concerns into account (FRN, 2020).
- The National Policy on Drought and Desertification is an additional policy. This policy was established in order to counteract the threat of drought and desertification that climate change may bring about, especially in Northern Nigeria.
- The Policy on National Forests - The main goals of this strategy are to guarantee a participatory development process and to encourage efficient forest management through private sector forestry development.
- The National Biodiversity Strategy and Action Plan seeks to integrate biodiversity into national planning, policy, and decision-making processes while creating a suitable action plan and framework for the conservation of Nigeria's biological variety for better sustainability.

- The National Erosion and Flood Control Policy aims to mitigate the effects of erosion and floods caused by climate change by controlling and managing these risks.
- Environmental laws and regulations provide instructions for healthy attitudes and behaviors towards the environment (Mogo, 2019).

The following are initiated to address climate change challenges in Nigeria:

a. The Endangered Species (Control of International Trade and Traffic) Act, which protects vulnerable and endangered species and conserves wild life, is still in effect as Cap E9 LFN 2004.

b. The Land Use Act, which was enacted in 1978 and is codified in Cap 202, LFN 2004, specifies that every Nigerian has the right to use and enjoy land and its natural fruits in sufficient quantity and quality within Nigeria to enable them to support their families and themselves. This right must be guaranteed, protected, and preserved.

c. The Exclusive Economic Zone Act was enacted and is codified in CAP E11, LFN 2004. It prohibits the exploration and exploitation of natural resources inside the Exclusive zone without a valid permit.

d. The Nuclear Safety and Radiation Protection Act, which was implemented in CAP N142, LFN 2000, regulates the use of radioactive materials and machinery that produces and emits ionizing radiation.

e. The Water Resources Act was enacted and is codified in CAP W2, LFN 2004. Its objective is to enhance and expand the amount and caliber of water resources available.

f. The Forestry Law, which was enacted and is codified in CAP 55, 1994, forbade any action that would cause any forest product, forest growth, or forestry property in Nigeria to be destroyed or damaged.

g. Promulgated as codified in CAP R9, LFN 2004 and known as the River Basins Development Authority Act: The development of water resources for home, industrial, and other applications, as well as the prevention of erosion and floods, are the subjects of this Act.

The proper implementation of these laws will reduce the malpractices that would have negative effect on the climate (FRN, 2018).

ISSUES OF ENVIRONMENTAL DEGRADATION IN NIGERIA

Air pollution: is the term used to describe the unwelcome gases, emissions, particles, and other related elements that contaminate the atmospheric air in any given location. According to a similar perspective, wastes coming from human activities and enterprises that continuously produce energy that heats our surroundings can be classified as air pollution. The outdoor atmosphere of a location containing contaminants such as dust, fumes, gas, mist, odour, smoke, or vapour in such quantities, characteristics, and duration as to make them actually harmful or potentially harmful to human, plant, or animal life or property, or which can unreasonably interfere with life and property comfort, is defined as air pollution, according to the World Bank Report 2019. The result of economic and domestic activities, such as modern agriculture, which uses pesticides that contaminate the atmosphere or seep into water systems through sewage or erosion, is environmental air pollution. Pollution in Calabar Metropolis is caused by a variety of human and industrial activities, including burning fossil fuels, operating automobiles, and operating thermal power plants. These activities release hazardous pollutants such carbon dioxide, nitrogen, and sulfur dioxide.

Water Pollution: Decomposed trash, mining operations, and petroleum exploration activities are just a few of the causes of water pollution, according to Mba (2020). In similar view, Odiette (2019) says soil erosion, the spread of water hyacinth, and the discharge of domestic and industrial pollutants are the main causes of water pollution. While Okorie (2017) accepted that there are 600

documented gully erosion sites in Anambra, 300 in Imo, 59 in Akwa Ibom, and 130 in Cross River State and other states within the zone, unregulated gully erosion is one of the sources of water pollution. The United Nations Development Programme (2018) stated that flooding in Lagos is caused by rivers and streams overflowing their banks due to climate change. Usually, the rainy season is when this happens. It is a persistent issue in low plain areas.

Noise Pollution: Scholars have attempted the definition of noise to mean an unwanted sound. Decibels (DB) is used to measure noise which is mostly generated in high-density urban areas or even in the industrial areas that usually use industrial plants as their sources of energy. Niger Delta states are prone to the risk of many environmental related challenges especially such as the noise from oil exploration activities, heated environment resulting from the activities of industrial mining activities which in turn culminate into greenhouse gases and causing global warming. These are issues that have posed serious challenges across Calabar Metropolis and even beyond.

Solid Waste Pollution: The issue of solid waste is becoming the most challenging environmental problem that the country has to face in recent times with its attendant consequences on the pollution of water, air and land and let alone its hazards on human health (Uchegbu, 2017). The incessant rural-urban migration culminating in population explosion is the cause of the uncontrollable generation and disposal of solid wastes across cities and towns in the country. A case in point is Lagos state where waste is a common sight. Consequently, the improper disposal of solid waste is tantamount to breeding of diseases like, malaria, typhoid, dysentery, yaw, cholera, yellow fever which can be contracted through biological vectors, physical and mechanical means, air-borne, water supply, food supply, direct contact or other means (Uchegbu, 2017).

Oil Pollution: The oil producing states in the Niger Delta area have frequently suffered from oil spillage as a result of the oil exploration. This is because the major production of the country's oil and gas is explored and/or produced in the Niger Delta, which is the reason why majority of the inhabitants are poor even in the midst of abundant resources. The oil pollution is one of the dreaded environmental hazards facing the Niger Delta people due to the fact that oil companies are situated in major ecological areas such as mangroves, tropical rainforest and fishing grounds. This often leads to polluted water, damaged soil resulting from oil leaks. People often get sick and farmers no longer cultivate their soil due to polluted soil (Wikipedia, 2020). Gas flaring in Nigeria and particularly in the Niger Delta is much more than anywhere else worldwide. It is damaging to the inhabitants of the gas flaring areas especially the oil producing area of the Niger Delta who are equally affected and exposed to increased risk of child respiratory illnesses, asthma, cancer and premature deaths. Oil spillage often causes similar effects as gas flaring. This is because it has resulted to immediate death of not only fish but human population and damage to the ecosystem. The oil spilling and dissolving into water body thereby getting oxidized, culminate in bacterial changes and sink to the bottom of the water by gravitational force. This action causes contamination and brings about adverse effect on the terrestrial life. No amount of molecular weight components which emulsifies into water that does not affect aquatic life. Pipes connected to the villages, farmlands, creeks and rivers are monumental sources of pollution especially when leaking which result in sickness and economic ruin to the people of Calabar Metropolis, (Wikipedia, 2020). The consequences of oil spillage to marine life and coastal vegetation are enormous. It causes devastating effects to the environment and causing respiratory and chromosome damage which in turn causes still birth and cancer in women (Uchegbu, 2019). The reason is that women are the regular users of the polluted water because of their domestic chores.

CLIMATE CHANGE AND ENVIRONMENTAL DEGRADATION IN CALABAR METROPOLIS

The impact of climate change and environmental degradation in the Calabar Metropolis, Cross River State, Nigeria, is attributable to both man-made and natural phenomena with adverse effects or consequences on physical and social environments not excluding human health, food security, economic, political and cultural activities, natural resource exploitation and physical infrastructure (Robert, 2017). In various areas in Calabar, agricultural production in the rural area is severely truncated manifesting in significantly low yields as result of climate change which is more acute due to heavy reliance on climate-sensitive sectors of agriculture and fisheries. The monumental incidences of deforestation, unpredictable temperature and rainfall patterns, thunderstorms, heavy winds and floods are traceable to Climate change. Monumental losses have been experienced in agricultural crop and animal production, livestock, trees, grazing land, fishing, hunting, and all other rural employment have become highly insecure. Climate change in has resulted into environmental degradation which deteriorated the already existing low social-economic condition by aggravating hunger, malnutrition, disease and poverty thus helping to destroy livelihoods (Online Encyclopedia, n.d).

CAUSES OF POLICY FAILURES:

The stalemate in international negotiations: The climate change policy negotiation featured wide-ranging discussions about mitigations, adaptation, funding, monitoring and verification, technology transfers, and institutional or programmatic designs among thousands of diplomats and state actors with conflicting national interests and priorities (Vandeleker, 2021).

Economic Incentive Programmes: Some promote the use of economic incentives as a major public policy instrument, if not the only instrument, to encourage consumer and industrial behavior conducive to sustainability. And while others are doubtful whether economic incentive programmes can be used as a primary, if not the only instrument to encourage behavior conducive to environmental sustainability and climate change (Ojha, 2019).

Challenging the Consensus: Forging global policy consensus on cooperative strategies for mitigating and adapting to climate change is a formidable challenge.

Overlapping Institutional Responsibilities: Conceptualizing authority in this manner of spotlights on how the ability to govern environmental change is not simply mandated through policy, but rather is an outcome of dynamics and often contested social relations.

Thus, what is looking at institutions and organizations for climate adaptation ‘authority’ is not concerned to state actors or formal programmes only. Often, there are conflicts over which actors or institutions have the right to govern resources (Bulkeley, 2019).

THE SOLUTIONS TO CLIMATE CHANGE POLICY FAILURES

The following suggestions are made to address climate change policy failures (Robert, 2007):

- To complete the nation's National Climate Change Policy and Response Strategy;
- To establish the Nationally Strategic Climate Change Trust Fund;
- To commission a comprehensive study for an updated GHG emission profile projection and mitigation strategies;
- To commission a comprehensive study on the socio-economic impacts of climate change;
- To carry out a detailed costing of adaptation initiatives for planning purposes;

- To develop and implement a well-crafted action plan and process for the mainstreaming of climate change into national development plans, especially vision 20:2030;
- To strengthen national capacity at the Federal, State, and Local Government levels to plan and respond to climate change impacts; with evidence-based decision-making.

THEORETICAL FRAMEWORK

The study adopts the conflict theory to examine and buttress the subject matter under investigation. The proponent of this theory is Karl Marx, who is often credited being the father of conflict theory. Karl Heinrich Marx (1818 – 1883) was a German Philosopher, a Sociologist, historian, political economist, political theorist, and revolutionary socialist, who developed the sociopolitical theory of Marxism. Those who hold this same view like Marx Webber believe that conflict theory occurs also in patterns of class differentiation when one class (group) of people is systematically empowered over others and then tend to use it against others. The less empowered class demands a fair treatment thereby leading to conflict. Climate change is a product of conflict between the developed economies (countries) and the developing economies (countries). Therefore, it can be stated here that the developing nations are suffering what they never caused and/or triggered but the consequences of the actions and inactions of the developed nations.

METHODOLOGY

The study makes use of the Descriptive Research and ex-post facto Designs. These were chosen because it gives the researcher an ample opportunity to take a critical analysis and description of the subject as it has happened in the past and predicting the future. It is most suitable for this study because of the nature of occurrences of environmental related phenomena in Calabar Metropolis. Primary and secondary sources of data were employed in the course of this study. The instrument used for the collection of data was the questionnaire. A total of 129 house owners in the Calabar Metropolis, who are hapless victims of different environmental related phenomena were sampled through Purposive Sampling technique. Descriptive statistical technique with the aid of SPSS was employed for the analysis of the posited hypotheses.

DATA ANALYSIS

Table1: Hypothesis one: There is no significant relationship between climate change policy and environmental degradation.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Climate Change Policy	120	2.00	5.00	4.3250	.85172
Environmental Degradation	120	1.00	5.00	2.6417	1.40106
Valid N (listwise)	120				

Discernibly from the table above, we can simply adduce that the result is statistically significant having the mean score of 4.3250 and 2.6417 and a corresponding standard deviation of .85172 and 1.40106; therefore, can conclude that there is a significant relationship between climate change policy and environmental degradation.

Table2: Hypothesis two: There have been no adequate climate change policy frameworks in place to mitigate environmental degradation in Calabar Metropolis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Adequate Climate Change Policy Frameworks	120	1.00	5.00	3.7917	1.06823
Environmental Degradation	120	1.00	5.00	2.6417	1.40106
Valid N (listwise)	120				

From the analysis above, having the mean score of 3.7917 and 2.6417 and a corresponding standard deviation of 1.06823 and 1.40106; we can therefore adduce that the result is statistically significant and thus, conclude that there is a significant relationship between adequate climate change policy frameworks and environmental degradation. Meaning that there have been no adequate policy frameworks in place to tackle or mitigate the effect of climate change in Calabar Metropolis, Cross River State, Nigeria.

DISCUSSION OF FINDINGS

Discernibly, it has been found out that climate change policy has significant influence on environmental degradation. This is as a result of the statistical relationship as shown from the table between the mean scores and standard deviation. Also, that, there have been no adequate policy frameworks in place to checkmate environmental related issues in Calabar Metropolis, Cross River State, Nigeria.

CONCLUSION

Climate change has become such issue that has occupied the academic and other intellectual discourse spaces due to its debilitating effect on man and his existence. The issue of putting adequate policy frameworks in place to mitigate the effects of climate change on man is still far-fetched and requires urgent attention by all the stakeholders concerned. It is also pertinent to mention here that, there are dominant policies on climate change mitigation across the country which are not enforced; hence the effort of government in this direction.

RECOMMENDATIONS

The paper recommends that Policy makers should pursue aggressive policy formulation and implementation in the area of climate change reduction and mitigation in the Calabar Metropolis. The moribund policy frameworks on climate change should be resuscitated and put into use by the government to reduce climate change effects on our existence. The issue of environmental related matters should not be left in the hands of government alone but the private sector should equally be given the opportunity to manage especially, climate change menace. This is because corruption in public office has become too monumental and endemic that the issue of climate change cannot be reasonably pursued to an aggressive end. Finally, Policy evaluation is a critical stage of policy cycle; therefore, every policy effort should be carefully evaluated and ensure that each policy framework has actually yielded the intended consequences.

REFERENCES

Ayoade, A. (2019). Climate change related factors and management. *journal of applied science and environmental management*: Ibadan, Oyo state

- Bulkeley, B. (2019). Navigating the climate, human geographies: exploring the whereabouts of climate politics. *sage journal*.
- Federal Republic of Nigeria (2021). Country summary on climate change action. Department of climate change, Federal Ministry of Agriculture, Nigeria.
- Giddens, H. (2018). The politics of climate change. Cambridge
- James, A. (2019). Humans are too stupid trying to prevent climate change. The Guardian Newspaper, 24th March, 2023
- Karl, H. M. (1909). Conflict theory [stribbr.wikipedia.com](https://en.wikipedia.org/wiki/Conflict_theory)
- Okechukwu, D. (2020). The employment impact of climate change adaptation. International Labour Organization.
- Odiette, C. (2019). Global issues on climate change. <https://www.undp.org>.
- Okorie, G. (2017). Combating climate change using education and training in pharmacology and therapeutics. British Pharmacological Society
- Ojha, A. (2019). Policy without politics: technocratic control of climate change adaptation. ECONBIZ, find economic literature.
- Online encyclopedia (n.d). Policies inadequacy and the control of climate change in sub- saharan Africa. <https://www.encyclopedia.com>
- Oyeshola, A. O. (2014). Information sources and awareness of climate change by citrus farmers in Benue State, Nigeria. *journal of agricultural extension*
- Mba, D. (2020). Climate change and COP26: Are digital technologies and information management part of the problem or the solution? *International journal information management*.
- Mogo, J. (2021). Global warming and climate change: opposing viewpoints online collection: Gale scholarly article
- Robert, R. (2017). Climate change and human rights: a rough guide. International council on human rights policy
- Uchegbu, I. (2021). Nigeria: the climate change act 2021: key points for consideration. Mondaq connecting knowledge and people
- Vandeleker, G. (2021). World vision's environmental stewardship and climate action. <https://www.wvi.org>
- World Bank (2019). Countries climate change and development reports. <https://www.worldbank.org>