Volume 4 / Issue 8/ August 2026 International Journal of Modern Science and Research Technology
ISSN:2584-2706 DOI: https://doi.org/10.5281/zenodo.22719427

A Survey of Taxation and Climate Change Issues among Small Businesses in Nigeria

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Abstract
Climate change poses significant threats to Nigeria's environment, economic development, and public health, as extreme weather events like floods, droughts, and high temperature become more common and severe. Environmental taxation, has shown to be a successful policy tool for encouraging sustainable practices around the world. Nigeria has also made some efforts on Climate Change, but the use of environmental taxes within this framework is still immature and underutilized. Moreso, despite that small scale businesses account for great proportion of Nigeria's businesses, there is limited empirical research on how their operators view climate change and its relationship to economic mechanisms such as taxation. This study examined the effect of the perception of small business operators on climate change and taxation in Nigeria with a view to assessing the effect of the taxation on such perception. The study adopted descriptive survey design using questionnaire from sample of 203 among small business operators in Nigeria as the population. Inferential statistics was used to analyse the responses. The study found that taxation (measured with small business operators' perception of revenue generation from environmental taxes, green policy effectiveness and the appropriateness of revenue allocation to green projects) exerted significant effect on the mitigation of climate change impacts in Nigeria based on perception of small businessess in Nigeria. Specifically, results of the individual contribution established that small business operators' perception of revenue generation from environmental taxes and the appropriateness of revenue allocation to green projects exerted positive significant contribution while, green policy effectiveness had negative effect, contrary to *a-priori* expectation. The study concludes that taxation exerted significant effect on the mitigation of climate change impacts in Nigeria. Policy implication of the findings were highlighted.

Keywords:
Climate Change, Environmental Policy, Revenue Allocation, Revenue Generation, Taxation.

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1.Introduction

Climate change is one of the most crucial global issues, with far-reaching consequences for the environment, the economy, and human health. Nigeria, the most populous nation in Africa and a lower-middle-income economy, is especially sensitive to these effects. Nigeria, in particular, has substantial environmental problems such as extreme flooding, lengthy extreme temperatures, desertification, and food poverty, all of which are compounded by the country's geographical location and economy (Oderinde *et al.,* 2022). For example, the 2022 floods displaced nearly 1.4 million people, killed more than 600 individuals, and damaged over 82,000 dwellings.

Despite the seriousness of the global catastrophe, public knowledge and understanding of climate change in Nigeria remains low, particularly among young people. According to a 2020 poll, more over 60% of Nigerians had never heard of climate change, with metropolitan areas showing higher awareness than rural communities. This awareness gap is particularly troubling given that small businesses account for great number of Nigeria's businesses. Their participation is crucial for influencing the country's response to climate change, both now and in the future. According to research, climate change awareness and risk perception are critical drivers of both adaptation and mitigation actions (Oderinde *et al.*, 2022).

Individuals and groups with higher levels of awareness are more likely to take proactive measures in response to climate risks. As a result, raising climate change knowledge is critical to lowering vulnerability and increasing resilience, particularly among mitigation of climate change impacts who will bear the long-term repercussions of the actions.

The Nigerian media plays a significant role in affecting public opinion and awareness of climate change. Studies on media coverage have shown the different ways in which climate concerns are covered, often impacted by specific events. However, it is unclear if these storylines will translate into substantial participation among mitigation of climate change impacts.

Taxation is a potentially effective yet underutilized tool for achieving environmental change in Nigeria. Environmental taxation, such as carbon taxes, is a fiscal policy tool for reducing greenhouse gas emissions and encouraging ecologically responsible behaviour. The Nigerian government passed the Climate Change Act in 2021, laying the legal groundwork for achieving net-zero emissions by 2050-2070, although the incorporation of taxing measures into this framework remains limited.

Understanding the viewpoints of mitigation of climate change impacts in Nigeria on both climate change and environmental taxation is vital for designing policies that resonate with them. Despite that several incentives had been given, more inventive measures are still required to enhance their involvement, particularly in tying fiscal policies such as taxation to climate solutions.

The purpose of this study is to survey small business operators in Nigeria with a view to examining their understanding of climate change issues as well as their attitudes of taxation as a tool for environmental sustainability. The findings will help policymakers establish measures to increase participation of small business operators in climate-related fiscal policy and contribute to Nigeria's overall climate resilience and sustainable development goals.

Problem of the Study

Climate change poses significant threats to Nigeria's environment, economic development, and public health, as extreme weather events like floods, droughts, and heatwaves become more common and severe (Oderinde *et al.*, 2022). The 2022 floods alone affected nearly 1.4 million people and claimed more than 600 lives, highlighting the country's vulnerability to climate-related calamities. Despite these realities, Nigerian young people awareness and understanding of climate change remain alarmingly low. A 2020 poll found that more over 60% of Nigerians had never heard of climate change, with metropolitan areas having much more awareness than rural communities (Nzeadibe, et al., 2021).

This lack of information is especially troubling given that small business account for over very high number of businesses in Nigeria. Their participation is critical to national climate change mitigation and adaptation initiatives. Research continues to demonstrate that awareness and risk perception are important motivators for climate action (Dzahan *et al.*, 2022; Zakeer & Nawaz, 2020). However, there is limited empirical research on how small business operators in Nigeria view climate change and its relationship to economic mechanisms such as taxation.

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Environmental taxation, similar to carbon taxes, has shown to be a successful policy tool for reducing greenhouse gas emissions and encouraging sustainable practices around the world. Although Nigeria has made significant progress with the National Climate Change Policy and the Climate Change Act of 2021, the use of environmental taxes within this framework is still immature and underutilized. Furthermore, small business operators' perceptions on taxes as a lever for climate action have received little attention in existing research and policy discourses.

The key issue addressed by this study is a paucity of empirical data on small business operators' awareness and understanding of climate change, as well as the role of taxation in mitigating its effects. Without this understanding, efforts to create inclusive, entrepreneurship-responsive climate policy may be unsuccessful or misaligned with the goals of a critical group. The purpose of this study is to investigate small business operators' awareness, perceptions, and attitudes concerning climate change and environmental taxation. The study's findings will help policymakers and stakeholders understand how to better engage small business operators in climate governance and fiscal environmental measures, helping Nigeria achieve its broader goals of sustainable development and climate resilience.

2.Objectives

The main objective of the study is to examine the opinion of small business operators on the effect of taxation on the mitigation of climate change impacts in Nigeria. Specific objectives to pursue the main objective are:

1) Assess the effect of small business operators' perception of the generation of revenue from environmental taxes on the mitigation of climate change impacts in Nigeria;
2) Examine the effect of small business operator' perception of the green policy effectiveness on the mitigation of climate change impacts in Nigeria; and
3) Examine the effect of small business operators' perception of the revenue allocation to green projects on the mitigation of climate change impacts in Nigeria.

3.Materials and Methods

The study adopted a descriptive survey with small business operators in Nigeria as target population using a sample of 250 respondents randomly selected using google forms. A structured questionnaire was drafted with taxation measured by perception of; generation of revenue from environmental taxes, assessment of green policy effectiveness and revenue allocation to green projects as proxies for measurement of taxation and impacts on human capital, natural capital and physical capital as proxies for the impact of climate change. The items were measured using 7-point Likert scale on Totally True as 7 and Not True at All as 1.

4.Results

Table 1: Regression Test Statistics

Model	**R**	**R Sq.**	**Adj R Sq.**	**Std. Error**	**F**	**DF**	**Sign.**
1	.371[a]	.137	.125	0.87021	10.624	3/203	0.000.

Model		Unstddizd Coeff.		Stdd Coef.	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.464	.304		14.696	.000
	Revenue From Environmental Taxes	.315	.083	.337	3.814	.000
	Green Policy Effectiveness	-.172	.068	-.244	-2.513	.013
	Revenue Allocation to Green Projects	.147	.072	.209	2.038	.043

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Source: Survey (2026)

Interpretation

The results (R = 0.371, Adj. R Square = 0.125; F(3, 203) = 10.624, P < 0.001) suggest that taxation has a moderate significant positive effect on the mitigation of climate change impacts in Nigeria. The implication is that 13.7% of the changes in the mitigation of climate change impacts is caused by the collective effects of the three predictors in the model.

Individual Effects of each Predictor

Revenue From Environmental Taxes: The result (β = 0.315; p = 0.000) suggest that a unit increase in perceived appropriateness of environmental taxes has significant effect of 0.315 inducement in the mitigation of climate change impacts. This proxy gave the strongest positive predictor in the model.

Green Policy Effectiveness: The results (β = -0.172; p-value = 0.013) show that a unit increase in perceived effectiveness of green policies has a significant moderate but negative effect of 0.172 on the mitigation of climate change impacts in Nigeria. The implication is that unexpectedly, increased perception of green policy effectiveness contributed to reduction in mitigation of climate change impacts.

Revenue Allocation to Green Projects: The results (β = 0.147; p = 0.043) suggests that perception of the appropriate allocation of environmental tax revenue to green projects has significant effect of 0.172 on the mitigation of climate change impacts in Nigeria. This implies that a unit increase in proper channelling of environmental tax revenue to finance green projects will induce mitigation of climate change impact by 0.172. The implication is that proper channelling of environmental tax revenue to finance green projects enhances climate mitigation.

5.Summary and Discussion of Findings

In summary, the model established that taxation (measured by perception of revenue from environmental taxes, green policy effectiveness and revenue allocation to green projects) exerted significant effect on variation in the climate change mitigation efforts in Nigeria. Specifically, revenue from environmental taxes and revenue allocation to green projects both positively and significantly contribute to mitigation outcomes. meanwhile, green policy effectiveness shows a significant negative effect, highlighting potential misalignments between policy perception and practical outcomes.

The predictors of revenue from environmental taxes, the effectiveness of green policies, and revenue allocation to green projects collectively exerted 13.7% effect on the climate change mitigation. Notably, there is a negative correlation between climate change mitigation and green policy effectiveness, while there is a positive effect from revenue from environmental taxes and revenue allocation to green projects.

Revenue from Environmental Taxes: The finding of positive effect from perception of generating revenue from environmental taxes is consistent with the theoretical prediction that environmental taxes can be used to finance sustainable projects as well as to discourage ecologically damaging behaviour. This is also supported by studies like Stout *et al* (2025**)** and Omodero *et al.* (2022).

The negative effect from perception of the effectiveness of green policies is not in line with the *a-priori* expectations. This surprising result might be a reflection of how difficult it is to execute policies in Nigeria. Reasons behind it might be from the following (John & Udochukwu, 2025; Uwaegbulam & Gbonegun, 2021):

a) A discrepancy between the formulation of policies and their actual application.
b) Rather than concrete results, perceived "effectiveness" could be predicated on flimsy policy branding.
c) Potential public disenchantment or an exaggerated assessment of the impact of policies that conceals actual inefficiency; or
d) A lag effect, in which the advantages of measures have not yet become apparent.

Perception of the allocating revenue to green initiatives is found to exert positive effect on mitigation of climate change impacts among small business operators in Nigeria. Allocating green tax revenue into specified environmental projects helps to lessen the effects of climate change. This result emphasizes how crucial it is to collect environmental taxes and make sure the money raised is used wisely for initiatives that tackle environmental issues. However, openness, responsibility, and efficient project execution are necessary for these allocations to be successful.

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6.Conclusion

Based on the findings, the study concludes that taxation exerted significant effect on the mitigation of climate change impacts as expressed by small business operators in Nigeria in Nigeria. The study provides evidences that environmental taxation as a fiscal instrument has differential effects on the efforts to mitigate climate change impacts in Nigeria. The results show how complicated Nigeria's environmental economic policies are and how they may have unforeseen repercussions. The inverse relationship between climate change mitigation and green policy effectiveness emphasizes how crucial it is to develop sensible environmental policies and see to it that they are implemented successfully.

Policy Implications of the Findings

The study therefore highlights the following as the policy implications:

Positive effect of Revenue from Environmental Taxes.

a) This established the need for enhancement and expansion of Environmental Taxation in Nigeria.
b) Governments need to expand the scope of environmental taxes to include more activities in the pollution-intensive industries like plastics, extractive industries and industrial emissions.
c) To sustain citizens' trust and support, government and other policy makers should clearly dedicate revenue from environmental taxes to specified, visible environmental projects.
d) Policy making should acknowledge that the legitimacy and efficacy of taxation as a fiscal instrument will be increased by making sure taxes are properly imposed and collection procedures are effective. Strong oversight procedures should also be put in place to combat tax evasion and avoidance.
e) Citizens need to be educated on the benefits and justifications for imposing environmental taxation.

Negative effect of Green Policy Effectiveness:

a) The policy implication of Negative effect of Green Policy Effectiveness on the mitigation of climate change impact is that policy implementation and assessment should be prioritised.
b) The gap between policy and practice should also be bridged. There should also be strong structures for monitoring and evaluation, as well as, institutional transformation and capacity building.
c) The results establishing the benefits of allocating revenue to green projects suggests that there is need for accountability and efficient revenue allocation. Green project funding should be allocated according to anticipated results and tracked with key performance indicators (KPIs). Priority should also be given to scalable, high-impact projects and ensure transparency in revenue usage.
d) Nigeria may greatly increase the efficacy of taxation in combating climate change and guarantee that public views correspond with quantifiable environmental outcomes by implementing these policy implications.

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