

THE ROLE OF GREEN ACCOUNTING IN PROMOTING ENVIRONMENTAL SUSTAINABILITY IN NIGERIA

BY

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Abstract

This study examines the role of green accounting in advancing environmental sustainability in Nigeria, focusing on its integration into corporate reporting and decision-making. Green accounting, also referred to as environmental accounting, incorporates environmental costs and benefits into financial reporting to promote transparency, accountability, and sustainable development. The study employed a survey research design to assess public awareness, corporate compliance, and perceived benefits of green accounting. Primary data were collected from 76 respondents in Osun State, Nigeria, and analyzed using descriptive statistics. Results indicate that while public awareness of green accounting is growing, adoption and implementation within Nigerian companies remain limited due to the absence of legal frameworks, organizational support, and professional guidelines. The findings reveal strong public support for incorporating environmental accounting into company reporting systems and highlight its potential to enhance corporate social responsibility (CSR) initiatives, reduce environmental degradation, and improve long-term business performance. The study recommends the integration of environmental accounting standards into national legislation, continuous public sensitization, and corporate capacity-building programs to strengthen green accounting practices in Nigeria. By linking environmental responsibility with financial accountability, this research underscores green accounting's critical role in driving sustainable business practices in emerging economies.

Keywords: *Green accounting, Environmental accounting, Sustainability reporting and Management*

Introduction

In recent decades, environmental sustainability has become a central concern for policymakers, businesses, and the global community, as industrial growth and human activities continue to exert immense pressure on natural ecosystems. While corporate operations generate employment, income, and economic growth, they also contribute significantly to environmental degradation, including resource depletion, pollution, and climate change (United Nations Environment Programme [UNEP], 2022). In Nigeria, rapid industrialization, urban expansion, and resource exploitation have intensified these challenges, particularly in sectors such as oil and gas, manufacturing, and extractive industries (Adebayo & Ojo, 2021). Gas flaring, deforestation, improper waste disposal, and unregulated industrial emissions have emerged as critical environmental threats, undermining sustainable development goals. Green accounting—also known as environmental accounting—offers a strategic framework for integrating environmental costs and benefits into financial decision-making and corporate reporting. It expands traditional accounting to include both monetary and non-monetary measures of environmental impact, enabling organizations to quantify environmental liabilities, assess resource usage efficiency, and evaluate sustainability performance (Lloyd, 2017; Yakubu & Abubakar, 2023). Globally, environmental accounting has been recognized as a valuable tool for achieving sustainable development by promoting transparency, accountability, and informed decision-making (European Commission, 2021). In practice, it links environmental stewardship with corporate social responsibility (CSR), ensuring that businesses not only comply with environmental regulations but also adopt proactive measures to minimize ecological footprints.

Despite its growing recognition worldwide, green accounting adoption in Nigeria remains limited. This is largely due to the absence of comprehensive legal frameworks mandating environmental reporting, lack of standardized guidelines, and insufficient technical capacity within organizations (Beredugo & Mefor, 2012; Mohammed, 2023). While some multinational corporations operating in Nigeria have voluntarily incorporated sustainability disclosures in line with global best practices, many indigenous firms still overlook environmental reporting, focusing primarily on short-term financial performance. This gap between environmental responsibility and financial accountability underscores the urgent need for institutionalizing green accounting practices within Nigeria's corporate governance framework. Furthermore, empirical

studies in developing economies indicate that integrating environmental accounting into corporate strategies enhances operational efficiency, reduces regulatory risks, and improves corporate reputation (Okafor, Onuoha, & Oladipo, 2020; Nwankwo et al., 2022). However, much of the existing Nigerian research emphasizes environmental awareness and CSR in general, without systematically examining the level of public understanding, corporate compliance, and policy support for green accounting as a structured accounting practice. This study addresses this gap by investigating the role of green accounting in promoting environmental sustainability in Nigeria, assessing both public perceptions and organizational readiness for adoption.

By doing so, this research contributes to the discourse on sustainable business practices in emerging economies. It offers insights for policymakers, corporate leaders, and sustainability advocates on how environmental accounting can be institutionalized to align economic growth with ecological preservation. In particular, it emphasizes the importance of aligning Nigeria's corporate governance framework with international sustainability standards, ensuring that environmental protection becomes a core component of business decision-making rather than an afterthought.

Literature Review

Green accounting, also referred to as environmental accounting, is a framework that integrates environmental costs, benefits, and impacts into corporate financial systems and decision-making. It extends the scope of traditional accounting beyond monetary transactions to include environmental performance indicators, such as resource consumption, pollution control costs, and ecological liabilities (Lloyd, 2017). This approach aligns with the principles of sustainable development by enabling organizations to account for their environmental footprint and adopt strategies that minimize ecological harm while enhancing long-term economic value. According to Yakubu and Abubakar (2023), green accounting serves as a critical tool for linking corporate environmental stewardship with financial accountability, thereby encouraging environmentally responsible investment and operational decisions. The concept evolved from environmental management accounting, which initially focused on identifying environmental costs for internal management purposes (Afzal, 2012). Over time, it has expanded to cover external reporting, allowing stakeholders to evaluate the environmental performance of organizations alongside their financial performance (United Nations Conference on Trade and Development [UNCTAD], 2003). This shift reflects a growing global consensus that environmental sustainability and corporate profitability are interdependent, and that transparent environmental reporting is a key component of modern corporate governance (European Commission, 2021).

The structure of environmental accounting involves several interrelated components designed to capture both quantitative and qualitative environmental data. Lange (2003), as cited in Reajmin (2016), identified four primary components: (1) Natural resource asset accounts, which document the stock and flow of environmental resources; (2) Energy and material flow accounts, detailing inputs and outputs of energy and materials at the industry level; (3) Environmental protection expenditure accounts, tracking investments in pollution control and resource management; and (4) Environmentally adjusted macroeconomic aggregates, such as the environmentally adjusted net domestic product (EDP), which measure sustainable economic performance. These components are essential for integrating environmental considerations into the System of National Accounts (SNA) and for aligning corporate accounting practices with sustainability objectives. Contemporary applications of green accounting increasingly leverage digital tools, satellite monitoring, and big data analytics to track environmental indicators, making reporting more accurate and timely (World Bank, 2022).

Despite its benefits, the adoption of green accounting in Nigeria faces multiple barriers. Legally, there is no explicit provision for environmental accounting in the Companies and Allied Matters Act (CAMA), Securities and Exchange Commission (SEC) regulations, or national environmental management policies (Mohammed, 2023). Organizationally, companies often lack the internal policies, technical expertise, and trained personnel necessary to implement environmental accounting systems effectively (Beredugo & Mefor, 2012). Cultural and market factors also play a role. Many businesses prioritize short-term profitability over long-term sustainability, perceiving environmental reporting as a cost rather than an investment (Okafor et al., 2020). Moreover, the absence of standardized environmental reporting frameworks makes it difficult to compare performance across organizations, reducing the perceived value of disclosure. These challenges mirror those found in other developing economies, where institutional weaknesses, low public awareness, and limited regulatory enforcement hinder the institutionalization of green accounting (Kılıç & Kuzey, 2022).

Empirical research consistently demonstrates that green accounting contributes to environmental sustainability, corporate reputation, and operational efficiency. In Nigeria, Beredugo and Mefor (2012) found that environmental accounting enhances corporate social responsibility (CSR) initiatives and facilitates better resource management. More recent studies

show that organizations adopting structured environmental accounting practices are better positioned to meet regulatory requirements, reduce waste, and attract environmentally conscious investors (Okafor et al., 2020; Nwankwo et al., 2022). Globally, companies integrating green accounting have reported improved long-term profitability through cost savings from energy efficiency, waste reduction, and pollution prevention (European Commission, 2021). In emerging markets, environmental accounting has also been linked to enhanced access to international funding, as many development finance institutions now require environmental performance disclosures as part of loan or investment conditions (World Bank, 2022). These findings underscore the strategic importance of green accounting as both an environmental and a business imperative.

Methodology

This study adopted a survey research design to examine the role of green accounting in promoting environmental sustainability in Nigeria, focusing on public awareness, corporate compliance, and perceived benefits. The population comprised residents of Osun State, from which 76 respondents were purposively selected to ensure diverse representation across gender, age, and occupation. Primary data were collected through a structured questionnaire administered in March and April 2023, while secondary data were sourced from academic publications, government reports, and sustainability guidelines. The questionnaire elicited responses on knowledge, perceptions, and attitudes toward environmental accounting, as well as perceived organizational and policy challenges. Data analysis was conducted using descriptive statistics, including frequencies and percentages, to summarize demographic characteristics and survey responses. The results were presented in tabular form, accompanied by narrative interpretation. Ethical considerations were observed by ensuring voluntary participation, anonymity, and confidentiality of responses. This methodological approach was appropriate for capturing both the extent of awareness and the perceived relevance of green accounting within the Nigerian context, thereby aligning with the study's objective of providing actionable insights for policy and practice.

Results

Table 1: Demographic Profile of Respondents (n = 76)

Classification	Frequency	Percentage (%)
Gender		
Male	44	57.9
Female	32	42.1
Age		
20–30 years	21	27.63
30–40 years	15	19.74
40–50 years	33	43.42
50 years & above	7	9.21
Occupation		
Employees	44	57.9
Students	10	13.2
Lawyers	8	10.5
Businessmen	14	18.4

Source: Field Survey (2023)

The sample was predominantly male (57.9%) and concentrated in the 40–50 age bracket (43.42%). Employees accounted for the largest share (57.9%), suggesting a strong representation from the working population likely to have professional exposure to corporate reporting practices.

Table 2: Respondents' Awareness and Perceptions of Green Accounting (n = 76)

Awareness/Perception Item	Aware (%)	Not Aware (%)
Have heard of green/environmental accounting	55 (72.4)	21 (27.6)
Understand its purpose and objectives	48 (63.2)	28 (36.8)
Believe it is important for environmental sustainability	62 (81.6)	14 (18.4)
Believe it should be mandatory for all companies	59 (77.6)	17 (22.4)

Source: Field Survey (2023)

The majority of respondents (72.4%) had heard of green accounting, and 63.2% understood its objectives. A substantial 81.6% believed it plays a vital role in environmental sustainability, while 77.6% supported making it a mandatory component of corporate reporting in Nigeria. These results indicate strong public recognition of the relevance of green accounting despite varying levels of detailed knowledge.

Table 3: Perceived Challenges to Implementing Green Accounting (n = 76)

Challenge Category	Agree (%)	Disagree (%)
Lack of legal and regulatory framework	65 (85.5)	11 (14.5)
Lack of organizational policies supporting green accounting	58 (76.3)	18 (23.7)
Insufficient training and skilled personnel	60 (78.9)	16 (21.1)
High perceived cost of implementation	54 (71.1)	22 (28.9)
Businesses prioritize short-term profits over sustainability	61 (80.3)	15 (19.7)

Source: Field Survey (2023)

Respondents overwhelmingly agreed that the absence of a legal framework (85.5%), limited organizational support (76.3%), and inadequate technical capacity (78.9%) are major barriers to green accounting adoption. Additionally, over 70% cited cost concerns and profit-driven business priorities as significant constraints. These findings suggest that both policy intervention and organizational commitment are essential for mainstreaming green accounting in Nigeria.

Discussion of the Findings

The survey results reveal that awareness of green accounting among respondents in Osun State, Nigeria, is relatively high, with 72.4% having heard of the concept and 63.2% understanding its purpose and objectives. This suggests that environmental accounting is no longer entirely foreign to the Nigerian public, aligning with recent studies that highlight increasing environmental consciousness in developing economies (Okafor, Onuoha, & Oladipo, 2020; Nwankwo et al., 2022). Notably, a substantial majority (81.6%) believe green accounting is essential for environmental sustainability, while 77.6% advocate for its mandatory adoption in corporate reporting. This reflects a growing consensus that environmental accountability should be institutionalized in Nigeria, echoing global sustainability advocacy (European Commission, 2021; Yakubu & Abubakar, 2023). The findings further indicate that perceived challenges to implementation are both systemic and organizational. The most cited barrier was the lack of a legal and regulatory framework (85.5%), which resonates with the position of Mohammed (2023) that the absence of statutory requirements in the Companies and Allied Matters Act (CAMA) and Securities and Exchange Commission (SEC) regulations impedes environmental reporting adoption. This lack of regulation is compounded by weak enforcement of existing environmental laws, a problem prevalent in many developing economies (Kılıç & Kuzey, 2022). Organizational limitations are also significant.

Respondents identified inadequate internal policies supporting environmental accounting (76.3%) and a shortage of trained personnel (78.9%) as major obstacles. These capacity deficits mirror earlier observations by Beredugo and Mefor (2012), who argued that many Nigerian firms lack the technical expertise to implement effective environmental reporting systems. Additionally, cost concerns were expressed by 71.1% of respondents, while 80.3% noted that profit-maximizing business models often overshadow sustainability priorities. These findings support stakeholder theory (Freeman, 1984), which emphasizes that corporations must consider the interests of multiple stakeholders, including the environment and local communities, rather than focusing solely on shareholder returns. From a theoretical perspective, the results align with institutional theory, which posits that organizational change is driven by regulatory, normative, and cognitive pressures (DiMaggio & Powell, 1983). In this context, the absence of strong regulatory mandates in Nigeria reduces the institutional pressure for firms to adopt green accounting, leading to voluntary and inconsistent practices. Similarly, legitimacy theory suggests that organizations adopt environmental accounting to maintain social legitimacy (Suchman, 1995).

The fact that a significant portion of respondents link green accounting to corporate social responsibility underscores its role in strengthening public trust and organizational reputation. In comparison to international trends, where environmental reporting is increasingly being integrated into mainstream accounting through frameworks such as the Global Reporting Initiative (GRI) and the International Sustainability Standards Board (ISSB), Nigeria remains at a developmental stage. However, the high level of public support for green accounting identified in this study presents an opportunity for policymakers, professional bodies, and advocacy groups to push for institutional reforms. This aligns with findings from emerging economies where public awareness has been a catalyst for legislative change (World Bank, 2022). Overall, the discussion highlights a dual reality: Nigeria has a receptive public willing to embrace green accounting, but the institutional and organizational infrastructure to support widespread adoption remains underdeveloped. Addressing these gaps requires coordinated action between government, industry regulators, corporate leaders, and civil society stakeholders.

Conclusion

This study investigated the role of green accounting in promoting environmental sustainability in Nigeria, focusing on public awareness, perceptions, and the barriers to its adoption. The findings indicate that while there is substantial public

recognition of the relevance of green accounting—particularly its capacity to enhance corporate social responsibility (CSR), reduce environmental degradation, and support long-term business performance—its implementation in Nigeria remains minimal. This gap is primarily due to the absence of comprehensive legal frameworks, weak enforcement mechanisms, inadequate organizational policies, shortage of skilled personnel, and cost considerations. The results further reveal that Nigerians generally support making green accounting a mandatory component of corporate reporting. However, without institutional reforms, capacity-building efforts, and regulatory enforcement, adoption is likely to remain voluntary and inconsistent. This reflects broader sustainability challenges in developing economies, where economic growth imperatives often overshadow environmental stewardship. The study underscores that for Nigeria to align with global sustainability standards and the United Nations Sustainable Development Goals (SDGs), green accounting must be institutionalized within the country's corporate governance framework.

Recommendations

In line with the findings of this study, the following recommendations are made:

1. The National Assembly should amend the Companies and Allied Matters Act (CAMA) and relevant environmental laws to mandate environmental accounting disclosure for all companies, particularly those in high-impact sectors such as oil and gas, manufacturing, and mining.
2. Enforcement should be strengthened by the Securities and Exchange Commission (SEC) and Federal Ministry of Environment, with clear penalties for non-compliance and incentives for proactive adoption of green accounting.
3. Specialized training programs should be developed for accountants, auditors, and corporate managers on environmental accounting practices, possibly in partnership with professional bodies like ICAN and ANAN.
4. Companies should be encouraged to integrate environmental reporting into their internal governance policies, making sustainability a core strategic objective rather than a peripheral activity.

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