



WWJMRD 2022; 8(1): 111-120
www.wwjmr.com
International Journal
Peer Reviewed Journal
Refereed Journal
Indexed Journal
Impact Factor SJIF 2017:
5.182 2018: 5.51, (ISI) 2020-
2021: 1.361
E-ISSN: 2454-6615
DOI: 10.17605/OSF.IO/XK5D3

MBATUEGWU
Center for Financial
Accounting Research
(CEFAR) Nigerian College of
Accountancy, Kwall, Near Jos,
Plateau state, Nigeria.

Lawal, Sagir
Nigerian police academy wudil
kano, Nigeria

Egberi, Oyinemi Elvis
Nigerian College of
Accountancy, Kwall,
Near Jos, Plateau state,
Nigeria.

Correspondence:
MBATUEGWU
Center for Financial
Accounting Research
(CEFAR) Nigerian College of
Accountancy, Kwall, Near Jos,
Plateau state, Nigeria.

Impact of Environmental Accounting Disclosure on Financial Statements

MBATUEGWU, Christopher David, LAWAL, Sagir, EGBERI, Oyinemi Elvis

Abstract

Accounting for the environment improves investment decisions. In the long run, environmental accounting aids in the management and protection of Nigeria's natural resources. The main objective of this study is to examine the environmental accounting reporting in the financial statements of firms in Nigeria. It aims to investigate the extent and manner of environmental degradation. The majority of Nigerian quoted companies do not report their environmental accounting practices in their annual reports. Environmental Accounting enables organizations to track their environmental data and other greenhouse gas (GHG) emissions against reduction targets. It also facilitates environmental reporting to provide sustainability-related data that is comprehensive, auditable, and timely. Wikipedia describes Global Environmental Accounting as "an accounting methodology that deals with areas like energy, ecology, and economics at a worldwide level". National Environmental Accounting involves an individual country's accounting for its environmental problems. The US EPA categorizes environmental costs into potentially hidden costs, contingent costs, image and relationship costs, and social or external costs.

Keywords: Environmental Accounting, Nigeria's natural resources, financial statements of firms

Introduction

The most difficult environmental issues confronting the world today are global warming and climate change, both of which are caused by business operations. If not addressed immediately, this issue may have an impact on the ecosystem and pose a risk to future generations. As a result, it is critical for businesses to protect the environment and society by properly disclosing environmental accounting information in order to achieve long-term growth and development. Environmental issues have gradually evolved into not only a social issue, but also an economic and political one.

According to the Environmental Agency UK, "environmental accounting is defined as the collection, analysis, and assessment of environmental and financial performance data obtained from business management information systems, such as environmental management and financial accounting systems" (2006). Accounting for societal costs incurred as a result of the firm's production and other related activities is required.

Taking the environment into account improves investment decisions. Environmental activities and costs reported in financial statements assist a company's management in making future decisions.

Environmental accounting allows a company to measure its true financial performance because environmental costs such as greenhouse gas emissions, oil spillage, and deforestation are properly accounted for and reported. In the long run, environmental accounting aids in the management and protection of Nigeria's natural resources. A company that measures and forecasts its performance will become more productive, profitable, and sustainable.

Many profit-seeking firms in Nigeria are more concerned with the number of huge profits they can make without taking into account the environmental costs of achieving such profits. In the long run, society is forced to bear environmental costs such as greenhouse gas emissions, etc.

Environmental accounting reporting receives insufficient attention from members of the accounting profession. Many businesses have ignored this aspect of accounting, and the general public is unaware. The majority of businesses believe that they are not required to disclose their environmental activities in their financial statements. Despite the fact that these companies' financial statements present an impressive picture, society is forced to bear all of their costs.

As a result, the goal of this research is to look into the extent and nature of environmental degradation.

The investigation's goal

The main objective of the study is to examine the environmental accounting reporting in the financial statements of firms in Nigeria. Specific objectives of the study include:

1. To determine whether the majority of Nigeria quoted companies report their environmental practices in their annual reports.
2. To know the extent to which environmental accounting affects the organization's performance as shown by the financial statements
- To know if companies have a special way of disclosing their environmental accounting practices in their annual reports.

The hypotheses that are tested in the course of the study are:

1. H0: The majority of Nigerian quoted companies do not report their environmental accounting practices in their annual reports.

H1: The majority of Nigerian quoted companies report their environmental accounting practices in their annual reports.

2. H0: Environmental Accounting Does Not Affect the Organization's Performance as Shown by the Financial Statements

H1: Environmental Accounting affects the organization's performance as shown by the financial statements.

3. H0: Companies do not have a special way of disclosing their environmental practices in their annual reports.

H1: Companies have a special way of disclosing their environmental practices in their annual reports.

Conceptual framework

In recent years, Environmental Accounting (EA), also known as Green Accounting, has received numerous definitions. Many authors and organizations have provided a plethora of definitions.

Environmental accounting is defined as "the collection, analysis, and assessment of environmental and financial performance data obtained from business management and financial accounting systems," according to the Environmental Agency of the United Kingdom (2006).

Environmental Accounting, according to Essay World (2012), is an important tool for understanding the role of the environment in the economy as a mutual relationship identified between the two. Environmental accounting, according to the Business Dictionary, is the application of traditional accounting and finance principles to calculate the environmental costs of commercial and industrial decisions. Environmental accounting is a broad term that refers to the incorporation of environmental costs and information into a wide range of accounting practices. Graff et al. (1998)

Yakhou and Dorweiler (2004) specified that environmental accounting is an inclusive field of accounting. It provides reports for both internal and external use, generating environmental information to help make management decisions on pricing, overhead, and capital budgeting, and disclosure of environmental information of interest to the public and the financial community.

Environmental Accounting enables organizations to track their environmental data and other greenhouse gas (GHG) emissions against reduction targets and facilitates environmental reporting to provide sustainability-related data that is comprehensive, auditable, and timely to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development, social development, economic development, and environmental protection in Nigeria. (UNCTAD, 2003).

According to Daferighe (2010), environmental accounting can be broken into three disciplines:

1. Global Environmental Accounting:
2. National Environmental Accountability
- Corporate Environmental Accounting:

Global Environmental Accounting:

Global Environmental Accounting has to do with environmental accounting at a worldwide level. According to Wikipedia, "Global Environmental Accounting is an accounting methodology that deals with areas like energy, ecology, and economics at a worldwide level." It involves accounting for environmental costs and problems not just within individual countries but aggregately as a planet. Global Environmental Accounting is concerned with the preservation, protection, and management of the earth's natural resources. The awareness made about global warming by world bodies like the U.N.O. in the past years as a result of global environmental accounting practice Some world bodies in charge of environmental accounting include:

1. The Nature Conservancy
2. The Natural Resources Defense Council
- World Wildlife Fund, etc.

National Environmental Accounting

According to Wikipedia, "National Environmental Accounting is an accounting approach that deals with economics at a country's level."

"National Environmental Accounting is an accounting approach that deals with economics at a national level. It is a macroeconomic measure that looks at the use of natural resources and the impacts of national policies on the environment. (EPA of the United States, 1995; Jasch, 2006).

National Environmental Accounting involves an individual country's accounting for its environmental costs and problems. Environmental accounting at the national level requires a country to identify, reduce, or eliminate environmental costs that are peculiar to it. The country identifies such environmental problems and accounts for them. Different environmental agencies have been set up in different countries to account for their environmental activities. Examples include:

1. Environmental Agency of the United Kingdom
2. United States Environmental Protection Agency
3. Nigeria, National Environmental Standards and Regulations Enforcement Agency.

Classification of environmental costs

According to the US EPA, environmental costs are categorized into potentially hidden costs, contingent costs, conventional costs, image and relationship costs, and social or external costs. Potentially hidden costs, contingent costs, conventional costs, and related costs are seen as societal costs or external costs.

Private costs are the costs a business incurs or for which a business can be held accountable (legally responsible), while societal costs represent the costs of business impacts on the environment and society for which a business is not legally accountable. (US EPA, 1995).

1. **Potentially Hidden Costs:** These are costs that are difficult to identify despite the fact that they must have occurred. These costs may have been jointly grouped or calculated with other costs and reported therein. Some types of potential hidden costs include:
 2. **Upfront Environmental Costs:** These can include costs related to siting, design of environmentally preferable products or processes, qualifications of suppliers, evaluation of alternative pollution control equipment, and so on. Whether classified as overhead or R & D, these costs can easily be forgotten when managers and analysts focus on the operating costs of processes, systems, and facilities. (US EPA, 1995).
 3. **Regulatory and Voluntary Environmental Costs:** incurred in operating a process, system, or facility. Because many companies have traditionally treated these costs as overhead, they may not receive appropriate attention from managers and analysts responsible for day-to-day operations and business decisions. The magnitude of these costs may also be more difficult to determine as a result of their being pooled in overhead accounts. (US EPA, 1995).
 4. **Back-end Environmental Costs:** These environmental costs of current operations are prospective, meaning they will occur at more or less well-defined points in the future. Examples include the future cost of decommissioning a laboratory that uses licensed nuclear materials, closing a landfill cell, replacing a storage tank used to hold petroleum or hazardous substances, and complying with regulations that are not yet in effect but have been promulgated. Such back-end environmental costs may be overlooked if they are not well documented or accrued in accounting systems. (US EPA, 1995).
 5. **Contingent Costs:** Costs that may or may not be incurred in the future--here termed "contingent costs"--can best be described in probabilistic terms: their expected value, their range, or the probability of their exceeding some dollar amount. Examples include the costs of remedying and compensating for future accidental releases of contaminants into the environment (e.g., oil spills), fines and penalties for future regulatory infractions, and future costs due to unexpected consequences of permitted or intentional releases. These costs may also be termed "contingent liabilities" or "contingent liability costs." Because these costs may not currently need to be recognized for other purposes, they may not receive adequate attention in internal management accounting systems and forward-looking decisions. (US EPA, 1995).
 6. **Conventional costs:** the costs of using raw materials, utilities, capital goods, and supplies are usually

addressed in cost accounting and capital budgeting, but are not usually considered environmental costs. However, decreased use and less waste of raw materials, utilities, capital goods, and supplies are environmentally preferable, reducing both environmental degradation and the consumption of nonrenewable resources. It is important to factor these costs into business decisions, whether or not they are viewed as "environmental" costs. (US EPA, 1995).

7. **Image and Relationship costs:** Some environmental costs are called "less tangible" or "intangible" because they are incurred to affect subjective (though measurable) perceptions of management, customers, employees, communities, and regulators. These costs have also been termed "corporate image" and "relationship" costs. (US EPA, 1995).
8. **Social costs;** are costs borne by society. A business may or may not pay for such costs. These costs include both environmental degradations, for which firms are not legally liable, and adverse impacts on human beings, their property, and their welfare that cannot be compensated for through the legal system. Damage caused to a river via oil spillage, the release of gases that destroy the ozone layer, and the discharge of toxic substances into the air.

Environmental regulatory agencies in Nigeria

In Nigeria, many environmental regulatory agencies have been set up to protect the environment, manage waste disposal and prevent environmental degradation.

At the federal level, the regulatory agencies include:

1. The National Environmental Standards and Regulations Enforcement Agency (NESREA)
2. FMOE (Federal Ministry of Environment)
3. National Oil Spill Detection and Response Agency (NOSDRA)
4. The Niger Delta Development Commission (NDDC)
5. Federal Environmental Protection Agency (FEPA) – defunct
6. Forestry Research Institute of Nigeria (FRIN)
7. National Biosafety Management Agency (NBMA)
8. Abuja Environmental Protection Board (AEPB)
9. The Petroleum Product Pricing and Regulatory Agency (PPRA) is a government agency that oversees the pricing and regulation of petroleum products.

Theoretical framework

Many theories back up the reason and need for environmental accounting and reporting, but this research is based on the legitimacy theory. The legitimacy theory was selected because it offers a powerful mechanism for understanding voluntary social and environmental disclosure made by corporations.

i. Legitimacy theory; Gray (1995) claims that there has been significant growth in environmental and social auditing and reporting since the 1990s. To a great extent, the legitimacy theory is the reason for the increase in environmental reporting.

"Legitimacy theory posits that a social contract or agreement exists between an enterprise and its constituents due to which the enterprise agrees to perform various socially desired actions in return for approval of its objectives, other rewards, and ultimate survival." (Guthrie and Parker). The legitimacy theory is one of the most cited

theories in social and environmental accounting.

There is always a social contract that is binding on an organization. A social contract shows the expectations society expects from the organization's operations. Organizations try to make sure they try to operate within the bounds and norms of their respective society. The legitimacy theory suggests that businesses operate in a society according to the social contract upon which their survival and growth are dependent.

ii, Stakeholder theory: This theory focuses more on meeting stakeholders' demands to achieve strategic firm objectives. It considers the different stakeholder groups within society and how they could best be managed. It looks at the relationships between an organization and others in its internal and external environment. It also takes into cognizance how these relationships affect the way the organization operates. (Mbatuegwu and Ogoh 2021)

iii. Resource Dependence Theory: this theory, according to Wikipedia, "is the study of how the external resources of organizations affect the behavior of the organization. The procurement of external resources is an important tenet of both the strategic and tactical management of any company. " Organizations depend on the resources of the environment to survive. It focuses on the strategy organizations adopt when drawing resources from the environment.

Despite the diversity in their level of analysis, these theories seek to promote and enhance corporate social and environmental accounting reporting.

Guided by the legitimacy theory, this research work seeks to examine the environmental accounting reporting in the financial statements of firms in Nigeria.

Ifeyanichukwu and Emmanuel (2021). The research looked into the corporate environmental accounting disclosure and financial performance of a few Nigerian manufacturing companies. Specifically, the study looked at the impact of environmental accounting disclosures on the share price, return on assets, and return on equity of selected Nigerian manufacturing firms. This study employed the ex-post-facto research design, with a sample of 40 manufacturing firms. The convenience sampling technique was used to collect data from a secondary source. From 2010 to 2019, data were gathered from the content analysis disclosure index and corporate annual reports of the sampled manufacturing firms listed on the Nigerian Stock Exchange. The statistical tools used in the study were descriptive statistics, a correlation matrix, and regression analysis. The panel data regression technique was used to analyze the data. Our findings showed that environmental accounting disclosures had a significant impact on the share price, return on assets, and return on equity of Nigerian manufacturing firms. According to the study, companies should increase the extent to which they disclose the environmental impacts of their firm's activity in their annual report in order for stakeholders to assess their performance. Similarly, effective government oversight is critical in ensuring that environmental disclosure is implemented in accordance with applicable regulations. Finally, the regulatory authority should establish a verification unit to ensure external verification of environmental disclosure claims and ascertain compliance. Hassan and Zamil (2019). From 2013 to 2017, this study looked at the impact of environmental reporting on the financial performance of Fortune 500 companies. It

evaluates financial performance by measuring three independent variables: greenhouse gas emissions reduction, waste reduction, and water consumption reduction. While the target population consisted of the Fortune 500's top 100 CSR-reputed companies, the sample size was determined to be 50 based on observations of 250 companies. Descriptive statistics, correlation, and regression analysis were used to analyze the collected data. Findings revealed that reducing nominated variables such as greenhouse gas emissions and water consumption had a positive and significant impact on financial performance, whereas reducing another variable, namely waste, had a negative and significant impact. As a result, this study suggests that firms use environmentally friendly resources to attract stakeholders while also saving the planet. It also implies that firms should devote more attention to environmental reporting in order to improve profitability.

Shonhadji (2018) To determine the effect of profitability and growth rates of the company's assets on environmental disclosure with environmental performance as a moderating variable, investigate the financial performance of environmental disclosure with environmental performance as a moderating variable. Environmental disclosure is a dependent variable, whereas profitability and asset growth rates are independent variables. At the same time, profitability is measured by ROA (Return on Asset), and the rate of asset growth is measured by total assets. He also uses environmental disclosure to measure a weighted score of the Global Reporting Initiative (GRI) Guidelines as the dependent variable. A moderated regression analysis was used to analyze the data. This study's sample is used by mining companies that use the PROPER program and are listed on the Indonesia Stock Exchange. Purposive sampling was used to analyze the data. The study's findings show that profitability variables have no effect on environmental disclosure, variable growth rates of the company's assets have a significant effect on environmental disclosure, and environmental performance variables can be independent variables with an effect on environmental disclosure. the work was done on profitability while this will focus on financial disclosure.

Bassey, Effiok, and Eton (2013) carried out a study on "The Impact of Environmental Accounting and Reporting on the Organizational Performance of Selected Oil and Gas Companies in the Niger Delta Region of Nigeria". The study was conducted using Pearson's product-moment correlation coefficient. Data was gathered from both primary and secondary sources. It was found from the study that environmental costs have a satisfactory relationship with a firm's profitability. It was concluded that environmentally friendly firms will significantly disclose environmental-related information in financial statements and reports. The study recommended that firms adopt a uniform method of reporting and disclosing environmental issues for control and measurement of performance and that accounting standards should be published locally and internationally and reviewed continually to ensure dynamism and compliance to meet environmental and situational needs, also the work was done on oil and gas companies in Nigeria, what of other sector of the economy. Uwuigbe and Jimoh (2012) researched "Corporate Environmental Disclosures in the Nigerian Manufacturing Industry: A Study of Selected Firms". The study was based on the stakeholders' theory, and the selected firms were

manufacturing firms listed on the Nigerian Stock Exchange. The study, as part of its findings, observed that the level of environmental disclosure practices in the industry is still very low and is still at an embryonic stage in Nigeria.

The study, therefore, called for concerted efforts on the part of the Nigerian Accounting Standards Boards and the government to take another look at making corporate environmental disclosure mandatory.

Onyali, Okafor, and Egolum (2014) carried out a study that assessed the extent, nature, and quality of environmental information disclosure practices of manufacturing firms in Nigeria. Content analysis was adopted in analyzing the annual reports of the selected firms with regards to their environmental disclosure practices. Furthermore, a survey was carried out to ascertain whether the environmental disclosure practices of firms in Nigeria have improved. The findings of the study indicated that the environmental disclosure practices of firms in Nigeria are still ad-hoc and contain little or no quantifiable data. As a result, the study recommended the development of environmental disclosure standards to harmonize firm disclosure practices and result in the provision of environmental quantifiable data.

Okafor, Okaro, and Egbunike (2013) conducted a study on environmental cost accounting and cost allocation. The study sought to determine the extent to which Nigerian firms have embraced environmental cost accounting in cost allocation. The study revealed that the majority of firms have not embraced environmental cost accounting, they still lump all indirect costs under overhead. It also revealed that significant differences exist among firms on the method of allocating environmental costs to products/processes. The study further concluded that environmental accounting can be said to be in its embryonic stage in the manufacturing firms in Nigeria.

Methodology

The design of this study is a descriptive survey research design. The descriptive design seeks to find out the conditions and relationships that exist, opinions that are held, processes that are going on, evident effects, or trends that are developing (Akuezuilo and Agu, 2003). The

descriptive survey design is suitable for this study because we are interested in examining the environmental accounting reporting practices of selected firms in Nigeria. To reduce the size of the large population to a manageable size, the researcher used the judgmental sampling technique. And secondary sources of data from listed 24 companies that published at least two years and at most five years of annual reports as a sample for the study. These were selected due to the availability and easy access to their annual reports.

Cochran's Q Test

The Cochran's Q test is a statistical test used to verify whether K treatments have identical effects. It is used in the analysis of two randomized block designs where the response variables can only take two possible outcomes (coded as 0 and 1) and is also used to statistically analyze success rate data.

The Cochran's Q test statistic is

$$T = K (K-1)$$

Where:

K is the number of treatments.

X_j = the column total for the jth treatment.

b = the number of blocks

X_i = the total number of rows in the ith block

N is the total number of

Critical region

For significance level, the critical region is T > Where is the () quantile of the chi-squared distribution with k-1 degree of freedom? The null hypothesis is rejected if the test statistic is in the critical region.

Presentation and analysis of data

This chapter presented and analyzed the data collected from the annual reports of the sampled companies in Nigeria in line with the objectives of the study. The data collected was from five years' financial reports, (2015–2019) of the sampled firms. A total of 24 companies were examined. The analysis was done using statistical techniques such as content analysis, Cochran's Q test, and regression analysis with the aid of the Statistical Package for Social Sciences (SPSS).

Table 1: Existence of Environmental Accounting Reporting in Annual Reports.

NAME OF COMPANY	2015	2016	2017	2018	2019
A.G Leventis Nig PLC	No	No	No	No	No
Ashaka Cement PLC	No	No	No	Yes	Yes
Beta Glass PLC	No	No	No	No	No
Chams PLC	No	No	No	No	No
Chellarams PLC	No	No	No	No	No
Dangote Cement PLC	Yes	Yes	Yes	Yes	Yes
Dangote Sugar PLC	No	Yes	Yes	Yes	Yes
First Aluminum Nig PLC	No	No	No	No	No
Flour Mills of Nigeria PLC	No	No	No	No	No
Guinness Nig PLC	Yes	Yes	Yes	Yes	Yes
Honeywell Flour Mills PLC	No	No	No	No	No
Julius Berger Nigeria PLC	No	No	No	No	No
Lafarge Cement Wapco PLC	No	Yes	Yes	Yes	Yes
Nestle Nig PLC	Yes	Yes	Yes	Yes	Yes
Nigerian Breweries	Yes	Yes	Yes	Yes	Yes
Oando PLC	Yes	Yes	Yes	Yes	Yes
Portland Paints and Products Nig PLC	No	No	No	No	No
PZ Cussons PLC	Yes	Yes	Yes	Yes	Yes
Transnational Corporation of Nigeria PLC	No	No	No	No	No
UAC of Nigeria PLC	No	No	No	No	No

Unilever Nigeria PLC	Yes	Yes	Yes	Yes	Yes
MRS Nigeria PLC	No	No	No	No	No
CAP PLC	Yes	Yes	Yes	Yes	Yes

In the table above, it can be seen that in 2015, 8 out of the 24 companies disclosed their environmental accounting practices in their annual reports. 8 companies represent 33% of the population, while the remaining 16 companies representing 67% did not disclose it in their annual report. In the year 2016, 11 companies (46%) disclosed their environmental accounting practices while the remaining 13 companies (54%) had no disclosure. In the year 2017, 10 companies (42%) disclosed their environmental accounting practices while the remaining 14 companies (58%) had no disclosure. In the year 2018, 12 companies (50%) had the existence of their environmental accounting practices in their annual reports while 12 companies (50%) had no disclosure. In the year 2019, 12 companies (50%) disclosed their environmental accounting practices while the remaining 12 companies (50%) did not.

1 Calculated Return on Capital Employed (ROCE) and Return on Shareholder's Capital (ROSC) of sampled companies.

Profitability was used to measure organizational performance. In other to measure the profitability of the company, two profitability ratios were used; Return on Capital Employed (ROCE) and Return on Shareholders Capital (ROSC). These ratios were calculated for the two sets of companies, i.e., those that report their environmental accounting practices and those that do not.

$$ROCE = \frac{\text{Profit before interest and taxation}}{\text{Share capital and reserves} + \text{long-term debt capital} + \text{preference share capital}} \times 100\%$$

$$ROSC = \frac{\text{Profit after taxation and preference dividend}}{\text{Share capital and reserves}} \times 100\%$$

Table 2: ROCE and ROSC of Companies that report their environmental accounting practices and year of report.

Name of company	ROCE (%)					ROSC (%)				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Ashaka Cement	10	31	11	68	32	7	5	6	68	25
Dangote cement	38	29	29	32	34	51	41	36	37	32
Dangote sugar	39	27	35	37	33	28	18	23	25	22
Guinness Nig. Plc	53	59	45	38	22	40	45	36	26	21
Julius Berger Nig Plc	88	122	98	61	58	36	48	54	29	23
Lafarge Wapco Nig	8	6	8	9	6	7	5	4	5	2
Nestle Nig Plc	51	44	47	42	52	85	72	62	55	59
Nigerian Breweries	90	54	47	57	3	61	49	41	38	25
Oando PlcS	6	7	0.3	14	12	9	4	8	2	5
Pz Cussons plc	20	20	11	11	20	13	15	8	15	18
Unilever nig Plc	31	31	88	52	63	32	34	56	50	51
Cap Plc	80	136	165	120	118	66	70	96	112	102

From the table above, not all the companies reported their environmental accounting practices constantly, Ashaka Cement reported for 2018 and 2019, Julius Berger Nig. Plc

reported for 2015, 2016, and 2017. Lafarge Wapco Nig reported for only 2016, 2017, 2018, and 2019. Dangote sugar also reported for 2016, 2017, 2018, and 2019.

Table 3: ROCE and ROSC of companies that do not report their environmental accounting practices.

Name of company	ROCE (%)					ROSC (%)				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
A. G. Leventis	11	13	18	19	18	11	10	12	13	10
Beta Glass plc	21	19	15	15	13	14	15	11	11	9
Chams Plc	-22	-13	13	10	11	-16	-9	9	9	8
Chellarams plc	26	12	14	11	12	15	8	6	4	7
First aluminum Nig plc	-8	-11	-23	-9	-9	-1	-7	-23	-2	-1
Flour mills of Nig	32	40	17	16	21	20	24	11	10	11
Forte oil plc	-19	-21	33	44	30	-11	-17	10	37	29
Honey well flour mills plc	27	25	18	18	20	14	15	16	15	16
Portland paints	8	13	6	17	27	6	7	9	7	20
Transactional corporation	5	9	13	11	9	22	6	14	9	8
UAC of Nig	17	40	21	20	22	14	35	17	15	16

Table 4 Evaluation to know the way companies report their environmental accounting practices.

Name of Company	2010	2011	2012	2013	2014
A.G. Leventis	-	-	-	-	-
Ashaka Cement	-	-	-	D	D
Beta Glass	-	-	-	-	-
Chams Plc	-	-	-	-	-
Chellarams Plc	-	-	-	-	-
Dangote Cement Plc	D & C	D & C	D & C	D & C	D & C
Dangeto Sugar	-	D	D	D	D

First Aluminum Nig	-	-	-	-	-
Flour Mills of Nig	-	-	-	-	-
Forte oil Nig Plc	-	-	-	-	-
Guinness Nig Plc	D & C	D & C	D & C	D & C	D & C
Honeywell flour mills plc	-	-	-	-	-
Julius Berger nig Plc	-	D & C	-	D & C	D & C
Lafarge	-	D & C	D & C	D & C	D & C
Nestle Nig Plc	D	D	D	D	D
Nigerian Breweries	D & C	D & C	D & C	D & C	D & C
Oando Plc	D	D	D	D	D
Portland paints & products Plc	-	-	-	-	-
Pz cusson Plc	D	D	D	D	D
Transaction corporation plc	-	-	-	-	-
UAC of Nig. Plc	-	-	-	-	-
Unilever Nig. Plc	D	D	D	D	D
MRS Nig. Plc	-	-	-	-	-
CAP Plc	D	D	D	D	D

**D = Means Descriptive approach while
C = Means Cost outlay approach**

In the table above, it can be observed that out of the 12 companies that reported their environmental accounting practice, 5 companies used both the descriptive and cost outlay approach, while the remaining 7 companies used only the descriptive approach.

Test of Hypotheses

H01: The majority of Nigerian quoted companies do not report their environmental practices.

This hypothesis is tested using SPSS Cochran's Q test. This

was deemed appropriate because SPSS Cochran's Q test is a procedure for testing whether the proportions of 3 or more dichotomous variables are equal in some populations. The variables employed were obtained from table 1. These variables have been measured on the same cases with 1 coded as Yes indicating "existence of environmental accounting reporting in annual reports of the companies and 2 coded as NO indicating the "non-existence of environmental accounting reporting in annual reports of the companies."

Result of SPSS Cochran's Q test NPar Test

Table 5: Descriptive Statistics

Companies names	N	Mean	Std. Deviation	Minimum	Maximum
A.G Leventis	5	2.0000	.00000	2.00	2.00
Ashaka Cement	5	1.6000	.54772	1.00	2.00
Beta Glass	5	2.0000	.00000	2.00	2.00
Chams PLC	5	2.0000	.00000	2.00	2.00
Chellarams PLC	5	2.0000	.00000	2.00	2.00
Dangote Cement	5	1.0000	.00000	1.00	1.00
Dangote Sugar	5	1.2000	.44721	1.00	2.00
First Aluminium	5	2.0000	.00000	2.00	2.00
Flour Mills	5	2.0000	.00000	2.00	2.00
Forte Oil	5	2.0000	.00000	2.00	2.00
Guinness PLC	5	1.0000	.00000	1.00	1.00
HONEYWELL	5	2.0000	.00000	2.00	2.00
Julius Berger	5	1.4000	.54772	1.00	2.00
Lafarge PLC	5	1.2000	.44721	1.00	2.00
NESTLE NIG	5	1.0000	.00000	1.00	1.00
NIG Breweries	5	1.0000	.00000	1.00	1.00
Oando PLC	5	1.0000	.00000	1.00	1.00
Portland	5	2.0000	.00000	2.00	2.00
PZ Cussons	5	1.0000	.00000	1.00	1.00
Transnational	5	2.0000	.00000	2.00	2.00
UAC	5	2.0000	.00000	2.00	2.00
Unilever	5	1.0000	.00000	1.00	1.00
MRS NIG	5	2.0000	.00000	2.00	2.00
Cap PLC	5	1.0000	.00000	1.00	1.00

Cochran Test

Table 6: Frequencies

	Value	
	1	2
A.G LEVENTIS	0	5
ASHAKA CEMENT	2	3
BETA GLASS	0	5

CHAMS PLC	0	5
CHELLARAMS PLC	0	5
DANGOTE CEMENT	5	0
DANGOTE SUGAR	4	1
FIRST ALUMINIUM	0	5
FLOUR MILLS	0	5
FORTE OIL	0	5
GUINNESS PLC	5	0
HONEYWELL	0	5

JULIUS BERGER	3	2
LAFARGE PLC	4	1
NESTLE NIG	5	0
NIG BREWERIES	5	0
OANDO PLC	5	0
PORTLAND	0	5
PZ CUSSONS	5	0
TRANSNATIONAL	0	5
UAC	0	5
UNILEVER	5	0
MRS NIG	0	5
CAP PLC	5	0

Table 7: Test Statistics

N	5
Cochran's Q	101.049^a
Df	23
Asymp. Sig.	.53

a. 2 is treated as a success.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.206 ^a	.042	-.277	16.231

a. Predictors: (Constant),
Roce And Rosce of Companies That Discloses

Table 9: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	34.898	1	34.898	.132	.000 ^b
	Residual	790.302	3	263.434		
	Total	825.200	4			

a. Dependent Variable: Roce and Rosce of Companies That Do Not Disclose
b. Predictors: (Constant), Roce and Rosce of Companies That Discloses

Table 10: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	65.340	60.714		1.076	.361
	Roce And Rosce of Companies That Discloses	-.642	1.763	-.206	-.364	.740

a. Dependent Variable: Roce and Rosce of Companies That Do Not Disclose

Test of Hypothesis Three

H03: Companies do not have a special way of disclosing their environmental practices.

This hypothesis is tested using the SPSS Cochran's Q test. This was deemed appropriate because the SPSS Cochran's Q test is a procedure for testing whether the proportions of 3 or more dichotomous variables are equal in some populations. The variables employed to test this hypothesis were obtained from table 4.5. These variables have been measured in the same cases with 1 coded as D, indicating "the descriptive approach of reporting environmental issues" and 2 codes as DC, indicating the "descriptive and cost outlay approach of reporting environmental issues."

Decision Based on Hypothesis Test Three

The null hypothesis is accepted because the P-value (Asymp Sig =.069) is greater than the stipulated level of significance of 5%. It is thus concluded that companies do not have a special way of disclosing their environmental practices in their financial statements.

Discussion of Results

The result of the findings revealed that the majority of the

Decision from Test of Hypothesis One

The null hypothesis is accepted because the P-value (Asymp Sig=.53) is greater than the stipulated level of significance of 5%. It is thus concluded that the Majority of Nigerian quoted companies do not report their environmental practices in their annual reports.

H02: Environmental Accounting does not affect the organization performance

To test this hypothesis, regression analysis was employed. Data were obtained from Table 2 (ROCE and ROSC) of companies that disclose their environmental accounting reports and Table 4.4 (ROCE and ROSC) of companies that do not disclose their environment accounting reports.

companies do not report their environmental accounting practices as observed from their annual reports for five years. The calculated P-value was 0.53, which is greater than the stipulated level of significance of 5%, or 0.05. This led to the conclusion that the majority of the companies do not report their environmental accounting practices because the null hypothesis, which stated that "the majority of Nigerian quoted companies do not report their annual reports," was accepted. Uwuigbe and Jimoh (2012) supported this finding when they maintained that environmental disclosure is still very low and at its embryonic stage in Nigeria.

The study, after the data analysis, also found out that environmental accounting affects organizations' performance. The calculated P-value (0.000) is lower than the stipulated level of significance (0.05). This led to the rejection of the null hypothesis that the organization's performance as shown by the financial statements was null. This finding is also in agreement with that of Bassey, Sunday, and Okon (2013) when they found that environmental accounting influences firms' profitability and enhances organizational performance.

Hypothesis three was tested, and the result showed that

companies do not have a special way of disclosing their environmental practices in their annual reports. It was tested using Cochran's Q test and the null hypothesis was accepted, which means that there is no particular way companies report their environmental accounting practices. Some companies made use of the descriptive approach, while some others used both the cost outlay and the descriptive approach. Companies tend to use any method that best suits them.

The following were also examined:

1. The majority of companies do not report their environmental accounting practices as seen in their annual reports for five years.
2. It was also found out that companies that report their environmental issues in their annual reports are more profitable than those that do not.
3. Companies do not have a special way of disclosing their environmental activities in their annual report. Most companies use whatever method is best for them.

Conclusion and Recommendations

From the findings, the researcher concludes that environmental accounting reporting in firms is still at a low stage and that most companies don't take it seriously. This finding of the study, in line with Onyali, Okafor, and Egolom (2013), indicates that the environmental disclosure practices of firms in Nigeria are still ad hoc and contain little or no quantifiable data. Just like Okafor, Okaro, and Egbunike (2013) also concluded, many firms are still trying to understand the concept of environmental accounting.

Based on findings and conclusions and also data available, the following recommendations were made.

1. Institutes for Accounting and bodies regulating the practice of accounting in Nigeria, like ICAN and ANAN, should come together and develop environmental accounting and make the concept a popular one that firms should adopt and be conversant with. Researchers and other members of the accounting profession should provide the basis and also the means of quantifying environmental accounting.
2. The government should put in place suitable legislation for all companies to compel organizations to be genuinely responsible for all environmental costs and damage that may arise as a result of their activities. If companies are left to keep on reporting voluntarily, they will be after profits, not minding the damage caused to the environment.
3. Companies, on their part too, should not just be after profit-making but also consider the environment from which they are benefiting and find ways to keep on sustaining the environment. They should bear in mind that the sustainability of the environment is also the sustainability of their business operations.

References

1. Ahmad, A (2012). Environmental accounting and reporting practices: significance and issues. *Global Journal of Business & Management Research*, 12 (14), 119-127.
2. Ayoola, T. (2011). Gas flaring & its implication for environmental accounting in Nigeria. *Journal of Sustainable Development*, 4(5), 244-250.

3. Daferighe, E. E. & Aje, S. O. (2005). management of the environmental accounting system. *International Journal of Economic & Development*, 5(1), 204-213.
4. Daferighe, E.E. (2010). environmental accounting and degradation. *A Quarterly Journal of the Association of National Accountants of Nigeria*, 18(4), 55-67.
5. Dorweiler, V.P., and Yakhou, M. (2002). dimensionality of environmental accounting. *Journal of Accounting & Finance Research*, 9(4), 47-64.
6. Emmanuel U, Ifeanyichukwu AP (2021). Environmental accounting disclosure and financial performance of manufacturing firms in Nigeria. *Journal of Economics and International Business Management*, Volume 9, Issue 2, pp. 71-81. doi: https://doi.org/10.33495/jeibm_v9i2.21.126
7. Environmental Agency, UK (2006) Glossary of terminology and definitions.
8. Environmental Protection Agency. (1995a). An introduction to environmental accounting as a business management tool: key concepts and terms, office of pollution prevention and toxics. EPA 742-R-95-001, June.
9. Environmental Protection Agency. 1995b. Environmental cost accounting for capital budgeting: A benchmark survey of management accountants, office of pollution prevention and toxics, EPA 742-R-95-005, September.
10. Environmental Protection Agency. (1995c). Environmental accounting case green accounting at AT & T, Office of Pollution Prevention & Toxics, EPA 742-R-95-003, September.
11. Environmental Protection Agency. (1996). Valuing potential environmental liabilities for managerial decision-making: A review of available techniques, EPA 742-R-96-003, December.
12. Frost, G., and Wilmshurst, T.D. (2000). Evidence of environmental accounting in Australian companies *Asian Review of Accounting*, 6 (2), 10-26.
13. Graff, P.G., Ferskin, E.D; White, A.C., & Bodroell, K. (1998). Snapshots of environmental cost accounting. 1-6. United States Environmental Protection Agency, Environmental Accounting Project.
14. Gray, R.H., Kouhy, R., & Lavers, S. (1995a). Corporate social and environmental reporting: A review of the literature and a longitudinal study of United Kingdom disclosure. *Accounting, Auditing, & Accountability Journal*, 8(12), 47-54.
15. Gray, R.H., Kouhy, R., & Lavers, S. (1995b). Methodological themes: Constructing a research data base of social & environmental reporting by UK companies. *Accounting, Auditing, and Accountability Journal*, vol. 8, no. 2, pp. 68-77.
16. Guthrie, J. & Parker, L. (1989). Corporate social disclosure practice: A comparative international analysis. *Advances in Public Interest Accounting*. 3.
17. The Irish Times, 2000.environmental accounting, social responsibility, and its impact on annual reporting. Seventh edition of *Business 2000*.
18. Jasch, C. H. (2006). How to perform an environmental management cost assessment in one day. *Journal of Cleaner Production*. 14(14), 56-67.
19. Mastrandrea, M. & Schneider, S. H. (2008). "Global warming." Microsoft Corporation's Microsoft® Encarta® 2009 [DVD]All rights reserved.

20. Mbatuegwu, C.D. & Ogoh, T. (2021) Effect of Firm Attributes on Stock Returns of Quoted Consumers Goods Companies in Nigeria. BUJAB Vol.6 No 2,
21. O'Donovan, G. (1999) Managing legitimacy through increased corporate environmental reporting: An exploratory study. *Interdisciplinary Environmental Review*. 1 (1), 13-19
22. Odum, E.P. (1983). *ecology and our life support system*. Sunderl & Sinnaner
23. Odum, H. T. (1996). *Environmental Accounting: Using Energy to Make Decisions USA*: Wiley
24. Okafor, G. O. (2011). *Corporate environmental accounting practices in Nigeria A PhD dissertation presented to the department of accountancy at Nnamdi Azikiwe University, Awka, Nigeria.*
25. Okafor, G., Okaro, S, & Egbunike, F (2013). Environmental cost accounting and cost allocation (A study of selected manufacturing companies in Nigeria). *European Journal of Business & Management*, 5(18), 68-75.
26. Onyali, C, Okafor, T, and Egolum, P. (2014). An assessment of the environmental information disclosure practices of selected Nigerian manufacturing companies. *International Journal of Finance & Accounting*, 3(6), 349-355.
27. Tennenbaum, S. E. (1988). *Network energy expenditures for subsystem production*, M.Sc. thesis. Gainesville, Florida University, Florida.
28. UNCTAD (2003). *Integrating environmental and financial performance at the enterprise level: A methodology for standardizing eco-efficiency indicators.*
29. Uwuigbe, U. & Jimoh, J. (2012). Corporate environmental disclosures in the Nigerian manufacturing industry: A study of selected firms. *An International Multidisciplinary Journal, Ethiopia*, 6(3), 71--83.
30. Uwuigbe, U. & Olayinka, M. (2011). Corporate social and environmental disclosure in Nigeria: A comparative study of the building materials and brewery industries. *International Journal of Business & Management*, 6(2), 258-264.
31. Watts, R. L., and Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards *Accounting Review*, vol. 54(2), pp. 53–61.
32. Shonhadji, N. (2018) Financial Performance to Environmental Disclosure with Environmental Performance as Moderation. *International Journal of Research Science & Management [183]* 5(8): ISSN:2349-5197
33. Xiaomei, L. (2004). Theory and practice of environmental management accounting: implementation experience in China *International Journal of Technology Management & Sustainable Development*, 3(1), 47-57.
34. Yalkhou, M., & Dorweiler, V. P. (2004). Environmental accounting: an essential component of business strategy. *Business Policy & the Environment: Bus, Strat, Env*, 13, 65-77.
35. Zamil, S.G.M. and Hassan Z. (2019) Impact of Environmental Reporting on Financial Performance: *Indonesian Journal of sustainability accounting and management* Vol. 3 no.2
DOI: <https://doi.org/10.28992/ijssam.v3i2.78>