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Green Environmental Management and Community Sustainability in Exxonmobil, Eket, Akwa Ibom State, Nigeria

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Abstract

The study investigates the relationship between green environmental management and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria. A survey research method was adopted for the study. A sample of 240 respondents was drawn from the population of 600 using Taro Yamane's scientific sampling technique. For the objectives of the study to be achieved, two hypotheses were formulated and tested. The study utilized structured questionnaire as a major instrument for data collection. 240 questionnaires distributed were all returned in useable form. Data collected were analyzed using simple percentage and regression. The results of the regression analysis indicated positive relationship between the variables of green environmental management - organizational environmental stewardship and organizational pollution prevention standard, and community sustainability. It was recommended that, ExxonMobil, Eket, Akwa Ibom State, Nigeria should maintain transparency in environmental and community impact reporting by sharing these reports with stakeholders including the local community to build trust and accountability.

Keywords: Green Environmental Management, Community Sustainability, Organizational Environmental Stewardship, Organizational Pollution Prevention Standard

1. Introduction

The relevance of green environmental management in achieving community development and sustainability in Niger Delta region can never be under-estimated. Green environmental management refers to the practice of managing an organization's environmental impact by reducing waste and pollution, conserving resources, and promoting sustainability. It involves developing and implementing strategies and policies that address environmental issues, such as climate change, air and water pollution, and natural resource depletion. These practices aim to minimize the negative impact of an organization's operations on the environment, while maximizing its economic and social benefits (Abaikpa 2025). The concept describes the importance of eco-friendly practices and supports practices like smart applications of green energy products and the strategies of reducing environmental harm as a result of pollution and industrial toxins (Abaikpa 2025). By community sustainability, we refer to organizations using environmental resources without causing damages to the environment they are operating. However, this sustainability is what is observed to be absent in many of the communities in Niger Delta region of Nigeria occupied by several oil/gas multinationals.

Apparently, the physical and natural environment of the Niger Delta region is faced with a wide-range cases of pollution and degradation resulting from spillage from oil exploration/exploitation, wetland loss, flooding, nuclear hazards, desertification, genetically modified organisms, deforestation etc. To preserve and tackle these problems head on for the benefit of the communities involved and for the future generations, a number of approaches such as green environmental management, ecosystem maintenance services, biodiversity conservation, sustainable livelihoods, human well-being, ecosystem health, integrity and sustainability should be consciously practiced by the organizations operating in the region (Laberge, 2017). Managing these environmental influences effectively for good performance, requires a proactive management approach (Abaikpa 2025). This may help organization to be aware of current as well as likely future developments in their environment and therefore remain environmentally alert.

1.2 Statement of the Problem

The green environmental management plays a significant role in community sustainability and firm's image building. The concept helps in shaping the culture and reputation of the organizations that practice it. The concept helps organizations in creating, developing and implementing the viable strategies of sustainable business operations (Abaikpa 2023). In spite of these seeming staggering ground-breaking benefits of the green environmental management concept, its application is practically flawed due to myriads of environmental management challenges, ranging from lack of good organizational environmental stewardship and planning, lack of organizational environmental compliance with international pollution prevention laws etc. (Abaikpa & Joseph 2020). However, the purpose of this study is to present a full conceptual and theoretical framework for green environmental management practices and to test its perspective in oil/gas industry in Niger Delta region of Nigeria. It is against this background that, this study is designed to investigate the relationship between green environmental management and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

1.3 Objectives of the study

The main objective of this study is to investigate the relationship between green environmental management and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria. Specific objectives of this study include:

i. To examine the relationship between organizational environmental stewardship and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.
ii. To assess the relationship between organizational pollution prevention standard and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

1.4 Research Questions

From the objectives of the study, the following research questions were poised to guide the study:

i. To what extent is the relationship between organizational environmental stewardship and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria?
ii. To what extent is the relationship between organizational pollution prevention standard and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria?

1.5 Hypotheses

From the objectives of this study, the following research hypotheses were formulated to guide the study:

i. Organizational environmental stewardship has no significant relationship with community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.
ii. Organizational pollution prevention standard has no significant relationship with community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

1.6 Significance of the Study

This study will be significant since the findings and recommendations may contribute to the growing literature in green environmental management and community sustainability. The study may assist management and operators of oil and gas industry in Niger Delta region, particularly Akwa Ibom State to look inward and pay proper attention to internal and external environmental factors that could aid them to adapt, perform and compete favorably with their counterparts within the industry. The results of this study may inform the management and operators of oil and gas in Nigeria and other related professionals on the internal and external environmental factors that can influence their corporate sustainability. The study may be of benefit to students who may wish to carry out further studies in the related area of interest. Finally, the findings of this study may serve as a source of reference materials for future researches in the related field.

1.7 Scope of the Study

The study investigates the relationship between green environmental management and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

Unit scope: The study focused on 240 respondents of ExxonMobil, Eket, Akwa Ibom State, Nigeria.

Content scope: The content scope of this study was confined to literature on green environmental management and community sustainability. The explanatory variables of green environmental management (independent variable) are environmental stewardship and pollution prevention standard. The explanatory variable of dependent variable was community sustainability.

Geographical scope: The geographical scope of this study focused on staff of ExxonMobil, Eket, Akwa Ibom State, Nigeria.

2. Review of Literature

2.1 Concept of Green Environment

The concept of green environmental management is one of the recent concepts that is a bit difficult to give a more complete and acceptable definition. The reason for this difficulty in definition is due to the fact that, the concept is relatively new, and the confusion surrounding the range of practices that actually constitute green management. The

concept may be traceable to the green movement of 1980s. Only few literatures address the concept of green management. Majority of empirical works focus on environmental management and environmental management systems (EMS) as ways to improve environmental and organizational performance (Florida & Davison, 2001, Darnall, Jolley & Handfield 2008). Both environmental management and environmental management systems concepts are designed to improve the basic goals of green management, but a more comprehensive and extensive definition of green management is required. When definitions of the exact concept of green management are given in the literature, they often appear either too vague or incomplete. One of the most recent studies on green management defines the concept as practices that produce environmentally friendly products and minimize the impact on the environment through green production, green research and development, and green marketing (Peng & Lin 2008). With no mention of factors such as strategic integration or sustainability, it is believed that this definition falls short of what it means to embrace true green management.

However, several researchers have made brave attempts to develop more complete and acceptable definitions of the concept of green management. Laberge (2017) views the concept of green environmental management (GEM) as an approach that helps organizations to understand their environmental impacts, and systematically operate more efficiently by reducing harms through energy usage, minimizing waste and reducing pollution. The author views the concept as a system of combining leading-edge technology and the collective knowledge and expertise team of talented professionals to develop sound, cost-effective strategies for achieving environmental objectives and delivering environmental solutions that may bring peace and development between organizations and the host communities. The concept holds that, any decision made by the organization must not result in any harm to the environment. This therefore, implies that, green management is the type of management that is dedicated to providing care to the environment and avoiding any harm to the environment as well. Sulphey and Safeer (2015) view green environmental management as an organizational concept that is beneficial and sustainable to the whole humanity.

Like financial management which has to do with managing the finances of an organization and quality management which has to do with managing the quality of products and process, Sheldon and Yoxon (2012) compare green environmental management as managing the environment that the organization operates in. To Pataki and Crooty (2017) green environmental Management may be viewed as a set of management principles designed to create the administrative procedures that organizations need to integrate environmental concerns into their daily business practices. The authors posit that green environmental management is based on a proactive management approach which may help to reduce environmental harms while improve the safety and health of the environment. They believe that, the system may help the organization satisfy the regulatory demands in cost-effective manner. Costello (2008) suggests that the concept of green corporate environmentalism revolves around the objective of reducing waste, which in turn contributes to the organization's ultimate goal of making money. However, others define green corporate environmentalism as something much more broad and profound than financial returns derived from waste reduction. For instance, one working definition of the term identifies green corporate environmentalism as the organization-wide recognition of the legitimacy and importance of the biophysical environment in the formulation of organization strategy, and the integration of environmental issues into the strategic planning process (Banerjee 2002). While this definition stresses the importance of environmental issues and the need to integrate these issues into the strategy of the organization, some factors such as continuous improvement, sustainability and innovation believed to be critical to the practice of green management seem to be missing or need to be specified.

The concept of green environmental management has attracted so much discourses from different levels of stakeholders especially in developing countries particularly Nigeria in Niger Delta region where many oil/gas multinationals operate. The concept of green environment is a diverse movement that forwards the concerns of environmentalists, that is, persons who see the integrity of the non-human world as worthy of preservation both for its own sake and for the sake of human survival. The membership of green movement is extremely diverse: scientists, management experts, political activists, rich and poor persons in all countries, and people with many different religious philosophies. Since the 1980s, global climate change has been one of the green movement's main concerns. Other concerns include organic agriculture, pollution, preservation of both multi-use undeveloped landscapes and wild places, protection of endangered species, resistance to genetic modification of crops and livestock, and opposition to nuclear power. The movement comprises an array of political parties, advocacy organizations, and individual activists operating on international, national, and local levels. Unified by a desire to protect the environment, but otherwise diverse in philosophy and strategy, the various factions of the green movement have succeeded in heightening public awareness of environmental issues, have won some significant legal victories, and have influenced government policies, especially in Europe and America.

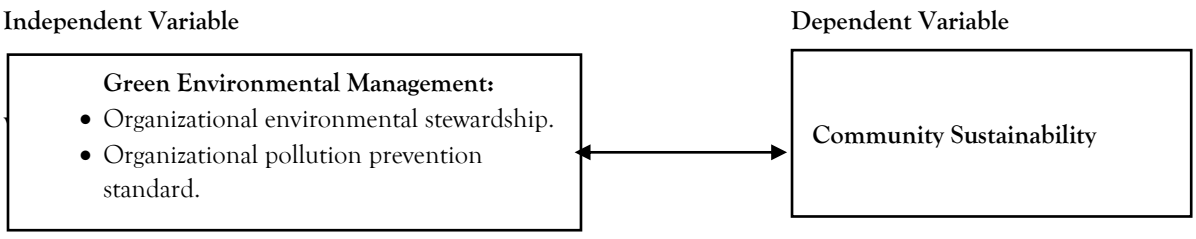

Figure 1: Model (Researcher, 2024)

Organizational environmental stewardship and community sustainability

The relationship between organizational stewardship and community sustainability is one of interdependence. Organizations that prioritize stewardship in their operations and relationships with the community are better positioned to create sustainable value for all stakeholders, including the broader community. In turn, sustainable communities provide a stable and supportive environment for businesses to thrive in the long term. According to a review by GlobeScan SustainAbility Leaders Survey Report (2022), organizational stewardship is understood as the active management of relationships and impact on the environment, society and the economy. This involves a focus on sustainability within the organization itself, as well as in its interactions with the broader community. In terms of community sustainability, the same review notes that successful stewardship requires consideration of community needs and values, with a recognition that an organization's success is inextricably related with the sustainability of the community within which it operates (GlobeScan SustainAbility Leaders Survey Report 2022). This means that an organization must take into account the social and environmental impacts of its operations, both positive and negative, and work proactively to create positive benefits for the community in which it operates.

A similar sentiment is echoed by some authors on sustainability and corporate responsibility describing stewardship as a culture of caring for the future through long-term thinking and planning that involves listening to stakeholders and taking action that transcends the narrow boundaries of an individual company or industry (Elkington & Hailes 2018). This ethos of long-term thinking and planning, and a focus on the well-being of the broader community, is essential for creating sustainable and resilient communities. Organizational environmental stewardship can play an important role in promoting community sustainability. According to a study by Seles and Adams (2013), organizations that practice environmental stewardship can have a positive impact on their local communities by reducing their environmental footprint, promoting sustainable practices, and helping to raise awareness of environmental issues. The study suggests that such practices can help to build trust and social capital within the community, which in turn can lead to lasting partnerships and collaborations that promote sustainability. According to Seles and Adams (2013), more sustainable organizations are better positioned to meet the social and economic needs of their communities in the long term, by conserving resources, reducing waste and pollution, and promoting sustainable practices. Furthermore, a study by (Azapagic et. al., 2012) argues that sustainable businesses consider a wide array of environmental, economic, and social factors when making business decisions. These organizations promote sustainable practices to reduce environmental damage and social harm, supporting the development of healthy and resilient communities.

Organizational pollution prevention standard and community sustainability

Organizational pollution prevention standards can have significant implications for community sustainability. According to a report by the US Environmental Protection Agency (EPA 2023), air pollution can have serious health impacts, including respiratory problems, heart disease, and strokes, which can negatively affect the sustainability of a community. By prioritizing ergonomics of an organization and pollution prevention practices, organizations can consciously reduce pollution-related health effects, thereby promoting community sustainability (Usoro, Inyang & Abaikpa 2025). Moreover, pollution prevention can also contribute to economic and environmental sustainability. In their article on the role of pollution prevention in environmental sustainability, Cho and Lee (2017) note that pollution prevention can help reduce waste and associated costs while also reducing environmental damage and contributing to more sustainable business practices. By investing in pollution prevention measures, organizations can minimize their carbon footprint and create a more sustainable community that benefits everyone and for generations to come. Research has also shown that environmental concerns such as pollution prevention are closely related with the concept of community sustainability (Anbumozhi and Kim 2018). According to Cho and Lee (2017) environmental issues such as pollution prevention for achieving community sustainability goals, especially in developing countries are some of the problems faced by many organizations. The authors emphasize that pollution prevention standards can help achieve regulatory compliance, realize financial benefits, and contribute to community sustainability.

Community Sustainability

Community sustainability refers to the ability of communities to meet the present needs of their residents without compromising the ability of future generations to meet their own needs. Sustainable communities prioritize environmental, social and economic sustainability to create long-term well-being. Organizational sustainability has become an increasingly important topic in recent years, as businesses, nonprofits and governments seek to balance economic growth with social and environmental responsibility (Abaikpa, Thomas, Daniel & Etuk 2023). Organizational sustainability requires a multi-faceted approach that takes into account economic, social and environmental factors. By considering these factors, organizations can build a sustainable future for themselves and future generations (Epstein et al., 2010). According to (Abaikpa, Udoh, Thomas, & Etuk, 2022), sustainable development should aim to meet the needs of the present without compromising the ability of future generations to meet their own needs. Community sustainability is crucial in promoting resilient and sustainable communities where future generations can thrive. Governments, organizations and individuals can use scientific findings from research on community sustainability to develop policies and practices that prioritize long-term well-being over short-term gains.

2.2 Theoretical Review

The relationship between green environmental management and community sustainability is best supported by the following theories: Triple bottom line theory and sustainable development theories. By understanding and incorporating these frameworks, policymakers, businesses and communities can take steps towards achieving a more sustainable and equitable future.

Triple Bottom Line Theory.

Environmental management and community sustainability are two interconnected concepts that have their roots in various theoretical frameworks. One such framework is the triple bottom line theory, first introduced by John Elkington in 1994. The triple bottom line theory maintains that companies should focus as much on their social and environmental impact as they do on their financial bottom line.

Sustainable Development Theory.

Another relevant theory of environmental management and community sustainability is the concept of sustainable development, which was first institutionalized with the Rio Process initiated at the 1992 Earth Summit in Rio de Janeiro. The desired result is a society where living conditions and resources meet human needs without undermining the planetary integrity and stability of the natural system. Sustainable development theory has its roots in ideas regarding sustainable forest management, which were developed in Europe during the 17th and 18th centuries.

2.3 Empirical Review

Several studies in the field of management and environmental sciences have identified relationship between green environmental management and community sustainability. One of such related studies is the one conducted by Abaikpa, Etuk, Thomas & Udoh (2022) on Credibility and organizational sustainability in trinity polytechnic, Uyo, Akwa Ibom State. The study comprised a sample of 240 respondents drawn from the population of 600 using Taro Yamen scientific formula. The findings revealed lack of policy transparency, consistency and organizational accountability. Several empirical studies have been conducted on organizational pollution prevention standard and community sustainability to promote sustainable development. One of such empirical analysis is one conducted by the United Nations Industrial Development Organization (UNIDO 2021). The study found that implementing pollution prevention measures can lead to win-win outcomes, benefiting both the environment and the economy. Additionally, a historical review conducted by Stern and Xie (2022) on the economics of climate change highlighting the importance of international cooperation in environmental protection. The findings of these empirical studies support the importance of these concepts in achieving sustainable development goals. In a study conducted by Kashefi, Ojha and Turaev (2020) investigated the interplay of sustainable leadership, organizational learning, empowerment, and sustainable development within organizations. They found that sustainable leadership is positively related to organizational learning, empowerment, and sustainable development, and that these factors can support the achievement of environmental and community sustainability. Bennett et al. (2018) conducted a study on "Urban Environmental Stewardship and Civic Engagement: How Planting Trees Strengthens the Roots of Democracy." The study discusses and summarizes the different notions of urban environmental stewardship and how they can improve civic engagement and promote community sustainability. Another study conducted by Kahlenborn and Koliou (2018) focused on the economic, social, and environmental planning practices of societies embodying 'urban sustainability'. They proposed that planning practices that integrate these three dimensions of sustainability can serve as antidotes to the negative environmental and social impacts of urbanization. There have been several empirical studies and discussions on organizational environmental compliance laws and sustainability. Marx et. al (2018) conducted a tests and policy analysis of environmental degradation at different levels of economic development. The authors examined the environmental Kuznets curve and sustainable development, finding evidence to support the hypothesis that economic growth can lead to environmental degradation in the short run, but that eco-friendly policies can ultimately lead to sustainable development. A study published by Wendling et. al (2018) analyzed the environmental sustainability of different countries based on a range of factors such as greenhouse gas emissions and renewable energy use. The authors found that Scandinavian countries, such as Sweden and Denmark, were among the most environmentally sustainable nations.

2.4 Research Gap

In spite of several extant literature on the seemingly staggering ground-breaking benefits of the green environmental management concept, it is observed that, its application is practically flawed due to myriad of environmental management challenges ranging from lack of good organizational environmental stewardship and planning, lack of organizational environmental compliance with international pollution prevention laws, lack of continual improvements of environment by relevant organizations, environmental injustices/mismanagement by firms especially oil multi-national corporations operating in the region (Shaban, 2019).

3. Research Methodology

The study utilized survey research design. The choice of this research design was considered appropriate because it

provided the researcher the opportunity of gathering data from a representative population of the study. This approach also aids in the development of the questionnaire (Etuk & Udonde, 2024). The population of this study comprised 600 staff members of Qua Ibo terminal of ExxonMobil, Eket, Akwa Ibom State, Nigeria. Judgmental sampling technique was adopted for the study. Given the population, a sample size of 240 was derived using Taro Yamane's scientific formula which is given as:

$$n = \frac{N}{1 + N(e)^2}$$

Where: N = Population. 1 = constant. e = Level of significance. n = sample size

$$n = \frac{600}{1 + 600(00.5)^2}$$

$$n = \mathbf{240}$$

The research relied on primary data sources, and the quantitative analysis involved descriptive statistics. To evaluate the impact of the variables, Simple Linear Regression Analysis was utilized.

4 Data Presentation, Analysis and Discussion of Findings

4.1 Data Presentation

The data that were gathered using the questionnaire are presented below:

Table 1: Questionnaire Distribution of Respondents

Questionnaire		Frequency	Percent
Valid	Questionnaire Returned	240	100
	Questionnaire Not returned	0	0
	Total	240	100.0

Source: Researcher's Computation from Field Survey Data (2025)

The above table portrays that 240 copies were returned in a useable form representing 100%. The researcher therefore uses 240 copies of returned questionnaires as the bases for the analysis.

Table 2: Gender Distribution of Respondents

Gender		Frequency	Percent
Valid	Male	138	57.5
	Female	102	42.5
	Total	240	100

Source: Researcher's Computation from Field Survey Data (2025)

Table 2 above reveals the gender distribution of the respondent. It was observed that, out of 240 questionnaires returned, 138 were male representing 57.5%, while 102 respondents were female representing 42.5%. This implies that the majority of the respondents were male.

Table 3: Age Distribution of Respondents

Age range		Frequency	Percent
Valid	25-30	22	9.17
	31-35	34	14.17
	36-40	68	28.33
	41 - above	116	48.33
	Total	240	100

Source: Researcher's Computation from Field Survey Data (2025)

Table 3 above depicts that 22 respondents representing 9.17% of the sampled respondents are within the age bracket of 25-30 years, 34 respondents representing 14.17% are within the age bracket of 31-35 years while 68 respondents representing 28.33% of the respondents are within the age bracket of 36-40 years, 116 respondents representing 48.33% of the respondents are within the age bracket of 41 above years.

Table 4: Marital Status of Respondents

Marital status		Frequency	Percent
Valid	Single	69	28.75
	Married	90	37.50
	Divorced	44	18.33
	Widowed	37	15.42
	Total	240	100

Source: Researcher's Computation from Field Survey Data (2025)

In the above table, 69 respondents were single representing 28.75% while 90 respondents were married representing 37.50%. Also, 44 respondents were divorced representing 18.33% and 37 respondents were widowed representing 15.42%.

Table 5: Educational Qualification Distribution of Respondents

Qualification		Frequency	Percent
Valid	SSCE	42	17.50
	OND/NCE	65	27.08
	HND/BSC	87	36.25
	MBA/MSC	20	8.33
	PHD	26	10.83
	Total	240	100

Source: Researcher's Computation from Field Survey Data (2025)

Table 5 above shows that out of 240 questionnaires correctly filled and returned, 42 respondents representing 17.50% were holders of SSCE while OND/NCE holders were 65 representing 27.08% and 87 respondents representing 36.25% were holders of HND/B.Sc and 20 respondents representing 8.33% were MBA/M.Sc holders. Also, 26 respondents representing 10.83% were holders of P.hD educational qualifications.

Table 6: Occupation Distribution of Respondents

Occupation		Frequency	Percent
Valid	Trader	45	18.75
	Craftsmen/ Craftswomen	43	17.92
	Civil Servant	103	42.92
	Educationalists	22	9.17
	Others	27	11.25
	Total	240	100

Source: Researcher's Computation from Field Survey Data (2025)

The above table depicts occupation distribution of respondents. The table revealed that 45 respondents representing 18.75% were traders, 43 respondents representing 17.92% were craftsmen/craftswomen, 103 respondents representing 42.92% were civil servants while 22 respondents representing 9.17% were educationists and 27 respondents representing 11.25% were in other occupations.

4.2 Data Analysis

Analysis of Research Questions

In this section, the primary data collated from questionnaires were analyzed using tables and simple percentages.

Research Question One: To what extent is the relationship between organizational environmental stewardship and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria?

Table 7: Responses on the relationship between organizational environmental stewardship and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria

Organizational Environmental Stewardship (OES)	SA	A	SD	D	N	TOTAL
My organization is reputed for her stewardship role in her operational relationship with her host community.	24	13	17	10	4	68 (28.33%)
My organization is known for its stewardship	32	8	11	3	2	56

through creation of sustainable values for all stakeholders in the host community.						(23.33%)
My organization's success is not unconnected with its effective stewardship of resources of its host community.	25	10	14	4	4	57 (23.75%)
My organization earns trust by its host community due to its effective management of environmental resources.	10	4	5	5	4	28 (11.67%)
My organization is known to always promote community sustainability through reduction of environmental damages and social harm.	9	5	6	6	5	31(12.92 %)
Total	100 (41.67%)	40 (16.67%)	53 (22.08%)	28 (11.67%)	19 (7.92%)	240 (100%)

Source: Researcher's Computation using Field Survey Data, 2025

Table 7 above depicts that 100 respondents representing 41.67% strongly agreed that there is a relationship between organizational environmental stewardship and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria while 40 respondents representing 16.67% agreed to the claim. Also, 53 respondents (22.08%) strongly disagreed to the claim and 28 respondents (11.67%) disagreed while 19 respondents representing 7.92% were neutral. Nevertheless, until statistically and scientifically tested, positive or significant relationship between independent variable and dependent variable can only be assumed but not claimed.

Research Question Two: To what extent is the relationship between organizational pollution prevention standard and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria?

Table 8: Responses on the relationship between organizational pollution prevention standard and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria

Organizational Pollution Prevention Standard (OPPS)	SA	A	SD	D	N	TOTAL
Several people in my host community are suffering from heart and respiratory diseases due to lack of pollution prevention standard of your organization.	6	9	4	2	3	24 (10%)
My host community achieves economic and environmental sustainability due to your organization's effective pollution prevention standards.	5	7	3	1	0	16(6.67%)
My organization always achieve regulatory compliance due to its effective pollution prevention standards.	14	21	6	14	0	55 (22.92%)
My host community is prevented from environmental damage through your organization's effective pollution prevention measures.	36	16	7	12	0	71 (29.58%)
My organization's effective pollution prevention has helped to maintain community sustainability.	39	9	9	17	0	74 (30.83%)
Total	100 (41.67%)	62 (25.83%)	29 (12.08%)	46 (19.17%)	3 (1.25%)	240 (100%)

Source: Researcher's Computation using Field Survey Data, 2025

Table 8 above indicates that 100 respondents representing 41.67% strongly agreed that there is a the relationship between organizational pollution prevention standard and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria while 62 respondents representing 25.83% agreed to the assertion. On the contrary, 29 respondents representing 12.08% strongly disagreed to the statement while 46 respondents representing 19.17% disagreed and only 3 respondents representing 1.25% were neutral to the claim. Nevertheless, until statistically and scientifically tested, positive or significant relationship between independent variable and dependent variable can only be assumed but not claimed.

Descriptive Statistics Results

Table 9: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
Community sustainability	240	1	4	2.89	1.040
Organizational Environmental Stewardship	240	1	4	2.86	1.122
Organizational Pollution Prevention Standard	240	1	4	3.04	.085
Valid N (listwise)	240				

Source: SPSS outputs computed by the researcher

Table 9 above displays that community sustainability has a mean score of 2.89 with a standard deviation of 1.040, indicating that the deviation from the mean is low hence; the data are clustered below the mean. The minimum value is 1 and a maximum value of 4 was recorded. This statistic reveals that the level of deviation of the minimum from the maximum value is low. Thus, indicating low level of green environmental management in ExxonMobil, Eket, Akwa Ibom State, Nigeria in recent years.

4.3 Test of Research Hypotheses

A simple regression analysis tests were conducted and the p-values outputs were used to test the formulated hypotheses.

Hypothesis One

H01: Organizational environmental stewardship has no significant relationship with community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

Table 10: Regression Results for Hypothesis one

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.964[a]	.929	.928	.280

a. Predictors: (Constant), Organizational environmental stewardship

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	65.250	1	65.250	833.866	.000[b]
	Residual	5.008	238	.078		
	Total	70.258	239			

a. Dependent Variable: Community sustainability

b. Predictors: (Constant), Organizational environmental stewardship

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.336	.095		3.535	.001
	Organizational environmental stewardship	.893	.031	.964	28.877	.000

a. Dependent Variable: Community sustainability

Source: SPSS outputs computed by the researcher (2024)

Since the calculated probability (Sig.) value of 0.000 was less than the p-value of 0.05, the null hypothesis was rejected while the alternative hypothesis was accepted, which states that Organizational environmental stewardship has a significant relationship with community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

Hypothesis Two

H02: Organizational pollution prevention standard has no significant relationship with community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

Table 11: Regression Results for Hypothesis two

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.945[a]	.894	.892	.341

a. Predictors: (Constant), Organizational pollution prevention standard

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.804	1	62.804	539.269	.000[b]
	Residual	7.454	238	.116		
	Total	70.258	239			

a. Dependent Variable: Community sustainability

b. Predictors: (Constant), Organizational pollution prevention standard

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.516	.411		1.2554	.750
	Organizational pollution prevention standard	.039	.012	.045	3.2533	.001

a. Dependent Variable: Community sustainability
Source: SPSS outputs computed by the researcher

Since the calculated probability (Sig.) of 0.001 was less than the p-value of 0.05, the null hypothesis was rejected while the alternative hypothesis was accepted, which states that Organizational pollution prevention standard has a significant relationship with community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

4.4 Discussion of the Findings

The two hypotheses tested revealed consistent results. In hypothesis one, the regression coefficient of 0.893 indicates that there is a positive relationship between organizational environmental stewardship and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria. The R Square (R2) of 0.929 in implies that about 92.9% variations in the community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria are caused by organizational environmental stewardship while the remaining 7.1% are caused by other variables not captured by the model. Since the calculated probability (Sig.) of 0.000 was less than the p-value of 0.05. The finding was that organizational environmental stewardship has a significant relationship with community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria. This finding corroborates that study of Abakpa, et al (2022) who identified lack of policy transparency, consistency and organizational accountability as some of the factors that impede community sustainability. Also, in the second hypothesis tested, the regression coefficient of 0.039 indicates a positive relationship between organizational pollution prevention standard and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria. The R Square (R2) of 0.894 implies that about 89.4% variations in community sustainability are caused by the organizational pollution prevention standard while the remaining 10.6% are caused by other variables not captured by the model. Since the calculated probability (Sig.) of 0.001 was less than the p-value of 0.05, the finding revealed that organizational pollution prevention standard has a significant relationship with community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria. The finding is supported by that of (Stern and Xie 2022) who argued that, the economics of climate change plays importance role in environmental protection.

5 Summary, Conclusion and Recommendations

5.1 Summary of the Findings

The key objective of this study was to investigate the relationship between green environmental management and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria. The specific objectives of the study were to examine the relationship between organizational environmental stewardship and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria, assess the relationship between organizational pollution prevention standard and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria. Two hypotheses were formulated and tested in this study. Bearing in mind the nature of this study, the researcher employed the use of survey research design in which primary data was obtained through questionnaire administration. Data for this study were obtained from both primary and secondary sources. Primary data were obtained through a structured questionnaire. Secondary sources were information from existing literatures such as relevant textbooks, Journals and internet. The researcher employed tables and simple percentage method to analyze the research questions. However, the simple regression technique was used to test hypotheses. The results of the regression analysis indicated positive relationship between the variables of green environmental management and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

5.2 Conclusion

In conclusion, the results of the regression analysis indicated positive relationship between the variables of green environmental management and community sustainability in ExxonMobil, Eket, Akwa Ibom State, Nigeria.

5.3 Recommendations

From the findings of this study, the following recommendations were made:

i. ExxonMobil, Eket, Akwa Ibom State, Nigeria should maintain transparency in environmental and community impact reporting by sharing these reports with stakeholders including the local community to build trust and accountability.
ii. The company should implement green technologies through adoption of renewable energy sources like solar and wind to reduce carbon footprint by investing in energy-efficient technologies and equipment.

Declaration of Competing Interests

The authors declare that they are not aware of any competing financial interests or personal relationships that may have influenced the work described in this document.

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Ethical considerations

The article followed all ethical standards appropriate for this kind of research.

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