EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON THE SUSTAINABLE PERFORMANCE AMONG SELECTED DOWNSTREAM FIRMS

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ABSTRACT

The Nigerian economy is sustained mainly by oil exploration. Thus, there is a need for the oil firms to have sustainability plans for development. Corporate social responsibility is one of such plans that allow for long term relationships between the organization and its internal and external environments. We carried out a study with the aim to assess the effect of corporate social responsibility on sustainable performance. A descriptive survey among selected downstream firms in Lagos State, Nigeria was designed. Secondary data were also reviewed. One hundred study participants recruited from selected downstream firms responded to the questionnaire. Simple regression and correlation were used to test three hypotheses. The findings demonstrated that economic responsibility improved environmental performance. Social responsibility showed a positive association with quality performance. A significant positive relationship was demonstrated between legal responsibility and technical performance in organizations. The conclusion is that oil downstream firms' economic and social responsibility significantly determines their quality and environmental performance in Lagos Nigeria. The key recommendation is that the management of oil companies should engage more in corporate social responsibility activities to enhance sustainable performance.

Keywords: Economic Responsibility, Environmental Performance, Social Responsibility, Quality Performance, Technical Performance.

INTRODUCTION

The Niger Delta region of Nigeria, which stands as the richly endowed with crude oil, and most popular for its gas, wealth of hydrocarbon along with water resources had suffered the effect of oil drilling with its attendant environmental degradation for years because of the activities of multinational oil corporations in the region. It is argued that the corporations in recent times have exploited the general obliviousness of the people of the region about the obligation for them to be socially responsible. Consequently, until the late 2000s, the rich natural

endowment was not seen to have converted into substantial development in the region (Marrewijk, 2010).

However, as the Niger Delta Environmental Survey of 1992 pointed out that, while the exploitation was going on, the people in the region were becoming ever more informed about their rights as citizens. Similarly, they were more conscious of the extent of what was taken from their localities as oil revenues both for the government and for the multinational oil companies (Niger Delta Survey, 1992). Thus, as their business activities continued to expand and their sizes increased, the companies were faced with challenges in regards to sustainable growth in the region through Corporate Social Responsibility (CSR). The call for CSR was based on the fact that businesses that align business concerns with societal concerns in terms of CSR goals would reduce the risks and liabilities involved with operating in culturally diverse regions from their countries of origin (Mahmood et al., 2019).

Corporate social responsibility represents companies' ability to promote community growth and development as well as voluntarily eradicate activities that are not in conformity with the public interest. It is therefore the purposeful incorporation of the benefits of the society into business decision making as well as upholding of a triple bottom line: People, Planet and Profit (Solihin, 2009). According to Motilewa & Worlu (2015), CSR is seen as the relationship between an operating organization and the community which includes its stakeholders, whereupon it carries out its business activities. It is assumed that if organizations develop an agreement with host community where such businesses are situated, an agreement that is rooted in protecting the people from the detrimental effects or influences of its operations, will further improve the organization's activities of such business. However, in the Niger Delta oil companies have been found to be practicing CSR in the form of donations and charitable concerns to less privileged, contributions, sponsorship and charitable gifts devoid of consideration of their different sizes and scope of activities instead of long-lasting CSR programs.

The host communities on their part perceived those donations as not sufficient but deceptive and destructive to the environment compared to the damage being caused by the companies especially those with expanded scope of activities. According to the host communities, the region had been stripped of its resources that were supposed to give rise to a good life to its inhabitants throughout the years (Madichie et al., 2018). Preceding the sighting and drilling of oil and gas resources in the region, the main profession of the people was farming and fishing. It was, however, observed that oil activities had destroyed the food- producing agriculture activities of the people and the environment suffered degradation caused by oil spillages which had made life really hard for the local people (Fidelis & Kimiebi, 2011).

Furthermore, as the various oil companies are of varying sizes, the extent of their damage to the host communities vary as well, hence the need for the companies to increase their CSR activities. In view of the mixed feelings, a study on the effect of the intervention activities of CSR also consequently sustainable performance of the oil company is considered imperative (Fidelis & Kimiebi, 2011). Many empirical researches have been carried out on CSR and its influence on the performance of firms largely in developed countries and relatively in developing countries. The studies have however yielded mixed results which create a motivation for further research.

The pursuit of sustainable performance does not consistently lead to social development and could be destructive to the environment, contributing to unhealthy workplaces, high risk to toxic substances and sometimes death as a result of inhalation of toxic waste (Shehu, 2013).

Corporate social responsibility (CSR) has continued to be a subject of discussion especially in downstream oil firms. The relationship between downstream oil firms and majority of their host communities was not cordial by reason of diverse impression of the role that the downstream oil firms are expected to discharge for the development of their host communities. On the contrary these firms have created environmental degradation in their host communities. The host communities maintain that downstream oil firms are not sufficiently addressing the amount of oil wealth taken from their lands. Notwithstanding, downstream oil firms feel they are doing sufficiently well in this and have gone beyond the realm of normal corporate social responsibility (Alabi & Ntukekpo, 2012).

Organizations that neglect to incorporate CSR measures into their business activities allow themselves exposed to adverse impressions of the stakeholder (Spangler and Pompper, 2011). Downstream oil firms are frequently listed among those least trusted by the public. The significance of oil, the intricacy of the oil business, rewarding profits, sufficient capital for extraction and environmental risks all contribute to the public's scrutiny of the industry. Thus, it is crucial that downstream oil firms explore means to reduce the "observation gap" between them and their stakeholders (Spangler & Pompper, 2011).

The development of situations has compelled downstream oil firms to put profound energy into a vast variety of CSR activities. Corporate social responsibility has become a vital facet in the strategic decision making of downstream oil firms primarily due to tension from the host community and a drop in investors' expectations. Numerous arguments premised on researches are found in literature as to the significance or otherwise of CSR on the host environment, as there is no general understanding of the issue at hand due to the features of diverse sectors and the variations in methodologies adopted by the studies. Some studies argue in favor of CSR as it results to sustainable performance (environmental stability, profitability). Amole, et al. (2012) view it to be irrelevant and a waste resulting in the misuse of firm's resources to project motive. This stimulated the need to undertake a study of a specific sector so as to determine the effect of implementing CSR. In view of the above, this study assessed the perception of employees of downstream oil firms on the effect of CSR on sustainable performance in their respective firms.

Objectives of the Study

The detailed objectives were established:

1. To assess the effect of economic responsibility on environmental performance.
2. To determine the effect of social responsibility on quality performance.
3. To evaluate the effect of legal responsibility on technical performance

LITERATURE REVIEW

Corporate Social Responsibility

In common with other complex circumstances in the context of management and social sciences, because of its conceptual nature, it is hard to accomplish corporate social responsibility in a clear and concise way (Ejumudo, 2011). There is no agreement regarding what constitutes a generally recognized CSR concept. This has culminated in various definitions of the terms (Ejumudo, 2011). Despite that, it is convenient to recognize several ways researchers, corporate bodies and international organizations have used the term. The European Union Commission defined CSR as a voluntary obligation by organizations seeking to incorporate social as well as

environmental issues into their business activities, involving collaborations with their stakeholders on behalf of the society. According to Ogunnaike et al. (2019) it is necessary for CSR to be incorporated into an organization's operations as well as the business getting involved in improving the society in order to expand. The world Business Council on Sustainable Development has described CSR as the corporate obligation to support sustainable economic development by collaborating with employees, their families and host communities (WBCSD 2001).

Social responsibility, as the basis of corporate social responsibility, directs companies by clear legislation to reputable decisions that separate the businesses and their activities. The areas of responsibility according to Ferrell & Fracedrich (1997) can be classified according to economic, legal, ethical and voluntary responsibilities. Organizations have the duty to meet their goals of corporate profit for their investors as part of their economic responsibility. Legal responsibilities oblige commitment to regard statutes as well as regulations of government. Ethical responsibilities consider businesses to understand and comply with other societal expectations which have not been clearly indicated within documented law; while the voluntary responsibilities are additional actions and practices that society considers acceptable and that determine the value of the business (Bateman & Snell, 1999). Therefore, this study made use of economic, social and legal responsibility as indicators of CSR.

Sustainable Performance

Sustainable performance is a corporate responsibility to improve and reinforce the interrelated and collaboratively strengthening fundamental component of economic development, social development as well as environmental protection at a local, regional as well as worldwide level (Adewuyi et al., 2012). Sustainability is the ability to maintain, in a collaboratively comprehensive approach, the resources and capabilities needed for a constant improvement over the long term (Dogaru, 2013). Sustainability can be described as a strategy adopted by any organization which leads largely to the improvement of the society. Sustainability is of great concern to every organization. It involves evaluating the functioning and positioning of an organization concerning environmental, quality, technical, health and security matters (Nicolăescu et al., 2015). According to Yadav (2014) sustainability is when a firm satisfies human needs and wants in the present generation without having an effect on the potential to satisfy future generations.

In achieving sustainable performance, downstream firms have to perform activities with vision and leadership, stay transparent and respond to the dynamic change in the environment (Nicolăescu et al., 2015). Sustainability is deep and addresses a wide range of topics ranging from usual preservation, to consumption of energy, to shareholder fulfillment and economic outcomes. The actual application of this concept is similar to stability which means survival, stability and eternalness (Cheney et al., 2004). Sustainability exceeds being "*Environmentally friendly*"; it is so much more about the reduction in energy and waste, safeguarding ecology as well as recycling. Corporate social responsibility can be viewed as ideas and approaches by which organizations freely and willingly combine both social as well as ecological issues with their business operations and shareholder dealings. Corporate social responsibility as a result of Triple Bottom Line (which comprise economic, social as well as environmental responsibilities), can imply a harmony among these three issues which makes a more generic image of the intricacy of sustainable development (Enquist & Edvardsson, 2006). Therefore, this study made use of environmental, quality and technical performance as sustainable performance indicators.

The Oil and Gas Industry

The oil and gas industry is composed of the upstream, midstream and downstream. The upstream is concerned with exploration and production, at this stage new products are often produced and it has the most investment. The upstream cuts across exploration, the discovery of reservoirs, passing through regular production and activities, which include drilling and completion. The activities carried out by the upstream are the high and hazardous procedures of pilot drilling, assembly and operation of platforms, completion of well. The midstream is responsible for transportation and refining. The downstream is involved in distribution of products and by-products to the consumers passing through refining and the distribution. The downstream divisions of refining and transportation include the distribution of crude oil and gas to units of derived output. According to Oyewunmi et al. (2017), the downstream sector largely portrays the marketing dimension of the petroleum industry, where the investors start to earn proceeds and profits. The major materials and facilities are massive pumps and compressors, steam turbines, furnaces, walls, pressure vessels and supervisor control systems (Barata et al., 2014).

According to Mojarad et al. (2018), based on the increase on pressure and conditions of the temperature of the underground reservoirs, the use of different chemicals to drill each barrel of crude oil safely, the processing as well as transport of petroleum products to final consumers has caused a lot of contamination and environmental pollution.

Hypothesis Development

Economic responsibility and environmental performance

According to Deng & Lu (2017) an organization's environmental performance and corporate social responsibility impact each other; the worse the environmental performance of the organization, the reduced rating of the corporate social responsibility. With the advent of emphasis on environmentally sustainable performance, organizations are faced with growing requests that put a demand on their economic responsibility (Ejumudo 2011). A business' influence on the economic welfare of its concerned parties and the society is the maximum interest of the economic aspect.

Fauzi & Idris (2010) investigated the possible existence of any positive relationships between environmental performance (EP) and CSR within the slack resource theory and the existence of any positive relationships between CSR and environmental performance within good management theory by incorporating the strategic management concept into the interpretation of CSR as the sustainable corporate performance especially in regards to the environment. The study employed a questionnaire-based survey research design, sampling responses from managers of state-owned companies and private owned companies using post and e-mail services. Results obtained thereof indicated that there was a positive relationship between EP and CSR within the slack resource theory and within good management theory.

In line with the views of Krajinc & Glavic (2005) research investigating wide range of firms showed that the environment addresses the influence of company on natural systems equally whether living or non-living such as the ecosystem, land, air, and water. He concluded that across the Nigerian setting at least, sustainability has an impact on corporate performance and y perhaps it might be a feasible means for corporate settlement of disputes. Thus, the first hypothesis was developed:

H_1: *Economic responsibility has a significant effect on environmental performance.*

Social responsibility and quality performance

Tatiana (2013) evaluated the relationship between social responsibility and quality performance. Social responsibility was mandated by labor practices and human rights, employees while quality performance was measured by the percentage of export to sales and export growth. Data were collected from the questionnaires and analyzed using the average percentage. The findings revealed that social responsibility significantly affects quality performance but when the proxies vary, the opposite results are achieved.

Visser (2010) posited that often times it is not about being socially responsible that matters but the quality performance derived from being socially responsible. New technology emerges rapidly as a result of the dynamics of the business environment. Laws, therefore, are implemented by government agencies to checkmate specifically the developed technology confirming that social responsibility impacts quality performance (Nicolăescu et al., 2015). These laws help the organization to develop technologies that will not cause harm to society at large with a view to ensure a level of quality performance. Thus, the second hypothesis was developed:

H_2: *Social responsibility has a significant effect on quality performance.*

Legal responsibility and technical performance

Ngwakwe (2009) attempted to determine a feasible relationship between sustainable business practice and technical performance. A field survey methodology was employed with a sample size of sixty (60) manufacturing firms in Nigeria were studied. Categorizing the firms into two groups, as environmentally responsible and irresponsible firms, he investigated upon the possible relationship midst technical performance and three selected measure of sustainable business activities: employee health and safety (EHS), waste management (WM), and legal responsibility (LR), common within the thirty (30) responsible firms. Findings from the empirical results disclosed that the sustainable activities of reliable firms are considerably associated with technical performance.

Uadiale & Fagbemi (2012) focused their study on Nigeria. Their study considered the effectiveness of CSR activities on technical performance. The outcome was that CSR has a positive and significant relationship with technical performance measures. These results enhance the increasing body of empirical support for the positive impact of CSR on technical performance. This study was well sampled and as such the conclusions were reasonable. Thus, the third hypothesis was developed:

H_3: *Legal responsibility has a significant effect on technical performance.*

METHODOLOGY

This research used the quantitative method by questionnaire to the study participants. The study also adopted the descriptive survey design. This design was chosen since it intensely defines and evaluates the effect of corporate social responsibility on sustainable performance among oil downstream firms. This constituted the primary data for this study.

The population of this study is comprised of the listed downstream oil firms in Nigeria. Based on Nigerian Stock Exchange Fact Book as of December 2019, there are (8) quoted companies: Mobil, Oando, Forte, MRS, Total, Etema, Conoil and Beco Oil. Two criteria were adopted in order to arrive at an adjusted population. The first criterion was the availability of annual reports within the period of study. This was to ensure consistency of data and completeness of observations. The second criterion was the disclosure of CSR costs. For a company to be included, the amount spent on CSR in lump sum or additional of the aggregate values disclosed for the period of study was required. For example, CSR figures can be in terms of donations, charitable concerns to the less privileged, sponsorship, etc. Therefore, once a company practices any of these CSR activities and disclose such in their financial report, it was considered socially responsible and thus eligible to be included in the study. Based on the two criteria some selected downstream oil firms were considered for inclusion in the study.

The sampling technique adopted was the stratified sampling method. Sampling techniques can be defined as the process that involves choosing components (samples) from a specified population. There are 2 main classes of sampling which are probability and non-probability sampling. The probability sampling gives a specific component of a population an equal chance to be chosen, while non-probability sampling is those schemes that do not involve components of randomization (Ojo, 2005). For the purpose of this study, the probability sampling technique was embraced using the stratified sampling method to draw the required sample size for the research. This process yielded one hundred respondents from the selected firms. The analysis of the data was done using statistical package for social sciences (SPSS). Descriptive analysis was carried out which included frequencies and percentages. Simple regression analysis in line with the research hypotheses was used to determine the extent of the impact of the independent variables on the dependent variables.

Content validity of the study instrument was carried out by giving the instrument to academic and research experts to proofread and remark on. This was to make sure that all questions in the questionnaire were fully in agreement with the research questions and hypotheses. The general reliability that showed internal consistency (Cronbach Alpha Coefficient) was 0.927 on 26 items in the questionnaire which implied that the reliability was good (Table 1).

Table 1
RELIABILITY

	Construct	**No. of Items**	**Reliability Coefficient**
CSR	Economic responsibility	4	0.688
	Social responsibility	5	0.759
	Legal responsibility	2	0.630
Sustainable Performance	Environmental performance	3	0.890
	Quality performance	4	0.920
	Technical performance	4	0.754

RESULTS

This segment displays the stated demographics of the respondents, presenting distribution in terms of gender, age, marital status and educational qualification (Table 2).

Demographic Profile of Respondents

Table 2
DEMOGRAPHIC PROFILE OF RESPONDENTS

		Frequency	Percent
Gender	Male	62	62.0
	Female	38	38.0
	Total	**100**	**100.0**
Age	18-22	14	14.0
	23-27	34	34.0
	28-32	42	42.0
	33 and above	10	10.0
	Total	**100**	**100.0**
Marital Status	Single	62	62.0
	Married	38	38.0
	Total	**100**	**100.0**
Educational Qualification	O'level	6	6.0
	Diploma	24	24.0
	Graduate	58	58.0
	Master degree	12	12.0
	Total	**100**	**100.0**

Source: Researcher's field survey (2020)

The majority (62%) of the respondents were males. Most were aged between 28 to 32 years and were single; 58% were graduates. The age distribution showed that 14 (14%) respondents were in the age bracket of 18-22 years, followed by 34 (34%) participants within the age bracket of 23-27 years: 42 (42%) participants were in the age bracket of 28-32 years while 10 (10%) participants were in the age bracket of 33 years and above. 62 (62%) of them were single and 38 (38%) were married.

The respondents' educational qualification showed that 6 (6%) had O'level education while 24 (24%) had a diploma, 58(58%) were graduates and 12 (12%) were holders of Masters degree.

Descriptive Analysis of Data on Significant Variables

This segment elaborates on participants' replies to assertions about corporate social responsibility and sustainable performance. Participants specified whether they strongly agree, agree, disagree or strongly disagree with the assertions given.

Table 3
CORPORATE SOCIAL RESPONSIBILTY

Economic Responsibility

Statement	SA	A	D	SD	Total	Mean
Training sessions	56	34	6	4	100	3.42
Good quality product	64	36			100	3.64
Transparency	38	56	4	2	100	3.30
Good relationships	68	24	8		100	3.60
Social Responsibility						
	SA	A	D	SD	Total	Mean
Understanding CSR	40	50	10		100	3.30
Cordial relationship	66	24	10		100	3.56
Impact in the community	48	44	8		100	3.40
Impact on my life	46	50	4		100	3.42
Social campaigns	14	62	24		100	2.90
Legal Responsibility						
	SA	A	D	SD	Total	Mean
Trainings	44	46	10		100	3.34
Adherence to legal laws	60	38	2		100	3.58

Source: Researcher's field survey (2020)

Table 3 shows the indicators of corporate social responsibility of the included firms. For the economic responsibility 56 and 34 respondents strongly agreed and agreed respectively to be offered training sessions by their firms, while 6 disagreed and 4 strongly disagreed on this. All the respondents either strongly agreed (64) or agreed (36) that their community perceive their products to be of good quality. 38 strongly agreed and 56 agreed on the transparency of their firms. However, 4 disagreed and 2 strongly disagreed that their firms were transparent. All, except 8 agreed (24) and strongly agreed (68) that their firm had a good relationship with the community their firm is located in.

Table 3 also shows the responses to social responsibility indicators. The majority of the respondents either agreed or strongly agreed to these indicators being observed in their firms. Fewer respondents disagreed that their firms exhibited these indicators. The indicator that had the highest number of respondents disagreeing was the social campaigns (24) while the impact on respondents' life was the least indicator (4) disagreed by the respondents.

Response on the legal responsibility also showed that 44 respondents strongly agreed and 46 agreed while 10 disagreed that they had received training on the laws governing the firm; 60 strongly agreed and 38 agreed to adhere to the laws while 2 disagreed.

Table 4
SUSTAINABLE PERFORMANCE

Environmental Performance						
Statement	SA	A	D	SD	Total	Mean
Prevents pollution	64	22	14		100	3.50
Environmentally friendly	62	30	8		100	3.54
Minimizes waste	62	24	14		100	3.48
Quality Performance						
	SA	A	D	SD	Total	Mean
Meets consumer needs	62	32	4	2	100	3.54
Good quality products	52	42	4	2	100	3.44
Continuous improvement	62	32	6		100	3.56
Documentation of customers' complaints	58	30	10	2	100	3.44
Technical Performance						

	SA	A	D	SD	Total	Mean
Eradicates inefficiency	42	50	8		100	3.34
Seek help from experts	50	38	10	2	100	3.36
Improvement of technology	54	40	4	2	100	3.46
Techniques adapt	22	62	16		100	3.06

Source: Researcher's field survey (2020)

Table 4 shows the response to indicators of sustainable performance. 64 strongly agreed, 22 disagreed and 14 disagreed that their firms adopted measures for the prevention of pollution. 62 strongly disagreed, 30 agreed and 8 disagreed that their activities were environmentally friendly. 62 strongly disagreed 24 agreed and 14 disagreed that they utilize procedures that minimize waste.

Quality performance indicators are also shown in Table 4. On meeting consumer's needs 62 strongly agreed, 32 agreed, 4 disagreed, and 2 strongly disagreed. Similarly, responses to the respondents' perception of the quality of their firm's products, 52 strongly agreed, 42 agreed, while 4 disagreed and 2 strongly disagreed. 62 strongly agreed, 32 agreed, while 6 disagreed that their firms showed continuous improvement over time. 58 strongly agreed, 30 agreed, 10 disagreed, and 2 strongly disagreed with their firms documenting customer's complaints.

Indicators of technical performance of the firms showed that 42 respondents strongly agreed that their firms engaged processes that eradicate inefficiency: 50 agreed and 8 disagreed. 50 of the respondents strongly agreed to seek help from experts when they had challenges; 38 agreed to do the same, 10 disagreed, and 2 strongly agreed. Among the 100 respondents, 54 strongly agreed that there was constant improvement of the technology in their firms; 40 agreed, 4 disagreed, and 2 strongly disagreed. 22 of the respondents strongly agreed that the techniques deployed by their firms were adapted to the dynamic nature of their environment; 62 agreed while 16 disagreed.

Test of Hypothesis

H_1: *Economic responsibility has a significant effect on environmental performance*

Table 5
Model Summary[b]

Model	R	R^2	Adjusted R^2	Std error of the estimate
1	0.569[a]	0.323	0.316	0.53106

Anova[a]

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	13.201	1	13.201	46.808	0.000[b]
	Residual	27.639	98	0.282		
	Total	40.840	99			

Coefficients[a]

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	T	Sig
1	(Constant)	0.785	0.406		1.932	0.056
	Economic responsibility	0.757	0.111	0.569	6.842	0.000

Source: Researcher's field survey (2020)
[a]Dependent variable: Environmental performance.
[b]Predictors: (Constant), Economic responsibility.

Table 5 displays the model summary, anova and regression coefficient (R) of economic responsibility on environmental performance. The R was 0.569. One-way Anova was used to

ascertain the equality of mean of an independent variable (economic responsibility) on a dependent variable (environmental performance). The outcome of the f-distribution calculated was 46.808 (p = 0.000).

H_2: *Social responsibility has a significant effect on quality performance*

Table 6
MODEL SUMMARY[b]

Model	R	R^2	Adjusted R^2	Std error of the estimate
1	0.461[a]	0.212	0.204	0.54264

Anova[a]

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	7.783	1	7.783	26.433	0.000[b]
	Residual	28.857	98	0.294		
	Total	36.640	99			

Coefficients[a]

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	T	Sig
1	(Constant)	2.073	0.294		7.048	0.000
	Social responsibility	0.418	0.081	0.461	5.141	0.000

Source: Researcher's field survey (2020)
[a]Dependent variable: Quality performance.
[b]Predictors: (Constant) Social responsibility

Table 6 shows the regression coefficient (R) of social responsibility on quality of performance to be0.461. One-way Anova was used to assess the equality of mean of social responsibility on the quality performance. The result of the f-distribution calculated was 26.433 (p = 0.000)

H_3: *Legal responsibility has a significant effect on technical performance*

Table 7
MODEL SUMMARY[b]

Model	R	R^2	Adjusted R^2	Std error of the estimate
1	0.598[a]	0.357	0.351	0.54222

Anova[a]

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	16.028	1	16.028	54.515	0.000[b]
	Residual	28.812	98	0.294		
	Total	44.840	99			

Coefficients[a]

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	T	Sig
1	(Constant)	0.769	0.369		2.086	0.040
	Legal responsibility	0.752	0.102	0.598	7.383	0.000

Source: Researcher's field survey (2020)
[a]Dependent variable: Technical performance.
[b]Predictors: (Constant), Legal responsibility

Table 7, shows the regression coefficient (R) of legal responsibility for technical performance to be 0.598. One-way Anova was used to measure the equality of mean of legal responsibility on a technical performance. The outcome of the f-distribution calculated was 54.515(p=0.000).

DISCUSSION

Firms, such as downstream oil firms, can play a vital role in an economy and society at large. The index study has shown a higher tendency to employ young, educated, but unmarried personnel. The results also showed a higher preference for males. While the employment opportunity created for the young ones is commendable the domination of the industry by males creates gender imbalance which robs the industry of gender diversity required for positive outcomes such as better organizational performance.

The components of corporate social responsibility studied included economic, social, and legal responsibilities. Of the four indicators assessed for economic responsibility, a good relationship with the host community had the highest response from the respondents. This could have stemmed from the fact that the selected firms had a record of delivering on their Corporate Social Responsibility. Their customers also perceived their products to be of good quality. The indicator of transparency scored the lowest on the strongly agreed scale as six of the respondents reported non transparency of their firms. Non transparency could result in mistrust of the system and hinder the growth of an industry. On the other hand, corporate transparency can contribute to a reduction in uncertainty, improve efficiency, and sustainable development of the organization (Baraibar-Diez & Sotirrio, 2018).

The firms also scored the highest on the strongly agree scale on the cordial relationship between the employer and the employee further indicating that these firms valued the external (community) and internal (staff) relationships to deliver on their CSR. This could explain why the scores on the impact on the community and the lives of their staff were also scored high. However, social campaigns scored the highest on the disagree scale. The reason for this is not easily discernable. It may probably be that campaigns need to be tailored to the needs of the industry for them to be involved.

Legal responsibility ensures the compliance of rules and regulations by the industry that were created in the interest of the community they serve (Chen et al., 2015). From the index study some respondents disagreed that they were trained on what is required of them legally to deliver on their responsibilities. This can predispose to malpractice and compromise on set standards. It is, therefore, advisable to have all employees knowledgeable on the governing laws to forestall such compromise.

The indicators for environmental performance, a component of sustainable performance, were scored high on the strongly agree scale for its indicators, an indication that prevention of pollution was topmost on the scale. The import of this is that the oil industry poses major environmental hazards in the air, water, soil and the ecosystem in general and it has been reported that refining, a downstream activity, is the major source of pollution in the industry (Mariano, 2020). One of the commonest hazards of the downstream oil industry is environmental pollution from accidental spills and gaseous emissions (Mariano & Rovere, 2020). Prevention of pollution and engaging environmentally friendly processes would enhance community acceptance. Though a good number of respondents agreed or strongly agreed that their firms minimize waste yet minimization of waste indicator recorded the highest disagreement score.

This could compromise on the environment if not addressed. This is particularly so as these wastes constitute risk to the health of the people and the environment.

The regression coefficient to establish the descriptive power of the economic responsibility in elucidating as well as predicting the environmental performance suggest that economic responsibility had a strong positive effect on environmental performance. The R^2 which is the coefficient of determination explains the degree of variance. The R^2 was 0.323 (or 32.3%). This implies that the economic responsibility explains 32.3% of the variance on the environmental performance hence other factors not included in the model explained 67.7% (100-32.3) of the variance in environmental performance. This degree of the relationship can be considered moderate. The hypothesis was further tested by examining the decision rule which states that if the significant value is less than 0.05, the economic responsibility made a significant participation to the prediction of the environmental performance and vice versa. The significant value under coefficients was (.000) therefore economic responsibility has a significant effect on environmental performance.

The result of the regression coefficient (R) of social responsibility on the quality of performance suggests that social responsibility has a strong positive effect on the quality of performance. As in the hypothesis above, social responsibility explained 21.2% of the variation in quality performance. Other factors not included in the model contribute 78.8% of the variance. The degree of the relationship is weak. The hypothesis was further tested by examining the decision rule which states that if the significant value was less than 0.05, the social responsibility made a significant contribution to the prediction of the quality performance and vice versa. The significant value under coefficients was (0.000) which was less than 0.05 therefore social responsibility had a significant effect on quality performance.

The regression coefficient of legal responsibility for technical performance showed a positive relationship. This suggests that legal responsibility had a strong positive effect on the technical performance. The degree of variation contributed by legal responsibility in the model was 35.7% inferring that other factors not included in the model accounted for the remaining 64.3% of the variation. The relationship between the two variables is moderate.

The hypothesis was further tested by examining the decision rule which states that if the significant value was less than 0.05, the legal responsibility made a significant contribution to the prediction of the technical performance and vice versa. The significant value under coefficients is (.000) which was less than 0.05 therefore legal responsibility has a significant effect on technical performance.

CONCLUSION

In view of the research findings, the study asserts that corporate social responsibility (Economic, social and legal) have a significant effect on sustainable performance (Environmental, quality and technical). Therefore, downstream oil firms pursuing greater sustainable performance should engage more in corporate social responsibility actions. Several researches have shown that organizations that miss the mark to develop suitable corporate social responsibility actions will undeniably encounter the problem of poor sustainable performance. Other areas of corporate social responsibility and sustainable performance can be researched to further buttress the findings of this study.

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

1. The management of downstream oil firms should be transparent in dealing with their staff and the community at large to gain their trust, and continue to extend their economic, social and legal responsibilities to the host communities.
2. Management of oil downstream firms should ignore minimization of waste in the environment as this can pose hazards to the community and hinder the sustainability of the firm.
3. Oil companies should be abreast of new equipment and strategies to manage spillage and other environmental hazards.
4. The practice of legal responsibility (following laid down government laws) should be encouraged greatly in oil companies in order to boost technical performance.
5. Management of oil downstream firms should maintain a cordial relationship between the organization and the community.

The findings of this study have several implications for the management of oil companies, investors, government and host communities. The implications are briefly highlighted below:

Firstly, the findings have implications for management policies and decisions on the issue of what would guarantee a peaceful and secure environment for companies to utilize their capacity.

Secondly, shareholders of oil companies would realize that CSR activities in the communities that host the operations of their firm are very vital to the survival of the companies and that at the level of annual general meetings stakeholders should encourage management to provide CSR services as much as they can.

Thirdly, the findings would place the government on a sound footing to understand the importance of CSR thereby initiating new programs that would cater to the need of citizens.

Lastly, the findings have implications for the host communities as they would be better informed of their rights and are in harmony with the oil companies functioning in their region.

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