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Sustainability Reporting and Performance of Listed Upstream Oil and Gas Firms in Nigeria: A Content Evaluation Approach

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Abstract

This study evaluates the sustainability reporting and performance of listed upstream petroleum companies in Nigeria, using a content analysis approach. The paper objectively evaluated the textual content of the sustainability reports of the firms in line with the GRI standards. The study found evidence of inadequate reporting of sustainable economic performance by the major oil and gas firms, especially the financial implications and other risks and opportunities due to climate change. The results also show that the oil and gas companies are less perturbed by environmental conservatism due to weak environmental law enforcement. The firms' sustainability performance reports about the environment and protection of the rights of indigenous communities are disingenuous. Further, there is little evidence of adoption of the Triple Bottom Line framework in evaluating firm performance in a broader perspective or in creating firm value. The findings also indicate that there is sustainability implementation laxity or apathy in Nigeria. This study adds to the burgeoning literature on the dichotomy of stakeholder value-driven versus shareholder value-driven corporate governance and how this paradigm fosters long-term sustainable value creation in an industry whose activities impinge upon the environment and people's social lives. The findings are useful for Government, regulators, corporate executives, and other stakeholders in understanding the importance of institutionalizing sustainability reporting and disclosure on economic sustainability performance in line with the GRI disclosure content.

1. Introduction

Unchecked exploration activities by oil and gas companies in the upstream sector are largely responsible for the environmental hazards and ecosystem disruption in Nigeria (See, for example, (Acti, Lyndon, & Bingilar, 2013; Adediran & Alade, 2013; Asaolu, Agboola, Ayoola, & Salawu, 2011; Umoren, Akpan, & Okafor, 2018; Uwakonye, Osho, & Anucha, 2006; Uwuigbe & Jimoh, 2012)). In addition to severe health hazards that are commonly associated with oil and gas exploration activities, the environment, economic and social structure of indigenous communities in the oil producing areas is adversely affected. Further, poor or weak environmental law enforcement is a major issue which the United Nations has been grappling with over the years through the sustainable development goals (SDGs). In their 2005 international survey of corporate sustainability reporting, KPMG suggested inter alia that international oil companies (IOCs) should voluntarily improve their sustainability performance and reporting in countries with inadequate environmental laws in order to ascertain the level of their commitment to the UN's SDGs. Adams (2020) suggests that "sustainability reports should be included in the annual reports of firms that comprise majorly financial performance of firms". Under the Global Sustainability Standards Board (GSSB) (2016) the ontology

of sustainability report/disclosure requires a separate publication of nonfinancial reporting issue. The UN principles of sustainability are anchored on three pillars, namely: economic development, social development and environmental protection. Informally, these principles pander to profit, people and planet, respectively.

In the light of the foregoing, the present study examines the sustainability performance of listed upstream oil and gas companies in Nigeria. We evaluate the sustainability disclosure content of the firms' annual reports against the Global Reporting Initiative (GRI) 2016 disclosure benchmark. The objective is to ascertain the level of sustainability reporting by the firms as well as their level of compliance or conformity with global best practices. The GRI benchmark is designed to help firms (a) identify key performance indicators (KPIs) (corporate priorities) in terms of people, profit and planet (economic development, social development and environmental protection); (b) report responsibility for the firms' operational impacts on host communities and society at large; (c) evaluate the firms' success at reaching targets; and (d) increase transparency in the firms' relevant contextual information in the sustainability reporting and disclosure.

In recent times, the notion of sustainability reporting (SR) or sustainability disclosure (SD) has gained momentum, especial with the advent of GSSB Global Reporting Initiative (GRI) standards for content disclosure of the sustainability performance of firms. The premise of this development is the growing awareness of the neglect of the environment and the mounting need to beam searchlight on corporate activities, especially international oil companies (IOCs), whose operations have historically had grave implications for the environment and social lives of the host communities. The destruction of the ecosystems in the Niger Delta region of Nigeria is a classic case of the unremitting malfeasance perpetrated by the IOCs. There have been persistent complaints by the indigenous people and regional governments about abuses of the environment, untold human rights violations, and the appalling disposition of the petroleum firms. The spate of anecdotal evidence about the series of inchoate conflicts with inchoate mediations between the IOCs and host communities underscores the significance of sustainability reporting/disclosure.

Further, there has been an increasing consciousness of the value of ethical investments or socially responsible investment (SRI), often referred to as sustainable or green investment, which needs to be communicated to wider stakeholder groups via sustainability reports. The tenet of this ethical or sustainable investment movement is to raise global consciousness on the consequences of corporate focus on competitive financial returns, however achieved, without considering, or neglecting, the environmental and social consequences of such corporate investments or activities. Basically, sustainability reporting is (nonfinancial) reporting about the impact of a firm's environmental and social performance.

Various stakeholders are affected by a firm's economic activities. They also have differential needs for which sustainability reports are meant to communicate the firm's ethical considerations in protecting the environment and society while pursuing profits. While financial returns are useful in paying the bills and maintaining the business, the process of achieving this has increasingly come under scrutiny by ethical or 'green' considerations about the environment and society. Thus, sustainability reporting putatively signals the investment and operational strategies of the firm, with a focus on the effect of the firm's economic activities on the environment and society. Sustainability report dichotomizes the firm's corporate performance records into financial returns and social and environmental impact.

Ordinarily, few businesses will trade the pursuit of profit maximization (or shareholder wealth maximization) for ethical balancing of sustainability of the environment and society. The financial management criterion of corporate activities is anchored on financial performance decisions that generate maximum return to shareholders and enhance firm growth (via market shares). Incorporating nonfinancial (ethical balancing) performance evaluation methods like sustainability reports, using the GRI standards, recalibrates business pursuit with sustainability development considerations in a standard comparable way. This way, the firm's host community's interests that prospectively foster good business-community relations can be assessed and a unit of analysis of the firm's strategy becomes assessable via a global generally accepted framework (See: (Acti et al., 2013; Dilling, 2010)). Over the years, sustainability reporting has become a key part of business practice, especially those firms that engage in activities that are harmful to the environment such as firms in the oil and gas industry. Thus, using the firms' sustainability reports to assess their sustainability performance is an affirmative move towards improving sustainability reporting as well as the image of the firms. Such disclosures paint a positive picture of organizations in terms of their active responses to significant issues about their environment of operations, climate change or carbon neutrality, in general, and these firms use sustainability reports to both leverage individual executives and gain corporate trust and reputation (Asaolu et al., 2011).

2. Theoretical Literature

There is as yet no consensus on theoretical propositions on corporate behaviour and propensity towards corporate sustainability performance (CSP) and corporate sustainability reporting (CSR) (Belal & Roberts, 2010; Deegan, 2002; Gray, Adams, & Owen, 2014; Gray, Kouhy, & Lavers, 1995; Gray, Owen, & Adams, 2009). Consequently, CSP/CSR has been studied from different theoretical perspectives, with conflicting or inconclusive evidence (See: (Jadoon, Ali, Ayub, Tahir, & Mumtaz, 2020)). Deegan (2002) was categorical about the absence of "an accepted theory for social and environmental accounting, [and] there is much variation in the theoretical perspectives being adopted". However, theorization in prior research on corporate

sustainability reporting has mainstreamed into at least three interrelated perspectives of the triple bottom line theory, namely: legitimacy theory, stakeholder theory, and signalling theory. For example, Gray et al. (1995) claim that social and political theories such as legitimacy theory, stakeholder theory, and institutional theory can provide more insightful theoretical perspectives on corporate sustainability practices than can purely economic theories. Deegan (2002) affirms that a considerable relationship exists between these three theories with respect to corporate practices. These often produce conflicting results regarding the significance and effects of social and environmental disclosures (Fernando & Lawrence, 2014). These theoretical prescriptions - legitimacy theory, stakeholder theory, signalling theory, and triple bottom line (TBL) theory - are sketched immediately to provide sufficient rationale for sustainability reporting.

2.1. Legitimacy Theory

The premise of the legitimacy theory is that an organization is a nexus of social contracts with various stakeholders and, as such, its objective pursuits are putatively in fulfilment of such diverse contractual relationships, as opposed to traditional business focus on short-termism and its preoccupation with short-term results for shareholders. An organization loses its legitimacy, that is, its legal validity is destroyed or impaired if it habitually violates its social contract with its community of stakeholders. This phenomenon is referred to as "legitimacy gap" which can result in "legitimization threats" (Fernando & Lawrence, 2014). To maintain their legitimacy and thus fulfil their social contracts, organizations are invariably obliged to develop and implement voluntary sustainability reports.

The thrust of the legitimacy theory is that the globalized business world with the integration of national markets and economies has compelled a new paradigm or business model that (a) clearly acknowledges a diverse group of stakeholders with different and conflicting interests, (b) wittingly recognizes a social contract between corporate world (businesses) and society, and (c) accentuates business policies and practices that are beneficial for all stakeholders (Darnall, Henriques, & Sadorsky, 2010). In effect, the legitimacy theory provides an understanding of an organization's behaviour in developing, implementing, and reporting its' environmental, social and economic performance which is captured by the GRI framework synonymous with the TBL framework.

The legitimacy theory of sustainability reporting raises the moral ground of business activity beyond short-termism-focused shareholder wealth maximization to include environmental concerns and considerations of what Suchman (1995) describes as "a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions". Viewed from this inclusive prism, the legitimacy theory exposes the limits of the short-termism phenomenon, namely: diminished firm competitiveness, increased systemic risk, increased potential for earnings management, and abridged or fractured potential of long-term benefits to the company and the economy.

2.2. Stakeholder Theory

Stakeholder considerations have assumed a particular urgency as organizations are increasingly brought under public scrutiny not for their excessive profit motive, but for their gross insensitivity towards the environment and the planet in pursuit of profits. In addition, there is increased suspicion about the ethical conduct of the oil companies in developing countries in general. The distrust has attracted public and media to look at the oil companies with eyebrows raised questioningly over their ethical and governance matters and corporate social responsibility and environmental issues. This is more so with oil producing and manufacturing companies whose exploits have depleting consequences on natural habitats and the ozone layer. Donaldson and Preston (1995) justify the espousal of the stakeholder theory in the management literature on the basis of its descriptive accuracy, instrumental power, and normative validity.

Stakeholder groups are by definition those that have something at stake in the organisation, operational activities, subsistence and/or collapse/failure of the organisation. Their stakes may be placed in jeopardy by any of the above factors. However, the recognition that profit is not attainable if the environment of business activities is neglected or devastated is the antecedental basis of Spreckley (1981) original notion of TBL in suggesting the content of enterprises or 'socially responsible enterprises' in their performance assessment (See: (Sitnikov (2013)). In other words, neglecting the society and the operational environment, it would be infeasible for businesses to thrive. The aim of sustainability reporting is to provide a framework for evaluating current corporate, environmental, social and governance disclosure practice and developing new practice. As such, it is possible that some stakeholder groups may be placed at risk, that is, they may lose their stakes should corporate actions appear negative or detrimental from their perspective.

Although the nature and size of stakes may vary considerably from company (group) to company (group), the existence of stake per se is sufficient to warrant a particular stakeholder group in an open society to expect and receive the opportunity to provide input into or interrogate activities that affect or potentially affect it and to exert some control for the group's overall interest. As a result, firms must not restrain information about their social, economic and environmental performance in practice and reporting approach (the stylized 'triple bottom line'). But the extent or quality of firms' sustainability reports vis-à-vis different stakeholder-interests is questioned, as their reports are susceptible to information asymmetry. Thus, to all intents and purposes,

signalling theory is fundamentally concerned with reducing information asymmetry between two or more parties to a given set of actual or prospective transactions (See: (Spence, 1973; Spence, 2002)).

2.3. Signalling Theory

Signalling theory is employed in a variety of economic transactions to describe corporate behaviour in the presence of asymmetric information or what Williamson (1975) tersely calls 'information impactedness'. To be sure, asymmetric information or information failure is a derivative condition that arises mainly because of uncertainty and opportunism when two parties (individuals or organizations) to an economic transaction possess information disparity or have access to different information. In a multi-stakeholder setting, the joint presence of uncertainty, opportunism and bounded rationality is both inevitable and bound to lead to information impactedness condition in which information is asymmetrically distributed between the parties (managers of the firms as providers of corporate reports) and various stakeholder groups (as consumers and users of corporate reports).

Thus, corporate financial decisions, including financial statements and their disclosure contents, are signals sent by corporate management to investors and other stakeholders with a view to shaking up the asymmetry. Contextually, ethically-minded managers with inside information will be predisposed to use sustainability report to signal information to stakeholders about the economic, environmental and social performance of their firms, thereby enhancing the reputation of the firms. Such specific disclosures could be used as a valued-statement signal to convey the environmental-friendly status of the firm or separate the sustainability-friendly from sustainability-unfriendly firms. Signalling has triggered an enormous literature attention and application in many decision scenarios in a range of disciplines outside accounting and finance to anthropology and zoology (Bird & Smith, 2005).

2.4. Triple Bottom Line' (TBL or 3BL)

The Triple Bottom Line (TBL) theoretical framework is sketched to provide sufficient rationale for sustainability reporting. Championed by Elkington (1994); Elkington (1997)[1], it is a three-part sustainability accounting framework that represents a trichotomy of interests: social, environmental and financial. In effect, the theory proposes emerging sustainability report as a broad framework to evaluate corporate performance in order to create greater business value. The three-part accounting framework measures and reports the financial, social, and environmental effect and performance of a company over a period of time. The three elements of TBL are designed to widen the conventional reporting architecture to reflect profit, people and the planet (3P) (Elkington, 1994). The 3P of the TBL framework can be dichotomized into primary stakeholders (such as shareholders, employees, customers, government) and secondary stakeholders (such as the environmental organizations, other non-governmental organizations, civil society organizations, faith-based organizations, media, and marginalized groups) (Donaldson & Preston, 1995; Freeman, 1984; Schaltegger, Hörisch, & Freeman, 2019). The primary constituency is largely interested in profit as the traditional bottom line, even if there are ethical sensitivities or interests in their investments. The secondary constituency represents activists broadly concerned about enforcement of corporate social responsibility, ecological or environmental sustainability by businesses locally and worldwide.

The TBL framework further reiterates the legitimacy theory that firms must satisfy legitimate demands for economic performance. Precisely, corporate organizations have a social responsibility to disclose information that caters to the interests of a broader and diverse group of stakeholders. Elkington's TBL proposition derives from two conjectural antecedent sources. The first is Adam Smith's theory of the firm and Friedman's shareholder theory both of which postulate that the firm has only one goal: to satisfy the interests of shareholders in profitmaking in a legitimate way. It enables firms to assess the profits made over a period of time by going behind the façade and beyond the traditional bottom line of business to segment the profits into social, environmental, and economic components. The TBL has attractive analytical and decision-making characteristics or opportunities to multiple stakeholder interests beyond the traditional one bottom-line (profit) report. It (TBL) is useful for investors interested in investing in socially responsible companies/projects and/or for stakeholders (employees, customers, ethical investors, etc.,) who seek to identify with companies that manifest social and environmental conscience in their operations. Above all, the comprehensiveness of TBL from stakeholder perspective appears to be a robust framework to effectuate standards of equity in the usefulness of information that a traditional profit (one bottom-line) report may not easily avail or respect.

2.5. A Synoptic View of Nigeria's Petroleum Industry

The petroleum or oil and gas industry is a conglomeration of different businesses, operations and occupations performed sequentially in the extraction of crude oil and gas from under the ground to the

[1]The term *triple bottom line* (TBL) was coined by John Elkington and his colleagues at SustainAbility, a strategy consultancy firm, in 1994. It is part of a historical progression that included the development of the concept of sustainable development in the Brundtland Report, *Our Common Future*, which proposed that the pursuit of financial gains ought to be constrained by the need to maintain social and natural systems at levels sufficient for the needs of future generations (Encyclopedia.com, 2019).

consumer or consumable products. The industry is a triumvirate supply chain of chronological economic activities: the upstream, midstream and downstream. The locus and operational properties of the upstream sector are exploration and production (E and P). The E and P activities involve the identification of deposits, well drilling, rig operations and extraction or recovery of crude oil from underground or underwater fields. In a nutshell, the upstream petroleum sector finds and produces crude oil and natural gas. The midstream sector is the logistics component of the industry's three-way supply chain process. It processes, stores, markets and transports the crude oil, natural gas and natural gas liquids. Thus, the midstream sector is the vital link between the petroleum producing areas, some of which are in remote and not-easily-accessible terrains, and the population location centres (towns and cities) of the consumers. Transmission pipeline companies are the leading corporate members of the midstream petroleum industry.

The downstream sector of the oil and gas industry represents the final step in the production process or petroleum supply chain. It is the end process in which petroleum crude oil and natural gas are refined and brings the usable products to end users and consumers. This sector also engages in the marketing and distribution of crude oil and natural gas products. In effect, the downstream oil and gas sector or market is about the post-production activities of crude oil and natural gas. Many of the daily consumer products are the products or by-products of downstream production activities, such as Premium Motor Spirit (commonly called petrol or fuel or Gas or Gasoline in the U.S.), Automotive Gas Oil (AGO, popularly known as Diesel), Dual Purpose Kerosene (DPK, otherwise known as Kerosene), natural gas, heating oil, lubricants, pesticides, pharmaceuticals, and propane. The commanding players in the downstream sector are petroleum refineries, petrochemical plants, petroleum products distributors, retail outlets and natural gas distribution companies. However, several international oil companies (IOCs) integrate two or three of the supply chain operations, albeit each is a distinct operational node within the group.

The upstream sector is a complex and risky business, but carries both high rewards and political visibility nationally and globally. The visibility derives from a number of factors. First, many IOCs operate in all oil producing countries. Second, the complexity of their operations and revenues therefrom are major contributors to domestic employment and tax revenues. Third, by their very nature, they are susceptible to the vagaries of both their host countries' political dynamics and international market forces. Fourth, the sector is subject to frequent monitoring by government's regulatory as well as environmental agencies. Fifth, it is a highly technology-driven industry with continuous growth and adaptable changes sequel to regulations. Above all, and in consequence of the foregoing, the unique nature of the petroleum industry demands idiosyncratic skill sets in all fields to keep up with these changes.

In sum, the petroleum industry is unique in several respects and enjoys global appeal for several reasons. First, the global utility of the petroleum industry to the maintenance of industrial civilization has made it a critical resource as well as a source of global concern, not only for the oil-producing countries for whom it is a vital source of revenue and GDP growth but also for the advanced economies of the West and fast-developing economies of China, Asia and the Middle East for whom oil constitutes a large component of their energy consumption. Second and in consequence of the geographic/regional consumption patterns of oil, the petroleum industry has had an important and determinative effect in the global economy. With daily global consumption in excess of 93 million barrels per day, that is about 15 billion litres of refined petroleum products (Central Intelligence Agency (CIA), 2017) the production, refining, distribution and retailing of petroleum taken as a whole represents the world's largest industry in terms of dollar value (Ibid.). Third, research, such as Acti et al. (2013) and Adediran and Alade (2013) indicate that unchecked exploration activities by oil and gas companies are the cause of several but avoidable undesirable environmental hazards. An upshot of the environmental degradation of oil exploration activities is the dislocation of the economic and social structure of the host indigenous communities. This trend is exacerbated by the absence of, or weak national environmental laws or feeble enforcement, where the laws exist. The KPMG (2005); KPMG (2008) reports advocated the need for enhanced environmental laws, with the recommendation that IOCs should voluntarily improve their performance in countries with inadequate environmental laws and capture such improvements in their reports. This underscores the importance of sustainability reporting as part of the financial reporting framework (KPMG, 2008).

2.5.1. Operational Strategy of Joint Operating Agreements in Nigeria's Upstream Sector

A Joint Operating Agreement (JOA) is a business operating arrangement or contract between two or more business entities (companies) in or with similar business interests whereby they agree to combine some of their operations and resources as a cost-cutting or cost-sharing strategy. A JOA is a type of joint venture agreement (JVA), where the latter is a contract between two or more companies with the purpose of achieving a specific goal. A JOA is created to achieve at least two related fundamental objectives or benefits: cost savings and economies of scale. Herbert (1995) characterizes JVs of which JOA is a special type in the following way:

Joint ventures conform to, and involve, cooperative and usually collective activity: they provide for profit-sharing arrangements, but, they do not entail hierarchical association nor subordination in ways normally linked with internal organization structure. They correspond, mutatis mutandis, to peer group associations. Defined as non-hierarchical associations of workers, such collective organizations offer prospective advantages in indivisibility, risk-bearing, and associated respects. Since a firm is configured as a nexus of contractual

relations (for both internal parties and external parties) (Alchian & Demsetz, 1972; Jensen & Meckling, 1976) viewing a JV as a nexus of a set of contracting relationships implicitly extends the argument of the firm to JVs. Within this setting, JVs of three types can be distinguished: those engaged in common or related economic activities; those engaged in unrelated economic activities and; those performing an integrated set of economic activities. A common feature of all types of JVs is the element of economic indivisibility in the facility (Buckley & Casson, 2003; Williamson, 1975). Making indivisibility the central unit of economic analysis permits an understanding of the compensating advantage in not splitting up the jointly owned/used facility or resources into two or more separate facilities. To facilitate this requires that the way in which the indivisibility manifests itself be described and their taxonomic implication be specified contextually.

Of the three types of JV contractual arrangements identified by Herbert (1995) Type 1 resonates with JOA, which encompasses JV arrangements that use a homogeneous input sourced jointly by the partners or a homogeneous output shared between the partners. Here, the indivisibility is one of economies of scale, which allows the partner-companies to (a) utilise fewer resources including employees, and (b) eliminate duplication of resources (facilities, equipment, input, functionality and functions).

2.5.2. Summary of NNPC's Upstream Joint Ventures with IOCs

Nigeria's upstream oil industry is run under a joint venture operating agreement (JOA) between the Nigeria National Petroleum Corporation (NNPC) and the major international oil companies (IOCs) which makes them joint operating partners in both the upstream and downstream activities. The JOA is not a memorandum of understanding (MOU) which is a response to the specifics of fiscal incentives; rather, it contains the basic understanding on the JV and sets the guidelines/modalities for running the operations. The IOCs in Nigeria are in JOA with the NNPC. However, as operators in the Nigeria oil and gas exploration and production activities, they owe their host communities the ethical obligation of protecting and sustaining their environmental, economic and social wellbeing so as to militate against an inharmonious hazardous sequel in the future. Over the years, large multinational corporations (MNCs), often referred to as multinational corporate giants, have been using their ownership advantages - competitive advantages, internalization (the creation and exploitation of their core competencies), and internationalization advantages – to advance their productivity, marketability and profitability in their host countries. Firm-specific resources are employed to gain entry and operational advantages and to extract undue rents from African countries, their economic and political space, especially given the individual countries' political and economic leadership deficit.

The reality is that some of these MNCs have become economic behemoths and untouchable that their ignoble influence on their host countries symbolizes 'economic hit men' with mafia rules of conduct that tend to eclipse their criminal enterprises. Over time, there has been an increasing wave of political and economic debates over globalization, the dynamics of corporate governance and their influence on corporate reporting, auditing, and performance. However, academic research in Sub-Saharan African (SSA) countries has not beamed much searchlight on, and, in fact, has become increasingly divorced from the political, social and economic repercussions of corporate behaviour on their host communities. The primary purpose of sustainability reporting is to prompt management to resolve the contradictions in corporate reporting with full disclosure of financial and nonfinancial information. As investors interrogate current reporting practices with increasing calls for changes, the potential of nonfinancial reports, in particular, to stimulate the growth of sustainable investing cannot be discounted. The concern of corporate governance pressure groups, such as the environmental pressure groups and sustainability reporting advocacy groups or special interest groups, is to force firms to increasingly disclose sustainability reports about the environmental and social impacts of their field operations.

Over the years, there has been compelling evidence amidst a cacophony of voices about the need to protect the ecosystems arising from the egregious use and/or abuse of natural resources by individuals and organizations. Specifically, a number of factors such as growing population, rising urbanization, indiscriminate industrial activities, deforestation, climate change, dwindling natural resources, poverty and sundry abuses of the environment, jointly and severally account for the increased global interest in corporate social responsibility vis-à-vis sustainable development. These integrate ethical, environmental and social issues, employees and consumers' concerns and human rights into business activities, also known as environmental, social and governance disclosure (ESG). The upshot has been mounting pressure by stakeholders (ethical investors, environmentalists, multilateral agencies, etc.,) on corporations to take remedial actions to minimize the negative effects of their actions on the natural and social environments (See also, Costa and Menichini (2013)) with the ultimate aim of improving social and environmental sustainability (Adams, 2020). Put differently, the global concern of sustainability disclosure is about the role of corporations in supporting "a more sustainable and inclusive economic system which is low carbon and resource efficient" (Adams, 2018). Following Fonseca, McAllister, and Fitzpatrick (2014), to better achieve ESG aims, voluntary disclosure of ESG activities is becoming a fad as a mainstream practice. Also, as Quick (2008) observed, the essence is to have a financial reporting framework that "will reflect the integration of economic, environmental and social factors into corporate behaviour with the aim of sustaining resources for future generation."

2.6. Conceptualizing Sustainability Reporting

Conceptually, sustainability reporting refers to the systematic and transparent disclosure - process of summarizing, analysing and communicating - of economic, environmental, social and governance performance of an organization. As part of an elaborate or comprehensive corporate governance architecture, a sustainability report enables an organization to evaluate the impact of its activities on, and its commitment to, a sustainable global economy – that is, meeting the present needs of the environment and society at large without compromising the needs of future generations or their ability to meet their own needs. In effect, sustainability reporting is a key platform for communicating an organization's commitment to sustainability performance and impacts thereof. A firm's sustainability report is simply a way of displaying or demonstrating that its business activities are not harmful to the environment or adversely affect the long-term environmental balance. In other words, the firm is simply saying to its audience of interest that it is eco-friendly in its business activities. To make sustainability reporting to be easily assessed and comparably useful to all stakeholders - corporate insiders (employees, managers, executives, and shareholders) and external parties – organizations have adopted a universal framework known as the Global Reporting Initiative (GRI) Sustainability Reporting Framework.

While many authors have attempted to define sustainability reporting, there is no universally accepted definition of sustainability reporting as yet. Collett and Hrasky (2005) see sustainability practice and reporting as a set of socially conditioned practices that have various significant impacts on the operation of businesses and society and in the manner the firms communicate such activities to the various stakeholders. Sustainability practice of the firms is done to assist in demonstrating the accountability and integrity of business actions (Hart, 2005). Elkington (2004) defines sustainability reporting as the integration of reporting and accounting for social, environmental and economic issues into the corporate report of firms. Elkington (2004) further states that sustainability reporting, in its narrowest form, is a framework for measuring and reporting corporate performance against economic, social and environmental parameters, while in its broadest form, it is the whole set of values, issues and processes that companies must address in order to minimize any harm resulting from the activities they engage in and to create viable economic, social and environmental values to the host community. Although, sustainability reporting has yet to reach a generally accepted standard of financial reporting and is still largely a voluntary exercise in many countries, such notion is changing as a result of the mandatory requirements being introduced globally (Association of Chartered Certified Accountants (ACCA), 2005).

2.7. Global Best Practice in Sustainable Reporting

The global best practice for sustainability reporting has several reporting guidelines for reporting sustainability which entails reporting the firms environmental, economic and social performance. Assessing the environmental report of firms reflects the firm's disclosure of the impact of its production activities on the environment. Also, economic report echoes the firm's disclosure of the economic impact of its sustainable activities, while social report incorporates the firm's report on the various social responsibility activities embarked upon during the year. The GRI Standards provide incipient global standards for sustainability reporting. The standards are a modular, interrelated structure, and represent the global best practice for reporting on a range of economic, environmental and social (EES) impacts (Global Reporting Initiative, 2002).

The concept of sustainability reporting views as important both the traditional concern of business organizations' strategies for profit maximization as well as the global assessment of firms' financial performance and its effect on the economy and environment (See also, Hart (1997)). However, the evolution of strategic thinking on sustainability reporting underscores the need to include activities that seek to integrate social and environmental issues into the business decision making process (Sihotang & Effendi, 2010). This is done so as to enable firms properly integrate their environment and stakeholders and make such firms socially responsible for the host community. Nigeria should not be an exception in the introduction of sustainability reporting in the business community with particular reference to the oil and gas sector in view of its role in economic development of the nation and the possible hazards their activities cause to the host community (Umoren et al., 2018). The oil and gas sector is the backbone of Nigeria's economy, contributing over 80% of her foreign exchange earnings (Uwakonye et al., 2006). Although most of the crude oil in Nigeria comes from numerous small producing fields, located in the swamps of the Niger Delta, the multinationals have shown a lacklustre attitude, ranging from lack of transparency, environmental degradation to insensitivity to the concerns of stakeholders, leading to incessant community unrest and public criticism (Umoren et al., 2018).

Many researchers have examined different aspects of sustainability reporting, including voluntary disclosures and sustainability cost reporting. Cortez and Cudia (2011) conducted research on the impact of sustainability accounting on firm performance. Using electronics companies listed in the Tokyo Stock Exchange and with aid of panel regression analyses, the study found that sustainable developments have significant impact on firm performance because it enhances revenue generation. Asaolu et al. (2011) assessed sustainability reporting in the Nigerian oil and gas sector by employing content analysis on the data sourced from the companies' annual reports to identify the extent to which their reporting corresponds with global best practices. They observed the existence of arbitrary and incompatible sustainability reporting indicators among the sampled companies and recommended the introduction of sustainability reporting framework in

line with global best practices in the Nigerian oil and gas sector. Umoren et al. (2018) examined the nature of relationships between environmental accounting reporting and oil companies' performance in Nigeria. Their multiple regression analysis of eleven (11) quoted oil companies on the Nigerian Stock Exchange found no significant relationships between environmental accounting/reporting and performance. They argued that in the interest of safety of the environment and promotion of economic growth and development, government should make environmental disclosure mandatory as well as impose sanctions for delinquent corporate violation. Nnamani, Onyekwelu, and Ugwu (2017) examined the effect of sustainability accounting on the financial performance of listed manufacturing firms in Nigeria using ordinary linear regression, and found that sustainability reporting has a positive and significant effect on financial performance of firms. While the number of sustainability reports has increased significantly in the past few years with most of the world's largest companies embracing CSR reports (Landrum & Ohsowski, 2018) however, the credibility and reliability of sustainability reporting have been widely criticized (Cho, Laine, Roberts, & Rodrigue, 2015). Furthermore, Michelon, Pilonato, and Ricceri (2014) contend that "research on sustainability disclosure points to an increasing lack of completeness and decreasing amount of credibility in the information reported as well as concerns about overall reporting practices". The shouldering of corporate social responsibility has continued to generate mixed considerations, debates and thoughts by different subsets of the corporate world and the academia (Simnett, Vanstraelen, & Chua, 2009). Clarkson (1995) has argued that sustainability disclosure is not only a righteous obligation of firms but one that also comes with great benefits. On the other hand, Sveiby (1997) claims that it is against the profit-making function of business, and that it does not even pay the firm any meaningful dividend to become socially responsible.

Table-1. The Principles of SDG Disclosure

SDG Disclosure Principles	Application
Strategic focus and future orientation	SDG Disclosures should reflect the extent to which consideration of the SDGs, and the sustainable development issues that they address, are integrated into the organisation's processes. This includes processes for considering risk and opportunity that influence strategy and the organisation's business model to create long term value for the organisation and society.
Stakeholder inclusiveness	SDG Disclosures should reflect the outcome of the reporting organisation's process to identify its key stakeholder groups, including communities, it impacts, and should explain how it has responded to their reasonable expectations and interests. (Adapted from GRI, 101).
Conciseness	SDG Disclosures should be concise so that relevant information is not obscured, but SDG Disclosures must nevertheless, satisfy the Principle of Completeness.
Connectivity of information	SDG Disclosures should demonstrate that consideration of sustainable development issues and impact on the achievement on the SDGs is integrated into the organisation's: o Business model. o Consideration of risks and opportunities in the external environment. o Strategy to create value and avoid harm. o Risk management. o Other key organisational processes. SDG Disclosures should convey the interrelatedness of the SDGs and the interdependencies between the sustainable development issues that affect the organisation's ability to create long term value for organisations and society.
Consistency and comparability	Changes that occur through the application of these Principles should be disclosed so that the SDG Disclosures are comparable over time and across organisations.
Completeness, balance, understandability	SDG Disclosures should be complete, balanced and understandable. They should report on the organisation's impact on the achievement of the SDGs in a balanced way and without material error. In order for SDG Disclosures to be complete and comply with the Fundamental Concept of Sustainable Development context and relevance and the Fundamental Concept of Materiality, they may need to address issues and impact in the organisation's value chain but outside its boundary.
Reliability and verifiability	Quantified SDG Disclosures should be reliable and verifiable.
Timeliness	SDG Disclosures should be provided on a timely basis in order for users to make informed decisions.

Source: Adams, Druckman, and Picot (2020), Table 2, p. 9.

Table-2. GRIs Benchmark Disclosure Content.

GRI 301	• Materials used by weight or volume. **(M1)** • Recycled input materials used. **(M2)** • Reclaimed products and their packaging materials **(M3)**
GRI 302	• Energy consumption within the organisation. **(E1)** • Energy consumption outside the organisation. **(E2)** • Energy intensity. **(E3)** • Reduction in energy consumption. **(E4)** • Reductions in energy requirements of products and services **(E5)**
GRI 304	• Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas. **(B1)** • Significant impacts of activities, products, and services on biodiversity. **(B2)** • Habitats protected or restored. **(B3)** • IUCN Red List species and national conservation list species with habitats in areas affected by operations **(B4)**
GRI 305	• Direct (Scope 1) GHG emissions. **(EM1)** • Energy indirect (Scope 2) GHG emissions. **(EM2)** • Other indirect (Scope 3) GHG emissions. **(EM3)** • GHG emissions intensity. **(EM4)** • Reduction of GHG emissions. **(EM5)** • Emissions of ozone-depleting substances (ODS). **(EM6)** • Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions. **(EM7)**
GRI 307	• Non-compliance with environmental laws and regulations **(EC1)**
GRI 308	• New suppliers that were screened using environmental criteria. **(SEA1)** • Negative environmental impacts in the supply chain and actions taken **(SEA1)**
GRI 413	• Operations with local community engagement, impact assessments, and development programs. **(LC1)** • Operations with significant actual and potential negative impacts on local communities **(LC21)**
GRI 411	• Incidents of violations involving rights of indigenous peoples. **(RIP1)**
GRI 404	• Average hours of training per year per employee. **(TE1)** • Programs for upgrading employee skills and transition assistance programs. **(TE2)** • Percentage of employees receiving regular performance and career development reviews **(TE3)**
GRI 416	• Assessment of the health and safety impacts of product and service categories. **(CHS1)** • Incidents of non-compliance concerning the health and safety impacts of products and services **(CHS2)**
GRI 201	• Direct economic value generated and distributed. **(EP1)** • Financial implications and other risks and opportunities due to climate change. **(EP2)** • Defined benefit plan obligations and other retirement plans. **(EP3)** • Financial assistance received from government **(EP4)**
GRI 203	• Infrastructure investments and services supported. **(IEP1)** • Significant indirect economic impacts **(IEP2)**
GRI 202	• Ratios of standard entry level wage by gender compared to local minimum wage. **(MP1)** • Proportion of senior management hired from the local community **(MP1)**

Source: Global Sustainability Standards Board (GSSB) Reports.

The foregoing notwithstanding, the essence of sustainability reporting and disclosure is to enhance corporate awareness and mainstream corporate reporting and disclosure of organizational activities and efforts in meeting the Sustainable Development Goals (SDGs). The GRI affirms that sustainability reporting permits an overview of an organization's economic, environmental and social (EES) impacts of its activities. The value of sustainability reporting and disclosure corresponds with (a) how well they contend with EES impacts and governance and other nonfinancial matters; (b) how they report the impacts of their activities and operations

on sustainability issues; and (c) how firms ensure that they are not only transparent about the risks and opportunities they face but how these are communicated to the diverse interests of their many stakeholders.

Especially in the developing countries, many organizations simply mime about sustainability goals and make claims about their level of sustainability compliance and reporting, without any discernible or credible evidence of active involvement, particularly in disclosing such information to a wide variety of global stakeholders, including civil society groups and government. Established in 1997, the GRI developed a ground-breaking initiative on corporate sustainability reporting and the standards are reportedly used widely by the majority of companies reporting sustainability information (www.unglobalcompact.org). As the most widely used global sustainability standards, reporting on the SDGs not only leverages the GRI standards, but also companies use the GRI standards to develop, design and include a very broad scope of disclosure in their sustainability or corporate responsibility reports. Table 1 outlines the major principles of SDG disclosure.

3. Methodology

The content analysis method is used in codifying the level of sustainability report of the firms, using dummy (0, 1) codes in line with the GRI standards. Based on the GRI materiality reporting principle, the study adopts 13 GRI standards as content analysis requirements to assess the level of sustainability reports and disclosure of the qualitative information of the oil and gas firms. The qualitative data codified is transformed into quantitative data. Descriptive statistics are used in designating and understanding the features of the data. The firms' sustainability reporting average content disclosed is compared against the GRI standard disclosure content to ascertain the level of sustainability reports of the firms vis-à-vis the GRI standards. The study data are obtained from the annual sustainability reports of the listed oil and gas companies on the NSE as at 2018 (See: Appendix 1). The study time frame is restricted to 2018 for two reasons. First, the GRI standards materials used in this study have 2018 as their effective date. Second, the firms' 2019 financial statements were not yet published due to the global disruption caused by the Covid-19.

Content analysis is most commonly used research technique for assessing an organization's qualitative (textual) content (Weber, 1988). With content analysis, a researcher can quantify, analyse and interpret the presence, connections and connotations of textual materials or themes in a verbalized communication. It permits codifying and transforming the text (in this case, the sustainability reports) into quantitative data, to admit further analysis and valid inferences to be drawn from the data derived therefrom (Krippendorff, 2004). Sustainability matters, incorporating social, economic and environmental disclosure issues, are largely textual and qualitative in nature. Researchers, used to analysis with quantitative data, are inclined to seek a systematic way to analyse the contextual qualitative data, contained in companies' annual reports. Thus, content analysis has been embraced as a suitable technique for analysis, especially where data are numerous and statistical accounts seem helpful (Krippendorff, 2004). Tables 2 and 3 below describe the sustainability reporting guide adopted by this study.

Table-3. GRI Content analysis criteria.

S/N	Series	Total Content	Disclosure	Report
1	GRI 301	3	Materials (M)	Environmental
2	GRI 302	5	Energy (E)	Environmental
3	GRI 304	4	Biodiversity (C)	Environmental
4	GRI 305	7	Emissions (EM)	Environmental
5	GRI 307	1	Environmental Compliance (EC)	Environmental
6	GRI 308	2	Supplier Environmental Assessment (SEA)	Environmental
7	GRI 413	2	Local Communities (LC)	Social
8	GRI 411	1	Rights of indigenous People (RIP)	Social
9	GRI 404	3	Training and Education (TE)	Social
10	GRI 416	2	Customers Health and Safety (CHS)	Social
11	GRI 201	4	Economic Performance (EP)	Economic
12	GRI 203	2	Indirect Economic Impacts (IEP)	Economic
13	GRI 202	2	Market Presence (MP)	Economic

Note:

- Disclosed content is codified (1).
- Undisclosed content is codified (0).
- The disclosed content for each GRI standard by the firms is summed up to form the total evaluation criteria that are compared against GRI required total content.

Decision Criteria: Sustainability disclosure is attained if the calculated mean is equal to the total number of required GRI standard disclosure content adopted.

4. Result and Analysis

The data analysed below is presented in Appendix 1 as the content sustainability data of the sampled firms. Table 4 presents the codified sustainability disclosure content of the listed upstream oil and gas

companies. The number of observations (3) indicates that three firms met the criteria for inclusion in the study sample. The Global Reporting Initiative (GRI) Standards Evaluation Values (GRI E.V) are used as a basis for comparison against the respective means of sustainability disclosure contents published by the firms.

Table-4. Descriptive statistics of the codified sustainability disclosure content of the firms.

Disclosure Indicators	N	Minimum	Maximum	Mean	GRI E.V.
GRI301	3	.00	1.00	.3333	3.00
GRI302	3	1.00	3.00	1.6667	5.00
GRI304	3	1.00	3.00	2.0000	4.00
GRI305	3	.00	1.00	.6667	7.00
GRI307	3	.00	1.00	.6667	1.00
GRI308	3	.00	.00	.0000	2.00
GRI413	3	1.00	2.00	1.6667	2.00
GRI411	3	.00	.00	.0000	1.00
GRI404	3	2.00	3.00	2.6667	3.00
GRI416	3	1.00	2.00	1.6667	2.00
GRI201	3	2.00	4.00	3.0000	4.00
GRI203	3	1.00	2.00	1.6667	2.00
GRI202	3	1.00	2.00	1.6667	2.00
Valid N (listwise)	3				

Source: Global Sustainability Standards Board (GSSB) (2016).

As shown in the table, there are variations in the result obtained for the firms' sustainability disclosures on environmental performance in accordance with GRI 301, GRI 302, GRI 304, GRI 305, GRI 307 and GRI 308. There is a low level of disclosure by the firms, with the mean of 0.33, far below the GRI EV of 3. On energy used (GRI 302), the firms' average of 1.67 is below the GRI required level of 5 contents to be disclosed. The disclosures about biodiversity (GRI 304) for the firms show an average mean of 2.00 which is below the GRI required level of 4 contents to be disclosed. Both GRI 305 and 307 (Emission and Environmental compliance) indicate a mean of 0.67 each. Although the GRI 305 level of disclosure is below the required level of 7, the GRI 307 level of disclosure is approximately 1, and thereby conforms to the level of disclosure on environmental compliance required by GRI. The firms do not make disclosures on Suppliers Environmental Assessment in their sustainability reports with the zero-mean value.

The second phase of content analysis focused on the social sustainability performance of the firms in line with GRI 413, 411, 404 and 416. About the firms engaging local communities via social responsibilities, the level of disclosure records a mean of 1.67 which approximately is in line with the required GRI level of 2 contents to be disclosed. On the rights of indigenous people, the firms have not disclosed any data on how they recognize the rights of the people with an average mean of 0.00 as against the required GRI level of 1 content to be disclosed. On staff training and education, the firms record an approximate mean of 3.00 (2.67) which conforms to the GRI disclosure requirement. Also, the firms' sustainability disclosures on customer health and safety records averaged approximately 2 (1.67) which is in line with the GRI disclosure requirement.

Lastly, the study evaluated the level of economic sustainable performance using GRI 201, 203 and 202 standards. For the firms' disclosure on the sustainable economic performance (GRI 201), the result shows an average mean of 3.00 which is below the GRI required standard of 4 contents to be disclosed. On indirect economic impacts (GRI 203), and market presence (GRI 202), the firms record an average of 1.67 which is approximately equal to the required level of disclosure content (2) in GRI 203 and 202, respectively.

5. Discussion of Results

The results of the study indicate a poor sustainability reporting and disclosure by the oil and gas firms about the impact of their operations on the environment. The firms' disclosure practices fall short of the average globally accepted standards GRI disclosure content. This deficit is most notable in the firms' poor sustainability disclosures in the materials used for production, energy used, biodiversity, environmental compliance and supplier environmental assessment. This result is consistent with Umoren et al. (2018) who reported an insignificant relationship between environmental accounting and the performance of oil companies in Nigeria.

With respect to social sustainability reports, the firms substantially disclosed the social impacts of their activities on the local communities, customers and employees. The firms' disclosure in respect of host communities is in line with the GRI requirement with the reported adequate attention to various needs of local communities in a bid to mitigate the negative social impacts of the firms' economic activities. Indigenous communities play a critical role in the protection of the environment which supports global efforts to achieving the SDGs. Because indigenous communities are closer to nature which sustains their livelihoods, it is of empirical interest to ascertain how their rights and habitats are violated or protected by resident

corporate entities. This study found that the rights of indigenous people are beneath the GRI threshold which suggests that protection of the economic and social rights of indigenous people is not a fundamental concern of the resident oil and gas companies. This grievous neglect fuels the agitation and struggle for resource control in the oil-producing Niger Delta region.

We further chronicle evidence of inadequate reporting of sustainable economic performance by the major oil and gas firms, especially the financial implications and other risks and opportunities due to climate change. Nigerian oil and gas companies are actually less perturbed by environmental conservatism due to weak environmental law enforcement. With respect to market presence, the companies made substantial disclosures on their economic sustainability performance in line with the required GRI disclosure content. The significant market presence of the oil and gas companies in the Nigerian economic scene has given them a vital role in the country's economic growth and development.

6. Conclusion and Practical Implications

Nigeria's upstream petroleum industry has been poorly reporting the environmental impacts of their economic activities. Most of the firms have not fully adopted the GRI standards, the globally required standards for sustainability reporting. While there is increased attention in social and economic performance reporting, the same cannot be said about disclosure of the rights of indigenous people and environmental degradation caused by inattentive economic activities. Corporate efforts that seek to strengthen corporate stance on environmental issues and help to conserve natural resources and protect human lives and environmental health are affirmative causes. On the other hand, weak environmental law enforcement has continued to generate unpleasant challenges and threat to environmental conservatism and sustainability as well as preservation of the ecosystem. This conclusion is reinforced by the spate of environmental degradation and wave of strident concerns and agitations by the host communities in the Niger Delta region.

Inadequate reporting of sustainable economic performance by the major oil and gas firms juxtaposing government's inability to hold them accountable for the egregious violation of the ecosystem and of the rights of indigenous people is an unpleasant narrative that fuels unrest and conflicts between the IOCs and their host communities. But through the Sustainability Disclosure Framework, all parties in the production chain (the oil and gas industry, the host communities, government and the markets) must be seen as global solution partners in (a) remediating the perceived imperfection in production practices by the firms, and (b) fostering long-term sustainable value creation in the petroleum sector or any industry whose activities impinge upon the environment and social lives of the people. Since financial indicators are insufficiently microanalytic to stakeholders, sustainability reporting will compel corporate executives to change their individual and business attitudes towards their environment of operations and voluntarily publicize their firms' contributions towards sustainable development. Interpreted contextually, sustainability reporting promises to be a conducive framework to ethical and environmental awareness, good corporate governance, and business success signal.

7. Implications

Sustainability reporting creates an incremental challenge to companies whose activities impinge upon the planet, to government whose responsibility it is to protect the citizens and the ecosystem, and eco-friendly citizens and civil society organizations that have taken on the altruistic responsibility of raising global consciousness on the need to protect the ecosystem. A recent global survey found that some of the world's largest companies do not have the systems in place to collect quality data for sustainability reporting (Bernow, Godsall, Klempner, & Merten, 2019)[2]. This is even more so in developing countries with weak regulatory architecture and "low-level constitutional provision for environmental protection, roles and conflicts in environmental management, undue adherence to legalism by the courts and absence of mandatory disclosure of information" (Ijaiya & Joseph, 2014).

Equally, as the global consciousness grows about the importance of sustainable investments and sustainability-related information and reporting, more investors will likely embrace sustainability reports. In developing countries, where large multinational companies take advantage of weak regulatory system and opportunistic compromises with Government and thus become selective with or reluctant in their approach to managing sustainability issues, it is suggested that more sustainable government policy engagement will yield both corrective and preventive action measures, where these are respectively defined and designed to reduce the frequency of environmental neglect by the oil companies. Both corrective and preventive actions will go a long way in lessening the harmful effect of oil exploration activities on host communities, building synergy between the oil firms and their host communities, and providing sustainable development projects that will improve the lives of the host community. These, in turn, will eliminate the inhospitable atmosphere that characterizes the operational dynamics of Nigeria's exploration and production activities.

The results of this study may be useful for policy implications. First, the study adds to the burgeoning literature on the dichotomy of stakeholder value-driven versus shareholder value-driven corporate governance and how this paradigm shift shapes corporate governance and sustainable economic performance. Second,

[2]The authors: Sara Bernow is a partner in McKinsey's Stockholm office, where Charlotte Merten is a consultant; Jonathan Godsall is a partner in the New York office; and Bryce Klempner is a partner in the Boston office.

globalization has challenged and is still challenging several indigenous habits and cultures which, in turn, have compelled governments and communities to be more sensitive about their environments. The arguments of sustainability reporting and disclosure adduced in this study adumbrate this global challenge from the empirical context of oil and gas firms operating in Nigeria. Third, as the operational dynamics of IOCs have increasingly come under the spotlight and scrutiny of local, national and international observers, studies of this kind help to validate the spate of anecdotal evidence.

Fourth, the institutionalization of sustainability reporting framework that (a) incorporates the dimensions of sustainability (by the inclusion of relevant nonfinancial information), and (b) potentially satisfies the yearnings of diverse stakeholders is appealing in reporting correction as well as corrective and preventive action measures of oil and gas companies, in particular. Fifth, business models are increasingly competing for more enduring and sustainable innovative strategies. This is more so as the sophistication and ethical consciousness of local and international stakeholders is increasingly awakened by painful scars of historical and continuing devastation of communities through various business pursuits (crude oil and minerals exploration, logging and deforestation, etc.), thus rendering the local communities vulnerable, with the destruction of their natural sources of livelihood. Sixth, beyond financial benefits and shareholder wealth maximization, the ethical thermostat of corporate activities is now being increasingly gauged and regulated by sustainability sentiments.

Finally, there appears to be sustainability implementation laxity or apathy in Nigeria and most SSA countries. Anecdotal evidence supports this study's findings about the inconsequentiality of sustainability disclosure to corporate performance. Despite the recent World Economic Forum's (WEF) affirmation of the rising tide of stakeholder capitalism in contrast to the diminishing emphasis on shareholder capitalism, there is little or no evidence that this is a trending news in SSA. This paper canvasses the importance of embracing the GRI to mandate SSA companies to publish Sustainability/Integrated reports and have a Sustainability Disclosure Database with their Organization Profile page. As the GRI recommends, a completed Organization Profile page facilitates interaction between a reporting organization and its multitude of stakeholders by detailing the organization's high-level defining characteristics, its sustainability risks and opportunities, most recent news, and reporting history. Given the ubiquity of social media connectivity, affirmative sustainability reporting can be enhanced through such open communication channels.

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Appendix-1. Firms' content sustainability data.

Codified/ Listed Upstream Oil & Gas Firm	M1	M2	M2	Total	E1	E2	E3	E4	E5	Total			
Firm A	0	0	0	0	0	1	0	0	0	1			
Firm B	0	0	1	1	1	1	1	0	0	3			
Firm C	0	0	0	0	0	0	1	0	0	1			
	B1	B2	B3	B4	Total	EM1	EM2	EM3	EM4	EM5	EM6	EM7	Total
Firm A	1	0	0	0	1	1	0	0	0	0	0	0	1
Firm B	1	1	1	0	3	1	0	0	0	0	0	0	1
Firm C	1	1	0	0	2	0	0	0	0	0	0	0	0
	EC1	SEA1	SEA2	Total	LC1	LC2	Total	RIP1		Total			
Firm A	0	0	0	0	1	1	2	0		0			
Firm B	1	0	0	0	1	1	2	0		0			
Firm C	1	0	0	0	0	1	1	0		0			
	TE1	TE2	TE3	Total	CHS1	CHS2	Total						
Firm A	1	1	1	3	1	1	2						
Firm B	1	1	1	3	1	1	2						
Firm C	1	0	1	2	0	1	1						

NAME	EP1	EP2	EP3	EP4	EPTO	IEP1	IEP2	IEPTO	MP1	MP2	MPTO
Firm A	1	0	1	1	3	1	1	2	1	1	2
Firm B	1	1	1	1	4	1	1	2	1	1	2
Firm C	1	1	0	0	2	0	1	1	0	1	1

Source: Authors' context codification of GRI standards, based on the data sourced from the annual sustainability reports of the listed oil and gas firms on the NSE as at 2018.

Note:

- Materials used by weight or volume **(M1).**
- Recycled input materials used **(M2).**
- Reclaimed products and their packaging materials **(M3).**
- Energy consumption within the organisation. **(E1)**
- Energy consumption outside the organisation. **(E2)**
- Energy intensity. **(E3)**
- Reduction in energy consumption. **(E4)**
- Reductions in energy requirements of products and services **(E5)**
- Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas. **(B1)**
- Significant impacts of activities, products, and services on biodiversity. **(B2)**
- Habitats protected or restored. **(B3)**

- IUCN Red List species and national conservation list species with habitats in areas affected by operations **(B4)**
- Direct (Scope 1) GHG emissions. **(EM1)**
- Energy indirect (Scope 2) GHG emissions. **(EM2)**
- Other indirect (Scope 3) GHG emissions. **(EM3)**
- GHG emissions intensity. **(EM4)**
- Reduction of GHG emissions. **(EM5)**
- Emissions of ozone-depleting substances (ODS). **(EM6)**
- Nitrogen oxides (NOX), Sulphur oxides (SOX), and other significant air emissions. **(EM7)**
- Non-compliance with environmental laws and regulations **(EC1)**
- New suppliers that were screened using environmental criteria. **(SEA1)**
- Negative environmental impacts in the supply chain and actions taken **(SEA2)**
- Operations with local community engagement, impact assessments, and development programs. **(LC1)**
- Operations with significant actual and potential negative impacts on local communities **(LC21)**
- Incidents of violations involving rights of indigenous peoples. **(RIP1)**
- Average hours of training per year per employee. **(TE1)**
- Programs for upgrading employee skills and transition assistance programs. **(TE2)**
- Percentage of employees receiving regular performance and career development reviews **(TE3)**
- Assessment of the health and safety impacts of product and service categories. **(CHS1)**
- Incidents of non-compliance concerning the health and safety impacts of products and services **(CHS2)**
- Direct economic value generated and distributed. **(EP1)**
- Financial implications and other risks and opportunities due to climate change. **(EP2)**
- Defined benefit plan obligations and other retirement plans. **(EP3)**
- Financial assistance received from government **(EP4)**
- Infrastructure investments and services supported. **(IEP1)**
- Significant indirect economic impacts **(IEP2)**
- Ratios of standard entry level wage by gender compared to local minimum wage. **(MP1)**
- Proportion of senior management hired from the local community **(MP1)**