



Journal Homepage: - [www.journalijar.com](http://www.journalijar.com)

## INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/10800

DOI URL: <http://dx.doi.org/10.21474/IJAR01/10800>



### RESEARCH ARTICLE

#### A LONGITUDINAL STUDY OF THE SOCIAL AND ENVIRONMENTAL ACCOUNTABILITY PRACTICES OF LISTED NIGERIAN OIL AND GAS COMPANIES

Mohammed Sani Damamisau<sup>1</sup>, Aishatu Danjuma Adam<sup>2</sup>, Muhammad Muhammad Sallau<sup>3</sup>, Yusuf Abdu Gimba<sup>3</sup> and Bashir Ali Sulaiman<sup>2</sup>

1. Lecturer I, Department of Taxation, Federal University Dutse, Jigawa State, Nigeria.
2. Graduate Assistant, Department of Taxation, Federal University Dutse, Jigawa State, Nigeria.
3. Assistant Lecturer, Department of Taxation, Federal University Dutse, Jigawa State, Nigeria.

#### Manuscript Info

##### Manuscript History

Received: 10 February 2020

Final Accepted: 12 March 2020

Published: April 2020

##### Key words:-

Quantity and Quality, Social And Environmental Accountability, Listed Oil and Gas Companies, Vulnerability and Exploitability Framework, Global Reporting Initiative

#### Abstract

Activities of the Nigerian oil and gas industry are fraught with lots of social and environmental negative effects such as displacement of settlements to allow for exploration, production and transportation of crude oil and refined products, loss of traditional means of livelihood, food shortage, lost of cultural values and traditional institutions, destruction of biodiversity, terrestrial and aquatic environments, water and air pollution, oil spill and gas flaring which is a significant contributor to carbon dioxide (CO<sub>2</sub>) emissions causing global warming and climate change. Indeed, exploration activities and consumption of oil, gas and related products accounted for 95 million metric tonnes of CO<sub>2</sub> out of the 96 million metric tonnes emitted in 2016. Therefore, the aim of this study is to longitudinally assess the social and environmental accountability practices of listed Nigerian oil and gas companies. To achieve this aim, modified word counts content analysis of annual reports and accounts of sampled companies is employed to obtain data on the social and environmental accountability of sampled companies 2004 – 2018. The Global Reporting Initiative (GRI) disclosure guideline is used to benchmark the disclosure accountability practices of sampled companies. Descriptive statistical tools are employed to present collected data while vulnerability and exploitability analytical framework is employed to give insights into the disclosure practices. Findings indicated that sampled oil and gas companies are exploiting the vulnerabilities of host communities, Nigerian governments and citizens in their disclosure accountability by making more social disclosure on issues that concerns employees and managers while making little environmental disclosure.

Copy Right, IJAR, 2020,. All rights reserved.

#### Introduction:-

Activities of human beings are dependent on utilization of energy over the centuries transiting from one source of energy to another from human muscle power, energy from animals, solar, water and air used in early history to biomass with the discovery of fire making process. The discovery of coal resulted into significant replacement of the use of biomass as source of energy especially in the industrialized nations and some developing countries. Similarly,

**Corresponding Author:- Mohammed Sani Damamisau**

Address:- Lecturer I, Department of Taxation, Federal University Dutse, Jigawa State, Nigeria.

the discovery of oil and gas resulted in significant shift from coal source of energy to oil and gas sources of energy referred to as fossil fuels (EIA 2018). Precisely, the incorporation of oil in to steam engines in Great Britain marked the beginning of the industrial revolution of the eighteenth century which later spread to other parts of the world (Paul 2006). The industrial revolution marked the beginning of new ways of life as these fossil fuels not only resulted in increasing industrial production, but also, positively affected all forms of human activities including food production, clothing, housing, medicine, increased per capita income, simplifying domestic activities through introduction of domestic machines (McLamb 2011). Since then, fossil fuels have remained the dominant source of Global Total Primary Energy Supply (GTPEs) supplying 61.30% in 1973, 60% in 1983, 58.82% in 1993, 52.10% in 2003, 68.70% in 2013 and most recently 54.20% in 2017 (IEA 2019, 2013, Paul 2006). However, the processes of exploration and production of oil and gas resources are accompanied with lots of negative social and environmental impacts from displacement of settlements to allow for exploration, production and transportation of crude oil and refined products, loss of traditional means of livelihood, food shortage and hunger, lost of cultural values and traditional institutions (Loro and Zhibo 2018). The environmental effects of the exploration, production and distribution of oil and gas resources include destruction of biodiversity, terrestrial and aquatic environments, water and air pollution, oil spill and gas flaring (Erhinyoja and Marcella 2019, Loro and Zhibo 2018, Mohammed 2016). Gas flaring is specifically identified as a significant contributor to global carbon dioxide (CO<sub>2</sub>) emissions which in turn is causing global warming leading to climate change (Mohammed 2018, Hassan and Kouhy 2013). Indeed, combustion of fossil fuels accounted for 55.10% of the 32,840 million tonnes of CO<sub>2</sub> emitted in 2017 (IEA 2019).

Nigeria is a country located in the West African sub-region of the African continent and the country is blessed with abundant reserves of oil and gas resources (Hassan 2012). The country has proved oil reserves of 37.50 billion barrels as at end of December 2018 making it the eleventh in global ranking. Likewise, it has 180.80 trillion cubic feet of proved natural gas reserves placing it in the tenth position of global ranking as at the end of December 2018 (BP 2019). The Nigerian oil and gas industry is playing significant roles in the socio-economic development of the country being the major source of foreign revenue and total government revenue earnings which is then shared among the three tiers of governments in Nigeria (CBN 2019). However, the Nigerian oil and gas industry is also associated with lots of negative social and environmental problems. The social problems encompasses destruction of farming and fishing lands thereby making it scarce which in turn affects food production and causing hunger (Allen 2012). Thus, parents are finding it difficult to feed their families and provide for the educational needs of their children (Okereke and Orjiafor 2011) which in turn is causing teenage pregnancies in girl child and militancy among the male children (Mohammed 2016). There are also social problems relating to health consequent to oil and gas exploration such as convulsions, chromosomal damage and birth defects caused by benzene due to blazing fire of gas flaring (Osuokaand Roderick 2005). The long term gas flaring in oil and gas producing region is found responsible for bronchial and respiratory diseases among people in the region (Akoroda 2000, Ebegbulem, Ekpe and Adejumo 2013). Excessive exploration and seismic activities are negatively impacting on soil fertility and quality of crops (Jike 2004, Benedict 2011). Indeed, the quality, size, and shape of traditional staple such as cassava, yam, plantain etc. are reported as adversely affected due to oil exploration activities (Akoroda 2000). Similarly, constructions of oil and gas pipelines destroy rainforest and mangroves leading to segregation of natural population and affect the breeding behaviour of animals and birds species (Ugochukwu and Ertel 2008). The industry is also associated with problem of oil spillage (Benedict 2011, Allen 2012, Ebegbulem, Ekpe and Adejumo 2013) which is among the worst globally (Ifeadi, Ekaluo, and Orubuma 1985). Indeed, the environmental problems of the industry are identified as the causes of numerous social problems in the Niger Delta oil and gas producing region and youth militancy leading oil bunkering, vandalisation of oil and gas assets, kidnapping and loss of lives (Mohammed 2016, Hassan 2012). In the downstream sector, there problems of adulteration of Premium Motor Spirit (PMS) and Kerosene reported to have caused loss of many human lives in Nigeria (NNPC 2014).

Thus, although the global and Nigerian oil and gas industry is a significant player in the socio-economic development of the world in general and Nigeria in particular; the industry is causing lots of social and environmental negative effects. These negative effects have drawn global concerns on the need for the industry to render accountability on its activities (Frynas 2005, Mohammed 2016); in response to the raised concerns, the oil and gas industry is reported as following good practices of disclosing the social and environmental impacts of its activities (Krishna et al. 2012). Indeed, the industry is leading other industries in championing social and environmental disclosure (Mohammed 2016, Frynas 2009) which is a form of corporate accountability (Hassan 2012). Corporate disclosure accountability is a way of taking responsibility for actions and decisions which could pave the way for dialogue among interested parties that may lead to resolving contentious issues such as on corporate social and environmental negative effects (Mohammed 2016, Hassan 2012). Therefore, the aim of this

paper is assess the social and environmental accountability practices of listed Nigerian oil and gas companies. To achieve this, the quantity of the disclosure which is signifying the importance of disclosed topic to the disclosing entity is determined through modified word counts content analysis of the annual reports and accounts of sampled companies. To further assess the accountability, factual reported social and environmental problems bedevilling the industry are compared with disclosed issues while vulnerability and exploitability analytical framework underpins the study.

It is of significance here to acknowledge that previous studies on the social and environmental disclosure practices of the oil and gas industry were conducted in oil and gas resources endowed countries. The environmental disclosure practices of energy companies in Saudi Arabia were evaluated based on GRI guideline issued in 2016. The result showed environmental compliance having 26% of total disclosure volume as the most disclose information followed by emission 20.6%, material 16.7% and energy 15.7% while the least disclose information is related to biodiversity and effluents and wastes (Abdull Razak , Al Hujaili and Al Ahmedi 2019). Content analysis of annual reports and accounts of twenty three Libyan oil and gas companies was carried out for the years 2008, 2009 and 2010. The results of the study indicated low level and quality of environmental information disclosed in the annual reports most especially before Arab spring (Eljayash 20 15). Specifically on Nigeria, Dibia and Onwuchekwa (2015) investigated the relationship between firm size, profitability, leverage and audit type and environmental disclosure in the annual reports and accounts of listed Nigerian oil and gas companies by means of content analysis. Findings showed significant and positive relationship between firm size and corporate environmental disclosure, while the relationship between profitability, leverage, audit firm type and corporate environmental disclosure is insignificant. Similarly, Yusuf, Samuel and Ekundayo (2016) investigated the extent of environmental disclosures by listed oil and gas companies in Nigeria by means of content analysis of only annual reports of sampled companies. Results from the study reveal that oil and gas companies operating in Nigeria are paying little or no attention to the disclosure of environmental information of their operations in their annual reports. Disclosed information are mostly general in nature usually relating to the companies stands on health, safety and environment which are not useful to stakeholders. Similarly, Mohamed (2016) found that the most disclosed issues are social especially on labour practices and decent work, diversity and equal opportunity, employment and society as the first; second, third and fourth most disclosed social aspects while environmental disclosure is found few in a study of the Nigerian oil and gas industry.

Likewise, an empirical investigation was carried out to examine environmental accounting disclosure practices and corporate financial attributes in the annual reports of the ten listed oil and gas companies in Nigeria 2009 - 2018. The study examined 40 items in a disclosure index developed in line with the Global Reporting Initiative (GRI) while obtained data were analysed using descriptive and inferential statistics. Findings revealed that sampled companies are disclosing very inadequate financial and nonfinancial environmental information in their annual reports at a minimum disclosure practice of 0.0283 and maximum of 0.2727 and on average the disclosure level stood at about 11.67% of total disclosure. Corporate leverage and liquidity have significant positive influence on the environmental disclosure; profitability is found having significant negative influence; while long-term financing has insignificant positive influence. Thus, the study concluded that companies' financial attributes are key determinants of the environmental disclosure and many listed Nigerian oil and gas companies are disclosing very negligible qualitative environmental accounting information in their annual reports (Udo 2019). This study one; looked into not only environmental disclosure, but social and environmental disclosure practices of listed Nigerian oil and gas companies as a means of discharging corporate accountability; two it is carried for a period of fifteen years (15) perhaps long enough to reveal the trends of social and environmental accountability by the sampled companies and three, it is benchmarked with GRI which is a global disclosure guideline. These may perhaps make the study different from previous studies conducted in the industry; therefore, it may reveal to industry operators the level of social and environmental accountability being rendered which is vital in ensuring peaceful and smooth operations. Policy makers may be availed with useful insights on social and environmental accountability of operators to other stakeholders especially host communities which may reveal areas that need to be improved upon. Social and environmental right groups may get useful information from findings of this study to help them in pursuing their legitimate cause. This introduction is section one of the study; subsequent section two outline the method of conducting the study; section three presents the results of the study while section four discusses the results of the study.

**Method:-**

The process of data collection and analysis in a research is referred to as the method of conducting the research, but choosing the philosophical assumptions that will underpin the study is of significance in conducting any research. The assumptions are ontological, epistemological and methodological (Collis and Hussey 2014); while ontology is about whether reality is objective in nature; therefore, something external to the researcher or reality is from within the individual; thus subjective (Burrell and Morgan 1979); epistemology is about what constitute valid knowledge (Collis and Hussey 2014) or an acceptable knowledge in a particular field (Bryman and Bell 2007). The methodology is build on one hand on the belief that only observable and measurable phenomena are considered valid knowledge; therefore, following positivism methodological approach or the belief that requires participation of the researcher in that being researched; thus, deep rooted in interpretivism methodological approach (Collis and Hussey 2014). From the perspective of ontology, the social and environmental disclosure practices of sampled listed Nigerian oil and gas companies in their annual reports and accounts represent an objective reality. The social and environmental disclosure practices of sampled companies in their annual reports and accounts is valid knowledge as annual reports and accounts are the medium through which corporate organizations are communicating with all stakeholders and is the media for discharging accountability (Zeghal and Ahmed 1990, Gray, Kouhy and Lavers 1995b). Quantitative data obtained through content analysis of annual reports and accounts which is a quantifiable method of obtaining data which is consistent with positivism research methodology. Therefore, the essence of collecting the data is to test chosen theory underpinning the study (Collis and Hussey 2014). Consequently, the task on hand is to find out probable explanations or a theoretical argument explaining the social and environmental disclosure practices of sampled listed Nigerian oil and gas companies (Collis and Hussey 2014, Blaike 2007).

**Data and its Collection:**

There are two broad sources of data for conducting research which are primary and secondary from which quantitative or qualitative data could be collected through observations, interviews, questionnaires, surveys, content analysis of documents (Collis and Hussey 2014, Creswell 2013, Morgan and Smircich 1980). Determining which method to collect data depends on the method considered most suitable by the researcher to answer raised research questions (Collis and Hussey 2014, Spencer et al. 2003). To determine the social and environmental accountability disclosure of sampled listed Nigerian oil and gas companies, secondary data from the annual reports and accounts were collected online for the period of fifteen (15) years 2004 - 2018. This period is long enough to refer to the study as longitudinal study (Mohammed 2016, Caruana et al 2015, Zainal, Zulkifli and Saleh 2013). The annual reports and accounts are in PDF format; thus, were converted to words documents using ABBYY PDF transformer. Data relevant to the study is then collected through content analysis which is “a method by which selected items of qualitative data are systematically converted to numerical data for analysis” (Collis and Hussey 2014, p. 166). The method is also regarded as quantitative analysis of qualitative data (Morgan 1993) associated with the positivism research paradigm (Collis and Hussey 2014) described as objective, systematic and quantitative (Berelson 1952). Content analysis assumes that extent of disclosure signifies the importance of the disclosed topic to the reporting entity (Krippendorff 1980). Therefore, volume of social or environmental disclosed words by sampled oil and gas companies signifies the importance attached to the disclosed issues. Content analysis has the strength of allowing the use of retrospective data, its track and changes over time which could be useful for building data base (Konracki, Wellman and Amundson 2002) and reflect trends in a social system (Babbie 2013). Consequently, the method will show patterns of social or environmental accountability of sampled companies over the period of the study which could be used to develop data base for future use. Although different approaches were utilized in conducting content analysis such as counting number of words (Wasara and Ganda 2019, Lee 2015, Zeghal and Ahmed 1990); counting number of sentences (Jessop et al 2019, Hackston and Milne 1996); considering average lines (Belal and Lubinin 2009); and taking proportion of pages (Lungu, Caraiani and Dascălu 2011a); the most appropriate method depends on researchers’ choice (Williams 1999). Word count content analysis is expected to provide maximum robustness when assessing quantity of disclosure (Wilmschurst and Frost 2000), although it is criticized for lacking meaning to provide sound basis of coding disclosure (Hassan 2012). Capitalizing on the strength of word count content analysis as well as overcoming its criticisms, this study adopted modified word count (Mohammed 2018, Mohammed 2016) in which only words in a sentences or phrases conveying meaningful social or environmental information are counted, rather than individual social or environmental words that have no meaning.

However, to determine what is social or environmental disclosure, researchers could develop disclosure index (Ernst and Ernst 1978); adopt and modify existing disclosure index or use disclosure guidelines developed by national and international organisations such as the United Nations Global Compact (UNGC), the Oil and Gas Industry Guidance

on Voluntary Sustainability Reporting (OGIGVSR) and the Global Reporting Initiative (GRI). The oil and gas industry guidance could perhaps be most appropriate guidance to use in this study; however, the first edition of the guidance is issued in April 2005 while this study commences from January 2004 and the guidance is not available online. Similarly, the second edition was released in 2010, to overcome the apparent difficulties, GRI disclosure guideline is employed as benchmark in evaluating the social and environmental accountability by sampled companies. The GRI is a multi-stakeholder, international guideline designed to be used by organisations of any size, sector, or location (GRI 2002). The guideline enables benchmarking of different organisations (Ioannou and Serafeim 2012) using the same rigor as financial reporting (Alonso-Almeida, Llach and Marimon 2014) and is the most widely used sustainability reporting guideline worldwide (KPMG 2017). The guideline is of different versions with the first version issued in 1999 referred to as G1; this is followed by the second version issued in 2002 (G2); the third was issued in 2006 (G3); the fourth version issued in 2011 (G3.1) while the fifth version was issued in 2016 (G4). Therefore, the period covered by this study 2004 – 2018 is covered by the regimes of G2, G3, G3.1 and G4; thus, while G2 is the first employed version, the study adopted all modification in subsequent guidelines.

### Population and sample of the study:

The entire members of a group on which some information is required to be ascertained is referred to as the population (Banerjee and Chaudhury 2010). However, sometimes some members of the population do not possess all the attributes required to achieve the goal of the research. In this context such members of the population must be excluded and what is left after such exclusion is referred to as the sample of the population (Asiamah et al 2017); thus, the sample of a population is simply a subset of the population (Banerjee and Chaudhury 2010). The population of listed Nigerian oil and gas companies in the Nigerian Stock Exchange (NSE) from 1<sup>st</sup> January 2004 to 31<sup>st</sup> December 2018 is twelve (12). However, one of the companies has online annual reports and accounts only from 2012 to 2018; another company has no online annual reports and accounts from 2004 to 2009; another company has no online annual reports and accounts from 2004 to 2013; while another company was listed in April 2014. Therefore, there are no adequate annual reports and accounts for all these four companies 204 - 2018; thus, these companies are excluded from the population to arrive at the sample as depicted in Table I.

**Table I:-** Inclusion and Exclusion Criteria of Sampled Listed Nigerian Oil and Gas Companies.

S/n	Name of Company	Annual Report and Accounts Available for:														
		04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
1	Anino International Plc	-*	-	-	-	-	-	-	-	-	x**	x	x	x	x	x
2	Ardova	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3	Capital Oil	-	-	-	-	-	-	x	x	x	x	x	x	x	x	x
4	Conoil	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
5	Eterna Plc	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
6	Japaul Oil & Mar. Serv.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
7	Mobil - 11 Plc	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
8	MRS Oil Nig Plc	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
9	Oando Plc	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	Rak Unity Petroleum Co.	-	-	-	-	-	-	-	-	-	-	x	x	x	x	x
11	Seplat Petroleum Dev Co.	-	-	-	-	-	-	-	-	-	-	-	x	x	x	x
12	Total	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

- \* indicates non-availability of annual reports and accounts

x\*\* indicates availability of annual reports and accounts

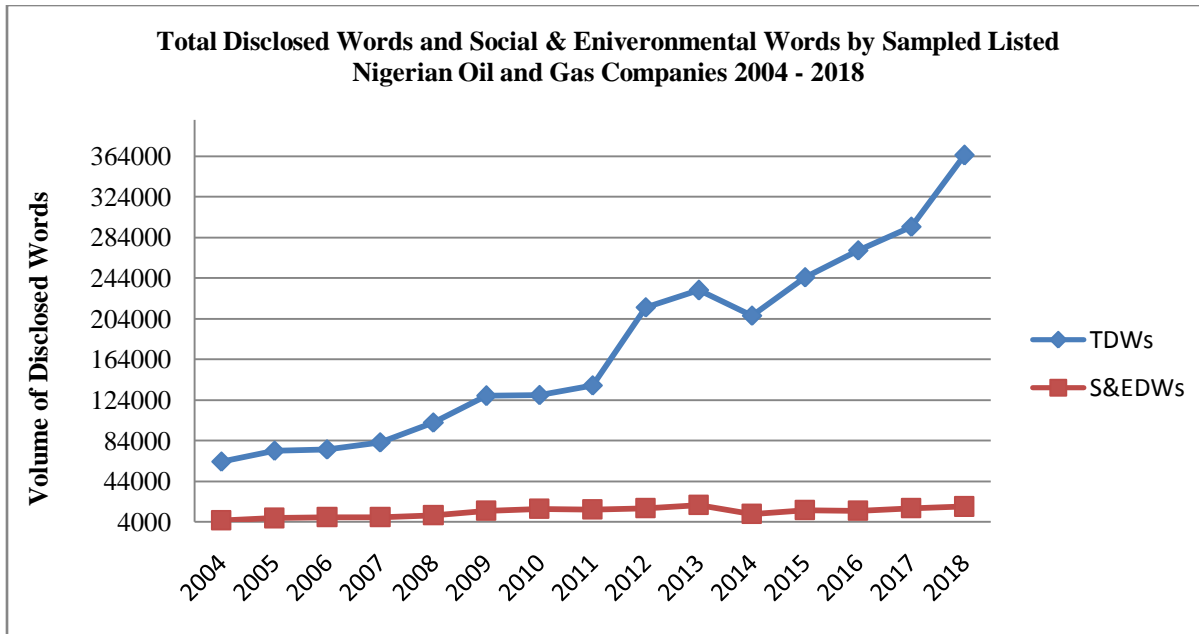
### Analytical Framework of the Study:

Vulnerability is defined as exposure to the possibility of being attacked or harmed, either physically or emotionally while exploitability signify tendency to being exploited selfishly or unethically by someone (Oxford Dictionary 2013). The International Monetary Fund (IMF) World Economic Outlook 2019 classified the world into two major groups as advanced economies and emerging and developing economies. The advanced economies comprises thirty nine countries characterised by high GDP of 40.80% of global total, 63% of global export of goods and services while accounting for only 14% of global population. There are one hundred and fifty five countries under the emerging and developing economies category sharing 59.20% of global GDP, 37% of global export of goods and services while having 85.70% of global total population (IMF 2019). However, a number of these emerging and developing economies are endowed with natural resources such as minerals, oil, gas and forests and large human

population living in poverty. Alongside these resources, legal and regulatory frameworks are weak and less strictly enforced in these countries than in developed countries (Belal, Cooper and Roberts 2013). Indeed, governments drive to legislate and regulate in many developing countries is missing (Hilson 2012). Therefore, in their quest to exploit their natural resources to earn revenues, governments in emerging and developing countries provides stabilisation clauses in contracts with corporate organisations harnessing their natural resources (Sikka 2011). Such stabilisation clauses are found harmful to current and even future government tax revenues and on social and environmental issues (Saidu 2014, Belal, Cooper and Roberts 2013, Sikka 2011). Consequently, governments and citizens in these emerging and developing economies are exposed to number of exploitable vulnerabilities. First; these economies are characterized by poverty, low literacy and increasing population all of which corporate organisations in emerging and developing countries are exploiting. Second; contractual agreements between governments and corporate organisations for the exploitation of natural resources in these countries are composed of stabilization clauses that are detrimental to current and future revenues. Third; more often, existing laws and regulations are weak and unenforceable by governments and citizens in the event of breach. Fourth; citizens of these countries as employees of corporate organisations have to contend with low wages in the face of weak and unenforceable labour laws as governments are in dire need of revenues from the corporate organisations. All these vulnerabilities are exploited by corporate organisations exploring and producing natural resources in emerging and developing economies to the detriment of governments and citizens even on social and environmental accountability through disclosure (Mohammed 2016, Belal, Cooper and Khan 2015, Hassan and Kouhy 2015). The Nigerian oil and gas industry is the major contributor of Nigeria's foreign exchange earnings and its total revenue (CBN 2018e); thus, corporate organisations operating in the industry could be exploiting the government and citizens of Nigeria from all the aforementioned vulnerabilities and also on social and environmental accountability. The exploitative activities of the oil and gas industry due its importance as global energy source extends to developed countries (see Mufson 2014, Greenpeace 2011, Shell 2008, Watkins and Passow 2002). This analytical framework was found useful in explaining the social and environmental disclosure of listed Nigerian and UK oil and gas companies (Mohammed 2016). Therefore, this analytical framework underpins this study in trying to understand the social and environmental accountability of sampled listed Nigerian oil and gas companies.

### **Results:-**

An important aspect before presenting the results of the study is to perhaps give an outline of G2, G3, G3.1 and G4 used in benchmarking the social and environmental disclosure practices of sampled listed Nigerian oil and gas companies. G2 issued in 2002 is composed of total of 85 social and environmental performance indicators with 49 social performance indicators distributed into 20 disclosure aspects and 35 environmental performance indicators spread under 10 disclosure aspects. These are modified to total of 70 social and environmental performance indicators in G3 issued in 2006 with social disclosure having 40 performance indicators covered under 22 aspects of disclosure and 30 environmental performance indicators under 9 aspects of disclosure. Total performance disclosure indicators increased to 75 in G3.1 issued in 2011 composing of 45 social performance indicators grouped under 25 disclosure aspects and 30 environmental performance indicators under 9 aspects of disclosure. The G4 issued in 2016 has total of 74 performance indicators from which there are 48 social performance indicators grouped under 30 aspects of disclosure while environmental performance indicators are 26 under 6 aspects of disclosure. Disclosure under the relevant performance indicators of an aspect will give total disclosure practices under such an aspect; for instance if employment aspect of social disclosure has 3 performance indicators, assessing disclosure under employments means collecting data on all the 3 performance indicators. Therefore, disclosure on individual performance indicators gives total disclosure on the relevant aspects while total disclosure on all aspects under social or environmental disclosure category give the overall disclosure under either social or environment. Consequently, this section is results of social and environmental disclosure information collected from the annual reports and accounts of sampled listed Nigerian oil and gas companies 2004 – 2018. Figure I is on total disclosed words in the annual reports and accounts compared with words devoted to social and environmental accountability.



**Figure I:-** Total Disclosed Words and Social and Environmental Disclosure Words by Sampled Listed Nigerian Oil and Gas Companies 2004 – 2018 (TDWs = Total Disclosed Words; S&EDWs = Social and environmental Disclosed Words).

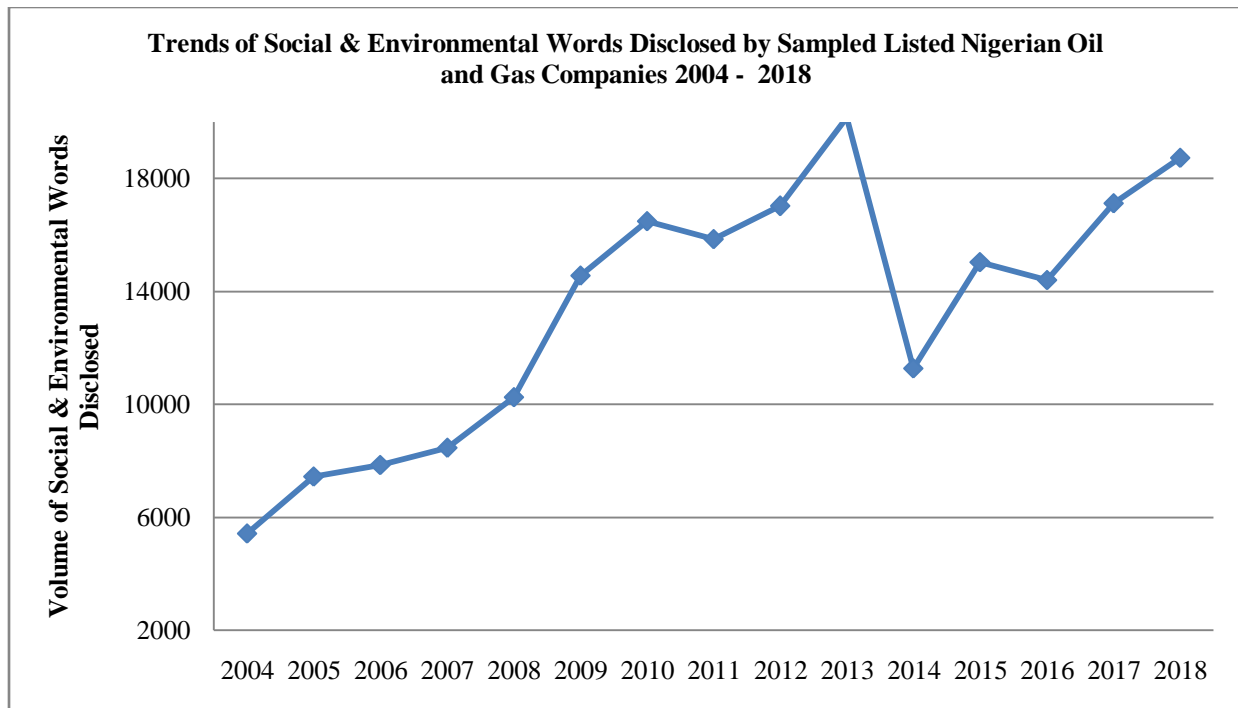
From Figure I, total disclosed words in the annual reports and accounts of sampled listed Nigerian oil and gas companies are 63,007 in 2004 while social and environmental words are 5,425 or approximately 9% of the total. In 2005, total disclosed words are 74,063 words from which 7,448 words or 10% of total words are devoted to social and environmental accountability. In 2006, 75,114 words are disclosed by sampled companies out of which 7,856 words representing 10% of the total are on social and environmental accountability. In 2007, total of 82,252 words are disclosed with social and environmental disclosed words accounting for 8,470 words or 10% of the total. In 2008, total disclosed words are 101,896 words from which 10,254 words are devoted to social and environmental issues representing 10% of the total. In 2009, total of 127,774 words are disclosed with social and environmental disclosed words being 14,556 or 11% of the total. In 2010, total disclosed words are 128,915 from which social and environmental words account for 16,486 words or 13% of the total. Total of 138,161 words are disclosed in 2011 and social and environmental disclosed words are 15,842 or 11% of the total. Total disclosed words in 2012 are 214,919 from which social and environmental words account for 17,015 words or 8% of the total. Similarly, total disclosed words in 2013 are 231,851 out of which 20,158 words or 9% of the total are on social and environmental issues. Total of 206,790 words are disclosed in 2014 and social and environmental disclosed words are 11,281 or 5% of the total. Total disclosed words in 2015 are 244,920 from which social and environmental disclosure words are 15,026 or 6% of the total. Likewise, total disclosed words in 2016 are 270,974 from which social and environmental disclosed words account for 14,399 words or 5% of the total. Total words disclosed in 2017 are 294,820 with social and environmental disclosed words accounting for 17,124 or 6% of the total. Total words disclosed in 2018 are 364,824 while social and environmental words from this are 18,722 or 5% of the total. Table I depicts total disclosure and percentages devoted to social and environmental accountability and economic accountability.

**Table I:-** Breakdown of Social, Environmental and Economic Accountability Words in percentages .

S/N	Year	Total Disclosed Words	Percentage of SED Words	Percentage of Words o Economic Accountability
1	2004	63,007	9	91
2	2005	74,063	10	90
3	2006	75,114	10	90
4	2007	82,252	10	90
5	2008	101,869	10	90
6	2009	127,774	11	89
7	2010	128,915	13	87

8	2011	138,161	11	89
9	2012	214,919	8	92
10	2013	231,851	9	91
11	2014	206,790	5	95
12	2015	244,920	6	94
13	2016	270,974	5	95
14	2017	294,820	6	94
15	2018	364,824	5	95
Total		<b>2,620,253</b>		

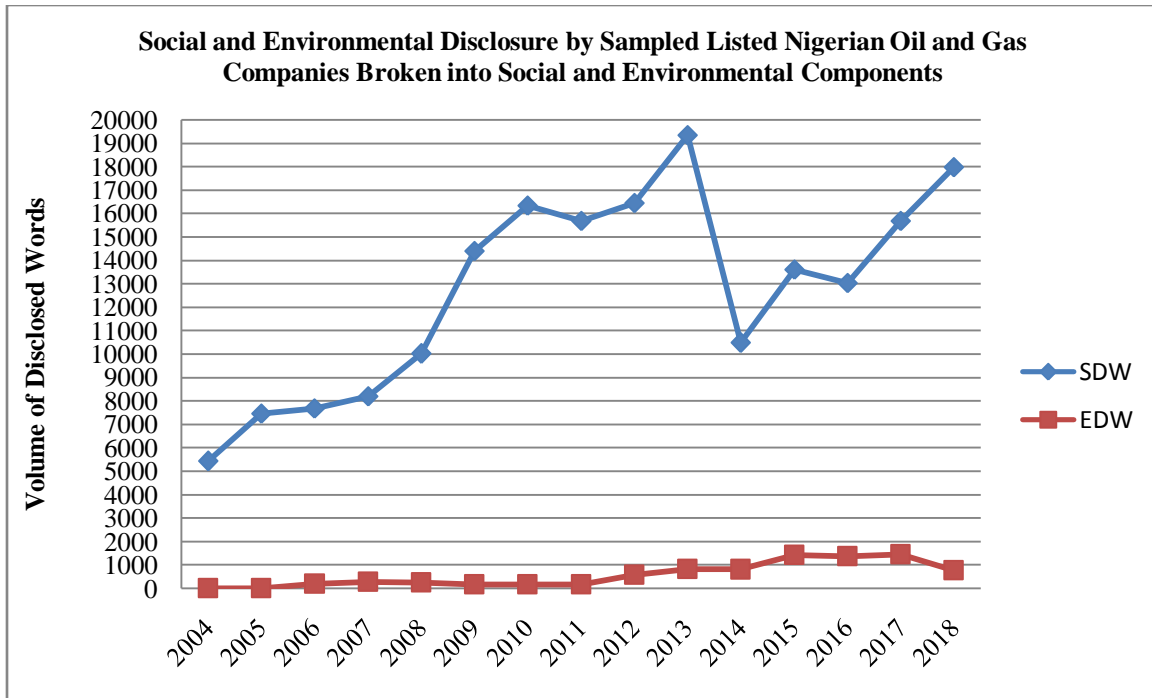
Perhaps to give a clear pattern of the social and environmental accountability of sampled companies, Figure II present the patterns of the social and environmental disclosures alone without comparison to total disclosed words.



**Figure II:-** Trends of Social and Environmental Words Disclosed by Sampled Listed Nigerian Oil and Gas Companies 2004-2018.

From Figure II, the social and environmental disclosure practices of sampled listed Nigerian oil and gas companies 2004 – 2018 showed some fluctuations. Total disclosed words in 2004 are 5,425 increasing to 7,448 in 2005 to 7,856 in 2006 to 8,470 in 2007 further increasing to 10,254 in 2008, to 14,566 in 2009 to 16,486 in 2010 then decreasing to 15,842 in 2011. This decrease is reversed in 2012 when disclosed words increase to 17,015 then to 20,158 in 2013 then sharply decreasing to 11,281 in 2014 which is however reversed to an increasing pattern in 2015 with 15,026 disclosed words. The disclosure pattern showed decreasing trend in 2016 with 14,399 words which increased in 2017 to 17,124 and to 18,722 in 2018. It may perhaps be interesting to break down the social and environmental disclosure into social and environmental components as presented in Figure III.





**Figure III:-** Social and Environmental Disclosure by Sampled Listed Nigerian Oil and gas Companies Broken into Social and Environmental Components (SDW = Social Disclosed Words; EDW = Environmental Disclosed Words).

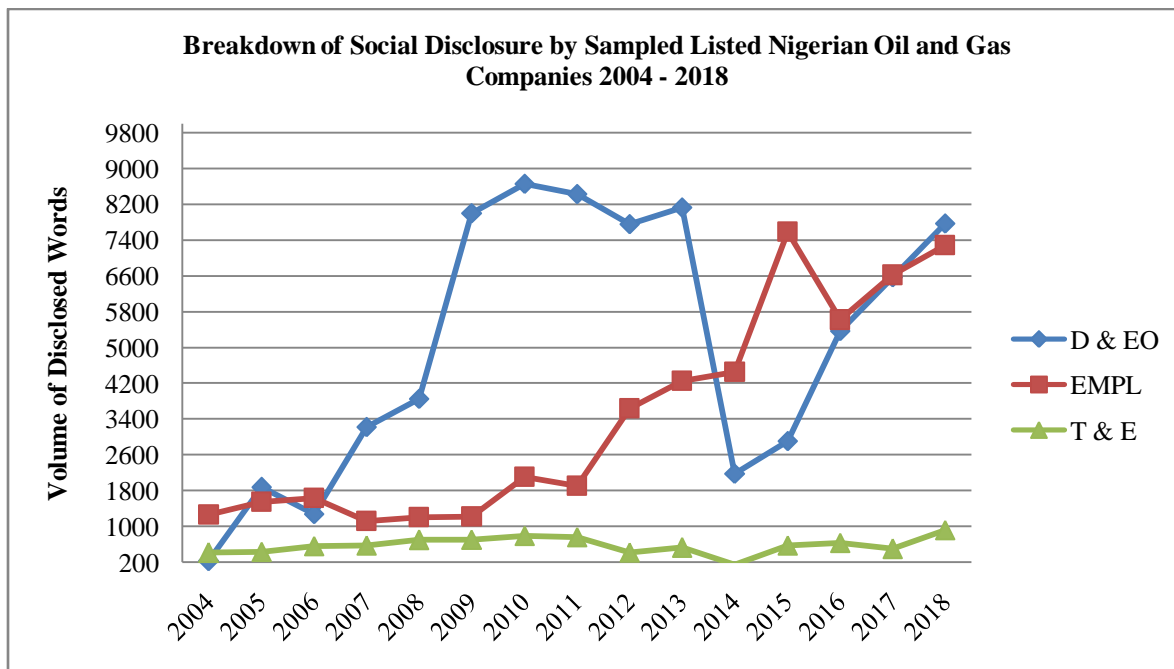
From Figure III, the whole of 5, 425 social and environmental disclosed words in 2004 are on social accountability with no disclosure on environmental impacts; similarly, the entire 7,448 words disclosed in 2005 are on social issues; thus, 100% of social and environmental disclosure in these two years is on social accountability. From the total of 7,669 social and environmental disclosed words in 2006, 7,856 or 98% are on social accountability; while the remaining 187 words or 2% are on environmental accountability. Total of 8,190 words or 97% are on social accountability from the total 8,470 words disclosed in 2007 while the remaining 280 words or 3% are disclosure on the environment. Social accountability accounts for 10,013 words or 98% of total 10,254 words disclosed in 2008 and the remaining 241 words or 2% are on environmental accountability. In 2009, social disclosure account for 14,399 words or 99% of total 14,566 disclosed social and environmental words while the remaining 167 words or 1% is on environmental accountability. Similarly in 2010, social accountability account for 16,324 words or 99% of total 16,486 social and environmental disclosure and the remaining 1% or 162 words are on environmental accountability. Furthermore, in 2011, social accountability has 15,677 words representing 99% of total of 15,842 words while the remaining 1% or 165 words are on environmental accountability. In 2012, social accountability has 16,446 words or 97% of the total social and environmental disclosure while environmental disclosure has 569 words or 3% of the total. Social disclosure accounts for 19,335 words or 96% of total disclosure in 2013 while environmental accountability has 823 words or 4%. In 2014, social accountability has 10,474 words or 93% of the total while environmental accountability has 807 words or 7% of the total. Social disclosure accounts for 13,602 words or 91% of total disclosure in 2015 while environmental accountability has 1,424 words or 9% of the total. Similarly, in 2016, social accountability has 13,035 or 91% of total disclosure while environmental accountability has 1,364 words or 9% of the total. In 2017, social accountability has 15,685 words or 92% of the total while environmental accountability has 1,439 words or 8% of the total. Social accountability has 17,964 words or 96% of total disclosure while environment has 758 words or 6% of the total in 2018. Perhaps Table II presents the percentages of the interactions between social and environmental components of the disclosure in clear terms.

**Table II:-** Breakdown of Percentages of Social and Environmental Accountability.

S/N	Year	Total Disclosed Social and Environmental Words	Percentage of Social Words	Percentage of Environmental Words
1	2004	5,425	100	0
2	2005	7,448	100	0

3	2006	7,856	98	2
4	2007	8,470	97	3
5	2008	10,254	98	2
6	2009	14,566	99	1
7	2010	16,486	99	1
8	2011	15,842	99	1
9	2012	17,015	97	3
10	2013	20,158	96	4
11	2014	11,281	93	7
12	2015	15,026	91	9
13	2016	14,399	91	9
14	2017	17,124	92	8
15	2018	18,722	96	4
Total		<b>200,072</b>		

Results from Figure III and Table II have indicated the dominance of social accountability compared to environmental accountability; therefore, it may be interesting to present the most disclosed aspects of social disclosure. Prior to this, it is important to note that the social disclosure practices of sampled companies are mainly on 3 performance indicators of employment aspect, 2 indicators of training and education aspect, 1 indicator of diversity and equal opportunity aspect, 1 indicator of labour and management relations aspect, 3 indicators of health and safety aspect, 1 indicator of community and 1 indicator of bribery and corruption. Therefore, although there are disclosures on seven social disclosure aspects, only 3 aspects are presented in Figure IV due to the low volume of disclosure on the other four aspects.



**Figure IV:-** Breakdown of Social Disclosure by Sampled Listed Nigerian Oil and Gas Companies 2004 – 2018 (D & EO = Diversity and Equal opportunity; EMPL = Employment; T & E = Training and Education).

From Figure IV, in 2004, the most disclosed aspect is employment with 1,264 words followed by training and education 411 words and diversity and equal opportunity 224 words. Diversity and equal opportunity is the most disclosed aspect in 2005 with 1,868 words followed by employment 1,550 and training and education 435 words. In 2006, employment is the most disclosed with 1,637 words followed by diversity and equal opportunity 1,272 words then, training and education 564 words. In 2007, the most disclosed aspect is diversity and equal opportunity 3,223 words; then, employment with 1,116 words and training and education 576 words. Similarly, in 2008, diversity and

equal opportunity is the most disclosed aspect with 3,851 words followed by employment 1,207 words and training and education 696 words. Again, diversity and equal opportunity is the most disclosed aspect in 2009 with 7,993 words; then, employment 1,213 words and training and education 707 words. Likewise, in 2010, diversity and equal opportunity is the most disclosed with 8,652 words followed by employment 2,110 words; then, training and education 792 words. Furthermore, in 2011, diversity and equal opportunity is the most disclosed with 8,420 words followed by employment 1,901; then, training and education 759 words. Again, diversity and equal opportunity is the most disclosed aspect in 2012 with 7,749 words followed by employment 3,630 words; then, training and education 420 words. Similarly, in 2013, diversity and equal opportunity is the most disclosed aspect with 8,126 words; then, employment 4,246 words followed by training and education 525 words. In 2014, employment is the most disclosed aspect with 4,447 words followed by diversity and equal opportunity 2,178 words; then, training and education 139 words. Likewise, employment is the most disclosed aspect in 2015 with 7,582 words followed by diversity and equal opportunity 2,901 words; then, training and education 579 words. Again in 2016, employment is the most disclosed aspect with 5,615 words; then, diversity and equal opportunity 5,368 words; then, training and education 637 words. Furthermore, employment is the most disclosed aspect in 2017 with 6,615 words; then, diversity and equal opportunity 6,566 words; then, training and education 496 words. Finally, in 2018, diversity and equal opportunity is the most disclosed aspect with 7,763 words followed by employment 7,285 words; then, training and education 919 words. Having presented the results of this study, the next section discusses these results in light of existing literature, theory and practice.

### **Discussion:-**

This section interpret and discusses findings from the study in the context of existing literature, theory and practices on social and environmental disclosure in order to explain new understanding or findings from this study. To do this, findings from the study are linked with existing literature, theory and practice (Mohammed et al 2020, Mohammed 2016, Labaree 2013, Kretchmer, 2008). As presented in Figure I and Table I, disclosure in the annual reports and accounts of sampled companies are dominated by accountability to economic stakeholders such as creditors, suppliers of goods and services, the government for tax purposes and debtors among others. While Figure I showed the trends and dominance of economic accountability, Table I showed the extent of the dominance by revealing percentages of disclosure on economic, social and environmental issues. The highest percentage of social and environmental disclosure words from the total is 13% in 2007 and the lowest is 5% in 2014, 2016 and 2018. This dominance of economic accountability is consistent with Udo (2019) and Yusuf, Samuel and Ekundayo (2016) that found oil and gas companies making negligible environmental disclosure in their annual reports and accounts. Although the pattern of the disclosure practices by sampled companies on the overall showed increasing trends, there is a decreasing pattern in 2014 on both economic and social and environmental accountability. This is attributed to slowing down of economic activities due to build-up apprehensions in preparation to the 2015 general elections (CBN 2014). Economic stakeholders could be regarded as having economic influence on the activities of sampled companies such as access to capital, goods and services; thus, less vulnerable and exploitable by sampled companies which perhaps explain volume of accountability on issues of interest to them. However, stakeholders interested in corporate social and environmental accountability have no control over the vital resources of sampled companies; thus, more vulnerable to accountability which sampled companies exploited by not rendering adequate accountability on these issues. This pattern of disclosure is better explained by vulnerability and exploitability analytical framework underpinning the study.

Figure II that indicated the trends of social and environmental disclosure on the overall showed increasing pattern with the exception of 2014 which was discussed and 2016 that also showed decreasing pattern. The decreasing pattern in 2016 could be attributed to economic recession experienced by the Nigerian economy (CBN 2019, Kazeem 2017). Therefore sampled companies gave more economic accountability to economic stakeholders by way of explaining the economic environment. Again, this pattern of disclosure is revealing the vulnerability of social and environmental stakeholders which sampled companies exploited by making little social and environmental accountability. Figure III broke down the social and environmental disclosure into social and environmental components while Table II reveals the percentage share of the social and environmental components with social disclosure being dominant. This finding is consistent with Mohammed (2016) that reported the dominance of social aspects of disclosure accountability by listed Nigerian companies. Consequently, sampled listed Nigerian oil and gas companies have neglected to account for such environmental problems of gas flaring, oil spillage, destruction of biodiversity, emissions of carbon dioxide and other atmospheric gases reported in the industry. These environmental problems in addition to their negative effects are the causes of many social problems in the oil producing region of Niger Delta; yet, sampled companies are not rendering accountability on these issues. Therefore, sampled companies

are exploiting the vulnerabilities of their host communities and other stakeholders interested in environmental accountability as less influential to be given accountability. The result is consistent with Udo (2019), Mohammed (2016) and Yusuf, Samuel and Ekundayo (2016) that found listed Nigerian oil and gas companies making little environmental accountability. This disclosure accountability is better explained by the lens of vulnerability and exploitability analytical framework.

Figure IV further broke down the dominant social accountability of sampled listed oil and gas companies to reveal the most disclosed social aspects. The most dominantly disclosed aspect is diversity and equal opportunity which was dominant in nine out of the fifteen years studied which are 2005, 2007, 2008, 2008, 2009, 2010, 2011, 2012, 2013 and 2018. The second most disclosed aspect is employment in five years of 2004, 2006, 2014, 2015, 2016 and 2017 while the least most disclosed aspect is training and education. These aspects concerns the employees and management of sampled companies; thus, as influential custodians and operators of sampled companies' vital financial and non-financial resources, accountability is rendered on issues that concerns them the most such as their benefits, diversities, and recruitments. Being employees and managers of sampled companies, it could be contented that these groups are less vulnerable and exploitable (Mohammed 2016, Mufson 2014) and this perhaps explain the volume of disclosure accountability devoted on issues of interest to these groups. The aspect of training and education; although, the least disclosed is also an issue that concerns these groups; therefore, the patterns of disclosure on these aspects are better explained by vulnerability and exploitability analytical framework.

From the findings of this study, it could be concluded that listed Nigerian oil and gas companies are exploiting the vulnerabilities of one; host communities that lack strong voice to demand and get social and environmental accountability, two; environmental and human rights groups working in an environment with weak and unenforceable laws and three; Nigerian governments in dire need of oil and gas revenues; thus, not capable of protecting or enforcing citizens rights of getting social and environmental accountability from sampled companies. However, employees and managers of sampled companies are perhaps less vulnerable; thus, less exploitable and this perhaps explain the dominance of social accountability on issues of interest to these groups. All these are explained from the perspective of vulnerability and exploitability analytical framework underpinning this study. The findings of this study have some policy implications; one, considering the socio-economic significance of the Nigerian oil and gas industry, its adequate social and environmental accountability practices could have drive the practice in other industries; however, this may probably be not achieved. Two, the little social and environmental disclosure accountability by listed sampled Nigerian oil and gas companies are not reflective of the factual social or environmental problems of the industry and this may have signalling effects for other industries to also be concealing their factual negative effects. Three, the social and environmental disclosure accountability of sampled companies' may not contribute to achieving stability in the oil and gas producing region as sampled companies failed to take responsibility for their negative social and environmental effects. Therefore, it is recommended that policy and decision makers in the industry should embrace social and environmental disclosure accountability in the industry as a means to contributing to peace in the region. Policy and decision makers in institutional and regulatory bodies in the industry should also take further steps to ensuring that operators are providing adequate social and environmental accountability in the industry for smooth and peaceful operations in the industry. However, further studies should be conducted employing different data, method of data collection and analysis and use of different theoretical framework to underpin the study all of which may result in obtaining different results from the ones obtained in this study, but may give further insight on the social and environmental disclosure practices of the industry.

### References:-

1. Abdull Razak , R., Al Hujaili, R., and Al Ahmedi, R. (2019): Environmental Disclosure Practices of Saudi Companies According To The New Gri Standards, 5<sup>th</sup> Asia Pacific Institute of Contemporary Research, Asia Pacific Institute of Advanced Research (APIAR).
2. Akakpo, G.S. (2012): Social Impact Assessment of Oil And Gas Exploration In The Western Region Of Ghana: A Case Study of Sekondi/Takoradi Metropolis, Regional Maritime University, Accra, Ghana, 2(): 44-62.
3. Akoroda, M. (2000): Remediation response in the Niger-Delta. In: The Anniversary of Jesse Fire Disaster, Nigeria Institute of International Affairs, Lagos, 20, August 2000. Nigeria: Nigeria Institute of International Affairs, Lagos.
4. Allen, F. (2012): The Enemy Within: Oil in the Niger Delta. World Policy Journal. 29(4): 46-53.

5. Alonso-Almeida, M. M., Llach, J. and Marimon, F. (2014): A Closer Look at the 'Global Reporting Initiative Sustainability Reporting as a Tool to Implement Environmental and Social Policies: A Worldwide Sector Analysis. *Corporate Social Responsibility and Environmental Management*. 21(): 318-335.
6. Asiamah, N., Mensah, H.K., and Oteng-Abayie, E.F. (2017): General, Target, and Accessible Population: Demystifying the Concepts for Effective Sampling. *The Qualitative Report*, 22(6): 1607-1622.
7. Baalouch, F., Ayadi, S.D., and Hussainey, K. (2019): A study of the determinants of environmental disclosure quality: evidence from French listed companies, *Journal of Management and Governance* 23(): 939-97.
8. Babbie, E. (2013). *The practice of social research*. 13 ed. ed. New York, USA: Macmillan.
9. Belal, A. and Lubinin, V. (2009): Russia: Corporate social disclosures. In: S. O. Idowu and W. L. Filho. eds. *Global practices of corporate social responsibility*. Germany: SpringerVerlag Berlin Heidelberg, 165-179.
10. Berelson, B. (1952). *Content analysis in communication research*. Gelencoe, IL, Free Press.
11. Belal, A. R., Cooper, S. and Khan, N. A. (2015): Corporate environmental responsibility and accountability: What chance in vulnerable Bangladesh? *Critical Perspectives on Accounting*. 33: 44-58.
12. Belal, A. R., Cooper, S. M. and Roberts, R. W. (2013): Vulnerable and exploitable: The need for organizational accountability and transparency in emerging and less developed economies. *Accounting Forum*. 37(2): 81-91.
13. Benedict, A. O. (2011): Tragedy of Commons: Analysis of Oil Spillage, Gas Flaring and Sustainable Development of the Niger Delta of Nigeria. *Journal of Sustainable Development*. 4(2): 200-210.
14. Blaikie, N. (2007). *Approaches to social enquiry: Advancing knowledge*. 2 ed. ed. India: Replica Press Pvt Ltd.
15. BP (2019): BP Statistical Review of World Energy, Online from <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf>. [Accessed 8 October 2019].
16. Bryman, A. and Bell, E. (2007). *Business research methods*. 3rd ed. New York: Oxford University Press.
17. Burrell, G. and Morgan, G. (1979): *Sociological paradigms and organizational analysis*. USA: Ashgate publishing company.
18. Caruana, E.J., Roman, M., Hernández-Sánchez, S. and Solli, P. (2015): Longitudinal studies, *Journal of Thoracic Disease*, 7(11): E537-E540
19. Central Bank of Nigeria (2014): Statistical Bulletins, Public finances. Online, available from <https://www.cbn.gov.ng/Out/2015/SD/2014%20Statistical%20Bulletin%20Contents%20and%20Narratives.pdf> [Accessed 8 April 2020].
20. Central Bank of Nigeria (2018e): Annual Statistical Bulletins: Public Finance Statistics. Online, available from <https://www.cbn.gov.ng/documents/Statbulletin.asp> [Accessed 20 March 2020].
21. Central Bank of Nigeria (2019e): Statistical Bulletins, Public finances. Online, available from <https://www.cbn.gov.ng/documents/Statbulletin.asp> [Accessed 30 March 2020].
22. Central Bank of Nigeria (2019): From Recession to Growth: The Story of Nigeria's Recovery From the 2016 Economic Recession. Online, available from <https://www.proshareng.com/news/Nigeria%20Economy/From-Recession-to-Growth--The-Story-Of-Nigeria%E2%80%99s-Recovery-From-The-2016-Economic-Recession/45370#> [Accessed 19 April 2020].
23. Chiu, T. and Wang, Y. (2015): Determinants of Social Disclosure Quality in Taiwan: An Application of Stakeholder Theory. *Journal of Business Ethics*. 129(): 379-398.
24. Clarkson, P. M. et al. (2008): Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*. 33(4): 303-327.
25. Collis, J. and Hussey, R. (2014): *Business research: A practical guide for undergraduate & postgraduate students*. 4th ed. UK: Basingstoke: Palgrave Macmillan.
26. Creswell, J. W. (2013): *Qualitative inquiry and research design: Choosing among five approaches*. 3rd ed. London: Thousand Oaks.
27. Ebegbulem, J. C., Ekpe, D. and Adejumo, T. O. (2013): Oil Exploration and Poverty in the Niger Delta Region of Nigeria: A Critical Analysis. *International Journal of Business and Social Science*. 4(3), 279-287.
28. Eljayash, K. M., James, K. and Kong, E. (2012): The Quantity and Quality of Environmental Disclosure in Annual Reports of National Oil and Gas Companies in Middle East and North Africa. *International Journal of Economics and Finance*. 4(10): 201 - 217.
29. Energy Information Administration (2018): Industrial sector energy consumption, online. Available from <https://www.eia.gov/outlooks/ieo/pdf/industrial.pdf> [Accessed 20 December 2019].
30. Erhinyoj, E.F., and Marcella, E.C. (2019): Corporate Social Sustainability Reporting and Financial Performance of Oil and Gas Industry in Nigeria, *International Journal of Accounting, Finance and Risk Management*, 4(2): 44-60.
31. Ernst and Ernst (1978): *Social responsibility disclosure, 1978, survey Ernst & Ernst*. OH. Cleveland.

32. Frazer, M. (1992): Quality assurance in higher education. In: *Quality Assurance in Higher Education: Proceedings of an International Conference, Hong Kong 1992*. London, UK: The Falmer Press.
33. Frynas, J. G. (2005): The false developmental promise of Corporate Social Responsibility: evidence from multinational oil companies, *International Affairs*, 81(3): 581-598.
34. Frynas, J. G. (2009): Corporate social responsibility in the oil and gas sector. *Journal of World Energy Law & Business*, 2(3): 178-195.
35. Global Reporting Initiative (2002): *Sustainability Reporting Guidelines*. Amsterdam: Global Reporting Initiative. Online, available from [http://www.aeca.es/old/comisiones/rsc/documentos\\_fundamentales\\_rsc/gri/guidelines/gri\\_guidelines\\_2002.pdf](http://www.aeca.es/old/comisiones/rsc/documentos_fundamentales_rsc/gri/guidelines/gri_guidelines_2002.pdf) [Accessed 30 August, 2013].
36. Gray, R., Kouhy, R. and Lavers, S. (1995b): Methodological themes Constructing a research database of social and environmental reporting by UK companies. *Accounting, Auditing & Accountability Journal*. 8(2): 78-101.
37. Greenpeace. (2011): 1995 - Shell reverses decision to dump the Brent Spar. Online, available from: <http://www.greenpeace.org/international/en/about/history/Victories-timeline/Brent-Spar/>. [Accessed 16 April 2020].
38. Hackston, D. and Milne, M. J. (1996): Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1):77-108.
39. Harvey, L. and Green, D. (1993): Defining Quality. *Assessment and Evaluation in Higher Education*. 18(1).
40. Hassan, A. (2012): *Corporate Environmental Accountability in the Nigerian Oil and Gas Industry: The Case of Gas Flaring*. PhD. Abertay University.
41. Hassan, A. (2019): Do renewable energy incentive policies improve performance of energy firms? Evidence from OECD countries, *Organization of the Petroleum Exporting Countries*, 43(2): 168-192..
42. Hassan, A. and Kouhy, R. (2013): Gas flaring in Nigeria: Analysis of changes in its consequent carbon emission and reporting, *Accounting Forum*, 32(7): 124-134.
43. Hassan, A. and Kouhy, R. (2015): From environmentalism to corporate environmental accountability in the Nigerian petroleum industry: Do green stakeholders matter? *International Journal of Energy Sector Management*. 9(2): 204-226.
44. Hassan, M. K. (2012): A disclosure index to measure the extent of corporate governance reporting by UAE listed corporations. *Journal of Financial Reporting and Accounting*, 10(1): 4-33.
45. He, H. and Baruch, Y. (2010): Organizational identity and legitimacy under major environmental changes: tales of two UK building societies. *British Journal of Management*, 21(1): 44-66.
46. Hilson, G. (2012): Corporate Social Responsibility in the extractive industries: Experiences from developing countries. *Resources Policy*. 37(): 131-137.
47. Ifeadi, N., Ekaluo, U. and Orubuma (1985): Treatment and disposal of drilling muds and cuttings in the Nigerian petroleum industry. In: *International Seminar on the Petroleum Industry and Environment 1985. Nigeria: Nigerian National Petroleum Corporation*.
48. International Energy Agency (2013): *Key World Energy Statistics*, online. Available from [https://nature.berkeley.edu/er100/sections/Week2\\_IEA\\_2013\\_key-world-energy-statistics.pdf](https://nature.berkeley.edu/er100/sections/Week2_IEA_2013_key-world-energy-statistics.pdf) [Accessed 17 December 2019].
49. International Energy Agency (2019): *Key World Energy Statistics*, online. Available from <https://webstore.iea.org/key-world-energy-statistics-2019> [Accessed 17 December 2019].
50. International Monetary Fund (2019): *World economic outlook: Global Manufacturing Downturn, Rising Trade Barriers*, 2019. Online, available from [https://www.elibrary.imf.org/doc/IMF081/28248-9781508214/28248-9781513508214/Other\\_formats/Source\\_PDF/28248-9781513516165.pdf](https://www.elibrary.imf.org/doc/IMF081/28248-9781508214/28248-9781513508214/Other_formats/Source_PDF/28248-9781513516165.pdf) [Accessed 18 December 2019].
51. Ioannou, I. and Serafeim, G. (2014): *The Consequences of Mandatory Corporate Sustainability Reporting: Evidence from Four Countries*. Working Paper edition, USA: Harvard Business School, 1-34.
52. Jike, V. T. (2004): Environmental Degradation, Social Disequilibrium, and the Dilemma of Sustainable Development in the Niger-Delta of Nigeria. *Journal of Black Studies*. 34(5): 686-701.
53. Johnson, P. et al. (2006): Evaluating qualitative management research: towards a contingent criteriology. *International Journal of Management Reviews*, 8(3): 131-156.
54. Kazeem, Y. (2017): Nigeria has now been in recession for five quarters—but there may be light at the end of the tunnel. Online, available from <https://qz.com/africa/989805/nigerias-economy-has-been-in-recession-for-the-fifth-consecutive-quarter/> [Accessed 19 April 2020].
55. Kent, P. and Chan, C. (2003): *Application of Stakeholder Theory to the Quantity and Quality of Australian Voluntary Corporate Environmental Disclosures*. Social Science Research Network- Working Paper, page 21, January, 2016.

56. Kondracki, N. I., Wellman, N. S. and Amundson, D. R. (2002): Content Analysis: Review of Methods and their Applications in Nutrition Education. *Journal of Nutrition Education and Behaviour*, 34(4): 224-230.
57. KPMG (2017): International Survey of Corporate Sustainability Reporting 2017. Online, available from <https://assets.kpmg/content/dam/kpmg/xx/pdf/2017/10/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf> [Accessed 20 January 2020].
58. Krippendorff, K. (1980): Content analysis: An introduction to its methodology. Newbury Park: Sage Publications.
59. Krishna, P. et al. (2012): Sustainability reporting on the rise within the petroleum industry - A view of the industry and experiences from an NOC, IOC and service companies. In: International Conference on Health, Safety and Environment in Oil and Gas Exploration and Production Held Perth, Australia, 11 - 13 September 2012. USA: International Society of Petroleum Engineers, pp.1-7.
60. Lee, K. (2015): Does Size Matter? Evaluating Corporate Environmental Disclosure in the Australian Mining and Metal Industry: A Combined Approach of Quantity and Quality Measurement. *Business Strategy and the Environment*, 1-15.
61. Li, S., and Liu, C. (2018): Quality of Corporate Social Responsibility Disclosure and Cost of Equity Capital: Lessons from China, *Emerging Markets Finance and Trade*, 54(11), 2472-2494.
62. Loro, E. L.L., and Zhibo, L. (2018): *International Journal of Scientific and Research Publications*, Volume 8(10): 197-209.
63. Lungu, C. I., Caraiani, C. and Dascălu, C. (2011a): Research on corporate social responsibility reporting. *Corporate Social Responsibility*. 13(29): 117-131.
64. McLamb, E. (2011): What is Sustainability. UK: Ecology Global Network.
65. Mohammed, S.D. (2016): Social and Environmental Disclosures: A Comparative Analysis of Listed Nigerian and UK Oil and Gas Companies, PhD Thesis, University of Abertay, Dundee, United Kingdom.
66. Mohammed, S.D. (2018): Mandatory Social and Environmental Disclosure: A Performance Evaluation of Listed Nigerian Oil and Gas Companies Pre- and Post-Mandatory Disclosure Requirements. *Journal of Finance and Accounting*, 6(2): 56-68.
67. Morgan, D. L. (1993): Qualitative content analysis: A guide to paths not take. *Qualitative Health Research*. 3(3):112-121.
68. Morgan, G. and Smircich, L. (1980): The Case for Qualitative Research. *Academy of Management Review*. 5(4): 491-500.
69. Mufson, S. (2014): BP's 'gross negligence' caused Gulf oil spill, federal judge rules. Online, available from [https://www.washingtonpost.com/business/economy/bps-gross-negligence-caused-gulf-oil-spill-federal-judge-rules/2014/09/04/3e2b9452-3445-11e4-9e92-0899b306bbea\\_story.html](https://www.washingtonpost.com/business/economy/bps-gross-negligence-caused-gulf-oil-spill-federal-judge-rules/2014/09/04/3e2b9452-3445-11e4-9e92-0899b306bbea_story.html) [Accessed 16 April 2020].
70. Neave, G. (1994): The Politics of Quality: Developments in Higher Education in Western Europe 1992-1994. *European Journal of Education*. 29(2): 94.
71. Ndukwe O. Dibia, N.O. and Onwuchekwa, J.C. (2015): Determinants of Environmental Disclosures in Nigeria: A Case Study of Oil and Gas Companies, *International Journal of Finance and Accounting*, 4(3): 145-152.
72. Okereke, N. E. and Orjiafor, K. C. (2011): Women in the Environment: The Impact of Oil and Gas Exploration on the Women in the Niger-Delta States of Nigeria since 1960: An Historical Perspective. *Journal of Environmental Management and Safety*. 2(3): 75-95.
73. Osazuwa, N. P., Okoye, F. A. and Izedonmi, F. (2013): Corporate Attributes and Environmental Disclosures of Nigerian Quoted Firms: An Empirical Analysis. *Research Journal of Social Science and Management*. 3(6): 150-158.
74. Oxford Dictionary (2013): Oxford English mini dictionary. 8 ed. UK: Oxford University Press.
75. Paul, M. (2006): The industrial revolution of the eighteenth century: An outline of the beginning of the modern factory system in England. 1st ed. Oxon: Routledge.
76. Saidu, S. (2014): A Comparative Analysis of Production Sharing Contracts of Selected Developing Countries: Nigeria, Indonesia, Malaysia and Equatorial Guinea. *Journal of Finance and Accounting*. 2(2): 34-40.
77. Scaltrito, D. (2015): Assessing Disclosure Quality: A Methodological Issue. *Journal of Modern Accounting and Auditing*. 11(9): 466-475.
78. Shell. (2008): Brent Spar Dossier. London: Shell International Limited 2008. Online, available from [https://www.shell.co.uk/sustainability/decommissioning/brent-spar-dossier/\\_jcr\\_content/par/textimage.stream/1426853000847/32a2d94fa77c57684b3cad7d06bf6c7b65473faa/brent-spar-dossier.pdf](https://www.shell.co.uk/sustainability/decommissioning/brent-spar-dossier/_jcr_content/par/textimage.stream/1426853000847/32a2d94fa77c57684b3cad7d06bf6c7b65473faa/brent-spar-dossier.pdf) [Accessed 14 January, 2016].

79. Sikka, P. (2011): Accounting for human rights: The challenge of globalization and foreign investment agreements. *Critical Perspectives on Accounting*. 22(8): 811-827.
80. Spencer, L. et al. (2003): Quality in qualitative evaluation: A framework for assessing research evidence. Online, available from [Http://www.Policyhub.Gov.Uk](http://www.Policyhub.Gov.Uk). [Accessed 21 February 2014].
81. Sulaiman, M., Abdullah, N. and Fatima, A. (2014): Determinants of environmental reporting quality in Malaysia. *International Journal of Economics, Management and Accounting*. 22(1): 63-90.
82. Udo, E.J. (2019): Environmental Accounting Disclosure Practices in Annual Reports of Listed Oil And Gas Companies In Nigeria, *International Journal of Accounting and Finance*, 8(1): 1-20.
83. Wasara, T.M., and Ganda, F. (2019): The Relationship between Corporate Sustainability Disclosure and Firm Financial Performance in Johannesburg Stock Exchange (JSE) Listed Mining Companies. *Sustainability*, 11(4496), 1-23.
84. Watkins, M. and Passow, S. (2002): Sunk Costs: The Plan to Dump the Brent Spar (A). N-9-903-010. pp.1-36. London: Harvard Business School. [Accessed 14 January, 2016].
85. Williams, S. M. (1999): Voluntary environmental and social accounting disclosure practices in the Asia-pacific region: an international empirical test of political economy theory. *The International Journal of Accounting*. 34(2): 209-238.
86. Wilmshurst, T. and Frost, G. (2000): Corporate environmental reporting – a test of legitimacy theory. *Accounting, Auditing and Accountability Journal*. 13(1): 10-26.
87. Wiseman, J. (1982): An evaluation of environmental disclosures made in corporate annual reports. *Accounting, Organizations and Society*. 7(1): 53-63.
88. Yusuf, I., Samuel, J., and Ekundayo, O. (2016): The Extent of Environmental Disclosures in Listed Oil and Gas Companies in Nigeria, *Proceedings of Nigeria's Economic Development Conference (NEDCO): Nigeria's Economic Challenges since Independence: Issues and Prospects from Multidimensional Perspectives* 400-413.
89. Zeghal, D. and Ahmed, S. A. (1990): Comparison of Social Responsibility Information Disclosure Media Used by Canadian Firms. *Accounting, Auditing & Accountability Journal*. 3(1): 38-53.